

**RECENT TRENDS IN ILLEGAL  
DRUG USE IN  
NEW ZEALAND, 2006-2014**

Findings from the 2006, 2007, 2008, 2009, 2010, 2011,  
2012, 2013 and 2014 Illicit Drug Monitoring System  
(IDMS)

C. Wilkins  
J. Prasad  
K. Wong  
M. Rychert

Social and Health Outcomes Research and Evaluation  
College of Health  
Massey University, PO Box 6137, Wellesley St,  
Auckland, New Zealand

November 2015



# Table of Contents

List of Tables .....	8
List of Figures .....	14
Executive Summary .....	22
1. Introduction .....	28
1.1 Aims of IDMS .....	28
1.2 Methodology .....	28
1.3 Survey of frequent drug users .....	30
1.4 Secondary data sources .....	30
1.5 Statistical analysis .....	31
1.6 Statistical weighting of the sample .....	32
2. Demographics .....	35
2.1 Introduction .....	35
2.2 Gender .....	35
2.3 Age .....	36
2.4 Ethnicity .....	37
2.5 Employment status .....	39
2.6 Education .....	40
2.7 Sexual orientation .....	41
2.8 Marital status .....	41
2.9 Accommodation .....	42
2.10 Physical health .....	42
2.11 Mental health .....	44
2.12 Summary of demographic characteristics .....	47
3. Drug use patterns .....	49
3.1 Introduction .....	49
3.2 Current drug use of the frequent methamphetamine users .....	50
3.3 Current drug use of the frequent ecstasy (MDMA) users .....	55
3.4 Current drug use of the frequent injecting drug users .....	58
3.5 Summary of drug use patterns .....	64

4. Emerging drug types.....	67
4.1 Introduction.....	67
4.2 Drug types used for first time in past six months.....	68
4.3 New drug types noticed.....	76
4.4 New types of drug users.....	78
4.5 Different ways of selling drugs.....	79
4.6 Summary of emerging drugs.....	80
5. Methamphetamine.....	82
5.1 Introduction.....	82
5.2 Knowledge of methamphetamine trends.....	83
5.3 Availability of methamphetamine.....	83
5.4 Price of methamphetamine.....	90
5.5 Strength of methamphetamine.....	101
5.6 Perceptions of the number of people using methamphetamine.....	106
5.7 Purchase of methamphetamine.....	110
5.8 Seizures of methamphetamine.....	114
5.9 Methamphetamine laboratories.....	114
5.10 Pseudoephedrine and ephedrine seizures.....	115
5.11 Summary of methamphetamine trends.....	117
6. Crystal methamphetamine.....	119
6.1 Introduction.....	119
6.2 Knowledge of crystal methamphetamine trends.....	119
6.3 Availability of crystal methamphetamine.....	120
6.4 Price of crystal methamphetamine.....	124
6.5 Strength of crystal methamphetamine.....	129
6.6 Perceptions of the number of people using crystal methamphetamine.....	132
6.7 Summary of crystal methamphetamine trends.....	134
7. Ecstasy.....	135
7.1 Introduction.....	135
7.2 Knowledge of ecstasy trends.....	136
7.3 Drug types perceived to be in ecstasy.....	136
7.4 Availability of ecstasy.....	137

7.5 Price of ecstasy .....	143
7.6 Strength of ecstasy .....	149
7.7 Perceptions of the number of people using ecstasy .....	154
7.8 Purchase of ecstasy .....	157
7.9 Seizures of ecstasy .....	166
7.10 Summary of ecstasy trends .....	167
8. Cannabis .....	169
8.1 Introduction .....	169
8.2 Knowledge of cannabis trends .....	170
8.3 Availability of cannabis .....	170
8.4 Price of cannabis.....	176
8.5 Strength of cannabis.....	182
8.6 Perceptions of the number of people using cannabis.....	186
8.7 Purchase of cannabis .....	188
8.8 Seizures of cannabis plants.....	194
8.9 Summary of cannabis trends .....	195
9. LSD .....	197
9.1 Introduction .....	197
9.2 Knowledge of LSD and other synthetic psychedelics trends .....	198
9.3 Availability of LSD and other synthetic psychedelics.....	198
9.4 Price of LSD and other synthetic psychedelics .....	202
9.5 Strength of LSD and other synthetic psychedelics .....	205
9.6 Perceptions of the number of people using LSD and other synthetic psychedelics .....	208
9.7 Seizures of LSD.....	210
9.8 Summary of LSD trends .....	211
10. Street Morphine.....	212
10.1 Introduction.....	212
10.2 Knowledge of street morphine.....	212
10.3 Availability of street morphine .....	213
10.4 Price of street morphine.....	217
10.5 Strength of street morphine.....	221
10.6 Perceptions of the number of people using street morphine.....	226

10.7 Purchase of street morphine .....	227
10.8 Seizures of opioids .....	237
10.9 Summary of street morphine trends .....	239
11. Cocaine.....	241
11.1 Introduction .....	241
11.2 Knowledge of cocaine trends .....	241
11.3 Availability of cocaine .....	242
11.4 Price of cocaine.....	245
11.5 Strength of cocaine.....	248
11.6 Perceptions of the number of people using cocaine.....	252
11.7 Seizures of cocaine .....	254
11.8 Summary of cocaine trends .....	256
12. Heroin.....	257
12.1 Introduction.....	257
12.2 Knowledge of heroin trends .....	257
12.3 Availability of heroin.....	257
12.4 Price of heroin .....	260
12.5 Purity of heroin.....	261
12.6 Perceptions of the number of people using heroin .....	263
12.7 Summary of heroin trends.....	264
13. Homebake morphine/heroin .....	265
13.1 Introduction.....	265
13.2 Knowledge of homebake morphine/heroin trends.....	265
13.3 Availability of homebake morphine/heroin .....	265
13.4 Perceptions of the number of people using homebake morphine/ heroin .....	267
13.5 Summary of homebake morphine/heroin trends .....	269
14. Street methadone .....	270
14.1 Introduction.....	270
14.2 Knowledge of street methadone trends .....	270
14.3 Availability of street methadone .....	271
14.4 Perceptions of the number of people using street methadone.....	273

14.5 Summary of street methadone trends .....	274
15. Street BZP .....	275
15.1 Introduction .....	275
15.2 Knowledge of street BZP trends .....	275
15.3 Availability of street BZP .....	275
15.4 Perceptions of the number of people using street BZP .....	278
15.5 Summary of street BZP trends .....	279
16. Health risks and the social harm of drug use .....	280
16.1 Introduction .....	280
16.2 Drug-related life impacts .....	280
16.3 Drug type responsible for drug-related life impacts .....	285
16.4 Medical and health services .....	287
16.5 Drug dependency .....	293
16.6 Mental illness .....	294
16.7 Summary of health risks and social harm from drug use .....	296
17. Drug and alcohol treatment .....	299
17.1 Introduction .....	299
17.2 Extent needed help to reduce drug use .....	299
17.3 Wanted help to reduce drug use but did not get it .....	301
17.4 Barriers encountered when looking for help to reduce drug use .....	302
17.5 Drug treatment history .....	307
17.6 Drug type responsible for drug treatment .....	308
17.7 Calls to the Alcohol & Drug Help-line .....	310
17.8 Summary of drug treatment .....	312
18. Crime .....	314
18.1 Introduction .....	314
18.2 Property crime .....	314
18.3 Drug dealing .....	316
18.4 Fraud .....	317
18.5 Crime involving violence .....	318
18.6 Means used to pay for drug use .....	319

18.7 Summary of crime .....	326
19. Drug enforcement.....	327
19.1 Introduction.....	327
19.2 History of arrest, conviction and imprisonment .....	327
19.3 Drug treatment as part of sentencing .....	330
19.4 Recent arrest and imprisonment.....	331
19.5 Offences arrested for in past 12 months.....	334
19.6 Perceptions of the current level of drug enforcement.....	337
19.7 Perceptions of the impact of drug enforcement.....	340
19.8 Number of friends arrested.....	342
19.9 Summary of drug enforcement .....	345
20. Synthetic Cannabinoids.....	348
20.1 Introduction.....	348
20.2 Knowledge of synthetic cannabinoids trends.....	349
20.3 Availability of synthetic cannabinoids .....	349
20.4 Price of synthetic cannabinoids.....	351
20.5 Strength of synthetic cannabinoids.....	352
20.6 Perceptions of the number of people using synthetic cannabinoids.....	354
20.7 Purchase of synthetic cannabinoids .....	355
20.8 Summary of synthetic cannabinoid trends.....	357
21. Party Pills.....	359
21.1 Introduction.....	359
21.2 Knowledge of party pills trends.....	359
21.3 Availability of party pills .....	359
21.4 Price of party pills .....	360
21.5 Perceptions of the number of people using party pills .....	361
21.6 Summary of party pills trends .....	362
References .....	363
Appendix 1: Lifetime drug use .....	370
Appendix 2: Current drug use .....	382

## List of Tables

Table 1 1: Distribution of IDMS respondents by site for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014 .....	33
Table 1 2: Distribution of IDMS respondents by module for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014 .....	33
Table 1 3: Weighted distribution of respondents by site for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014 .....	33
Table 1 4: Weighted distribution of respondents by module for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014 .....	34
Table 2 1: Ethnicity of the frequent drug users, 2014 .....	37
Table 2 2: Employment status of the frequent drug users, 2014 .....	39
Table 2 3: Highest educational achievement of the frequent drug users, 2014 .....	40
Table 2 4: Frequent drug users' sexual orientation, 2014 .....	41
Table 2 5: Frequent drug users by marital status, 2014 .....	41
Table 2 6: Frequent drug users by current accommodation type, 2014 .....	42
Table 2 7: Frequent drug users' self-assessment of current physical health, 2009-2014 .....	43
Table 2 8: Frequent drug users' self-assessment of current mental health, 2010-2014.....	45
Table 4 1: Drug types the frequent ecstasy users used for the first time in the past six months (of those who reported using a drug for the first time in previous six months), 2009-2014.....	70
Table 4 2: Drug types used by frequent methamphetamine users for the first time in the past six months (of those who reported using a drug for the first time in previous six months), 2009-2014.....	73
Table 4 3: Drug types used by the frequent injecting drug user for the first time in the past six months (of those who reported using a drug for the first time in previous six months), 2009-2014.....	75
Table 4 4: New drug types noticed in previous six months, 2011-2014.....	78
Table 4 5: New types of people reported using drugs, 2011-2014.....	79
Table 5 1: Current availability of methamphetamine by combined frequent drug users, 2006-2014 .....	84
Table 5 2: Current availability of methamphetamine by location, 2014 .....	86
Table 5 3: Change in availability of methamphetamine by combined frequent drug users, 2006-2014 .....	88
Table 5 4: Current price of methamphetamine (NZD) by combined frequent drug users, 2006-2014 .....	91
Table 5 5: Mean price of a 'point' of methamphetamine by combined frequent drug users, 2006-2014.....	92
Table 5 6: Current median (mean) price for a 'point' and gram of methamphetamine (NZD) by location, 2014 .....	93



Table 5 7: Change in the price of methamphetamine in the past six months by combined frequent drug users, 2006-2014.....	97
Table 5 8: Change in the price of methamphetamine in the past six months by location, 2014 .....	99
Table 5 9: Current strength of methamphetamine by combined frequent drug users, 2006-2014 .....	101
Table 5 10: Change in strength of methamphetamine by combined frequent drug users, 2006-2014 .....	104
Table 5 11: Perceptions of the number of people using methamphetamine by combined frequent drug users, 2006-2014.....	107
Table 5 12: Perceptions of the number of people using methamphetamine by combined frequent drug users by location, 2014 .....	108
Table 5 13: Time taken to purchase methamphetamine by combined frequent drug users, 2006-2014.....	110
Table 5 14: Location from which methamphetamine purchased in the past six months by combined frequent drug users, 2009-2014.....	113
Table 5 15: People from whom methamphetamine purchased in the past six months by combined frequent drug users, 2009-2014.....	113
Table 6 1 : Current availability of crystal methamphetamine by combined frequent drug users, 2006-2014.....	121
Table 6 2: Mean score of the current availability of crystal methamphetamine by combined frequent drug users, 2006-2014.....	123
Table 6 3: Current median (mean) price for crystal methamphetamine (NZD) by combined frequent drug users, 2006-2014.....	125
Table 6 4: Change in the price of crystal methamphetamine in the past six months by combined frequent drug users, 2006-2014.....	127
Table 6 5: Current purity of crystal methamphetamine by combined frequent drug users, 2006-2014 .....	129
Table 6 6: Change in strength of crystal methamphetamine by combined frequent drug users, 2006-2014.....	131
Table 6 7: Perceptions of the number of people using crystal methamphetamine by combined frequent drug users, 2006-2014.....	132
Table 7 1: Drug types thought to be in ecstasy (of the people who thought they knew), 2011-2014 .....	137
Table 7 2: Current availability of ecstasy by combined frequent drug users, 2006-2014 .....	138
Table 7 3: Current availability of ecstasy by location, 2014 .....	139
Table 7 4: Change in availability of ecstasy by combined frequent drug users, 2006-2014.....	141
Table 7 5: Current price of ecstasy (NZD) by combined frequent drug users, 2006-2014 .....	143
Table 7 6: Current median (mean) price for ecstasy (NZD) by location, 2014.....	144
Table 7 7: Change in the price of ecstasy in the past six months by combined frequent drug users, 2006-2014 .....	147
Table 7 8: Current strength of ecstasy by combined frequent drug users, 2006-2014.....	149
Table 7 9: Change in strength of ecstasy (MDMA) by combined frequent drug users, 2006-2014 ....	152

Table 7 10: Perceptions of the number of people using ecstasy by combined frequent drug users, 2006-2014 .....	155
Table 7 11: Frequency of purchase of ecstasy in past six months by combined frequent drug users, 2006-2014 .....	158
Table 7 12: Time taken to purchase ecstasy by combined frequent drug users, 2006-2014.....	162
Table 7 13: Location from which ecstasy purchased in the past six months by combined frequent drug users, 2009-2014.....	164
Table 7 14: People from whom ecstasy purchased in the past six months by combined frequent drug users, 2009-2014.....	165
Table 8 1: Current availability of cannabis by combined frequent drug users, 2006-2014.....	171
Table 8 2: Change in availability of cannabis by combined frequent drug users, 2006-2014 .....	174
Table 8 3: Current price of cannabis (NZD) by combined frequent drug users, 2006-2014.....	177
Table 8 4: Current median (mean) price for cannabis (NZD) by location, 2014 .....	178
Table 8 5: Change in the price of cannabis in the past six months by combined frequent drug users, 2006-2014 .....	181
Table 8 6: Current strength of cannabis by combined frequent drug users, 2006-2014 .....	182
Table 8 7: Change in strength of cannabis by combined frequent drug users, 2006-2014.....	185
Table 8 8: Perceptions of the number of people using cannabis by combined frequent drug users, 2006-2014 .....	186
Table 8 9: Frequency of purchase of cannabis in past six months by combined frequent drug users, 2006-2014 .....	189
Table 8 10: Median (mean) dollar amount spent on cannabis (NZD) on typical occasion by combined frequent drug users, 2006-2014.....	190
Table 8 11: Time taken to purchase cannabis by combined frequent drug users, 2006-2014 .....	191
Table 8 12: Location from which cannabis purchased in the past six months by combined frequent drug users, 2009-2014.....	193
Table 8 13: People from whom cannabis purchased in the past six months by combined frequent drug users, 2009-2014.....	193
Table 9 1: Current availability of LSD by combined frequent drug users, 2006-2014.....	199
Table 9 2: Change in availability of LSD by combined frequent drug users, 2006-2014 .....	201
Table 9 3: Current median (mean) price for LSD (NZD) by combined frequent drug users, 2006-2014 .....	202
Table 9 4: Change in the price of LSD in the past six months by combined frequent drug users, 2006-2014.....	204
Table 9 5: Current strength of LSD by combined frequent drug users, 2006-2014.....	205
Table 9 6: Change in strength of LSD by combined frequent drug users, 2006-2014 .....	207
Table 9 7: Perceptions of the number of people using LSD by combined frequent drug users, 2006-2014.....	209
Table 10 1: Current availability of street morphine by combined frequent drug users, 2008-2014 .....	213
Table 10 2: Change in availability of street morphine by combined frequent drug users, 2008-2014 .....	215

Table 10 3: Current median (mean) price for street morphine (NZD) by combined frequent drug users, 2008-2014 .....	217
Table 10 4: Change in the price of street morphine in the past six months by combined frequent drug users, 2008-2014.....	219
Table 10 5: Current strength of street morphine by combined frequent drug users, 2008-2014 .....	222
Table 10 6: Change in strength of street morphine by combined frequent drug users, 2008-2014 .....	225
Table 10 7: Perceptions of the number of people using street morphine, 2008-2014 .....	226
Table 10 8: Frequency of purchase of street morphine in past six months by combined frequent drug users, 2008-2014.....	228
Table 10 9: Median (mean) dollar amount spent on street morphine (NZD) on typical occasion by combined frequent drug users, 2008-2014 .....	230
Table 10 10: Time taken to purchase street morphine by combined frequent drug users, 2008-2014 .....	230
Table 10 11: Location from which street morphine purchased in the past six months by combined frequent drug users, 2014 .....	233
Table 10 12: People from whom street morphine was purchased in the past six months by combined frequent drug users, 2008-2014.....	235
Table 10 13: People from whom street morphine was purchased in the past six months by combined frequent drug users, 2008-2014.....	236
Table 10 14: Opioid products seized from 2009-2014.....	238
Table 11 1: Current availability of cocaine by combined frequent drug users, 2006-2014.....	242
Table 11 2: Change in availability of cocaine by combined frequent drug users, 2006-2014 .....	244
Table 11 3: Current price of cocaine (NZD) by combined frequent drug users, 2006-2014.....	245
Table 11 4: Change in the price of cocaine in the past six months by combined frequent drug users, 2006-2014 .....	247
Table 11 5: Current strength of cocaine by combined frequent drug users, 2006-2014 .....	249
Table 11 6: Change in strength of cocaine by combined frequent drug users, 2006-2014.....	251
Table 11 7: Perceptions of the number of people using cocaine by combined frequent drug users, 2006-2014 .....	253
Table 12 1: Current availability of heroin by combined frequent drug users, 2008-2014 .....	258
Table 12 2: Change in availability of heroin by combined frequent drug users, 2008-2014.....	259
Table 12 3: Current median (mean) price of heroin (NZD) by combined frequent drug users, 2008-2014.....	260
Table 12 4: Change in the price of heroin in the past six months by combined frequent drug users, 2008-2014 .....	260
Table 12 5: Current purity of heroin by combined frequent drug users, 2008-2014 .....	261
Table 12 6: Change in purity of heroin by combined frequent drug users, 2008-2014 .....	262
Table 12 7: Perceptions of the number of people using heroin by combined frequent drug users, 2008-2014 .....	263
Table 13 1: Current availability of homebake morphine/heroin by combined frequent drug users, 2008-2014 .....	266

Table 13 2: Change in availability of homebake morphine/heroin by combined frequent drug users, 2008-2014 .....	267
Table 13 3: Perceptions of the number of people using homebake morphine/ heroin by combined frequent drug users, 2008-2014.....	268
Table 14 1: Current availability of street methadone by combined frequent drug users, 2008-2014 .....	271
Table 14 2: Change in availability of street methadone by combined frequent drug users, 2008-2014.....	272
Table 14 3: Perceptions of the number of people using street methadone by combined frequent drug users, 2008-2014.....	273
Table 15 1: Current availability of street BZP by combined frequent drug users, 2007-2014 .....	276
Table 15 2: Change in availability of street BZP by combined frequent drug users, 2007-2014.....	277
Table 15 3: Perceptions of the number of people using street BZP by combined frequent drug users, 2007-2014 .....	278
Table 16 1: Drug-related incidents by frequent drug user group, 2014.....	281
Table 16 2: Drug types mainly responsible for drug related incidents by frequent drug user group, 2014.....	286
Table 16 3: Proportion of frequent injecting drug users who had accessed medical and health services in relation to drug use in the past six months, 2006-2014.....	288
Table 16 4: Proportion of frequent methamphetamine users who had accessed medical and health services in relation to drug use in the past six months, 2006-2014.....	290
Table 16 5: Proportion of frequent ecstasy users who had accessed medical and health services in relation to drug use in the past six months, 2006-2014.....	292
Table 17 1: Extent to which the frequent drug users felt they needed help to reduce their drug use by frequent drug user group, 2009-2014.....	300
Table 17 2: Proportion of frequent drug users who had wanted help to reduce their drug use in the previous six months but had not got it, 2007-2014 .....	302
Table 17 3: Barriers experienced by the frequent methamphetamine users when trying to find help to reduce drug use (of those who were unable to find help), 2007-2014 .....	303
Table 17 4: Barriers experienced by the frequent injecting drug users when trying to find help to reduce drug use (of those who were unable to find help), 2007-2014 .....	305
Table 17 5: Barriers experienced by frequent ecstasy users when trying to find help to reduce drug use (of those who were unable to find help), 2010-2014.....	307
Table 17 6: Drug type(s) currently in treatment for by frequent drug user group, 2010-2014 .....	309
Table 17 7: Percentage of callers to the Alcohol & Drug Help-line by drug type, 2007 – 2014/15.....	310
Table 18 1: Proportion of the frequent drug users who committed property crime, 2014 .....	315
Table 18 2: Proportion of the frequent drug users who sold illegal drugs, 2014 .....	316
Table 18 3: Proportion of the frequent drug users who committed fraud, 2014 .....	317
Table 18 4: Proportion of the frequent drug users who committed violent crime, 2014 .....	318
Table 18 5: Different means used by the frequent methamphetamine users to pay for drugs in the past six months, 2006–2014.....	320

Table 18 6: Different means used by frequent ecstasy users to pay for drugs in the past six months, 2006–2014.....	322
Table 18 7: Different means used by frequent injecting drug users to pay for drugs in the past six months, 2006–2014.....	324
Table 19 1: Proportion of frequent drug users who were arrested for different criminal offences in the past 12 months by frequent drug user group, 2014 .....	334
Table 19 2: Frequent methamphetamine users’ perceptions of the change in police activity in relation to drug users in the past six months (of those who noticed any change in police activity), 2006-2014 .....	339
Table 19 3: Frequent ecstasy users’ perceptions of the change in police activity in relation to drug users in the past six months (of those who noticed any change in police activity), 2006-2014.....	340
Table 19 4: Frequent injecting drug users’ perceptions of the change in police activity in relation to drug users in the past six months (of those who noticed any change in police activity), 2006-2014.....	340
Table 19 5: Proportion of frequent drug users who thought police activity had made it ‘more difficult’ for them to obtain drugs in the past six months, 2006-2014 .....	341
Table 19 6: Change in the number of friends arrested in the past six months by frequent drug user group (of those who had a friend arrested), 2009-2014.....	344
Table 20 1: Current availability of synthetic cannabinoids, 2013-2014.....	350
Table 20 2: Change in availability of synthetic cannabinoids by location, 2013-2014 .....	351
Table 20 3: Change in the price of synthetic cannabinoids, 2013-2014 .....	352
Table 20 4: Current strength of synthetic cannabinoids, 2013-2014 .....	352
Table 20 5: Change in strength of synthetic cannabinoids, 2013-2014.....	353
Table 20 6: Perceptions of the number of people using synthetic cannabinoids, 2013-2014 .....	354
Table 20 7: Time taken to purchase synthetic cannabinoids, 2013-2014 .....	355
Table 20 8: Location from which synthetic cannabinoids were purchased in the past six months, 2013-2014.....	356
Table 20 9: People from whom synthetic cannabinoids were purchased in the past six months, 2013-2014.....	357
Table 21 1: Current availability of party pills by combined frequent drug users, 2013 - 2014 .....	360
Table 21 2: Change in availability of party pills, 2013-2014 .....	360
Table 21 3: Change in the price of party pills in the past six months, 2013-2014.....	361
Table 21 4: Perceptions of the number of people using party pills, 2013-2014.....	361

## List of Figures

Figure 2 1: Proportion of the frequent drug users who were male, 2006-2014 .....	36
Figure 2 2: Mean age of the frequent drug users, 2006-2014.....	37
Figure 2 3: Proportion of the frequent drug users who were of European ethnicity, 2006-2014 .....	38
Figure 2 4: Proportion of the frequent drug users who were of Maori ethnicity, 2006-2014 .....	38
Figure 2 5: Proportion of the frequent drug users who were unemployed or on a sickness benefit, 2006-2014 .....	39
Figure 2 6: Proportion of the frequent drug users who had no educational qualifications, 2006-2014 .....	40
Figure 2 7: Mean score of perception of physical health by frequent drug user group, 2014.....	44
Figure 2 8: Mean score of perception of mental health by frequent drug user group, 2014 .....	46
Figure 3 1: Proportion of the frequent methamphetamine users who had used crystal methamphetamine (ice), oxycodone and morphine in the previous six months, 2006-2014 .....	51
Figure 3 2: Proportion of the frequent methamphetamine users who had used cocaine and heroin and in the previous six months, 2006-2014.....	51
Figure 3 3: Proportion of the frequent methamphetamine users who had used cannabis, ecstasy and LSD in the previous six months, 2006-2014.....	52
Figure 3 4: Proportion of the frequent methamphetamine users who had used BZP, synthetic cannabinoids and nitrous oxide in the previous six months, 2006-2014.....	53
Figure 3 5: Mean number of days frequent methamphetamine users had used cannabis and heroin in the previous six months (of those who had used cannabis in the previous six months), 2006-2014 .....	54
Figure 3 6: Proportion of frequent methamphetamine users who had injected methamphetamine in the previous six months (of those who had used methamphetamine in the previous six months), 2006-2014 .....	55
Figure 3 7: Proportion of the frequent ecstasy users who had used methylphenidate (Ritalin™) in the previous six months, 2006-2014 .....	56
Figure 3 8: Proportion of the frequent ecstasy users who had used BZP, nitrous oxide, cannabis, and LSD in the previous six months, 2006-2014 .....	57
Figure 3 9: Proportion of the frequent ecstasy users who had used oxycodone and synthetic cannabinoids in the previous six months, 2006-2014 .....	57
Figure 3 10: Proportion of the frequent injecting drug users who had used oxycodone, Ritalin™ and morphine in the previous six months, 2006-2014.....	59
Figure 3 11: Proportion of the frequent injecting drug users who had used nitrous oxide, methadone, ecstasy and cannabis in the previous six months, 2006-2014.....	60
Figure 3 12: Proportion of the frequent injecting drug users who had used BZP and synthetic cannabinoids in the previous six months, 2006-2014 .....	60

Figure 3 13: Proportion of frequent injecting drug users who had injected methamphetamine in the previous six months (of those who had used these drugs in the previous six months), 2006-2014 .....	61
Figure 3 14: Mean number of days the frequent injecting drug users had used cannabis and heroin in the previous six months (of those who had used these drug types in the previous six months), 2006-2014 .....	62
Figure 3 15: Mean number of days the frequent injecting drug users had used methylphenidate (Ritalin™) and oxycodone in the previous six months (of those who had used these drug types in the previous six months), 2006-2014 .....	63
Figure 4 1: Proportion of frequent drug users who had tried a drug type for the first time, 2009-2014.....	69
Figure 4 2: Proportion of frequent drug users who had tried a drug type for the first time by frequent drug user group, 2009-2014 .....	70
Figure 4 3: Proportion of frequent ecstasy users who had used ‘ecstasy’, Ritalin™ and synthetic cannabinoids for the first time (of those who had tried a drug for the first time), 2009-2014 .....	72
Figure 4 4: Proportion of frequent methamphetamine users who had used methamphetamine and synthetic cannabinoids for the first time (of those who had tried a drug for the first time), 2009-2014 .....	74
Figure 4 5: Proportion of the frequent injecting drug users who had used Ritalin™, oxycodone and synthetic cannabinoids for the first time (of those who had tried a drug for the first time), 2009-2014 .....	76
Figure 4 6: Proportion of frequent drug users who noticed a new drug type, 2008-2014 .....	77
Figure 5 1: Mean score of the current availability of methamphetamine by combined frequent drug users, 2006-2014 .....	85
Figure 5 2: Mean score of the current availability of methamphetamine by combined frequent drug users by location, 2006-2014 .....	86
Figure 5 3: Mean score of the current availability of methamphetamine by location, 2014.....	87
Figure 5 4: Mean score of the change in the availability of methamphetamine by combined frequent drug users, 2006-2014.....	89
Figure 5 5: Mean score of the change in the availability of methamphetamine by combined frequent drug users by location, 2006-2014 .....	90
Figure 5 6: Mean price of a gram of methamphetamine by combined frequent drug users, 2006-2014.....	93
Figure 5 7: Mean price of a gram of methamphetamine by location, 2014.....	94
Figure 5 8: Mean price of a ‘point’ of methamphetamine by location, 2006-2014 .....	95
Figure 5 9: Mean price of a gram of methamphetamine by location, 2006-2014 .....	96
Figure 5 10: Mean score of the change in the price of methamphetamine in the past six months by combined frequent drug users, 2006-2014 .....	98
Figure 5 11: Mean score of the change in the price of methamphetamine in the past six months by location, 2014 .....	99

Figure 5 12: Mean score of the change in the price of methamphetamine in the past six months by location, 2006-2014 .....	100
Figure 5 13: Mean score of the current strength of methamphetamine by combined frequent drug users, 2006-2014 .....	102
Figure 5 14: Mean score of the current strength of methamphetamine by combined frequent drug users by location, 2006-2014 .....	103
Figure 5 15: Mean score of the change in strength of methamphetamine in the past six months by combined frequent drug users, 2006-2014 .....	105
Figure 5 16: Mean score of the change in strength of methamphetamine in the past six months by combined frequent drug users by location, 2006-2014 .....	106
Figure 5 17: Perceptions of the number of people using methamphetamine by combined frequent drug users, 2006-2014.....	108
Figure 5 18: Perceptions of the number of people using methamphetamine by combined frequent drug users by location, 2006-2014 .....	109
Figure 5 19: Proportion of frequent drug users who could purchase methamphetamine in one hour or less, 2006-2014.....	111
Figure 5 20: Proportion of frequent drug users who could purchase methamphetamine in one hour or less by location, 2006-2014 .....	112
Figure 5 21: Kilograms of methamphetamine and crystal methamphetamine seized in New Zealand, 1999-2014 .....	114
Figure 5 22: Number of methamphetamine laboratories dismantled in New Zealand, 2000-2014.....	115
Figure 5 23: Thousands of (equivalent) tablets of pseudoephedrine and ephedrine seized in New Zealand, 2000-2014.....	116
Figure 6 1: Mean score of the current availability of crystal methamphetamine by combined frequent drug users, 2006-2014.....	122
Figure 6 2: Mean score of the change in availability of crystal methamphetamine by combined frequent drug users, 2006-2014.....	124
Figure 6 3: Mean price of a 'point' of crystal methamphetamine by combined frequent drug users, 2006-2014 .....	126
Figure 6 4: Mean price of a gram of crystal methamphetamine by combined frequent drug users, 2007-2014 .....	126
Figure 6 5: Mean score of the change in the price of crystal methamphetamine in the past six months by combined frequent drug users, 2006-2014.....	128
Figure 6 6: Mean score of the current strength of crystal methamphetamine by combined frequent drug users, 2006-2014.....	130
Figure 6 7: Mean score of the perceptions of the number of people using crystal methamphetamine by combined frequent drug users, 2006-2014.....	133
Figure 7 1: Mean score of the current availability of ecstasy by combined frequent drug users, 2006-2014.....	139
Figure 7 2: Mean score of the current availability of ecstasy by location, 2006-2014.....	140



Figure 7 3: Mean score of the change in the availability of ecstasy by combined frequent drug users, 2006-2014 .....	142
Figure 7 4: Mean score of the change in the availability of ecstasy by location, 2006-2014 .....	143
Figure 7 5: Mean price of a tablet of ecstasy by combined frequent drug users, 2006-2014.....	144
Figure 7 6: Mean price of a tablet of ecstasy by location, 2014 .....	145
Figure 7 7: Mean price of a pill of ecstasy by location, 2006-2014 .....	145
Figure 7 8: Mean score of the change in the price of ecstasy in the past six months by combined frequent drug users, 2006-2014.....	148
Figure 7 9: Mean score of the change in the price of ecstasy in the past six months by location, 2006-2014.....	148
Figure 7 10: Mean score of the current strength of ecstasy by combined frequent drug users, 2006-2014.....	150
Figure 7 11: Mean score of the current strength of ecstasy by location, 2006-2014.....	151
Figure 7 12: Mean score of the change in strength of ecstasy by combined frequent drug users, 2006-2014.....	153
Figure 7 13: Mean score of the change in strength of ecstasy by location, 2006-2014 .....	154
Figure 7 14: Mean score of perceptions of the number of people using ecstasy by combined frequent drug users, 2006-2014.....	156
Figure 7 15: Mean score of perceptions of the number of people using ecstasy by location, 2006-2014.....	157
Figure 7 16: Proportion of frequent drug users who purchased ecstasy weekly or more often, 2006-2014.....	159
Figure 7 17: Proportion of frequent drug users who purchased ecstasy weekly or more often by location, 2014 .....	160
Figure 7 18: Proportion of frequent drug users who purchased ecstasy weekly or more often by location, 2006-2014.....	161
Figure 7 19: Proportion of frequent drug users who could purchase ecstasy in one hour or less, 2006-2014.....	162
Figure 7 20: Proportion of frequent drug users who could purchase ecstasy in one hour or less by location, 2006-2014 .....	163
Figure 7 21: Thousands of (equivalent) ecstasy tablets seized in New Zealand, 2000-2014 .....	166
Figure 8 1: Current availability of cannabis by combined frequent drug users, 2006-2014 .....	172
Figure 8 2: Current availability of cannabis by combined frequent drug users by location, 2006-2014 .....	173
Figure 8 3: Change in availability of cannabis by combined frequent drug users, 2006-2014.....	175
Figure 8 4: Change in availability of cannabis by location, 2006-2014 .....	175
Figure 8 5: Price of an ounce of cannabis by combined frequent drug users, 2006-2014 .....	178
Figure 8 6: Mean price paid for an ounce of cannabis (NZD) by location, 2014.....	179
Figure 8 7: Mean price paid for an ounce of cannabis (NZD) by location, 2006-2014 .....	180
Figure 8 8: Mean score of the current strength of cannabis by combined frequent drug users, 2006-2014.....	183
Figure 8 9: Mean score of the current strength of cannabis by location, 2006-2014 .....	184

Figure 8 10: Perceptions of the number of people using cannabis by combined frequent drug users, 2006-2014 .....	187
Figure 8 11: Perceptions of the number of people using cannabis by location, 2006-2014 .....	188
Figure 8 12: Proportion of frequent drug users who purchased cannabis weekly or more often by location, 2006-2014 .....	190
Figure 8 13: Proportion of frequent drug users who could purchase cannabis in one hour or less by location, 2006-2014 .....	192
Figure 8 14: Annual number of cannabis plants destroyed in New Zealand, 2000-2014.....	194
Figure 9 1: Mean score of the current availability of LSD by combined frequent drug users, 2006-2014.....	200
Figure 9 2: Mean score of the change in availability of LSD by combined frequent drug users, 2006-2014.....	202
Figure 9 3: Mean price of a 'tab' of LSD by combined frequent drug users, 2006-2014.....	203
Figure 9 4: Mean score of the current strength of LSD by combined frequent drug users, 2006-2014 .....	205
Figure 9 5: Change in the mean score of the strength of LSD by combined frequent drug users, 2006-2014.....	208
Figure 9 6: Number of tabs of LSD and other synthetic psychedelics seized in New Zealand, 1999-2014.....	210
Figure 10 1: Current availability of street morphine by combined frequent drug users, 2008-2014 .....	214
Figure 10 2: Current availability of street morphine in Christchurch, 2008-2014.....	215
Figure 10 3: Change in availability of street morphine by combined frequent drug users, 2008-2014 .....	216
Figure 10 4: Change in availability of street morphine in Christchurch, 2008-2014 .....	217
Figure 10 5: Current mean price paid for 100 milligrams of street morphine (NZD), 2008-2014.....	218
Figure 10 6: Current mean price paid for 100 milligrams of street morphine in Christchurch (NZD), 2008-2014.....	218
Figure 10 7: Change in the price of street morphine in the past six months by combined frequent drug users, 2008-2014.....	220
Figure 10 8: Change in the price of street morphine in the past six months in Christchurch, 2008-2014.....	221
Figure 10 9: Current strength of street morphine in the past six months by combined frequent drug users, 2008-2014.....	223
Figure 10 10: Current strength of street morphine in Christchurch, 2008-2014.....	224
Figure 10 11: Perceptions of the number of people using street morphine in Christchurch, 2008-2014.....	227
Figure 10 12: Proportion of frequent drug users who purchased street morphine weekly or more often in Christchurch, 2008-2014 .....	229
Figure 10 13: Proportion of frequent drug users who could purchase street morphine in one hour or less, 2008-2014.....	231

Figure 10 14: Proportion of frequent drug users who could purchase street morphine in one hour or less in Christchurch, 2008-2014.....	232
Figure 10 15: Proportion of frequent drug users from Christchurch who purchased street morphine from an ‘agreed public location’, ‘public area like a park’ and from a ‘pub, bar/club’, 2008-2014 .....	234
Figure 10 16: Proportion of frequent drug users from Christchurch who purchased street morphine from a ‘gang member or associate’, ‘drug dealer’ and from a ‘social acquaintance’, 2008-2014 .....	235
Figure 11 1: Mean score of the current availability of cocaine by combined frequent drug users, 2006-2014.....	243
Figure 11 2: Mean score of the change in availability of cocaine by combined frequent drug users, 2006-2014 .....	245
Figure 11 3: Mean price of a gram of cocaine (NZD) by combined frequent drug users, 2006-2014 .....	246
Figure 11 4: Mean score of the change in price of cocaine in the previous six months by combined frequent drug users, 2006-2014.....	248
Figure 11 5: Mean score of the current strength of cocaine by combined frequent drug users, 2006-2014.....	250
Figure 11 6: Mean score of the perceptions of the number of people using cocaine by combined frequent drug users, 2006-2014.....	254
Figure 11 7: Grams of cocaine seized in New Zealand, 1999-2014 .....	255
Figure 12 1: Change in availability of heroin by combined frequent drug users, 2006-2014.....	259
Figure 13 1: Figure 13.1 Mean score of the current availability of homebake morphine/heroin by combined frequent drug users, 2006-2014.....	266
Figure 13 2: Mean score of the perceptions of the number of people using homebake morphine/heroin by combined frequent drug users, 2008-2014 .....	268
Figure 14 1: Current availability of street methadone by combined frequent drug users, 2008-2014 .....	272
Figure 15 1: Current availability of street BZP by combined frequent drug users, 2007-2014 .....	276
Figure 15 2: Change in the availability of street BZP by combined frequent drug users, 2007-2014 .....	277
Figure 15 3: Perceptions of the number of people using street BZP by combined frequent drug users, 2007-2014 .....	278
Figure 16 1: Proportion of frequent methamphetamine users who had been ‘given a drug without their knowledge’, ‘sexually harassed’ and ‘overdosed on drugs’ due to their drug use, 2007-2014 .....	282
Figure 16 2: Proportion of frequent methamphetamine users who had ‘physically hurt themselves’, were ‘physically assaulted’ and ‘argued with others’ due to their drug use, 2007 -2014.....	283
Figure 16 3: Proportion of frequent methamphetamine users who had ‘damaged property’, ‘stole property’, and ‘reduced work/study performance’ due to their drug use, 2007-2014 .....	283

Figure 16 4: Proportion of frequent ecstasy users who were ‘physically/verbally threatened’, ‘got into debt’, ‘argued with others’ and ‘got arrested’ due to their drug use, 2008-2014 .....	284
Figure 16 5: Proportion of frequent injecting drug users who had ‘damaged friendship’, ‘upset a family relationship’ and ‘physically hurt themselves’ due to their drug use, 2007-2014 .....	285
Figure 16 6: Proportion of frequent injecting drug users who had accessed a ‘counsellor’ and a ‘social worker’ in relation to drug use in the past six months, 2006-2014 .....	289
Figure 16 7: Proportion of frequent methamphetamine users who received ‘First Aid’, ‘accessed an ambulance’, ‘accessed a social worker’ and ‘accessed needle exchange’ in relation to drug use in the past six months, 2006-2014.....	291
Figure 16 8: Proportion of frequent ecstasy users who had ‘received First Aid’ and ‘accessed a General Practitioner’ in relation to drug use in the past six months, 2006-2014 .....	292
Figure 16 9: Proportion of frequent drug user groups who were assessed as drug dependent using the Short Dependency Scale, 2006-2014 .....	293
Figure 16 10: Proportion of frequent drug users who had stayed in a psychiatric facility overnight or longer by frequent drug user group, 2008-2014 .....	294
Figure 16 11: Proportion of frequent drug user group who are currently receiving treatment for a mental illness, 2008-2014.....	295
Figure 17 1: Proportion of the frequent drug users who felt they needed at least some help to reduce their drug use by frequent drug user group, 2009-2014.....	301
Figure 17 2: Proportion of the frequent methamphetamine users who reported ‘fear of service’ and ‘fear of losing friends’ as barriers to seeking help (of those who were unable to find help), 2007-2014.....	304
Figure 17 3: Proportion of the frequent injecting drug users who reported ‘no transport to get there’ or ‘cost too much’ as barriers to seeking help (of those who were unable to find help), 2007-2014.....	306
Figure 17 4: Proportion of frequent drug users who were currently in drug treatment by frequent drug user group, 2014 .....	308
Figure 17 5: Proportion of callers to the Alcohol & Drug Help-line by drug type, 2007-2014 .....	311
Figure 18 1: Proportion of frequent methamphetamine users who sold drugs, committed property crime and committed fraud in the previous month, 2006-2014.....	315
Figure 18 2: Proportion of frequent injecting drug users who sold drugs, committed property crime and committed fraud in the previous month, 2006-2014.....	316
Figure 18 3: Proportion of frequent ecstasy users who sold drugs, committed property crime and committed fraud in the previous month, 2006-2014.....	317
Figure 18 4: Proportion of frequent injecting drug users who had committed a violent crime in their lifetime, in the previous six months, and in the previous month, 2006-2014.....	318
Figure 18 5: Proportion of frequent injecting users who used a prescription (own name), someone else’s prescription and ‘doctor shopping’ to pay for drug use, 2006-2014.....	325
Figure 19 1: Proportion of frequent drug users who had ever been arrested, convicted or imprisoned, 2014.....	328
Figure 19 2: Proportion of frequent methamphetamine users who had ever been arrested, convicted or imprisoned, 2006-2014.....	329

Figure 19 3: Proportion of frequent injecting drug users who had ever been arrested, convicted or imprisoned, 2006-2014 .....	329
Figure 19 4: Proportion of frequent ecstasy users who had ever been arrested, convicted or imprisoned, 2006-2014.....	330
Figure 19 5: Proportion of convicted frequent drug users who received alcohol and drug treatment as part of sentence, 2009-2014.....	331
Figure 19 6: Proportion of frequent methamphetamine users who had been arrested and imprisoned in the previous 12 months, 2006-2014 .....	332
Figure 19 7: Proportion of frequent injecting drug users who had been arrested and imprisoned in the previous 12 months, 2006-2014 .....	333
Figure 19 8: Proportion of frequent ecstasy users who had been arrested and imprisoned in the previous 12 months, 2006-2014.....	333
Figure 19 9: Proportion of frequent methamphetamine users who had been arrested for disorderly behaviour, fraud and driving under the influence of drugs in the previous 12 months, 2006-2014.....	335
Figure 19 10: Proportion of frequent injecting drug users who had been arrested for disorderly behaviour, fraud, other driving offence and use/possession of drugs in the previous 12 months, 2006-2014.....	336
Figure 19 11: Proportion of frequent ecstasy users who had been arrested for disorderly behaviour, property crime, and use/possession of drugs in the previous 12 months, 2006-2014.....	337
Figure 19 12: Proportion of frequent drug users who noticed police activity toward drug users in the past six months, 2006-2014 .....	338
Figure 19 13: Mean score of change in police activity toward drug users in the past six months for frequent methamphetamine users and frequent ecstasy users, 2006-2014 .....	339
Figure 19 14: Proportion of frequent drug users who thought police activity had made it 'more difficult' for them to obtain drugs in the past six months, 2006-2014 .....	341
Figure 19 15: Proportion of frequent drug users who had a friend(s) arrested in the past six months, 2006-2014.....	342
Figure 20 1: Mean score of the current availability of synthetic cannabinoids, 2013-2014 .....	350
Figure 20 2: Mean score of the change in the availability of synthetic cannabinoids, 2013-2014 .....	351
Figure 20 3: Mean score of the current strength of synthetic cannabinoids, 2013-2014 .....	353
Figure 20 4: Mean score of the change in strength of synthetic cannabinoids, 2013-2014 .....	354
Figure 20 5: Mean score of perceptions of the change in the number of people using synthetic cannabinoids, 2013-2014 .....	355

# Executive Summary

## ***Overview of the IDMS study***

The Illicit Drug Monitoring System (IDMS) provides an annual 'snapshot' of drug use, drug markets and emerging drug use in New Zealand. It has been conducted annually since 2006, gathering trend data on drug use and drug markets for the past nine years. The IDMS provides an evidence base to inform effective and measured responses to drug problems in New Zealand. Findings are utilised by policy makers, government agencies, health providers, community groups and researchers. The 2014 IDMS surveyed 313 frequent drug users (i.e. 109 frequent ecstasy users, 101 frequent methamphetamine users, and 103 frequent injecting drug users [IDU]) from the three main centres (i.e. Auckland, Wellington and Christchurch) of New Zealand from August to December 2014.

## ***The emergence of new psychoactive substances and on-line drug markets***

The proportion of the frequent drug users who had tried a new drug for the first time increased from 24% in 2009 to 37% in 2014. The new drug types most commonly reported in 2014 were 'new synthetics', MDMA 'powder', mephedrone, synthetic hallucinogens (e.g. 25I-NBOMe), unspecified 'ecstasy' pills (5%), 2C drugs (e.g. 2CB, 2CI,) and methylone. Seventy-two percent of those who commented on new trends reported increasing use of the internet to buy and sell drugs, including purchasing from the encrypted web-sites (e.g. 'Silk Road', 'Evolution', 'Agora') and from social network sites (e.g. 'Facebook™'). The proportion who mentioned encrypted drug markets as a new way of selling drugs has increased steadily over the past three years (i.e. 2011=0%, 2012=8%, 2013=18%, 2014=37%). The proportion of frequent drug users who had purchased 'ecstasy' from the internet increased from <1% in 2011 to 10% in 2014.

## ***The rise and fall of synthetic cannabinoid use and availability***

There had previously been a rapid rise in synthetic cannabinoid use by the frequent ecstasy users, up from 21% in 2010 to 45% in 2011, but use declined just as dramatically the following year down to 24% in 2012. In May 2014, the Government withdrew all licenses for legal high products, effectively making all synthetic cannabinoids illegal. The use of synthetic cannabinoids by the ecstasy users declined sharply from 22% in 2013 to 6% in 2014. The proportion of frequent drug users who reported synthetic cannabinoids were 'more difficult' to obtain increased from 19% in 2013 to 57% in 2014, the proportion

who reported the price was 'increasing' rose from 31% in 2013 to 51% in 2014, and the proportion who said 'less' people were using synthetic cannabinoids increased from 36% in 2013 to 70% in 2014. The proportion of callers to the Alcohol & Drug Helpline seeking help for synthetic cannabinoids increased sharply from 1% in 2011/12 to 9% in 2013/14, before declining to 2% in 2014/15.

### ***The surge in methamphetamine supply continues in Christchurch***

The availability of methamphetamine recovered sharply in Christchurch in 2013, following a number of years of decline after the earthquakes, and this resurgence continued in 2014. The expansion of the methamphetamine market in Christchurch may be driven by growing demand fuelled by the influx of construction workers for the city re-build, and by greater supply facilitated by the reorganisation of local gangs towards more drug dealing.

### ***Growing gang involvement in the retail sale of methamphetamine***

The proportion of frequent drug users who purchased methamphetamine from a gang member increased from 36% in 2013 to 50% in 2014. In recent years there has been a similar increase in gang involvement in selling cannabis (up from 19% in 2009 to 34% in 2014) and street morphine (up from 10% in 2009 to 38% in 2014).

### ***A rise in semi-public markets for methamphetamine***

An increasing proportion of frequent drug users purchased methamphetamine from a 'street drug market' (up from 5% to 20% in 2014), 'public area like a park' (up from 9% in 2009 to 35% in 2014), a 'tinny house' (up from 11% to 20%) and from a 'pub/bar or club' (up from 2% in 2009 to 16% in 2014). These semi-public markets reduce the time required to find and purchase methamphetamine. The proportion of frequent drug users who could purchase methamphetamine in one hour or less increased from 51% in 2011 to 76% in 2014.

### ***Growing international supply of methamphetamine***

The 106 kilograms of methamphetamine seized in 2014 was the highest quantity seized in New Zealand since 2006. Record seizures of amphetamines were also made at the Australian border in 2013/14, and there have been international reports of increasingly globally networked methamphetamine trafficking. The mean price of methamphetamine in New Zealand remained stable at \$681 per gram in 2014, considerably lower than the peak of \$815 per gram reported in 2011.

### ***Increasing injection of methamphetamine and overdose***

The proportion of frequent methamphetamine users who had injected methamphetamine increased sharply from 28% in 2013 to 53% in 2014, and the proportion who had experienced a 'drug overdose' also increased sharply from 15% in 2013 to 29% in 2014. A higher proportion of methamphetamine users reported accessing a needle exchange; up from 20% in 2013 to 46% in 2014. Christchurch has an established population of intravenous drug users, and the increasing availability of methamphetamine there may be contributing to increased injecting of methamphetamine with associated health risks and service needs.

### ***A confusing and risky market for new synthetic hallucinogens***

A range of new synthetic hallucinogens have emerged in recent years, which are sometimes sold as 'LSD', including the NBOMe and 2C family of compounds. NBOMe compounds are many times more potent than LSD (i.e. active in sub-milligram doses), and have been responsible for overdoses and a small number of deaths in Europe and the United States. Reports of 'LSD' in the IDMS may now be referring to these new compounds, as well as the traditional LSD. A total of 26,965 blotter tabs of 'LSD and other synthetic psychedelics' were seized in 2014; 61% more than the 16,774 tabs seized in 2013. There has been some increase in 'LSD' use, and some recovery in 'LSD' availability, in recent years. The current availability of 'LSD' declined from 2013 to 2014, perhaps reflecting increasing tab seizures. The impact of these new synthetic hallucinogens may not be seen fully until the coming New Zealand summer music festival season.

### ***The return of MDMA?***

There were strong regional differences in ecstasy supply in 2014, with a sharp increase in the use, availability and strength of ecstasy in Christchurch. The proportion of frequent drug users from Christchurch who reported ecstasy was 'very easy' to obtain increased from 9% in 2013 to 25% in 2014, and the proportion who had purchased ecstasy weekly or more often increased from 2% in 2013 to 30% in 2014. Again, this surge in demand may be driven by the influx of construction workers to Christchurch. There have been reports of a return of higher purity MDMA in Europe, and this improved international supply may account for the stronger ecstasy reported in Christchurch. It remains unclear how much of the 'ecstasy' market in New Zealand consists of MDMA as opposed to a range of ecstasy substitute compounds, such as MEC and methylone. The emergence of the ecstasy substitute market



around 2009 was responsible for the decline in the strength and price of 'ecstasy' in New Zealand (down from \$55 per pill in 2009 to \$42 per pill in 2014), and there has been little indication to date of the price rising with the return of some higher purity MDMA.

### ***Was there a cannabis drought?***

There were anecdotal reports of a 'cannabis drought' in New Zealand at the end of 2014, particularly in the South Island. Findings from the IDMS provide some support for these claims. The current availability of cannabis declined from 2013 to 2014, with a particularly marked decline in Christchurch. The frequent drug users have reported modest declines in cannabis use in recent years. A number of factors may be responsible including the emergence of synthetic cannabinoids making cannabis use and cultivation less attractive, and a particularly successful cannabis crop eradication operation in 2014.

### ***A recovery in street morphine markets***

There had previously been a sudden decline in the availability of 'street' morphine in Christchurch from 2011 to 2013, accompanied by a substantial increase in price. The availability of morphine recovered quite sharply in 2014. The proportion of frequent drug users in Christchurch who were able to purchase street morphine in one hour or less increased from 71% in 2012 to 87% in 2014. The proportion of frequent drug users from Christchurch who purchased street morphine from a 'gang member' increased from 7% in 2012 to 51% in 2014, and the proportion who purchased from a 'drug dealer' increased from 46% in 2011 to 98% in 2014. These trends suggest organised drug dealing groups are playing a central role in the recovery of the street morphine market.

### ***A decline in oxycodone use but use of other pharmaceuticals continues to increase***

The proportion of frequent injecting drug users using oxycodone had previously increased from 9% in 2008 to 46% in 2013, but had decreased to 20% in 2014, perhaps reflecting tighter prescribing practices. However, use of methylphenidate (Ritalin™) and antidepressants by the frequent drug users continues to rise steadily. The proportion of the frequent ecstasy users who had used methylphenidate increased from 13% in 2006 to 32% in 2014. An increasing proportion of injecting drug users had used methylphenidate (up from 43% in 2006 to 59% in 2014), anti-depressants (up from 8% in 2006 to 18% in 2014) and morphine (from 54% in 2008 to 68% in 2014).

### ***A surprising spike in heroin use but little change in availability***

There was a surprising sharp increase in heroin use among the frequent methamphetamine users; up from 5% in 2013 to 18% in 2014. There was a large seizure of heroin made in New Zealand in 2014 (i.e. 16 kilograms), but nearly all of this was thought to be destined for the larger Australian market. There does not appear to have been any sustained increase in the availability of heroin in New Zealand, with the frequent drug users largely describing the availability of heroin as ‘stable/more difficult’ in 2014. However, the number of frequent drug users who commented on the heroin market was fairly low and so these findings should be interpreted with some caution.

### ***Little sign of a growing cocaine market***

We found little evidence of a growing cocaine market in New Zealand. The fluctuations in the availability, price and strength of cocaine over the past nine years suggest a fairly thin market subject to irregular supply. However, as the IDMS sample is recruited at ‘street level’, and the high price of cocaine in New Zealand (i.e. \$400 per gram) means its use is likely limited to a select affluent demographic, the IDMS participants may not provide the best overview of the current situation.

### ***The collapse in use of former legal highs***

There has been a substantial decline in BZP and nitrous oxide use (both former legal highs) over the past nine years following bans and greater regulatory control. The proportion of frequent ecstasy users who had used BZP declined from 65% in 2006 to 7% in 2014, and the proportion who had used nitrous oxide fell from 47% in 2006 to 7% in 2014.

### ***Different types of drug users have different levels of demand for treatment and health services***

There were significant differences in demand for help services between the different types of frequent drug users. Forty-three percent of the injecting drug users, and 20% of the methamphetamine users, indicated they needed ‘a lot’ of help to reduce their drug use in 2014. In contrast, only 3% of the ecstasy users indicated they needed ‘a lot’ of help. Thirty-nine percent of the injecting drug users, 32% of the methamphetamine users, and 12% of the ecstasy users said they had wanted help for their drug problems ‘but had not got it’ in 2014.

***Drug treatment increasingly available via the criminal justice system***

Fifty-three percent of the frequent methamphetamine users, 33% of the frequent injecting drug users and 21% of the frequent ecstasy users who had been convicted of a crime had received alcohol and drug treatment as a part of their sentence in 2014. The proportion of methamphetamine users who had received treatment as part of their sentence increased from 32% in 2009 to 53% in 2014.

# 1. Introduction

The Illicit Drug Monitoring System (IDMS) was established in 2005 to provide annual ‘snapshots’ of emerging drug use, ongoing drug trends, drug markets and drug related harm in New Zealand. The findings from the IDMS are intended to inform strategic and policy responses to drug use in New Zealand. IDMS findings are utilised by a wide audience including government agencies, policy makers, drug treatment organisations, drug prevention organisations, health and welfare services, needle exchanges and researchers.

## 1.1 Aims of IDMS

The principal aims of the IDMS are to:

- Track trends in drug use
- Identify the emergence of new drug types
- Measure the availability, price, and strength of drugs of greatest concern
- Document the health and social harms related to drug use
- Document demand for alcohol and drug treatment and other health services in relation to drug use, and to identify the barriers experienced by those accessing help for drug problems

## 1.2 Methodology

The IDMS employs a research methodology which has been used successfully in a number of countries to track trends in drug use and drug related harm (see Griffiths et al., 2000; Mounteney & Leirvag, 2004; Wilkins & Rose, 2003). The Australian drug monitoring programmes (i.e. the Illicit Drug Reporting System (IDRS) and Ecstasy and related Drugs Reporting System (EDRS)) provided a natural starting point for the development of a drug monitoring system in New Zealand (see recent examples, Dunn et al., 2007; O'Brien et al., 2007; Stafford et al., 2009). These methodologies were adapted and extended in the IDMS to address the unique market and geographical features of illegal drug use in New Zealand. The recruitment methods employed in the IDMS were first piloted in 2004 during early research into the socio-economic impact of methamphetamine in New Zealand (see Wilkins et al., 2004b).

The primary source of information in the IDMS are three groups of frequent drug users (i.e. frequent methamphetamine users, frequent ecstasy users and frequent injecting drug users) recruited from the community in the three main centres of New Zealand (i.e. Auckland, Wellington and Christchurch). The frequent drug users are interviewed because they are a 'sentinel population' with first-hand experience and expert knowledge of recent trends in drug use and drug markets, and who also bear a disproportionately high level of drug related harm (see Breen et al., 2002; Hando et al., 1997; Wilkins, et al., 2004b).

A unique design feature of the IDMS is that it simultaneously recruits and interviews *three* groups of frequent drug users from the community. This is done to provide a broader understanding of recent trends in different drug types and to ensure we have a sample of sufficient size to investigate less popular or emerging drug types. Most frequent drug users are poly drug users and some are involved in the buying and selling of different drug types; consequently they have knowledge of more than one drug type or drug market.

To be eligible to be interviewed for the study participants have to have used a drug type at least monthly in the past six months. The specific eligibility criteria are as follows:

- i) Frequent methamphetamine users - at least monthly users of methamphetamine or crystal methamphetamine
- ii) Frequent ecstasy users - at least monthly users of ecstasy
- iii) Frequent Intravenous Drug Users (IDU) – at least monthly injectors of any drug. The drug types injected by the IDU sample can include legal pharmaceuticals which may have been illegally diverted from the medical system, such as morphine, methadone and methylphenidate (Ritalin).

The information provided by the interviews with the three groups of frequent drug users is contextualised with secondary data sources, such as drug seizure statistics, admissions to drug treatment programmes, and calls to drug support and information lines.

### **1.3 Survey of frequent drug users**

A total of 313 frequent drug users were interviewed for the 2014 IDMS, including 109 frequent ecstasy users, 101 frequent methamphetamine users, and 103 frequent injecting drug users (IDU). The frequent drug users interviewed for the study participated in an in-depth, hour-long face-to-face interview using a structured questionnaire. Recruitment and interviewing of the frequent drug users was carried out in the three main centres (i.e. Auckland, Wellington and Christchurch) from August to December 2014. Participants were recruited through purposive sampling and ‘snowballing’ (Biernacki & Waldorf, 1981; Watters & Biernacki, 1989). Purposive sampling involves the use of targeted recruitment strategies and is used to recruit hard-to-reach populations, such as frequent illegal drug users, when general population sampling is costly. In order to ensure that a broad sample of frequent drug users is interviewed for the IDMS, a range of ‘start points’ for recruitment are chosen, based on the demographic profile of users and an understanding of the venues and locations where they are likely to congregate in a given site (see Wilkins et al., 2005a, 2005b, 2005c; Wilkins, et al., 2004b). The recruitment of the three samples of frequent drug users was achieved through three separate promotional campaigns. The interviewers left promotional material at a wide range of locations. Those contacting interviewers about participating in the study indicated the type of drug advertisement to which they were responding and were screened for eligibility for that drug type. Participants were administered a structured face-to-face interview at a public venue of their choosing.

Participants were informed that all the information provided was strictly confidential and anonymous, and that the results would only be presented in aggregate. The project was designed so that no individual participant could be identified at a later date. The protocols and procedures used to collect and store the data for the project were approved by the Massey University Human Subjects Ethics Committee. All participants were offered a \$20 voucher to compensate them for their time.

### **1.4 Secondary data sources**

A range of secondary data sources were used in the 2014 IDMS to place the reports of the frequent drug users in wider context. Secondary data sources included in this report are:

- Drug seizure data
- Call statistics from the Drug and Alcohol Help-line
- Drug treatment admission statistics

We would like to thank the New Zealand Police, National Drug Intelligence Bureau (NDIB), New Zealand Customs Service, Alcohol and Drug Association of New Zealand (ADANZ) and Community Alcohol and Drug Services (CADS) for allowing us to present this data. The amount of a drug seized by the authorities in a given year is constantly up-dated as cases are resolved through the courts. The seizure data for previous years has been updated in this report and consequently may differ from previous IDMS reports.

## 1.5 Statistical analysis

The statistical analysis presented in this report brings an important level of rigour to the findings. It is particularly important when trying to answer the question of whether variation in findings between years occurs because there has been some real change, or simply due random variation. We only consider there to be a real difference between the measures if the result of the test is statistically significant at the  $p < 0.05$  level. In other words, the probability of obtaining that result by chance is less than one in 20. At times we note situations where the test result is close to the  $p < 0.05$  cut-off point. This is particularly worthy of note when sample numbers are low and may be impeding a successful test. Statistical testing was carried out for a range of drug measures collected in the study. We conducted two types of statistical tests across time to investigate recent trends and over term trends. Firstly we tested for long term trends using all the years of data (i.e. from 2006 to 2014), and secondly we tested for recent trends using the most recent years of data (i.e. from 2013 to 2014). We tested for differences in proportions (e.g. yes/no questions) using logistic regression and differences in means using ANOVA and Student's t-tests. ANOVA and Student's t-tests were run on the log-transformed values for highly-skewed variables (e.g. number of days used methamphetamine in the previous six months). Scale-type questions such as current drug availability were allocated scores (e.g. very difficult=4, difficult=3, easy=2 and very easy=1) and differences were tested for using Student's t-tests. Student's t-tests assume the samples tested form a normal distribution. Frequency tables show the distribution of data as being mound shaped, providing an approximation of a normal probability distribution. The enumerated scale question is not intended to provide a precise description of the variable; rather it is a practical way to easily summarise the variable and demonstrate how it has changed. All analysis was run using SAS software.

## **1.6 Statistical weighting of the sample**

As part of the analysis we wished to compare findings from the 2014 IDMS survey with the previous 2013, 2012, 2011, 2010, 2009, 2008, 2007 and 2006 IDMS surveys. The annual samples differed somewhat in terms of the proportion of respondents in each site, and in each frequent drug user module (see Tables 1.1 and 1.2). If unaccounted for it is possible for the differences between the samples to influence the results of the comparisons. To minimise the effect of differing sample populations we weighted the sample to ensure the relative contribution of each site and module was equal across years. We applied fixed weightings for site location and frequent drug user group based on the averages for these categories for 2006-2008. Tables 1.3 and 1.4 show the weighted percentages of respondents from each site and module respectively.



**Table 1 1: Distribution of IDMS respondents by site for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014**

Site (%)	2006 (n=318)	2007 (n=324)	2008 (n=404)	2009 (n=315)	2010 (n=411)	2011 (n=372)	2012 (n=330)	2013 (n=312)	2014 (n=313)	Total (n=3099)
Auckland	43.4	46.9	33.2	41.6	36.0	49.7	37.6	43.3	46.0	42.0
Wellington	22.0	28.1	31.7	23.8	28.5	23.7	25.2	15.7	21.1	24.4
Christchurch	34.6	25.0	35.1	34.6	35.5	26.6	37.3	41.0	33.0	33.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.0

**Table 1 2: Distribution of IDMS respondents by module for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014**

Module (%)	2006 (n=318)	2007 (n=324)	2008 (n=404)	2009 (n=315)	2010 (n=411)	2011 (n=372)	2012 (n=330)	2013 (n=312)	2014 (n=313)	Total (n=3099)
Methamphetamine	35.8	34.0	33.9	33.3	31.6	30.4	30.3	29.8	32.3	32.3
Ecstasy	34.9	32.4	33.4	35.6	37.2	43.3	38.2	37.8	35.0	36.4
Injecting	29.2	33.6	32.7	31.1	31.1	26.3	31.5	32.4	33.0	31.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Table 1 3: Weighted distribution of respondents by site for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014**

Site (%)	2006 (n=318)	2007 (n=323)	2008 (n=405)	2009 (n=315)	2010 (n=412)	2011 (n=375)	2012 (n=331)	2013 (n=312)	2014 (n=313)	Total (n=3099)
Auckland	39.8	41.4	40.8	40.6	41.1	38.8	41.5	41.9	41.4	40.8
Wellington	27.1	27.6	27.6	27.4	27.2	26.8	27.1	26.9	27.4	27.2
Christchurch	33.1	31.0	31.6	32.0	31.7	34.5	31.4	31.2	31.2	32.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Table 1 4: Weighted distribution of respondents by module for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014**

<b>Module (%)</b>	<b>2006 (n=318)</b>	<b>2007 (n=323)</b>	<b>2008 (n=405)</b>	<b>2009 (n=315)</b>	<b>2010 (n=412)</b>	<b>2011 (n=375)</b>	<b>2012 (n=331)</b>	<b>2013 (n=312)</b>	<b>2014 (n=313)</b>	<b>Total (n=3099)</b>
Methamphetamine	34.3	32.9	36.1	34.5	36.3	32.5	36.1	34.8	33.0	34.5
Ecstasy	35.2	31.2	33.6	33.9	33.6	32.3	34.1	36.1	36.0	34.0
Injecting	30.6	35.9	30.2	31.6	30.2	35.2	29.8	29.1	32.0	31.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## 2. Demographics

### 2.1 Introduction

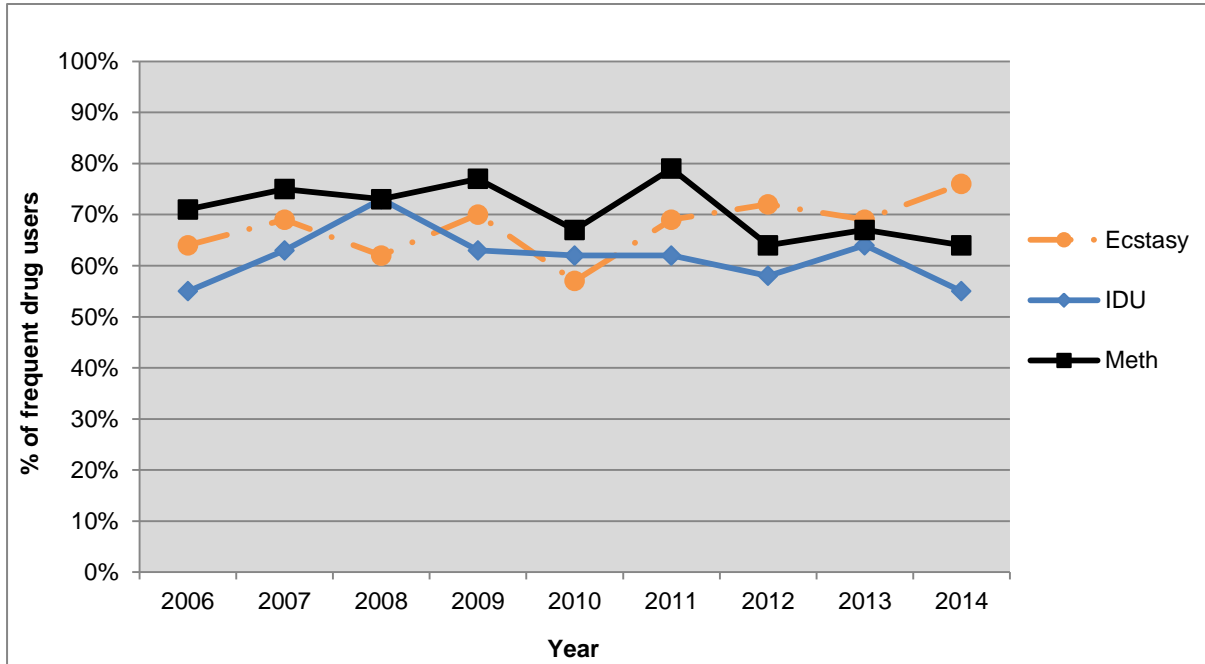
The IDMS has consistently found distinct demographic profiles for each of the three groups of frequent drug users interviewed for the study. The frequent ecstasy users tend to be younger (i.e. early 20s), students, and more highly educated (Wilkins et al., 2011b). Frequent methamphetamine users, on the other hand, tend to be older (i.e. early 30 year olds) and are more likely to be Maori (Wilkins et al., 2010). Finally, the frequent injecting drug users are the oldest group (i.e. late 30s), more likely to be unemployed or on a sickness benefit, and more likely to have poor physical health (Wilkins, et al., 2011b).

The IDMS has also identified some emerging trends in the demographic profiles of the three frequent drug user groups. The mean age of the frequent methamphetamine users increased from 30 years in 2009 to 36 years in 2013, suggesting a maturing group of users. The proportion of the frequent methamphetamine users who were Maori increased from 27% in 2010 to 43% in 2013. Sixty-two percent of the frequent ecstasy users were students in 2013. The mean age of the frequent injecting drug users increased steadily from 32 years in 2006 to 39 years in 2012, but then declined sharply to 33 years in 2013. Eighty percent of the frequent injecting drug users identified as European in 2013. Seventy-six percent of the frequent injecting drug users reported that they were unemployed or on a sickness benefit in 2013.

### 2.2 Gender

Seventy six percent of the frequent ecstasy users, 64% of the frequent methamphetamine users and 55% of the frequent injecting drug users were male in 2014 (Figure 2.1). The proportion of frequent ecstasy users who were male increased from 64% in 2006 to 76% in 2014 ( $p=0.0443$ ). Conversely, the proportion of frequent methamphetamine users who were male decreased from 71% in 2006 to 64% in 2014 ( $p=0.0456$ ).

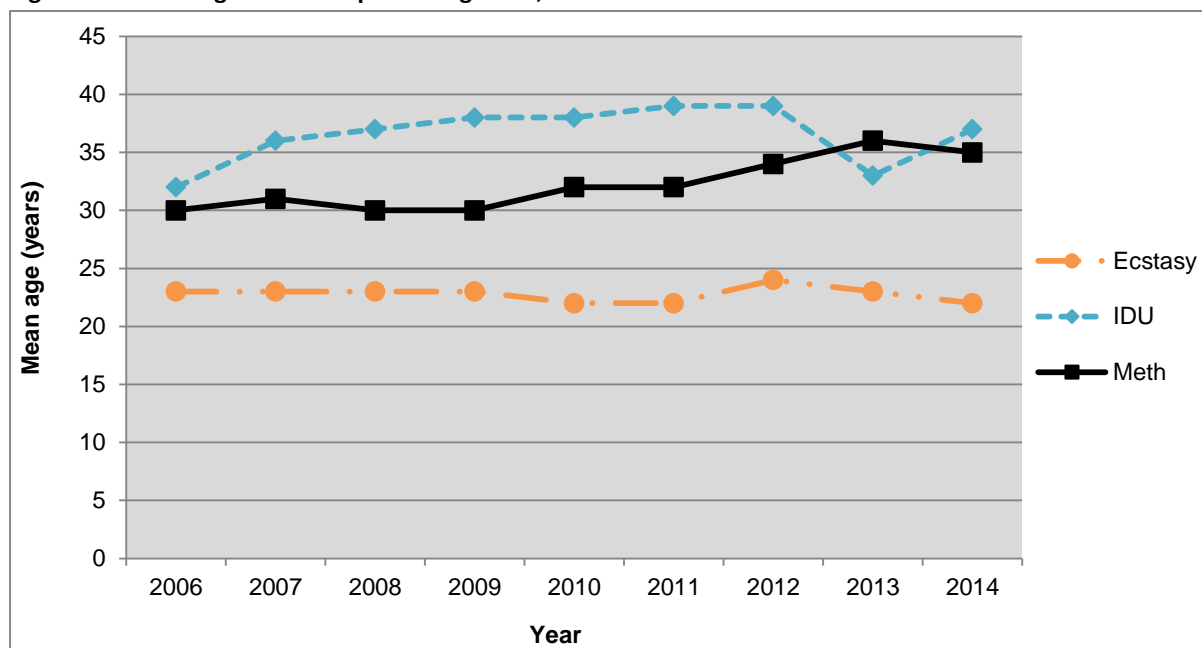
Figure 2 1: Proportion of the frequent drug users who were male, 2006-2014



### 2.3 Age

The frequent injecting drug users were a mean age of 37 years old, the methamphetamine users were 35 years old, and the frequent ecstasy users were 22 years old in 2014. The mean age of the frequent methamphetamine users had increased from 30 years in 2006 to 35 years in 2014 ( $p < 0.0001$ ). Overall, the frequent injecting drug user group have also got progressively older over the course of the study (from 32 years in 2006 to 37 years in 2014,  $p = 0.0593$ ) (Figure 2.2). There was no statistically significant change in the mean age of the frequent ecstasy users from 2006 to 2014.

**Figure 2 2: Mean age of the frequent drug users, 2006-2014**



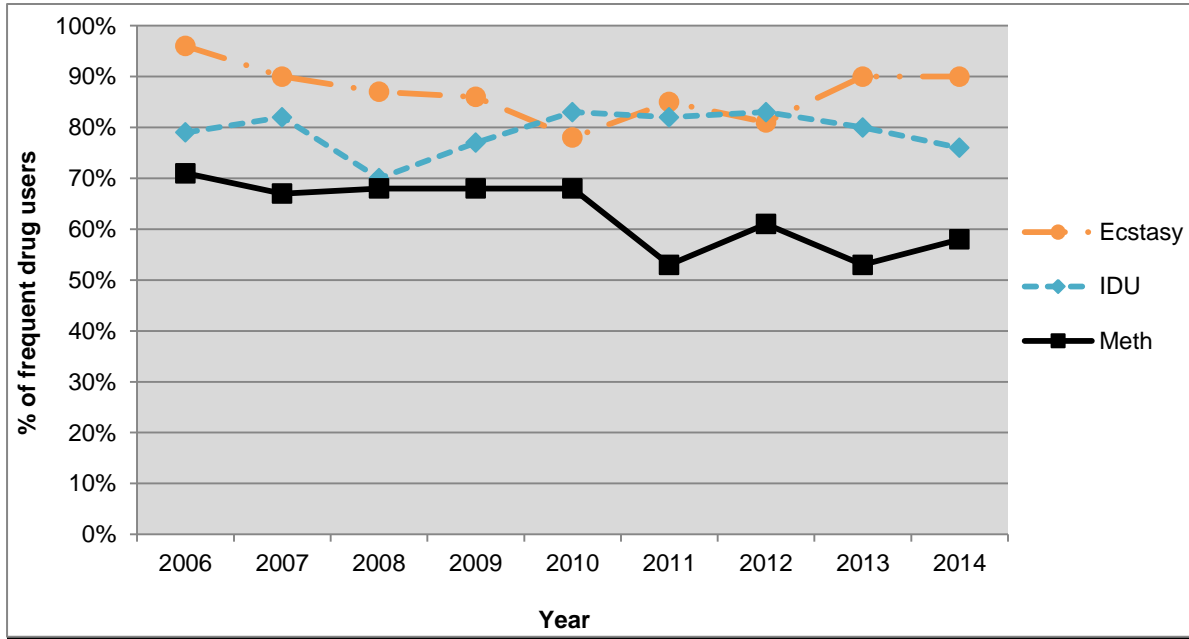
## 2.4 Ethnicity

Ninety percent of frequent ecstasy users, 76% of the frequent injecting drug users and 58% of the frequent methamphetamine users were of European ethnicity in 2014 (Table 2.1). The proportion of frequent methamphetamine users who were European decreased from 71% in 2006 to 58% in 2014 ( $p=0.0005$ ) (Figure 2.3).

**Table 2 1: Ethnicity of the frequent drug users, 2014**

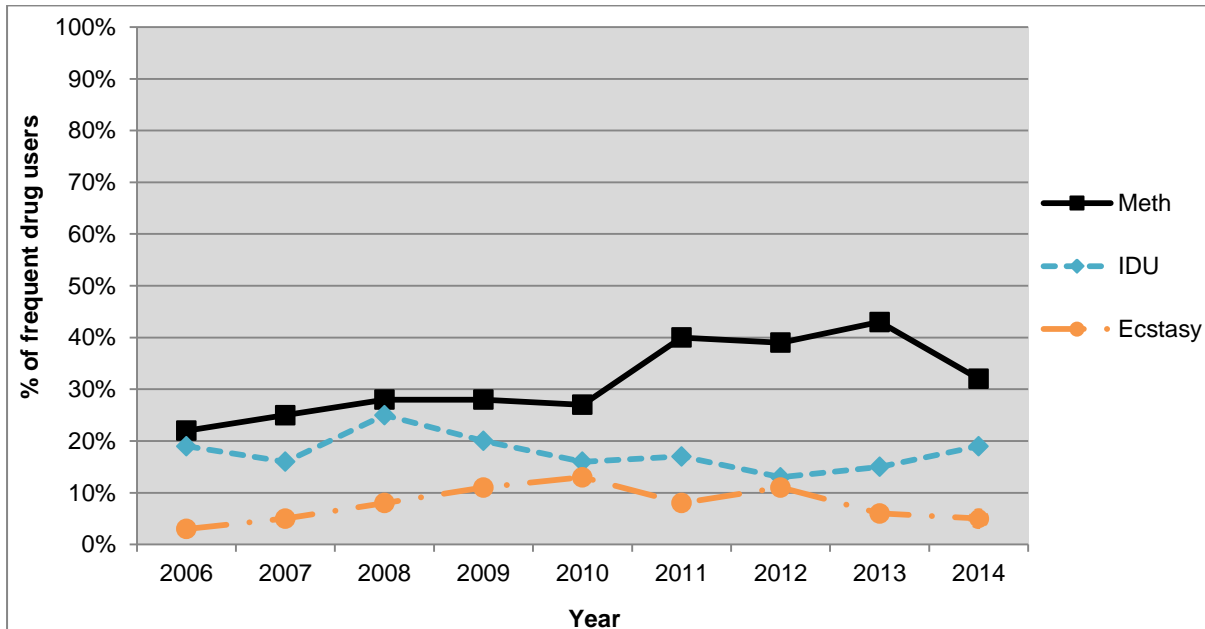
Ethnicity (%)	Methamphetamine users (n=101)	Injecting drug users (IDU) (n=102)	Ecstasy users (n=109)
European	58	76	90
Maori	32	19	5
Pacific Island	7	3	1
Asian	2	3	3
Other	1	0	2

**Figure 2 3: Proportion of the frequent drug users who were of European ethnicity, 2006-2014**



The proportion of frequent methamphetamine users who were Maori increased from 22% in 2006 to 32% in 2014 ( $p=0.0002$ ). However, this trend reversed somewhat from 43% in 2013 to 32% in 2014, and was close to being statistically significant ( $p=0.0907$ ) (Figure 2.4). There was no change in the proportion of frequent ecstasy and injecting drug users who were Maori from 2006 to 2014.

**Figure 2 4: Proportion of the frequent drug users who were of Maori ethnicity, 2006-2014**



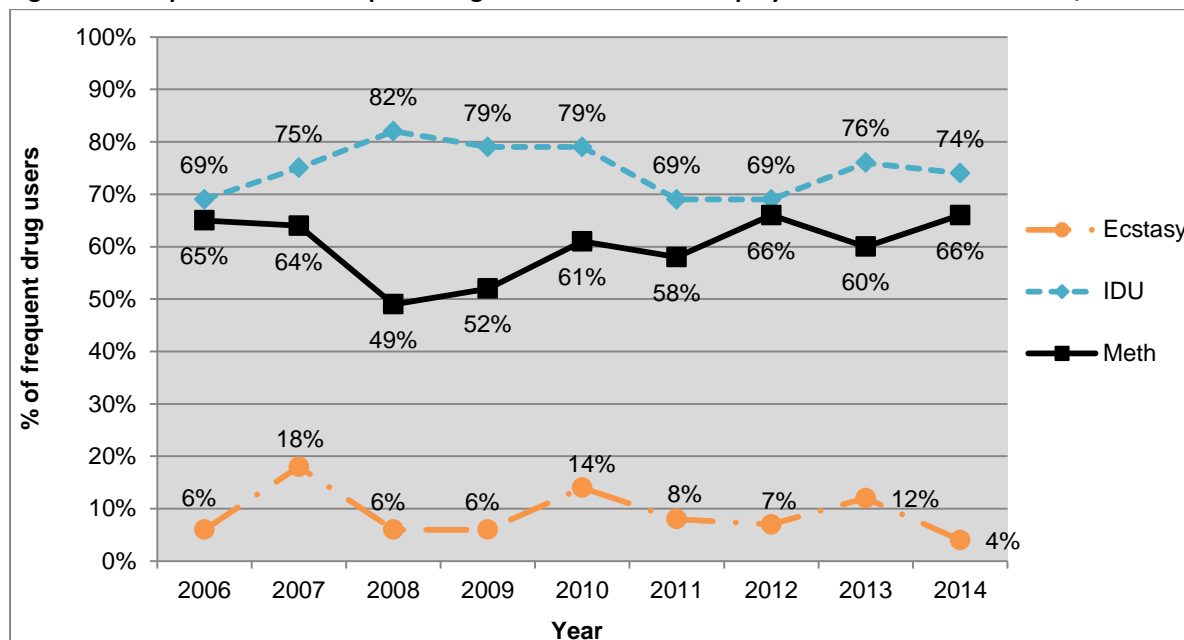
## 2.5 Employment status

The three frequent drug user groups show distinctive employment status profiles. In 2014, 74% of the frequent injecting drug users and 66% of the frequent methamphetamine users were unemployed or on a sickness benefit, compared to only 4% of the frequent ecstasy users (Table 2.2 and Figure 2.5). Furthermore, 78% of the frequent ecstasy users were students (i.e. tertiary or high school), compared to less than 10% of the other two groups. The proportion of frequent ecstasy drug users who were unemployed declined from 12% in 2013 to 4% in 2014 ( $p=0.0166$ ).

**Table 2 2: Employment status of the frequent drug users, 2014**

Employment status (%)	Methamphetamine users (n=98)	Injecting drug users (IDU) (103)	Ecstasy users (n=109)
Unemployed/ sick/ other	66	74	4
Employed	27	17	19
Students (tertiary/ high school)	7	9	78

**Figure 2 5: Proportion of the frequent drug users who were unemployed or on a sickness benefit, 2006-2014**



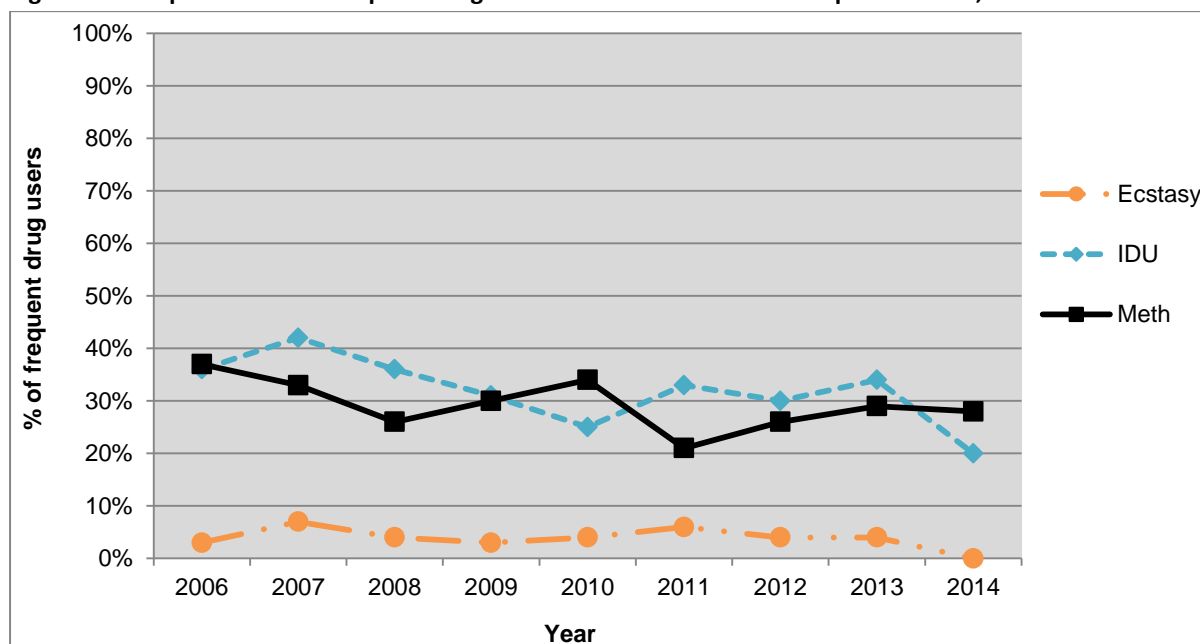
## 2.6 Education

The frequent methamphetamine users and frequent injecting drug users often have poor levels of educational achievement. In 2014, 28% of the frequent methamphetamine users and 20% of the frequent injecting drug users had no educational qualifications at all (Table 2.3). In contrast, none of the frequent ecstasy users had no educational qualifications. The proportion of frequent injecting drug users with no educational qualifications decreased from 34% in 2013 to 20% in 2014 ( $p=0.0361$ ). The proportion of frequent methamphetamine users with no educational qualifications also decreased from 37% in 2006 to 28% in 2014, and this decline was close to being statistically significant ( $p=0.0996$ ) (Figure 2.6).

**Table 2 3: Highest educational achievement of the frequent drug users, 2014**

Highest educational qualification (%)	Methamphetamine users (n=96)	Injecting drug users (IDU) (n=98)	Ecstasy users (n=106)
No qualifications	28	20	0
High school qualifications	33	27	69
Trade qualifications	22	31	6
Tertiary qualifications	17	21	25

**Figure 2 6: Proportion of the frequent drug users who had no educational qualifications, 2006-2014**





## 2.7 Sexual orientation

Twenty-one percent of the frequent injecting drug users, 15% of frequent methamphetamine users and 8% of frequent ecstasy users identified as non-heterosexual (i.e. gay man, lesbian woman, bisexual or 'other' sexual orientation) in 2014 (Table 2.4). The proportion of frequent ecstasy users who identified as non-heterosexual decreased from 18% in 2013 to 8% in 2014 ( $p=0.0477$ ).

**Table 2 4: Frequent drug users' sexual orientation, 2014**

Sexual orientation (%)	Methamphetamine users (n=100)	Ecstasy users (n=108)	Intravenous drug users (IDU) (n=102)
Heterosexual	85	92	80
Gay male	2	4	2
Lesbian	1	0	6
Bisexual	11	2	13
Other	1	2	0

## 2.8 Marital status

Seventy percent of the frequent ecstasy users, 56% of the frequent methamphetamine users and 41% of the frequent injecting drug users were of single marital status in 2014 (Table 2.5). The frequent injecting drug users were more likely to be married or in a de facto relationship than the other two groups.

**Table 2 5: Frequent drug users by marital status, 2014**

Marital status (%)	Methamphetamine users (n=100)	Ecstasy users (n=109)	Intravenous drug users (IDU) (n=103)
Single	56	70	41
With a regular partner	31	25	27
Married/ defacto	5	4	14
Separated	6	1	8
Divorced	2	0	8
Widowed	0	0	1

## 2.9 Accommodation

Seventy-two percent of frequent injecting drug users, 57% of the frequent ecstasy users and 54% of frequent methamphetamine users were living in a rented private accommodation in 2014 (Table 2.6).

**Table 2 6: Frequent drug users by current accommodation type, 2014**

Accommodation type (%)	Methamphetamine users (n=98)	Ecstasy users (n=109)	Intravenous drug users (IDU) (n=103)
Rented private house	54	57	72
Own private house	10	14	3
Parents/family private house	4	29	10
Boarding house/hostel	6	10	10
No fixed address/homeless	15	1	1
Other	3	0	2
Shelter/refuge	6	0	0
Drug treatment residence	2	0	0

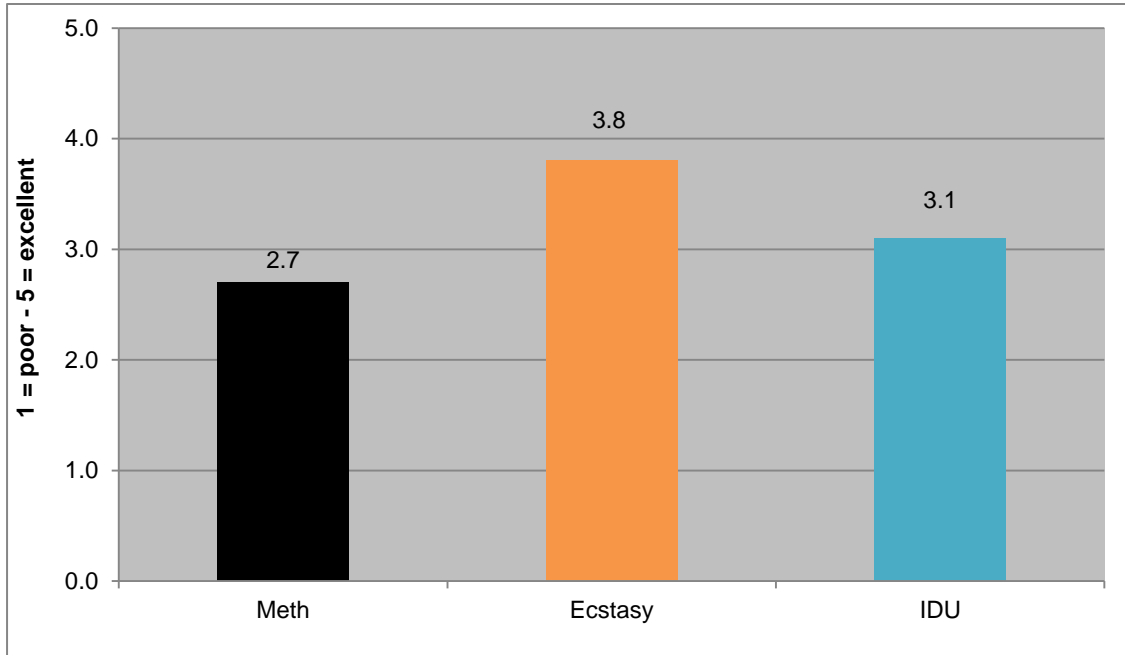
## 2.10 Physical health

The frequent drug users were asked to self-assess their physical health using a five point scale (i.e. 1=poor – 5=excellent). In 2014, 43% of the frequent methamphetamine users reported their physical health as either 'fair' or 'poor' (Table 2.7). The frequent methamphetamine users reported a decrease in their self-reported levels of physical health from 2009 to 2014 (down from 3.0 to 2.7,  $p=0.0090$ ). In contrast, the frequent injecting drug users self-reported an increase in their physical health from 2013 to 2014 (up from 2.6 to 3.1,  $p=0.0029$ ).

**Table 2 7: Frequent drug users' self-assessment of current physical health, 2009-2014**

	Methamphetamine users						Ecstasy users						Intravenous drug users (IDU)					
General physical health (%)	2009 (n=104)	2010 (n=126)	2011 (n=112)	2012 (n=100)	2013 (n=93)	2014 (n=98)	2009 (n=111)	2010 (n=153)	2011 (n=161)	2012 (n=124)	2013 (n=118)	2014 (n=109)	2009 (n=99)	2010 (n=128)	2011 (n=98)	2012 (n=104)	2013 (n=101)	2014 (n=103)
Excellent [5]	13	7	12	7	5	6	27	19	22	21	27	25	4	5	7	11	8	13
Very good [4]	19	23	31	20	17	18	33	36	37	37	40	39	19	21	21	15	17	23
Good [3]	35	37	37	32	39	33	25	26	27	31	20	29	29	36	29	32	30	37
Fair [2]	24	23	9	31	28	28	13	17	10	9	12	5	29	24	32	31	20	20
Poor [1]	10	11	10	10	12	15	2	2	4	3	1	3	19	15	10	12	25	7
Average score of physical health (1=Poor – 5=Excellent)	3.0	2.9	3.3	2.8	2.8	2.7	3.7	3.5	3.6	3.6	3.8	3.8	2.6	2.8	2.8	2.8	2.6	3.1

Figure 2 7: Mean score of perception of physical health by frequent drug user group, 2014



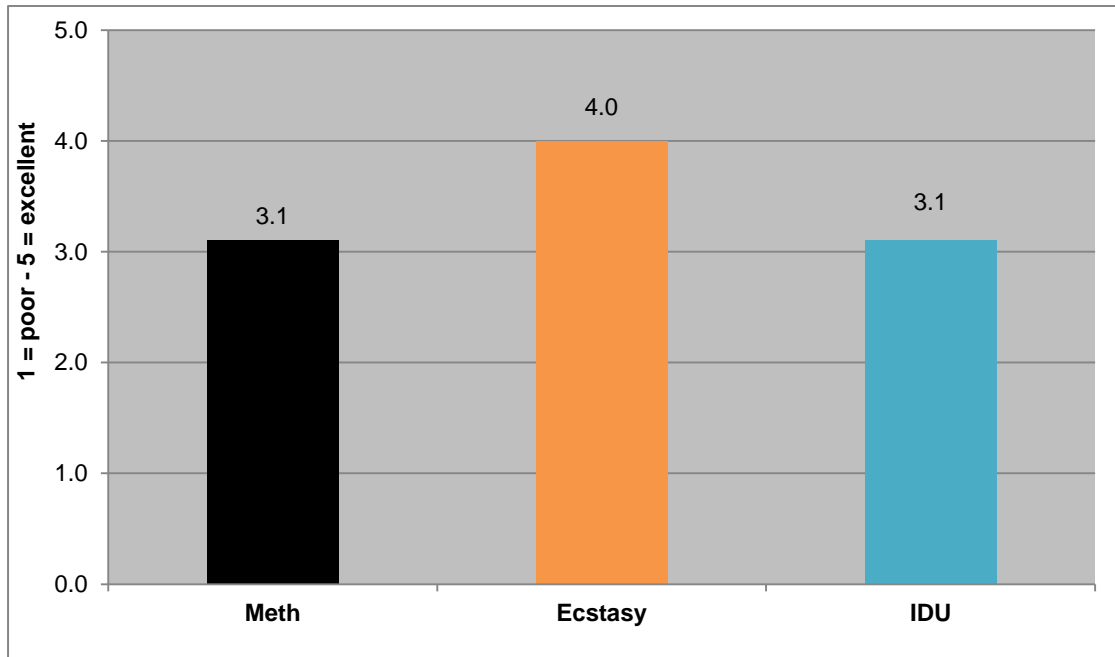
## 2.11 Mental health

The frequent drug users were also asked to self-assess their mental health using a five point scale (i.e. 1=poor – 5=excellent). The frequent ecstasy users rated their mental health considerably higher than either the frequent methamphetamine users or the frequent injecting drug users (Figure 2.8). Thirty-one percent of the frequent methamphetamine users described their mental health as either ‘fair’ or ‘poor’ in 2014 (Table 2.8). The frequent injecting drug users self-assessment of their mental health increased from 2013 to 2014 (up from 2.7 to 3.1,  $p=0.0268$ ).

**Table 2 8: Frequent drug users' self-assessment of current mental health, 2010-2014**

General mental health (%)	Methamphetamine users					Ecstasy users					Intravenous drug users (IDU)				
	2010 (n=128)	2011 (n=113)	2012 (n=100)	2013 (n=92)	2014 (n=96)	2010 (n=153)	2011 (n=161)	2012 (n=125)	2013 (n=118)	2014 (n=109)	2010 (n=127)	2011 (n=96)	2012 (n=104)	2013 (n=101)	2014 (n=102)
Excellent [5]	11	12	14	11	13	26	29	28	38	35	11	10	18	13	15
Very good [4]	22	28	11	22	19	35	36	31	33	39	23	26	18	12	19
Good [3]	31	36	43	38	37	27	21	27	18	21	42	36	36	30	37
Fair [2]	31	17	22	18	27	10	12	11	9	4	17	18	24	28	21
Poor [1]	5	7	10	11	4	1	2	2	2	2	6	11	5	17	8
Average score of mental health (1=Poor – 5=Excellent)	3.0	3.2	2.8	3.1	3.1	3.7	3.8	3.7	4.0	4.0	3.1	3.1	3.2	2.7	3.1

Figure 2 8: Mean score of perception of mental health by frequent drug user group, 2014



## 2.12 Summary of demographic characteristics

### Frequent methamphetamine users

- Sixty-four percent of the frequent methamphetamine users were male and their mean age was 35 years in 2014
- The mean age of the frequent methamphetamine users increased from 30 years in 2009 to 35 years in 2014
- The proportion of the frequent methamphetamine users who were Maori increased from 22% in 2006 to 43% in 2013, and then declined to 32% in 2014
- Sixty-six percent of the frequent methamphetamine users were unemployed or on a sickness benefit in 2014
- The proportion of frequent methamphetamine users with no educational qualifications declined from 37% in 2006 to 28% in 2014
- The frequent methamphetamine users reported a decline in their physical health from 2009 to 2014
- Thirty-one percent of the frequent methamphetamine users described their mental health as 'fair' or 'poor' in 2014

### Frequent ecstasy users

- Seventy-six percent of the frequent ecstasy users were male and their mean age was 22 years old in 2014
- Only 5% of the frequent ecstasy users were Maori ethnicity in 2014
- The proportion of frequent ecstasy users who were unemployed or on a sickness benefit declined from 12% in 2013 to 4% in 2014
- Seventy-eight percent of the frequent ecstasy users were students in 2014
- Seventy percent of the frequent ecstasy users were of 'single' marital status in 2014

- Six percent of the frequent ecstasy users described their mental health as either 'fair' or 'poor' in 2014
- Eight percent of the frequent ecstasy users described their physical health as either 'fair' or 'poor' in 2014

### **Frequent injecting users**

- Fifty-five percent of the frequent injecting users were male and their mean age was 37 years in 2014
- The mean age of the frequent injecting drug users increased steadily from 32 years in 2006 to 37 years in 2014
- Nineteen percent of the frequent injecting drug users were Maori in 2014
- Seventy-four percent of the frequent injecting drug users reported that they were unemployed or on a sickness benefit in 2014
- The proportion of frequent injecting drug users with no educational qualifications decreased from 36% in 2006 to 20% in 2014
- Twenty-seven percent of the injecting drugs users described their physical health as either 'fair' or 'poor' in 2014
- The self-reported physical health of the injecting drug users improved from 2013 to 2014
- Twenty-nine percent of the injecting drugs users described their mental health as either 'fair' or 'poor' in 2014
- The mental health of the injecting drug users improved from 2013 to 2014



## 3. Drug use patterns

### 3.1 Introduction

There has been a global trend over the past decade towards increased poly-drug and synthetic stimulant use (EMCDDA, 2013b; UNODC, 2012, 2013b). In the early 2000s, New Zealand experienced a rapid rise in methamphetamine and ecstasy (MDMA) use (Wilkins et al., 2002b; Wilkins et al., 2003). In the mid-2000s there was a global disruption in the supply of MDMA which meant that drugs sold as 'ecstasy' increasingly contained a range of substitute compounds, including methylenedioxymethamphetamine, methylone, mephedrone, MDPV, and piperazines (i.e. BZP, mCPP, TFMP). Over the past decade there has also been increasing extra-medical use of pharmaceutical medicines in developed countries, such as oxycodone, morphine, methadone, benzodiazepines and methylphenidate (Ritalin™) (UNODC, 2012, 2013b; Wilkins et al., 2011a). The number of patients being prescribed oxycodone in New Zealand has increased by 249% since 2007, with no corresponding decrease in the number receiving morphine (the preferred first-line pain relief option) (BPJ, 2012). The United States has experienced substantial problems with the misuse of oxycodone with resulting increases in treatment admissions, hospital emergencies and overdose deaths (Maxwell, 2011; Nicholas et al., 2011). In more recent years, a range of new psychoactive substances (NPS) have emerged with many sold as so called 'legal highs', including synthetic cannabinoids, non-BZP party pills and plant extracts such as salvia divinorum (EMCDDA, 2011, 2013a, 2013b; UNODC, 2011, 2012, 2013b; Wilkins, 2011; Wilkins & Sweetsur, 2013; Wilkins et al., 2008; Wilkins et al., 2014b).

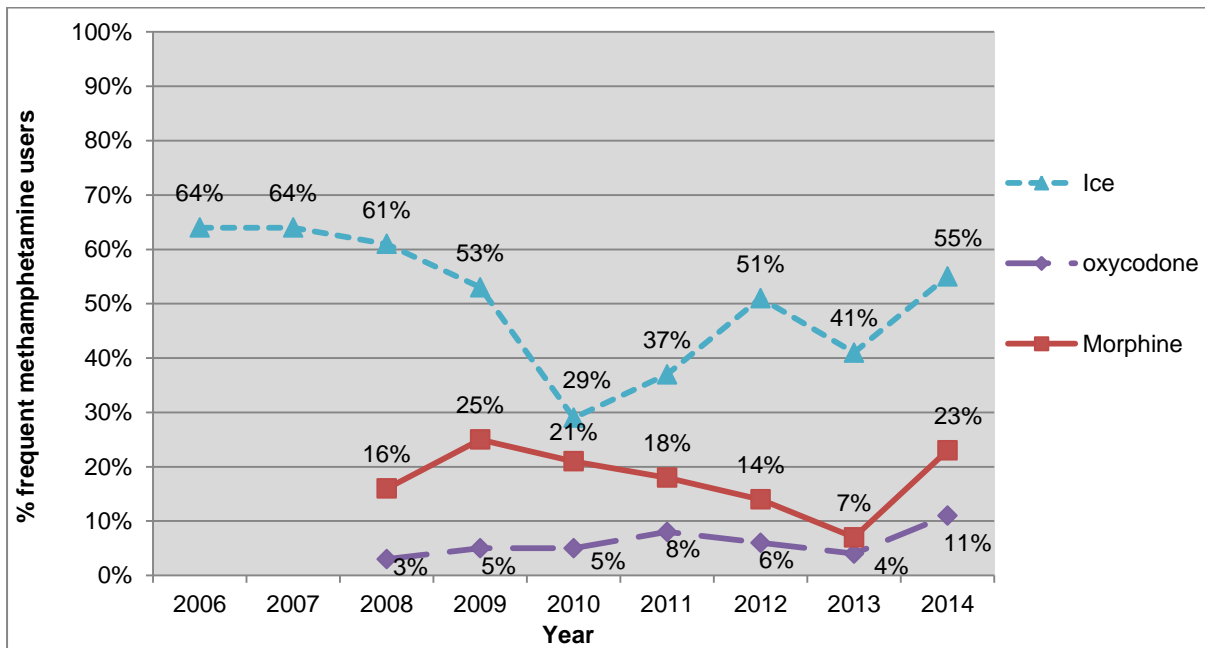
This chapter presents data on the drug types which the frequent drug users interviewed for the 2014 IDMS had used during the previous six months. We have added a number of new drug types to the IDMS drug use categories in recent years, including hallucinogenic mushrooms (psilocybin) in 2007; codeine, oxycodone, morphine, opium poppies and 'homebake' heroin in 2008; and synthetic cannabinoids and non-BZP party pills in 2010. In 2011, we added a range of NPS and pharmaceutical drug types to the drug list including mephedrone, '2C' drugs (e.g. 2CB, 2CI, 2CE, 2CD), MDPV, DMT, salvia divinorum, Fentanyl, 4-MEC, Tramadol and methylone.

### 3.2 Current drug use of the frequent methamphetamine users

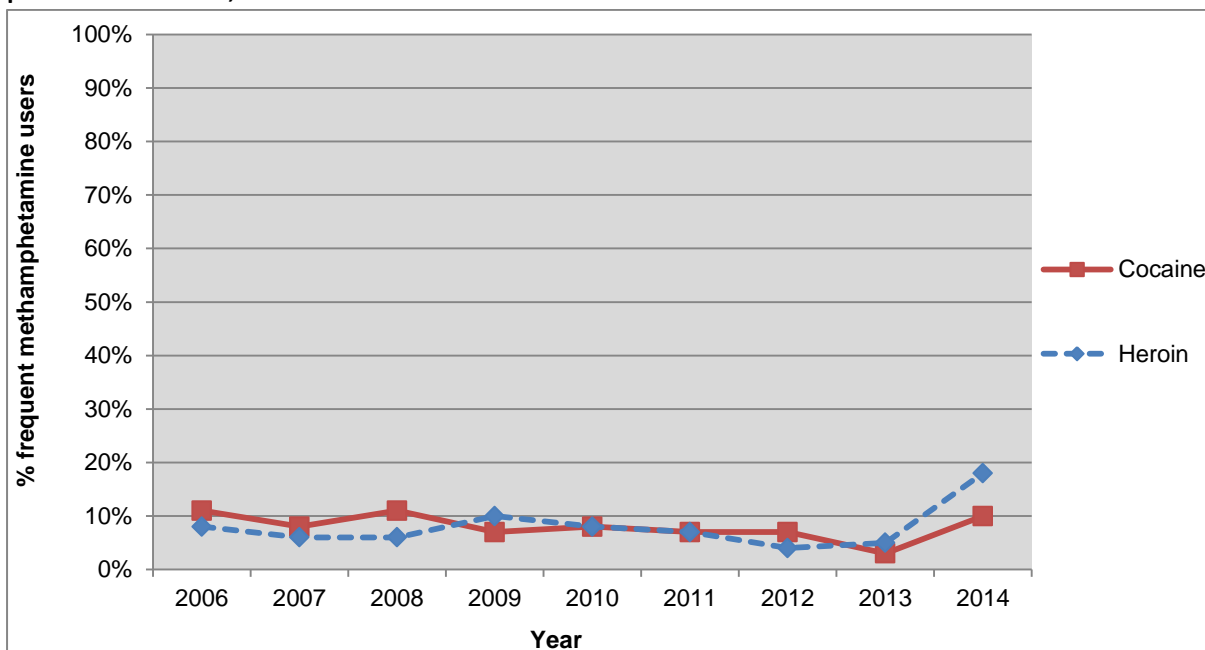
The frequent methamphetamine users had used a mean of seven drug types in the past six months in 2014 (median 7, range 2-19). The drug types most commonly used by the frequent methamphetamine users in the previous six months were methamphetamine (100%), tobacco (87%), alcohol (81%), cannabis (76%), crystal methamphetamine (Ice) (55%), ecstasy (34%) and synthetic cannabinoids (23%) (see Appendix 2). Many of the frequent methamphetamine users had recently used pharmaceuticals such as tramadol (45%), methylphenidate (Ritalin™) (27%), benzodiazepines (26%), codeine (19%), and anti-depressants (19%) in 2014. A minority of the frequent methamphetamine users had also recently used 'new drugs', such as salvia divinorum (10%), mephedrone (4%), methylone (4%), one of the 2C drugs (3%) and party pills (2%).

There had previously been a steady decrease in the use of crystal methamphetamine among the frequent methamphetamine users (down from 64% in 2006 to 29% in 2010,  $p < 0.0001$ ). In more recent years, there has been a recovery in crystal methamphetamine use among the methamphetamine users, and this continued in 2014 (up from 41% in 2013 to 55% in 2014,  $p = 0.0524$ ) (Figure 3.1). There were increases in the proportion of frequent methamphetamine users who had recently used oxycodone (up from 3% in 2006 to 11% in 2014,  $p = 0.0373$ ), cocaine (up from 3% in 2013 to 10% in 2014,  $p = 0.0434$ ), heroin (up from 5% in 2013 to 18% in 2014,  $p = 0.0036$ ), homebake morphine/heroin (up from 1% in 2013 to 10% in 2014,  $p = 0.0171$ ) and morphine (up from 7% in 2013 to 23% in 2014,  $p = 0.0031$ ) (Figure 3.1 & 3.2). There has been a steady increase in the proportion of frequent methamphetamine users who had used anti-depressants, up from 5% in 2006 to 19% in 2014 ( $p = 0.0013$ ).

**Figure 3 1: Proportion of the frequent methamphetamine users who had used crystal methamphetamine (ice), oxycodone and morphine in the previous six months, 2006-2014**



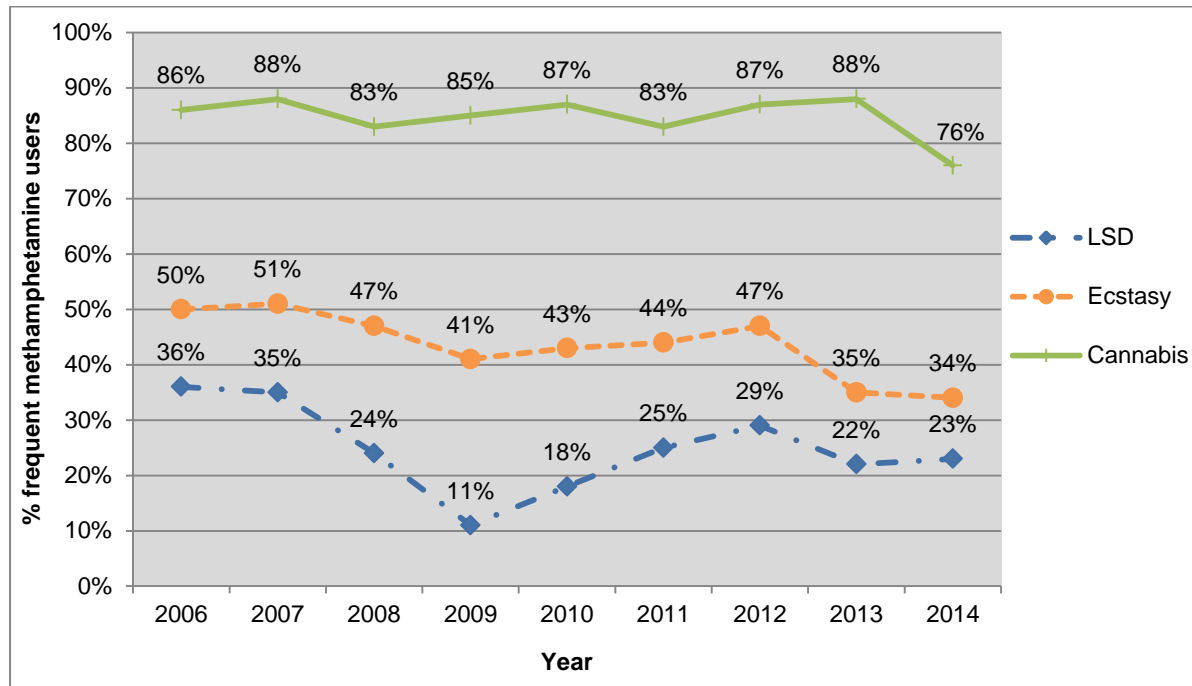
**Figure 3 2: Proportion of the frequent methamphetamine users who had used cocaine and heroin in the previous six months, 2006-2014**



The proportion of frequent methamphetamine users who had recently used cannabis decreased from 88% in 2013 to 76% in 2014 ( $p=0.0238$ ) (Figure 3.3). The proportion of frequent methamphetamine users who had recently used LSD had previously declined from 36% in 2006 to 11% in 2009, before recovering to 29% in 2012 and 23% in 2014, but still remains below its 2006 level ( $p=0.0464$ ). There were decreases in the proportion of frequent methamphetamine users who

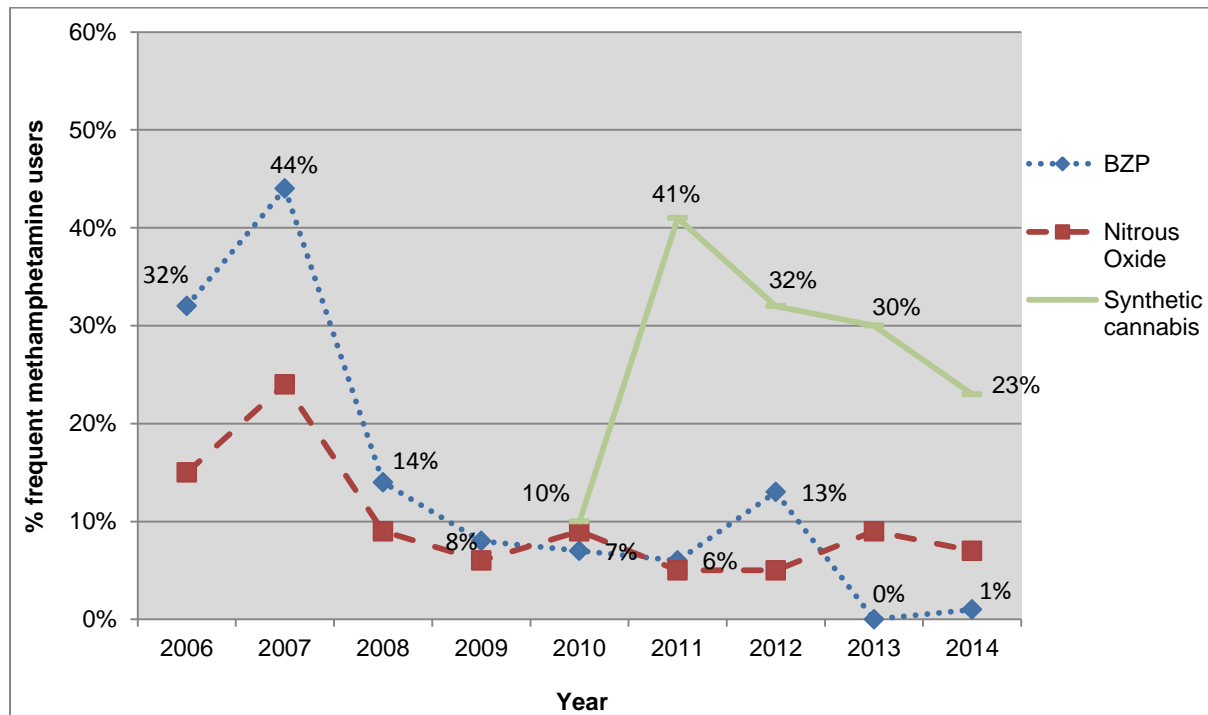
had recently used ecstasy (down from 51% in 2007 to 34% in 2014,  $p=0.0040$ ), ketamine (down from 13% in 2007 to 4% in 2014,  $p=0.0369$ ) and methadone (down from 27% in 2007 to 11% in 2014,  $p=0.0046$ ).

**Figure 3 3: Proportion of the frequent methamphetamine users who had used cannabis, ecstasy and LSD in the previous six months, 2006-2014**



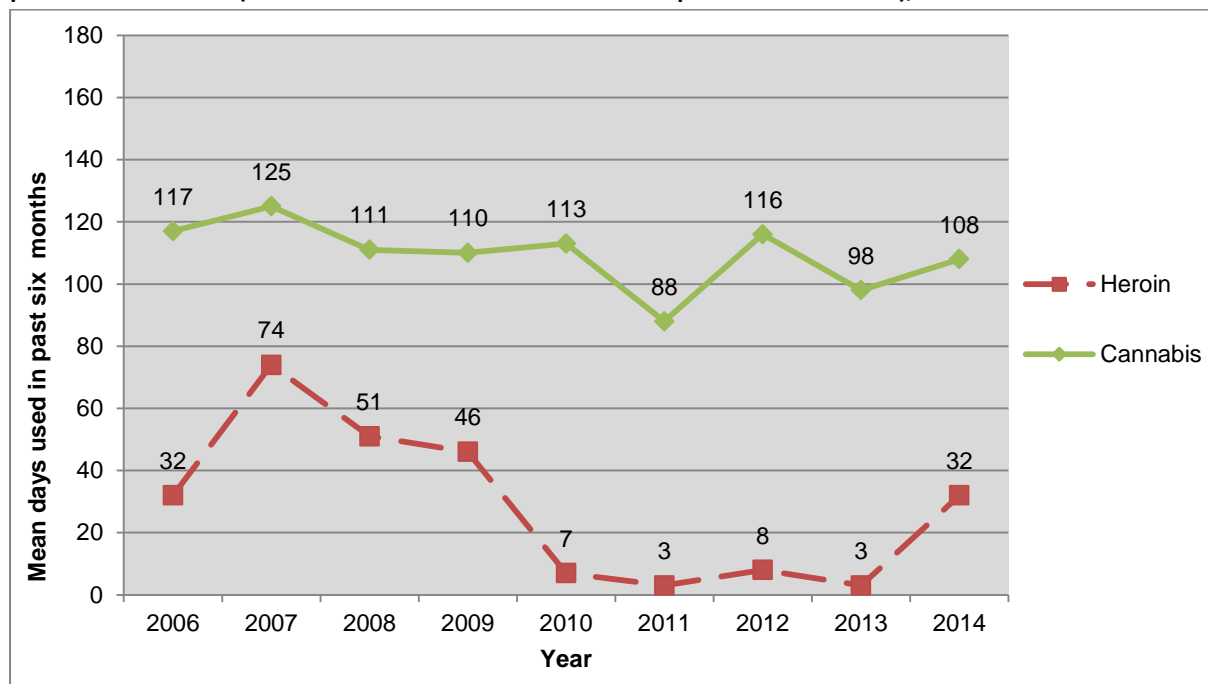
There has been a spectacular decline in the proportion of frequent methamphetamine users who use BZP (a former legal high) over the past nine years (down from 32% in 2006 to 1% in 2014,  $p<0.0001$ ) (Figure 3.4). Similarly, the use of nitrous oxide (another former legal high) declined from 15% in 2006 to 7% in 2014, ( $p=0.0001$ ). There had previously been a sharp increase in the proportion of frequent methamphetamine users who used synthetic cannabis, up from 10% in 2010 to 41% in 2011 ( $p<0.0001$ ), but use has steadily declined in subsequent years.

**Figure 3 4: Proportion of the frequent methamphetamine users who had used BZP, synthetic cannabinoids and nitrous oxide in the previous six months, 2006-2014**



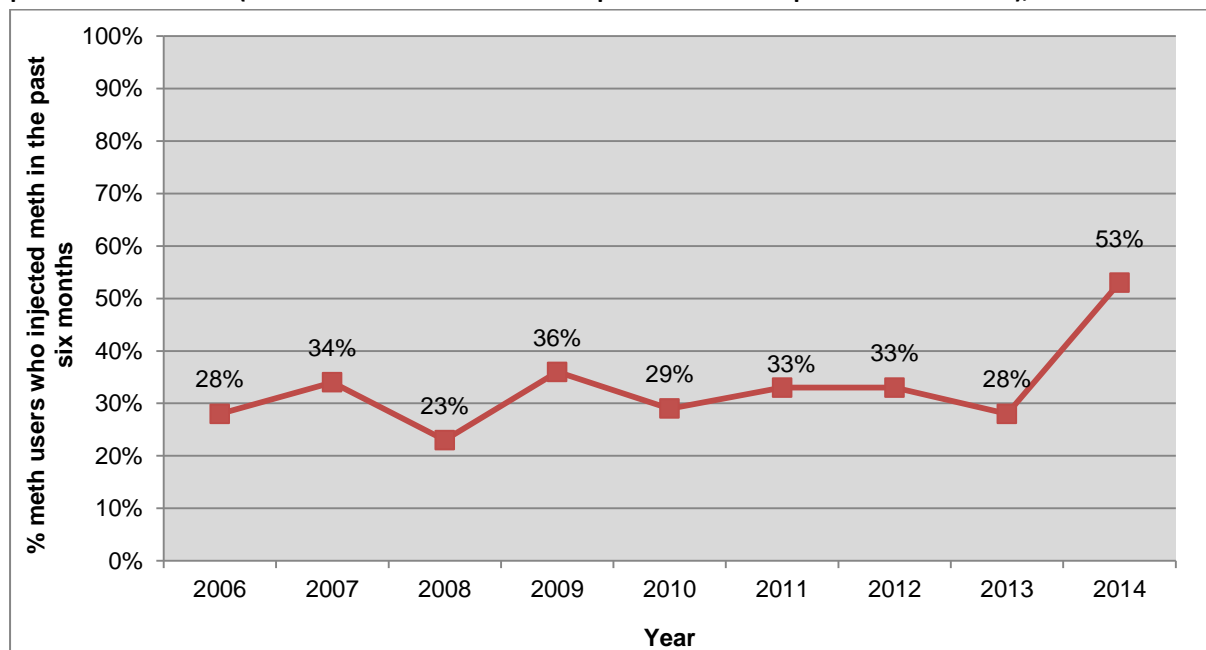
Those frequent methamphetamine users who indicated they had used a drug type in the past six months were asked on how many days they had used that drug type in the previous six months. The frequent methamphetamine users had used methamphetamine on a mean of 58 days in the past six months in 2014, and this had not changed since 2006 ( $p=0.2763$ ). The proportion of frequent methamphetamine users who used antidepressants daily increased from 0% in 2006 to 83% in 2014 ( $p=0.0038$ ). The mean number of days of use in the previous six months increased from 19 days in 2006 to 152 days in 2014. The number of days the frequent methamphetamine users had used benzodiazepines increased from 46 days in 2006 to 54 days in 2014 ( $p=0.0253$ ). The number of days the frequent methamphetamine users had used heroin also increased from 3 days in 2013 to 32 days in 2014, and this increase was close to being statistically significant ( $p=0.0589$ ). The number of days the frequent methamphetamine users had used cannabis declined from 117 days in 2006 to 108 days in 2014 ( $p=0.0318$ ) (Figure 3.5).

**Figure 3 5: Mean number of days frequent methamphetamine users had used cannabis and heroin in the previous six months (of those who had used cannabis in the previous six months), 2006-2014**



If frequent methamphetamine users reported using a drug in the previous six months they were asked if they had injected that drug in the same six month period. The proportion of frequent methamphetamine users who had injected methamphetamine in the last six months increased from 28% in 2006 to 53% in 2014 ( $p=0.0047$ ), and also increased from 28% in 2013 to 53% in 2014 ( $p=0.0003$ ) (Figure 3.6). Similarly, the proportion of frequent methamphetamine users who had injected crystal methamphetamine in the past six months increased from 28% in 2006 to 34% in 2014 ( $p=0.0159$ ), and also from 34% in 2013 to 54% in 2014 ( $p=0.0414$ ). Similarly, there was an increase in the proportion of frequent methamphetamine users who had injected amphetamine (up from 8% in 2013 to 33% in 2014,  $p=0.0318$ ), codeine (up from 3% in 2013 to 29% in 2014,  $p=0.0348$ ) and methylphenidate (Ritalin™) (up from 33% in 2013 to 70% in 2014,  $p=0.0094$ ). Conversely, the proportion of frequent methamphetamine users who injected BZP in the previous six months declined from 47% in 2012 to 0% in 2014 ( $p=0.0001$ ).

**Figure 3 6: Proportion of frequent methamphetamine users who had injected methamphetamine in the previous six months (of those who had used methamphetamine in the previous six months), 2006-2014**

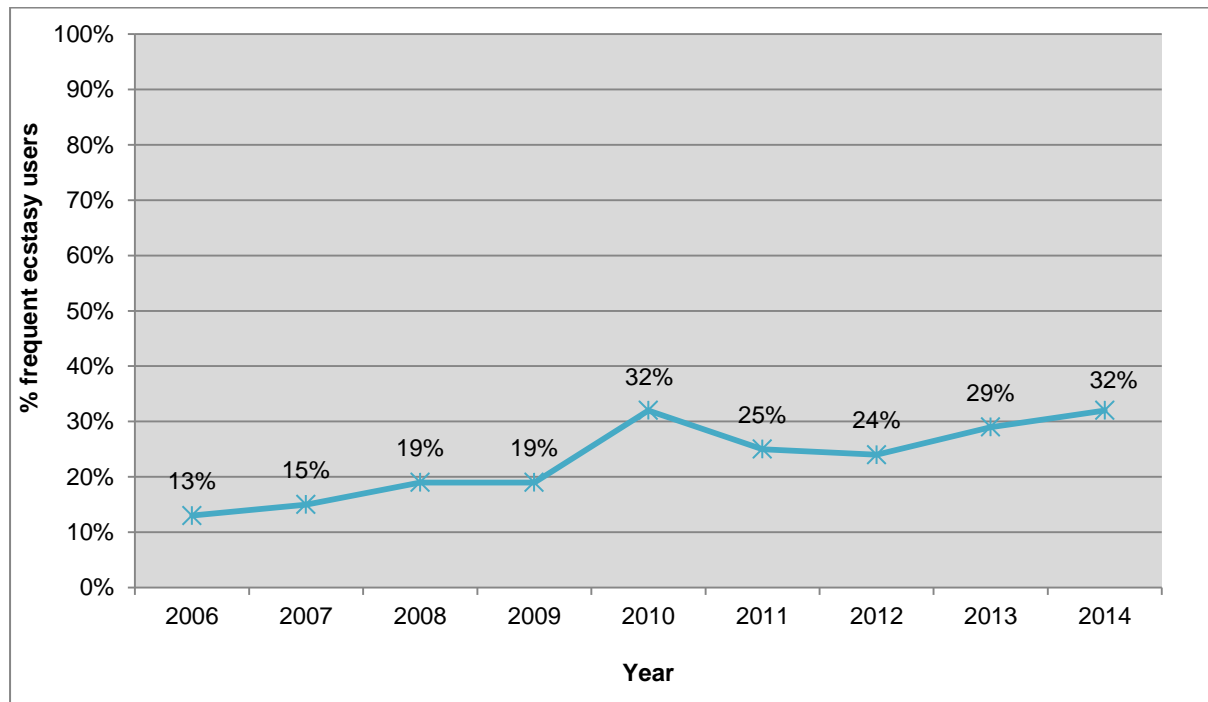


### 3.3 Current drug use of the frequent ecstasy (MDMA) users

The frequent ecstasy users had used a mean of six drug types in the past six months in 2014 (median 5, range 2-19). The drug types most commonly used by the frequent ecstasy users in the previous six months were ecstasy (100%), alcohol (98%), cannabis (82%), tobacco (66%) and LSD (40%) (see Appendix 2). Some of the frequent ecstasy users had recently used pharmaceutical drugs such as methylphenidate (Ritalin™) (32%), tramadol (18%), benzodiazepines (17%) and codeine (13%). Some of the frequent ecstasy users had also used 'new drugs' in the past six months including mephedrone (16%), one of the 2C drugs (16%), methylone (10%), party pills (8%) and synthetic cannabinoids (6%).

The proportion of the frequent ecstasy users who had recently used methylphenidate (Ritalin™) has increased steadily over the past nine years, up from 13% in 2006 to 32% in 2014 ( $p < 0.0001$ ) (Figure 3.7). There was also a small increase in recent methadone use, albeit from a very low baseline (up from 2% in 2006 to 4% in 2014,  $p = 0.0495$ ).

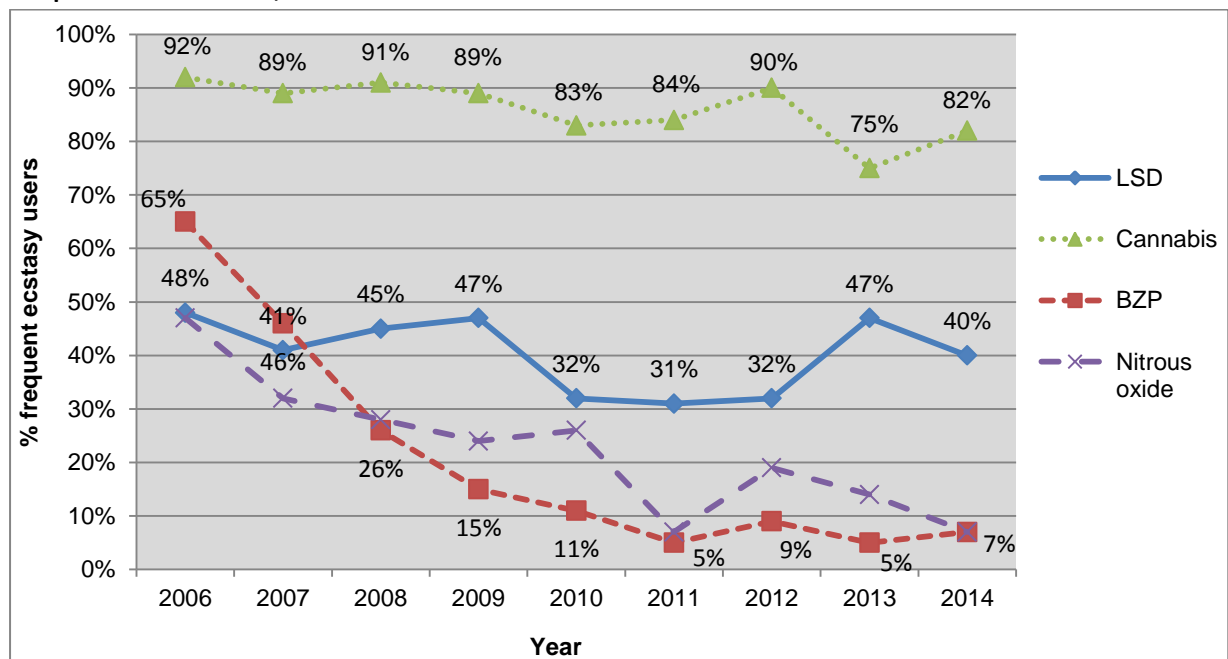
**Figure 3 7: Proportion of the frequent ecstasy users who had used methylphenidate (Ritalin™) in the previous six months, 2006-2014**



The proportion of frequent ecstasy users who had used LSD had previously declined from 48% in 2006 to 32% in 2012 ( $p=0.0577$ ), before increasing to 47% in 2013 ( $p=0.0298$ ) and remaining high at 40% in 2014. A lower proportion of the frequent ecstasy users had recently used cannabis (down from 92% in 2006 to 82% in 2014,  $p=0.0153$ ), BZP (down from 65% in 2006 to only 7% in 2014,  $p<0.0001$ ), nitrous oxide (down from 47% in 2006 to 7% in 2014,  $p<0.0001$ ), hallucinogenic mushrooms (down from 32% in 2007 to 23% in 2014,  $p=0.0108$ ), GHB (down from 10% in 2006 to 4% in 2014,  $p=0.0262$ ), amyl nitrate (down from 17% in 2006 to 7% in 2014,  $p=0.0015$ ) and oxycodone (down from 8% in 2013 to 1% in 2014,  $p=0.0304$ ) (Figure 3.8 and 3.9).

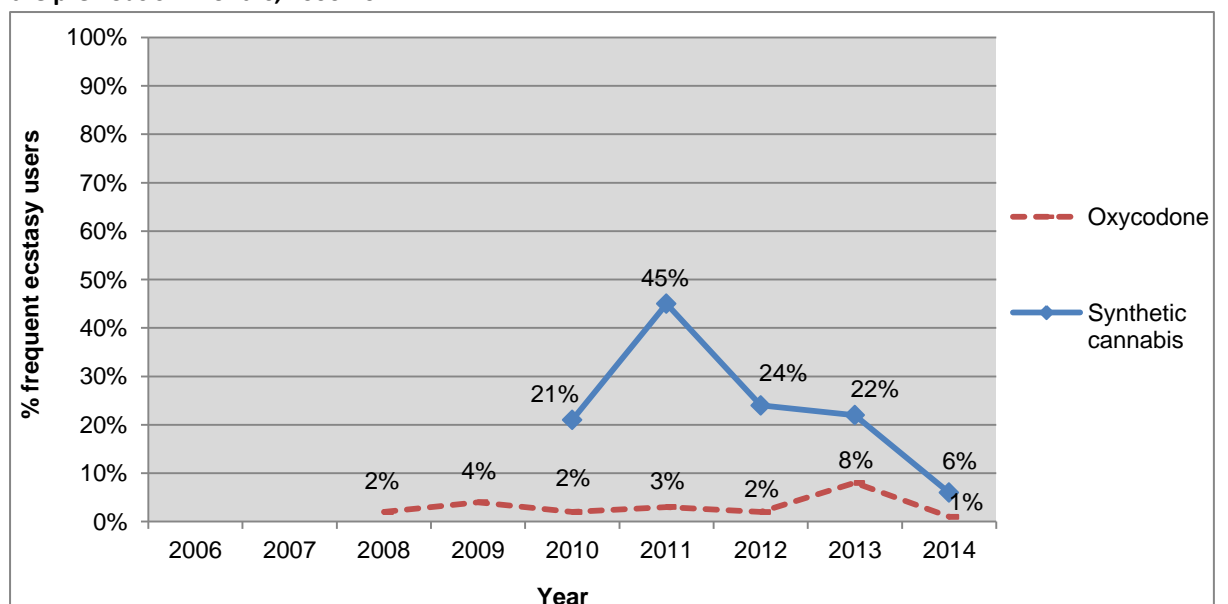


**Figure 3 8: Proportion of the frequent ecstasy users who had used BZP, nitrous oxide, cannabis, and LSD in the previous six months, 2006-2014**



There had previously been a steep increase in synthetic cannabinoid use by the frequent ecstasy users, up from 21% in 2010 to 45% in 2011 ( $p < 0.0001$ ), but use reversed just as dramatically down from 45% in 2011 to 24% in 2012 ( $p = 0.0008$ ) (Figure 3.9). The proportion of frequent ecstasy users who had used synthetic cannabinoids in the previous six months declined sharply again from 22% in 2013 to 6% in 2014 ( $p = 0.0011$ ). All legal high products were effectively banned in New Zealand in May 2014.

**Figure 3 9: Proportion of the frequent ecstasy users who had used oxycodone and synthetic cannabinoids in the previous six months, 2006-2014**



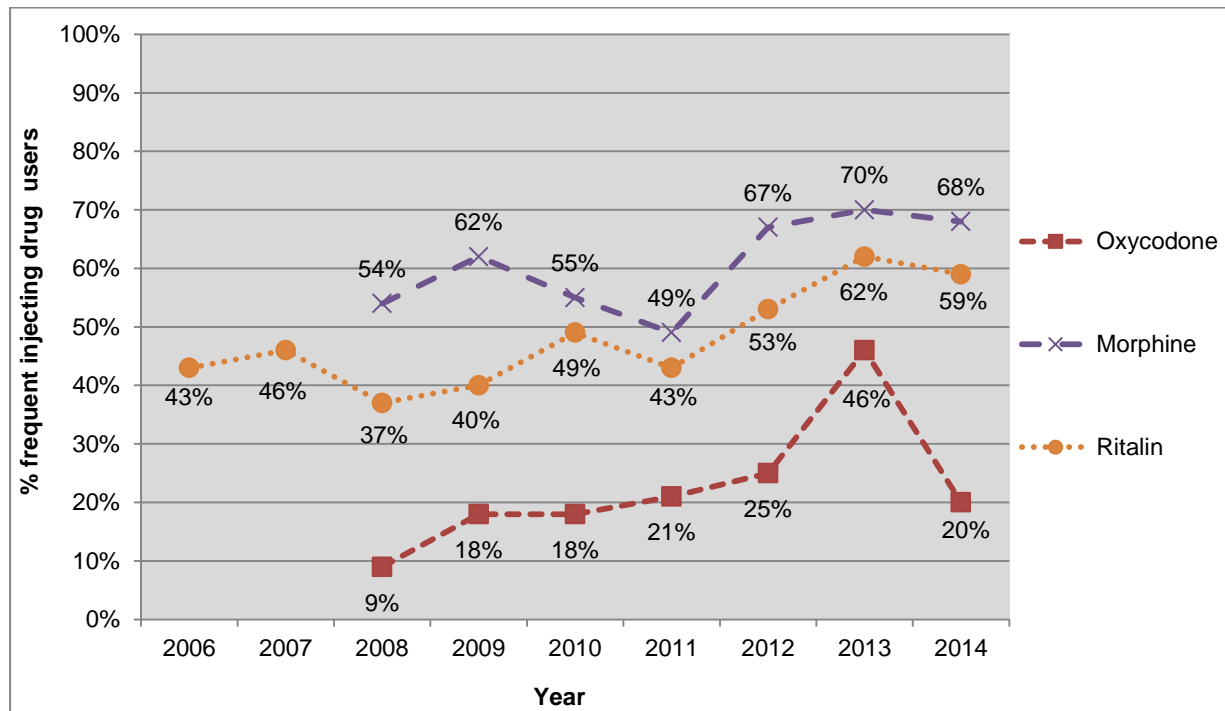
Those frequent ecstasy users who had used a drug type in the past six months were asked about the number of days they had used it in the previous six months. The mean number of days the frequent ecstasy users had used ecstasy in the previous six months increased from 8 days in 2006 to 12 days in 2014 ( $p=0.0106$ ) (Figure 3.13). The frequent ecstasy users had also used antidepressants on more days in the previous six months from 2006 to 2014 (up from 5 days to 112 days,  $p=0.0362$ ). There was a small decrease in the mean number of days the frequent ecstasy users had consumed alcohol in the past six months from 2006 to 2014 (down from 50 days to 46 days,  $p=0.0036$ ).

### **3.4 Current drug use of the frequent injecting drug users**

The frequent injecting drug users had used a mean of seven drug types in the past six months in 2014 (median 7, range 1-17). The number of drug types used by the frequent injecting drug users in the previous six months increased from 6.6 in 2006 to 7.4 in 2014 ( $p=0.0001$ ). Pharmaceutical drug use was common among the injecting drug users with 69% using methadone, 68% using morphine, 59% using methylphenidate (Ritalin™), 57% using benzodiazepines, 46% using codeine and 20% using oxycodone in the previous six months (see Appendix 2). The other drug types most commonly used by the frequent injecting drug users were tobacco (83%), alcohol (71%), cannabis (69%), methamphetamine (44%), crystal methamphetamine (24%) and homebake heroin/morphine (15%). Seventeen percent of the frequent injecting drug users had used heroin in the previous six months in 2014. A minority of the injecting drug users had recently used 'new drugs' such as synthetic cannabinoids (10%), party pills (7%), mephedrone (6%), methylone (5%) and one of the '2C' drugs (4%).

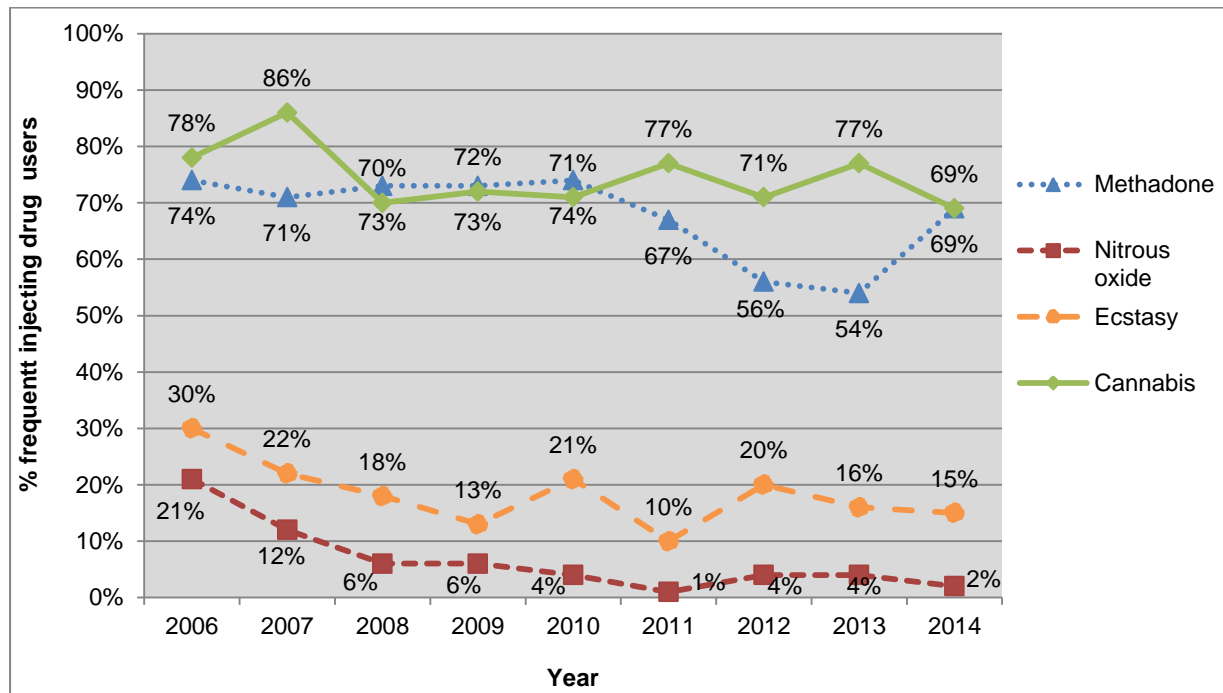
The proportion of frequent injecting drug users who had used oxycodone in the previous six months increased from 9% in 2008 to 46% in 2013 ( $p<0.0001$ ), before decreasing to 20% in 2014 ( $p=0.0002$ ) (Figure 3.14). An increasing proportion of injecting drug users had recently used anti-depressants (up from 8% in 2006 to 18% in 2014,  $p=0.0041$ ), morphine (up from 54% in 2008 to 68% in 2014,  $p=0.0051$ ) and Ritalin™ (up from 43% in 2006 to 59% in 2014,  $p=0.0002$ ).

**Figure 3 10: Proportion of the frequent injecting drug users who had used oxycodone, Ritalin™ and morphine in the previous six months, 2006-2014**



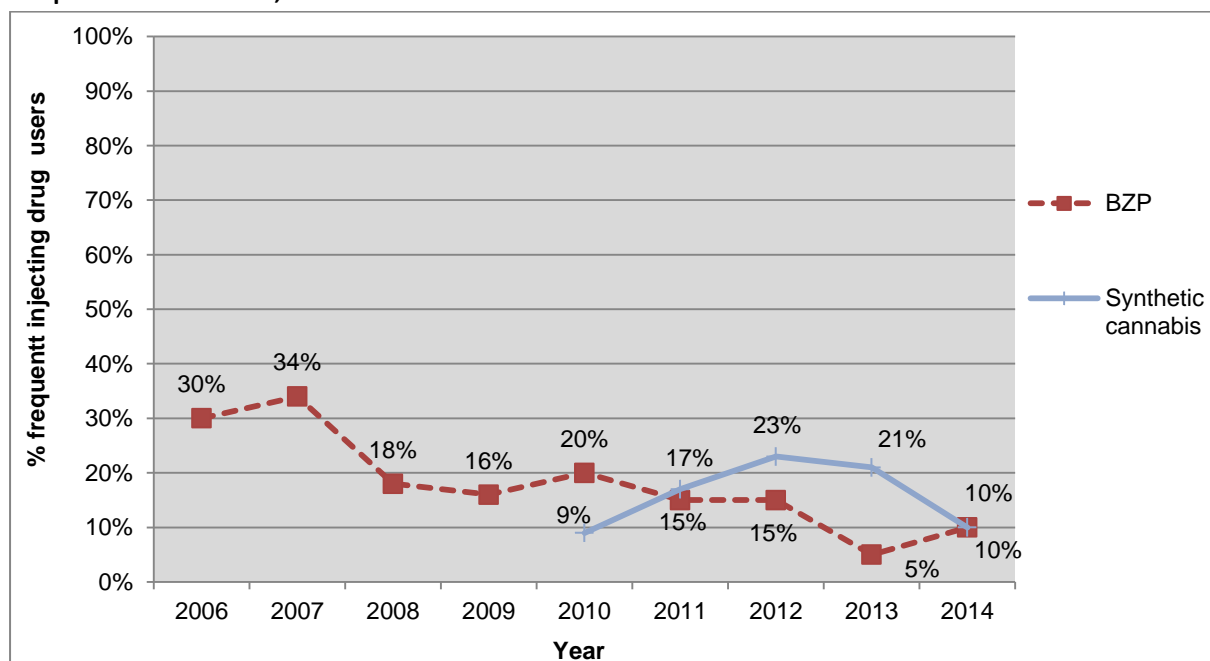
The proportion of injecting drug users who used cannabis declined from 78% in 2006 to 69% in 2014, and this decline was close to being statistically significant ( $p=0.0780$ ) (Figure 3.15). The proportion who had used methadone had previously decreased from 74% in 2006 to 54% in 2013 ( $p=0.0002$ ), before increasing to 69% in 2014 ( $p=0.0310$ ). A lower proportion of frequent injecting drug users had used nitrous oxide (down from 21% in 2006 to 2% in 2014,  $p<0.0001$ ), amyl nitrate (down from 16% in 2006 to 1% in 2014,  $p=0.0015$ ) and ecstasy (down from 30% in 2006 to 15% in 2014,  $p=0.0147$ ).

**Figure 3 11: Proportion of the frequent injecting drug users who had used nitrous oxide, methadone, ecstasy and cannabis in the previous six months, 2006-2014**



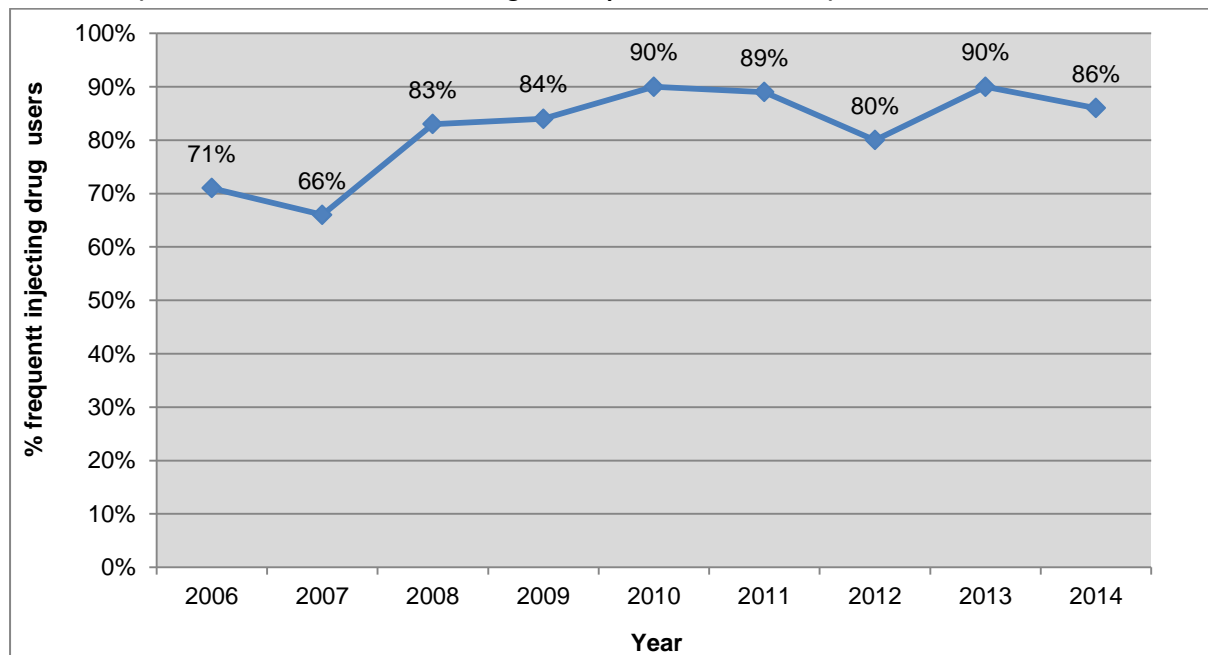
The proportion of injecting drug users who had used synthetic cannabinoids declined from 21% in 2013 to 10% in 2014 ( $p=0.0304$ ). The proportion who used synthetic cannabinoids had previously increased from 9% in 2006 to 23% in 2012 ( $p=0.0054$ ). There was a steady decline in the use of BZP (a former legal high) from 30% in 2006 to 10% in 2014,  $p<0.0001$ ,

**Figure 3 12: Proportion of the frequent injecting drug users who had used BZP and synthetic cannabinoids in the previous six months, 2006-2014**



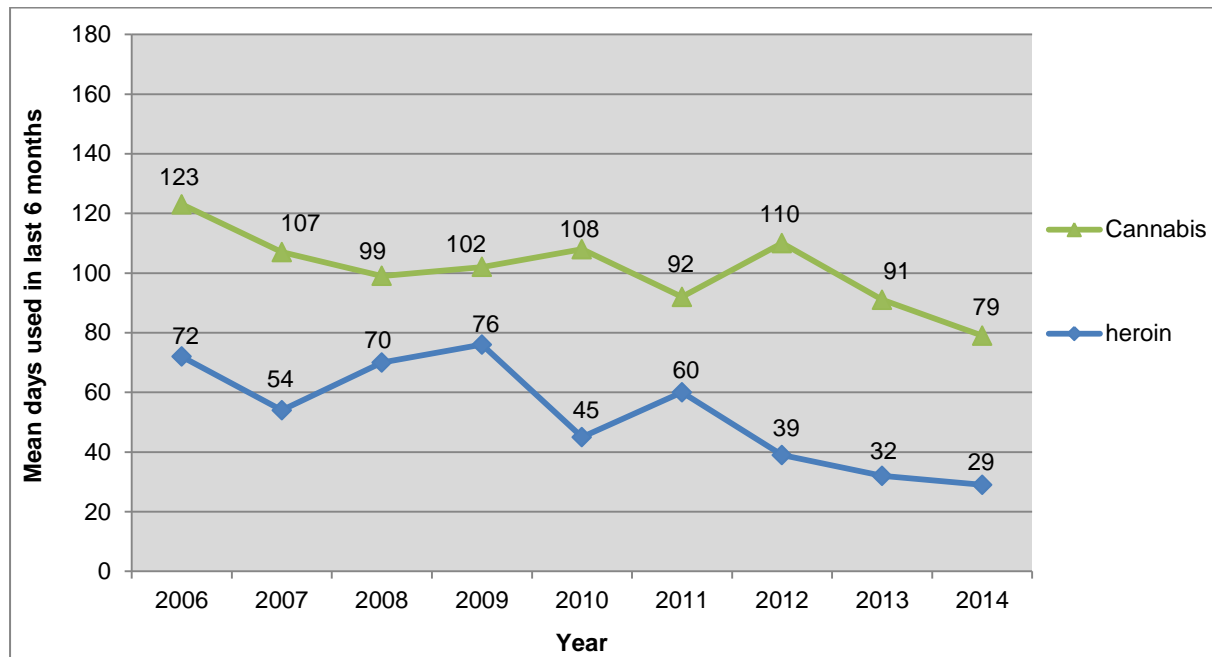
Those injecting drug users who reported using a drug in the previous six months were asked if they had injected that drug in the same six month period. The drug types the frequent injecting drug users had most commonly injected in 2014 were ‘homebake’ morphine (100%), morphine (99%), methylphenidate (Ritalin™) (97%), oxycodone (91%), heroin (90%), methamphetamine (86%), and crystal methamphetamine (80%). The proportion of frequent injecting drug users who injected methamphetamine increased from 71% in 2006 to 86% in 2014 ( $p=0.0026$ ) (Figure 3.16).

**Figure 3 13: Proportion of frequent injecting drug users who had injected methamphetamine in the previous six months (of those who had used these drugs in the previous six months), 2006-2014**



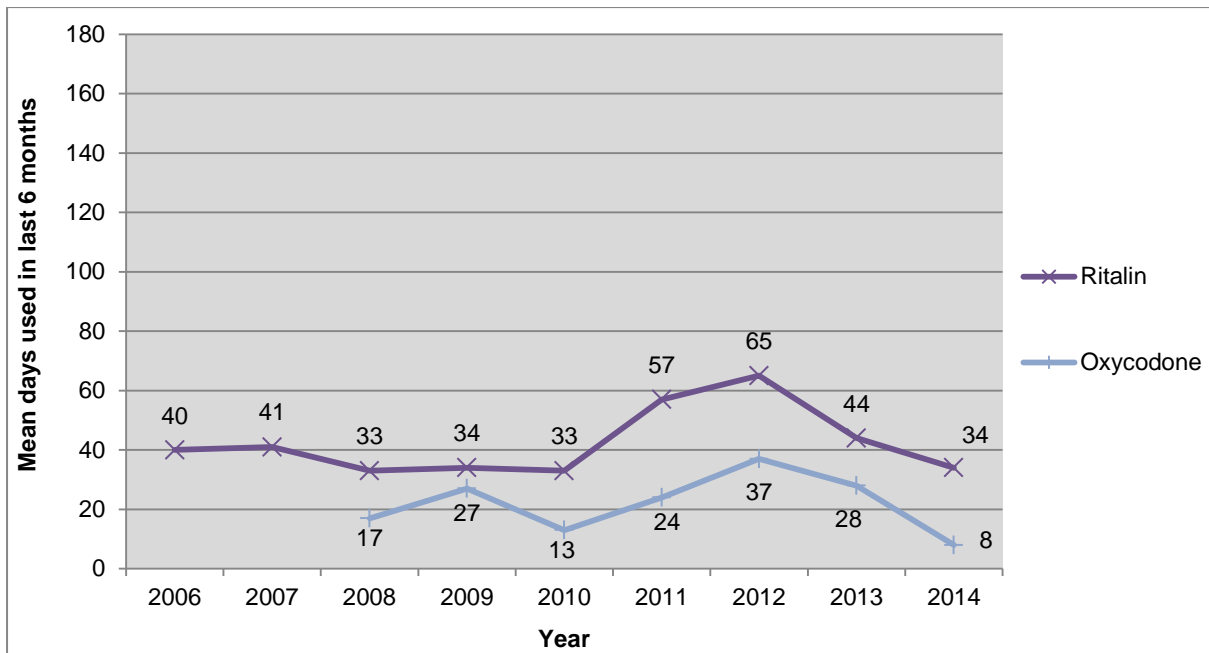
Those frequent injecting drug users who reported using a drug type in the past six months were asked on how many days they had used the drug over the same six month period. The frequent injecting drug users had used methadone on fewer days in the previous six months from 2006 to 2014 (down from 93 days to 79 days,  $p=0.0020$ ), and also cannabis (down from 123 days in 2006 to 79 days in 2014,  $p=0.0014$ ) and heroin (down from 72 days in 2006 to 29 days in 2014,  $p=0.0340$ ) on fewer days (Figure 3.17).

**Figure 3 14: Mean number of days the frequent injecting drug users had used cannabis and heroin in the previous six months (of those who had used these drug types in the previous six months), 2006-2014**



The injecting drug users had used methylphenidate (Ritalin™) on fewer days in the past six months from 2006 to 2014 (down from 40 days to 34 days,  $p=0.0326$ ). The number of days the injecting drug users had used ecstasy in the previous six months also decreased (down from 9 days in 2013 to 4 days in 2014,  $p=0.0238$ ), with decreases for LSD (down from 12 days in 2013 to 2 days in 2014,  $p=0.0170$ ) and oxycodone (down from 28 days in 2013 to 8 days in 2014,  $p<0.0001$ ) as well.

Figure 3 15: Mean number of days the frequent injecting drug users had used methylphenidate (Ritalin™) and oxycodone in the previous six months (of those who had used these drug types in the previous six months), 2006-2014



## 3.5 Summary of drug use patterns

### Frequent methamphetamine users

- The drug types most commonly used by the frequent methamphetamine users in the previous six months in 2014 were methamphetamine (100%), tobacco (87%), alcohol (81%), cannabis (76%), crystal methamphetamine (55%), ecstasy (34%) and synthetic cannabinoids (23%)
- Many of the frequent methamphetamine users had recently used pharmaceuticals in 2014 such as Tramadol (45%), methylphenidate (Ritalin™) (27%), benzodiazepines (26%), codeine (19%), and anti-depressants (19%)
- A minority of the frequent methamphetamine users in 2014 had used 'new drugs' such as salvia divinorum (10%), mephedrone (4%), methylone (4%), 2C drugs (3%) and party pills (2%)
- There had previously been a steady decrease in the use of crystal methamphetamine among the frequent methamphetamine users (down from 64% in 2006 to 29% in 2010), but use has continued to recover in recent years (up from 41% in 2014 to 55% in 2014)
- There were increases in the proportion of frequent methamphetamine users who had recently used oxycodone (up from 3% in 2006 to 11% in 2014), cocaine (up from 3% in 2013 to 10% in 2014), heroin (up from 5% in 2013 to 18% in 2014), 'homebake' heroin (up from 1% in 2013 to 10% in 2014), morphine (up from 7% in 2013 to 23% in 2014) and anti-depressants (up from 5% in 2006 to 19% in 2014)
- The proportion of frequent methamphetamine users who had recently used LSD had previously declined from 36% in 2006 to 11% in 2009, before recovering to 29% in 2012 and 23% in 2014
- There had previously been a sharp increase in the proportion of frequent methamphetamine users who used synthetic cannabinoids, up from 10% in 2010 to 41% in 2011 ( $p < 0.0001$ ), but use has steadily declined in subsequent years
- There were decreases in the proportion of frequent methamphetamine users who recently used ecstasy (down from 51% in 2007 to 34% in 2014), nitrous oxide (down from 15% in 2006 to 7% in 2014), BZP (down from 32% in 2006 to 1% in 2014), ketamine (down from 13% in 2007 to 4% in 2014) and methadone (down from 27% in 2007 to 11% in 2014)
- The number of days the frequent methamphetamine users had used heroin increased from 3 days in 2013 to 32 days in 2014



- The number of days the frequent methamphetamine users had used cannabis declined from 117 days in 2006 to 108 days in 2014
- The proportion of frequent methamphetamine users who injected methamphetamine increased from 28% in 2013 to 53% in 2014

### Frequent ecstasy (MDMA) users

- The drug types most commonly used by the frequent ecstasy users in the previous six months in 2014 were ecstasy (100%), alcohol (98%), cannabis (82%), tobacco (66%) and LSD (40%)
- Some of the frequent ecstasy users had recently used pharmaceutical drugs in 2014 such as methylphenidate (Ritalin™) (32%), tramadol (18%), benzodiazepines (17%) and codeine (13%)
- Some of the frequent ecstasy users in 2014 had also used 'new drugs' including mephedrone (16%), 2C drugs (16%), methylone (10%), party pills (8%) and synthetic cannabinoids (6%)
- The proportion of the frequent ecstasy users who had used methylphenidate (Ritalin™) increased from 13% in 2006 to 32% in 2014
- The proportion of ecstasy users who used synthetic cannabinoids declined sharply from 22% in 2013 to 6% in 2014
- The proportion of frequent ecstasy users who had used LSD declined from 48% in 2006 to 32% in 2012, before increasing steeply to 47% in 2013 and 40% in 2014
- A lower proportion of the frequent ecstasy users had used cannabis (down from 92% in 2006 to 82% in 2014), BZP (down from 65% in 2006 to 7% in 2014), nitrous oxide (down from 47% in 2006 to 7% in 2014), hallucinogenic mushrooms (down from 32% in 2007 to 23% in 2014), GHB (down from 10% in 2006 to 4% in 2014), amyl nitrate (down from 17% in 2006 to 7% in 2014) and oxycodone (down from 8% in 2013 to 1% in 2014)
- The frequent ecstasy users had used ecstasy on a greater number of days from 2006 to 2014 (up from 8 days to 12 days in 2014)

### Frequent injecting drug users

- Pharmaceutical drug use was common among the frequent injecting drug users with 69% using methadone, 68% using morphine, 59% using methylphenidate (Ritalin™), 57% using benzodiazepines, 46% using codeine and 20% using oxycodone in the previous six months in 2014

- Seventeen of the frequent injecting drug users had used heroin in the previous six months in 2014
- The other drugs most commonly used by the frequent injecting drug users in 2014 were tobacco (83%), alcohol (71%), cannabis (69%), methamphetamine (44%), crystal methamphetamine (24%) and homebake heroin/morphine (15%)
- A minority of the injecting drug users in 2014 had recently used 'new drugs' such as synthetic cannabinoids (10%), party pills (7%), mephedrone (6%), methylone (5%) and one of the 2C drugs (4%)
- The proportion of frequent injecting drug users who had recently used oxycodone increased from 9% in 2008 to 46% in 2013, before decreasing to 20% in 2014
- There was an increase in the proportion of frequent injecting drug users who had used anti-depressants (up from 8% in 2006 to 18% in 2014), morphine (up from 54% in 2008 to 68% in 2014) and Ritalin™ (up from 43% in 2006 to 59% in 2014)
- The proportion of injecting drug users had used synthetic cannabinoids declined from 21% in 2013 to 10% in 2014
- The injecting drug users were less likely to have used cannabis (down from 78% in 2006 to 69% in 2014), BZP (down from 30% in 2006 to 10% in 2014), nitrous oxide (down from 21% in 2006 to 2% in 2014), ecstasy (down from 30% in 2006 to 15% in 2014) and amyl nitrate (down from 16% in 2006 to 15 in 2014)
- The proportion of frequent injecting drug users who had injected methamphetamine (of those who used it) increased from 71% in 2006 to 86% in 2014
- The injecting drug users had used oxycodone on fewer days in 2014 (down from 28 days in 2013 to 8 days in 2014)
- The frequent injecting drug users had used methylphenidate (Ritalin™) on a fewer days (down from 40 days in 2006 to 34 days in 2014), and also methadone (down from 93 days in 2006 to 79 days in 2014), cannabis (down from 123 days in 2006 to 79 days in 2014), heroin (down from 72 days in 2006 to 29 days in 2014), ecstasy (down from 9 days in 2013 to 4 days in 2014) and LSD (down from 12 days in 2013 to 2 days in 2014)

## 4. Emerging drug types

### 4.1 Introduction

Frequent drug users are often ‘early adopters’ of new drugs and so are well placed to comment on emerging drug use and trends. A growing number of new or previously obscure synthetic psychoactive compounds have emerged rapidly over the past five years or so. Collectively they are referred to as ‘new psychoactive substances’ or NPS. NPS have been defined by the United Nations Drug Control Office as psychoactive compounds that pose a potential public health risk which are not currently controlled by international drug laws (UNODC, 2013b). The number of NPS newly identified each year by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) increased from 13 in 2008 to 101 in 2014 (UNODC, 2015b). The total number of NPS reported worldwide increased from 166 at the end of 2009 to 541 in 2014 (UNODC, 2015b).

NPS are often sold as ‘legal’ alternatives to illegal drugs as so called ‘legal highs’, although the compounds in question are increasingly controlled in a number of countries under generic or ‘blanket ban’ legislation (EMCDDA, 2015b; Hughes & Griffiths, 2014). NPS include a wide range of compound classes including phenethylamines (e.g. MDEA, ‘2C Class’, 25I-NBOMe), tryptamines (e.g. DMT), piperazines (e.g. BZP, TFMPP, mCPP), cathinones (e.g. mephedrone, methylone, MDPV), synthetic cannabinoids (e.g. JWH-018, JWH-024) and plant-based drugs such as salvia divinorum, Khat and Kratom (EMCDDA, 2011; UNODC, 2011, 2012, 2013b, 2015a).

New Zealand has been at the forefront of the NPS phenomena with an established market for BZP legal highs operating in the mid-2000s, followed by DMMA party pills, nitrous oxide and most recently a range of synthetic cannabinoid products (Wilkins et al., 2013). The high demand for NPS in New Zealand may reflect the poor supply of illegal drugs such as MDMA and cocaine found in other parts of the world, due to New Zealand’s geographical isolation and small population. Indeed, laboratory analysis has found drugs sold as ‘ecstasy’ in New Zealand are often found to contain NPS including BZP (benzylpiperazine), mephedrone (methylethcathinone), MEC (methylethcathinone), DMAA (dimethylamylamine) and methylone (methylenedioxymethcathinone) (ESR, 2014). Similarly, tabs assumed to be LSD have found following laboratory analysis to actually contain NBOME compounds (NDIB, 2014).

The IDMS found the proportion of frequent drug users who had tried a drug for the first time increased from 24% in 2009 to 40% in 2011, and then stayed at that level in 2012 and 2013 (Wilkins et al., 2014a). The proportion of frequent methamphetamine users interviewed for the IDMS who had used synthetic cannabinoids increased from 10% in 2010 to 41% in 2011 (Wilkins et al., 2012b). The use of NPS has been associated with a number of emergency hospital admissions and poisonings in New Zealand (Gee & Fountain, 2007; Ministry of Health, 2014b; Wilkins et al., 2015b).

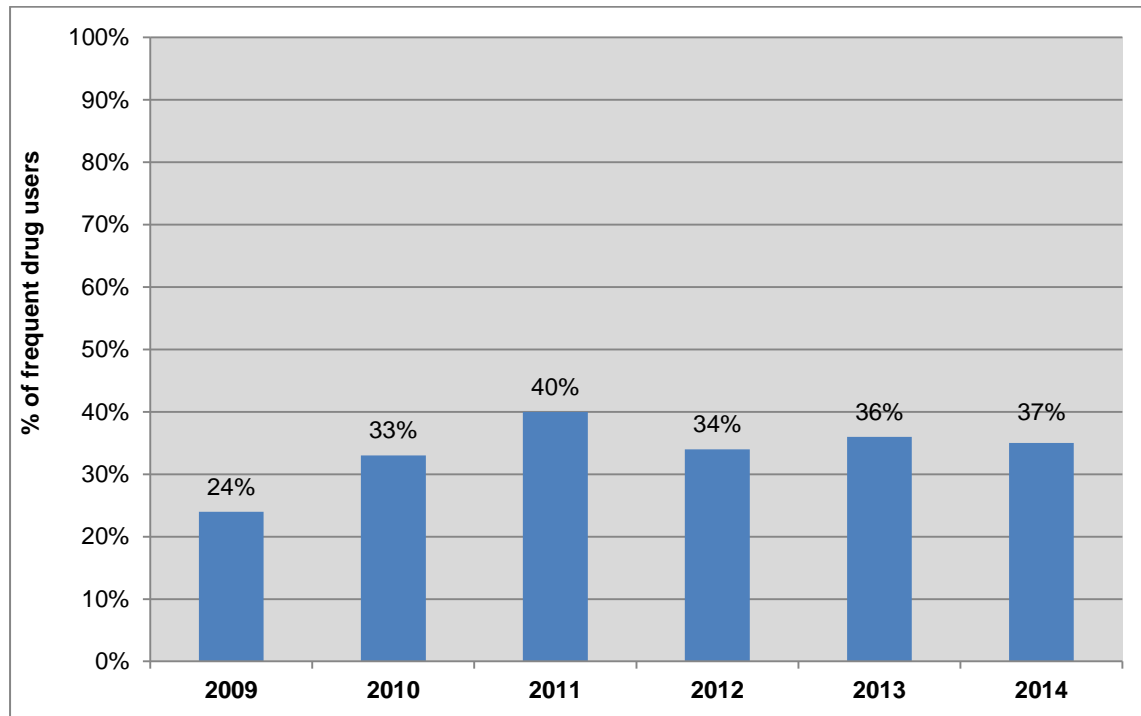
In July 2013, the New Zealand Government established the world's first regulated legal market for 'low risk' NPS with the enactment of the *Psychoactive Substances Act 2013* (PSA), in an attempt to address the underlying drivers of the NPS problem. Under this new legislation, NPS products which can be shown with toxicological and clinical trial data to be 'low risk' will be permitted to be legally sold at licensed retail outlets subject to age, advertising and other restrictions. A transitory interim PSA regime was set up immediately following the passage of the PSA which allowed a reduced number of existing untested legal high products to be sold while product testing data was developed. The interim regime proved to be controversial with ongoing reports of adverse effects from products and social disruption around the now reduced number of retail sites (Wilkins, 2014a, 2014b). In May 2014, the Government responded by abruptly withdrawing all licensed products and retail licenses, effectively prohibiting all legal highs.

## **4.2 Drug types used for first time in past six months**

The frequent drug users were first asked what 'drug types', if any, they had tried for the first time in the previous six months in 2014. This was an open question with the interviewer offering no suggestions concerning what drug types might be available. Note, the question asks about all the drug types a frequent drug user may have tried for the first time in the previous six months, not merely *new* drug types. Consequently, some answers can include established drugs which a respondent may have tried for the first time in the past six months.

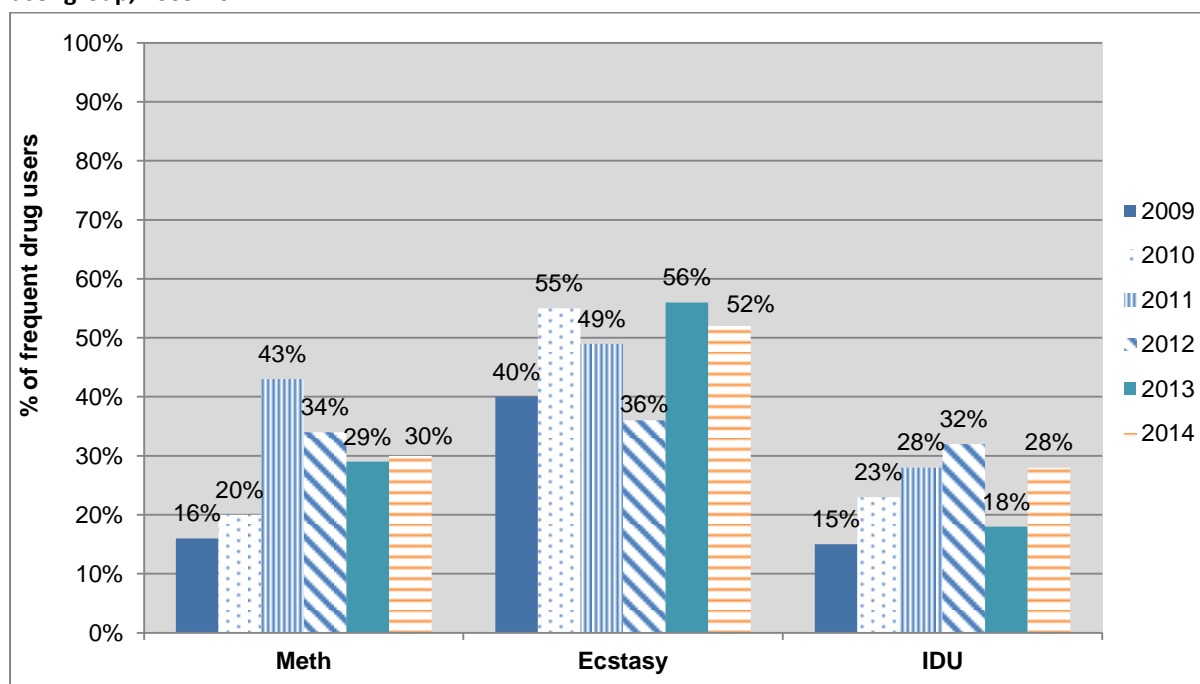
In 2014, 52% of the frequent ecstasy users, 30% of the frequent methamphetamine users and 28% of the frequent injecting drug users had used a drug type for the first time in the previous six months. The proportion of the frequent drug users (i.e. combined three frequent drug user groups) who had tried a drug type for the first time in the previous six months increased from 24% in 2009 to 37% in 2014 ( $p=0.0006$ ) (Figure 4.1). The proportion who had tried a new drug type had previously increased sharply from 24% in 2009 to 40% in 2011 ( $p<0.0001$ ).

**Figure 4 1: Proportion of frequent drug users who had tried a drug type for the first time, 2009-2014**



The proportion of frequent methamphetamine users who had tried a drug for the first time increased from 16% in 2009 to 30% in 2014 ( $p=0.0115$ ) (with a peak of 43% in 2011) (Figure 4.2). There was a sharp increase in the proportion of injecting drug users who had tried a drug for the first time from 18% in 2013 to 28% in 2014, but this increase was not statistically significant ( $p=0.1032$ ). The frequent ecstasy users have consistently had a high rate of trying a drug for the first time, and this level of experimentation did not change from 2009 to 2014 ( $p=0.2664$ ).

**Figure 4 2: Proportion of frequent drug users who had tried a drug type for the first time by frequent drug user group, 2009-2014**



The drug types which the highest proportions of frequent ecstasy users had tried for the first time in 2014 were 'ecstasy' (28%), hallucinogenic mushrooms (20%), 'LSD' (16%), methylphenidate (Ritalin™) (13%), cannabis (10%), tramadol (10%), alcohol (9%), tobacco (9%), cocaine (8%) and amphetamine (8%) (Table 4.1). A minority of the ecstasy users reported using NPS drugs by name for the first time in 2014, including mephedrone (6%), NBOME (5%) and 'research chemicals' (4%). Furthermore, as outlined in the introduction of this chapter, the 'ecstasy' the frequent ecstasy users reported using is also likely to contain NPS compounds rather than MDMA, and tabs of 'LSD' may well be NBOME compounds.

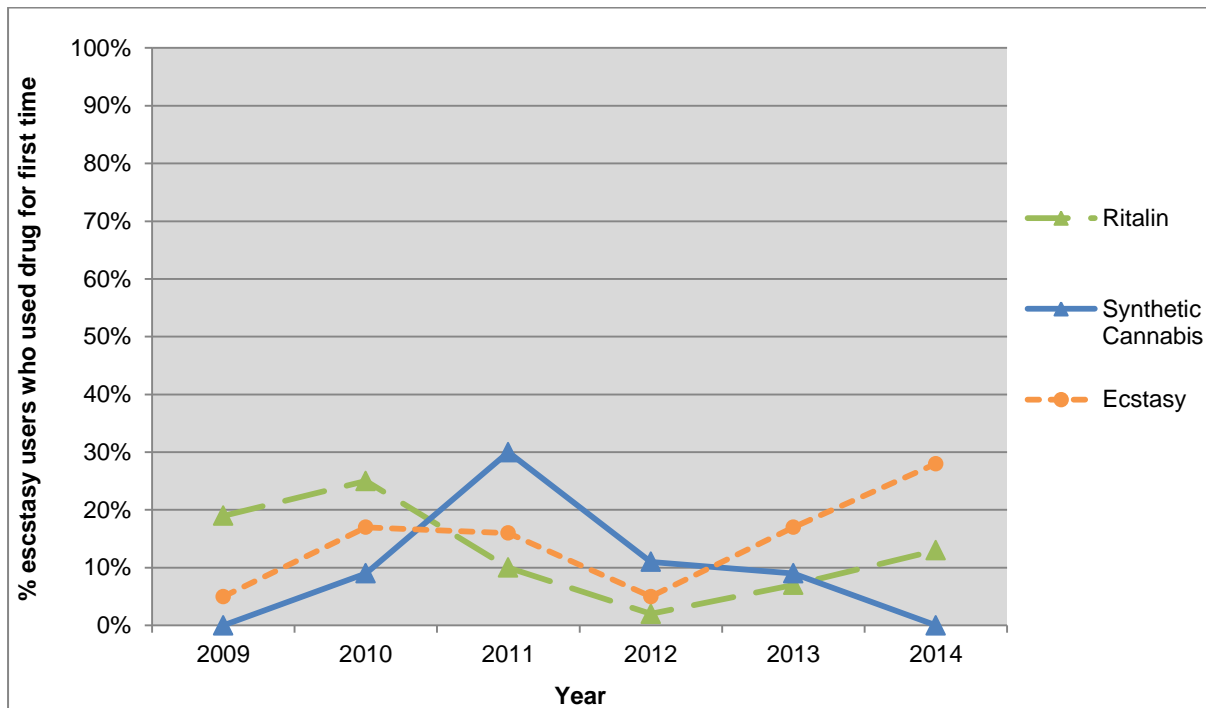
**Table 4 1: Drug types the frequent ecstasy users used for the first time in the past six months (of those who reported using a drug for the first time in previous six months), 2009-2014**

New drug (%)	Frequent ecstasy users					
	2009 (n=44)	2010 (n=84)	2011 (n=77)	2012 (n=46)	2013 (n=67)	2014 (n=54)
'Ecstasy'	5	17	16	5	17	28
Hallucinogenic mushrooms (psilocybin)	17	21	9	7	10	20
'LSD'	25	14	10	7	15	16
Methylphenidate (Ritalin™)	19	25	10	2	7	13
Tramadol	0	4	6	12	7	10
Cannabis	0	4	6	0	1	10
Tobacco	0	4	6	0	1	9
Alcohol	0	5	5	0	1	9

Cocaine	0	4	1	2	6	8
Amphetamine	17	12	10	2	7	8
Mephedrone (methylenedioxymethamphetamine)	4	3	3	7	9	6
NBOMe (25I, 25C)	-	-	-	-	-	5
Zopiclone	0	2	1	0	1	4
Research chemicals	-	-	-	-	-	4
Codeine	16	8	12	2	2	4
Benzodiazepines	7	5	6	0	0	4
Anti-depressants	9	1	2	2	5	4
Opium poppies	0	0	4	2	7	2
Methamphetamine	6	0	8	5	16	2
MDA	0	0	3	0	3	2
Ketamine	11	6	1	11	4	2
Crystal methamphetamine	0	0	2	2	0	2
BZP party pills	4	3	1	4	0	2
Amyl nitrate	11	0	2	0	4	2
PVP	-	-	-	-	-	1
Viagra	0	0	2	0	0	0
Synthetic cocaine	0	1	0	0	0	0
Synthetic cannabinoids	0	9	30	11	9	0
Salvia divinorum	0	1	5	9	2	0
Oxycodone	11	2	2	0	3	0
Non-BZP party pills (e.g. DMAA)	0	7	5	0	1	0
Nitrous oxide	2	6	2	0	5	0
Morphine	3	1	1	0	3	0
Methylone	4	1	0	2	3	0
Methadone (methylenedioxymethamphetamine)	0	1	0	3	5	0
Mescaline	8	0	0	0	2	0
MDPV	0	0	0	2	0	0
'Homebake' heroin/morphine	0	0	3	2	0	0
GHB/GBL	4	3	1	0	3	0
Fentanyl	0	0	1	0	0	0
Dimethyltryptamine (DMT)	0	0	6	2	0	0
Dexamphetamine	3	1	2	0	0	0
Any 2C compound (2CI, 2CB, 2CP)	0	3	8	6	0	0
2CI	0	1	6	4	0	0
2CB	0	1	5	2	0	0

The proportion of frequent ecstasy users who had tried 'ecstasy' for the first time increased from 5% in 2009 to 28% in 2014 ( $p=0.0185$ ). There were statistically significant declines in the proportion of frequent ecstasy users who had, for the first time, tried Ritalin™ (down from 19% in 2009 to 13% in 2014,  $p=0.0318$ ), codeine (down from 16% in 2009 to 4% in 2014,  $p=0.0186$ ) and synthetic cannabinoids (down from 30% in 2011 to 0% in 2014,  $p=0.0065$ ) (Figure 4.3).

**Figure 4 3: Proportion of frequent ecstasy users who had used 'ecstasy', Ritalin™ and synthetic cannabinoids for the first time (of those who had tried a drug for the first time), 2009-2014**



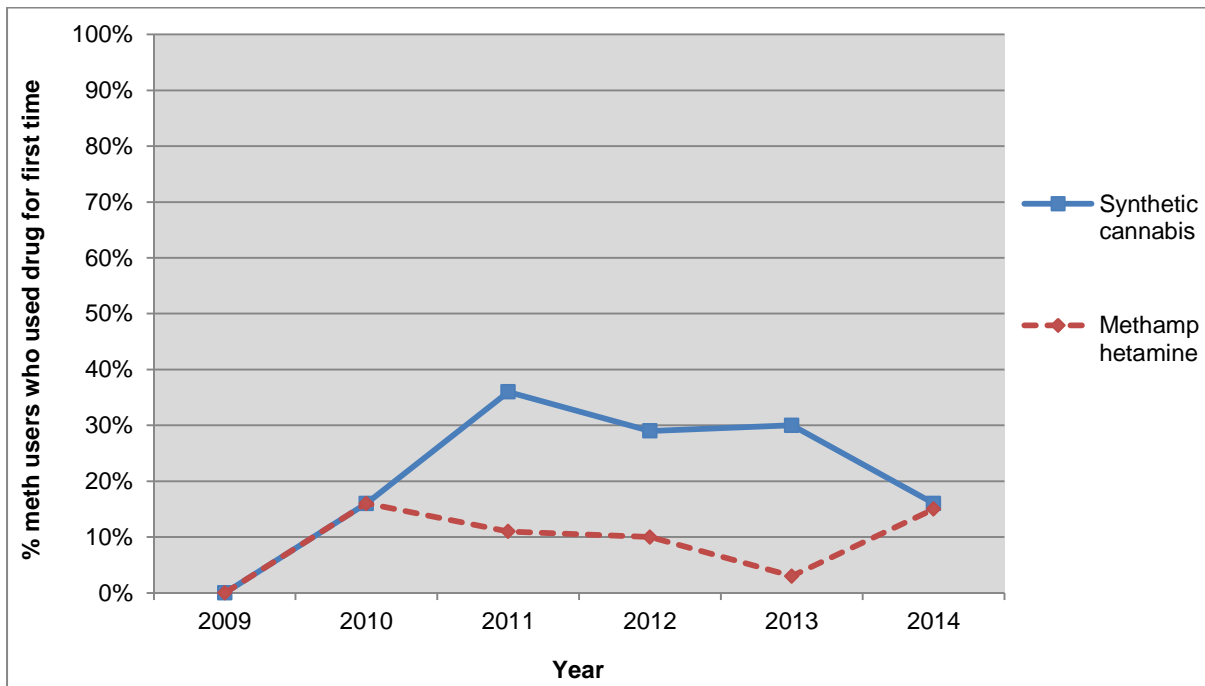
The drug types most often tried by the frequent methamphetamine users for the first time in 2014 were synthetic cannabinoids (16%), methamphetamine (15%), methylphenidate (Ritalin™) (14%), heroin (12%), morphine (11%), crystal methamphetamine (6%), 'LSD' (6%), Zopiclone (6%) and MDPV (5%) (Table 4.2 & Figure 4.5). The proportion of frequent methamphetamine users using synthetic cannabinoids for the first time declined from 30% in 2013 to 16% in 2014, although this decrease was not statistically significant ( $p=0.1804$ ). The proportion of frequent methamphetamine users using methamphetamine for the first time increased from 3% in 2013 to 15% in 2014, but again this increase was not statistically significant ( $p=0.1429$ ).



**Table 4 2: Drug types used by frequent methamphetamine users for the first time in the past six months (of those who reported using a drug for the first time in previous six months), 2009-2014**

New drug (%)	Frequent methamphetamine users					
	2009 (n=17)	2010 (n=26)	2011 (n=47)	2012 (n=31)	2013 (n=25)	2014 (n=30)
Synthetic cannabinoids	0	16	36	29	30	16
Methamphetamine	0	16	11	10	3	15
Methylphenidate (Ritalin™)	12	8	2	3	0	14
Heroin	0	0	0	3	3	12
Morphine	0	0	0	3	0	11
Zopiclone	0	3	4	0	0	6
'LSD'	0	4	2	0	0	6
Crystal methamphetamine	0	0	2	3	0	6
MDPV	0	0	0	0	0	5
Viagra	0	0	2	3	3	3
Tramadol	12	14	2	9	19	3
Synthetics	-	-	-	-	-	3
Oxycodone	12	15	6	0	3	3
Opium poppies	7	8	0	0	0	3
Nitrous oxide	0	0	2	0	0	3
Homebake heroin/ morphine	0	0	6	9	0	3
'Ecstasy'	7	0	2	7	3	3
Dexamphetamine	0	7	0	3	0	3
Codeine	0	4	0	0	0	3
Cocaine	12	4	2	9	0	3
Cannabis	0	0	0	0	0	3
BZP party pills	0	0	0	3	0	3
Benzodiazepines	12	0	2	0	0	3
Amphetamine	0	0	0	0	3	3
Alcohol	0	0	2	0	0	3
Salvia divinorum	0	0	4	0	3	0
Non-BZP party pills (e.g. DMAA)	0	0	4	3	0	0
NBOMe (25I, 25C)	-	-	-	-	-	0
Methylone	0	0	0	0	0	0
Methadone	0	4	4	0	0	0
Mescaline	0	4	0	0	7	0
Mephedrone (methylnmethcathinone)	0	4	6	7	13	0
Ketamine	18	0	0	3	7	0
Hallucinogenic mushrooms (psilocybin)	6	4	2	0	0	0
GHB/GBL	6	4	0	0	6	0
Clonazepam	6	0	0	0	0	0
Any 2C compound(2CI, 2CB, 2CP)	0	4	11	7	0	0
Anti-depressants	0	4	6	0	0	0
Amyl nitrate	6	0	2	0	0	0
2CI	0	0	4	0	0	0
2CB	0	4	6	7	0	0

**Figure 4 4: Proportion of frequent methamphetamine users who had used methamphetamine and synthetic cannabinoids for the first time (of those who had tried a drug for the first time), 2009-2014**

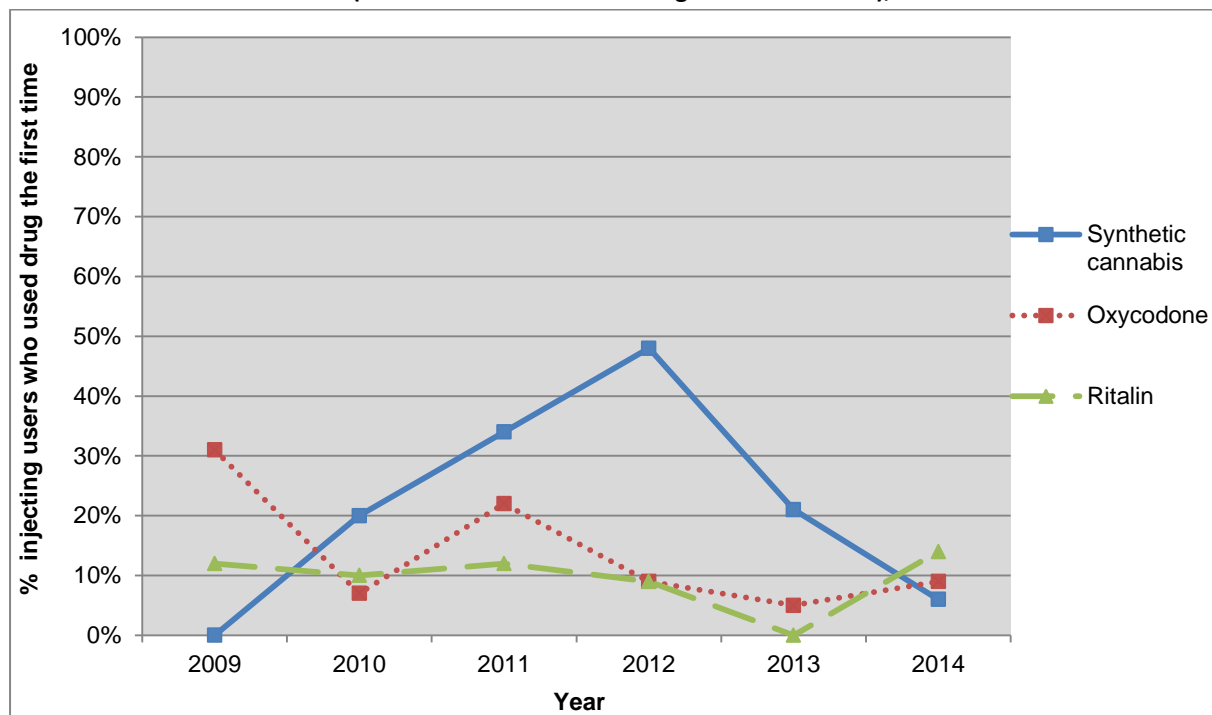


The drug types the frequent injecting drug users had most often tried for the first time in 2014 were methylphenidate (Ritalin™) (14%), morphine (11%), opium poppies (9%), oxycodone (9%), homebake morphine/heroin (8%), tramadol (8%), ketamine (7%), steroids (6%), mephedrone (6%) and synthetic cannabinoids (6%) (Table 4.3). A small proportion had tried mephedrone (6%) and synthetic cannabinoids (6%) for the first time in 2014.

**Table 4 3: Drug types used by the frequent injecting drug user for the first time in the past six months (of those who reported using a drug for the first time in previous six months), 2009-2014**

New drug (%)	Injecting drug users					
	2009 (n=16)	2010 (n=30)	2011 (n=28)	2012 (n=32)	2013 (n=16)	2014 (n=29)
Methylphenidate (Ritalin™)	12	10	12	9	0	14
Morphine	13	7	8	0	5	11
Oxycodone	31	7	22	9	5	9
Opium poppies	0	0	4	0	0	9
Tramadol	0	16	3	19	0	8
Homebake heroin/ morphine	0	3	8	6	11	8
Ketamine	19	7	0	3	11	7
Synthetic cannabinoids	0	20	34	48	21	6
Steroids	0	0	0	4	0	6
Mephedrone (methylethcathinone)	0	0	3	3	0	6
Zopiclone	0	7	0	0	0	5
Methadone	13	7	7	3	6	5
Heroin	7	3	0	0	15	5
Fentanyl	0	0	0	3	5	5
Buprenorphine	0	3	0	0	0	5
Amphetamine	6	7	0	0	0	5
Viagra	0	6	0	0	0	3
Methamphetamine	0	7	8	4	0	3
Halcion	-	-	-	-	-	3
'Ecstasy'	0	0	4	6	0	3
Crystal methamphetamine	0	3	0	0	0	3
Benzodiazepines	0	7	11	3	0	3
AMT (Alpha-Methyltryptamine)	-	-	-	-	-	3
Sevredol (Hydromorphone)	0	0	7	0	0	0
Salvia divinorum	0	0	12	0	0	0
Quinine	0	3	0	0	0	0
Quetiapine	0	6	0	0	0	0
Non-BZP party pills (e.g. DMAA)	0	4	3	0	0	0
Nitrous oxide	6	3	0	0	0	0
NBOMe (25I, 25C)	-	-	-	-	-	0
Methylone	0	0	0	0	22	0
'LSD'	0	0	4	3	0	0
Hallucinogenic mushrooms (psilocybin)	0	0	0	0	5	0
Dexamphetamine	0	4	0	0	0	0
Codeine	0	7	7	3	0	0
Cocaine	0	13	0	0	5	0
BZP party pills	7	3	4	0	0	0
Any 2C compound(2CI, 2CB, 2CP)	0	0	4	0	0	0
Anti-depressants	0	3	0	0	0	0
Amyl nitrate	12	0	0	3	0	0
2CI	0	0	4	0	0	0
2CB	0	0	4	0	0	0

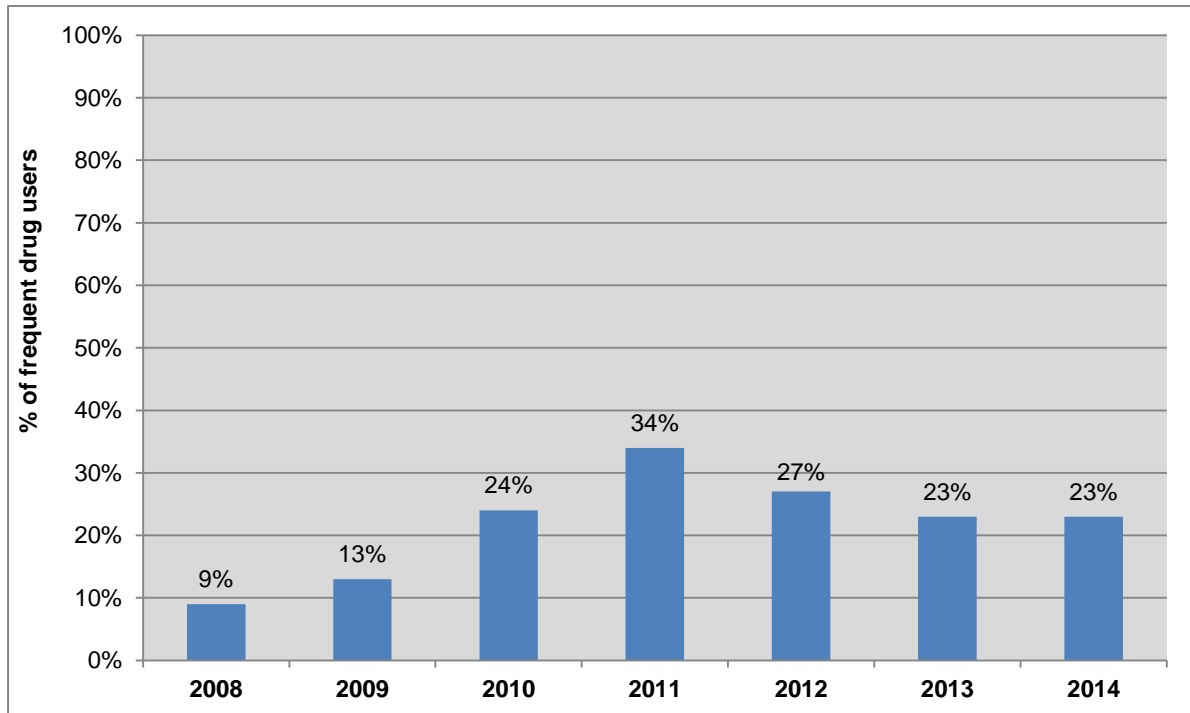
**Figure 4 5: Proportion of the frequent injecting drug users who had used Ritalin™, oxycodone and synthetic cannabinoids for the first time (of those who had tried a drug for the first time), 2009-2014**



### 4.3 New drug types noticed

The frequent drug users were also asked if they had ‘noticed’ any new drug types in the previous six months. This was an open qualitative question with the interviewer offering no suggestions concerning possible new drug types which might be available. The interviewer wrote down what the respondent said in consultation with them. A total of 70 frequent drug users (23% of the sample) provided reports of new drugs in 2014. The proportion of the frequent drug users who had noticed a new drug type increased from 9% in 2008 to 23% in 2014 ( $p < 0.0001$ ) (Figure 4.7). There had previously been a steep rise in the proportion of frequent drug users who had noticed a new drug type from 9% in 2008 to 34% in 2011.

**Figure 4 6: Proportion of frequent drug users who noticed a new drug type, 2008-2014**



Twenty-one percent of those who answered the question (i.e. 14 respondents) reported noticing 'designer drugs', 'new synthetics' or 'research chemicals' in the previous six months (Table 4.4). Eleven percent reported 'MDMA powder', with a further three participants noting that ecstasy 'wasn't the real ecstasy'. Nine percent reported the synthetic cathinone, mephedrone ('meow meow'). Eight percent reported the synthetic psychedelics of the NBOMe family (e.g. '25I-NBOMe'), and a further 5% mentioned 'LSD'. Five percent reported noticing one of the 2C drugs (e.g. 2CB, 2CE), methylone or amphetamine ('speed') in the previous six months. Only two respondents mentioned seeing new synthetic cannabinoids.

**Table 4 4: New drug types noticed in previous six months, 2011-2014**

Drug type (%)	2011 (n=125)	2012 (n=89)	2013 (n=70)	2014 (n=66)
Designer drugs, new synthetics, research chemicals	5	2	6	21
MDMA (powder)	7	10	13	11
Mephedrone (4-MMC, MCAT)	6	3	4	9
Synthetic LSD (25I-NBOMe)	-	-	19	8
Unspecified ['ecstasy'] pill	19	2	0	5
2C drugs (e.g. 2CB, 2CE, 2CI, 2CP)	13	17	11	5
Methylone	1	1	3	5
Amphetamine (uppers, speed)	6	1	1	5
LSD	2	0	1	5
Sleeping pills	0	0	0	5
Cocaine	1	2	3	4
Synthetic cannabinoids	9	7	3	3
Morphine (dots)	3	2	3	3
BZP	1	1	1	2
Ketamine	0	0	1	2
Ritalin	1	2	3	2
Dextromethorphan (in Robitussin cough syrup)	1	0	0	1
GHB	1	2	1	1
Heroin	0	1	6	1
Homebake heroin	0	0	0	1
MDPV	1	10	1	1
Methadone	1	1	6	1
Methamphetamine (meth, P)	6	1	3	1
Methoxetamine	0	4	3	1
Oxycodone	2	0	7	1

#### 4.4 New types of drug users

The frequent drug users were asked if they had seen any different types of drug users in the previous six months in 2014. Sixty-three frequent drug users (20% of the sample) provided accounts of new types of drug users in 2014. Thirty-eight percent of those who commented (i.e. 24 respondents) reported seeing 'younger' drug users (Table 4.5). Nineteen percent observed more 'business', 'professional' and 'higher socio-economic' people using drugs. A further thirteen percent reported that more 'high school students' were using drugs. Thirteen percent said there were more

‘injecting drug users’ (including injection of methamphetamine), and 6% said there were more ‘synthetic cannabis users’ (6%).

**Table 4 5: New types of people reported using drugs, 2011-2014**

Types of people (%)	2011 (n=150)	2012 (n=73)	2013 (n=52)	2014 (n=63)
Young people	35	27	38	38
Professional/wealthier people	8	10	14	19
High school students	-	7	4	13
People of all ages	4	8	10	13
Injecting drug users	5	4	6	13
University students	12	11	10	8
Synthetic cannabinoid users		4	4	6
More women/girls	-	-	8	3
Ecstasy users	9	8	4	2
Gangsters	0	0	0	2
Using at night clubs	13	3	0	2

## 4.5 Different ways of selling drugs

Finally, the frequent drug users were asked if they had noticed any new ways in which drugs had been sold in the previous six months. A total of 51 frequent drug users (16% of the sample) provided comments. Seventy-two percent of those who commented (i.e. 37 respondents) reported increasing use of the internet to buy and sell drugs, including purchasing from the crypto-drug markets on the dark web (37%) (e.g. ‘Silk Road’) and from social network sites (e.g. ‘Facebook™’) (35%). The proportion answering this question who mentioned crypto-drug markets as a new way of selling drugs has increased steadily over the past three years (i.e. 2011=0%, 2012=8%, 2013=18%, 2014=37%). Nine frequent drug users (18% of those who commented) reported people were able to buy drugs via mobile phone text orders, with deliveries made to their homes. A further five frequent drug users (10% of the sample) reported purchasing drugs from a ‘gym’.

## 4.6 Summary of emerging drugs

- The proportion of the frequent drug users who had tried a drug for the first time increased from 24% in 2009 to 37% in 2014
- The proportion of frequent methamphetamine users who had tried a drug for the first time increased from 16% in 2009 to 30% in 2014
- The drug types which the frequent ecstasy users had most often reported trying for the first time in 2014 were 'ecstasy' (28%), hallucinogenic mushrooms (20%), LSD (16%), methylphenidate (Ritalin™) (13%), tramadol (10%), cannabis (10%), tobacco (9%), alcohol (9%), cocaine (8%) and amphetamine (8%)
- A minority of the ecstasy users reported using new psychoactive substances (NPS) by name for the first time in 2014, including mephedrone (6%), NBOMe (5%) and 'research chemicals' (4%)
- The proportion of frequent ecstasy users who had tried 'ecstasy' for the first time increased from 5% in 2012 to 28% in 2014
- There were declines in the proportion of frequent ecstasy users who had first tried Ritalin™ (down from 19% in 2009 to 13% in 2014), codeine (down from 16% in 2009 to 4% in 2014) and synthetic cannabinoids (down from 9% in 2010 to 0% in 2014)
- The drug types most often tried by the frequent methamphetamine users for the first time in 2014 were synthetic cannabinoids (16%), methamphetamine (15%), methylphenidate (Ritalin™) (14%), heroin (12%), morphine (11%), crystal methamphetamine (6%), LSD (6%), Zopiclone (6%) and MDPV (5%)
- The drug types the frequent injecting drug users had most often tried for the first time in 2014 were methylphenidate (Ritalin™) (14%), morphine (11%), opium poppies (9%), oxycodone (9%), homebake morphine/heroin (8%), tramadol (8%), ketamine (7%), steroids (6%), mephedrone (6%) and synthetic cannabinoids (6%)
- A small proportion of injecting drug users had tried mephedrone (6%) and synthetic cannabinoids (6%) for the first time in 2014
- The proportion of frequent drug users who had noticed a new drug type(s) increased from 9% in 2008 to 23% in 2014
- The new drug types the frequent drug users most commonly reported seeing in 2014 were 'designer drugs'/'new synthetics'/'research chemicals' (21%), MDMA ('powder') (11%), mephedrone (9%), synthetic psychedelics (e.g. 25I-NBOMe) (8%), unspecified ecstasy pills (5%), 2C drugs (e.g. 2CB, 2CE, 2CI, 2CP) (5%), methylone (5%), amphetamines (5%), LSD (5%), sleeping pills (5%) and cocaine (4%)



- Seventy-two percent of the frequent drug users who commented on new ways of selling drugs reported increasing use of the internet to buy and sell drugs including purchasing from the crypto-drug markets on the dark web (37%) (e.g. 'Silk Road') and from social network sites (e.g. 'Facebook™') (35%)

## 5. Methamphetamine

### 5.1 Introduction

Methamphetamine, known colloquially in New Zealand as 'P', is a powerful and addictive psychostimulant (Gawin & Ellinwood, 1988; Hall & Hando, 1994; Kuhn et al., 1998; Shearer et al., 2002). Chronic and high dose use of methamphetamine can cause hostility, paranoia, hallucinations, obsessive behaviour, psychosis and drug dependency (Hall & Hando, 1994; Kuhn, et al., 1998; Shearer, et al., 2002).

Methamphetamine use first emerged in New Zealand in the early 2000s, and reached peak use at 5.0% of the population (aged 15-45 years) in 2001, before declining to 3.4% by 2006 (Wilkins, et al., 2002b; Wilkins & Sweetsur, 2008). The most recently available national survey data found 0.9% of New Zealanders (aged 16-64 years) reported using amphetamines<sup>1</sup> in the previous year in 2014/15 (Department of the Prime Minister and Cabinet, 2014, 2015; Ministry of Health, 2014a, 2015), similar to rates found in 2011/12 and 2012/13 (Ministry of Health, 2013). The mean age of amphetamine users increased from 29 years in 2012/13 to 33 years in 2014/15, suggesting an aging user group (Department of the Prime Minister and Cabinet, 2015; Ministry of Health, 2015). However, high levels of methamphetamine use and related harm have persisted among specific 'at risk' populations and communities (Wilkins et al., 2012a; Wilkins, et al., 2011b). For example, 30% of police detainees reported using methamphetamine in the previous 12 months in 2014; the same rate found in 2013 (Wilkins et al., 2015a).

The 2013 IDMS and the 2014 NZ-ADUM have both found increasing use and supply of methamphetamine in Christchurch. The proportion of frequent drug users in Christchurch who reported methamphetamine was 'easier' to obtain increased from 14% in 2012 to 26% in 2013 (Wilkins, et al., 2014a). The proportion of frequent drug users who could purchase methamphetamine in one hour or less in Christchurch increased dramatically from 56% in 2012 to 92% in 2013 (Wilkins, et al., 2014a). The proportion of police detainees in Christchurch Central who had used methamphetamine in the previous month increased from 10% in 2010 to 18% in 2014 (Wilkins, et al., 2015a). The proportion of Christchurch Central detainees who reported methamphetamine was 'easier' to obtain increased from 6% in 2011 to 43% in 2014 (Wilkins, et al.,

---

<sup>1</sup> In this survey the term 'amphetamines' referred to a number of amphetamine type drugs including methamphetamine, crystal methamphetamine (Ice) and amphetamine sulphate ('speed')

2015a). The surge in methamphetamine use in Christchurch may be being driven by the large influx of workers to Christchurch for the rebuild of the city following the earthquakes in 2011. Police have also noted a reorganization of the gang scene in Christchurch which may be facilitating greater drug supply (NDIB, 2014).

In Australia, the 2013 National Household Drug Survey found an increase in crystal methamphetamine use among those who used methamphetamine (i.e. up from 22% in 2010 to 50% in 2013) (AIHW, 2014). There have been record numbers and weights of seizures of amphetamine type stimulants (excluding MDMA) made at the Australian border in the past two years (ACC, 2015). There is evidence of growing methamphetamine use in the United States, based on treatment admissions and deaths, and also an increase in methamphetamine seizures in a number of Eastern and Northern European countries (EMCDDA, 2015a; UNODC, 2015b). The United Nations Office on Drugs and Crime (UNODC) has reported the methamphetamine market is expanding globally and there is increased interconnectedness in methamphetamine supply between regions (UNODC, 2015b). Global seizures of methamphetamine increased from 34 tons in 2009 to 88 tons in 2013 (UNODC, 2015b). Methamphetamine trafficking routes to East and South-East Asia have emerged from several parts of Africa and the Americas (UNODC, 2015b).

## **5.2 Knowledge of methamphetamine trends**

Forty-four percent of the frequent drug users interviewed for the 2014 IDMS (n=137) indicated they felt confident enough to comment on the price, strength and availability of methamphetamine in the previous six months. This included 90% of the frequent methamphetamine users (n=90), 35% of the frequent injecting drug users (n=36) and 11% of the frequent ecstasy users (n=11).

## **5.3 Availability of methamphetamine**

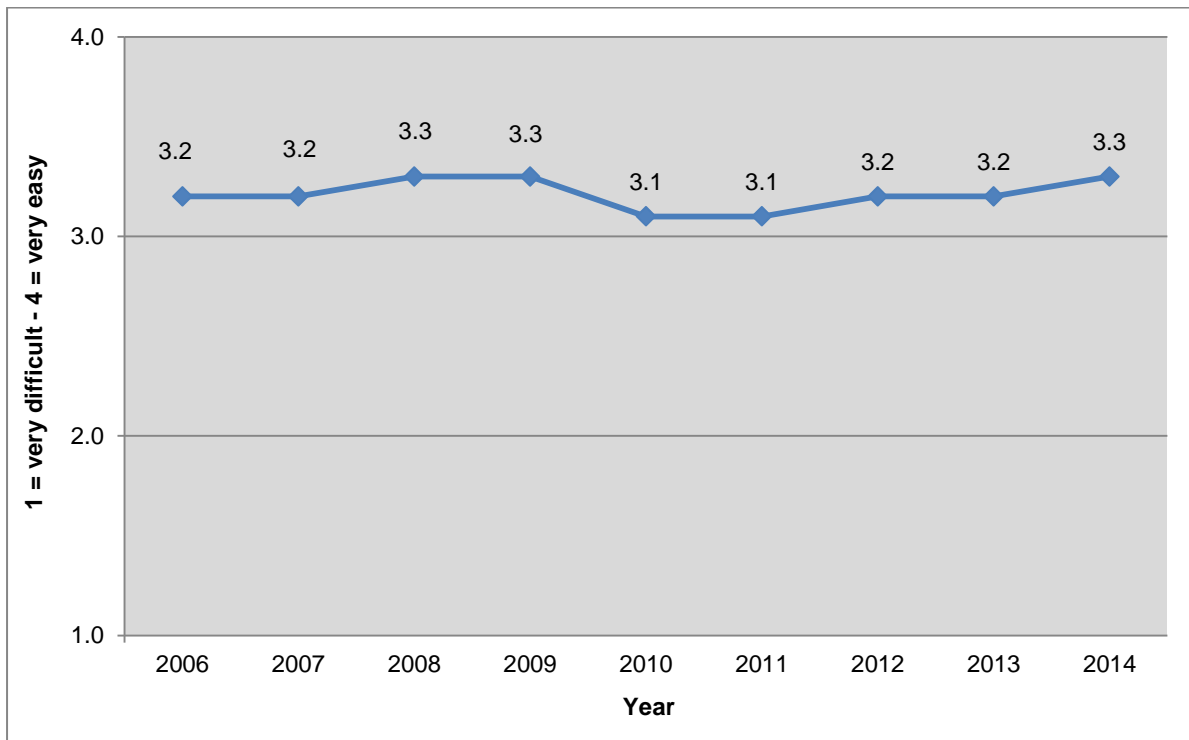
### **Current availability of methamphetamine**

The frequent drug users reported the current availability of methamphetamine was 'very easy/easy' in 2014 (Table 5.1). Overall, there was no statistically significant change in the current availability of methamphetamine from 2006 to 2014 ( $p=0.9291$ ) (Figure 5.1). The current availability of methamphetamine increased from 2013 to 2014 (up from 3.2 to 3.3), but this increase was not statistically significant ( $p=0.1032$ ).

**Table 5 1: Current availability of methamphetamine by combined frequent drug users, 2006-2014**

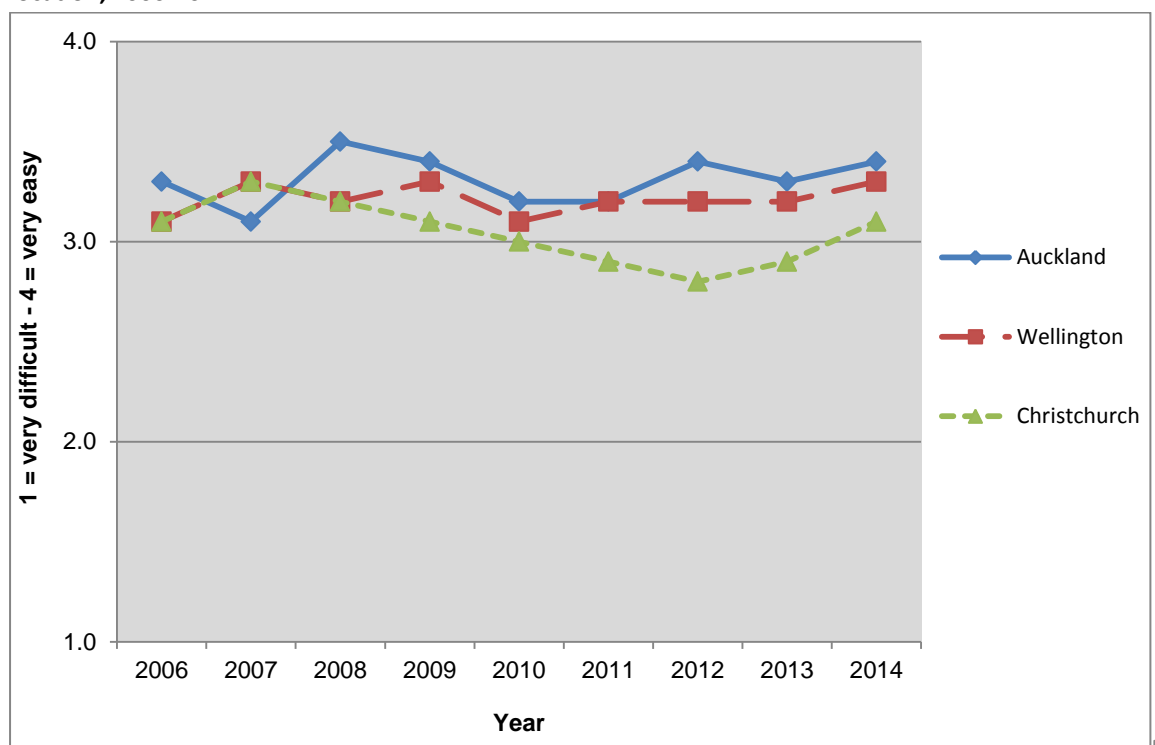
	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current availability of methamphetamine (%)</b>	<b>Combined modules (n=176)</b>	<b>Combined modules (n=176)</b>	<b>Combined modules (n=195)</b>	<b>Combined modules (n=167)</b>	<b>Combined modules (n=201)</b>	<b>Combined modules (n=185)</b>	<b>Combined modules (n=168)</b>	<b>Combined modules (n= 147)</b>	<b>Combined modules (n=137)</b>
Very easy [4]	38%	38%	42%	37%	34%	32%	44%	39%	45%
Easy [3]	44%	48%	48%	53%	48%	48%	37%	43%	43%
Difficult [2]	17%	12%	9%	7%	16%	18%	17%	15%	11%
Very difficult [1]	1%	2%	0%	2%	2%	2%	2%	2%	<1%
Average availability score (1=very difficult – 4=very easy)	3.2	3.2	3.3	3.3	3.1	3.1	3.2	3.2	3.3
Overall current status	Easy/ very easy	Easy/ very easy	Easy/ very easy	Easy/ very easy	Easy/ very easy	Easy/ very easy	Very easy/ easy	Easy/ Very easy	Very easy/ easy

**Figure 5 1: Mean score of the current availability of methamphetamine by combined frequent drug users, 2006-2014**



There had previously been a decrease in the current availability of methamphetamine in Christchurch from 2006 to 2012 (down from 3.1 to 2.8,  $p=0.0006$ ), the year immediately following the 2011 earthquakes (Figure 5.2). There has some recovery in the availability of methamphetamine in Christchurch in recent years, but the increases were not statistically significant. In 2014, the availability of methamphetamine is still lower in Christchurch than in Auckland (3.1 vs. 3.4), and this difference is close to being statistically significant ( $p=0.0939$ ) (Table 5.2 and Figure 5.3).

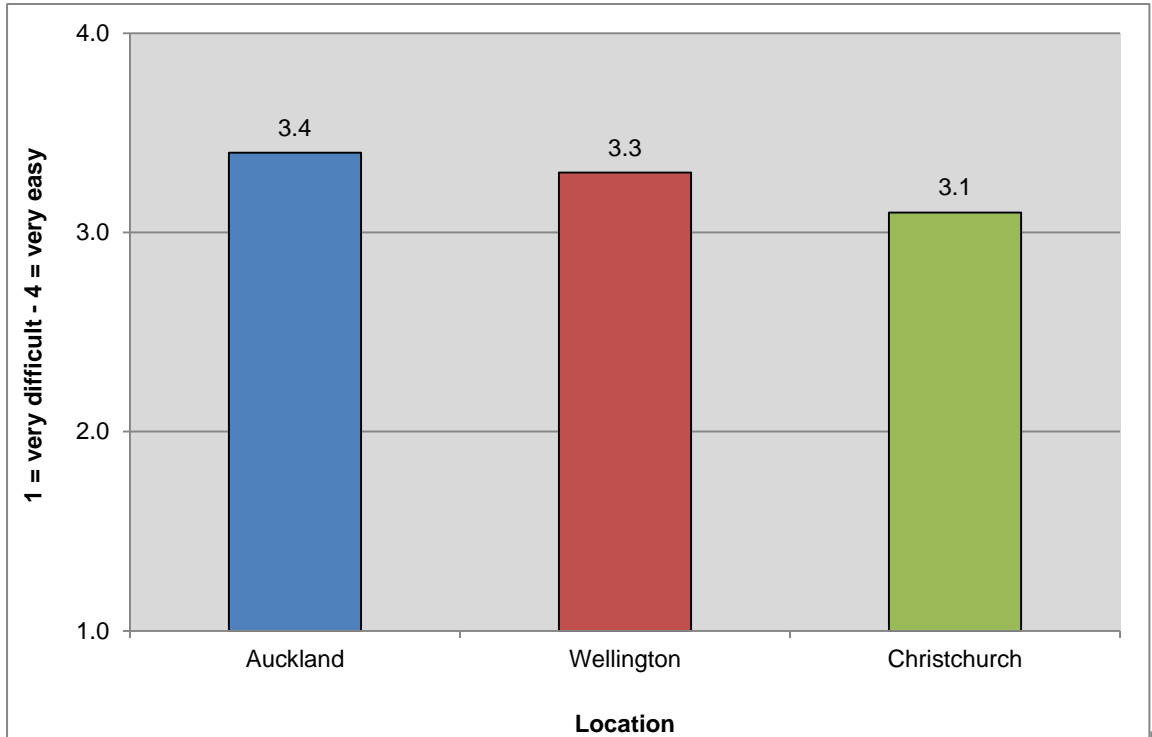
**Figure 5 2: Mean score of the current availability of methamphetamine by combined frequent drug users by location, 2006-2014**



**Table 5 2: Current availability of methamphetamine by location, 2014**

Current availability of methamphetamine (%)	Auckland (n=85)	Wellington (n=24)	Christchurch (n=28)
Very easy [4]	52%	38%	36%
Easy [3]	40%	50%	44%
Difficult [2]	8%	12%	17%
Very difficult [1]	0%	0%	3%
Average availability score (1=very difficult – 4=very easy)	3.4	3.3	3.1
Overall current status	Very easy/easy	Easy/very easy	Easy/very easy

Figure 5 3: Mean score of the current availability of methamphetamine by location, 2014



### Change in the availability of methamphetamine

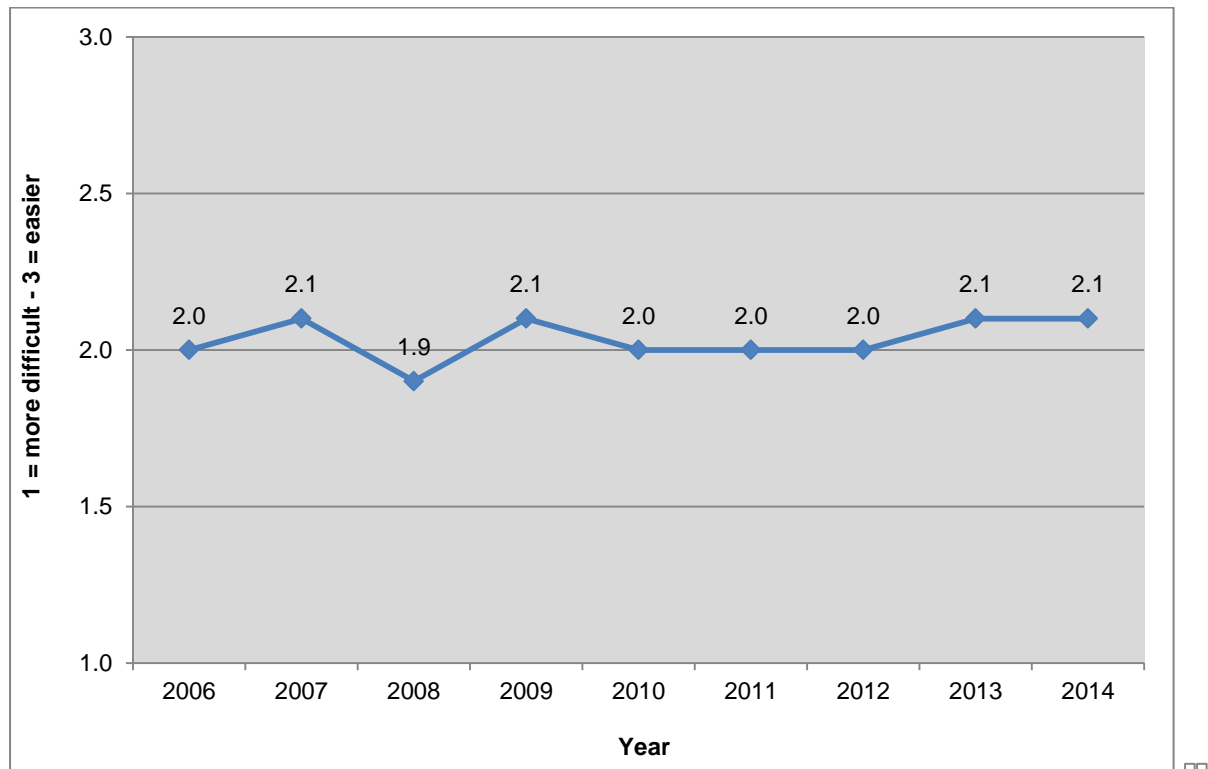
The frequent drug users considered the availability of methamphetamine to have been 'stable/easier' over the past six months in 2014 (Table 5.3). Overall, there was no statistically significant difference in reports of the change in the availability of methamphetamine from 2006 to 2014 ( $p=0.5381$ ), with most saying it had been 'stable/easier' in recent years (Figure 5.4).

**Table 5 3: Change in availability of methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Change in availability of methamphetamine (%)</b>	<b>Combined modules (n=175)</b>	<b>Combined modules (n=174)</b>	<b>Combined modules (n=193)</b>	<b>Combined modules (n=164)</b>	<b>Combined modules (n=194)</b>	<b>Combined modules (n=170)</b>	<b>Combined modules (n=165)</b>	<b>Combined modules (n= 143)</b>	<b>Combined modules (n=130)</b>
Easier [3]	21%	29%	14%	28%	16%	18%	26%	15%	17%
Stable [2]	52%	51%	57%	44%	60%	53%	51%	61%	61%
Fluctuates [2]	9%	6%	6%	8%	8%	13%	7%	13%	10%
More difficult [1]	19%	14%	23%	20%	17%	16%	16%	10%	11%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.1	1.9	2.1	2.0	2.0	2.0	2.1	2.1
Overall recent change	Stable/easier	Stable/easier	Stable/more difficult	Stable/easier	Stable/more difficult	Stable/easier	Stable/easier	Stable/easier	Stable/easier

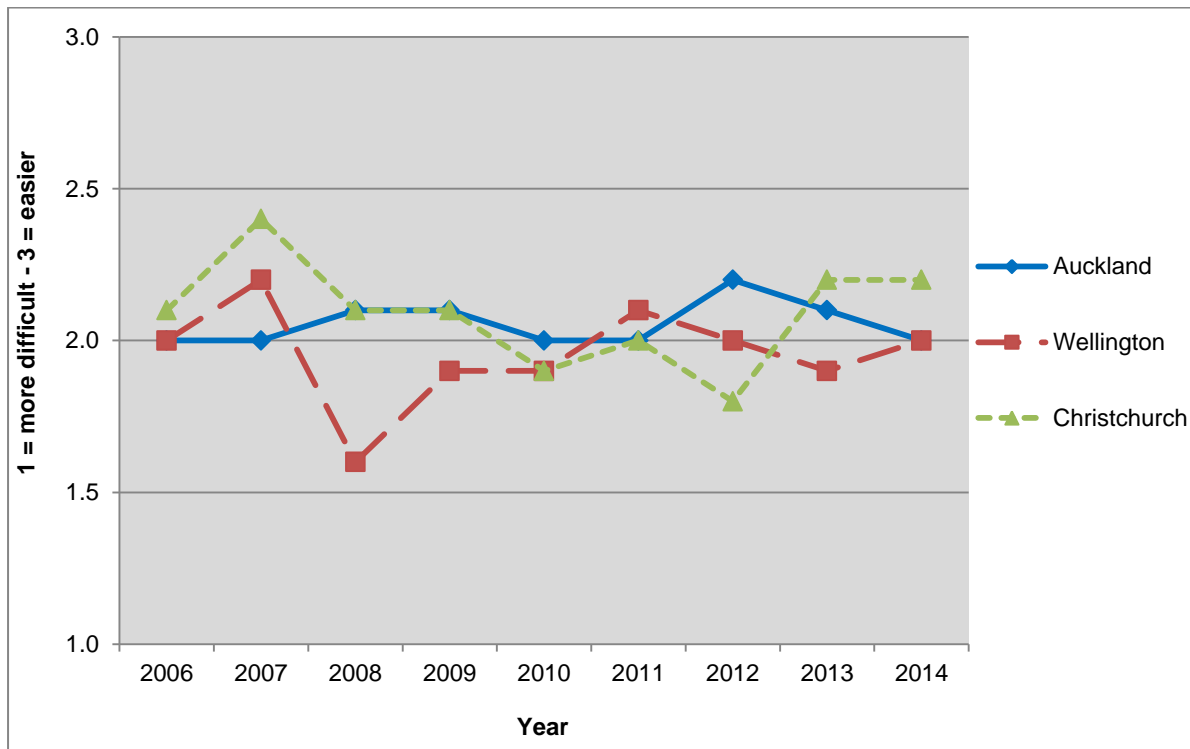


Figure 5 4: Mean score of the change in the availability of methamphetamine by combined frequent drug users, 2006-2014



The availability of methamphetamine become slightly easier in Auckland from 2006 to 2014 ( $p=0.0365$ ) (Figure 5.5). Overall, the availability of methamphetamine decreased in Christchurch from 2006 to 2014 ( $p=0.0299$ ), reaching a low point in 2012 (the year immediately following the 2011 earthquakes). More recently, the availability of methamphetamine in Christchurch recovered quite dramatically from 2012 to 2013 (up from 1.8 to 2.2,  $p=0.0242$ ). Subsequently, there was no difference in perceptions of the change in availability of methamphetamine in Christchurch from 2013 to 2014, with most describing it as 'stable/easier' in both years.

**Figure 5 5: Mean score of the change in the availability of methamphetamine by combined frequent drug users by location, 2006-2014**



## 5.4 Price of methamphetamine

### Current price of methamphetamine

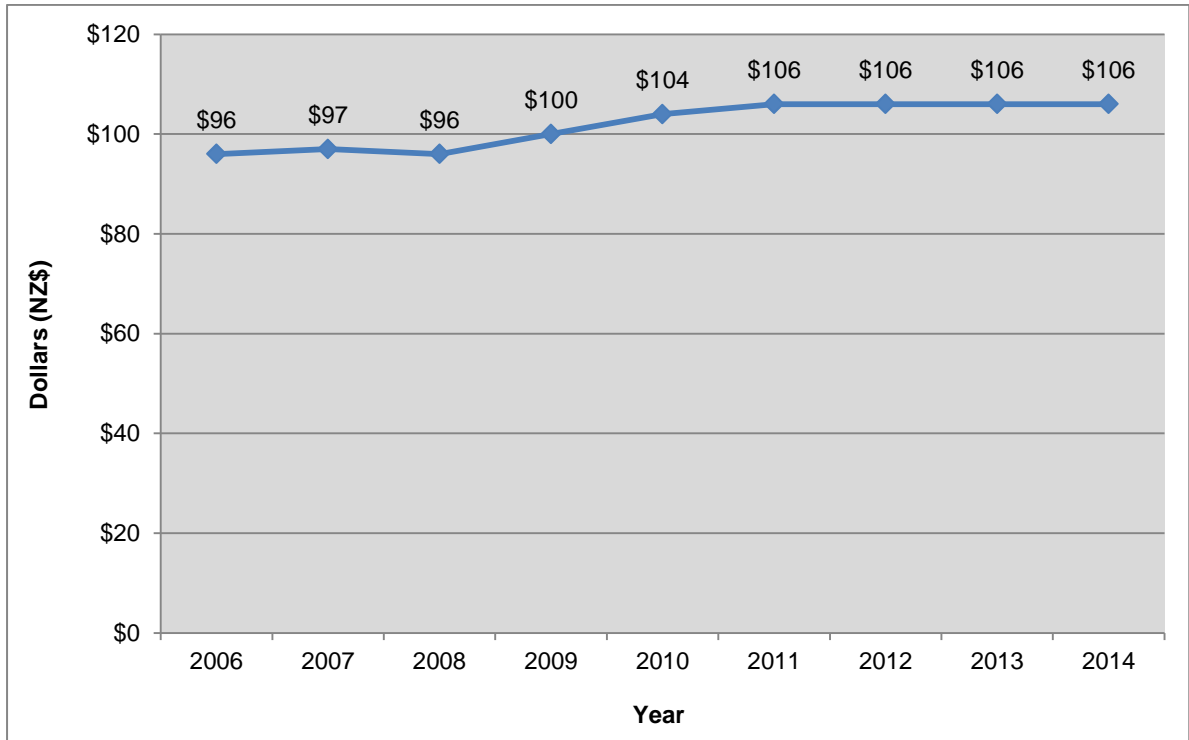
The median price of a 'point' (0.1 grams) of methamphetamine was \$100 in 2014, and the median price for a gram of methamphetamine was \$650 in 2014 (Table 5.4).

**Table 5 4: Current price of methamphetamine (NZD) by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current price of methamphetamine (\$)</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>
<b>Number with knowledge</b>	<b>n=144</b>	<b>n=130</b>	<b>n=166</b>	<b>n=137</b>	<b>n=155</b>	<b>n=161</b>	<b>n=139</b>	<b>n=114</b>	<b>n=105</b>
Median (mean) price 'point' (0.1 grams)	\$100 (\$96)	\$100 (\$97)	\$100 (\$96)	\$100 (\$100)	\$100 (\$104)	\$100 (\$106)	\$100 (\$106)	\$100 (\$106)	\$100 (\$106)
<b>Number with knowledge</b>	<b>n=75</b>	<b>n=68</b>	<b>n=54</b>	<b>n=56</b>	<b>n=69</b>	<b>n=69</b>	<b>n=83</b>	<b>n=62</b>	<b>n= 65</b>
Median (mean) price gram	\$600 (\$610)	\$600 (\$676)	\$700 (\$698)	\$700 (\$738)	\$800 (\$780)	\$800 (\$815)	\$700 (\$678)	\$700 (\$697)	\$650 (\$681)
<b>Number with knowledge</b>	<b>-</b>	<b>-</b>	<b>n=13</b>	<b>n=16</b>	<b>n=8</b>	<b>n=7</b>	<b>n=21</b>	<b>n=6</b>	<b>n=16</b>
Median (mean) price per ounce	-	-	\$12,000 (\$12,472)	\$12,000 (\$13,155)	\$12,000 (\$11,032)	\$15,000 (\$15,108)	\$10,000 (\$8,864)	\$14,000 (\$15157)	\$10,000 (\$8,984)

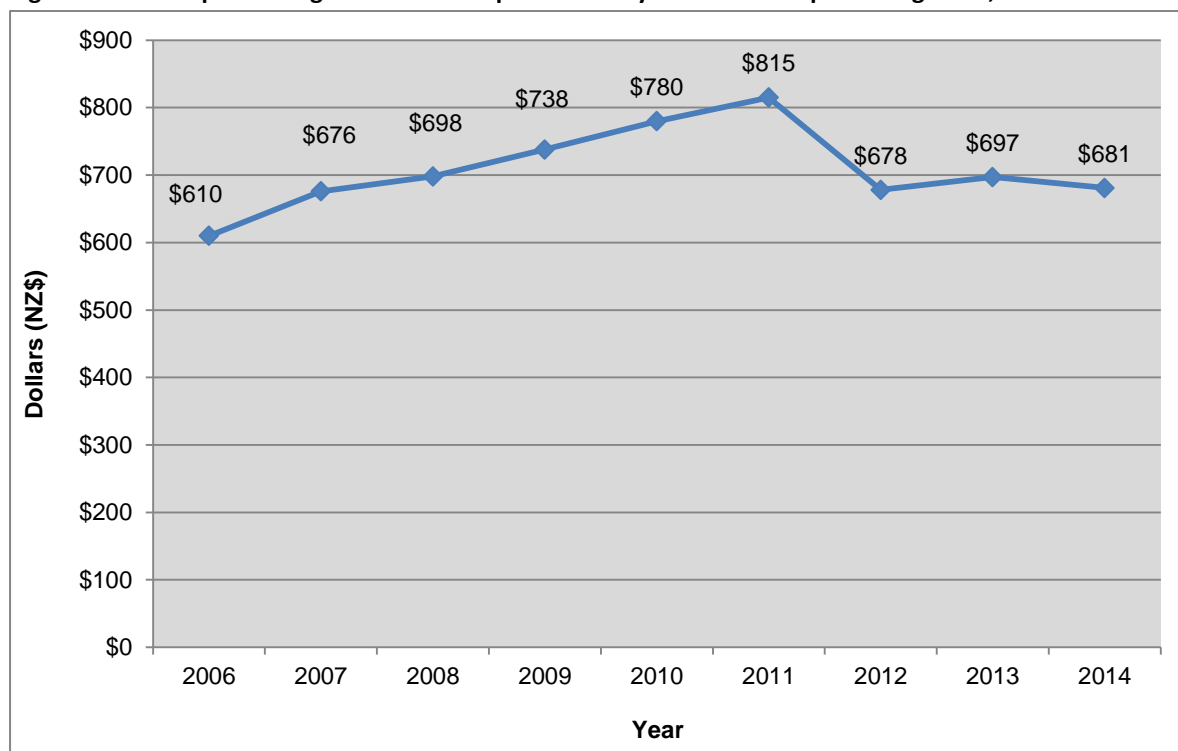
The mean price of a 'point' of methamphetamine has increased slightly over the past nine years, up from \$96 in 2006 to \$106 in 2014 ( $p < 0.0001$ ) (Figure 5.6). The 'point' price had previously increased from \$96 in 2006 to \$106 in 2011 ( $p < 0.0001$ ).

**Table 5 5: Mean price of a 'point' of methamphetamine by combined frequent drug users, 2006-2014**



The mean price of a gram of methamphetamine had previously increased steadily from \$610 in 2006 to a peak of \$815 in 2011 ( $p < 0.0001$ ), before declining to \$678 in 2012 ( $p = 0.0018$ ). There was no statistically significant change in the gram price from \$697 in 2013 to \$681 in 2014 ( $p = 0.7314$ ).

**Figure 5 6: Mean price of a gram of methamphetamine by combined frequent drug users, 2006-2014**



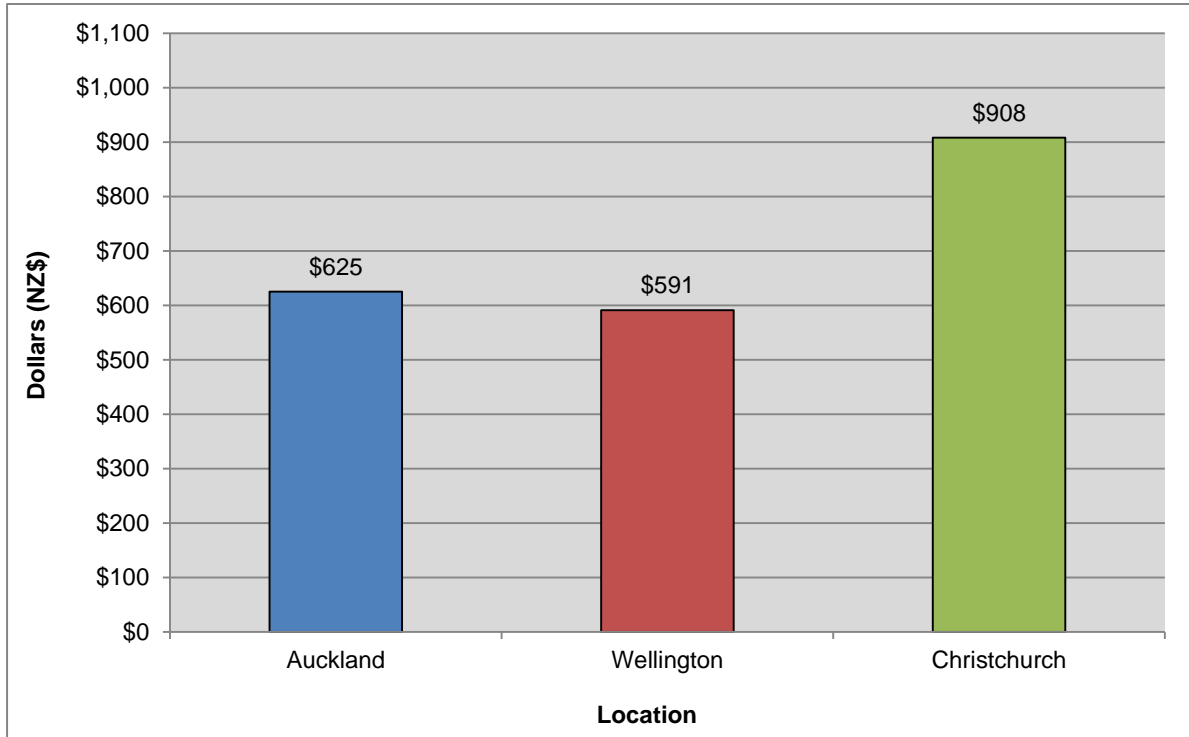
In 2014, the mean price of a ‘point’ of methamphetamine was lower in Auckland than in Wellington (\$99 vs. \$140), and this difference was close to being statistically significant ( $p=0.0808$ ) (Table 5.5).

**Table 5 6: Current median (mean) price for a ‘point’ and gram of methamphetamine (NZD) by location, 2014**

Current price of methamphetamine	Auckland	Wellington	Christchurch
<b>Number with knowledge</b>	<b>n=67</b>	<b>n=19</b>	<b>n=21</b>
Median (mean) price ‘point’ (0.1 grams)	\$100 (\$99)	\$100 (\$140)	\$150 (\$126)
<b>Number with knowledge</b>	<b>n=38</b>	<b>n=12</b>	<b>n=15</b>
Median (mean) price gram	\$600 (\$625)	\$700 (\$59)	\$1000 (\$908)

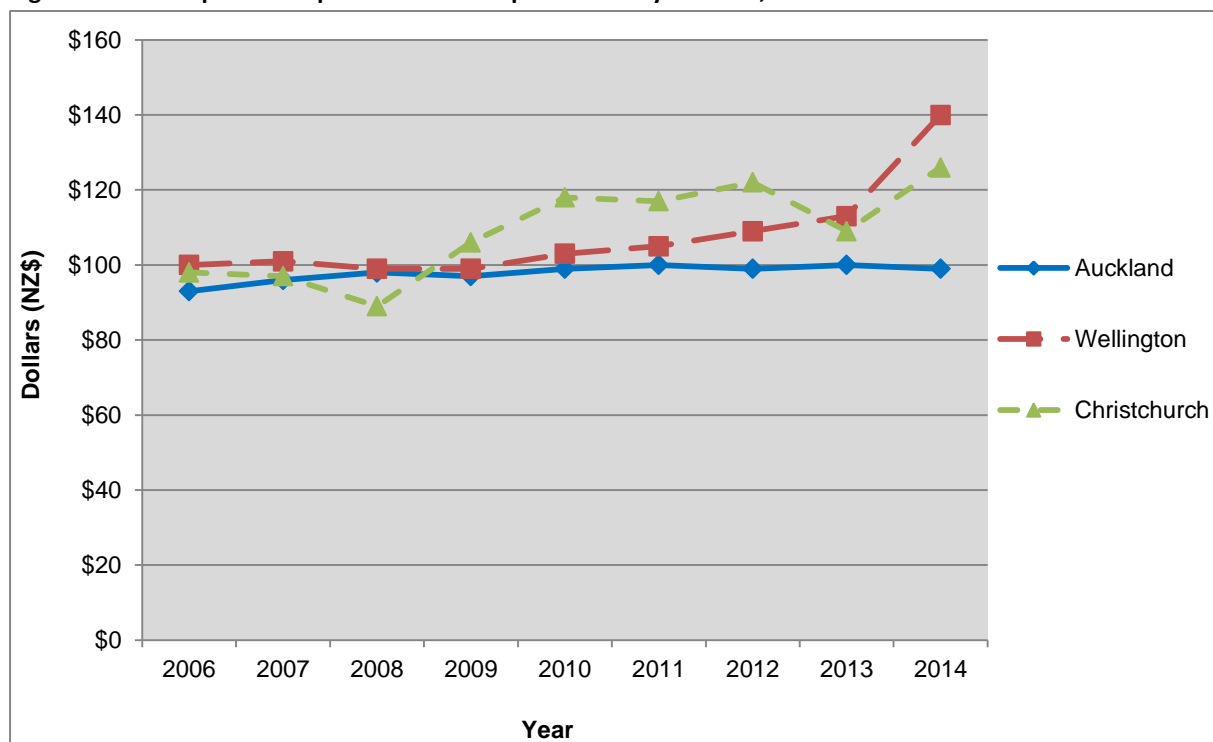
In 2014, the mean price of a gram of methamphetamine was higher in Christchurch than in Auckland (\$908 vs. \$625,  $p<0.0001$ ), and higher in Christchurch than in Wellington (\$908 vs. \$591,  $p<0.0001$ ) (Figure 5.8).

**Figure 5 7: Mean price of a gram of methamphetamine by location, 2014**



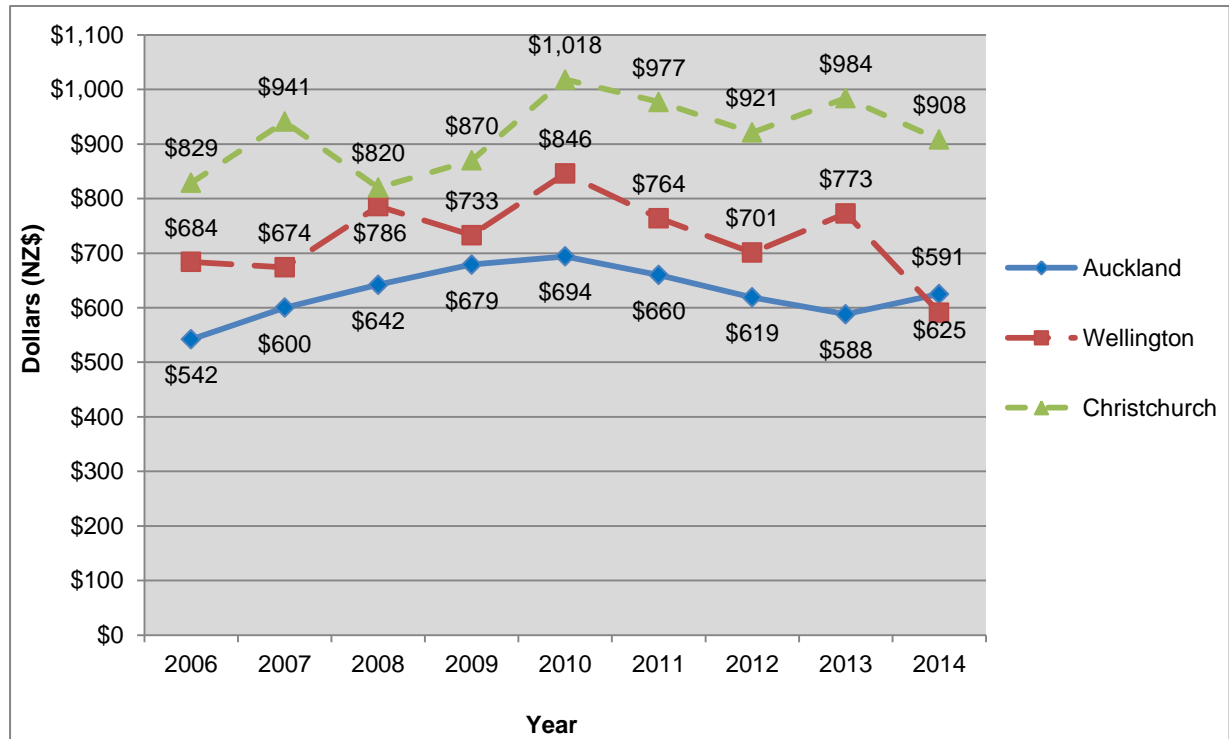
The price of a 'point' of methamphetamine increased in all three study locations from 2006 to 2014 (Figure 5.9). In Auckland, the 'point' price increased from \$93 in 2006 to \$99 in 2014 ( $p=0.0006$ ). In Wellington, the price of a 'point' increased from \$100 in 2006 to \$140 in 2014 ( $p=0.0073$ ). In Christchurch, the 'point' price increased from \$98 in 2006 to \$126 in 2014 ( $p<0.0001$ ), and from \$109 in 2013 to \$126 in 2014 ( $p=0.0475$ ).

**Figure 5 8: Mean price of a 'point' of methamphetamine by location, 2006-2014**



Overall, there was no statistically significant change in the price of a gram of methamphetamine in Auckland from 2006 to 2014 ( $p=0.2333$ ) (Figure 5.10). The price of a gram of methamphetamine had previously increased in Auckland from \$542 in 2006 to \$660 in 2011 ( $p<0.0001$ ). Fewer frequent drug users in the other sites answered the gram price question and this accounts for the greater annual variation in these locations. The price of a gram of methamphetamine in Christchurch increased from \$829 in 2006 to \$908 in 2014, but this increase was not statistically significant ( $p=0.2287$ ). There was also no overall change in the gram price in Wellington from 2006 to 2014 ( $p=0.7058$ ). However, the gram price in Wellington was reported to have declined from \$773 in 2013 to \$591 in 2014 ( $p=0.0266$ ), although the number of respondents reporting prices in this location was low (i.e.  $n=11$  in 2013 and  $n=12$  in 2014).

Figure 5 9: Mean price of a gram of methamphetamine by location, 2006-2014



### Change in the price of methamphetamine

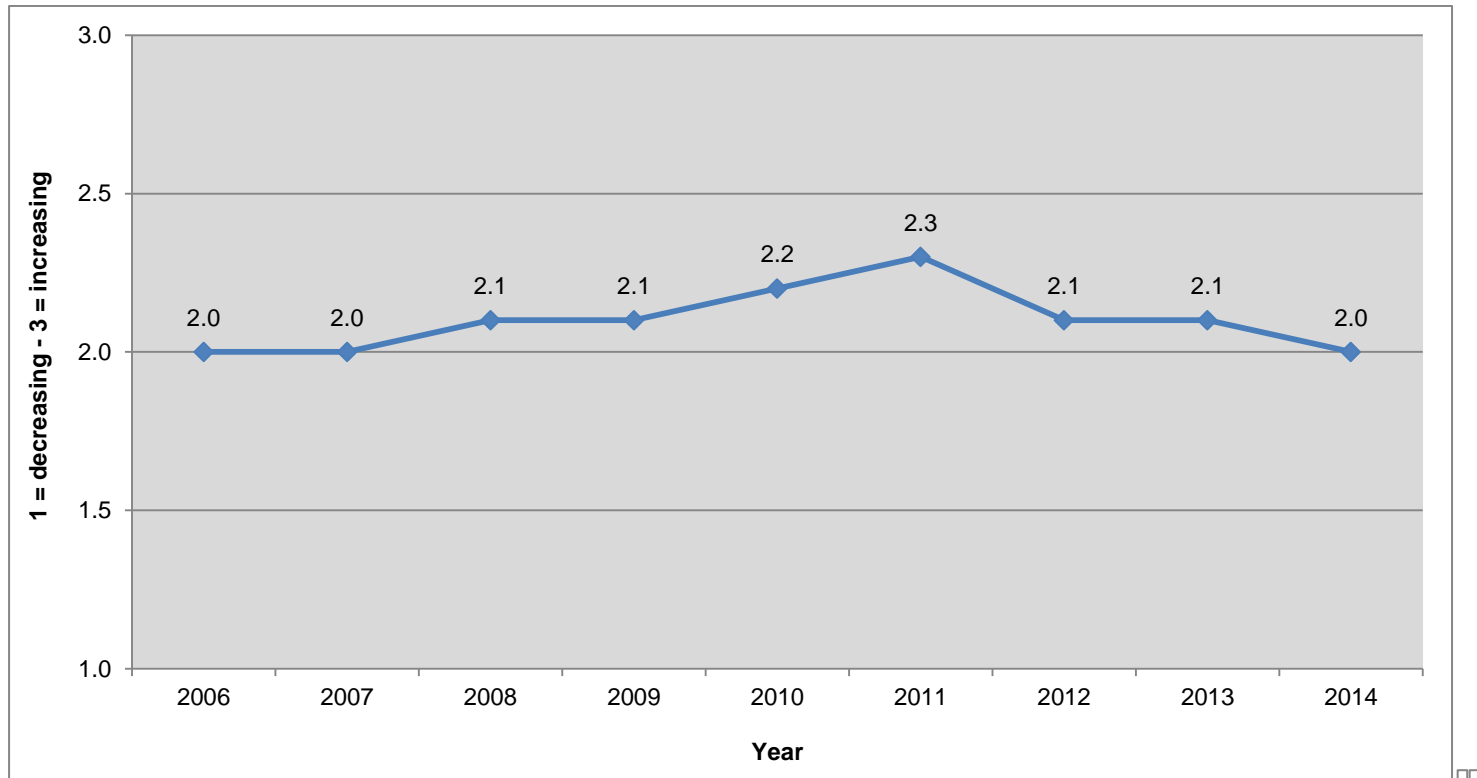
The price of methamphetamine was reported to have been ‘stable’ over the past six months in 2014 (Table 5.6). Seventy-three percent of the frequent drug users described the price as ‘stable’ in 2014. Overall, the price of methamphetamine was slightly more likely to be described as increasing from 2006 to 2014 ( $p=0.0063$ ) (Figure 5.11). A strong price increase had previously been reported from 2006 to 2011 (up from 2.0 to 2.3,  $p<0.0001$ ). The frequent drug users were subsequently less likely to describe the price as increasing from 2011 to 2012 (down from 2.3 to 2.1,  $p=0.0187$ ), and more likely to describe the price as ‘stable’ from 2012 to 2013.



**Table 5 7: Change in the price of methamphetamine in the past six months by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in price of methamphetamine (%)	Combined modules (n=155)	Combined modules (n=167)	Combined modules (n=188)	Combined modules (n=159)	Combined modules (n=190)	Combined modules (n=177)	Combined modules (n=160)	Combined modules (n=136)	Combined modules (n=129)
Increasing [3]	17%	13%	17%	12%	25%	31%	18%	10%	10%
Fluctuating [2]	12%	9%	11%	8%	9%	15%	13%	11%	9%
Stable [2]	49%	62%	66%	73%	63%	50%	65%	73%	73%
Decreasing [1]	21%	16%	6%	6%	3%	5%	5%	5%	8%
Average change in price score (1=decreasing – 3=increasing)	2.0	2.0	2.1	2.1	2.2	2.3	2.1	2.1	2.0
Overall recent change	Stable/ decreasing	Stable/ decreasing	Stable/ increasing	Stable	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable	Stable

Figure 5 10: Mean score of the change in the price of methamphetamine in the past six months by combined frequent drug users, 2006-2014

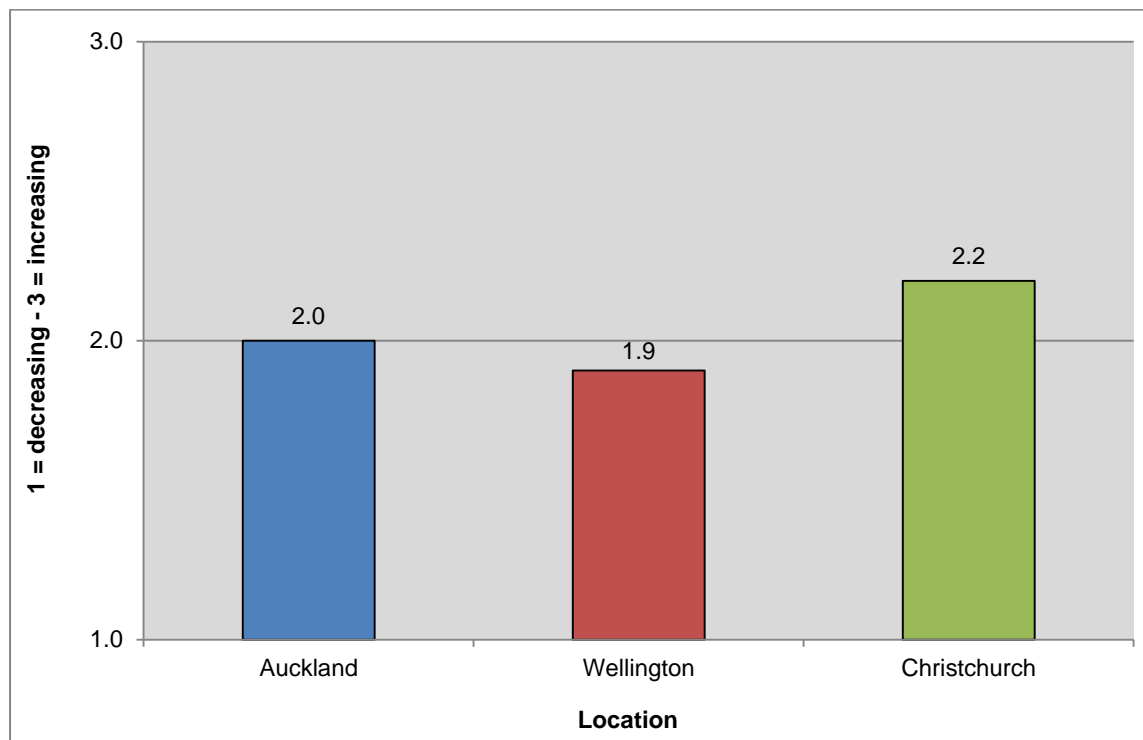


**Table 5 8: Change in the price of methamphetamine in the past six months by location, 2014**

Change in price of methamphetamine (%)	Auckland (n=82)	Wellington (n=24)	Christchurch (n=30)
Increasing [3]	11%	0%	20%
Fluctuating [2]	12%	4%	4%
Stable [2]	67%	86%	76%
Decreasing [1]	10%	9%	0%
Average change in price score (1=decreasing – 3=increasing)	2.0	1.9	2.2
Overall recent change	Stable/ fluctuating	Stable	Stable/ increasing

In 2014, there was a divergence in the appreciation of the change in the price of methamphetamine between the site locations. The frequent drug users in Christchurch were more likely to report the price of methamphetamine was ‘increasing’ than those in Wellington (2.2 vs. 1.9,  $p=0.0263$ ) (Table 5.7 & Figure 5.12).

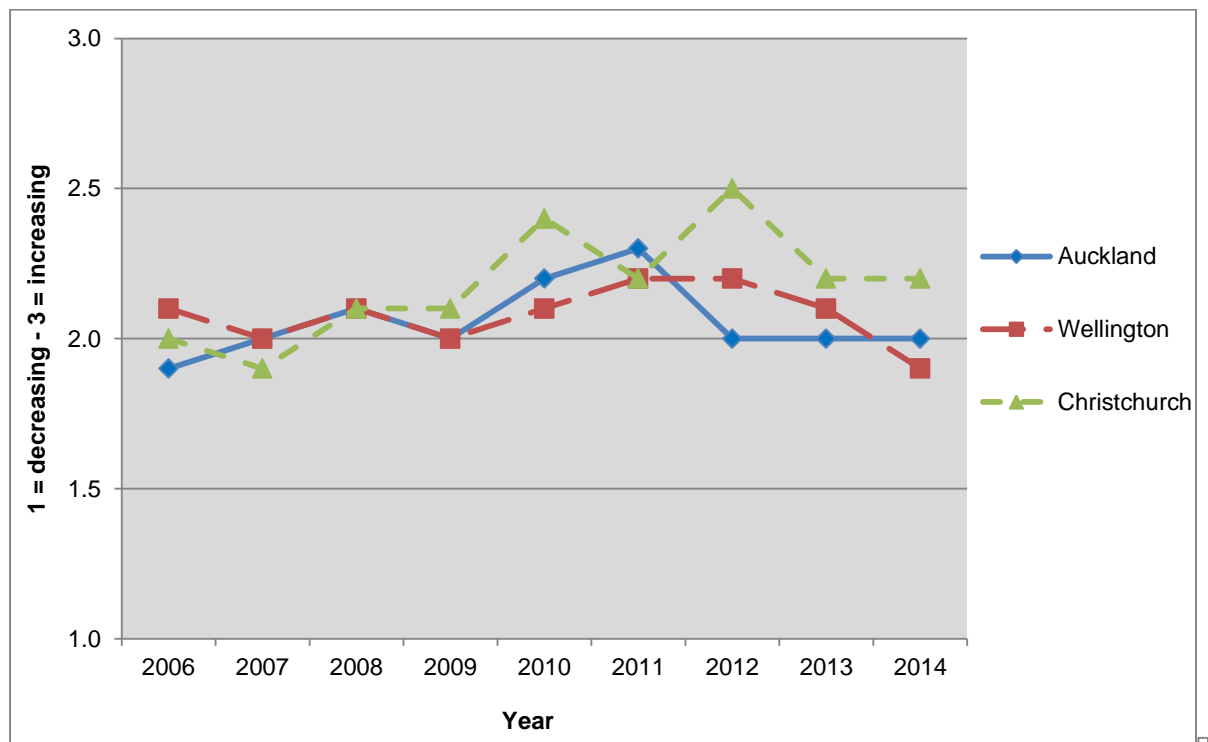
**Figure 5 11: Mean score of the change in the price of methamphetamine in the past six months by location, 2014**



There was no overall difference in perceptions of the change in the price of methamphetamine in Auckland from 2006 to 2014 ( $p=0.3656$ ). The frequent drug users in Auckland had previously

reported a strong price increase from 2006 to 2011 (1.9 to 2.3,  $p < 0.0001$ ). However, a higher proportion of Auckland frequent drug users had thought the price was 'stable' from 2011 to 2012 (down from 2.3 to 2.0,  $p < 0.0001$ ), and the assessment that the price was stable continued from 2013 to 2014. The frequent drug users from Christchurch reported an increasing price for methamphetamine from 2006 to 2014 (up from 2.0 to 2.2,  $p < 0.0001$ ) (Figure 5.13). They had previously reported a sharp increase in the price in Christchurch from 2011 to 2012 (up from 2.2 to 2.5,  $p = 0.0198$ ). In contrast, the frequent drug users from Wellington reported a decline in price from 2013 to 2014 (down from 2.1 to 1.9,  $p = 0.0315$ ), although the numbers reporting the change were fairly modest (i.e. 24=2013 and 22=2014). The frequent drug users in Wellington had previously reported an increasing price of methamphetamine from 2006 to 2012 ( $p = 0.0306$ ).

**Figure 5 12: Mean score of the change in the price of methamphetamine in the past six months by location, 2006-2014**



## 5.5 Strength of methamphetamine

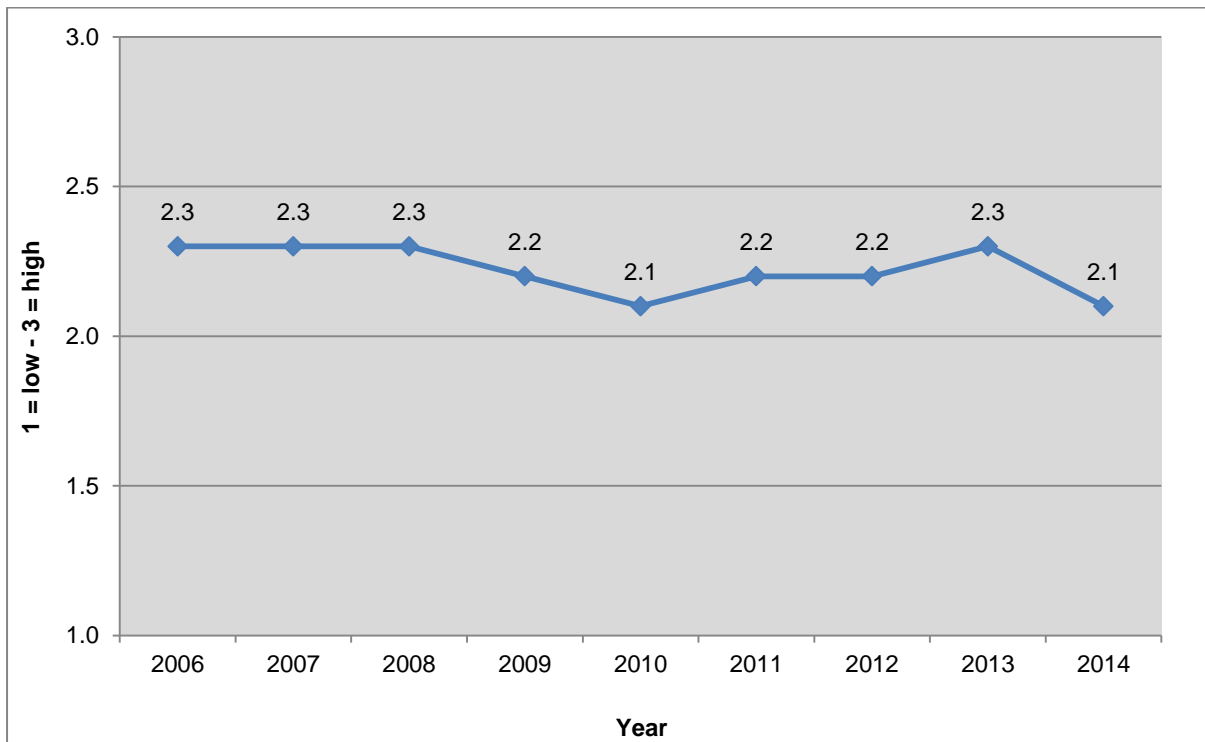
### Current strength of methamphetamine

The current strength of methamphetamine was described as 'fluctuates/high' in 2014 (Table 5.8). Overall, the frequent drug users reported the current strength of methamphetamine had declined from 2013 to 2014 (down from 2.3 to 2.1,  $p=0.0132$ ).

**Table 5 9: Current strength of methamphetamine by combined frequent drug users, 2006-2014**

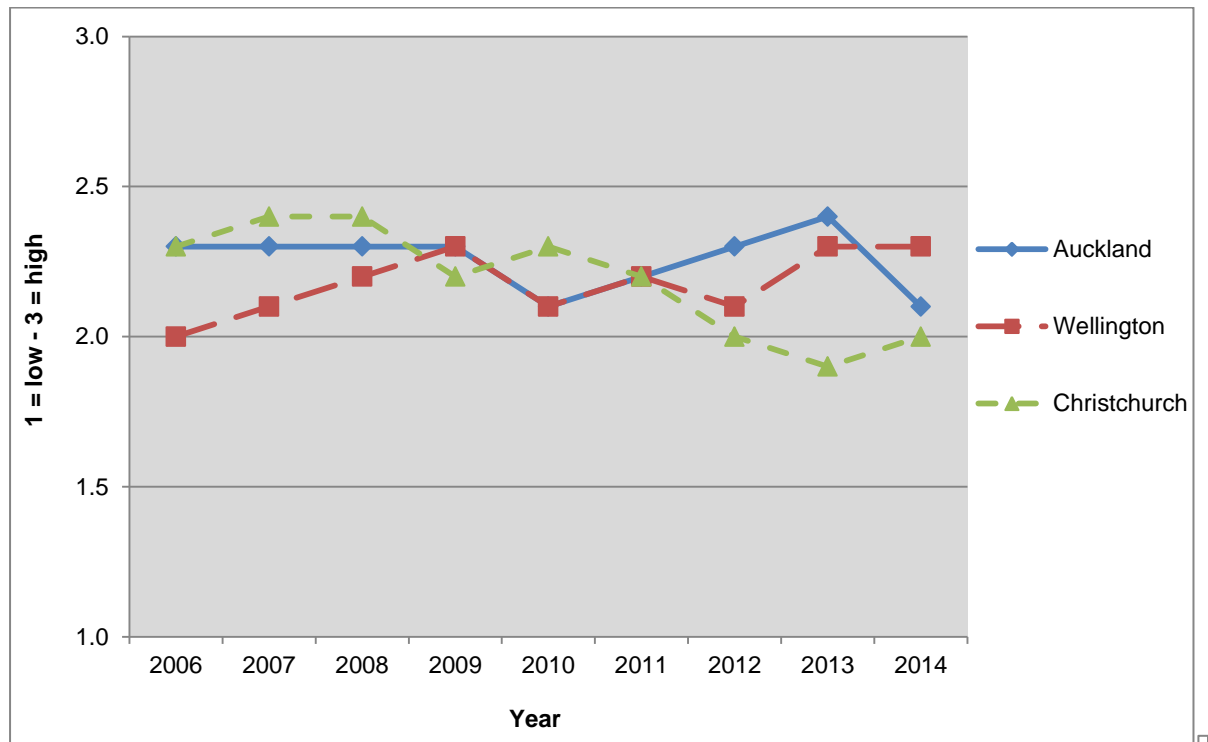
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current strength of methamphetamine (%)	Combined modules (n=166)	Combined modules (n=166)	Combined modules (n=189)	Combined modules (n=159)	Combined modules (n=187)	Combined modules (n=171)	Combined modules (n=163)	Combined modules (n=143)	Combined modules (n=132)
High [3]	33%	36%	36%	32%	28%	33%	30%	39%	27%
Medium [2]	24%	20%	19%	22%	21%	18%	26%	25%	25%
Fluctuates [2]	37%	35%	39%	39%	37%	35%	31%	29%	34%
Low [1]	6%	8%	7%	7%	14%	14%	13%	7%	14%
Average strength score (1=low – 3=high)	2.3	2.3	2.3	2.2	2.1	2.2	2.2	2.3	2.1
Overall current status	Fluctuates /high	Fluctuates /high	Fluctuates /high	Fluctuates /high	Fluctuates /high	Fluctuates /high	Fluctuates /high	High /fluctuates	Fluctuates /high

**Figure 5 13: Mean score of the current strength of methamphetamine by combined frequent drug users, 2006-2014**



The current strength of methamphetamine declined in Auckland from 2013 to 2014 (down from 2.4 to 2.1,  $p=0.0020$ ) (Figure 5.15). The current strength of methamphetamine in Christchurch also declined from 2006 to 2014 (down from 2.3 to 2.0,  $p=0.0002$ ). In contrast, the strength of methamphetamine in Wellington increased from 2006 to 2014 (up from 2.0 to 2.3,  $p=0.0414$ ).

**Figure 5 14: Mean score of the current strength of methamphetamine by combined frequent drug users by location, 2006-2014**



### Change in strength of methamphetamine

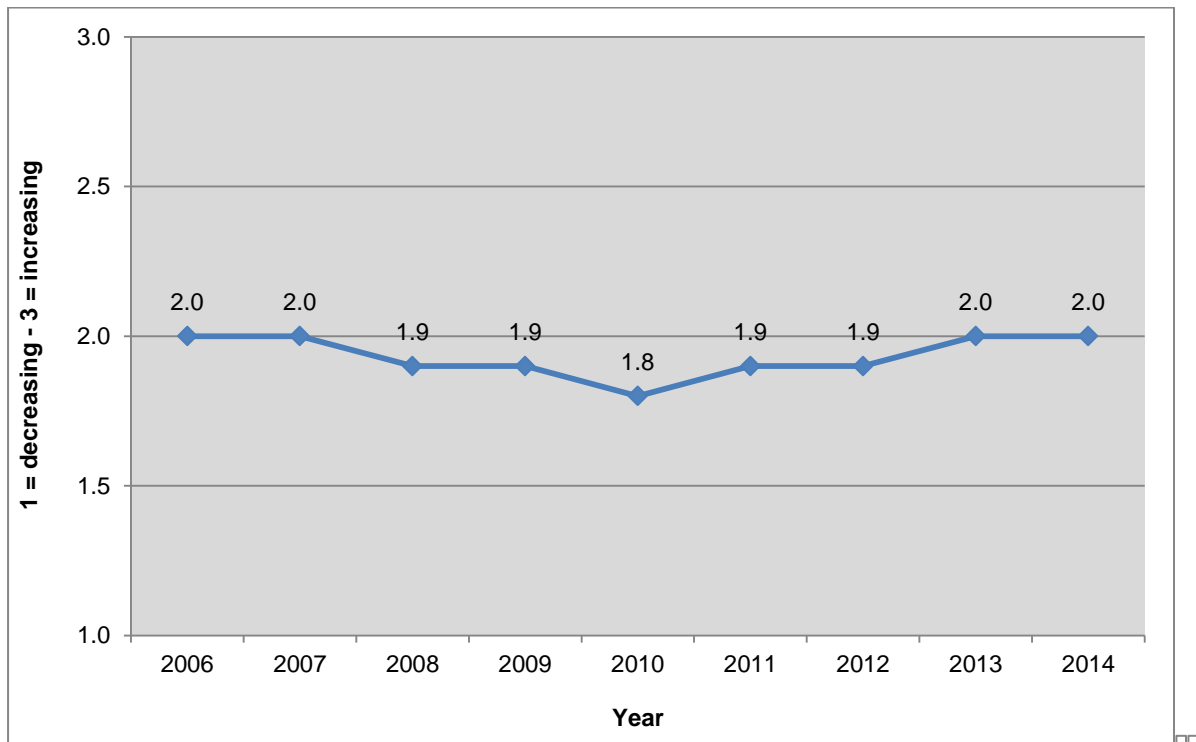
The strength of methamphetamine was reported to have been ‘stable/fluctuating’ over the previous six months in 2014 (Table 5.9 & Figure 5.16). The strength of methamphetamine had previously been reported to be decreasing from 2006 to 2012, before recovering in subsequent years until it was largely described as stable/fluctuating in 2013 and 2014.

**Table 5 10: Change in strength of methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in strength of methamphetamine (%)	Combined modules (n=156)	Combined modules (n=160)	Combined modules (n=189)	Combined modules (n=147)	Combined modules (n=179)	Combined modules (n=166)	Combined modules (n=158)	Combined modules (n=137)	Combined modules (n=127)
Increasing [3]	17%	16%	9%	14%	8%	11%	14%	13%	10%
Stable [2]	40%	34%	29%	28%	30%	33%	34%	45%	40%
Fluctuating [2]	28%	30%	48%	39%	37%	38%	30%	27%	35%
Decreasing [1]	15%	20%	14%	20%	25%	18%	22%	15%	15%
Average change in strength score (1=decreasing – 3=increasing)	2.0	2.0	1.9	1.9	1.8	1.9	1.9	2.0	2.0
Overall recent change	Stable/ fluctuating	Stable/ fluctuating	Fluctuating/ stable	Fluctuating/ stable	Fluctuating/ stable	Fluctuating/ stable	Stable/ Fluctuating	Stable/ Fluctuating	Stable/ Fluctuating

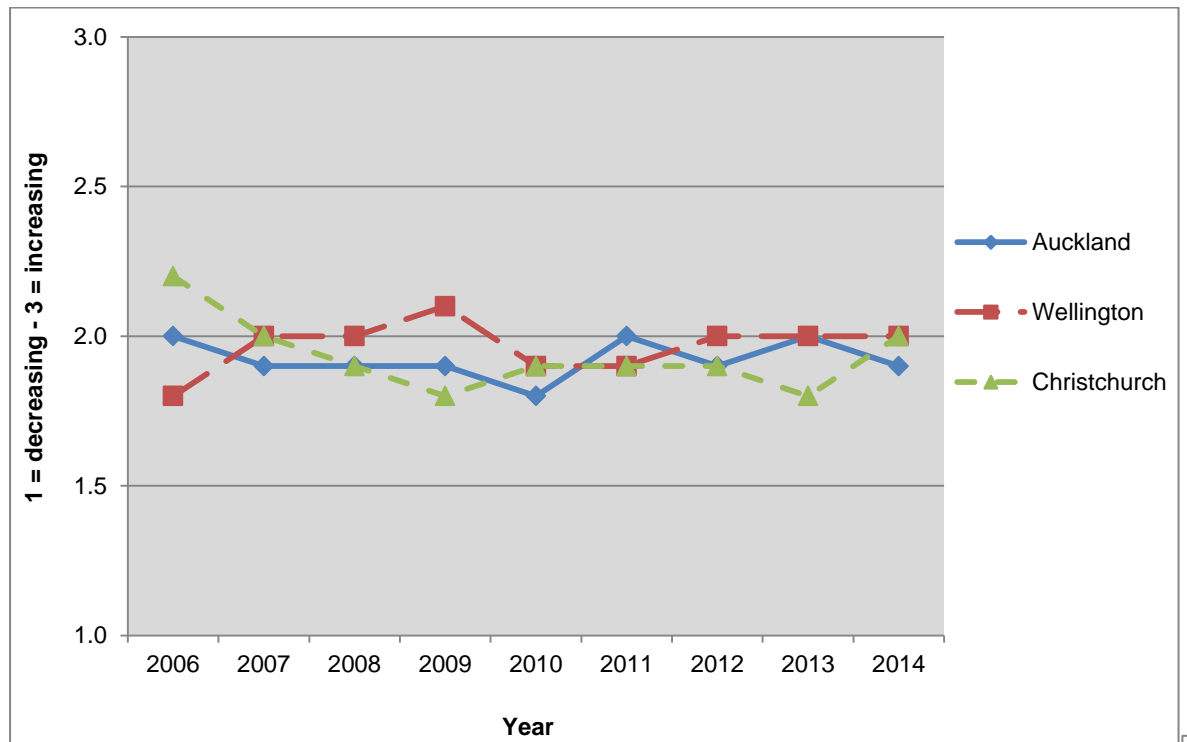


Figure 5 15: Mean score of the change in strength of methamphetamine in the past six months by combined frequent drug users, 2006-2014



The strength of methamphetamine in Auckland had previously been reported to be declining from 2006 to 2010, before recovering from 2010 to 2011 (up from 1.8 to 2.0,  $p=0.0082$ ), and thereafter being described as largely stable. Overall, the strength of methamphetamine in Christchurch was reported to have been declining from 2006 to 2014 (down from 2.2 to 2.0,  $p=0.0095$ ) (Figure 5.17). More recently, the strength of methamphetamine in Christchurch increased from 2013 to 2014 (from 1.8 to 2.0), but this increase was not statistically significant ( $p=0.1029$ ). The strength of methamphetamine in Wellington was largely described as stable or fluctuating from 2006 to 2014.

**Figure 5 16: Mean score of the change in strength of methamphetamine in the past six months by combined frequent drug users by location, 2006-2014**



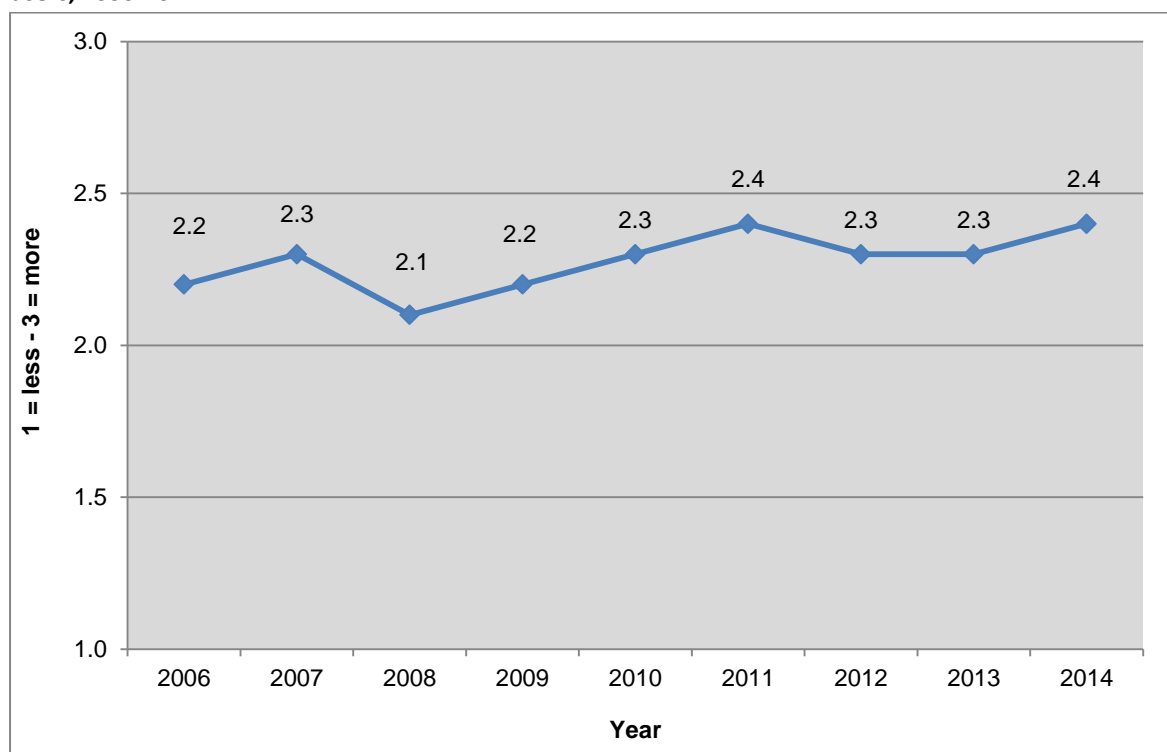
### 5.6 Perceptions of the number of people using methamphetamine

The number of people perceived by the frequent drug users to be using methamphetamine was described as ‘more/same’ in the previous six months in 2014 (Table 5.10). Forty-six percent of the frequent drug users reported ‘more’ people were using methamphetamine in 2014 compared to six months ago. An increasing proportion of frequent drug users thought that more people were using methamphetamine from 2006 to 2014 (up from 2.2 to 2.4,  $p=0.0227$ ) (Figure 5.18).

**Table 5 11: Perceptions of the number of people using methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Number of people using methamphetamine (%)</b>	<b>Combined modules (n=175)</b>	<b>Combined modules (n=173)</b>	<b>Combined modules (n=198)</b>	<b>Combined modules (n=169)</b>	<b>Combined modules (n=201)</b>	<b>Combined modules (n=180)</b>	<b>Combined modules (n=162)</b>	<b>Combined modules (n=141)</b>	<b>Combined modules (n= 121)</b>
More [3]	43%	51%	35%	44%	45%	51%	46%	40%	46%
Same [2]	33%	32%	39%	37%	38%	33%	41%	47%	43%
Less [1]	23%	17%	26%	19%	16%	16%	13%	13%	11%
Average number of people using score (1=less – 3=more)	2.2	2.3	2.1	2.2	2.3	2.4	2.3	2.3	2.4
Overall recent change	More/ same	More/ same	Same/ more	More/ same	More/ same	More/ same	More/ same	Same/ more	More/ same

**Figure 5 17: Perceptions of the number of people using methamphetamine by combined frequent drug users, 2006-2014**

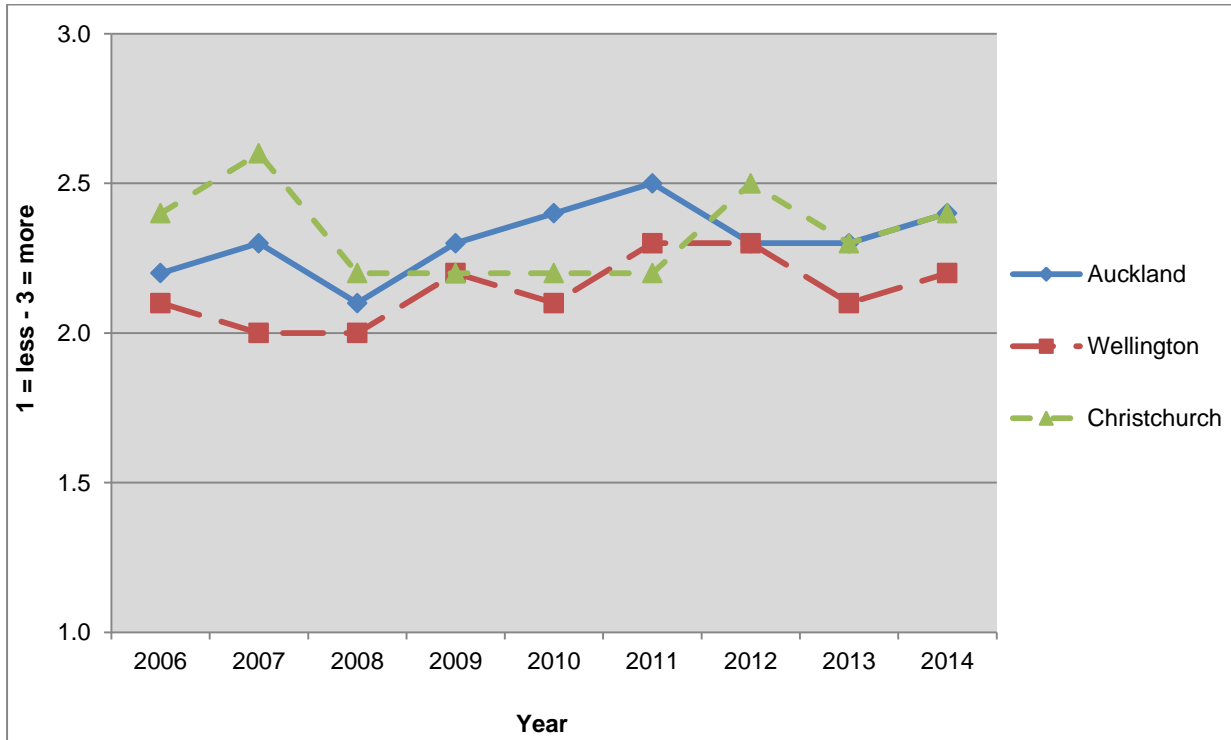


Overall, there was a perception of an increasing number of people using methamphetamine in Auckland from 2006 to 2014 (up from 2.2 to 2.4,  $p=0.0186$ ) (Figure 5.19 and Table 5.11). There was also a perception of an increasing number of people using methamphetamine in Wellington from 2006 to 2014 (up from 2.1 to 2.2), and this increase was very close to being statistically significant ( $p=0.0544$ ). The frequent drug users in Christchurch consistently reported ‘more’ people were using methamphetamine from 2006 to 2014.

**Table 5 12: Perceptions of the number of people using methamphetamine by combined frequent drug users by location, 2014**

Number of people using methamphetamine (%)	Auckland (n=72)	Wellington (n=21)	Christchurch (n=28)
More [3]	50%	33%	50%
Same [2]	37%	58%	43%
Less [1]	13%	9%	7%
Average change in price score (1=less – 3=more)	2.4	2.2	2.4
Overall recent change	More/same	Same/more	More/Same

Figure 5 18: Perceptions of the number of people using methamphetamine by combined frequent drug users by location, 2006-2014



## 5.7 Purchase of methamphetamine

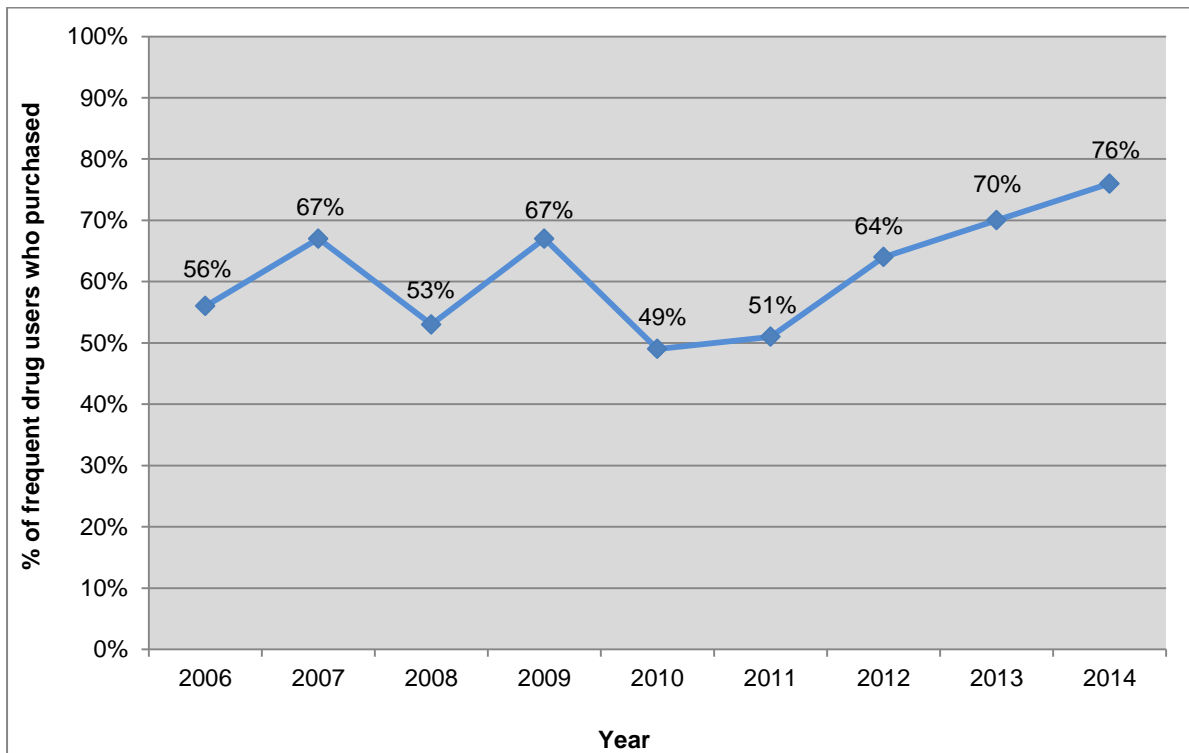
### Time taken to purchase

Seventy-six percent of the frequent drug users were able to purchase methamphetamine in one hour or less in 2014 (Table 5.12). Overall, there was a statistically significant increase in the proportion of frequent drug users who could purchase methamphetamine in one hour or less from 56% in 2006 to 76% in 2014 ( $p=0.0041$ ) (Figure 5.20). The proportion who could purchase methamphetamine in one hour or less had previously increased sharply from 51% in 2011 to 64% in 2012 ( $p=0.0198$ )

**Table 5 13: Time taken to purchase methamphetamine by combined frequent drug users, 2006-2014**

Time to purchase (%)	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Combined modules (n=112)	Combined modules (n=116)	Combined modules (n=164)	Combined modules (n=115)	Combined modules (n=153)	Combined modules (n=145)	Combined modules (n=134)	Combined modules (n=124)	Combined modules (n= 108)
Months	0	0	0	0	0	0	1	0	0
Weeks	0	1	0	1	0	1	1	0	0
Days	4	2	3	3	9	3	6	5	1
About one day	12	11	21	10	19	24	10	9	3
Hours	28	20	24	19	24	22	19	16	19
1 Hour	35	37	32	40	27	29	34	47	35
Less than 20 mins	21	30	21	27	21	22	30	23	41

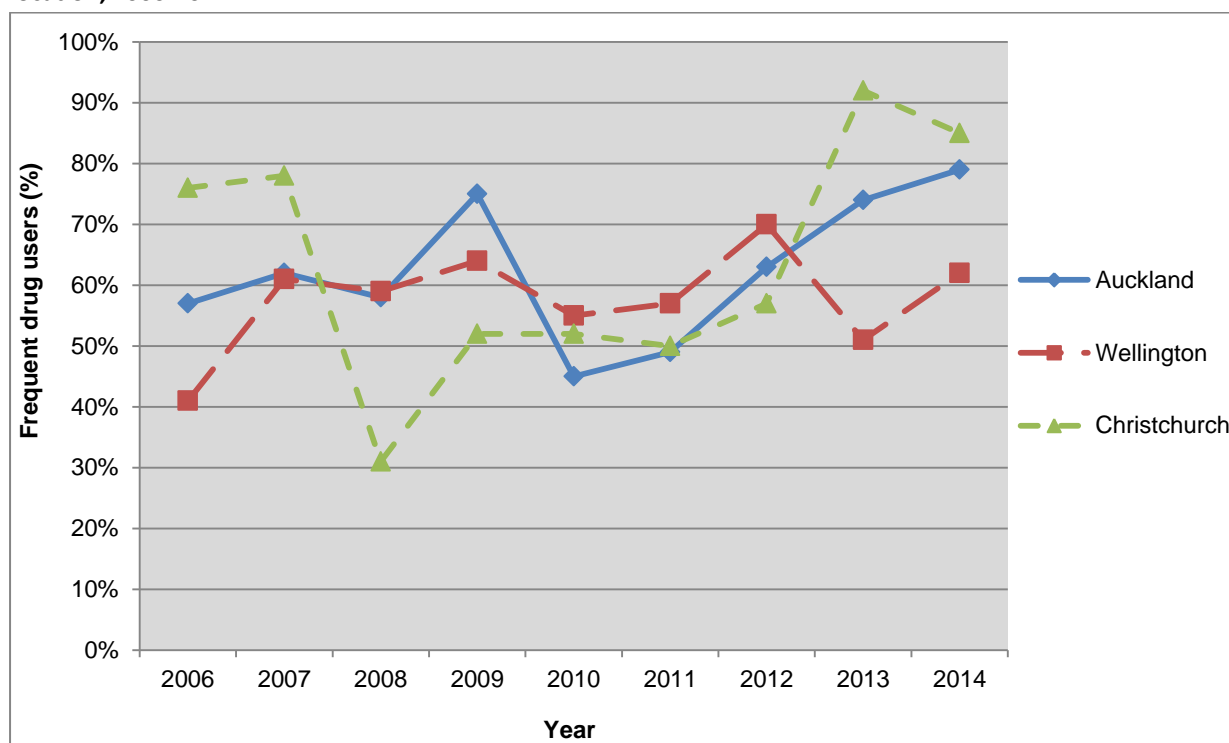
**Figure 5 19: Proportion of frequent drug users who could purchase methamphetamine in one hour or less, 2006-2014**



□

The proportion of frequent drug users in Auckland who could purchase methamphetamine in one hour or less increased from 57% in 2006 to 79% in 2014 ( $p=0.0133$ ). There had previously been a sharp increase in the proportion of frequent drug users from Auckland who could purchase methamphetamine in an hour or less from 50% in 2011 to 63% in 2012 ( $p=0.0513$ ). The proportion of frequent drug users in Christchurch who could purchase methamphetamine in one hour or less also increased from 76% in 2006 to 85% in 2014, but this increase was not statistically significant ( $p=0.1544$ ) (Figure 5.21). The proportion of frequent drug users in Christchurch who could purchase methamphetamine in one hour or less had previously increased dramatically from 56% in 2012 to 92% in 2013 ( $p=0.0139$ ).

**Figure 5 20: Proportion of frequent drug users who could purchase methamphetamine in one hour or less by location, 2006-2014**



### Location of purchase

In 2014, 79% of the frequent drug users had purchased methamphetamine from a ‘private house’, 39% had purchased methamphetamine from ‘an agreed public location’, 35% had purchased methamphetamine from a ‘public area’, 20% had purchased methamphetamine from a ‘street drug market’, 20% had purchased methamphetamine from a ‘tinny house’, and 16% had purchased methamphetamine from a ‘bar/pub/club’ (Table 5.13). The proportion of frequent drug users who had purchased methamphetamine from a ‘street drug market’ increased from 5% in 2009 to 20% in 2014 ( $p=0.0004$ ). The proportion who had purchased methamphetamine from a ‘public area like a park’ increased from 9% in 2009 to 35% in 2014 ( $p<0.0001$ ), and also increased from 21% in 2013 to 35% in 2014 ( $p=0.0103$ ). The proportion who purchased methamphetamine from a ‘pub/bar/club’ increased from 2% in 2009 to 16% in 2014 ( $p<0.0001$ ). The proportion who had purchased methamphetamine from a ‘tinny house’ increased from 11% in 2009 to 20% in 2014 ( $p=0.0337$ ).



**Table 5 14: Location from which methamphetamine purchased in the past six months by combined frequent drug users, 2009-2014**

	2009	2010	2011	2012	2013	2014
Location (%)	Combined modules (n=117)	Combined modules (n=145)	Combined modules (n=143)	Combined modules (n=135)	Combined modules (n=124)	Combined modules (n=105)
Private house	83	86	69	78	69	79
Agreed public location	42	39	42	46	20	39
Public area (e.g. park)	9	13	16	21	21	35
Street market	5	13	17	16	21	20
'Tinny' house	11	13	9	21	12	20
Pub/bar/club	2	7	9	15	18	16
Educational institute	0	4	4	1	2	9
Work	3	6	7	5	7	7
Internet/website	0	0	4	3	2	3

### Type of seller

In 2014, 70% of the frequent drug users had purchased methamphetamine from a 'friend', 63% had purchased methamphetamine from a 'drug dealer', and 50% had purchased methamphetamine from a 'gang member/associate' (Table 5.14). The proportion of frequent drug users who had purchased methamphetamine from a 'gang member/associate' increased from 30% in 2009 to 50% in 2014 ( $p=0.0012$ ), and from 36% in 2013 to 50% in 2014 ( $p=0.0215$ ).

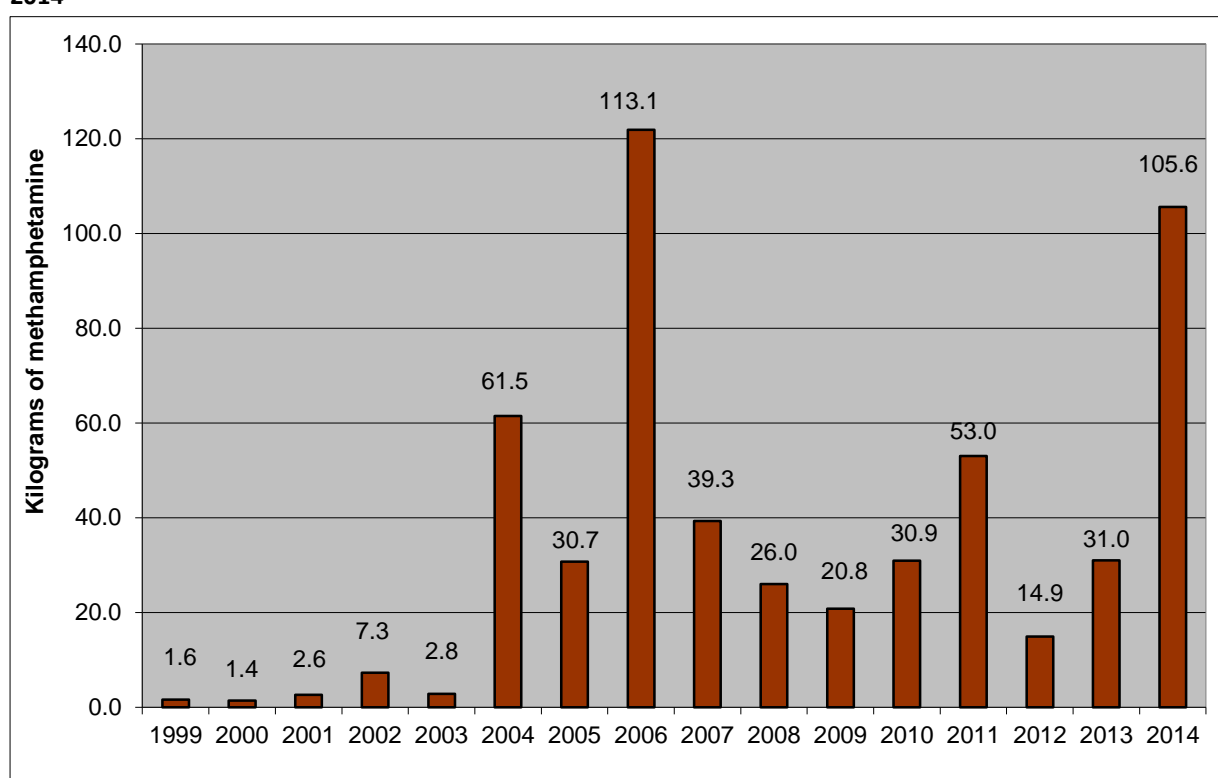
**Table 5 15: People from whom methamphetamine purchased in the past six months by combined frequent drug users, 2009-2014**

	2009	2010	2011	2012	2013	2014
Type of person (%)	Combined modules (n=117)	Combined modules (n=146)	Combined modules (n=144)	Combined modules (n=134)	Combined modules (n=124)	Combined modules (n=115)
Friend	56	66	54	68	62	70
Drug dealer	69	69	56	69	63	63
Gang member/ associate	30	34	33	44	36	50
Social acquaintance	50	52	40	57	55	49
Partner/family member	10	15	20	19	11	18

## 5.8 Seizures of methamphetamine

The amount of methamphetamine and crystal methamphetamine seized by the New Zealand Police and New Zealand Customs Service increased substantially after 2003, before stabilising from 2007 to 2013 (Figure 5.22). Very large seizures of methamphetamine were made in 2004 (i.e. 61.5 kilograms), 2006 (113.1 kilograms), and most recently in 2014 (105.6 kilograms). The quantity of methamphetamine seized in 2014 was the second largest quantity seized annually over the past sixteen years.

Figure 5 21: Kilograms of methamphetamine and crystal methamphetamine seized in New Zealand, 1999-2014



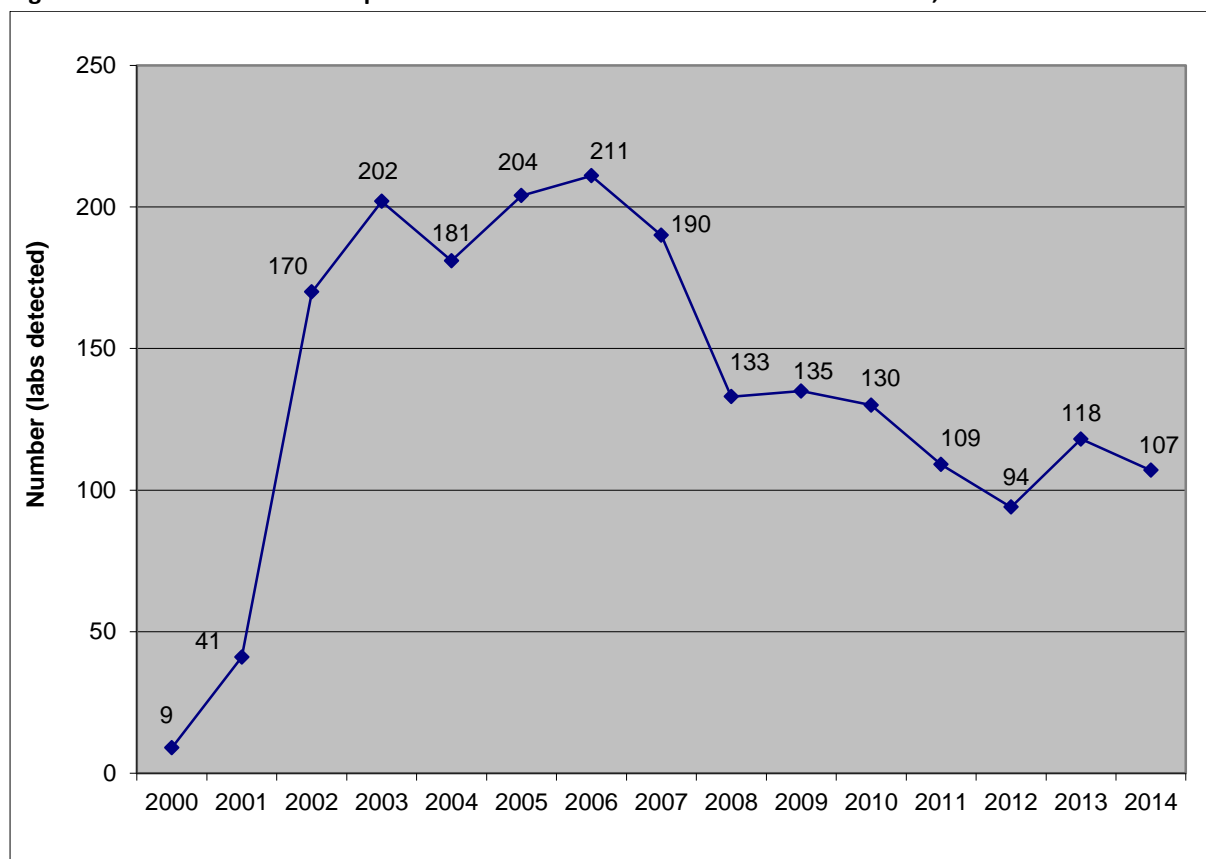
Source: NDIB, 2015

## 5.9 Methamphetamine laboratories

The number of clandestine methamphetamine laboratories detected by law enforcement is a useful but imperfect measure of total methamphetamine production. This is because it is difficult to both estimate how many laboratories remain undetected and the production capacity of both the detected and undetected laboratories (see UNODC, 2010). The number of methamphetamine laboratories dismantled each year by New Zealand Police has increased dramatically from a low level in the early 2000s (Figure 5.23). Laboratory detections reached a peak in the mid-2000s at

approximately 200 laboratories per year. Laboratory detections then levelled off after 2007 at about 130 per year for the next three years. There has been a further decline in detections since 2010 down to around 100 laboratories per year from 2011 to 2014. The number of methamphetamine laboratories detected in 2014 was 9% lower than the number detected in 2013, and 48% lower than the number detected in 2006 (i.e. the peak number of laboratory detections). New Zealand Police have noted that methamphetamine laboratories are increasingly located in isolated rural areas making detection more difficult (NDIB, 2011). The laboratories detected in recent years are also increasingly assessed to be producing at a 'commercial level' capacity, yielding kilograms of methamphetamine (NDIB, 2015).

**Figure 5 22: Number of methamphetamine laboratories dismantled in New Zealand, 2000-2014**



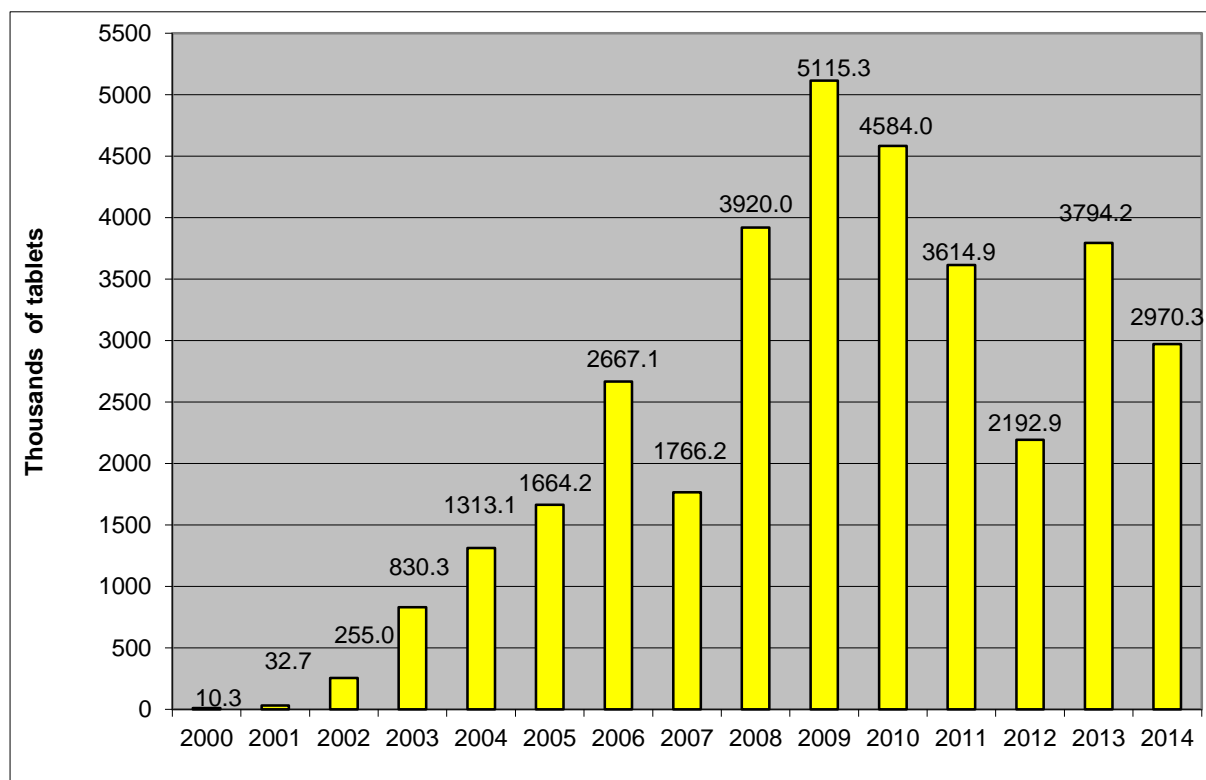
Source: NDIB, 2015

## 5.10 Pseudoephedrine and ephedrine seizures

Pseudoephedrine (PSE) and ephedrine (EPH) are key chemical precursors used to manufacture methamphetamine. In 2002, ephedrine products were classified as Class C controlled drugs under the *Misuse of Drugs Act 1975*. In August 2011, EPH and PSE were re-classified as Class B2 controlled

drugs, making them available only by prescription from a medical practitioner. The amount of PSE and EPH seized by the New Zealand Customs Service increased dramatically from 2002 to reach over 5.5 million (equivalent) tablets in 2009 (Figure 5.24). At this time methamphetamine precursor seizures were overwhelmingly PSE in the form of the pharmaceutical product ContacNT. There was a substantial decline in precursor seizures over the next three years to just over 2 million tablets in 2012, followed by an increase in 2013 when 3.7 million tablets were seized. A total of 2.9 million equivalent tablets were seized in 2014 (i.e. 662.38 kilograms at a conversion rate of 0.223 grams per tablet). Police note the 2014 yearly figure was tracking to exceed the 2013 total, but the 2013 total was dominated by a single operation completed in October and December 2013 where 2,663,677 tablet equivalent of PSE (i.e. 94 kilograms) was seized (NDIB, 2015). Since 2013 seizures of methamphetamine precursors have increasingly consist of EPH rather than PSE, and it has been speculated this reflects growing controls over ContacNT in China and the fact that it is easier to manufacture methamphetamine from EPH (NDIB, 2015).

**Figure 5 23: Thousands of (equivalent) tablets of pseudoephedrine and ephedrine seized in New Zealand, 2000-2014**



Source: NDIB, 2015

## 5.11 Summary of methamphetamine trends

- The current availability of methamphetamine was reported to be 'very easy/easy' in 2014
- The availability of methamphetamine became slightly easier in Auckland from 2006 to 2014
- The availability of methamphetamine in Christchurch initially declined steadily from 2006 to 2012, before recovering sharply in 2013, and remaining 'stable/easier' in 2014
- There was no change in the availability of methamphetamine in Wellington from 2006 to 2014
- The mean price of a 'point' of methamphetamine increased slightly from \$96 in 2006 to \$106 in 2011, and remained at that price from 2012 to 2014
- The 'point' price for methamphetamine increased in all three study locations from 2006 to 2014, with larger increases in Wellington and Christchurch
- The mean price of a gram methamphetamine increased steadily from \$610 in 2006 to a peak of \$815 in 2011, before declining to \$678 in 2012, and remaining stable at \$697 in 2013 and \$681 in 2014
- The price of methamphetamine was reported to be 'stable' in 2014
- The price for methamphetamine was reported to have been increasing from 2006 to 2011, followed a slower rate of increase in 2012 and 2013, and then a stable price in 2014
- There was some divergence in perceptions of the change in price of methamphetamine between the sites over the past nine years
- Auckland reported an increasing price for methamphetamine from 2009 to 2011, followed by a return to a stable price from 2012 to 2014
- Christchurch reported a sharp increase in the price of methamphetamine from 2011 to 2012, and the assessment of an increasing price continued from 2013 to 2014
- Wellington also reported an increasing price for methamphetamine up until 2013 but then reported the price was decreasing in 2014

- The strength of methamphetamine had previously been reported to be decreasing from 2007 to 2012, before recovered to be described as stable/fluctuating in 2013 and 2014
- The strength of methamphetamine in Christchurch was reported to be declining from 2006 to 2013, but recovered in 2014 to be largely described as stable/fluctuating
- The number of people using methamphetamine was described as 'more/same' in 2014
- An increasing proportion of frequent drug users thought that more people were using methamphetamine from 2006 to 2014
- The proportion of frequent drug user who could purchase methamphetamine in one hour or less increased from 51% in 2011 to 76% in 2014
- The proportion of frequent drug users in Auckland who could purchase methamphetamine in one hour or less increased from 50% in 2011 to 79% in 2014
- The proportion of Christchurch frequent drug users who could purchase methamphetamine in one hour or less had previously declined from 76% in 2006 to 56% in 2012, before increasing dramatically to 92% in 2013, and staying high at 85% in 2014
- An increasing proportion of frequent drug users purchased methamphetamine from a 'street drug market', 'public area like a park', 'tinny house' and from a 'pub/bar or club' from 2009 to 2014
- The proportion of frequent drug users who purchased methamphetamine from a gang member or gang associate increased from 30% in 2009 to 50% in 2014
- The 106 kilograms of methamphetamine seized in 2014 was the second largest yearly seizure total in the past sixteen years; the next largest was 113 kilograms in 2006
- The number of methamphetamine laboratories detected in 2014 (107 labs) was 9% lower than the number detected in 2013 (118 labs), and 49% lower than the peak number detected in 2006 (211 labs). However, contemporary methamphetamine laboratories are reported to have greater production capacity and are increasingly located in remote settings
- The number of (equivalent) tablets of ephedrine seized in 2014 (3.0 million tablets) is 21% lower than the quantity seized in 2013 (3.8 million), but 36% higher than the amount seized in 2012 (2.2 million)

## 6. Crystal methamphetamine

### 6.1 Introduction

Crystal methamphetamine ‘ice’, ‘crystal’ or ‘shabu’) refers to the highly finished, crystallised form of methamphetamine (Matsumoto et al., 2002; McKetin & McLaren, 2004). In New Zealand, crystal methamphetamine (or ‘ice’) is often distinguished from locally made methamphetamine (or ‘P’) on the basis that crystal methamphetamine is manufactured overseas and is believed to be of higher quality (Wilkins et al., 2004a). However, ESR analysis has shown that there is actually little difference in strength between locally made methamphetamine and imported crystal methamphetamine (NDIB, 2009). To ensure that the frequent drug users interviewed for the IDMS clearly understood the difference between crystal methamphetamine and methamphetamine the interviewer read out a brief description of crystal methamphetamine (i.e. ‘ice comes in large crystals and is usually imported’) and encouraged the respondent to complete the crystal methamphetamine section *only* if they clearly knew about this form of methamphetamine.

The IDMS has previously found a steady decrease in the use of crystal methamphetamine among frequent methamphetamine users from 64% in 2006 to 29% in 2010, but more recently found an increase in use from 29% in 2010 to 41% in 2013. The 2013 IDMS also found increasing availability, a declining ‘point’ price, and ongoing high strength. The number of people using ‘ice’ has consistently been described as ‘more’ since 2011. The re-emergence of ice may reflect greater domestic controls over methamphetamine precursors, and enforcement success against domestic methamphetamine manufacture, both of which make the importation of finished ice more attractive. There is also evidence of a growing methamphetamine market in the Asia region in recent years (UNODC, 2015b). Seizures of crystal methamphetamine almost doubled in the East and South-East Asia region from 2010 to 2013 (UNODC, 2015b). Increasing use of crystal methamphetamine has also been noted in Australia in recent years (AIHW, 2014).

### 6.2 Knowledge of crystal methamphetamine trends

Fifteen percent of the frequent drug users interviewed for the 2014 IDMS (n=46) indicated they felt confident enough to comment on the price, purity and availability of crystal methamphetamine in the previous six months. This included 31% of the frequent methamphetamine users (n=31), 13% of the frequent injecting drug users (n=13), and 2% of the frequent ecstasy users (n=2).

## 6.3 Availability of crystal methamphetamine

### Current availability of crystal methamphetamine

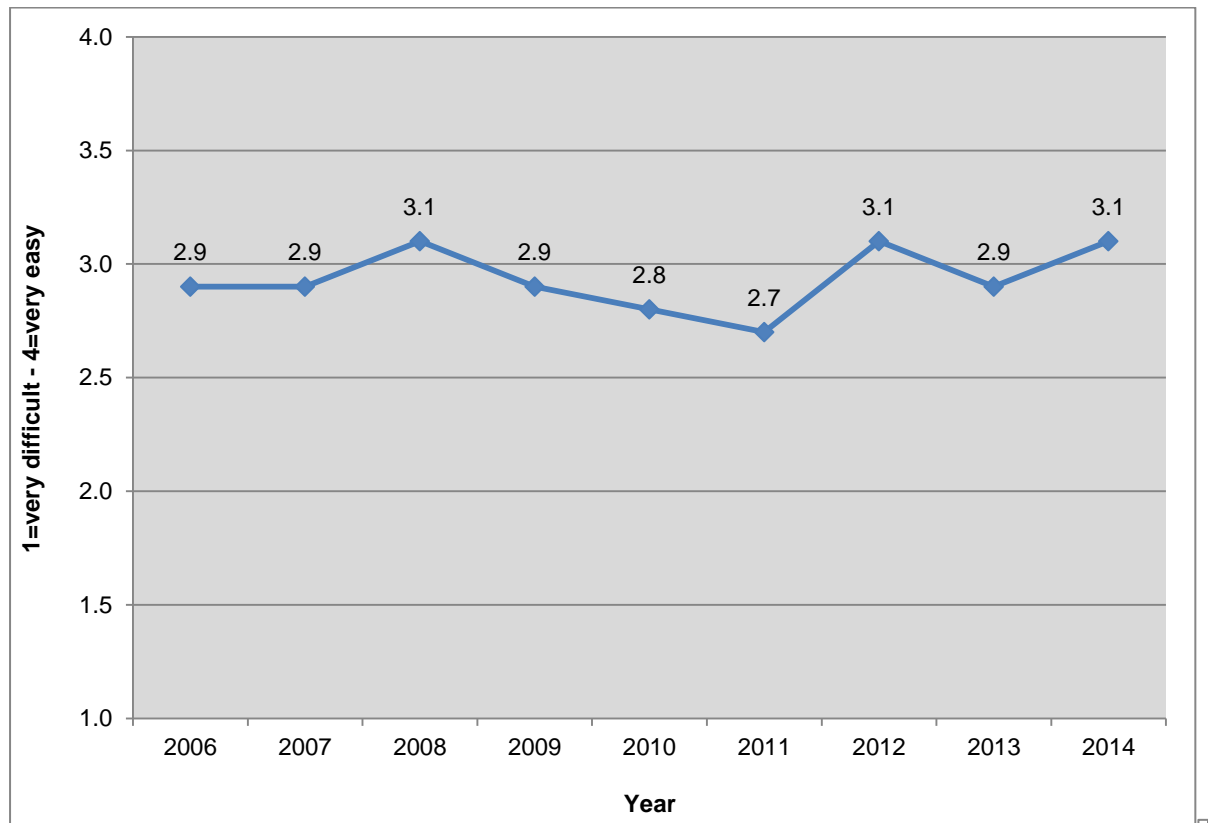
The frequent drug users described the current availability of crystal methamphetamine as 'easy/very easy' in 2014 (Table 6.1). Overall, there was no statistically significant change in the current availability of crystal methamphetamine from 2006 to 2014 ( $p=0.7829$ ) (Figure 6.1). The current availability of crystal methamphetamine had previously increased from 2011 to 2012 (up from 2.7 to 3.1,  $p=0.0154$ ).



**Table 6 1 : Current availability of crystal methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current availability of crystal methamphetamine (%)</b>	<b>Combined modules (n=107)</b>	<b>Combined modules (n=71)</b>	<b>Combined modules (n=86)</b>	<b>Combined modules (n=66)</b>	<b>Combined modules (n=61)</b>	<b>Combined modules (n=61)</b>	<b>Combined modules (n=56)</b>	<b>Combined modules (n=33)</b>	<b>Combined modules (n= 49)</b>
Very easy [4]	24%	26%	19%	27%	22%	12%	40%	23%	33%
Easy [3]	48%	40%	72%	47%	37%	49%	35%	46%	49%
Difficult [2]	23%	32%	9%	18%	36%	34%	19%	26%	14%
Very difficult [1]	5%	2%	0%	7%	5%	5%	7%	4%	4%
Average availability score (1=very difficult – 4=very easy)	2.9	2.9	3.1	2.9	2.8	2.7	3.1	2.9	3.1
Overall current status	Easy/very easy	Easy/difficult	Easy	Easy/very easy	Easy/difficult	Easy/difficult	Very easy/easy	Easy/Difficult	Easy/very easy

**Figure 6 1: Mean score of the current availability of crystal methamphetamine by combined frequent drug users, 2006-2014**



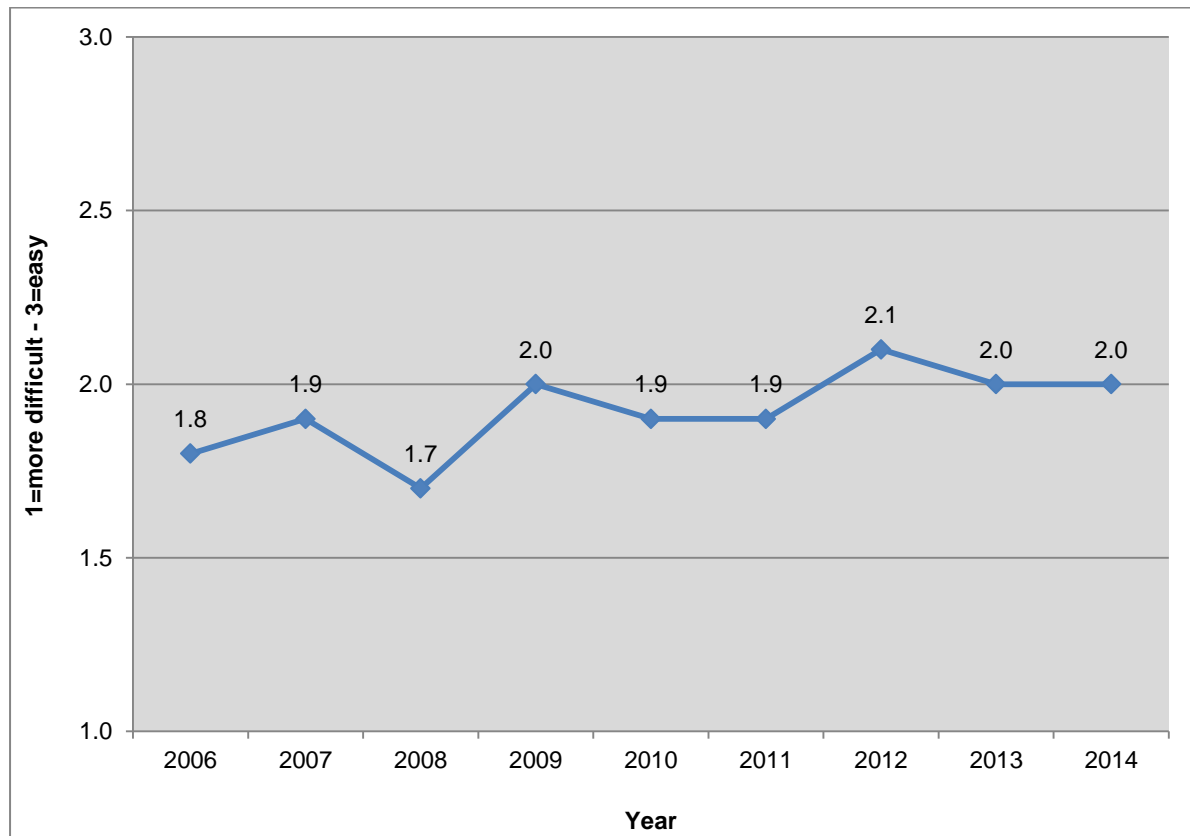
### Change in availability of crystal methamphetamine

The frequent drug users considered the availability of crystal methamphetamine to have been 'stable/fluctuating' over the past six months in 2014 (Table 6.2). Sixty-five percent said it had been 'stable' in 2014. The frequent drug users reported a recovery in the availability of crystal methamphetamine from 2006 to 2014 (up from 1.8 to 2.0,  $p=0.0007$ ) (Figure 6.2). A higher proportion had previously reported the availability of crystal methamphetamine had become 'easier' from 2011 to 2012 (up from 1.9 to 2.1,  $p=0.0169$ ). There was no difference in perceptions of the change in the availability of crystal methamphetamine from 2013 to 2014 (i.e. 2.0 in both years), with most describing availability as 'stable' in both years.

**Table 6 2: Mean score of the current availability of crystal methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Change in availability of crystal methamphetamine (%)</b>	<b>Combined modules (n=106)</b>	<b>Combined modules (n=69)</b>	<b>Combined modules (n=86)</b>	<b>Combined modules (n=65)</b>	<b>Combined modules (n=58)</b>	<b>Combined modules (n=57)</b>	<b>Combined modules (n=53)</b>	<b>Combined modules (n=33)</b>	<b>Combined modules (n= 47)</b>
Easier [3]	10%	17%	14%	21%	14%	4%	21%	9%	13%
Stable [2]	50%	53%	38%	49%	50%	68%	55%	71%	65%
Fluctuates [2]	10%	5%	5%	9%	14%	12%	13%	11%	14%
More difficult [1]	30%	25%	42%	21%	22%	17%	11%	9%	8%
Average change in availability score (1=more difficult – 3=easier)	1.8	1.9	1.7	2.0	1.9	1.9	2.1	2.0	2.0
Overall recent change	Stable/ more difficult	Stable/ more difficult	More difficult /stable	Stable/ more difficult	Stable/ More difficult	Stable/ more difficult	Stable/ easier	Stable	Stable/ fluctuates

**Figure 6 2: Mean score of the change in availability of crystal methamphetamine by combined frequent drug users, 2006-2014**



## 6.4 Price of crystal methamphetamine

### Current price of crystal methamphetamine

The median price of a 'point' (0.1 grams) of crystal methamphetamine was reported to be \$100 in 2014 (Table 6.3). The median price of a gram of crystal methamphetamine was \$650. There was an increase in the mean price of a 'point' of crystal methamphetamine from \$100 in 2006 to \$123 in 2014 ( $p=0.0014$ ) (Figure 6.3). The mean price of a 'point' of crystal methamphetamine had previously increased from \$100 in 2006 to \$114 in 2011 ( $p=0.0035$ ). Overall, there was no statistically significant change in the mean price of a gram of crystal methamphetamine from \$691 in 2007 to \$738 in 2014 ( $p=0.4807$ ) (Figure 6.4). The mean price of a gram of crystal methamphetamine had previously increased from \$691 in 2007 to \$914 in 2011 ( $p=0.0152$ ). The fairly low number of frequent drug users providing gram prices in some of these years (i.e.  $n<20$ ) means these results should be interpreted with some caution.

**Table 6 3: Current median (mean) price for crystal methamphetamine (NZD) by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current price of crystal methamphetamine (\$)</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>
<b>Number with knowledge</b>	<b>n=76</b>	<b>n=45</b>	<b>n=76</b>	<b>n=46</b>	<b>n=42</b>	<b>n=52</b>	<b>n=45</b>	<b>n=27</b>	<b>n=37</b>
Median (mean) price 'point' (0.1 grams)	\$100 (\$100)	\$100 (\$106)	\$100 (\$105)	\$100 (\$104)	\$100 (\$109)	\$100 (114)	\$100 (\$111)	\$100 (\$102)	\$100 (\$149)
<b>Number with knowledge</b>	<b>-</b>	<b>n=36</b>	<b>n=14</b>	<b>n=16</b>	<b>n=21</b>	<b>n=16</b>	<b>n=24</b>	<b>n=14</b>	<b>n= 18</b>
Median (mean) price per gram	-	\$700 (\$691)	\$800 (\$802)	\$800 (\$764)	\$700 (\$763)	\$900 (\$914)	\$700 (\$798)	\$700 (\$1,113)	\$650 (\$738)
<b>Number with knowledge</b>	<b>-</b>	<b>-</b>	<b>n=2</b>	<b>n=2</b>	<b>n=5</b>	<b>n=4</b>	<b>n=5</b>	<b>n=2</b>	<b>-</b>
Median (mean) price per ounce	-	-	\$14,000 (\$12,297)	\$18,000 (\$16,009)	\$14,000 (\$11,601)	\$4,500 (\$9,889)	\$21,000 (\$19,429)	\$12,000 (\$12,906)	-

Figure 6 3: Mean price of a 'point' of crystal methamphetamine by combined frequent drug users, 2006-2014

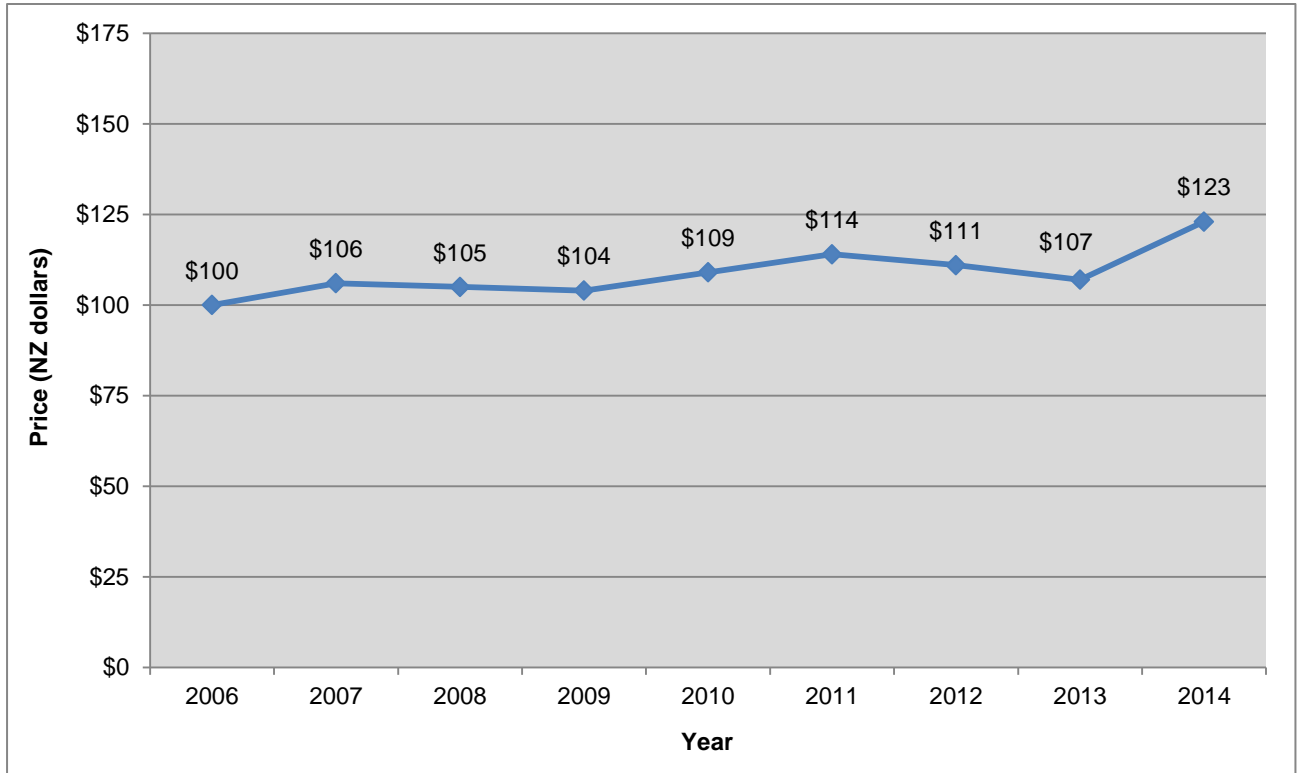
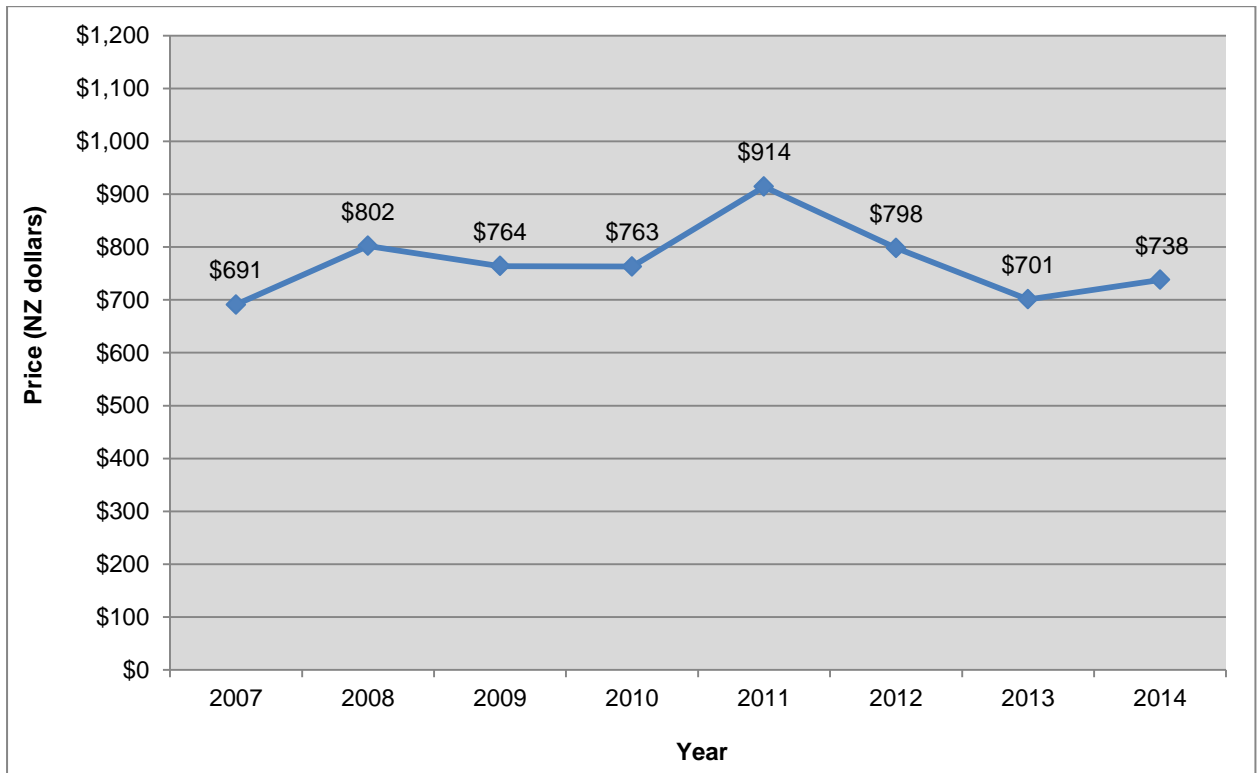


Figure 6 4: Mean price of a gram of crystal methamphetamine by combined frequent drug users, 2007-2014



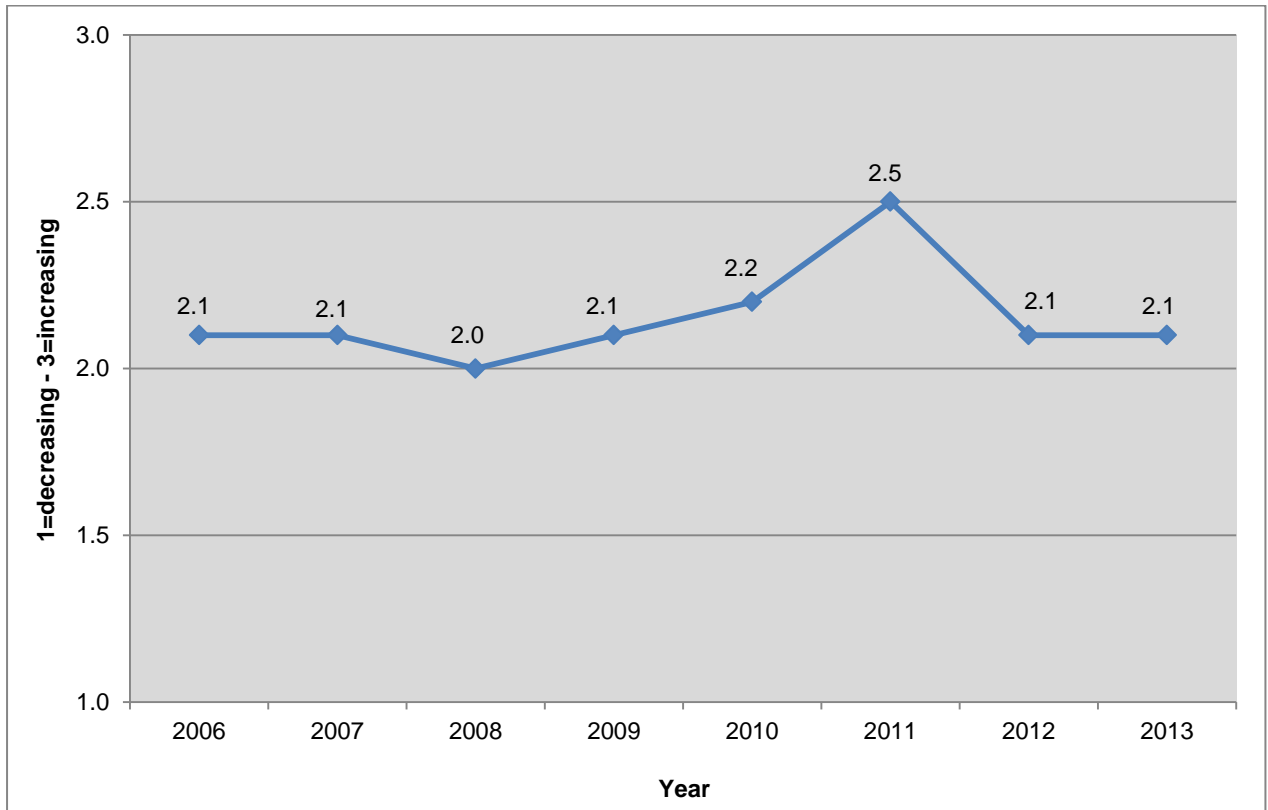
## Change in price

The frequent drug users reported that the price of crystal methamphetamine had been 'stable' in the previous six months in 2014 (Table 6.4). Seventy-seven percent described the price as 'stable' in 2014. Overall, the frequent drug users were more likely to say the price of crystal methamphetamine had been increasing from 2006 to 2014 ( $p=0.0032$ ) (Figure 6.5). The frequent drug users were previously more likely to say the price had been increasing from 2010 to 2011 (up from 2.2 to 2.5,  $p=0.0004$ ).

**Table 6 4: Change in the price of crystal methamphetamine in the past six months by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in price of crystal methamphetamine (%)	Combined modules (n=98)	Combined modules (n=69)	Combined modules (n=86)	Combined modules (n=64)	Combined modules (n=58)	Combined modules (n=59)	Combined modules (n=51)	Combined modules (n=32)	Combined modules (n=44)
Increasing [3]	17%	19%	6%	15%	22%	53%	20%	20%	16%
Fluctuating [2]	10%	11%	6%	12%	3%	7%	15%	3%	3%
Stable [2]	62%	61%	85%	69%	70%	39%	63%	71%	77%
Decreasing [1]	11%	9%	4%	3%	5%	1%	2%	5%	4%
Average change in price score (1=decreasing – 3=increasing)	2.1	2.1	2.0	2.1	2.2	2.5	2.2	2.1	2.1
Overall recent change	Stable/increasing	Stable/increasing	Stable	Stable/increasing	Stable	Increasing/stable	Stable/increasing	Stable	Stable

Figure 6 5: Mean score of the change in the price of crystal methamphetamine in the past six months by combined frequent drug users, 2006-2014





## 6.5 Strength of crystal methamphetamine

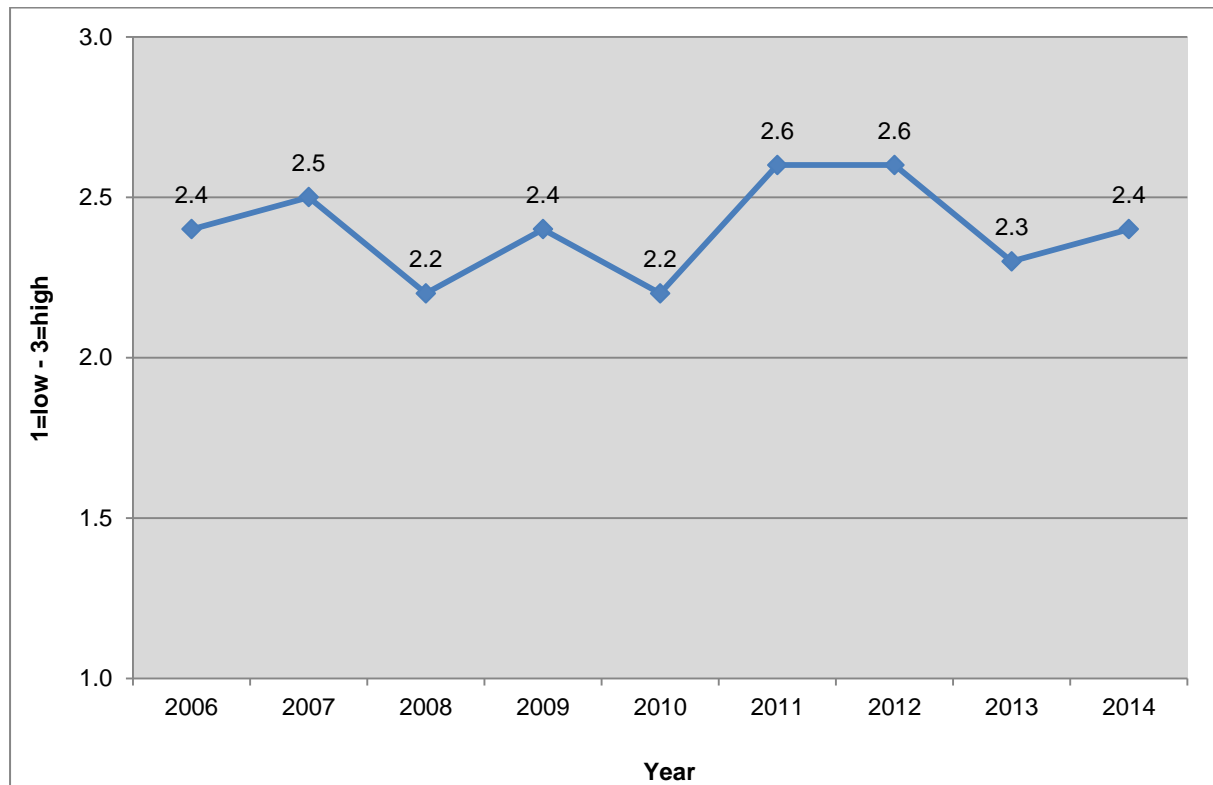
### Current strength

The current strength of crystal methamphetamine was considered to be ‘high/medium’ in 2014 (Table 6.5). Forty-two percent of the frequent drug users described the current strength of crystal methamphetamine as ‘high’ in 2014 (compared to 27% describing the strength of methamphetamine as ‘high’ – see Methamphetamine Chapter). There was no overall change in the current strength of crystal methamphetamine from 2006 to 2014 ( $p=0.3782$ ) (Figure 6.5). The frequent drug users had previously reported the strength of crystal methamphetamine had increased from 2010 to 2011 (up from 2.2 to 2.6,  $p=0.0089$ ), and then decreased from 2012 to 2013 (down from 2.6 to 2.3,  $p=0.0469$ ).

**Table 6 5: Current purity of crystal methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current purity of crystal methamphetamine (%)	Combined modules (n=103)	Combined modules (n=73)	Combined modules (n=86)	Combined modules (n=65)	Combined modules (n=59)	Combined modules (n=58)	Combined modules (n=56)	Combined modules (n=33)	Combined modules (n=46)
High [3]	47%	52%	29%	46%	34%	63%	62%	38%	42%
Medium [2]	25%	18%	13%	24%	30%	13%	13%	34%	36%
Fluctuates [2]	18%	26%	52%	23%	25%	15%	20%	18%	22%
Low [1]	9%	4%	6%	7%	11%	9%	5%	9%	0%
Average purity score (1=low – 3=high)	2.4	2.5	2.2	2.4	2.2	2.6	2.6	2.3	2.4
Overall current status	High/medium	High/fluctuates	Fluctuates/high	High/medium	High/medium	High/fluctuates	High/fluctuates	High/medium	High/medium

Figure 6 6: Mean score of the current strength of crystal methamphetamine by combined frequent drug users, 2006-2014



### Change in strength

The strength of crystal methamphetamine was considered to have been 'stable/increasing' during the previous six months in 2014 (Table 6.6). There was no statistically significant difference in reports of the change in the strength of crystal methamphetamine from 2006 to 2014 ( $p=0.4972$ ).

**Table 6 6: Change in strength of crystal methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Change in strength of crystal methamphetamine (%)</b>	<b>Combined modules (n=102)</b>	<b>Combined modules (n=68)</b>	<b>Combined modules (n=86)</b>	<b>Combined modules (n=64)</b>	<b>Combined modules (n=59)</b>	<b>Combined modules (n=55)</b>	<b>Combined modules (n=53)</b>	<b>Combined modules (n=33)</b>	<b>Combined modules (n= 45)</b>
Increasing [3]	15%	17%	11%	18%	10%	8%	18%	11%	16%
Stable [2]	54%	52%	17%	54%	46%	56%	51%	64%	63%
Fluctuating [2]	18%	22%	66%	21%	22%	25%	15%	12%	11%
Decreasing [1]	13%	9%	6%	7%	22%	11%	15%	14%	9%
Average change in purity score (1=decreasing – 3=increasing)	2.0	2.1	2.1	2.1	1.9	2.0	2.0	2.0	2.1
Overall recent change	Stable/ fluctuating	Stable/ fluctuating	Fluctuating/ stable	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ increasing	Stable/ decreasing	Stable/ increasing

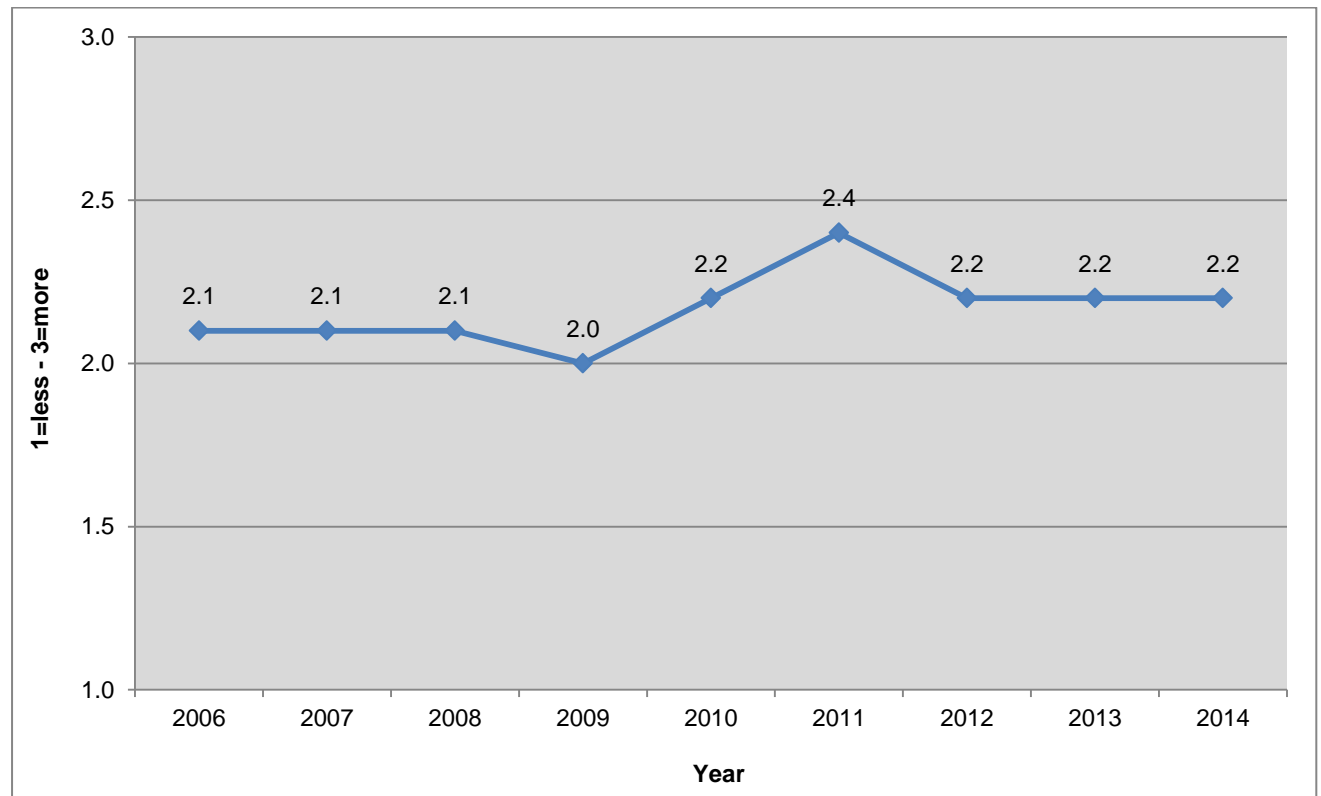
## 6.6 Perceptions of the number of people using crystal methamphetamine

The number of people using crystal methamphetamine was described as the 'same/more' in the past six months in 2014 (Table 6.7). An increasing proportion of frequent drug users said 'more' people were using crystal methamphetamine from 2006 to 2014 (up from 2.1 to 2.2,  $p=0.0488$ ) (Figure 6.7). A higher proportion of frequent drug users had previously said 'more' people were using crystal methamphetamine from 2006 to 2011 (up from 2.1 to 2.4), and this trend had been close to being statistically significant ( $p=0.0866$ ). There was no difference in perceptions of the change in number of people was using crystal methamphetamine from 2013 to 2014 ( $p=0.8711$ ), with most describing it as 'same/more' in both years.

**Table 6 7: Perceptions of the number of people using crystal methamphetamine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of people using crystal methamphetamine (%)	Combined modules (n=108)	Combined modules (n=71)	Combined modules (n=86)	Combined modules (n=64)	Combined modules (n=54)	Combined modules (n=47)	Combined modules (n=53)	Combined modules (n=32)	Combined modules (n=45)
More [3]	38%	36%	32%	25%	40%	49%	39%	33%	35%
Same [2]	37%	35%	48%	45%	41%	43%	45%	58%	51%
Less [1]	25%	29%	18%	30%	19%	8%	15%	9%	14%
Average number of people using score (1=less – 3=more)	2.1	2.1	2.1	2.0	2.2	2.4	2.2	2.2	2.2
Overall recent change	More/same	More/same	Same/more	Same/less	Same/more	More/Same	Same/more	Same/more	Same/more

Figure 6 7: Mean score of the perceptions of the number of people using crystal methamphetamine by combined frequent drug users, 2006-2014



## 6.7 Summary of crystal methamphetamine trends

- The current availability of crystal methamphetamine was reported to be 'easy/very easy' in 2014
- The availability of crystal methamphetamine was reported to be largely declining from 2006 to 2011 until a recovery in availability in 2012; availability has subsequently remained stable in 2013 and 2014
- The price of a 'point' of crystal methamphetamine increased from \$100 in 2006 to \$123 in 2014, with sharp increases in 2011 (\$114) and 2014 (\$123)
- The mean price of a gram of crystal methamphetamine had previously increased from \$691 in 2007 to \$914 in 2011, but has remained stable at around \$750 from 2012 to 2014
- The frequent drug users were more likely to say the price of crystal methamphetamine had been increasing from 2006 to 2014, with a sharp increase reported in 2011
- The current strength of crystal methamphetamine was described as 'high/medium' in 2014
- The frequent drug users had previously reported the strength of crystal methamphetamine had increased from 2010 to 2011, and then decreased from 2012 to 2013
- The frequent drug users reported the 'same/more' people were using crystal methamphetamine in 2014
- An increasing proportion of frequent drug users said 'more' people were using crystal methamphetamine from 2009 to 2011, and the reports of increasing levels of use continued from 2012 to 2014

## 7. Ecstasy

### 7.1 Introduction

The term 'ecstasy' traditionally referred to MDMA (methylenedioxyamphetamine), but due to greater international control of key MDMA precursors there has been a global shortage of MDMA since the mid-2000s. As a consequence, drugs sold as 'ecstasy' increasingly contain a range of substitute compounds which mimic the effects of MDMA, including BZP (benzylpiperazine), mephedrone (methylethcathinone), MEC (methylethcathinone), DMAA (dimethylamylamine) and methylone (methylenedioxyamphetamine) (ESR, 2014). Many of these substitute compounds are readily available in bulk from Asia, and this has created the opportunity for New Zealand based syndicates to import and blend these compounds to produce locally supplied 'ecstasy'. As a result there was greater availability of lower quality cheap 'ecstasy' pills and increasing use of ecstasy in New Zealand during the late 2000s.

The frequent drug users interviewed for the IDMS reported a decline in the strength of ecstasy in New Zealand from around 2008 (Wilkins, et al., 2011b). Laboratory analysis of 'ecstasy' seized in New Zealand in 2012/2012 confirmed the presence of a range of substitute compounds other than MDMA (ESR, 2014). The expansion in the local ecstasy market was particularly apparent in Auckland, with the price of an ecstasy tablet declining from \$50 in 2009 to \$41 in 2010, and the proportion of frequent drug users who purchased ecstasy weekly or more often increasing from 3% in 2009 to 22% in 2011 (Wilkins, et al., 2012b).

The growing domestic supply of 'ecstasy' led to a number of police operations against local ecstasy syndicates in 2011 and 2012. This appears to have particularly disrupted the Auckland 'ecstasy' market where the IDMS found a reduction in availability, increase in price, and decline in strength of ecstasy in 2012 (Wilkins, et al., 2012b). There was also a sharp decline in perceptions of the number of people using ecstasy in Auckland and Christchurch around these years (Wilkins, et al., 2012b).

The supply of MDMA has reportedly improved in Europe in the last few years and this may lead to resurgence in use (EMCDDA, 2013b; UNODC, 2012, 2013b, 2015b). Increasing levels of MDMA in ecstasy are thought to be behind the growing preference for ecstasy in Australia (Sindicich & Burns, 2012). The 2013 IDMS found the strength of ecstasy, previously been reported to be declining over the preceding five years, had recovered in 2013.

A final contextual factor influencing the current ecstasy market is the emergence of encrypted 'dark' web-sites which facilitate the anonymous on-line buying and selling of drugs using decentralised bitcoin currency (e.g. Agora and Evolution) (Van Buskirk et al., 2015). MDMA has fairly consistently been the most commonly purchased drug from dark websites (Van Buskirk et al., 2014; Van Buskirk, et al., 2015), and these websites are reported to offer MDMA at higher purities than is often available from street level drug markets.

## **7.2 Knowledge of ecstasy trends**

Forty-four percent of the frequent drug users interviewed for the 2014 IDMS (n=132) indicated they felt confident enough to comment on the price, strength and availability of ecstasy in the previous six months. This included 96% of the frequent ecstasy users (n=104), 24% of the frequent methamphetamine users (n=22), and 6% of the frequent injecting drug users (n=6).

## **7.3 Drug types perceived to be in ecstasy**

In response to the changing composition of ecstasy in recent years, we asked the frequent drug users who answered the ecstasy section to name the drug types they *thought* were in the ecstasy they had been using in the previous six months. They were read out a list of 11 substitute compounds commonly found in 'ecstasy' tablets. They could name more than one compound if they desired. Twelve percent of the frequent ecstasy users (n=15) answered they 'did not know' what was in the ecstasy they had used in 2014. Of those who thought they knew what was in their ecstasy, 92% believed it contained MDMA, 29% BZP, 30% caffeine, 25% mephedrone, 21% methamphetamine, and 16% ketamine (Table 7.1). Twenty-four percent thought their ecstasy contained 'nothing or almost nothing'. The proportion of respondents who thought their ecstasy contained 'nothing or almost nothing' increased from 9% in 2013 to 24% in 2014 (Table 7.1)



**Table 7 1: Drug types thought to be in ecstasy (of the people who thought they knew), 2011-2014**

Drug type (%)	2011 (n=109)	2012 (n=182)	2013 (n=141)	2014 (n=123)
MDMA	89	88	96	92
Caffeine	21	38	31	30
BZP	48	47	47	29
Mephedrone	28	43	26	25
Nothing/almost nothing	19	22	9	24
Methamphetamine	47	31	34	21
Ketamine	29	29	14	16
Other research chemicals	5	7	5	6
MDPV	2	8	4	5
4-MEC	1	4	3	2
TFMPP	3	5	1	2

## 7.4 Availability of ecstasy

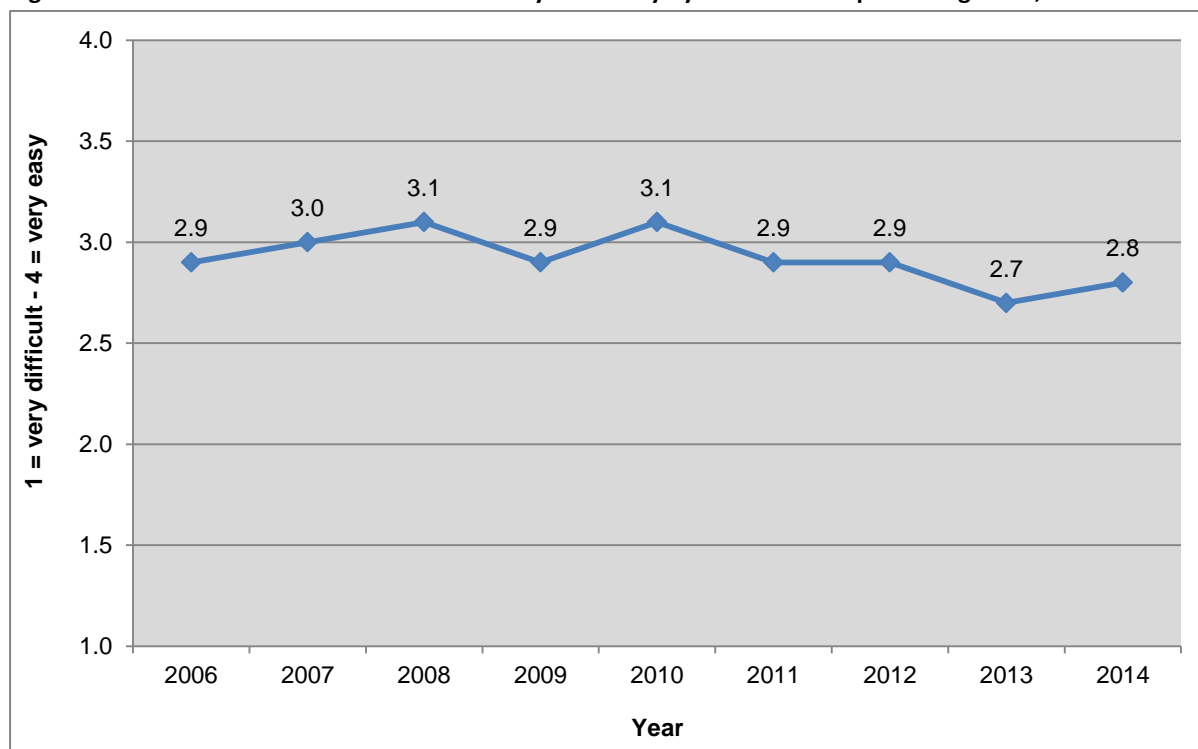
### Current availability of ecstasy

The frequent drug users reported the current availability of ecstasy to be 'easy/difficult' in 2014 (Table 7.2). Overall, there was a small decline in the current availability of ecstasy from 2006 to 2014 (down from 2.9 to 2.8,  $p=0.0013$ ) (Figure 7.1). The current availability of ecstasy had previously declined from 2012 to 2013 (down from 2.9 to 2.7,  $p=0.0300$ ).

**Table 7 2: Current availability of ecstasy by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current availability of ecstasy (%)	Combined modules (n=200)	Combined modules (n=157)	Combined modules (n=194)	Combined modules (n=159)	Combined modules (n=229)	Combined modules (n=215)	Combined modules (n=181)	Combined modules (n=148)	Combined modules (n=131)
Very easy [4]	19%	25%	32%	25%	29%	24%	28%	16%	15%
Easy [3]	54%	54%	46%	46%	53%	47%	39%	46%	54%
Difficult [2]	27%	20%	21%	27%	16%	26%	30%	33%	28%
Very difficult [1]	0%	1%	1%	2%	2%	2%	2%	5%	2%
Average availability score (1=very difficult–4=very easy)	2.9	3.0	3.1	2.9	3.1	2.9	2.9	2.7	2.8
Overall current status	Easy/difficult	Easy/very easy	Easy/very easy	Easy/difficult	Easy/very easy	Easy/difficult	Easy/difficult	Easy/difficult	Easy/difficult

**Figure 7 1: Mean score of the current availability of ecstasy by combined frequent drug users, 2006-2014**



The current availability of ecstasy was reported to be higher in Wellington than in Auckland in 2014 (3.0 vs. 2.6,  $p=0.0020$ ) (Table 7.3).

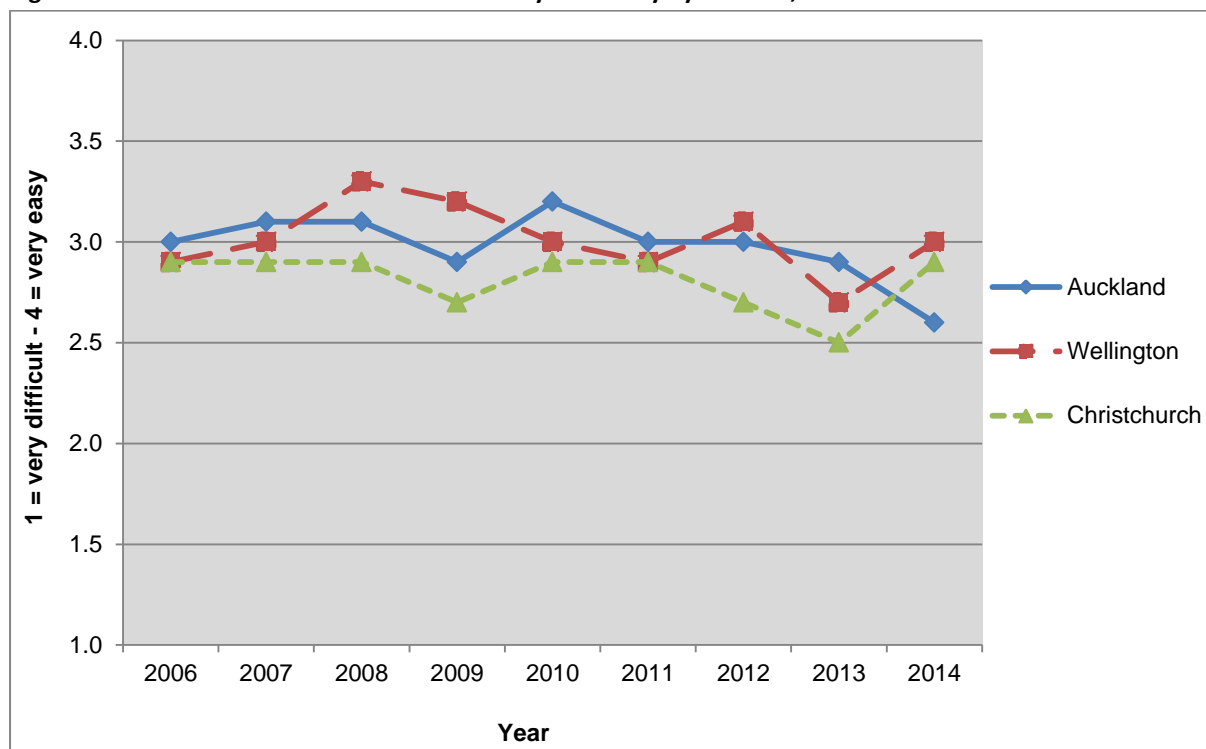
**Table 7 3: Current availability of ecstasy by location, 2014**

Current availability of ecstasy (%)	Auckland (n=54)	Wellington (n=49)	Christchurch (n=28)
Very easy [4]	4%	20%	25%
Easy [3]	51%	62%	40%
Difficult [2]	39%	18%	32%
Very difficult [1]	4%	0%	4%
Average availability score (1=very difficult – 4=very easy)	2.6	3.0	2.9
Overall current status	Easy/ Difficult	Easy/ very easy	Easy/ difficult

The current availability of ecstasy in Auckland declined from 2006 to 2014 (down from 2.9 to 2.6,  $p=0.0056$ ), and also declined from 2013 to 2014 (down from 2.9 to 2.6,  $p=0.0182$ ) (Figure 7.2). The current availability of ecstasy in Christchurch had previously declined from 2006 to 2013 (down from 2.9 to 2.5,  $p=0.0225$ ), but increased quite sharply more recently from 2013 to 2014 (up from 2.5 to

2.9), and this increase was close to being statistically significant ( $p=0.0832$ ). Similarly, the current availability of ecstasy in Wellington had declined from 2006 to 2013 (down from 3.1 to 2.7,  $p=0.0501$ ), and then increased from 2013 to 2014 (up from 2.7 to 3.0), but this increase was not statistically significant ( $p=0.1004$ ).

**Figure 7 2: Mean score of the current availability of ecstasy by location, 2006-2014**



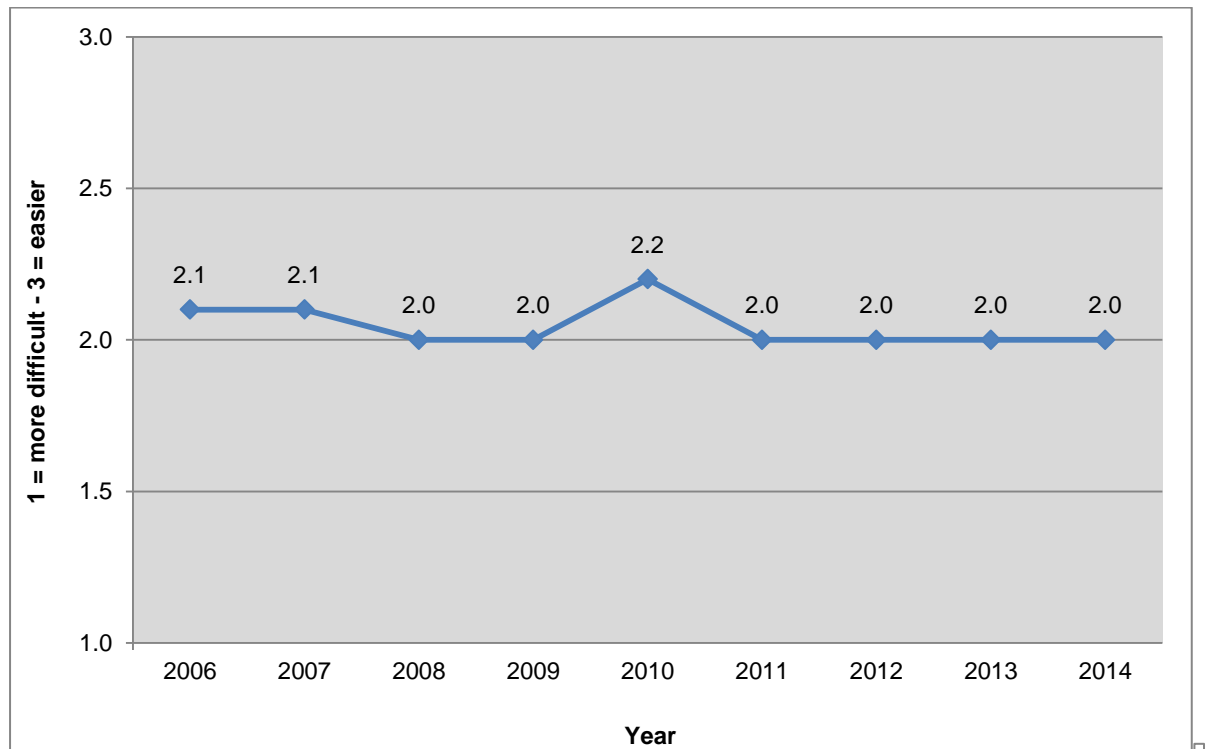
### Change in availability of ecstasy

The frequent drug users described the availability of ecstasy as being 'stable/fluctuating' in the previous six months in 2014 (Table 7.4). Overall, the frequent drug users were slightly more likely to describe the availability of ecstasy as 'more difficult' from 2006 to 2014 (down from 2.1 to 2.0), although this decline was not statistically significant ( $p=0.1364$ ) (Figure 7.3). The frequent drug users had previously reported the availability of ecstasy was becoming easier from 2009 to 2010 (up from 2.0 to 2.2,  $p=0.0158$ ), and then more difficult from 2010 to 2011 (down from 2.2 to 2.0,  $p=0.0147$ ).

**Table 7 4: Change in availability of ecstasy by combined frequent drug users, 2006-2014**

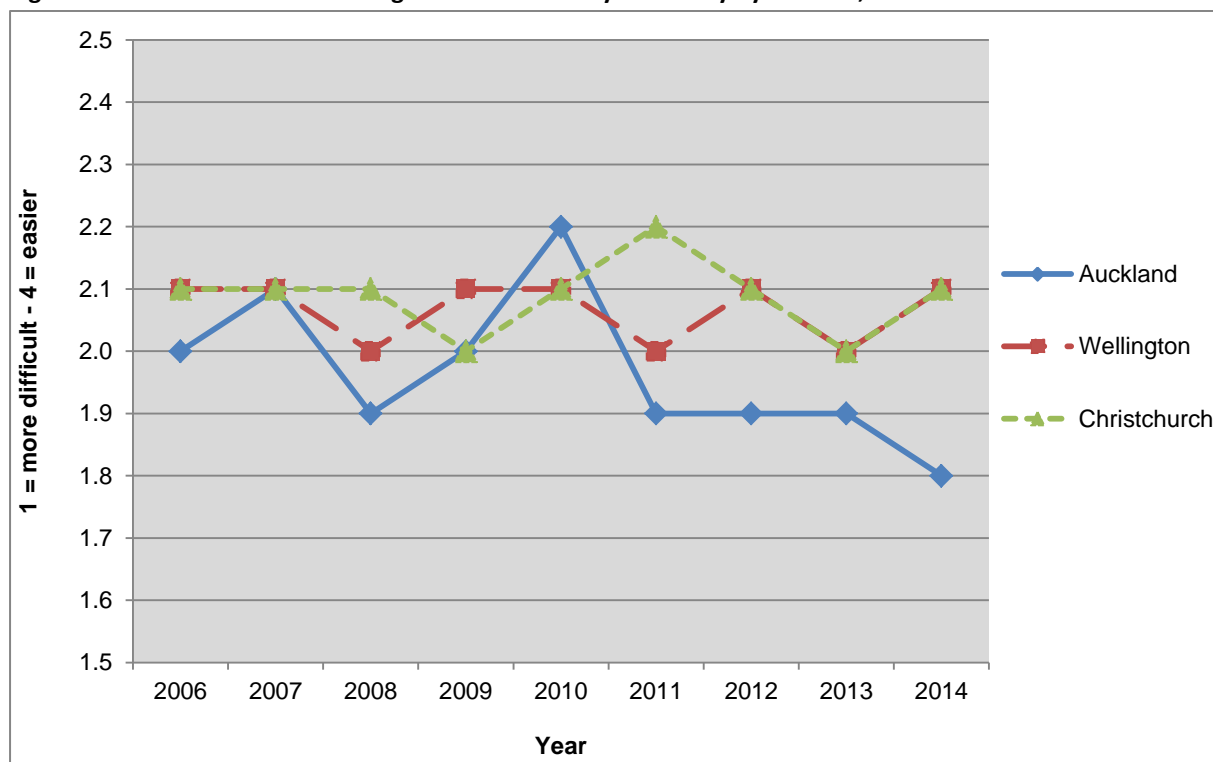
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in availability of ecstasy (%)	Combined modules (n=194)	Combined modules (n=154)	Combined modules (n=191)	Combined modules (n=154)	Combined modules (n=223)	Combined modules (n=207)	Combined modules (n=181)	Combined modules (n=147)	Combined modules (n=124)
Easier [3]	19%	28%	15%	20%	28%	24%	21%	18%	16%
Stable [2]	44%	48%	54%	47%	41%	33%	46%	46%	48%
Fluctuates [2]	24%	6%	14%	12%	18%	20%	12%	15%	19%
More difficult [1]	13%	18%	17%	21%	13%	24%	21%	22%	16%
Average change in availability score (1=more difficult – 3=easier)	2.1	2.1	2.0	2.0	2.2	2.0	2.0	2.0	2.0
Overall recent change	Stable/ fluctuates	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ easier/more difficult	Stable/ more difficult	Stable/ fluctuates

Figure 7 3: Mean score of the change in the availability of ecstasy by combined frequent drug users, 2006-2014



Overall, the frequent drug users in Auckland were more likely to report the availability of ecstasy had become 'more difficult' from 2006 to 2014 (down from 2.0 to 1.8,  $p=0.0386$ ) (Figure 7.4). The frequent drug users in Auckland had previously reported an increase in the availability of ecstasy from 2009 to 2010 (up from 2.0 to 2.2,  $p=0.0138$ ), and this was followed by an equally dramatic fall from 2010 to 2011 (down from 2.2 to 1.9,  $p=0.0207$ ). There was no statistically significant difference in perceptions of the change in the availability of ecstasy from 2006 to 2014 in Wellington ( $p=0.6919$ ) or Christchurch ( $p=0.7727$ ).

Figure 7 4: Mean score of the change in the availability of ecstasy by location, 2006-2014



## 7.5 Price of ecstasy

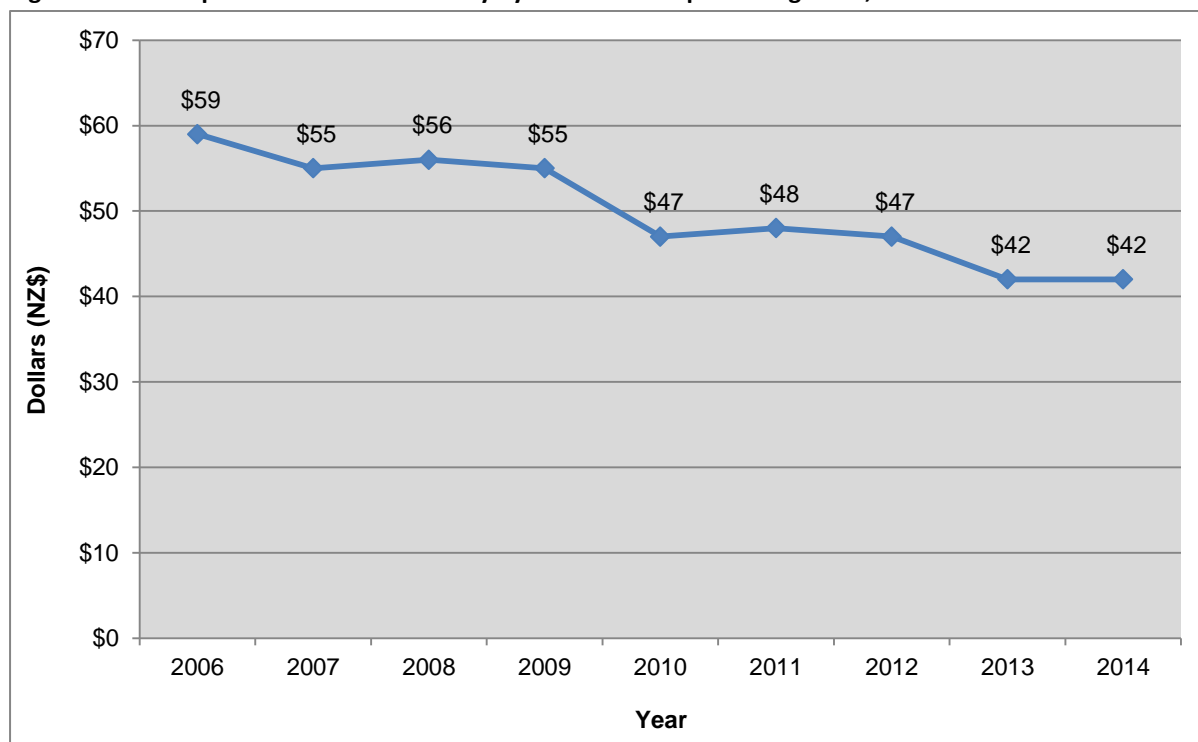
### Current price of ecstasy

The median price of a tablet of ecstasy was \$40 in 2014 (Table 7.5). The mean price of a tablet of ecstasy declined from \$59 in 2006 to \$42 in 2014 ( $p < 0.0001$ ) (Figure 7.5). There was no statistically significant change in the mean price for a tablet of ecstasy from 2013 to 2014 (\$42 in both years,  $p = 0.7301$ ).

Table 7 5: Current price of ecstasy (NZD) by combined frequent drug users, 2006-2014

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current price of ecstasy (\$)	Combined modules (n=190)	Combined modules (n=122)	Combined modules (n=127)	Combined modules (n=122)	Combined modules (n=143)	Combined modules (n=180)	Combined modules (n=162)	Combined modules (n=121)	Combined modules (n=101)
Median (mean) price tablet	\$60 (\$59)	\$60 (\$55)	\$60 (\$56)	\$60 (\$55)	\$43 (\$47)	\$50 (\$48)	\$40 (\$47)	\$40 (\$42)	\$40 (\$42)

**Figure 7 5: Mean price of a tablet of ecstasy by combined frequent drug users, 2006-2014**



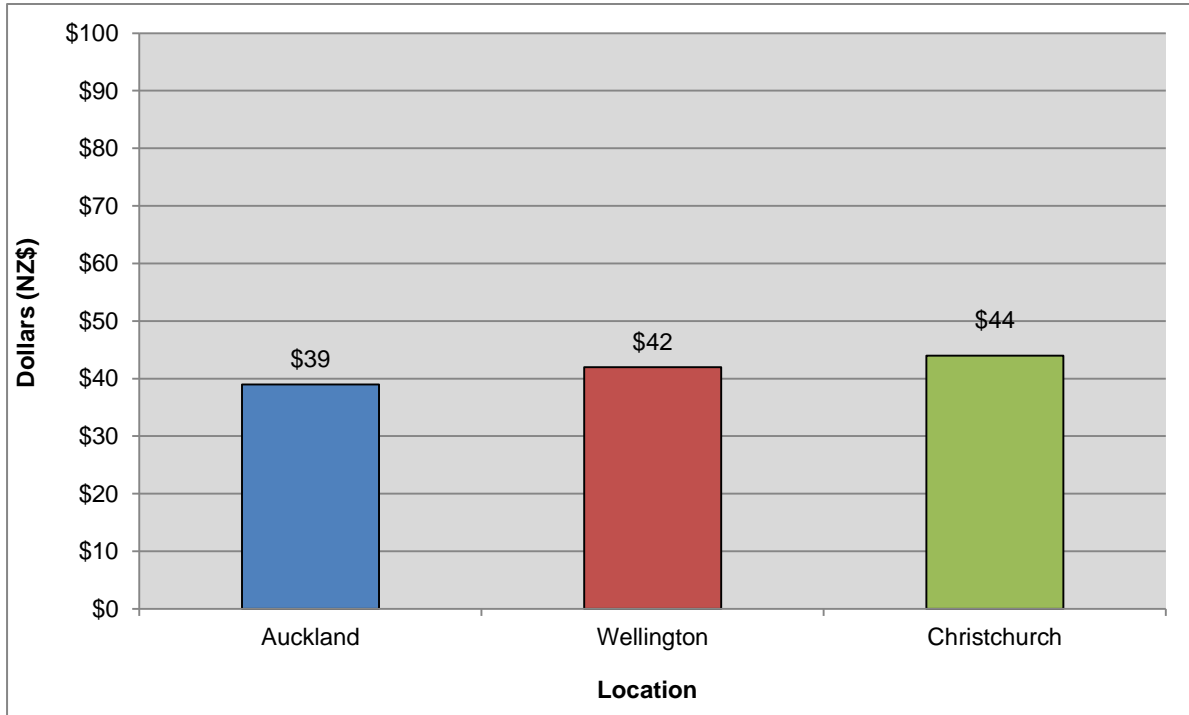
In 2014, there was no statistically significant difference in the mean price of a tablet of ecstasy between the three site locations ( $p=0.3775$ ) (Table 7.6 & Figure 7.6).

**Table 7 6: Current median (mean) price for ecstasy (NZD) by location, 2014**

Current price of ecstasy	Auckland (n=43)	Wellington (n=37)	Christchurch (n=21)
Median (mean) price for a tablet	\$40 (\$39)	\$40 (\$42)	\$40 (\$44)

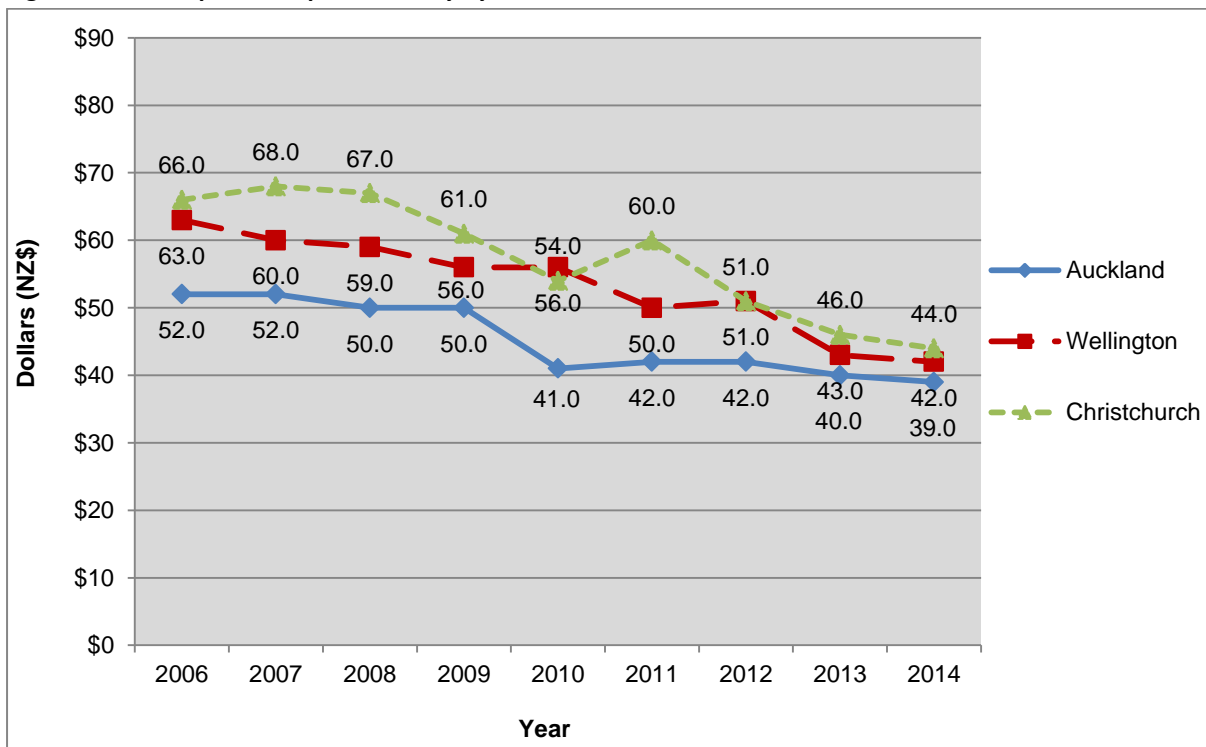


**Figure 7 6: Mean price of a tablet of ecstasy by location, 2014**



The mean price of an ecstasy tablet declined from 2006 to 2014 in Auckland (down from \$52 to \$39,  $p < 0.0001$ ), Wellington (\$63 to \$42  $p < 0.0001$ ) and Christchurch (\$66 to \$44,  $p < 0.0001$ ) (Figure 7.7). None of the sites reported a change in the price from 2013 to 2014.

**Figure 7 7: Mean price of a pill of ecstasy by location, 2006-2014**



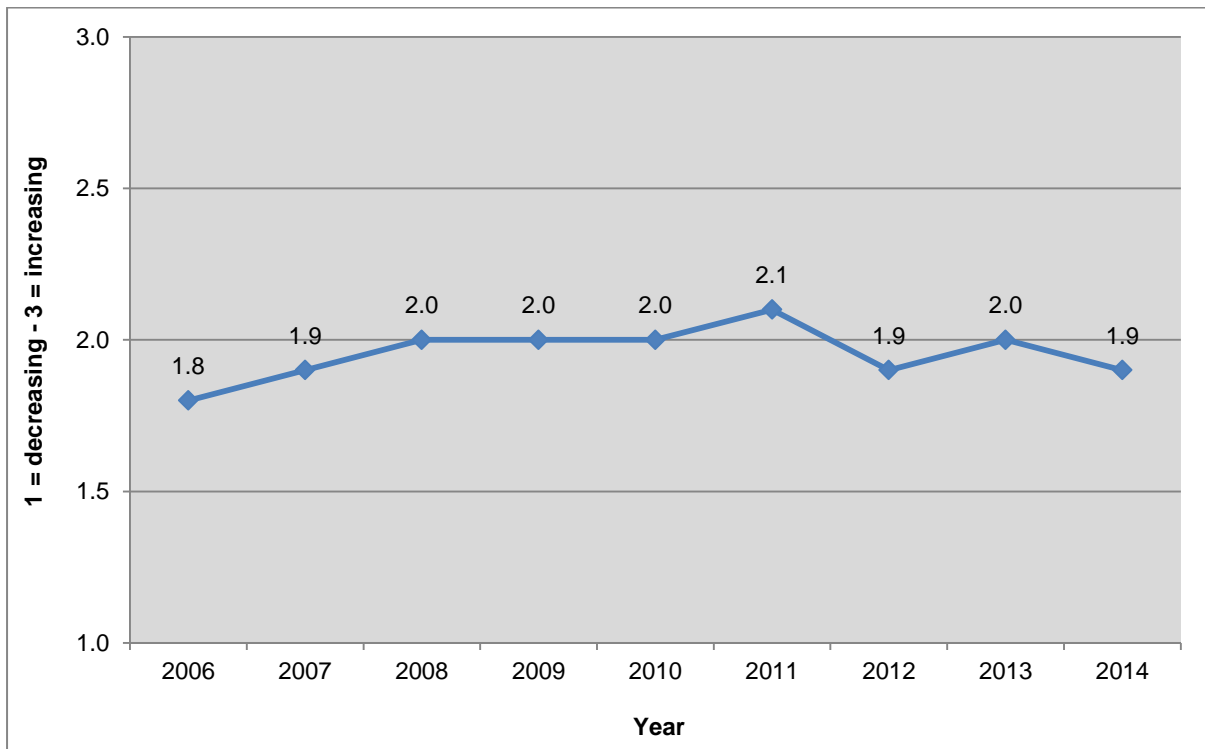
### **Change in price of ecstasy**

The frequent drug users reported the price of ecstasy had been 'stable/fluctuating' over the previous six months in 2014 (Table 7.7). A higher proportion of frequent drug users described the price of ecstasy as 'stable' over the past nine years (up from 1.8 in 2006 to 1.9 in 2014,  $p=0.0504$ ) (Figure 7.8).

**Table 7 7: Change in the price of ecstasy in the past six months by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in price of ecstasy (%)	Combined modules (n=187)	Combined modules (n=158)	Combined modules (n=194)	Combined modules (n=156)	Combined modules (n=224)	Combined modules (n=205)	Combined modules (n=177)	Combined modules (n=143)	Combined modules (n=125)
Increasing [3]	7%	8%	12%	12%	17%	23%	11%	9%	7%
Fluctuating [2]	13%	14%	20%	16%	14%	18%	11%	19%	16%
Stable [2]	58%	64%	55%	60%	51%	44%	62%	63%	63%
Decreasing [1]	22%	14%	13%	13%	18%	15%	17%	8%	14%
Average change in price score (1=decreasing – 3=increasing)	1.8	1.9	2.0	2.0	2.0	2.1	1.9	2.0	1.9
Overall recent change	Stable/ decreasing	Stable	Stable/ fluctuating	Stable/ fluctuating	Stable/ decreasing	Stable/ increasing	Stable/ decreasing	Stable/ fluctuating	Stable/ fluctuating

**Figure 7 8: Mean score of the change in the price of ecstasy in the past six months by combined frequent drug users, 2006-2014**



The frequent drug users in Christchurch were more likely to say the price of ecstasy was decreasing from 2013 to 2014 (down from 2.1 to 1.8,  $p=0.0154$ ).

**Figure 7 9: Mean score of the change in the price of ecstasy in the past six months by location, 2006-2014**



□

## 7.6 Strength of ecstasy

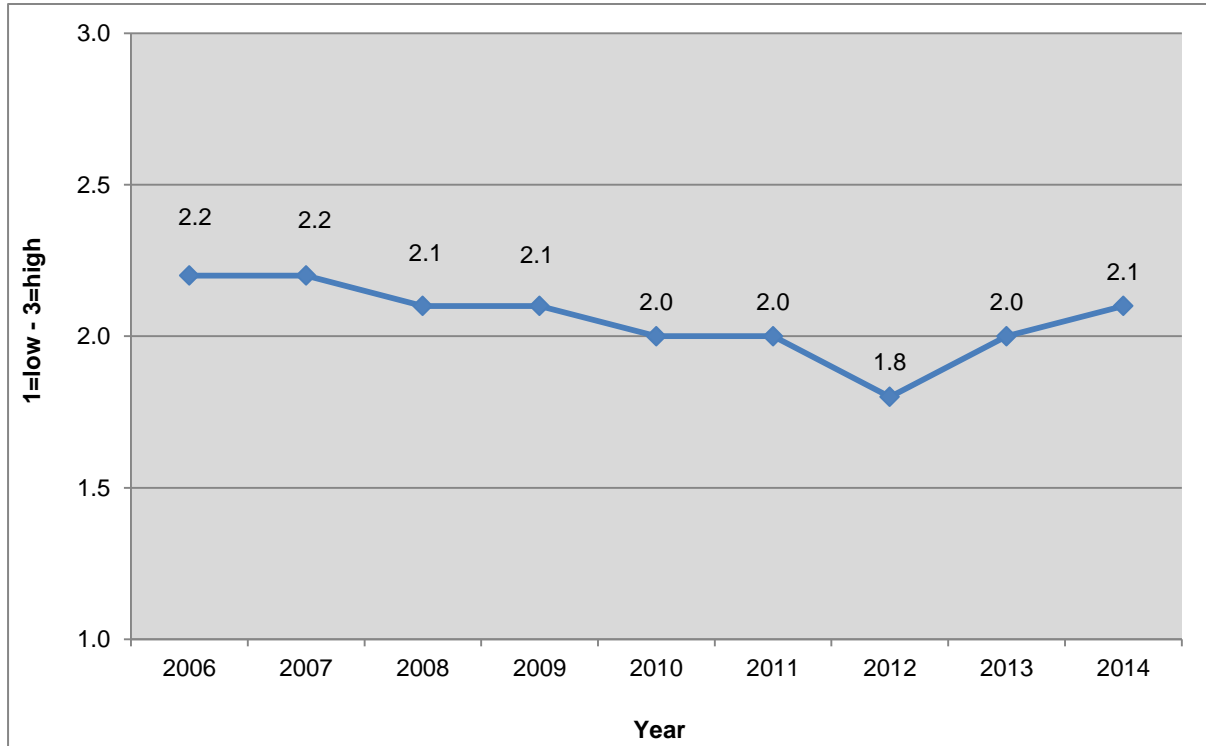
### Current strength of ecstasy

The frequent drug users reported the current strength of ecstasy to be ‘fluctuating/high’ in 2014 (Table 7.8). The current strength of ecstasy had previously steadily declined from 2006 to 2012 (down from 2.2 to 1.8,  $p < 0.0001$ ), and then recovered from 2012 to 2013 (up from 1.8 to 2.0,  $p = 0.0560$ ) (Figure 7.10). There was no statistically significant change in the current strength of ecstasy from 2013 to 2014 ( $p = 0.4405$ ).

**Table 7 8: Current strength of ecstasy by combined frequent drug users, 2006-2014**

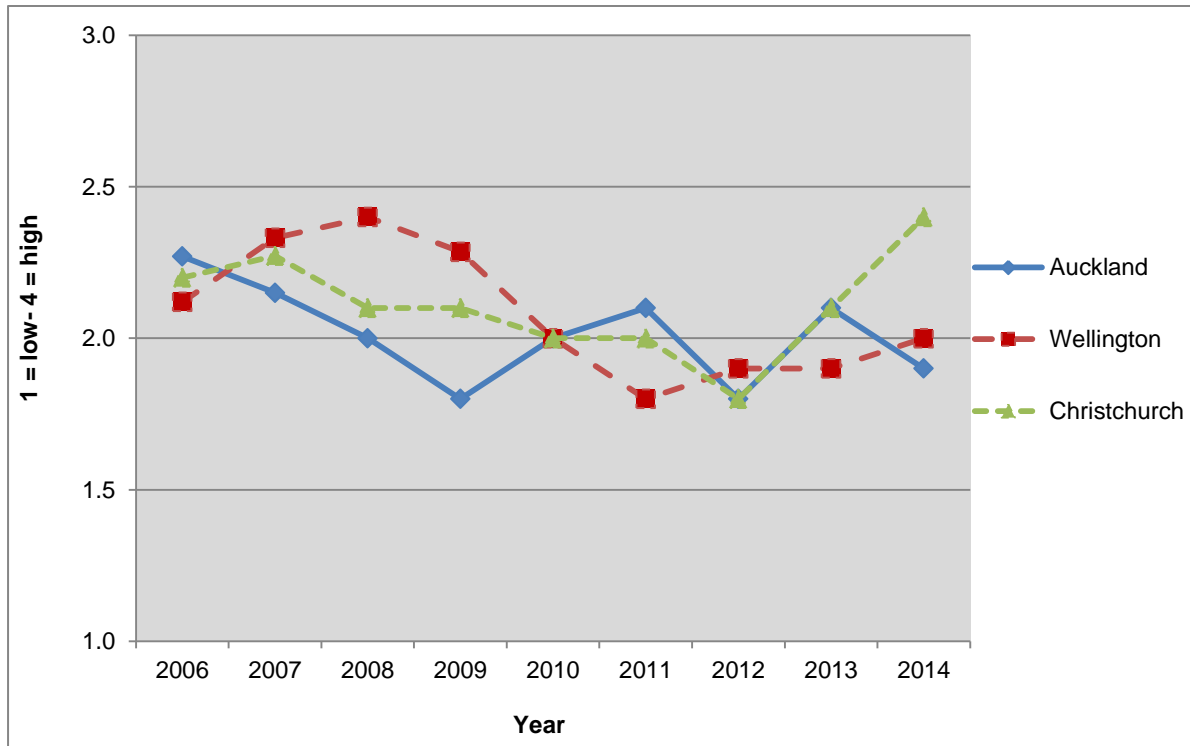
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current strength of ecstasy (%)	Combined modules (n=191)	Combined modules (n=156)	Combined modules (n=191)	Combined modules (n=157)	Combined modules (n=221)	Combined modules (n=213)	Combined modules (n=179)	Combined modules (n=147)	Combined modules (n= 126)
High [3]	28%	31%	26%	25%	23%	15%	17%	24%	27%
Medium [2]	32%	29%	30%	28%	29%	30%	23%	25%	22%
Fluctuates [2]	32%	33%	32%	27%	27%	23%	28%	26%	30%
Low [1]	8%	8%	12%	19%	21%	23%	33%	25%	21%
Average strength score (1=low 3=high)	2.2	2.2	2.1	2.1	2.0	2.0	1.8	2.0	2.1
Overall current status	Fluctuating /medium	Fluctuating /high	Fluctuating/ medium	Medium/ fluctuating	Medium/ fluctuating	Medium /low	Low/ fluctuating	Fluctuating/ Medium/ low	Fluctuating /high

Figure 7 10: Mean score of the current strength of ecstasy by combined frequent drug users, 2006-2014



The current strength of ecstasy had previously declined from 2006 to 2012 in Auckland (down from 2.3 to 1.8,  $p=0.0003$ ), Wellington (down from 2.1 to 1.9,  $p<0.0001$ ) and in Christchurch (down from 2.2 to 1.8,  $p=0.0006$ ) (Figure 7.11). Overall, the current strength of ecstasy declined in Auckland from 2006 to 2014 (down from 2.3 to 1.9,  $p=0.0015$ ). The current strength of ecstasy also decreased in Wellington from 2006 to 2014 (down from 2.1 in 2006 to 2.0 in 2014,  $p<0.0001$ ). In contrast, the current strength of ecstasy increased sharply in Christchurch from 2013 to 2014 (up from 2.1 to 2.4), but this increase was not statistically significant ( $p=0.1062$ ). The frequent drug users from Christchurch had previously reported a dramatic recovery in the strength of ecstasy from 2012 to 2013 (up from 1.8 to 2.1,  $p=0.0042$ ) (Figure 7.11).

Figure 7 11: Mean score of the current strength of ecstasy by location, 2006-2014



### Change in strength of ecstasy

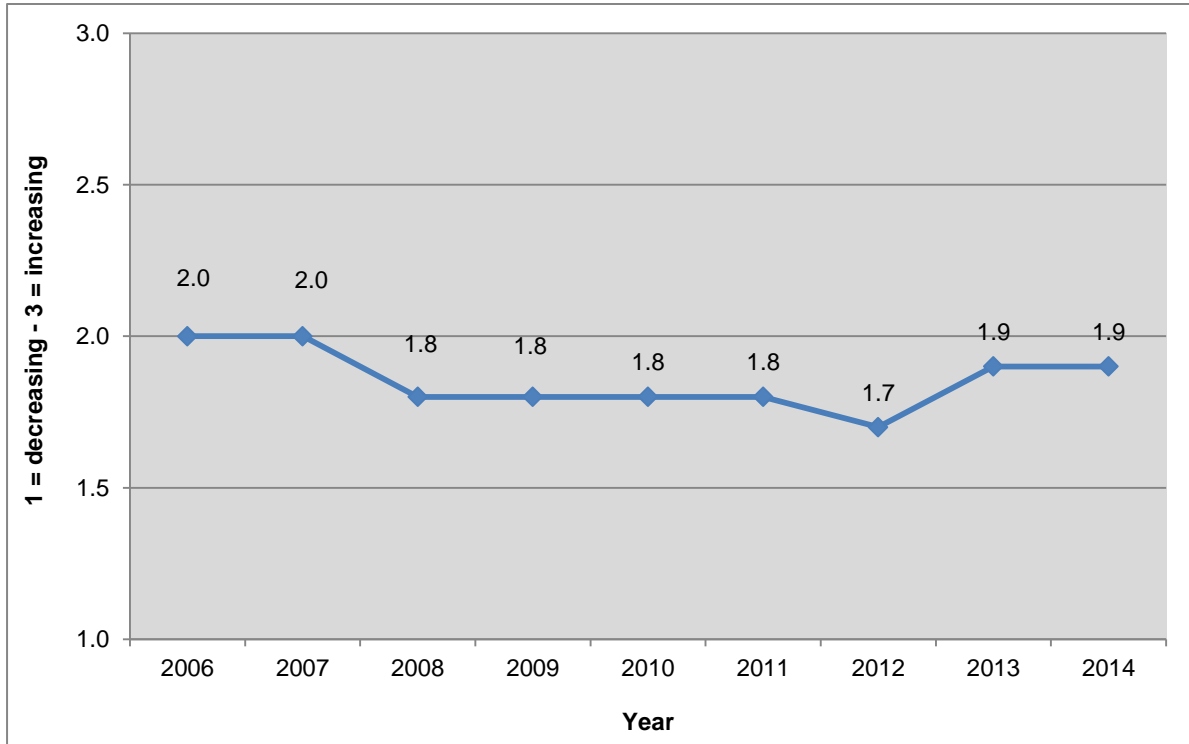
The strength of ecstasy was reported to have been 'fluctuating/stable' over the previous six months in 2014 (Table 7.9). Overall, the frequent drug users were more likely to report the strength of ecstasy was 'decreasing' from 2006 to 2014 (down from 2.0 to 1.9,  $p=0.0195$ ) (Figure 7.12). The frequent drug users had previously reported the current strength of ecstasy as decreasing from 2006 to 2012 (down from 2.0 to 1.7,  $p<0.0001$ ), followed by some recovery in strength from 2012 to 2013 (up from 1.7 to 1.9,  $p=0.0002$ ). There was no change in the current strength of ecstasy from 2013 to 2014 ( $p=0.3360$ ), with the frequent drug users largely describing it as 'fluctuating/stable'.

**Table 7 9: Change in strength of ecstasy (MDMA) by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in strength of ecstasy (%)	Combined modules (n=102)	Combined modules (n=68)	Combined modules (n=86)	Combined modules (n=64)	Combined modules (n=211)	Combined modules (n=197)	Combined modules (n=174)	Combined modules (n=141)	Combined modules (n= 122)
Increasing [3]	9%	10%	8%	9%	11%	10%	6%	12%	11%
Stable [2]	36%	39%	29%	31%	33%	28%	28%	38%	32%
Fluctuating [2]	42%	36%	40%	31%	28%	34%	31%	32%	33%
Decreasing [1]	13%	15%	23%	29%	28%	27%	36%	18%	24%
Average change in strength score (1=decreasing – 3=increasing)	2.0	2.0	1.8	1.8	1.8	1.8	1.7	1.9	1.9
Overall recent change	Fluctuating/ stable	Stable/ fluctuating	Fluctuating/ stable	Fluctuating/ stable	Stable/ fluctuating	Fluctuating/ stable	Decreasing / fluctuating	Stable/ fluctuating	Fluctuating/ stable

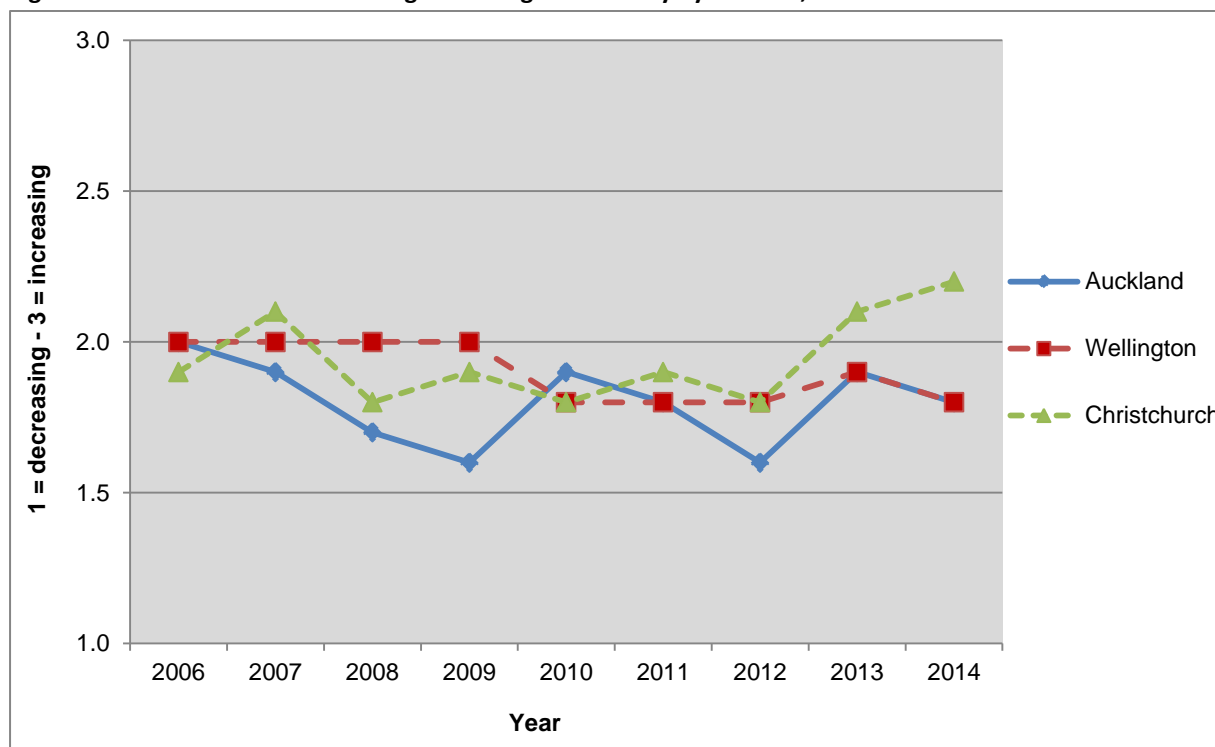


Figure 7 12: Mean score of the change in strength of ecstasy by combined frequent drug users, 2006-2014



Overall, the strength of ecstasy was reported to have been declining in Auckland from 2006 to 2014 (down from 2.0 to 1.8,  $p=0.0111$ ) (Figure 7.13). Similarly, the strength of ecstasy also declined in Wellington from 2006 to 2014 (down from 2.0 to 1.8,  $p=0.0112$ ). In contrast, the frequent drug users from Christchurch reported the strength of ecstasy to be increasing from 2006 to 2014 (up from 1.9 to 2.2), and this was close to being statistically significant ( $p=0.0936$ ). The frequent drug users from Christchurch had previously reported a dramatic recovery in the strength of ecstasy from 2012 to 2013 (up from 1.8 to 2.1,  $p=0.0042$ ).

Figure 7 13: Mean score of the change in strength of ecstasy by location, 2006-2014



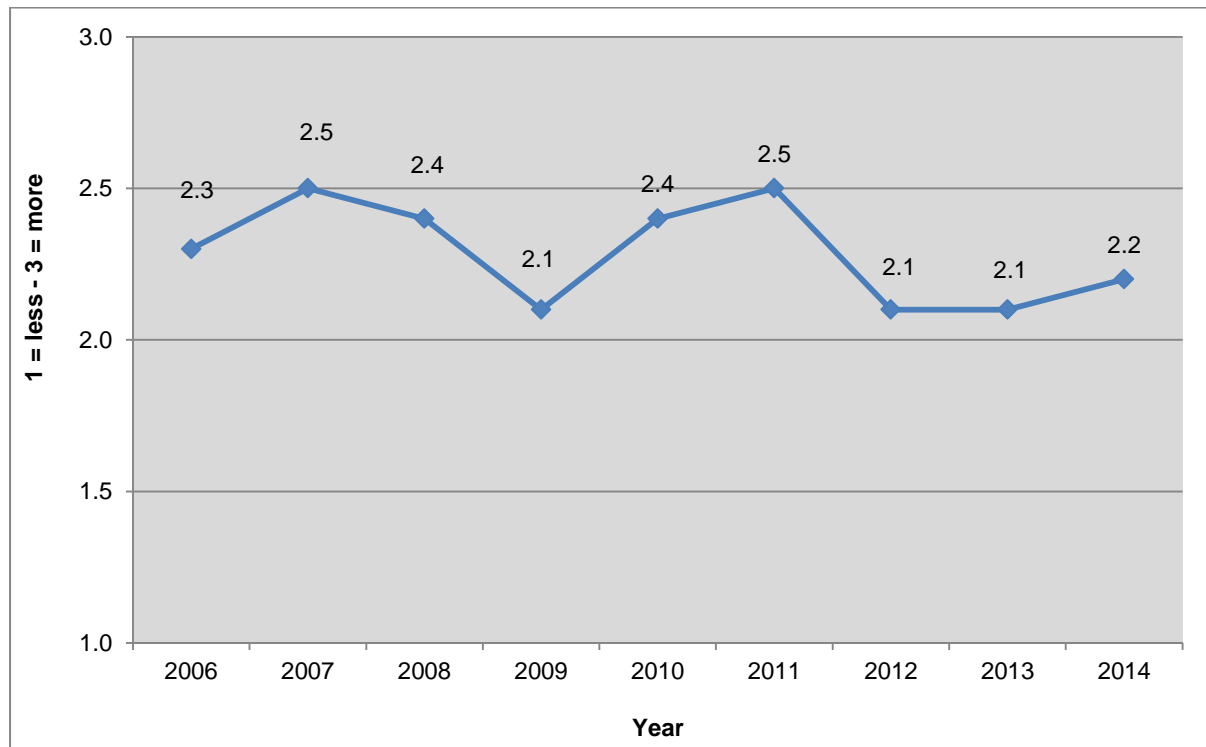
### 7.7 Perceptions of the number of people using ecstasy

The number of people using ecstasy was reported to be ‘same/more’ in the previous six months in 2014 (Table 7.10). Overall, a lower proportion of frequent drug users reported that ‘more’ people were using ecstasy from 2006 to 2014 (down from 2.3 to 2.2,  $p=0.0002$ ) (Figure 7.14). The frequent drug users had previously reported that an increasing number of people were using ecstasy from 2009 to 2010 (up from 2.1 to 2.4,  $p=0.0003$ ), followed by a lower proportion reporting that ‘more’ people were using ecstasy from 2011 to 2012 (down from 2.5 to 2.1,  $p<0.0001$ ). There was no statistically significant change in the perception of the number of users from 2013 to 2014 ( $p=0.3782$ ), with most describing it as ‘same/more’.

**Table 7 10: Perceptions of the number of people using ecstasy by combined frequent drug users, 2006-2014**

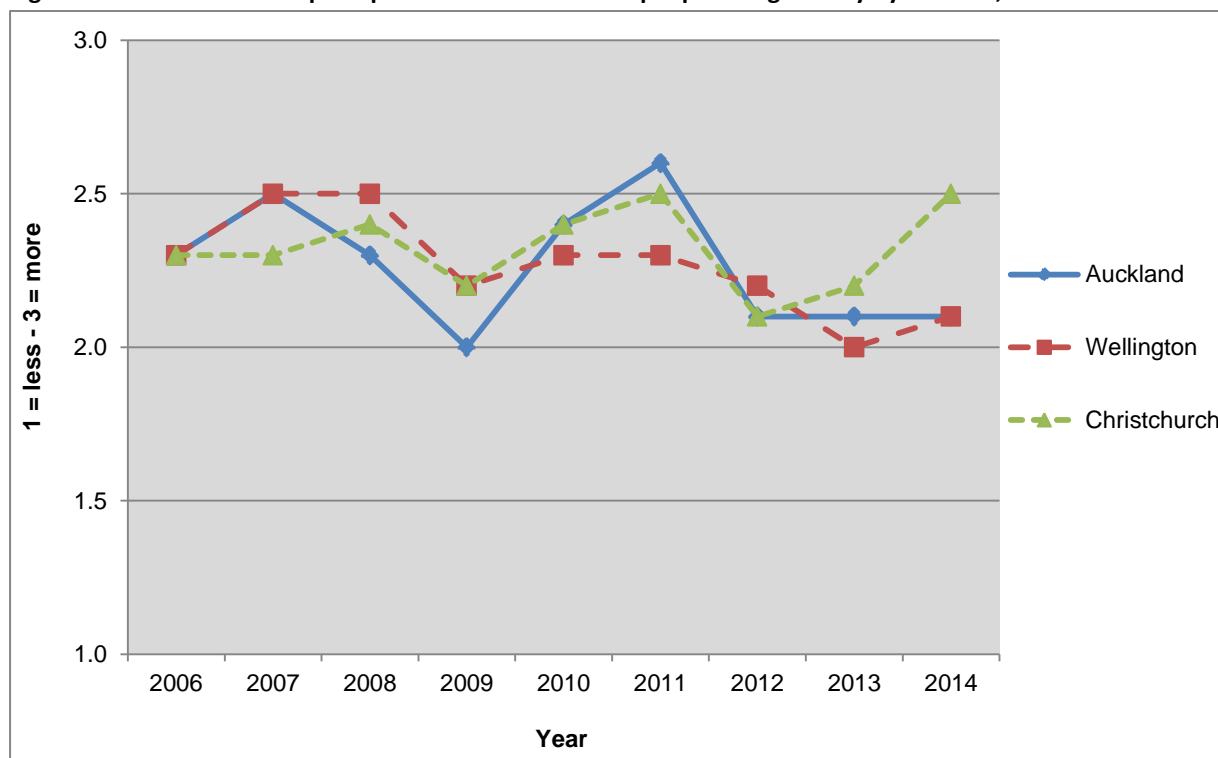
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of people using ecstasy (%)	Combined modules (n=196)	Combined modules (n=159)	Combined modules (n=194)	Combined modules (n=156)	Combined modules (n=226)	Combined modules (n=218)	Combined modules (n=181)	Combined modules (n=149)	Combined modules (n=131)
More [3]	39%	51%	44%	27%	54%	58%	35%	32%	33%
Same [2]	50%	43%	48%	60%	30%	31%	45%	44%	50%
Less [1]	11%	6%	8%	14%	16%	12%	20%	24%	17%
Average number of people using score (1=less – 3=more)	2.3	2.5	2.4	2.1	2.4	2.5	2.1	2.1	2.2
Overall recent change	Same/ more	More/ same	Same/ more	Same/ more	More/ same	More/ same	Same/ more	Same/ more	Same/ more

**Figure 7 14: Mean score of perceptions of the number of people using ecstasy by combined frequent drug users, 2006-2014**



Overall, a lower proportion of frequent drug users in Auckland reported ‘more’ people were using ecstasy from 2006 to 2014 (down from 2.3 to 2.1,  $p=0.0277$ ). The frequent drug users in Auckland had previously reported that an increasing number of people were using ecstasy from 2009 to 2010 (2.0 to 2.4,  $p=0.0009$ ), followed by a lower proportion using ‘more’ ecstasy from 2011 to 2012 (down from 2.6 to 2.1,  $p=0.0004$ ). A lower proportion of frequent drug users from Wellington also reported ‘more’ people using ecstasy from 2006 to 2014 (down from 2.3 to 2.1,  $p=0.0003$ ). In contrast, the frequent drug users in Christchurch reported a sharp increase in the number of people using ecstasy from 2013 to 2014 (up from 2.2 to 2.5), and this increase was close to being statistically significant ( $p=0.0856$ ) (Figure 7.15). A lower proportion of frequent drug users in Christchurch had previously reported that ‘more’ people were using ecstasy from 2011 to 2012 (down from 2.5 to 2.1,  $p=0.0027$ ).

**Figure 7 15: Mean score of perceptions of the number of people using ecstasy by location, 2006-2014**



## 7.8 Purchase of ecstasy

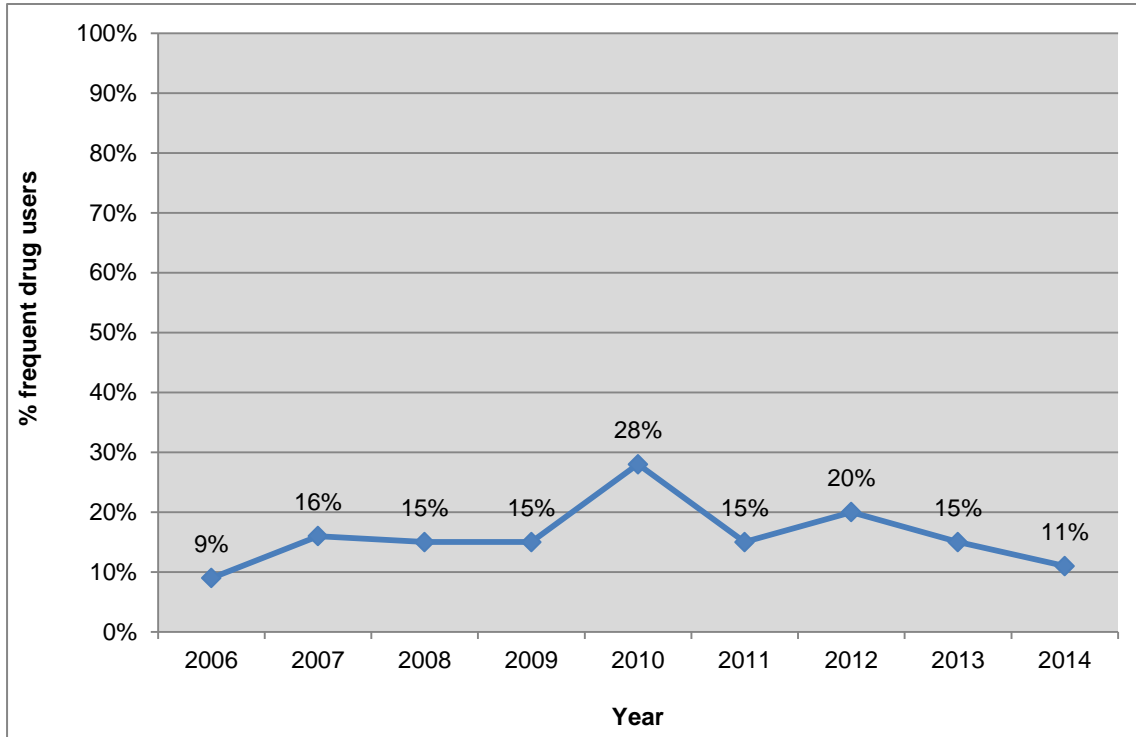
### Frequency of purchase of ecstasy

Ninety percent of the frequent drug users who answered the ecstasy section had purchased ecstasy in the previous six months in 2014. Eleven percent had done so weekly or more often over the past six months in 2014 (Table 7.11). The proportion of the frequent drug users who reported purchasing ecstasy weekly or more often had previously increased from 15% in 2009 to 28% in 2010 ( $p=0.0045$ ), before declining from 28% in 2010 to 15% in 2011 ( $p=0.0015$ ).

**Table 7 11: Frequency of purchase of ecstasy in past six months by combined frequent drug users, 2006-2014**

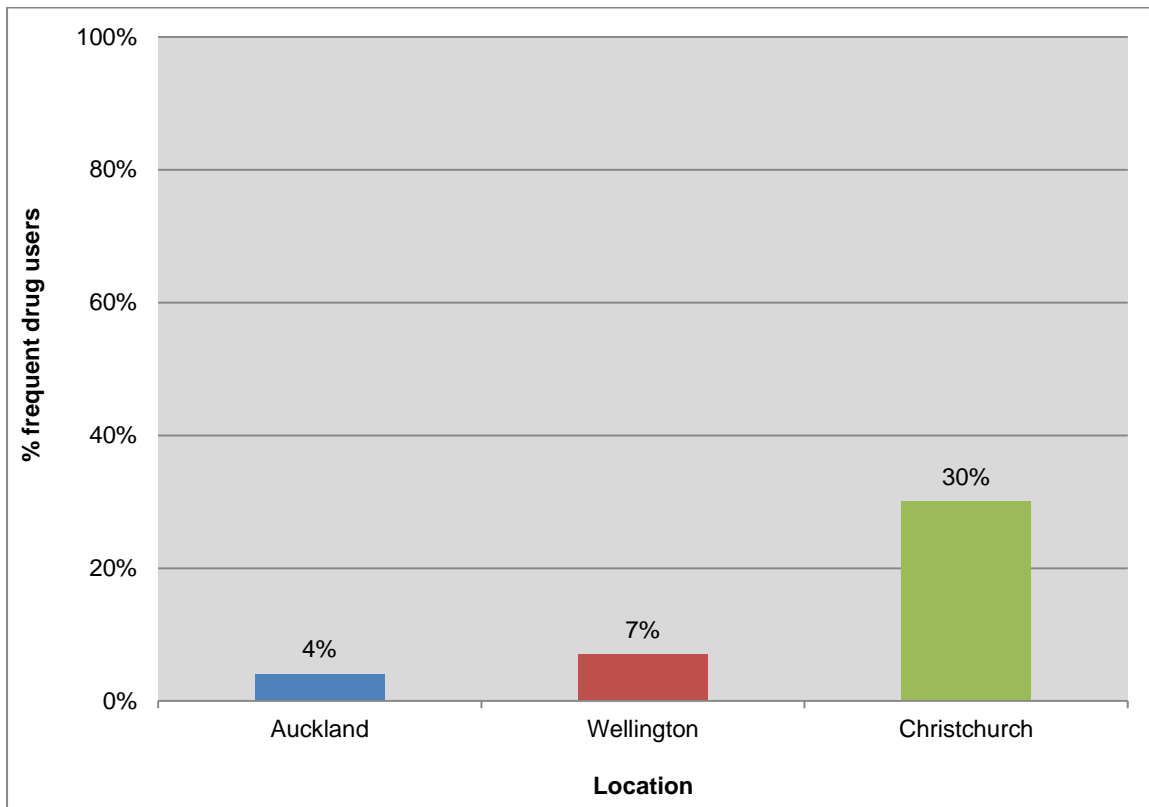
Frequency purchase in past six months (%)	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Combined modules (n=160)	Combined modules (n=127)	Combined modules (n=186)	Combined modules (n=140)	Combined modules (n=196)	Combined modules (n=187)	Combined modules (n=166)	Combined modules (n=139)	Combined modules (n=116)
1-2 times	22	22	17	22	23	23	18	26	22
3-4 times	28	21	26	34	17	25	22	25	25
Once per month	21	27	19	18	15	17	26	12	22
Twice per month	20	15	23	11	17	21	15	23	21
Once per week	8	13	13	14	18	12	14	10	6
2-3 times per week	1	1	1	1	10	3	4	5	3
4-5 times per week	0	2	1	0	0	0	0	0	2
Once per day	0	0	0	0	0	0	1	0	0
More than once per day	0	0	0	0	0	0	1	0	0

**Figure 7 16: Proportion of frequent drug users who purchased ecstasy weekly or more often, 2006-2014**



In 2014, a lower proportion of frequent drug users in Auckland had purchased ecstasy weekly or more often compared to those in Wellington (4% vs. 7%) and Christchurch (4% vs. 30%) (Figure 7.17).

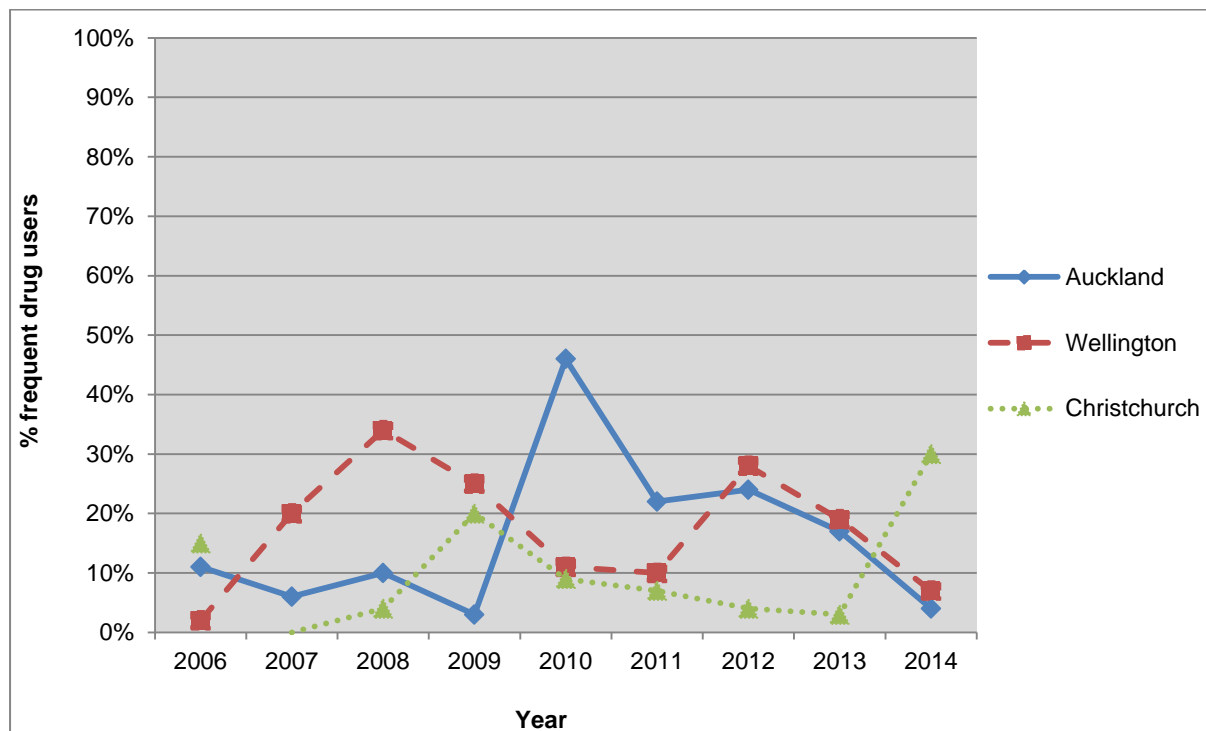
**Figure 7 17: Proportion of frequent drug users who purchased ecstasy weekly or more often by location, 2014**



Overall, the proportion of frequent drug users in Auckland who purchased ecstasy weekly or more often declined from 11% in 2006 to 4% in 2014 ( $p=0.0272$ )(Figure 7.18). There had previously been a dramatic increase in the proportion from Auckland who purchased ecstasy weekly or more often from 3% in 2009 compared to 46% in 2010 ( $p<0.0001$ ), followed by a decrease from 46% in 2010 to 22% in 2011 ( $p=0.0008$ ). The proportion of frequent drug users from Wellington who purchased ecstasy weekly or more often decreased from 19% in 2013 to 7% in 2014, and this decrease was close to being statistically significant ( $p=0.0694$ ). Conversely, the proportion of frequent drug users from Christchurch who had purchased ecstasy weekly or more often increased dramatically from 3% in 2013 to 30% in 2014 ( $p=0.0290$ ).



**Figure 7 18: Proportion of frequent drug users who purchased ecstasy weekly or more often by location, 2006-2014**



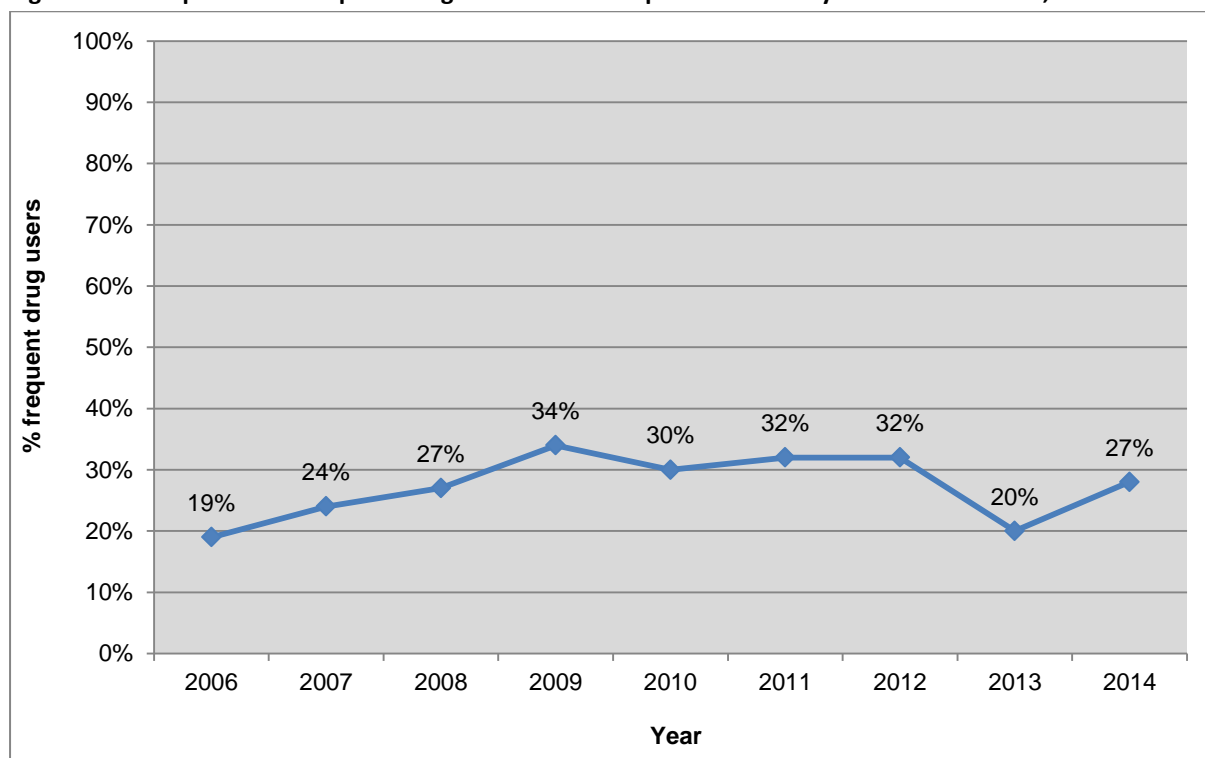
### Time taken to purchase ecstasy

Twenty-seven percent of the frequent drug users who had purchased ecstasy in the past six months were able to do so in one hour or less in 2014 (Table 7.13). Overall, there was no statistically significant change in the proportion of frequent drug users who were able to purchase ecstasy in one hour or less from 2006 to 2014 ( $p=0.2431$ ) (Figure 7.19). The proportion of frequent drug users who were able to purchase ecstasy in one hour or less had previously increased from 19% in 2006 to 34% in 2009, before decreasing from 32% in 2012 to 20% in 2013 ( $p=0.0198$ ). The proportion who could purchase ecstasy in one hour or less then increased from 20% in 2013 to 27% in 2014, but this increase was not statistically significant ( $p=0.1446$ ).

**Table 7 12: Time taken to purchase ecstasy by combined frequent drug users, 2006-2014**

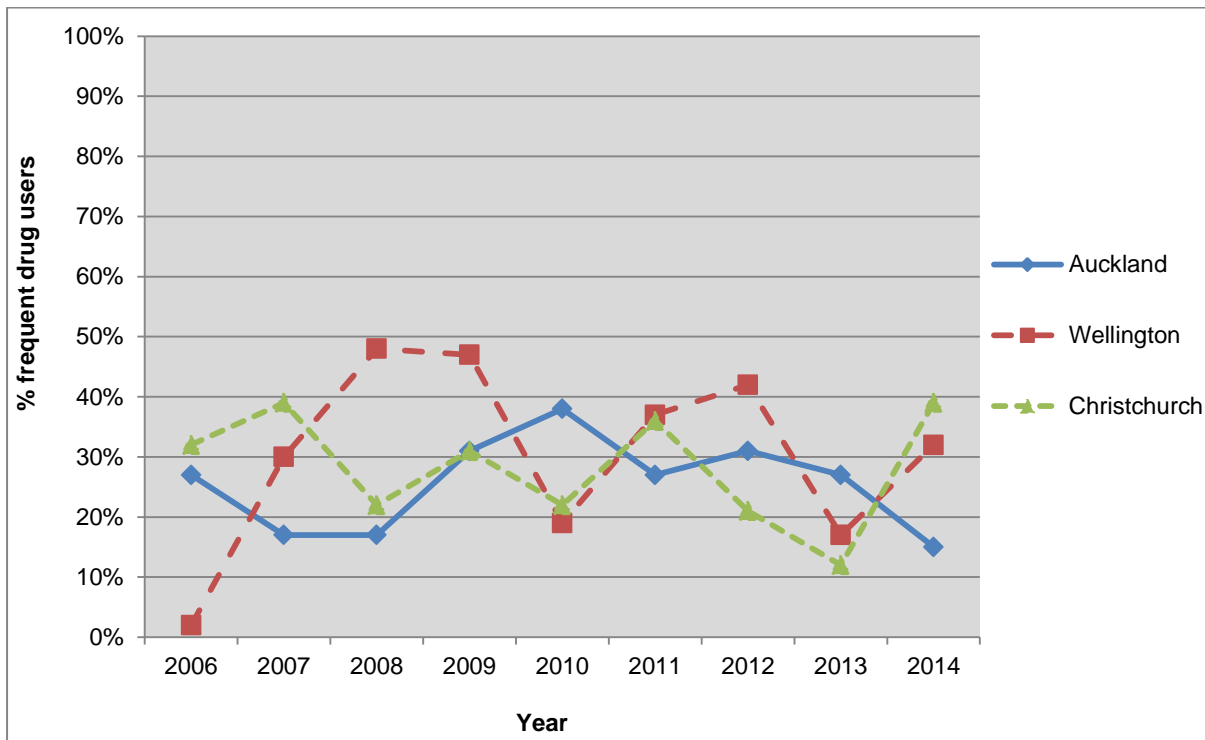
Time to purchase (%)	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Combined modules (n=158)	Combined modules (n=126)	Combined modules (n=186)	Combined modules (n=139)	Combined modules (n=196)	Combined modules (n=187)	Combined modules (n=165)	Combined modules (n=136)	Combined modules (n=117)
Weeks	6	5	4	4	4	5	5	10	4
Days	37	37	34	31	22	18	28	18	20
About one day	24	18	22	12	26	28	18	34	31
Hours	14	16	13	17	19	17	16	19	17
One Hour	11	14	11	22	14	22	18	15	18
Less than 20 mins	8	10	16	14	16	10	14	5	9

**Figure 7 19: Proportion of frequent drug users who could purchase ecstasy in one hour or less, 2006-2014**



The proportion of frequent drug users in Christchurch who could purchase ecstasy in one hour or less increased from 12% in 2013 to 39% in 2014 ( $p=0.0280$ ). The proportion of frequent drug users in Wellington who could purchase ecstasy in one hour or less also increased from 17% in 2013 to 32% in 2014, and this increase was very close to being statistically significant ( $p=0.0578$ ) (Figure 7.20).

**Figure 7 20: Proportion of frequent drug users who could purchase ecstasy in one hour or less by location, 2006-2014**



### Location of purchase of ecstasy

Eighty-eight percent of the frequent drug users had purchased ecstasy from a ‘private house’, 29% had purchased ecstasy from an ‘agreed public location’, and 21% had purchased it from a ‘pub, bar or club’ in 2014 (Table 7.14). The proportion purchasing ecstasy from a ‘pub/bar/club’ increased from 13% in 2009 to 21% in 2014 ( $p=0.0062$ ). The proportion of frequent drug users who purchased ecstasy from the internet increased from <1% in 2011 to 10% in 2014.

**Table 7 13: Location from which ecstasy purchased in the past six months by combined frequent drug users, 2009-2014**

	2009	2010	2011	2012	2013	2014
Location (%)	Combined modules (n=139)	Combined modules (n=184)	Combined modules (n=187)	Combined modules (n=164)	Combined modules (n=134)	Combined modules (n=115)
Private house	83	82	68	85	75	88
Agreed public location	23	33	31	30	29	29
Pub/bar/club	13	17	33	31	29	21
Internet	0	2	<1	4	7	10
Public area (e.g. park)	2	9	10	11	19	9
Educational institute	0	4	12	2	7	9
Street market	5	4	6	8	5	7
Work	3	6	7	8	4	4
'Tinny' house	3	3	3	6	5	3

## Types of sellers of ecstasy

Seventy-eight percent of the frequent drug users had purchased ecstasy from a 'friend', 61% had purchased from a 'social acquaintance', and 41% from a 'drug dealer' in 2014 (Table 7.15). The proportion who had purchased ecstasy from a 'partner/family member' declined from 8% in 2009 to 3% in 2014 ( $p=0.0071$ ). The proportion of frequent drug users who had purchased ecstasy from a 'friend' increased from 63% in 2013 to 78% in 2014 ( $p=0.0144$ ).

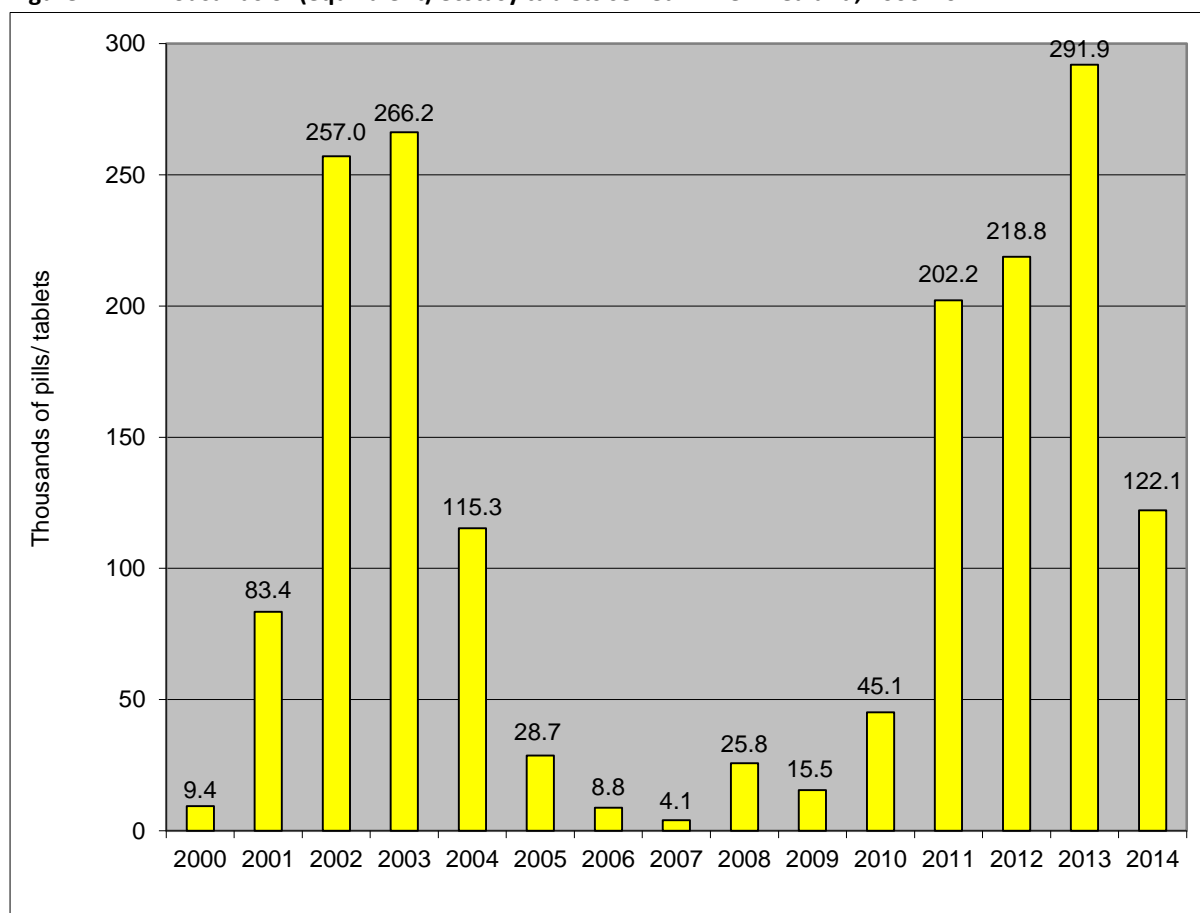
**Table 7 14: People from whom ecstasy purchased in the past six months by combined frequent drug users, 2009-2014**

	2009	2010	2011	2012	2013	2014
Type of person (%)	Combined modules (n=140)	Combined modules (n=189)	Combined modules (n=185)	Combined modules (n=165)	Combined modules (n=136)	Combined modules (n=115)
Friend	79	76	77	70	63	78
Social acquaintance	40	51	46	52	53	61
Drug dealer	50	38	38	46	51	41
Gang member/associate	9	6	8	10	6	5
Partner/family member	8	12	8	11	5	3

## 7.9 Seizures of ecstasy

Seizures of ecstasy made by the New Zealand Police and New Zealand Customs Service increased dramatically from 2001 onwards and remained high until 2004. Ecstasy seizures then declined to a low level for the next five years (Figure 7.21). MDMA became difficult to obtain during this time and seizures of 'ecstasy' were increasing found to contain a range of substitute compounds. There was a dramatic increase in seizures of these 'ecstasy' substitutes in 2011 and 2012 following a number of New Zealand Police and New Zealand Customs Service operations against local 'ecstasy' syndicates. For example, 111,881 tablets were seized in one operation against an Auckland based syndicate in late 2011 (NDIB, 2013). Large seizures of 'ecstasy' powders and pills were made at the border in 2013 by the New Zealand Customs Service (NDIB, 2014). In 2014, seizures by Customs continued to account for the majority of total ecstasy seized, and it has been suggested that this illustrates the emerging role of on-line drug markets (NDIB, 2015). The total quantity of ecstasy seized in 2014 was 58% lower than the total quantity seized in 2013.

**Figure 7 21: Thousands of (equivalent) ecstasy tablets seized in New Zealand, 2000-2014**



Source: NDIB, 2015

## 7.10 Summary of ecstasy trends

- The proportion of frequent drug users who thought their ecstasy contained 'nothing or almost nothing' increased from 9% in 2013 to 24% in 2014
- The current availability of ecstasy was reported to be 'easy/difficult' in 2014
- Overall, there was a small decline the current availability of ecstasy from 2006 to 2014, with a more substantial decline previously reported from 2012 to 2013
- The current availability of ecstasy in Christchurch had previously been declining from 2006 to 2013, but there was a sharp increase in availability from 2013 to 2014
- Similarly, the current availability of ecstasy in Wellington had previously been declining from 2006 to 2013, but there was some increase in availability from 2013 to 2014
- In contrast, the current availability of ecstasy in Auckland declined from 2006 to 2014, with a further decline from 2013 to 2014
- The median price of a tablet of ecstasy was \$40 in 2014
- The mean price of a tablet of ecstasy declined from \$59 in 2006 to \$42 in 2014
- The mean price of a tablet of ecstasy declined from 2006 to 2014 in Auckland (from \$52 to \$39), Wellington (\$63 to \$42) and Christchurch (\$66 to \$44)
- The frequent drug users in Christchurch were more likely to say the price of ecstasy was declining from 2013 to 2014
- The strength of ecstasy declined from 2006 to 2012, and then recovered in 2013 and 2014
- The strength of ecstasy has increased sharply in Christchurch in recent years
- An increasing proportion of frequent drug users said 'more' people were using ecstasy from 2009 to 2011; a lower proportion said 'more' people were using ecstasy from 2012 to 2014
- The frequent drug users in Christchurch reported a sharp rise in the number of people using ecstasy from 2013 to 2014
- The proportion of frequent drug users in Auckland who had purchased ecstasy weekly or more often declined from 46% in 2010 to 4% in 2014

- The proportion of frequent drug users from Wellington who had purchased ecstasy weekly or more often also decreased from 19% in 2013 to 7% in 2014
- In contrast, the proportion of frequent drug users from Christchurch who had purchased ecstasy weekly or more often increased dramatically from 2% in 2013 to 30% in 2014
- The proportion of frequent drug users who were able to purchase ecstasy in one hour or less had previously increased from 19% in 2006 to 34% in 2009, before decreasing to 20% in 2013 and 27% in 2014
- The proportion of frequent drug users in Christchurch who could purchase ecstasy in one hour or less increased sharply from 12% in 2013 to 39% in 2014
- The proportion of frequent drug users in Wellington who could purchase ecstasy in one hour or less also increased from 17% in 2013 to 32% in 2014
- The proportion of frequent drug users who purchased ecstasy from the internet increased from <1% in 2011 to 10% in 2014
- While there was a 58% decline in the total quantity of ecstasy seized in 2014 compared to 2013, the amount seized in 2014 was still the next highest annual quantity seized since 2003



## 8. Cannabis

### 8.1 Introduction

Cannabis use is associated with a number of health and social problems, including respiratory illness, low educational achievement, mental illness, drug dependency and vehicle crashes (Room et al., 2010). Cannabis has been the most widely used illegal drug worldwide for many decades (UNODC, 2015b). However, the prevalence of cannabis use is still subject to fluctuations. For example, declines in cannabis use were found in a number of Western countries in the later 2010s, including Australia, the United Kingdom, Western Europe, the United States and New Zealand (AIHW, 2008, 2011; EMCDDA, 2009; Wilkins & Sweetsur, 2008). These declines were attributed to concerns about the health risks of smoking, the declining social acceptability of smoking, and the increase in the availability of synthetic stimulants (UNODC, 2012, 2013b).

The supply of cannabis in New Zealand is almost entirely met through domestic cultivation, either via outdoor cultivation or indoor cannabis growing operations (Wilkins et al., 2002a; Wilkins & Casswell, 2003; Yska, 1990). The retail black market for cannabis in New Zealand was estimated to have a value of \$131-\$190 million (NZD) per year in the mid-2000s (Wilkins & Casswell, 2002; Wilkins et al., 2005b). The principal enforcement operation against cannabis in New Zealand has been the annual cannabis crop eradication operations, and these operations achieved fairly high seizure rates (e.g. 26% in 2009) (Wilkins & Sweetsur, 2011). Analysis of the structure of the illegal market for cannabis in New Zealand indicates that many cannabis users receive their cannabis for 'free' during group consumption sessions, and that many heavy cannabis users finance their spending on cannabis through selling cannabis to others (Wilkins & Sweetsur, 2006). Cannabis is largely sold via personal social networks, but in New Zealand it is also available from semi-public drug houses, known as 'tinny' houses, and these are popular locations for adolescents purchasing cannabis (Wilkins et al., 2005a).

In recent years, a range of synthetic cannabinoid products have been sold in New Zealand and many other countries as 'legal alternatives' to natural cannabis (e.g. 'K2', 'Kronic', 'Spice') (UNODC, 2011, 2013a; Wilkins, et al., 2012b). Synthetic cannabinoid use has been found to be popular among groups subject to regular drug testing, including offenders on parole, those working in high accident risk industries, and those in mental health and drug treatment programmes (see Perrone et al., 2013).

The 2013 IDMS found some decline in the number of days the frequent methamphetamine users had used natural cannabis since 2010, and this suggests some users were substituting synthetic cannabinoid products for natural cannabis. The possibility that the emergence of synthetic cannabinoids was leading to lower levels of natural cannabis use and availability has been further highlighted by the findings from the 2014 NZ-ADUM. The proportion of police detainees who had used natural cannabis in the previous year declined from 76% in 2011 to 68% in 2014 (Wilkins, et al., 2015a). The proportion of detainees in Auckland Central who described the current availability of cannabis as 'very easy' declined from 58% in 2012 to 41% in 2014. The understanding that the emergence of synthetic cannabinoids is responsible for these impacts is supported by evidence of some recovery in the frequency of cannabis use following the banning of all synthetic cannabinoid products in May 2014 (up from 158 days in 2013 to 173 days in 2014).

## **8.2 Knowledge of cannabis trends**

Seventy-six percent of the frequent drug users interviewed for the 2014 IDMS (n=233) indicated they felt confident enough to comment on the price, strength and availability of cannabis in the previous six months. This included 77% of the frequent ecstasy users (n=81), 75% of the frequent methamphetamine users (n=74), and 76% of the frequent injecting drug users (n=78). The large number of respondents answering the cannabis section can mean small changes in variables can achieve statistical significance. Consequently, the reader is encouraged to note the magnitude of the variable change, as well as the statistical significance of the test, when interpreting the importance of reported changes. Note, the statistical tests are of the mean scores of variables to a number of decimal places, whereas the mean scores presented in the graphs and tables are rounded to one decimal place only.

## **8.3 Availability of cannabis**

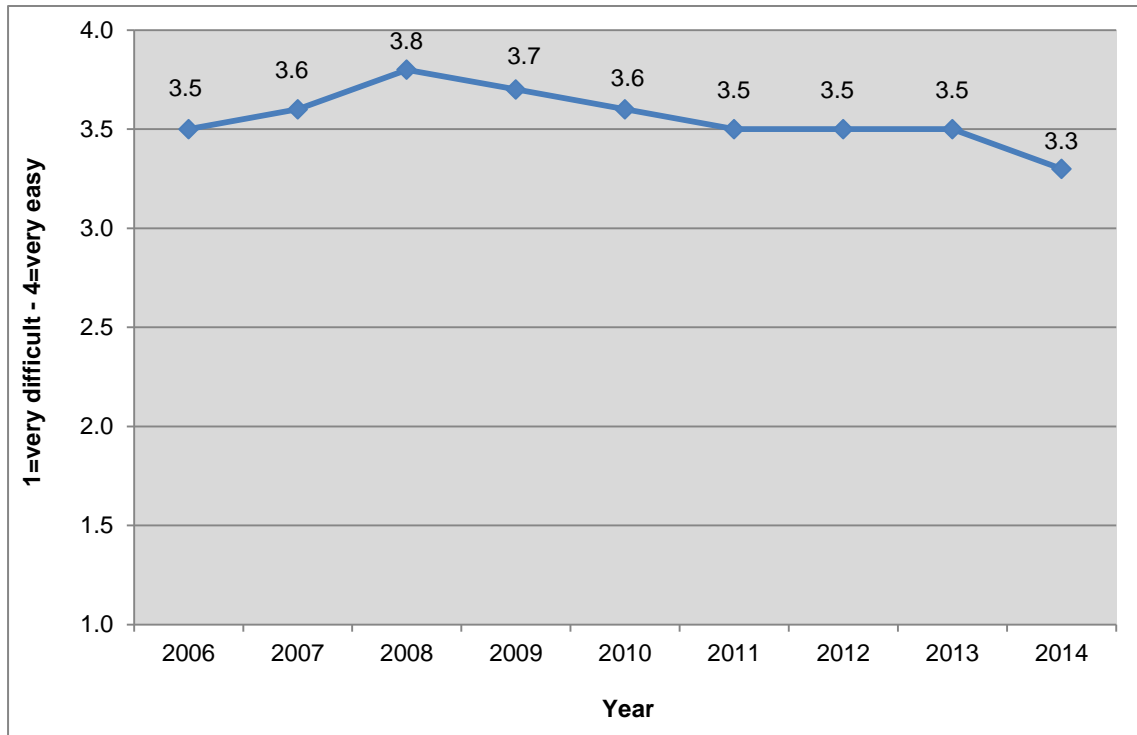
### **Current availability of cannabis**

The current availability of cannabis was reported to be 'very easy/easy' in 2014 (Table 8.1). Forty-five percent of the frequent drug users described the current availability of cannabis as 'very easy'. Overall, the current availability of cannabis declined slightly from 2006 to 2014 ( $p < 0.0001$ ), including a fairly sharp decline from 2013 to 2014 (down from 3.5 to 3.3,  $p < 0.0001$ ) (Figure 8.1).

**Table 8 1: Current availability of cannabis by combined frequent drug users, 2006-2014**

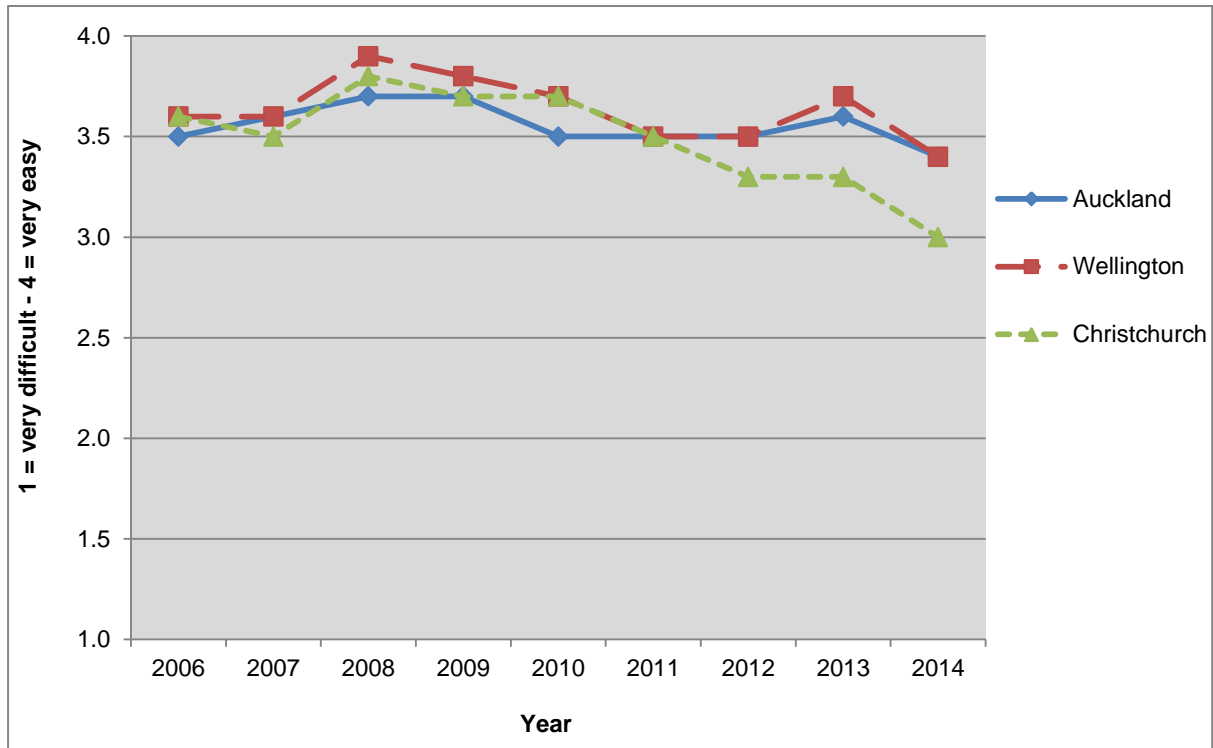
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current availability of cannabis (%)	Combined modules (n=276)	Combined modules (n=263)	Combined modules (n=318)	Combined modules (n=245)	Combined modules (n=344)	Combined modules (n=323)	Combined modules (n=280)	Combined modules (n=258)	Combined modules (n=231)
Very easy [4]	60%	64%	82%	73%	69%	56%	59%	62%	45%
Easy [3]	36%	30%	16%	23%	27%	38%	30%	31%	40%
Difficult [2]	4%	5%	3%	3%	3%	5%	10%	7%	15%
Very difficult [1]	0%	1%	0%	0%	1%	2%	1%	1%	1%
Average availability score (1=very difficult – 4=very easy)	3.5	3.6	3.8	3.7	3.6	3.5	3.5	3.5	3.3
Overall current status	Very easy/easy	Very easy/easy	Very easy	Very easy	Very easy/easy	Very easy/easy	Very easy/easy	Very easy/easy	Very easy/easy

**Figure 8 1: Current availability of cannabis by combined frequent drug users, 2006-2014**



In 2014, the current availability of cannabis was reported to be lower in Christchurch than in Auckland (3.0 vs. 3.4,  $p=0.0155$ ), and lower in Christchurch than in Wellington (3.0 vs. 3.4,  $p=0.0088$ ). There was a decrease in the current availability of cannabis in Auckland from 2013 to 2014 (down from 3.6 to 3.4,  $p=0.0436$ ). There was also a decrease in the current availability of cannabis in Wellington from 2006 to 2014 (down from 3.6 to 3.4,  $p=0.0186$ ), and from 2013 to 2014 (down from 3.7 to 3.4,  $p=0.0159$ ). Finally, there was also a decrease in the current availability of cannabis in Christchurch from 2006 to 2014 (down from 3.6 to 3.0,  $p<0.0001$ ), and from 2013 to 2014 (down from 3.3 to 3.0,  $p=0.0058$ ) (Figure 8.2).

Figure 8 2: Current availability of cannabis by combined frequent drug users by location, 2006-2014



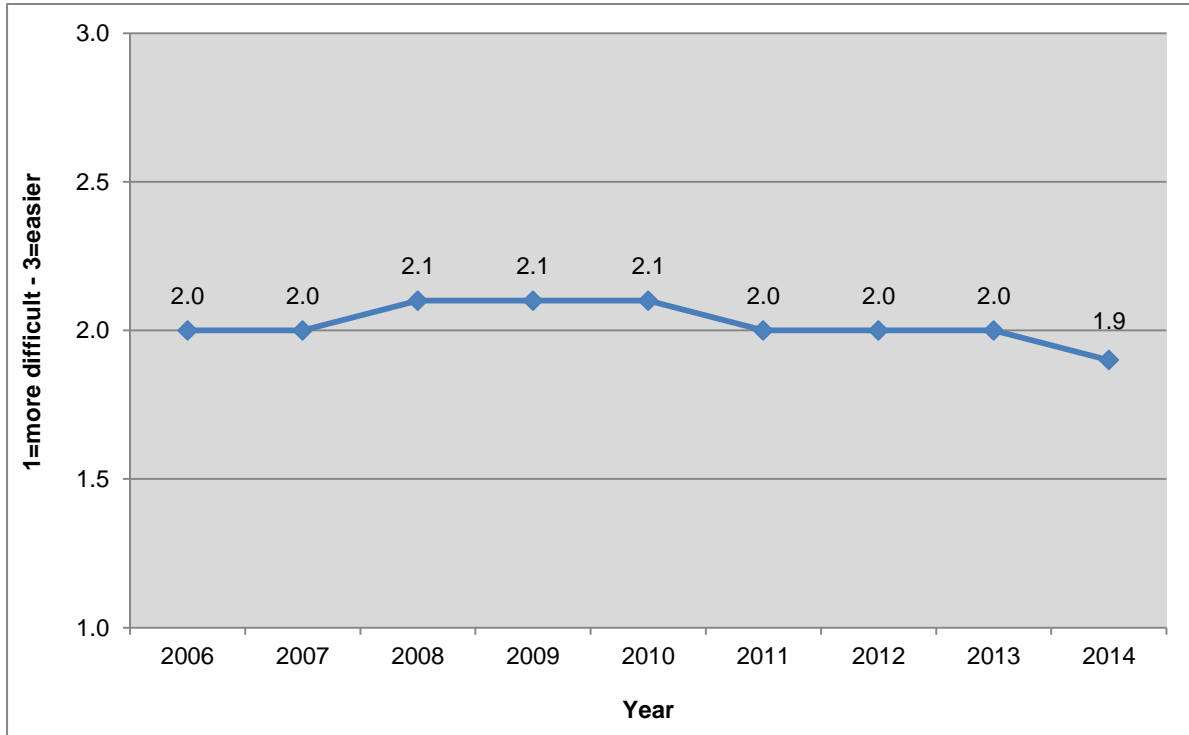
### Change in availability of cannabis

The frequent drug users reported the availability of cannabis had been 'stable/fluctuating' over the previous six months in 2014 (Table 8.2). The availability of cannabis was slightly more likely to be described as declining from 2006 to 2014 (down from 2.0 to 1.9,  $p=0.0135$ ) (Figure 8.3).

**Table 8 2: Change in availability of cannabis by combined frequent drug users, 2006-2014**

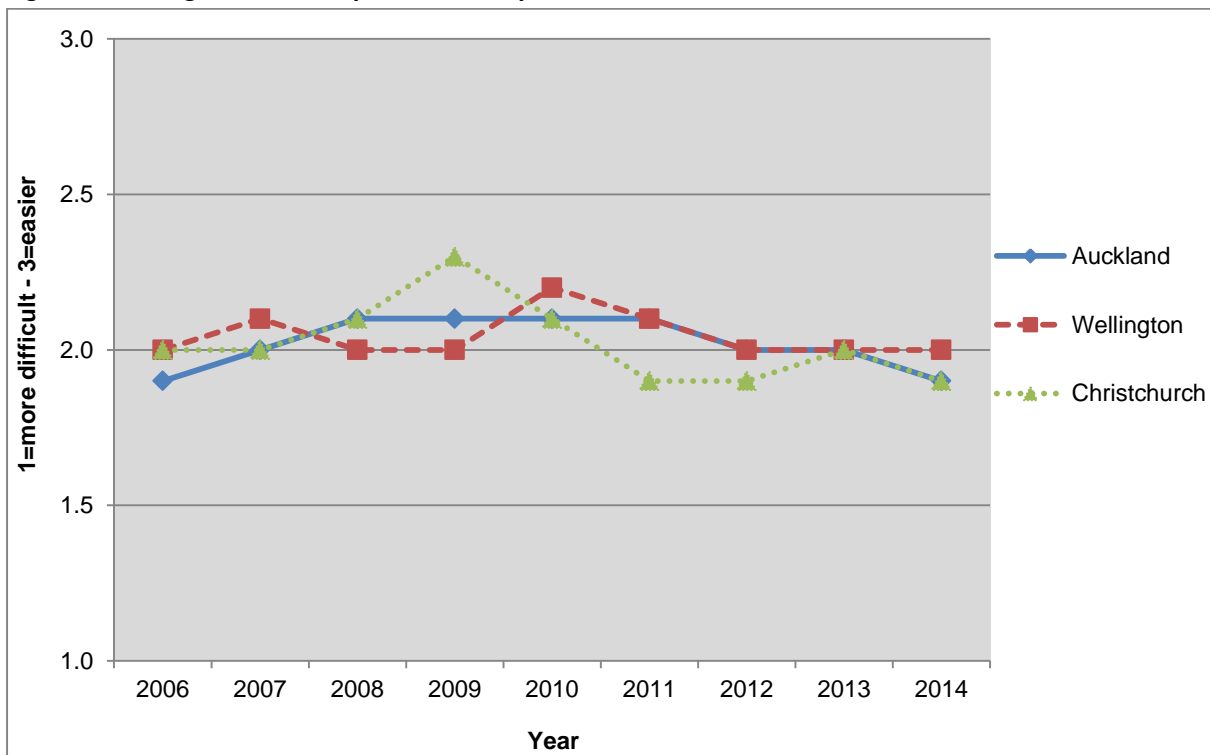
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in availability of cannabis (%)	Combined modules (n=274)	Combined modules (n=261)	Combined modules (n=318)	Combined modules (n=242)	Combined modules (n=337)	Combined modules (n=311)	Combined modules (n=279)	Combined modules (n=257)	Combined modules (n=226)
Easier [3]	7%	11%	14%	18%	16%	16%	13%	9%	8%
Stable [2]	68%	72%	71%	66%	67%	61%	61%	70%	58%
Fluctuates [2]	16%	8%	9%	10%	11%	12%	12%	12%	19%
More difficult [1]	9%	9%	6%	5%	6%	12%	14%	10%	15%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	1.9
Overall recent change	Stable/ fluctuates	Stable	Stable	Stable/ easier	Stable/ easier	Stable/ easier	Stable/ more difficult	Stable	Stable/ fluctuates

**Figure 8 3: Change in availability of cannabis by combined frequent drug users, 2006-2014**



The availability of cannabis was more likely to be reported as declining in Christchurch from 2006 to 2014 (down from 2.0 to 1.9,  $p=0.0009$ ), and from 2013 to 2014 (down from 2.0 to 1.9,  $p=0.0307$ ) (Figure 8.4).

**Figure 8 4: Change in availability of cannabis by location, 2006-2014**



## 8.4 Price of cannabis

### Current price of cannabis

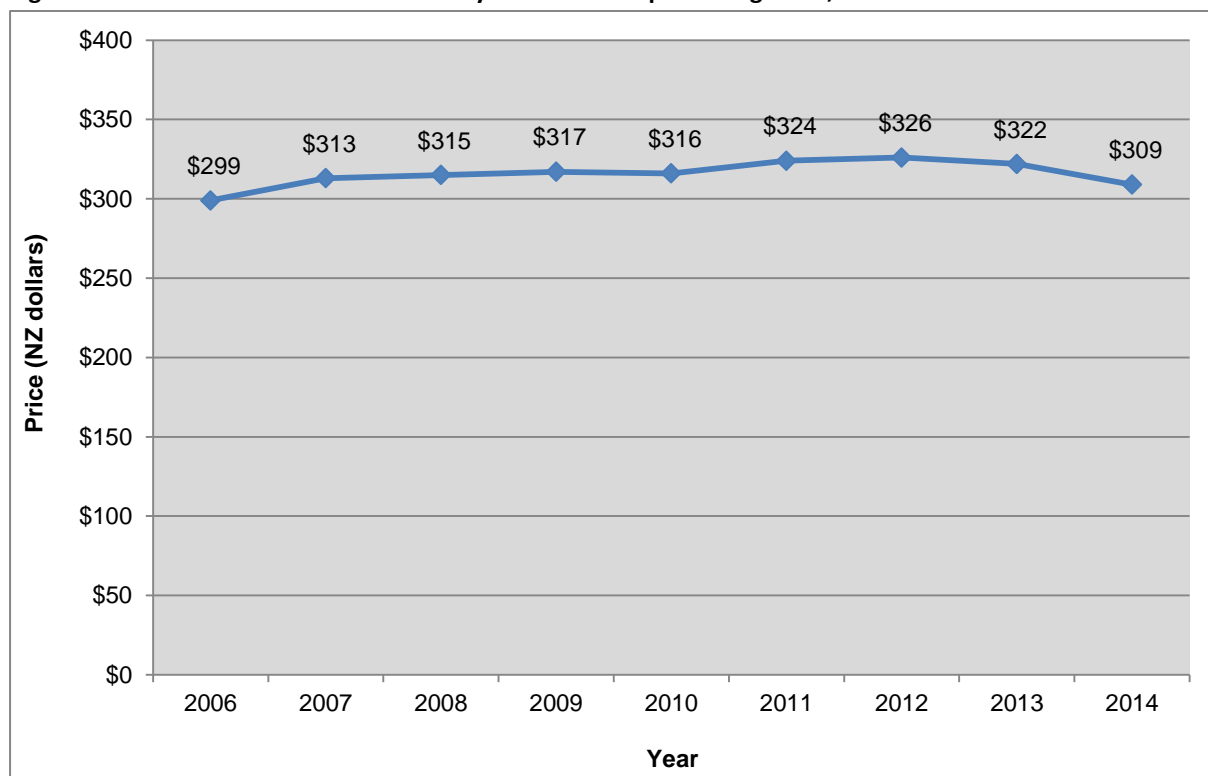
The current median price of a 'tinny' of cannabis (approximately 1.5 grams) was \$20 in 2014, and the median price of an ounce of cannabis (approximately 28 grams) was \$340 in 2014 (Table 8.3). There was no statistically significant change in the mean price of a 'tinny' of cannabis from 2006 to 2014 ( $p=0.7755$ ). There was a small increase in the mean price of an ounce of cannabis over the past nine years, from \$299 in 2006 to \$309 in 2014 ( $p=0.0007$ ) (Figure 8.5). The mean price of a pound of cannabis increased from \$3,046 in 2006 to \$3,492 in 2014, and this increase was very close to being statistically significant ( $p=0.0587$ ).



**Table 8 3: Current price of cannabis (NZD) by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current price of cannabis (\$)</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>
Number with knowledge	n=229	n=207	n=281	n=195	n=306	n=293	n=248	n=229	n =207
Median (mean) price for a 'tinny/foil' (1.5 grams)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$21)
Number with knowledge	n=175	n=101	n=111	n=101	n=135	n=157	n=161	n=115	n=107
Median (mean) price for an ounce (28 grams)	\$300 (\$299)	\$300 (\$313)	\$300 (\$315)	\$325 (\$317)	\$300 (\$316)	\$350 (\$324)	\$350 (\$326)	\$320 (\$322)	\$340 (\$309)
Number with knowledge	-	-	n=33	n=24	n=26	n=36	n=40	n=30	n=36
Median (mean) price for an pound (16 ounces)	-	-	\$3000 (\$3046)	\$3500 (\$3389)	\$3000 (\$2832)	\$3000 (\$3020)	\$3500 (\$3587)	\$4000 (\$4079)	\$3500 (\$3492)

**Figure 8 5: Price of an ounce of cannabis by combined frequent drug users, 2006-2014**

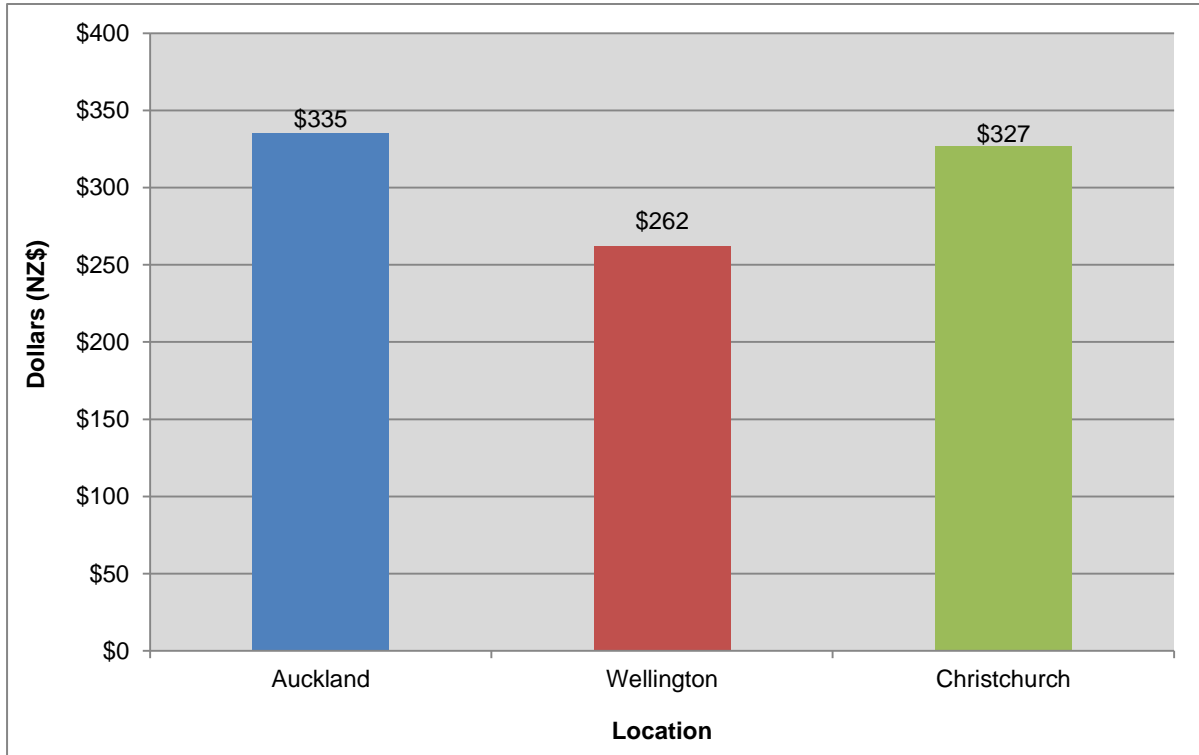


The mean price of an ounce of cannabis was higher in Auckland than in Wellington (\$335 vs. \$262,  $p < 0.0001$ ) and higher in Christchurch than in Wellington (\$327 vs. \$262,  $p < 0.0001$ ) (Table 8.4 and Figure 8.6).

**Table 8 4: Current median (mean) price for cannabis (NZD) by location, 2014**

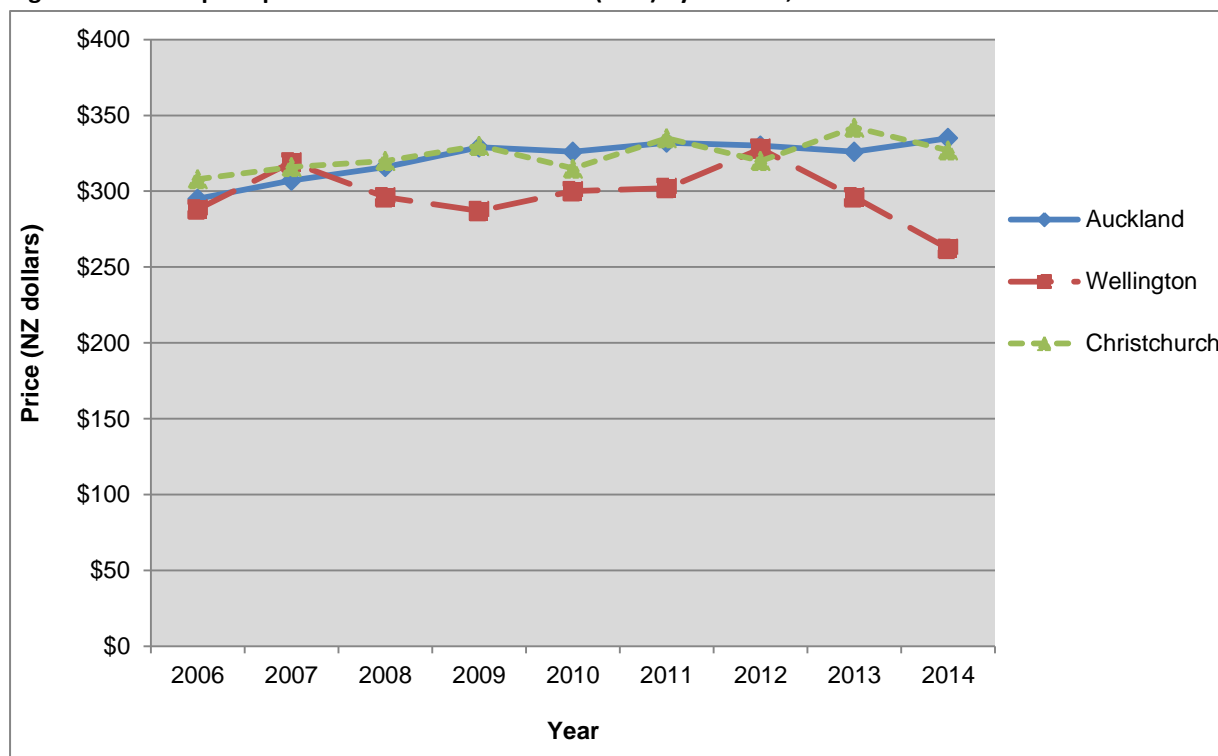
Current price of cannabis	Auckland	Wellington	Christchurch
<b>Number with knowledge</b>	<b>n=85</b>	<b>n=57</b>	<b>n=65</b>
Median (mean) price for a 'tinny/foil' (1.5 grams)	\$20 (\$20)	\$20 (\$20)	\$20 (\$21)
<b>Number with knowledge</b>	<b>n=42</b>	<b>n=27</b>	<b>n=38</b>
Median (mean) price for an ounce (28 grams)	\$350 (\$335)	\$300 (\$262)	\$350 (\$327)

**Figure 8 6: Mean price paid for an ounce of cannabis (NZD) by location, 2014**



The mean price of an ounce of cannabis increased in Auckland from \$295 in 2006 to \$335 in 2014 ( $p < 0.0001$ ), and in Christchurch from \$308 in 2006 to \$327 in 2014 ( $p = 0.0002$ ) (Figure 8.7). The price of an ounce of cannabis in Christchurch decreased from \$342 in 2013 to \$327 in 2014, and this decrease was close to being statistically significant ( $p = 0.0837$ ). The mean price of an ounce of cannabis in Wellington decreased from \$296 in 2013 to \$262 in 2014, but this decrease was not statistically significant ( $p = 0.1317$ ).

Figure 8 7: Mean price paid for an ounce of cannabis (NZD) by location, 2006-2014



### Change in price of cannabis

Overall, the price of cannabis was reported to have been ‘stable’ in the past six months in 2014, and this had not changed from the previous nine years ( $p=0.5082$ ) (Table 8.5). Eighty-five percent of frequent drug users described the price of cannabis as ‘stable’ in 2014. The frequent drug users in Auckland were slightly more likely to describe the price of cannabis as ‘stable’ from 2006 to 2014 (up from 74% to 88%), and this increase was close to being statistically significant ( $p=0.0783$ ). A higher proportion of frequent drug users in Christchurch also thought the price of cannabis had been ‘stable’ from 2013 to 2014 (down from 2.2 to 2.1,  $p=0.0088$ ).

**Table 8 5: Change in the price of cannabis in the past six months by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Change in price of cannabis (%)</b>	<b>Combined modules (n=269)</b>	<b>Combined modules (n=253)</b>	<b>Combined modules (n=312)</b>	<b>Combined modules (n=241)</b>	<b>Combined modules (n=328)</b>	<b>Combined modules (n=315)</b>	<b>Combined modules (n=273)</b>	<b>Combined modules (n=255)</b>	<b>Combined modules (n=225)</b>
Increasing [3]	11%	9%	8%	6%	10%	10%	9%	9%	7%
Fluctuating [2]	10%	4%	7%	4%	6%	8%	2%	4%	7%
Stable [2]	75%	82%	84%	89%	81%	81%	88%	86%	85%
Decreasing [1]	4%	4%	1%	1%	3%	2%	1%	2%	<1%
Average change in price score (1=decreasing – 3=increasing)	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Overall recent change	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable

## 8.5 Strength of cannabis

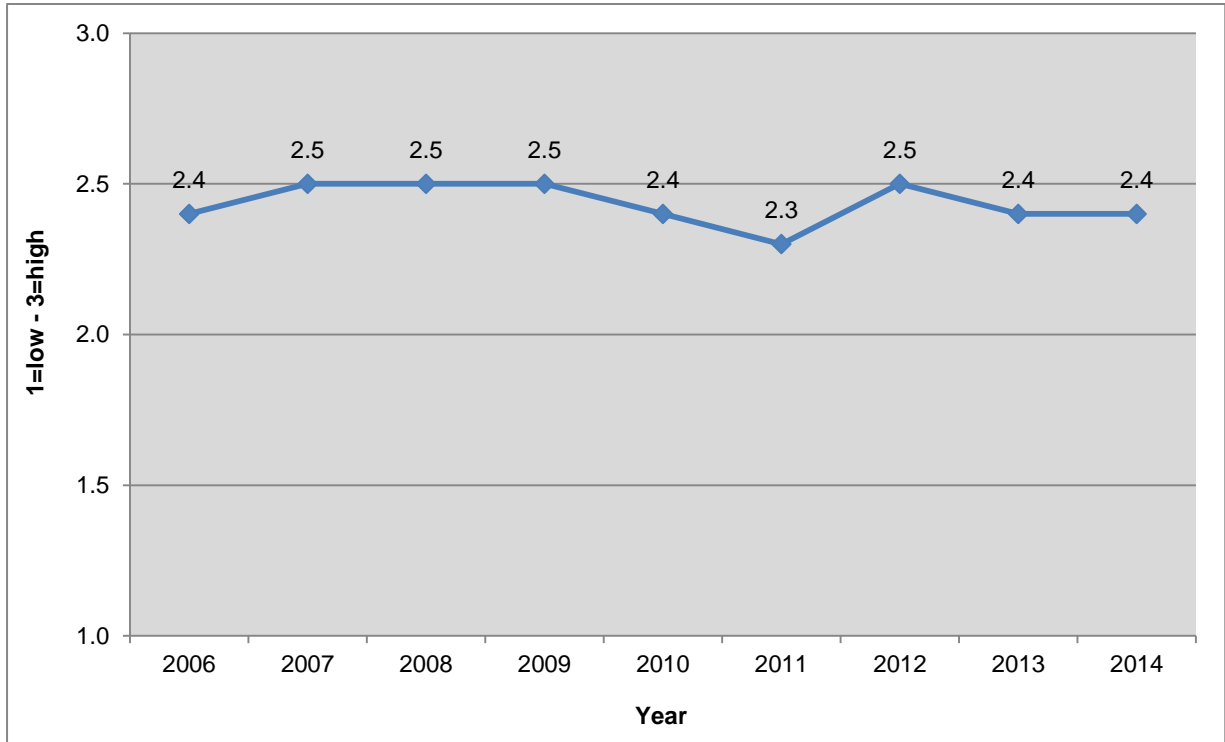
### Current strength of cannabis

The current strength of cannabis was reported to be 'high/ fluctuates' in 2014 (Table 8.6). There was a very small decline in the current strength of cannabis from 2006 to 2014 (down from 2.42 to 2.35,  $p=0.0016$ ).

**Table 8 6: Current strength of cannabis by combined frequent drug users, 2006-2014**

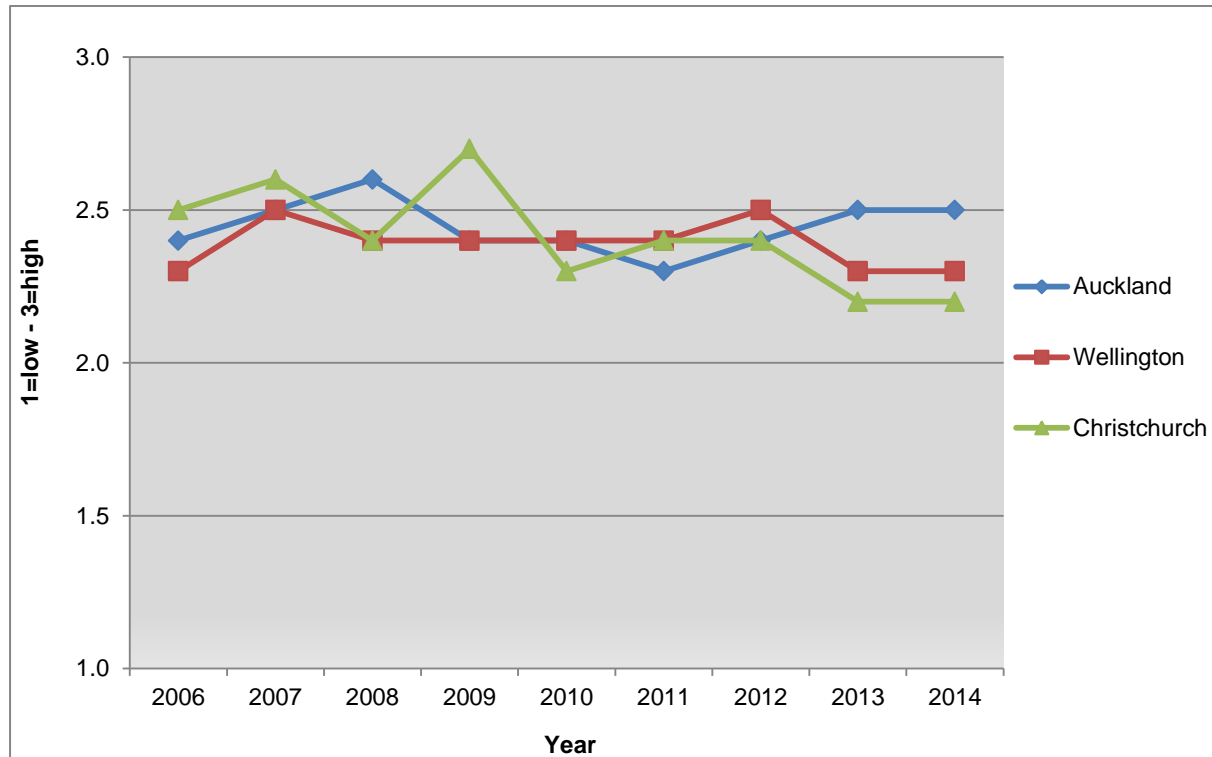
	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current strength of cannabis (%)</b>	<b>Combined modules (n=267)</b>	<b>Combined modules (n=258)</b>	<b>Combined modules (n=309)</b>	<b>Combined modules (n=240)</b>	<b>Combined modules (n=334)</b>	<b>Combined modules (n=306)</b>	<b>Combined modules (n=269)</b>	<b>Combined modules (n=250)</b>	<b>Combined modules (n=225)</b>
High [3]	46%	51%	49%	52%	37%	38%	48%	40%	37%
Medium [2]	17%	13%	21%	21%	23%	24%	26%	29%	25%
Fluctuates [2]	33%	33%	28%	26%	38%	35%	23%	29%	36%
Low [1]	4%	2%	2%	1%	2%	4%	3%	3%	2%
Average purity score (1=low – 3=high)	2.4	2.5	2.5	2.5	2.4	2.3	2.5	2.4	2.4
Overall current status	High/ fluctuating	High/ fluctuating	High/ fluctuating	High/ fluctuating	Fluctuating/ high	High/ fluctuating	High/ medium	High/medium/ fluctuates	High/ fluctuates

Figure 8 8: Mean score of the current strength of cannabis by combined frequent drug users, 2006-2014



The small decline in the strength of cannabis was most clearly reported in Christchurch from 2006 to 2014 (down from 2.5 to 2.2,  $p < 0.0001$ ) (Figure 8.9).

Figure 8 9: Mean score of the current strength of cannabis by location, 2006-2014



### Change in strength of cannabis

The strength of cannabis was reported to be 'stable/fluctuating' in the previous six months in 2014 (Table 8.7). An increasing proportion of the frequent drug users described the strength of cannabis as stable from 2006 to 2014 (down from 2.13 to 2.06,  $p=0.0462$ ), and from 2013 to 2014 (down from 2.12 to 2.06,  $p=0.0451$ ). Again, this increase in the proportion saying the strength of cannabis was stable was most clearly reported in Christchurch from 2006 to 2014 (down from 2.22 to 2.01,  $p=0.0143$ ) and from 2013 to 2014 (down from 2.1 to 2.01,  $p=0.0030$ ).



**Table 8 7: Change in strength of cannabis by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in strength of cannabis (%)	Combined modules (n=262)	Combined modules (n=254)	Combined modules (n=303)	Combined modules (n=240)	Combined modules (n=321)	Combined modules (n=292)	Combined modules (n=263)	Combined modules (n=248)	Combined modules (n=221)
Increasing [3]	18%	17%	14%	19%	16%	15%	14%	14%	8%
Stable [2]	46%	49%	45%	51%	45%	51%	61%	60%	60%
Fluctuating [2]	31%	30%	39%	26%	34%	30%	19%	24%	30%
Decreasing [1]	5%	4%	3%	4%	5%	4%	6%	2%	2%
Average change in purity score (1=decreasing – 3=increasing)	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1
Overall recent change	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating

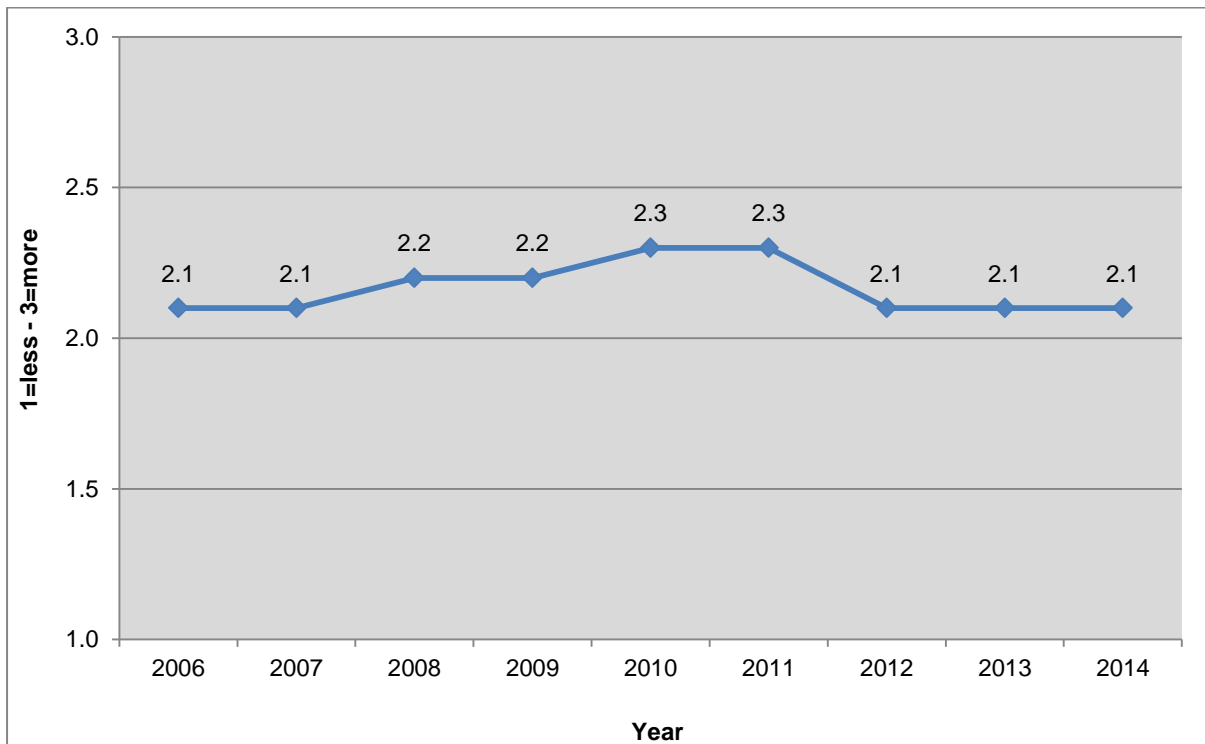
## 8.6 Perceptions of the number of people using cannabis

The number of people using cannabis was reported to be the ‘same’ in the previous six months in 2014 (Table 8.8). Overall, there was no statistically significant change in perceptions of the number of people using cannabis from 2006 to 2014, with the majority saying ‘the same’ number of people were using cannabis (Figure 8.10). Previously, there had been an increase in the proportion of frequent drug users who thought that ‘more’ people were using cannabis from 2006 to 2011 (up from 2.1 to 2.3,  $p < 0.0001$ ), followed by a lower proportion who thought ‘more’ people were using the drug from 2011 to 2012 (down from 2.3 to 2.1,  $p = 0.0038$ ).

**Table 8 8: Perceptions of the number of people using cannabis by combined frequent drug users, 2006-2014**

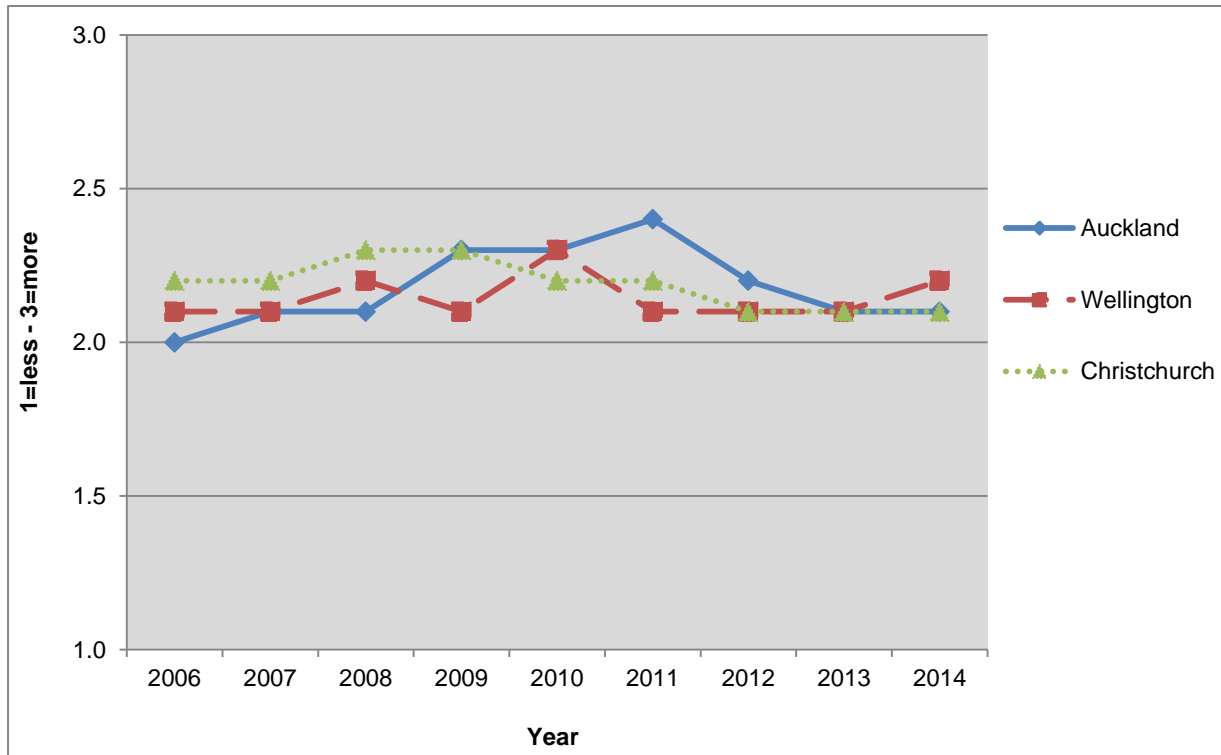
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of people using cannabis (%)	Combined modules (n=279)	Combined modules (n=261)	Combined modules (n=312)	Combined modules (n=244)	Combined modules (n=341)	Combined modules (n=320)	Combined modules (n=278)	Combined modules (n=259)	Combined modules (n=227)
More [3]	17%	22%	25%	26%	32%	35%	21%	23%	21%
Same [2]	73%	66%	68%	69%	61%	57%	71%	65%	70%
Less [1]	10%	11%	7%	4%	7%	8%	8%	12%	10%
Average number of people using score (1=less – 3=more)	2.1	2.1	2.2	2.2	2.3	2.3	2.1	2.1	2.1
Overall recent change	Same	Same/ more	Same/ more	Same/ more	Same/ more	Same/ more	Same	Same/ more	Same

Figure 8 10: Perceptions of the number of people using cannabis by combined frequent drug users, 2006-2014



Overall, a slightly higher proportion of frequent drug users in Auckland said 'more' people were using cannabis over the past nine years (up from 2.0 in 2006 to 2.1 in 2014,  $p=0.0204$ ), although there was no change from 2013 to 2014 (2.1 in both years,  $p=0.5388$ ) (Figure 8.11). Previously, a higher proportion of frequent drug users in Auckland said 'more' people were using cannabis from 2006 to 2011 (up from 2.0 to 2.4), followed by a lower proportion from 2011 to 2012 (down from 2.4 to 2.2,  $p=0.0018$ ).

Figure 8 11: Perceptions of the number of people using cannabis by location, 2006-2014



## 8.7 Purchase of cannabis

### Frequency of purchase of cannabis

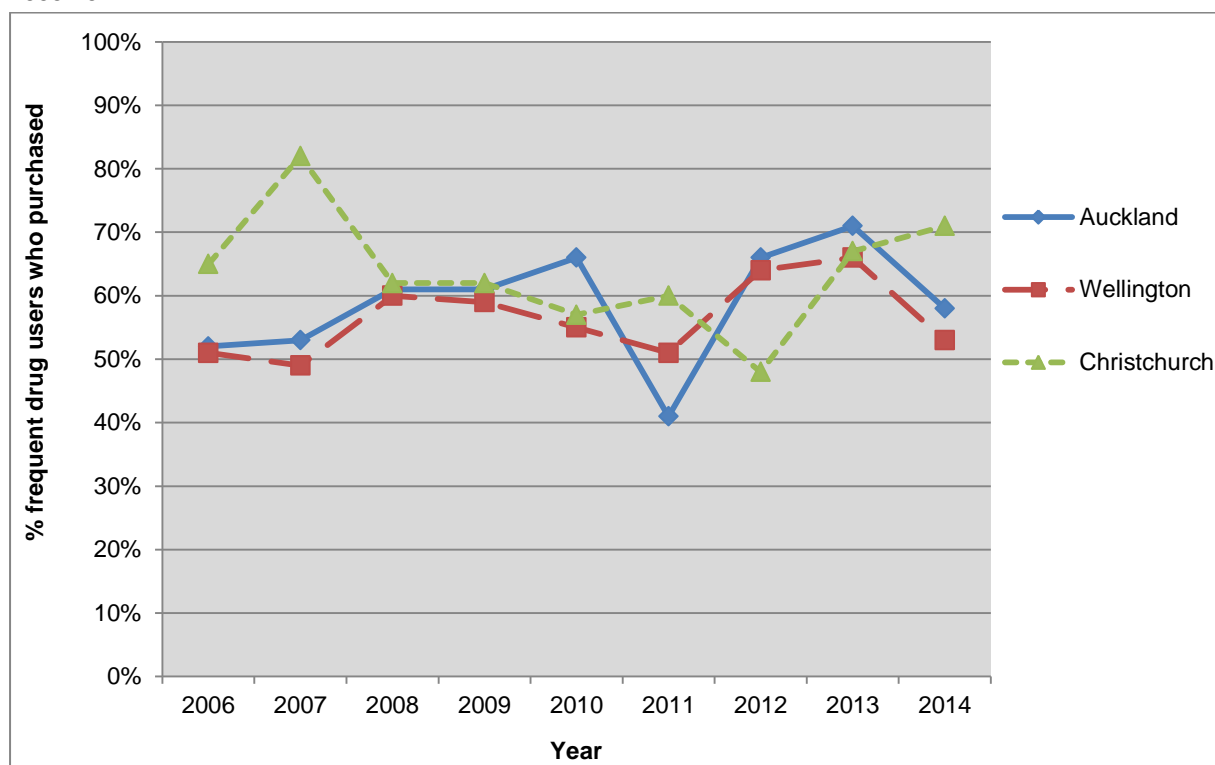
Eighty-three percent of the frequent drug users who answered the cannabis section had purchased cannabis in the past six months in 2014. Sixty-one percent of those who had purchased cannabis had done so weekly or more often in the previous six months in 2014 (Table 8.10).

**Table 8 9: Frequency of purchase of cannabis in past six months by combined frequent drug users, 2006-2014**

Frequency purchase in past six months (%)	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Combined modules (n=202)	Combined modules (n=202)	Combined modules (n=284)	Combined modules (n=193)	Combined modules (n=276)	Combined modules (n=254)	Combined modules (n=227)	Combined modules (n=226)	Combined modules (n=189)
1-2 times	14	13	9	8	12	18	11	10	11
3-4 times	7	6	9	10	9	9	4	8	4
Once per month	11	12	11	9	10	10	14	5	9
Twice per month	11	10	11	12	8	12	11	9	15
Once per week	27	28	27	30	22	17	19	27	31
2-3 times per week	16	17	22	22	20	21	19	27	15
4-5 times per week	5	4	5	4	5	5	8	5	6
Once per day	8	10	6	4	11	6	11	9	7
More than once per day	1	1	2	0	2	1	2	0.3	1

The proportion of frequent drug users in Auckland who purchased cannabis weekly or more often decreased from 71% in 2013 to 58% in 2014, and this decline was close to being statistically significant ( $p=0.0868$ ) (Figure 8.12). The proportion of frequent drug users in Auckland who purchased cannabis weekly or more often had previously declined from 66% in 2010 to 41% in 2011 ( $p=0.0002$ ), and then increased from 41% in 2011 to 66% in 2012 ( $p=0.0004$ ). The proportion of frequent drug users in Christchurch who purchased cannabis weekly or more often had previously declined from 65% in 2006 to 48% in 2012 ( $p=0.0034$ ), before increasing sharply from 48% in 2012 to 67% in 2013 ( $p=0.0115$ ) and 71% in 2014.

**Figure 8 12: Proportion of frequent drug users who purchased cannabis weekly or more often by location, 2006-2014**



### Dollar amount spent on cannabis

The frequent drug users reported spending a median of \$40 on cannabis on a typical occasion in the past six months in 2014 (mean \$61) (Table 8.11). The mean dollar amount spent on cannabis on a typical occasion decreased from \$117 in 2006 to \$61 in 2014 ( $p=0.0012$ ), and decreased from \$97 in 2013 to \$61 in 2014, with the latter decline close to being statistically significant ( $p=0.0860$ ).

**Table 8 10: Median (mean) dollar amount spent on cannabis (NZD) on typical occasion by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Amount spent on cannabis (\$)	Combined modules	Combined modules	Combined modules	Combined modules	Combined modules	Combined modules	Combined modules	Combined modules	Combined modules
Number with knowledge	n=202	n=202	n=280	n=192	n=266	n=251	n=228	n=228	n=192
Median (mean) amount spent	\$40 (\$117)	\$50 (\$118)	\$20 (\$70)	\$40 (\$95)	\$30 (\$112)	\$20 (\$86)	\$40 (\$83)	\$20 (\$97)	\$40 (\$61)

There was a decrease in the mean dollar amount spent on cannabis in Auckland (down from \$210 in 2006 to \$48 in 2014,  $p=0.0001$ ). There had previously been a decrease in the mean amount spent on cannabis in Christchurch from \$72 in 2012 to \$39 in 2013 ( $p=0.0009$ ), but this was followed by an increase from \$39 in 2013 to \$80 in 2014 ( $p=0.0006$ ).

### Time taken to purchase cannabis

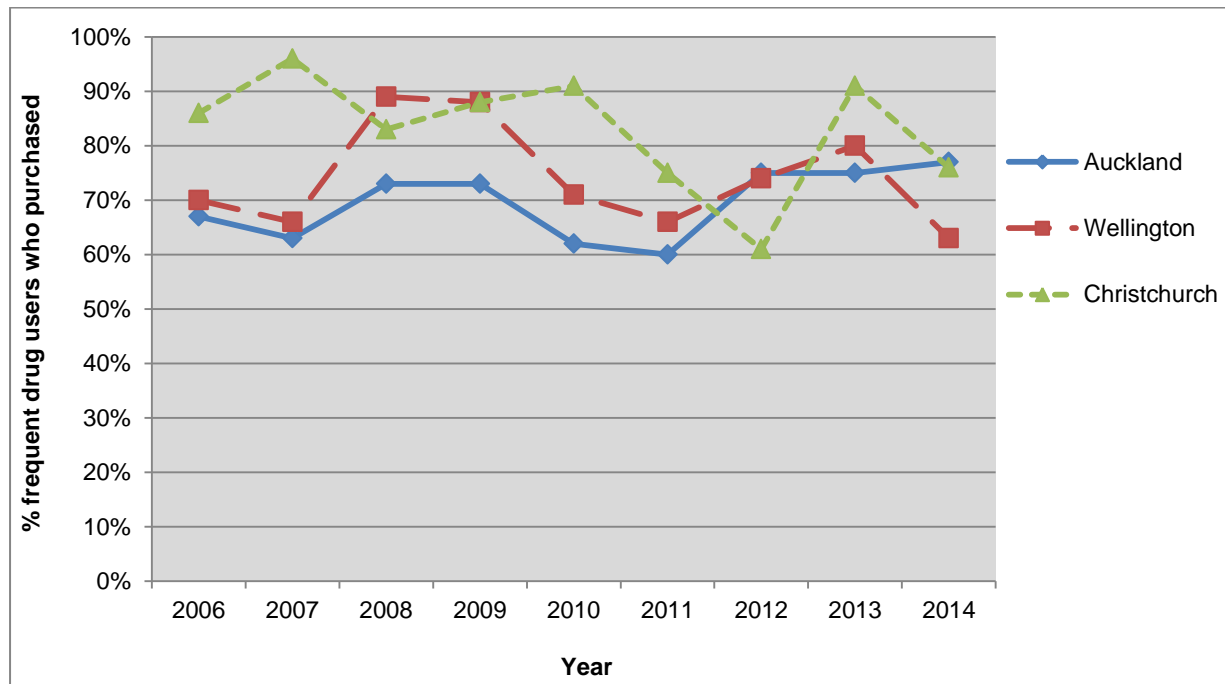
Seventy-two percent of the frequent drug users were able to purchase cannabis in one hour or less in the past six months in 2014 (Table 8.11). The proportion of frequent drug users who could purchase cannabis in one hour or less decreased from 82% in 2013 to 72% in 2014 ( $p=0.0241$ ). There had previously been an increase in the proportion who could purchase cannabis in one hour or less increased from 75% in 2006 to 82% in 2013 ( $p=0.0066$ ).

**Table 8 11: Time taken to purchase cannabis by combined frequent drug users, 2006-2014**

Time to purchase (%)	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Combined modules (n=203)	Combined modules (n=202)	Combined modules (n=283)	Combined modules (n=193)	Combined modules (n=272)	Combined modules (n=250)	Combined modules (n=227)	Combined modules (n=226)	Combined modules (n=189)
Weeks	0	0	0	0	1	1	1	0	0
Days	4	4	1	3	2	3	5	4	4
About one day	7	6	6	8	10	12	11	6	6
Hours	14	17	11	7	14	17	13	8	17
1 Hour	30	26	28	29	19	26	25	38	36
Less than 20 mins	45	47	53	53	55	41	45	44	36

The proportion of frequent drug users in Christchurch who could purchase cannabis in one hour or less had previously declined from 86% in 2006 to 61% in 2012 ( $p<0.0001$ ) (Figure 8.13). The proportion then increased sharply from 61% in 2012 to 91% in 2013 ( $p<0.0001$ ), before decreasing again from 91% in 2013 to 76% in 2014 ( $p=0.0099$ ). The proportion of frequent drug users in Wellington who could purchase cannabis in one hour or less also decreased from 80% in 2013 to 63% in 2014, and this was close to being statistically significant ( $p=0.0938$ ).

**Figure 8 13: Proportion of frequent drug users who could purchase cannabis in one hour or less by location, 2006-2014**



### Location of purchase of cannabis

In 2014, 77% of the frequent drug users had purchased cannabis from a ‘private house’, 51% from a ‘tinny house’, and 36% from an ‘agreed public location’ (Table 8.13). A higher proportion of the frequent drug users purchased cannabis from an ‘agreed public location’ (up from 29% in 2009 to 36% in 2014,  $p=0.0308$ ) and from a ‘public area like a park’ (up from 13% in 2009 to 25% in 2014,  $p<0.0001$ ). The proportion who purchased cannabis from a ‘street drug market’ also increased from 12% in 2009 to 15% in 2014 ( $p=0.0260$ ).



**Table 8 12: Location from which cannabis purchased in the past six months by combined frequent drug users, 2009-2014**

	2009	2010	2011	2012	2013	2014
Location (%)	Combined modules (n=193)	Combined modules (n=267)	Combined modules (n=249)	Combined modules (n=225)	Combined modules (n=228)	Combined modules (n=187)
Private house	85	79	72	86	82	77
'Tinny' house	44	51	38	46	49	51
Agreed public location	29	29	29	38	33	36
Public area (e.g. park)	12	12	15	24	27	25
Street drug market	12	8	13	21	13	15
Educational institute	2	6	7	8	8	12
Pub/bar/club	10	12	9	14	17	12
Work	11	7	11	8	9	10
Internet	1	2	2	6	3	2

### Types of sellers of cannabis

In 2014, 75% of the frequent drug users had purchased cannabis from a 'friend', 65% had purchased from a 'drug dealer' and 56% had purchased from a 'social acquaintance' (Table 8.13). The proportion of frequent drug users who had purchased cannabis from a 'gang member or gang associate' increased from 19% in 2009 to 34% in 2014 ( $p < 0.0001$ ). A lower proportion of frequent drug users had purchased cannabis from a 'partner or family member' (down from 21% in 2013 to 13% in 2014,  $p = 0.0487$ ).

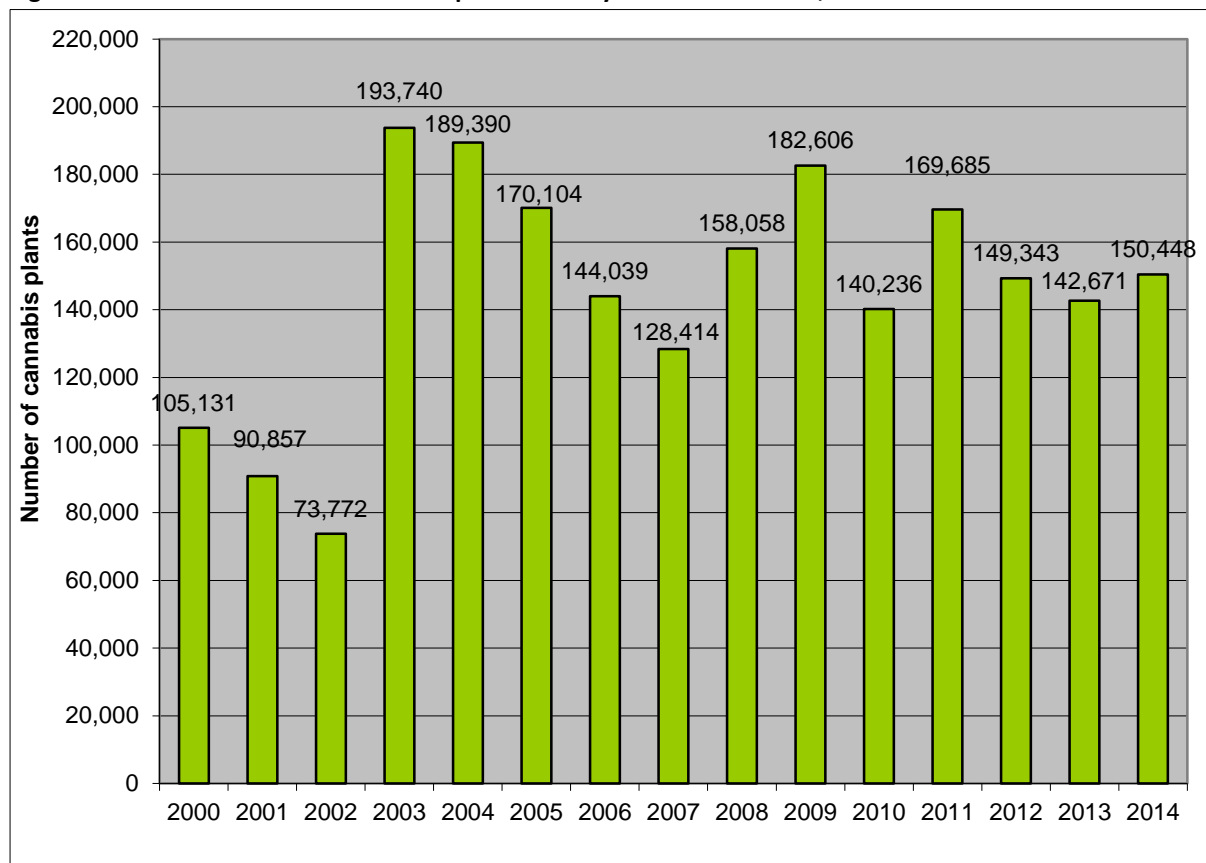
**Table 8 13: People from whom cannabis purchased in the past six months by combined frequent drug users, 2009-2014**

	2009	2010	2011	2012	2013	2014
Type of person (%)	Combined modules (n=1193)	Combined modules (n=265)	Combined modules (n=248)	Combined modules (n=226)	Combined modules (n=226)	Combined modules (n=188)
Friend	74	73	74	79	71	75
Drug dealer	67	55	45	63	61	65
Social acquaintance	46	54	45	55	57	56
Gang member/associate	19	25	21	27	35	34
Partner/family member	19	23	18	22	21	13

## 8.8 Seizures of cannabis plants

There was a dramatic increase in the number of cannabis plants seized in 2003 compared to the previous three years (Figure 8.14). The number of cannabis plants destroyed then declined steadily until 2007, before a return to previous levels in the following two years. In more recent years, the annual cannabis crop recovery operation has developed a greater focus on organised criminal groups involved in cannabis cultivation and related criminal offending, and is now known as the 'National Cannabis and Crime Operation' (NCCO). In 2014, a total of 150,448 cannabis plants were destroyed, including 126,110 plants during the 2014 NCCO (NDIB, 2015). The NCCO operation also seized 72 kilograms of cannabis leaf and head (NDIB, 2015).

**Figure 8 14: Annual number of cannabis plants destroyed in New Zealand, 2000-2014**



Source: NDIB, 2015

## 8.9 Summary of cannabis trends

- The current availability of cannabis was reported to be 'very easy/easy' in 2014
- Overall, the current availability of cannabis declined slightly from 2006 to 2014, including a sharp decline from 2013 to 2014
- The current availability of cannabis in Christchurch declined from 2006 to 2014, and sharply from 2013 to 2014
- The median price of a 'tinny' of cannabis was \$20, and the median price of an ounce of cannabis was \$340, in 2014
- The mean price of an ounce of cannabis increased slightly from \$299 in 2006 to \$309 in 2014
- The mean price of an ounce of cannabis increased in Auckland from \$295 in 2006 to \$335 in 2014, and in Christchurch from \$308 in 2006 to \$327 in 2014
- However, there were more recent declines in the price of an ounce of cannabis in Christchurch, down from \$342 in 2013 to \$327 in 2014, and in Wellington, down from \$296 in 2013 to \$262 in 2014
- The current strength of cannabis was described as 'high/fluctuates' in 2014
- The current strength of cannabis declined slightly in Christchurch from 2006 to 2014
- Overall, there was no change in perceptions of the number of people using cannabis from 2006 to 2014, with most saying the 'same' number of users
- The proportion of frequent drug users in Christchurch who purchased cannabis weekly or more often decreased from 65% in 2006 to 48% in 2012, before increasing sharply to 67% in 2013 and 71% in 2014
- The proportion of frequent drug users in Auckland who purchased cannabis weekly or more often declined from 66% in 2010 to 41% in 2011, and then increased to 66% in 2012, and declined again from 71% in 2013 to 58% in 2014
- The mean dollar amount spent on cannabis on a typical occasion declined from \$117 in 2006 to \$61 in 2014, and also from \$97 in 2013 to \$61 in 2014

- Seventy two percent of the frequent drug users could purchase cannabis in one hour or less in 2014
- The proportion of frequent drug users who could purchase cannabis in one hour or less decreased from 82% in 2013 to 72% in 2014
- An increasing proportion of frequent drug users purchased cannabis from public locations including 'agreed public locations' (up from 29% in 2009 to 36% in 2014), and from 'public areas like a park' (up from 13% in 2009 to 25% in 2014)
- The proportion of frequent drug users who purchased cannabis from a gang member increased from 19% in 2009 to 34% in 2014

## 9. LSD

### 9.1 Introduction

Lysergic acid diethylamide or LSD ('trips' or 'acid') is a hallucinogen which became popular in many Western countries during the 1960s. LSD is taken in minute amounts dissolved into everyday materials, such as small pieces of blotting paper (known as 'tabs'). While the use of LSD waned in many countries in the decades following the 1960s, it remained relatively popular in New Zealand up until the late 1990s, after which its use began to decline following the emergence of ecstasy and methamphetamine (Wilkins, et al., 2002b; Wilkins, et al., 2003).

In recent years, a number of synthetic hallucinogens have emerged around the world, such as the NBOMe family of compounds (e.g. 25I-NBOMe, 25C-NBOMe) (EMCDDA, 2014; UNODC, 2015b), which are often presumed by users to be LSD. These synthetic hallucinogens are generally sold on blotter tabs very similar to LSD and sometimes as 'legal alternatives' to LSD, or just misrepresented as LSD (EMCDDA, 2015a). However, NBOMe compounds are many times more potent than LSD (i.e. active in sub-milligram doses), and consequently it is much easier to unintentionally consume a high dose due to user or manufacturer ignorance (EMCDDA, 2015a; EMCDDA & Europol, 2013; EMCDDA & Europol, 2014, 2015). Users have also reported severe agitation and confusion including auditory and visual hallucinations, aggression and violent episodes (EMCDDA, 2014). Thirty-two non-fatal intoxications associated with 25I-NBOMe have been reported in Europe, of which 15 were confirmed by toxicological analysis (EMCDDA, 2014). Four deaths have been associated with 25I-NBOMe in Europe, of which two have been confirmed by toxicological analysis (EMCDDA, 2014).

NBOMe and other hallucinogens are available from encrypted 'dark websites' (e.g. Agora, Evolution) (EMCDDA, 2014), and this may be facilitating supply to Australia and New Zealand (Van Buskirk, et al., 2015). NBOMe class drugs are some of the most commonly sold NPS from dark websites (Van Buskirk, et al., 2014; Van Buskirk, et al., 2015). In New Zealand, there have been growing quantities of 'blotter tabs' seized at the border since 2013 (NDIB, 2015), and the ESR has confirmed the presence of NBOMe among recent drug seizures (ESR, 2014). The legal status of NBOMe compounds in New Zealand has been subject to a number of reviews (Rychert & Wilkins, 2015). Since mid-2013, NBOMe has been designated as a 'psychoactive substance' under the PSA, but it is currently being assessed for scheduling under MODA.

The 2012 and 2013 IDMS provided early indications of the emergence of new hallucinogens, such as NBOMe (Wilkins, et al., 2014a). Accordingly, the section of the IDMS interview on the LSD market was expanded to include 'LSD and *other synthetic psychedelics*'.

## **9.2 Knowledge of LSD and other synthetic psychedelics trends**

Twenty-six percent of the frequent drug users interviewed for the 2014 IDMS (n=77) indicated they felt confident enough to comment on the price, purity and availability of LSD in the previous six months. This included 47% of the frequent ecstasy users (n=49), 17% of the frequent methamphetamine users (n=15) and 13% of the frequent injecting drug users (n=13).

## **9.3 Availability of LSD and other synthetic psychedelics**

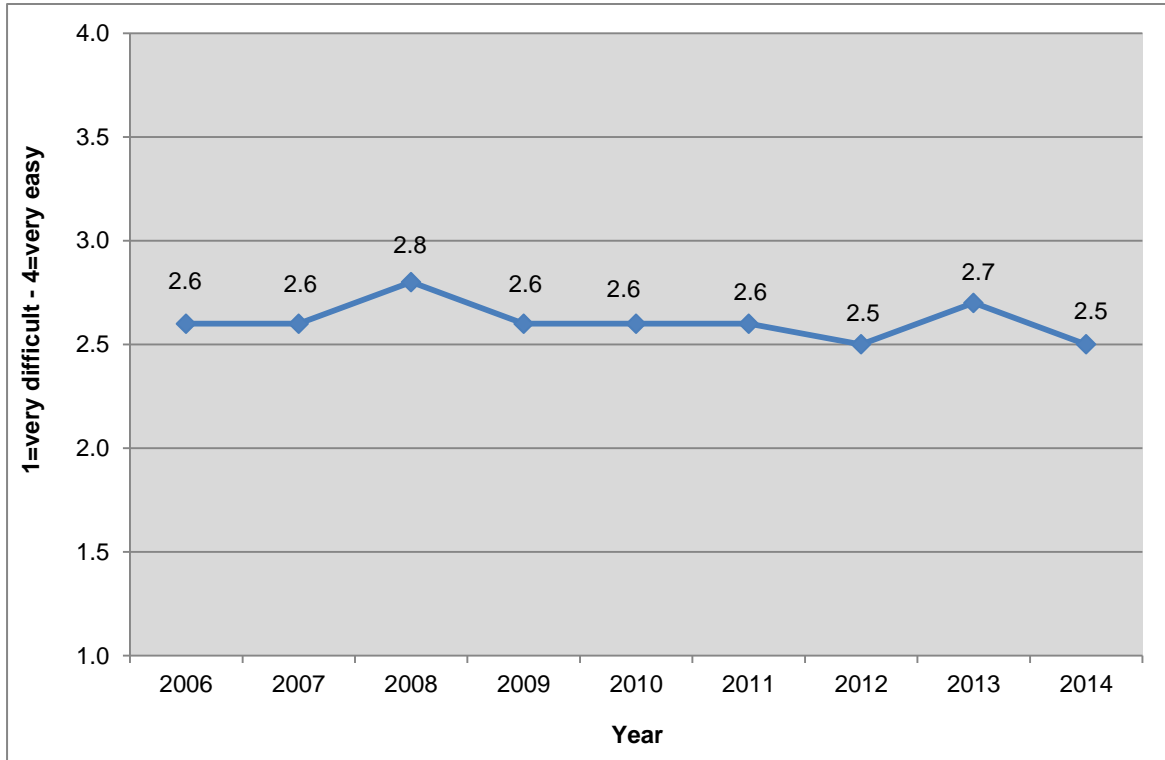
### **Current availability**

The frequent drug users reported the current availability of LSD was 'difficult/easy' in 2014 (Table 9.1). Forty-three percent said the current availability of LSD was 'difficult' while 42% said it was 'easy'. There was no statistically significant change in the current availability of LSD from 2006 to 2014 (Figure 9.1). However, the current availability of LSD decreased from 2013 to 2014 (down from 2.7 to 2.5,  $p=0.0338$ ).

**Table 9 1: Current availability of LSD by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current availability of LSD (%)	Combined modules (n=124)	Combined modules (n=102)	Combined modules (n=111)	Combined modules (n=97)	Combined modules (n=113)	Combined modules (n=93)	Combined modules (n=96)	Combined modules (n=88)	Combined modules (n=78)
Very easy [4]	9%	16%	19%	9%	12%	10%	13%	19%	6%
Easy [3]	46%	34%	48%	49%	43%	39%	33%	35%	42%
Difficult [2]	38%	42%	32%	36%	36%	48%	48%	43%	43%
Very difficult [1]	7%	8%	2%	7%	9%	2%	6%	3%	9%
Average availability score (1=very difficult – 4=very easy)	2.6	2.6	2.8	2.6	2.6	2.6	2.5	2.7	2.5
Overall current status	Easy/difficult	Difficult/easy	Easy/difficult	Easy/difficult	Easy/difficult	Difficult/easy	Difficult/easy	Difficult/easy	Difficult/easy

Figure 9 1: Mean score of the current availability of LSD by combined frequent drug users, 2006-2014



### Change in availability

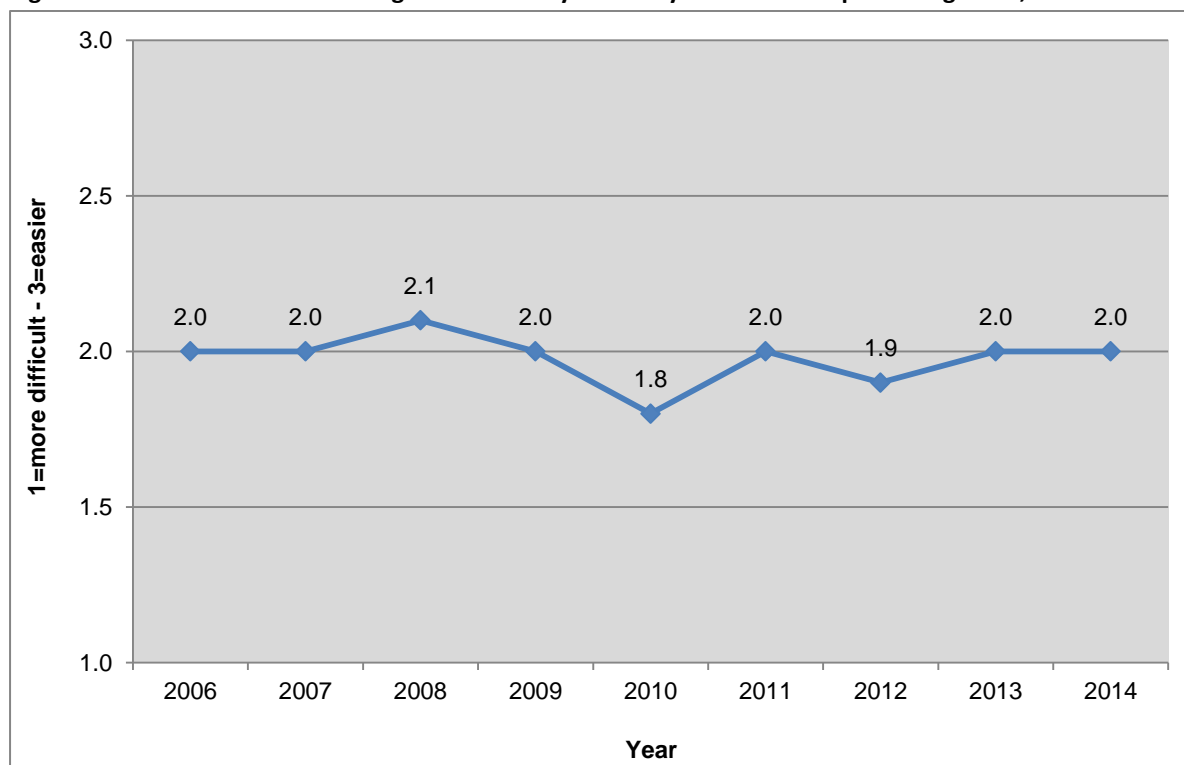
The frequent drug users described the availability of LSD as 'stable/fluctuates/more difficult' over the previous six months in 2014 (Table 9.2). Forty-eight percent said the availability of LSD had been 'stable' in 2014. There was no statistically significant change in the availability of LSD from 2006 to 2014 (Figure 9.2).



**Table 9 2: Change in availability of LSD by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in availability of LSD (%)	Combined modules (n=119)	Combined modules (n=96)	Combined modules (n=107)	Combined modules (n=90)	Combined modules (n=110)	Combined modules (n=94)	Combined modules (n=96)	Combined modules (n=81)	Combined modules (n=72)
Easier [3]	16%	20%	17%	24%	12%	17%	13%	17%	16%
Stable [2]	33%	41%	53%	41%	35%	45%	37%	52%	48%
Fluctuates [2]	32%	20%	20%	12%	25%	21%	27%	13%	18%
More difficult [1]	19%	20%	10%	23%	29%	18%	24%	19%	18%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.0	2.1	2.0	1.8	2.0	1.9	2.0	2.0
Overall recent change	Stable/ fluctuates	Stable/ easier	Stable/ fluctuates	Stable/ easier	Stable/ more difficult	Stable/ fluctuates	Stable/ fluctuates	Stable/ more difficult	Stable/ fluctuates/ More difficult

**Figure 9 2: Mean score of the change in availability of LSD by combined frequent drug users, 2006-2014**



## 9.4 Price of LSD and other synthetic psychedelics

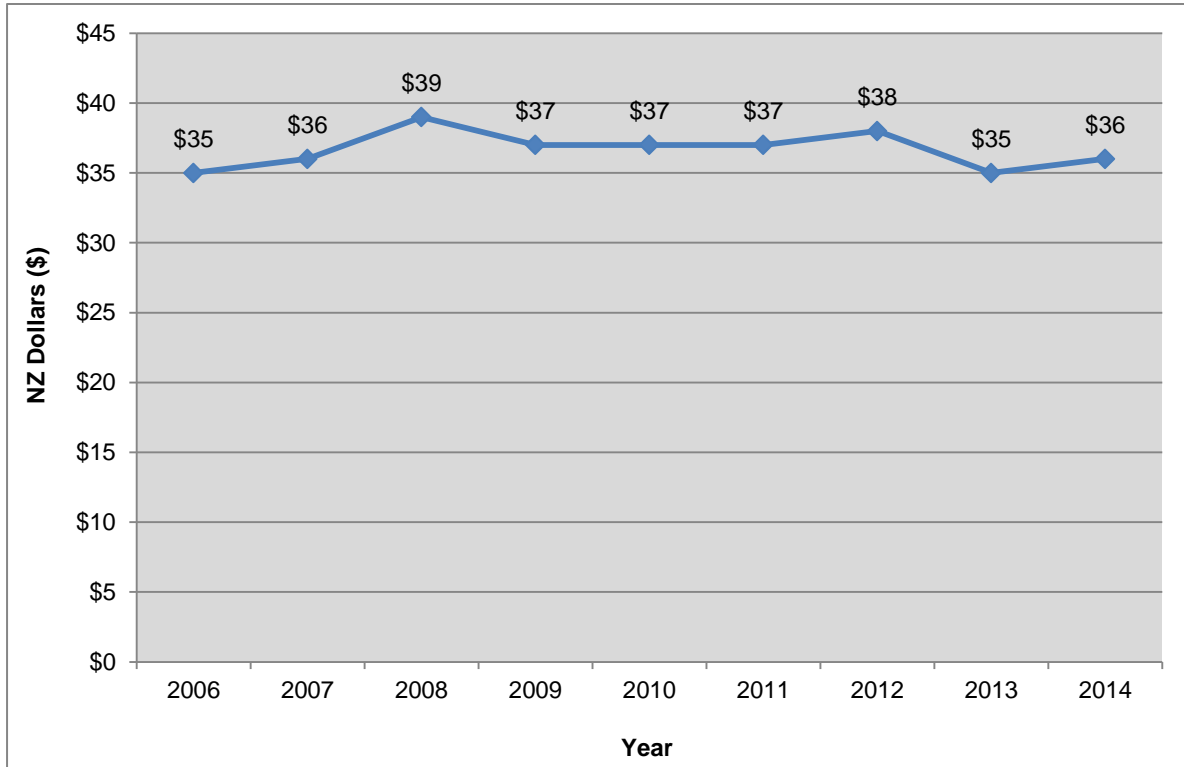
### Current price

The median price of a ‘tab’ of LSD was \$35 in 2014 (mean \$36) (Table 9.3). There was no statistically significant change in the mean price of a ‘tab’ of LSD from 2006 to 2014 (Figure 9.3). The mean price of a ‘tab’ of LSD had previously decreased from \$38 in 2012 to \$35 in 2013, and this decline was very close to being statistically significant ( $p=0.0592$ ).

**Table 9 3: Current median (mean) price for LSD (NZD) by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current price of LSD (\$)</b>	<b>Combined modules (n=117)</b>	<b>Combined modules (n=75)</b>	<b>Combined modules (n=79)</b>	<b>Combined modules (n=77)</b>	<b>Combined modules (n=88)</b>	<b>Combined modules (n=81)</b>	<b>Combined modules (n=80)</b>	<b>Combined modules (n= 72)</b>	<b>Combined modules (n= 61)</b>
Median (mean) price for a ‘tab’	\$35 (\$35)	\$40 (\$36)	\$40 (\$39)	\$40 (\$37)	\$40 (\$37)	\$40 (\$37)	\$40 (\$38)	\$40 (\$35)	\$35 (\$36)

Figure 9 3: Mean price of a 'tab' of LSD by combined frequent drug users, 2006-2014



### Change in price

The price of LSD was reported to be 'stable' over the previous six months in 2014 (Table 9.4). Seventy-six percent of the frequent drug users described the price as 'stable' in 2014. There was no statistically significant difference in the reported change in price of LSD from 2006 to 2014 ( $p=0.7793$ ).

**Table 9 4: Change in the price of LSD in the past six months by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in price of LSD (%)	Combined modules (n=117)	Combined modules (n=96)	Combined modules (n=103)	Combined modules (n=88)	Combined modules (n=107)	Combined modules (n=91)	Combined modules (n=87)	Combined modules (n=80)	Combined modules (n=70)
Increasing [3]	11%	13%	6%	7%	13%	12%	14%	8%	5%
Fluctuating [2]	10%	11%	10%	13%	16%	13%	8%	12%	13%
Stable [2]	70%	70%	73%	71%	58%	68%	73%	72%	76%
Decreasing [1]	10%	6%	11%	9%	13%	7%	5%	8%	6%
Average change in price score (1=decreasing – 3=increasing)	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0
Overall recent change	Stable	Stable	Stable	Stable	Stable/ fluctuating	Stable/ fluctuating	Stable	Stable	Stable

## 9.5 Strength of LSD and other synthetic psychedelics

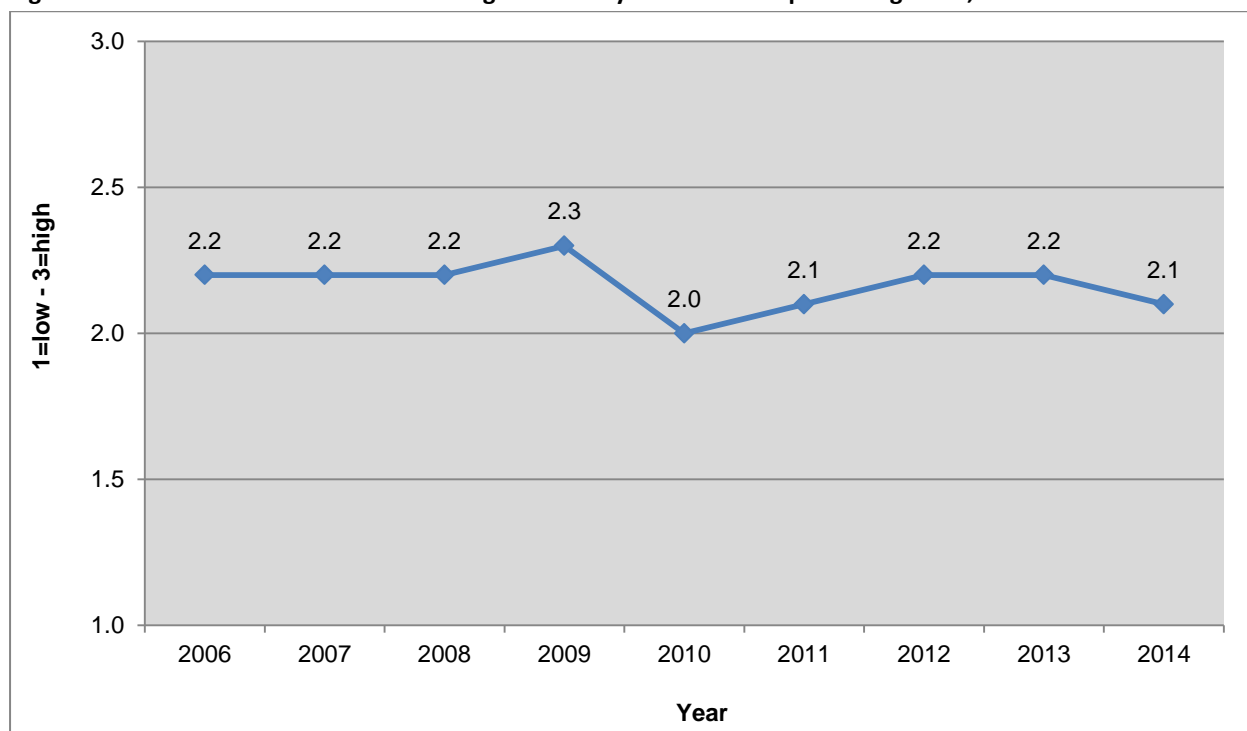
### Current strength

The current strength of LSD was reported to be ‘high/fluctuates’ in 2014 (Table 9.5). There was no statistically significant change in the current strength of LSD from 2006 to 2014 (Figure 9.4)

**Table 9 5: Current strength of LSD by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current strength of LSD (%)</b>	<b>Combined modules (n=121)</b>	<b>Combined modules (n=92)</b>	<b>Combined modules (n=99)</b>	<b>Combined modules (n=90)</b>	<b>Combined modules (n=106)</b>	<b>Combined modules (n=84)</b>	<b>Combined modules (n=90)</b>	<b>Combined modules (n=82)</b>	<b>Combined modules (n=71)</b>
High [3]	25%	35%	31%	38%	16%	24%	26%	31%	27%
Medium [2]	41%	23%	35%	33%	34%	34%	47%	33%	25%
Fluctuates [2]	25%	27%	27%	17%	37%	31%	21%	22%	26%
Low [1]	8%	16%	8%	13%	13%	11%	7%	15%	22%
Average purity score (1=low – 3=high)	2.2	2.2	2.2	2.3	2.0	2.1	2.2	2.2	2.1
Overall current status	Medium/fluctuates	High/fluctuates	Medium/high	High/medium	Fluctuates/medium	Medium/fluctuates	Medium/high	Medium/high	High/fluctuates

**Figure 9 4: Mean score of the current strength of LSD by combined frequent drug users, 2006-2014**



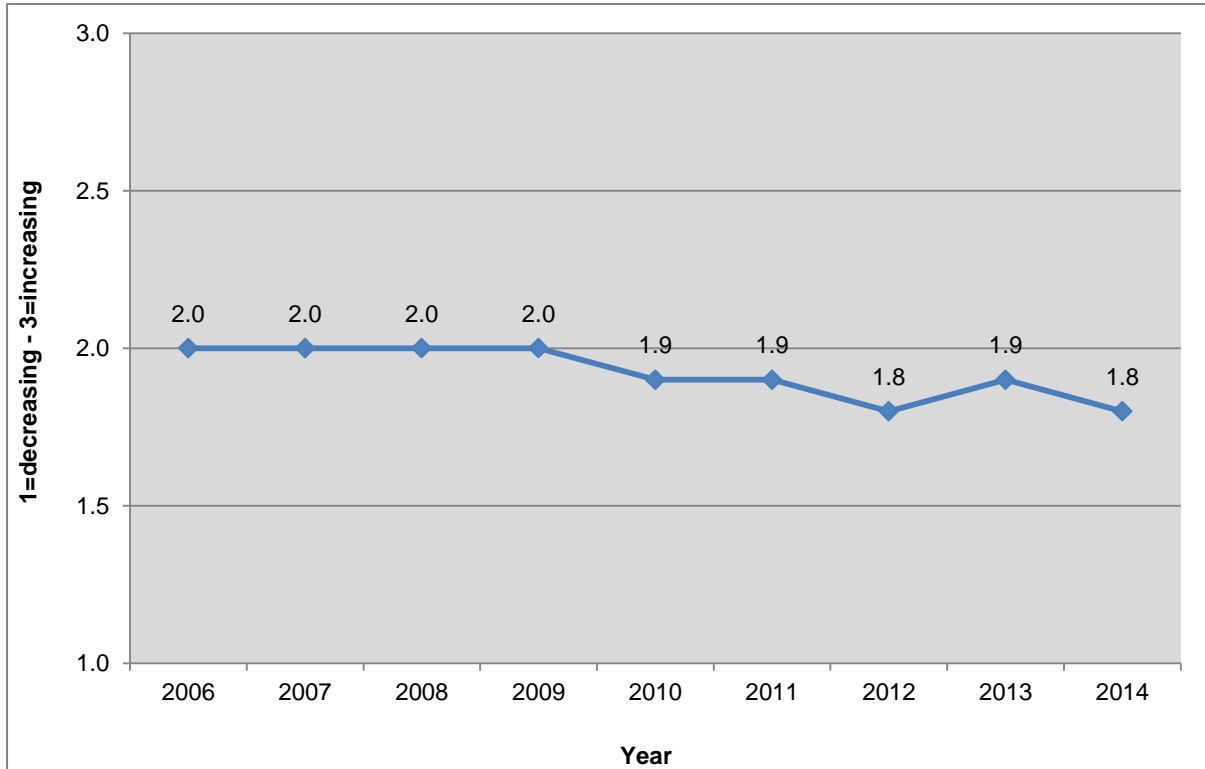
### Change in strength

The strength of LSD was reported to be 'stable/decreasing' in the previous six months in 2014 (Table 9.6). Overall, the frequent drug users were more likely to say the strength of LSD was declining from 2006 to 2014 (down from 2.0 to 1.8,  $p=0.0056$ ) (Figure 9.5). Twenty-seven percent of frequent drug users reported the strength of LSD was 'decreasing' in 2014.

**Table 9 6: Change in strength of LSD by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Change in strength of LSD (%)</b>	<b>Combined modules (n=109)</b>	<b>Combined modules (n=85)</b>	<b>Combined modules (n=91)</b>	<b>Combined modules (n=81)</b>	<b>Combined modules (n=95)</b>	<b>Combined modules (n=76)</b>	<b>Combined modules (n=82)</b>	<b>Combined modules (n=74)</b>	<b>Combined modules (n=62)</b>
Increasing [3]	15%	15%	10%	10%	9%	9%	3%	12%	11%
Stable [2]	44%	38%	42%	55%	36%	24%	51%	44%	36%
Fluctuating [2]	29%	30%	34%	24%	37%	46%	25%	26%	26%
Decreasing [1]	12%	17%	13%	12%	18%	21%	21%	18%	27%
Average change in purity score (1=decreasing – 3=increasing)	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.9	1.8
Overall recent change	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Fluctuating/ stable	Fluctuating/ stable	Stable/ fluctuating	Stable/ fluctuating	Stable/ decreasing

Figure 9 5: Change in the mean score of the strength of LSD by combined frequent drug users, 2006-2014



## 9.6 Perceptions of the number of people using LSD and other synthetic psychedelics

The number of people using LSD was reported to be the 'same/more' compared to six months ago in 2014. There was no statistically significant difference in reports of the change in the number of people using LSD from 2006 to 2014 ( $p=0.8027$ ).



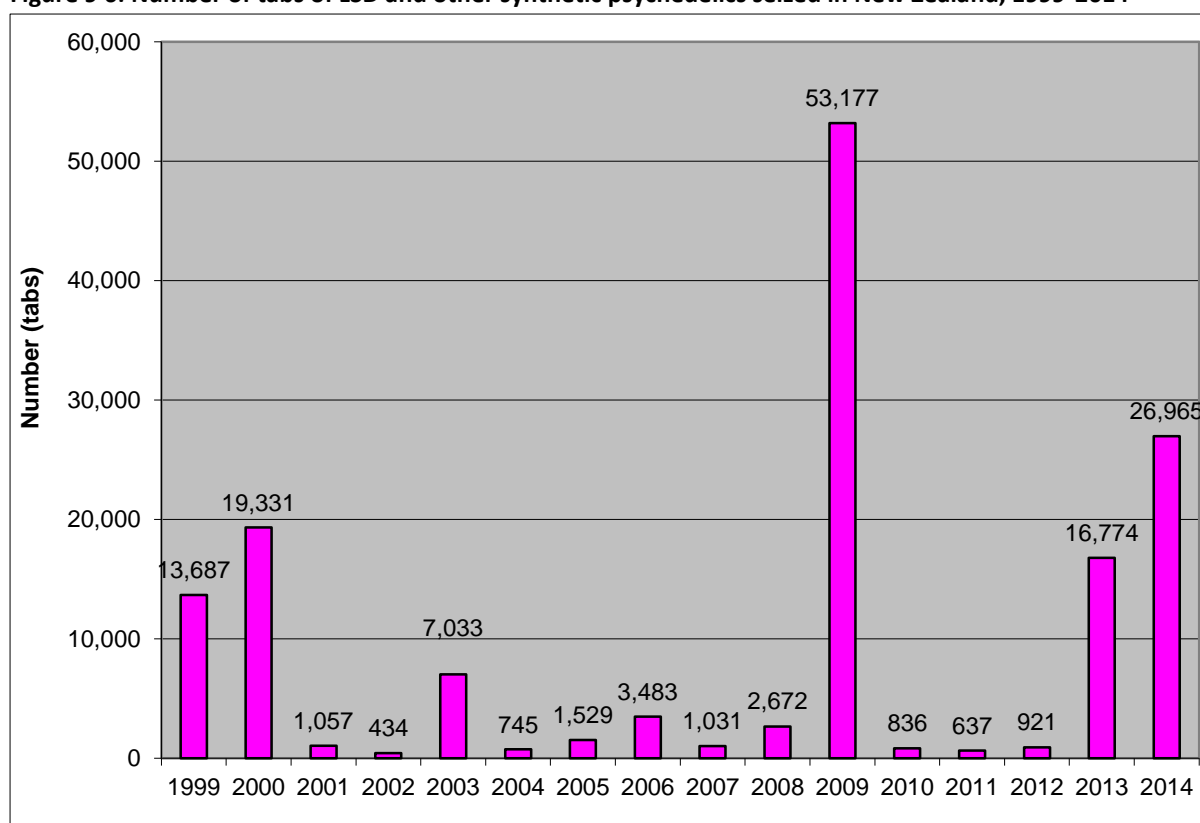
**Table 9 7: Perceptions of the number of people using LSD by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of people using LSD (%)	Combined modules (n=125)	Combined modules (n=101)	Combined modules (n=111)	Combined modules (n=99)	Combined modules (n=111)	Combined modules (n=92)	Combined modules (n=93)	Combined modules (n=85)	Combined modules (n=68)
More [3]	22%	27%	26%	28%	30%	25%	20%	17%	34%
Same [2]	50%	51%	57%	55%	42%	54%	53%	66%	43%
Less [1]	28%	22%	17%	17%	26%	22%	27%	18%	23%
Average number of people using score (1=less – 3=more)	1.9	2.0	2.1	2.1	2.0	2.0	1.9	2.0	2.1
Overall recent change	Same/less	Same/more	Same/more	Same/more	Same/more	Same/more	Same/less	Same/less	Same/more

## 9.7 Seizures of LSD

LSD is a particularly difficult drug to detect as only a minute amount is required for a typical dose. Seizures of LSD were low in New Zealand from 2001 to 2008, perhaps reflecting the emergence of ecstasy and methamphetamine (Figure 9.6). This changed dramatically in 2009 when a record 53,177 tabs were seized. This figure was largely made up of a single large seizure of 50,000 tabs made in November 2009. Collating seizures of LSD has become more difficult in recent years with the emergence of synthetic psychedelics, such as the NBOMe family, as these are sold in the same tab format as LSD. As a consequence, the seizure figure for 2013 included LSD and *other synthetic psychedelics* for the first time (NDIB, 2014). The 2014 seizure figure also represents this combined drug category. The total number of tabs seized in 2014 is 61% higher than the amount seized in 2013 and many times higher than the seizures for the previous three years.

Figure 9 6: Number of tabs of LSD and other synthetic psychedelics seized in New Zealand, 1999-2014



Source : NDIB, 2015

## 9.8 Summary of LSD trends

- The current availability of LSD was reported to be 'difficult/easy' in 2014
- The current availability of LSD declined from 2013 to 2014
- The median price of a 'tab' of LSD was \$35 in 2014
- The mean price of a 'tab' of LSD had previously declined from \$38 in 2012 to \$35 in 2013
- The price of LSD was reported to be 'stable' over the past six months in 2014
- The current strength of LSD was described as 'high/fluctuates' in 2014
- The frequent drug users were more likely to describe the strength of LSD as 'declining' from 2006 to 2014
- The frequent drug users described the number of people using LSD as the 'same/more' in 2014
- A total of 26,965 blotter tabs of 'LSD and other synthetic psychedelics' were seized in 2014, and this is 61% higher than the amount seized in 2013 (16,774 tabs), and many times higher than the quantity seized over the preceding three years

## 10. Street Morphine

### 10.1 Introduction

Morphine is a potent opioid analgesic which acts directly on the central nervous system, and has a high potential for creating physical dependency. Pharmaceutical morphine is one of the principal opioids used by injecting drug users in New Zealand, primarily due to the ongoing poor supply of internationally sourced heroin (Wilkins, et al., 2010; Wilkins, et al., 2011b). The international supply of heroin to New Zealand was substantially disrupted in the late 1970s by the arrest of the 'Mr Asia' heroin syndicate (New Zealand Customs Service, 2002; Newbold, 2000). Three domestic sources of opioids emerged in the subsequent decades to largely replace heroin: (1) 'street morphine' - pharmaceutical morphine illicitly diverted from the medical system; (2) 'homebake heroin/morphine' - morphine made by users from diverted codeine in make-shift 'kitchen' laboratories; and (3) opium extracted on a seasonal basis from locally grown opium poppies (Adamson & Sellman, 1998; New Zealand Customs Service, 2002). The IDMS has collected separate trend data on the four main opioid groups used in New Zealand since 2008 (i.e. 'street' morphine, 'street' methadone, heroin and 'homebake' heroin/morphine).

The IDMS had previously found a dramatic decrease in the availability of street morphine in Christchurch in 2012 (Wilkins, et al., 2013), and this trend continued in 2013 (Wilkins, et al., 2014a). The proportion of frequent drug users in Christchurch who reported that street morphine was 'more difficult' to obtain increased markedly from 11% in 2011 to 59% in 2013 (Wilkins, et al., 2014a). The decline in availability was accompanied by increases in price. This market disruption may reflect the adoption of tighter opioid prescribing practices and, as a result, reduced illicit supply of morphine.

### 10.2 Knowledge of street morphine

Twenty-nine percent of the frequent drug users interviewed for the 2014 IDMS (n=92) indicated they felt confident enough to comment on the price, strength and availability of 'street' morphine in the previous six months. This included 71% of the frequent injecting drug users (n=73), 17% of the frequent methamphetamine users (n=16) and 3% of the frequent ecstasy users (n=3). As in previous years, the majority of those commenting on the street morphine market in 2014 came from Christchurch (65%, n=60). Only nine respondents came from Wellington in 2014. In 2012, only eight respondents from Auckland answered this section. These low numbers of respondents in some years

makes comparisons within sites over time problematic, and consequently we largely focus on trends in Christchurch.

## 10.3 Availability of street morphine

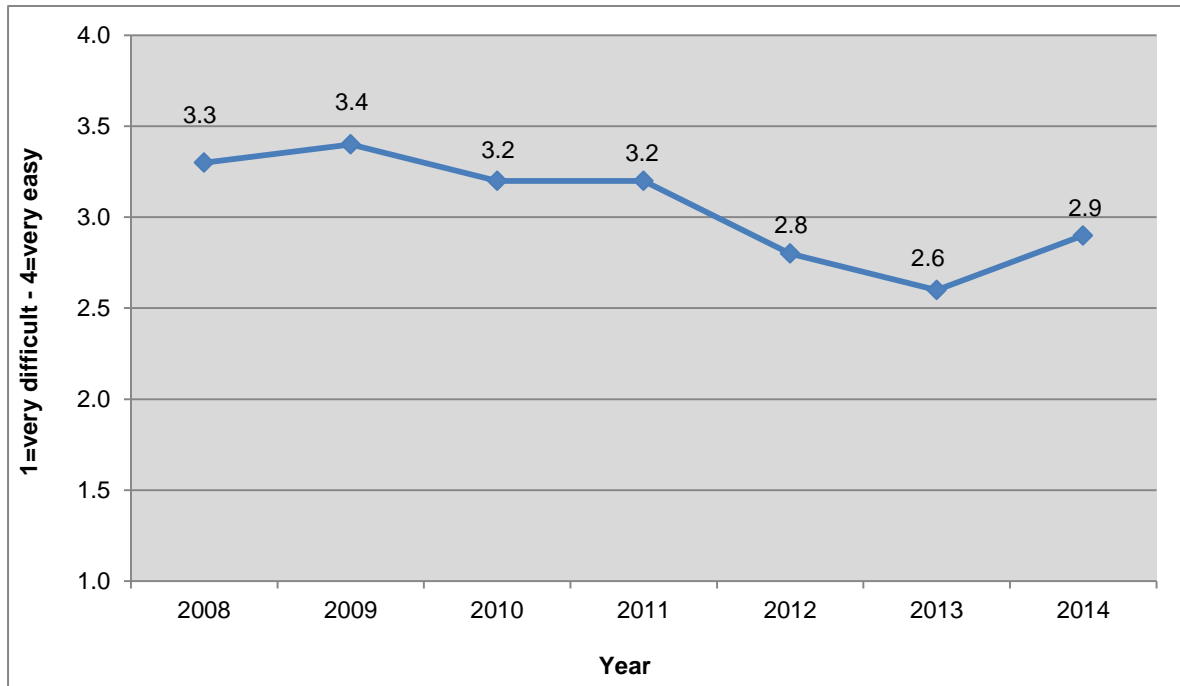
### Current availability of street morphine

The frequent drug users reported the current availability of street morphine to be ‘easy/difficult’ in 2014 (Table 10.1). Overall, there was a decline in the current availability of street morphine from 2008 to 2014 (down from 3.3 to 2.9,  $p < 0.0001$ ) (Figure 10.1). There had previously been a substantial decline in the current availability of street morphine from 2008 to 2013 (down from 3.3 to 2.6,  $p < 0.0001$ ). However, the current availability of street morphine increased from 2013 to 2014 (up from 2.6 to 2.9), and this increase was close to being statistically significant ( $p = 0.0615$ ).

**Table 10 1: Current availability of street morphine by combined frequent drug users, 2008-2014**

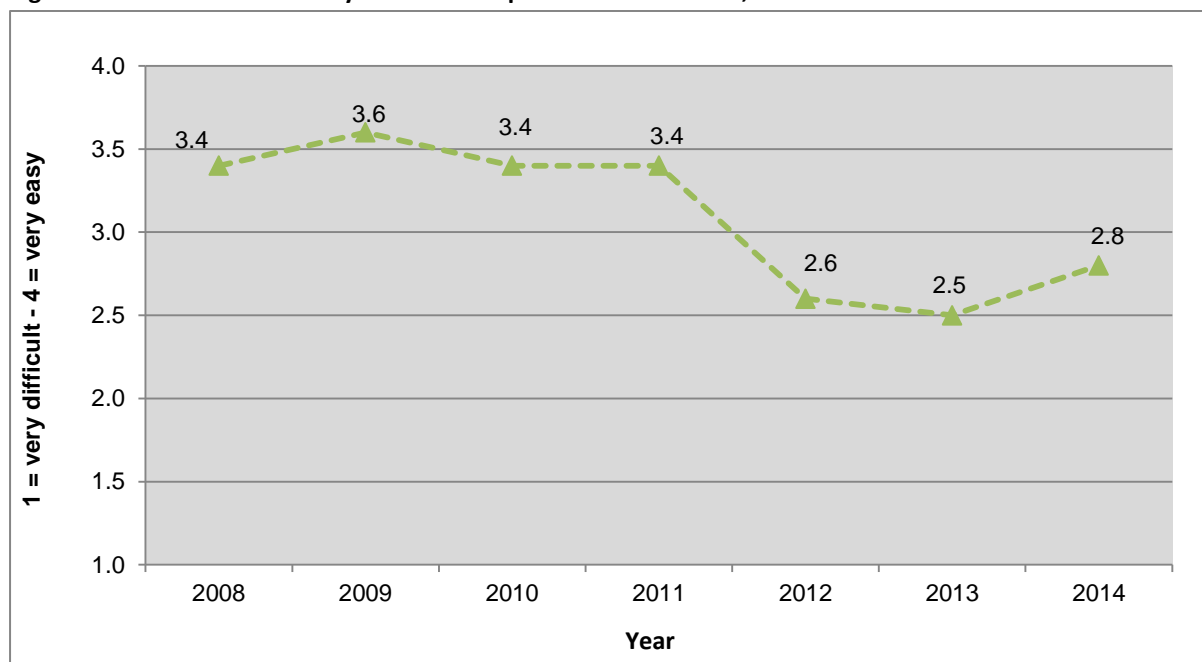
	2008	2009	2010	2011	2012	2013	2014
Current availability of street morphine (%)	Combined modules (n=110)	Combined modules (n=108)	Combined modules (n=116)	Combined modules (n=96)	Combined modules (n=97)	Combined modules (n=95)	Combined modules (n=90)
Very easy [4]	40%	50%	33%	40%	23%	23%	21%
Easy [3]	52%	40%	54%	41%	32%	29%	48%
Difficult [2]	7%	9%	12%	17%	45%	35%	27%
Very difficult [1]	1%	1%	1%	1%	0%	13%	4%
Average availability score (1=very difficult – 4=very easy)	3.3	3.4	3.2	3.2	2.8	2.6	2.9
Overall current status	Easy/very easy	Very easy/easy	Easy/very easy	Easy/very easy	Difficult/easy	Difficult/easy	Easy/difficult

Figure 10 1: Current availability of street morphine by combined frequent drug users, 2008-2014



The current availability of street morphine declined in Wellington from 3.2 in 2008 to 2.5 in 2014, and this was close to being statistically significant ( $p=0.0700$ ). The number of respondents reporting on trends in street morphine in Wellington was small in 2014 ( $n=9$ ). The current availability of street morphine declined sharply in Christchurch from 3.4 in 2008 to 2.5 in 2013 ( $p<0.0001$ ), but recovered from 2.5 in 2013 to 2.8 in 2014 ( $p=0.0338$ ) (Figure 10.2). There was also some recovery in the availability of street morphine in Auckland from 2013 to 2014 (2.8 to 3.3), although the increase was not statistically significant ( $p=0.1744$ ) (Figure 10.2).

**Figure 10 2: Current availability of street morphine in Christchurch, 2008-2014**



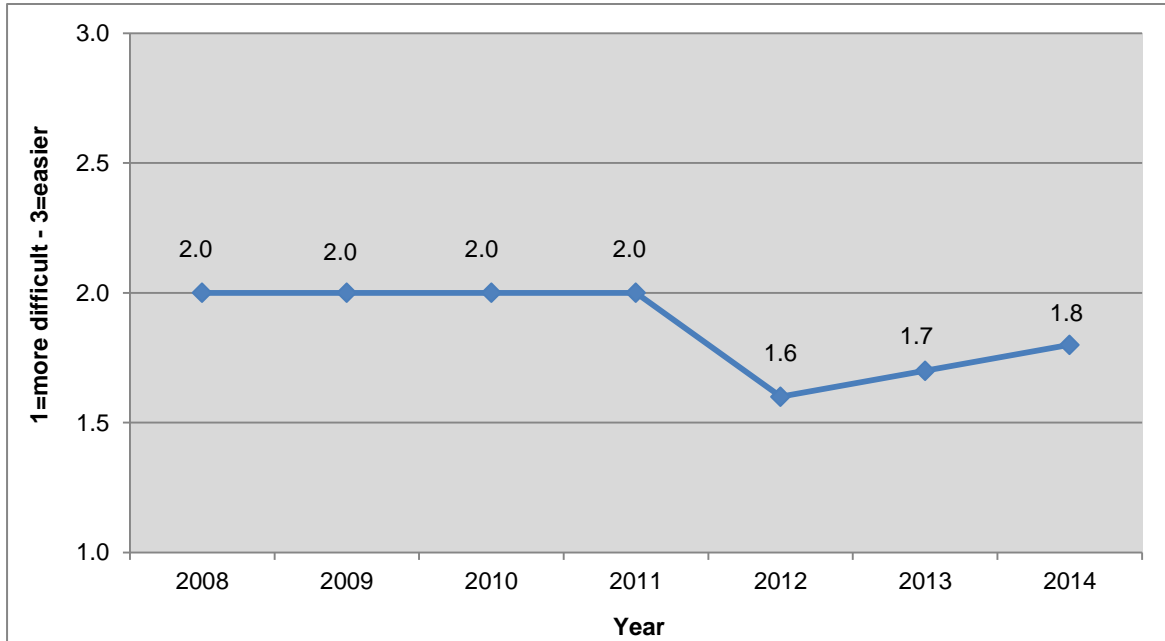
### Change in availability of street morphine

The frequent drug users reported the availability of street morphine had been ‘stable/more difficult’ over the past six months in 2014 (Table 10.2). A greater proportion of frequent drug users reported that street morphine was ‘more difficult’ to obtain from 2008 to 2014 (up from 11% to 27%,  $p < 0.0001$ ) (Figure 10.3). The availability of street morphine had previously been reported to have declined from 2008 to 2012 (down from 2.0 to 1.6,  $p < 0.0001$ ). There was no statistically significant change in the availability of street morphine from 2013 to 2014 ( $p = 0.3113$ ).

**Table 10 2: Change in availability of street morphine by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
Change in availability of street morphine (%)	Combined modules (n=110)	Combined modules (n=109)	Combined modules (n=113)	Combined modules (n=93)	Combined modules (n=97)	Combined modules (n=96)	Combined modules (n=89)
Easier [3]	13%	16%	16%	7%	1%	12%	5%
Stable [2]	62%	60%	53%	65%	44%	26%	43%
Fluctuates [2]	14%	7%	12%	16%	18%	18%	25%
More difficult [1]	11%	17%	19%	12%	37%	44%	27%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.0	2.0	2.0	1.6	1.7	1.8
Overall recent change	Stable/ fluctuates	Stable/ more difficult	Stable/ more difficult	Stable/ fluctuates	Stable/ more difficult	More difficult/ stable	Stable/ more difficult

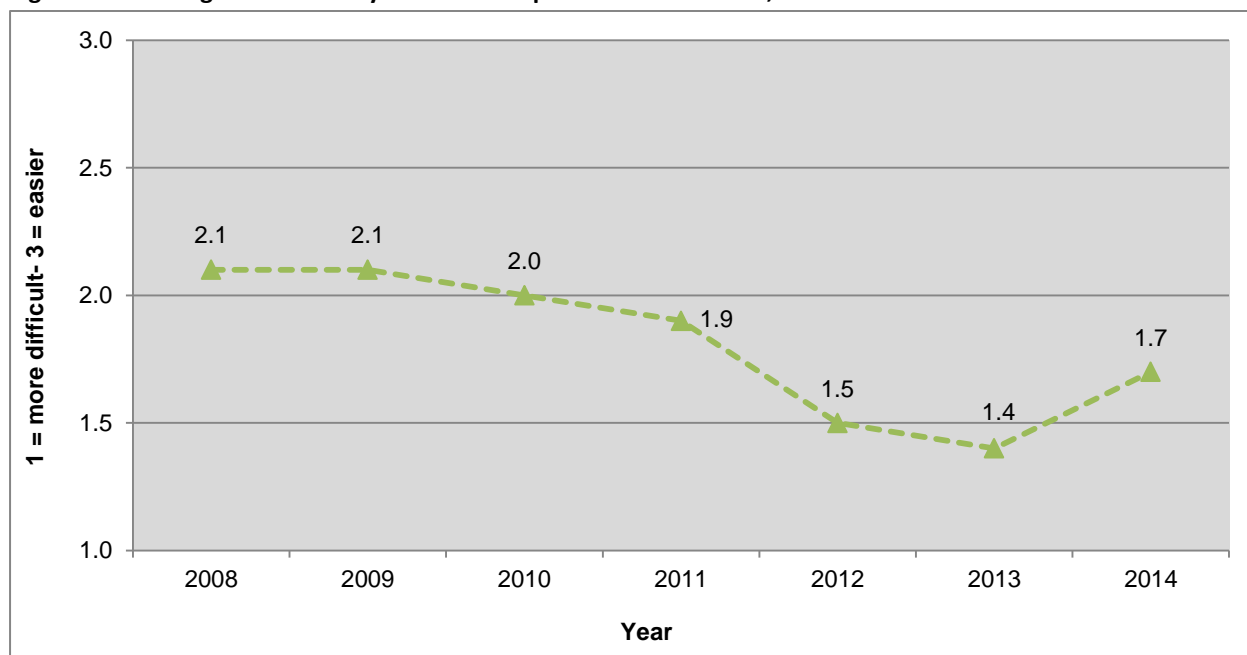
Figure 10 3: Change in availability of street morphine by combined frequent drug users, 2008-2014



The availability of street morphine in Christchurch had previously been reported to be declining from 2008 to 2013 (down from 2.1 to 1.4,  $p < 0.0001$ ). However, there was a sharp recovery in availability in Christchurch from 2013 to 2014 (up from 1.4 to 1.7,  $p = 0.0006$ ) (Figure 10.4). A greater proportion of frequent drug users in Wellington also reported the availability of street morphine had also become 'more difficult' from 2008 to 2014 (up from 36% to 46%,  $p = 0.0534$ ), although again the number of respondents is low ( $n = 9$ ).



**Figure 10 4: Change in availability of street morphine in Christchurch, 2008-2014**



## 10.4 Price of street morphine

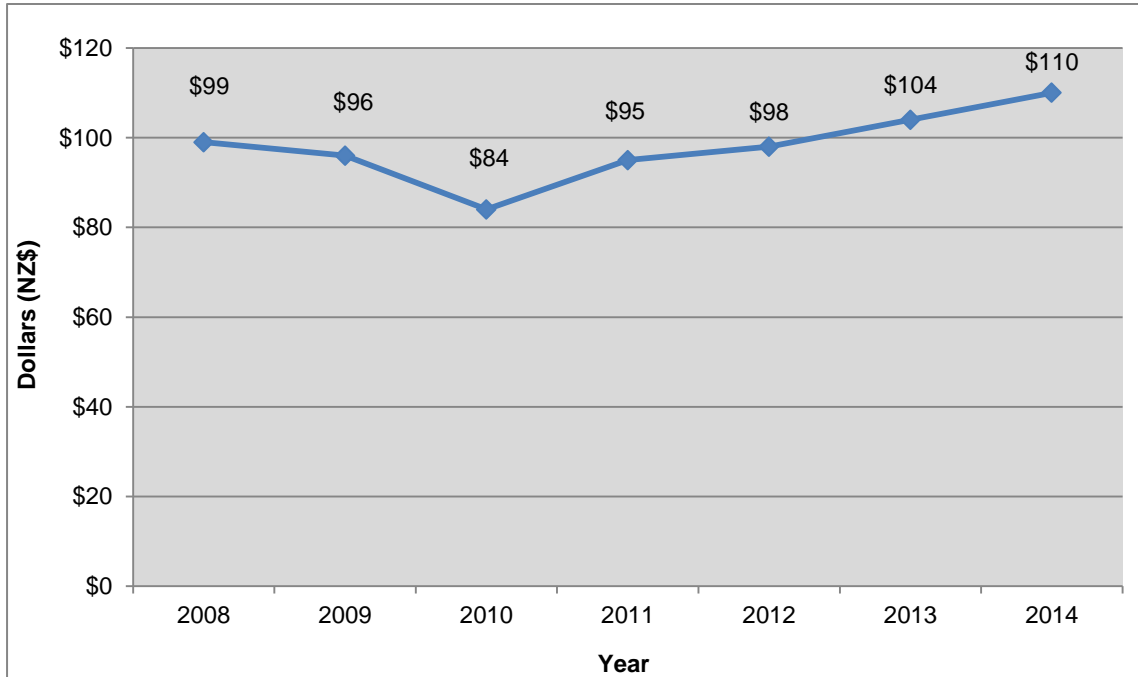
### Current price of street morphine

The current median price for one milligram of street morphine was \$1 (or \$100 per 100 milligrams) in 2014 (Table 10.3). The mean price of 100 milligrams of street morphine increased from \$99 in 2008 to \$110 in 2014 ( $p=0.0003$ ) (Figure 10.5).

**Table 10 3: Current median (mean) price for street morphine (NZD) by combined frequent drug users, 2008-2014**

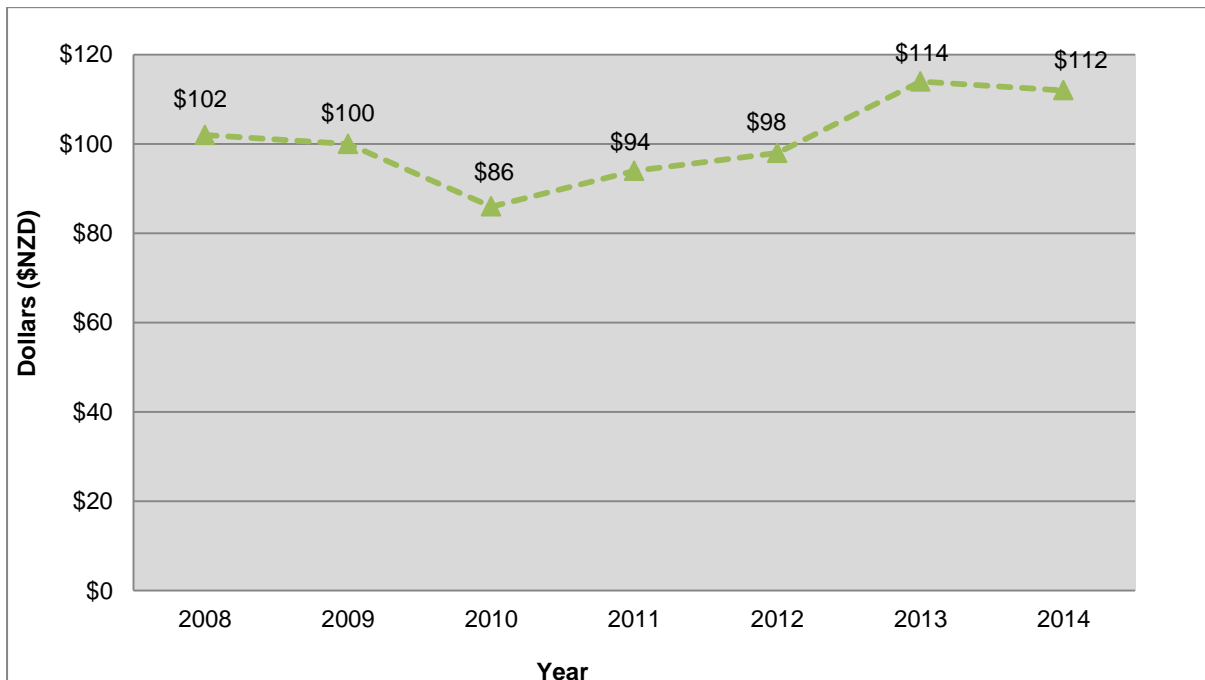
	2008	2009	2010	2011	2012	2013	2014
Current price of street morphine (\$)	Combined modules (n=103)	Combined modules (n=109)	Combined modules (n=109)	Combined modules (n=84)	Combined modules (n=93)	Combined modules (n=87)	Combined modules (n=80)
Median (mean) price for a milligram	\$1.00 (\$0.99)	\$1.00 (\$0.96)	\$1.00 (\$0.84)	\$1.00 (\$0.95)	\$1.00 (\$0.98)	\$1.00 (\$1.04)	\$1.00 (\$1.10)

**Figure 10 5: Current mean price paid for 100 milligrams of street morphine (NZD), 2008-2014**



The price of morphine in Christchurch increased from \$102 in 2008 to \$112 in 2014 ( $p < 0.0001$ ) (Figure 10.6). The price of morphine had previously increased in Christchurch from \$98 in 2012 to \$114 in 2013 ( $p < 0.0001$ ). The frequent drug users in Wellington reported the price of morphine had increased from \$88 in 2013 to \$100 in 2014, although this increase was not statistically significant ( $p = 0.1014$ ).

**Figure 10 6: Current mean price paid for 100 milligrams of street morphine in Christchurch (NZD), 2008-2014**



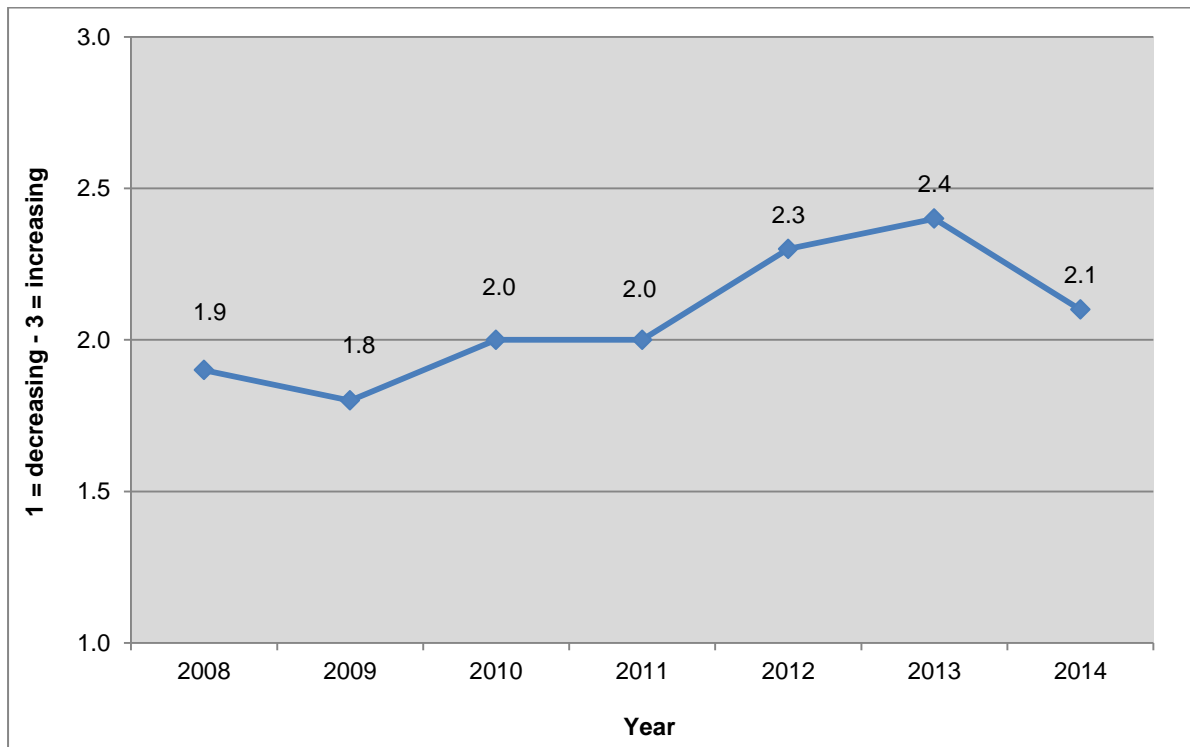
## Change in price of street morphine

The price of street morphine was described as ‘stable’ over the past six months in 2014 (Table 10.4). Overall, a higher proportion of frequent drug users thought the price of street morphine was ‘increasing’ from 2008 to 2014 (up from 1.9 to 2.1,  $p < 0.0001$ ) (Figure 10.7). However, a lower proportion of frequent drug users reported that the price of street morphine had been increasing from 2013 to 2014 (down from 41% to 12%,  $p = 0.0003$ ).

**Table 10 4: Change in the price of street morphine in the past six months by combined frequent drug users, 2008-2014**

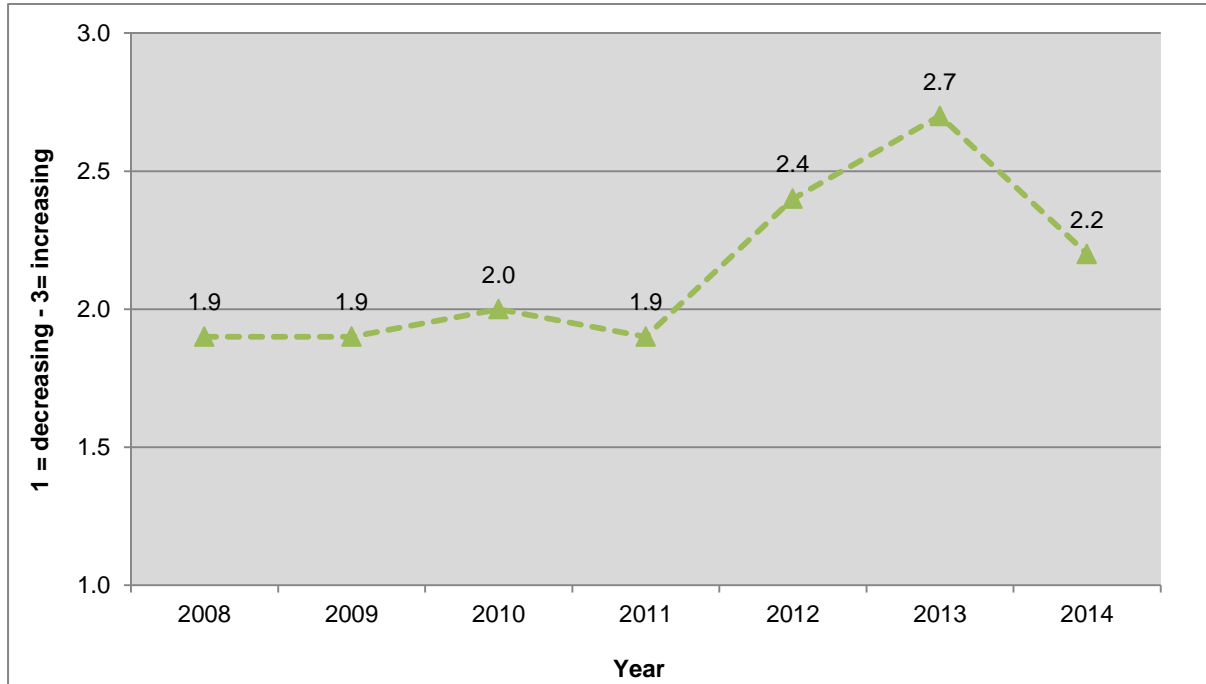
	2008	2009	2010	2011	2012	2013	2014
Change in price of street morphine (%)	Combined modules (n=106)	Combined modules (n=107)	Combined modules (n=114)	Combined modules (n=95)	Combined modules (n=93)	Combined modules (n=92)	Combined modules (n=89)
Increasing [3]	2%	2%	12%	7%	30%	41%	12%
Fluctuating [2]	6%	4%	8%	3%	5%	14%	7%
Stable [2]	80%	77%	70%	80%	62%	40%	77%
Decreasing [1]	12%	18%	10%	8%	4%	5%	4%
Average change in price score (1=decreasing – 3=increasing)	1.9	1.8	2.0	2.0	2.3	2.4	2.1
Overall recent change	Stable	Stable	Stable	Stable	Stable/ increasing	Increasing/ stable	Stable

**Figure 10 7: Change in the price of street morphine in the past six months by combined frequent drug users, 2008-2014**



There was no statistically significant difference in perceptions of the change in the price of morphine in Wellington from 2008 to 2014 (2.0 to 1.9,  $p=0.7707$ ;  $10=2014$ ) (Figure 10.8). In contrast, the frequent drug users in Christchurch were much more likely to describe the price as 'increasing' from 2011 to 2013 (up from 2% to 66%,  $p<0.0001$ ), but less likely to describe the price as 'increasing' from 2013 to 2014 (down from 66% to 15%,  $p<0.0001$ ).

Figure 10 8: Change in the price of street morphine in the past six months in Christchurch, 2008-2014



## 10.5 Strength of street morphine

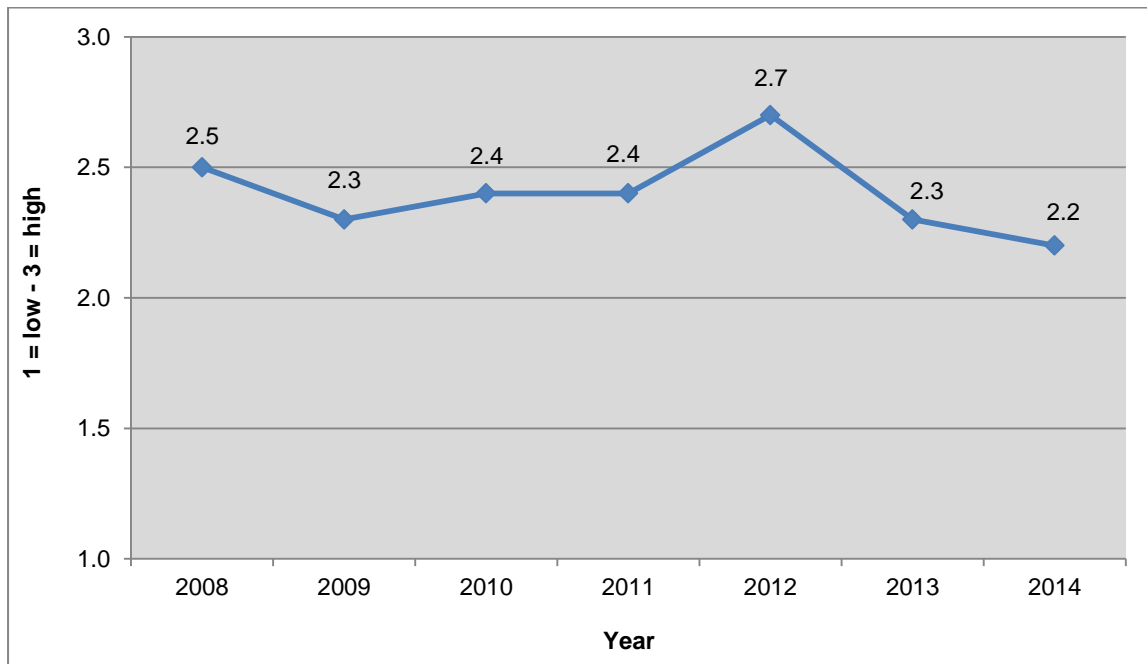
### Current strength of street morphine

The current strength of street morphine was considered to be 'medium/high' in 2014 (Table 10.5). The strength of street morphine declined from 2008 to 2014 (down from 2.5 to 2.2), but this decline was not statistically significant ( $p=0.1066$ ) (Figure 10.9). The strength of street morphine had previously declined sharply from 2012 to 2013 (down from 2.7 to 2.3,  $p<0.0001$ ).

**Table 10 5: Current strength of street morphine by combined frequent drug users, 2008-2014**

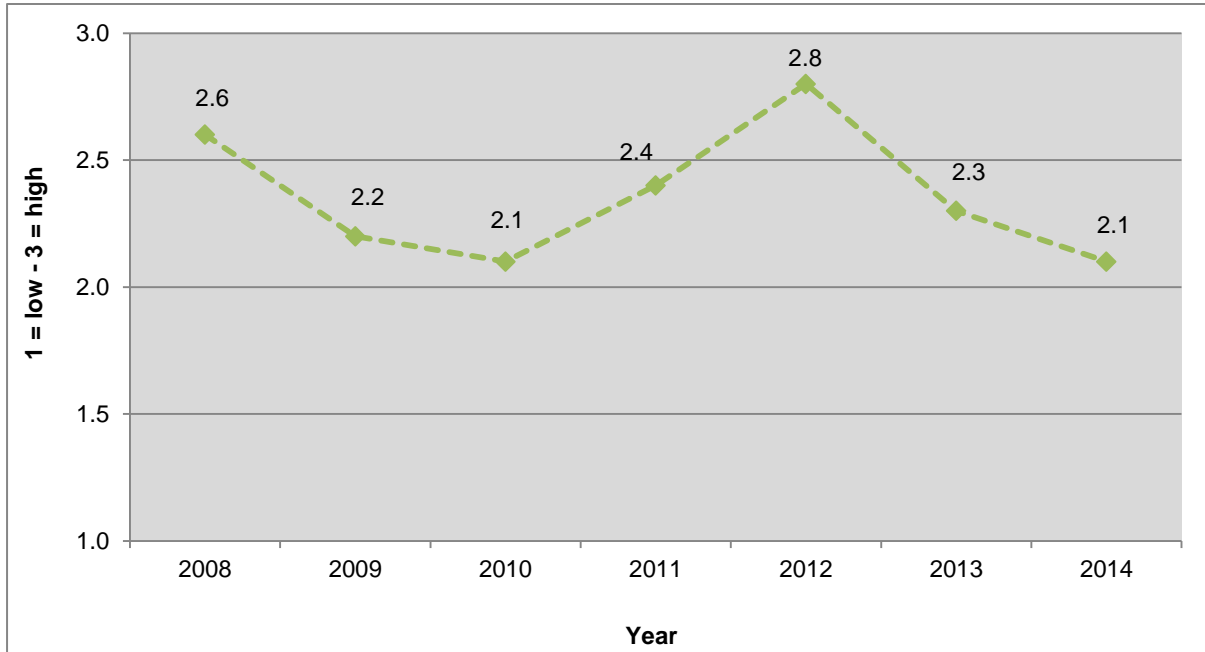
	2008	2009	2010	2011	2012	2013	2014
Current strength of street morphine (%)	Combined modules (n=111)	Combined modules (n=100)	Combined modules (n=75)	Combined modules (n=83)	Combined modules (n=87)	Combined modules (n=78)	Combined modules (n=76)
High [3]	57%	40%	44%	41%	74%	33%	25%
Medium [2]	29%	41%	33%	42%	21%	54%	66%
Fluctuates [2]	11%	9%	18%	17%	4%	13%	5%
Low [1]	4%	10%	5%	0%	1%	0%	4%
Average strength score (1=low – 3=high)	2.5	2.3	2.4	2.4	2.7	2.3	2.2
Overall current status	High/medium	Medium/high	High/medium	Medium/high	High	Medium/high	Medium/high

**Figure 10 9: Current strength of street morphine in the past six months by combined frequent drug users, 2008-2014**



The frequent drug users in Wellington reported a decline in the current strength of street morphine from 2008 to 2014 (down from 2.9 to 2.4,  $p=0.0001$ ;  $n=2014$ ). The frequent drug users in Christchurch also reported a decline in the strength of street morphine from 2013 to 2014 (down from 2.3 to 2.1,  $p=0.0111$ ) (Figure 10.10). In contrast, the frequent drug users in Auckland reported a slight increase in the strength of morphine from 2008 to 2014 (up from 2.2 to 2.4,  $p=0.0399$ ).

Figure 10 10: Current strength of street morphine in Christchurch, 2008-2014



### Change in strength of street morphine

The strength of street morphine was reported to have been 'stable' in the past six months in 2014 (Table 10.6). There was no statistically significant difference in perceptions of the change in strength of street morphine from 2008 to 2014 (2.0 in all the years) ( $p=0.1617$ ).



**Table 10 6: Change in strength of street morphine by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
Change in strength of street morphine (%)	Combined modules(n=110)	Combined modules(n=106)	Combined modules (n=108)	Combined modules (n=92)	Combined modules (n=91)	Combined modules (n=84)	Combined modules (n=89)
Increasing [3]	2%	3%	2%	2%	0%	3%	0%
Stable [2]	88%	89%	88%	86%	97%	91%	96%
Fluctuating [2]	6%	5%	8%	10%	3%	5%	4%
Decreasing [1]	5%	3%	3%	2%	0%	1%	0%
Average change in strength score (1=decreasing – 3=increasing)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Overall recent change	Stable	Stable	Stable	Stable	Stable	Stable	Stable

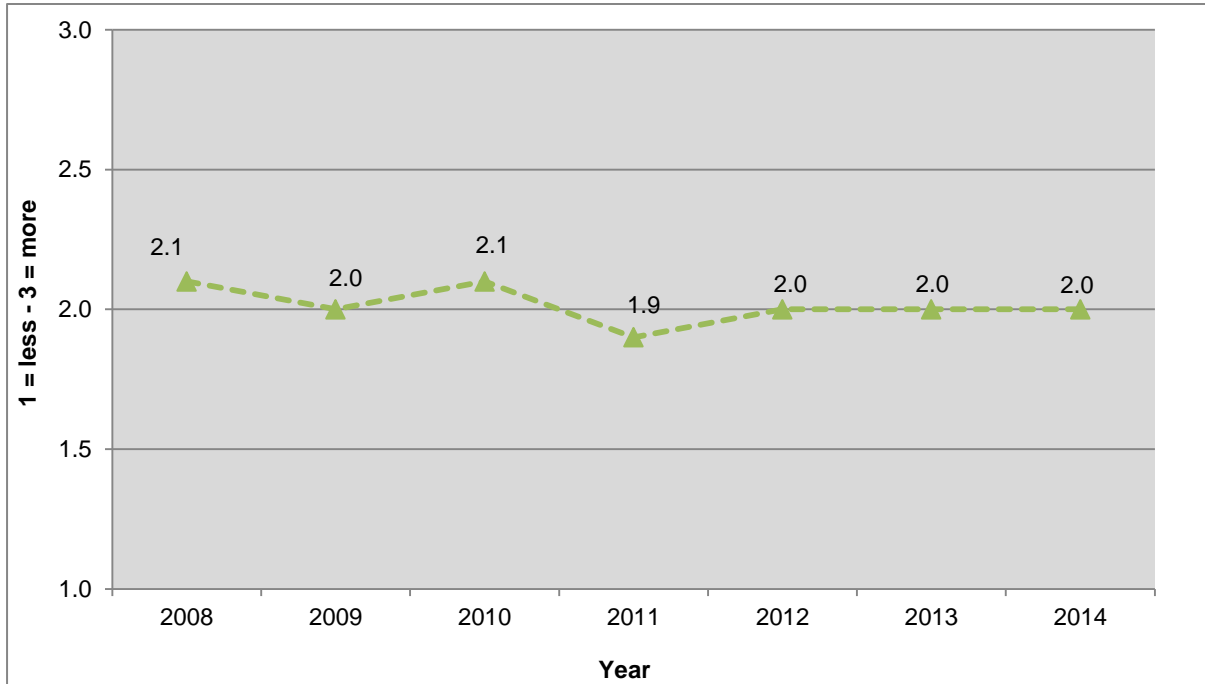
## 10.6 Perceptions of the number of people using street morphine

The number of people using street morphine was reported to be the 'same' in 2014 (Table 10.7). There was no statistically significant change in the number of people reported to be using street morphine from 2008 to 2014 ( $p=0.6219$ ). There was also no change in perceptions of the number of people using street morphine in Christchurch, with 75% reporting the same number of users in 2014 (Figure 10.11).

**Table 10 7: Perceptions of the number of people using street morphine, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Number of people using street morphine (%)</b>	<b>Combined modules (n=109)</b>	<b>Combined modules(n=108)</b>	<b>Combined modules (n=109)</b>	<b>Combined modules (n=89)</b>	<b>Combined modules (n=92)</b>	<b>Combined modules (n=94)</b>	<b>Combined modules (n=90)</b>
More [3]	22%	18%	26%	29%	15%	27%	15%
Same [2]	59%	62%	54%	46%	61%	59%	73%
Less [1]	19%	19%	20%	25%	23%	14%	12%
Average number of people using score (1=less – 3=more)	2.0	2.0	2.1	2.0	1.9	2.1	2.0
Overall recent change	Same/ more	Same/ less	Same/ more	Same/ more	Same/ less	Same/ more	Same

Figure 10 11: Perceptions of the number of people using street morphine in Christchurch, 2008-2014



## 10.7 Purchase of street morphine

### Frequency of purchase of street morphine

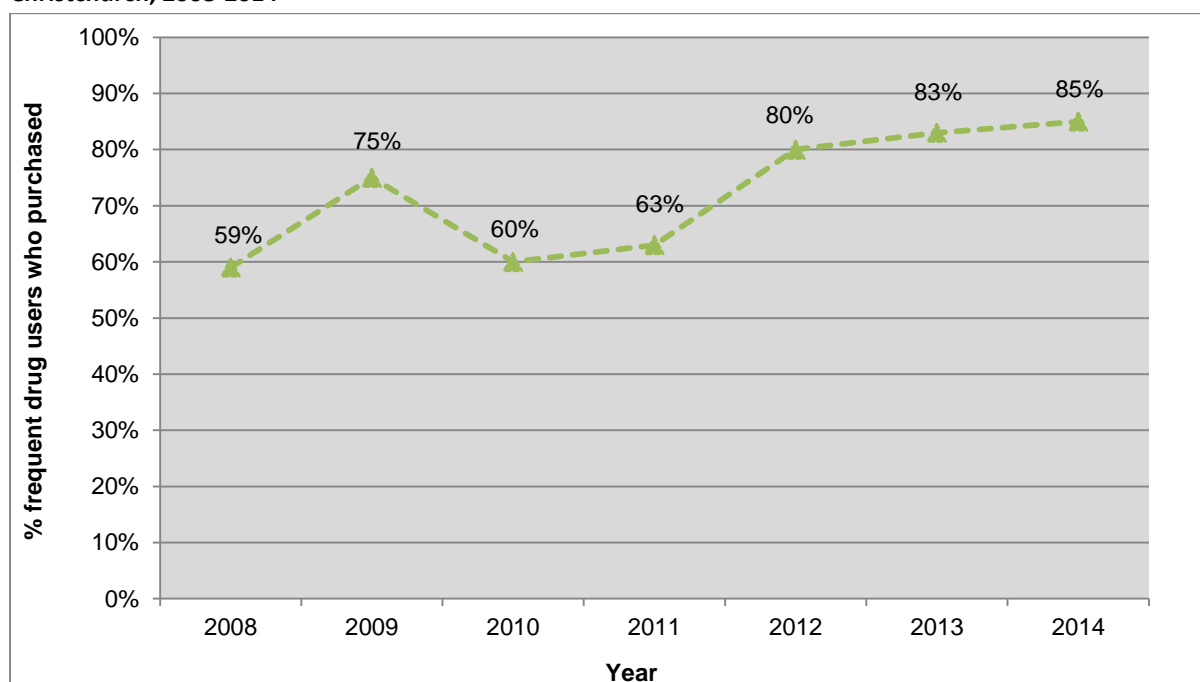
Seventy four percent of the frequent drug users who purchased street morphine had done so weekly or more often in the previous six months in 2014 (Table 10.8). The proportion of the frequent drug users who purchased street morphine weekly or more often increased from 55% in 2008 to 74% in 2014 ( $p=0.0214$ ).

**Table 10 8: Frequency of purchase of street morphine in past six months by combined frequent drug users, 2008-2014**

Frequency purchase in past six months (%)	2008	2009	2010	2011	2012	2013	2014
	Combined modules (n=94)	Combined modules (n=89)	Combined modules (n=90)	Combined modules (n=67)	Combined modules (n=85)	Combined modules (n=83)	Combined modules (n=78)
1-2 times	7	10	12	18	12	9	8
3-4 times	18	7	10	12	8	1	6
Once per month	12	6	15	8	7	8	4
Twice per month	8	6	6	7	11	10	9
Once per week	14	17	11	13	11	19	14
2-3 times per week	18	19	21	14	24	15	14
4-5 times per week	6	8	10	7	7	6	6
Once per day	13	17	10	19	16	28	30
More than once per day	4	10	4	3	4	4	9

There was no change in the proportion of frequent drug users from Wellington who purchased morphine weekly or more often from 2008 to 2014 (50% to 39%,  $p=0.2463$ ). In contrast, the proportion of frequent drug users from Christchurch who purchased morphine weekly or more often increased from 59% in 2008 to 85% in 2014 ( $p=0.0001$ ).

**Figure 10 12: Proportion of frequent drug users who purchased street morphine weekly or more often in Christchurch, 2008-2014**



### Dollar amount spent on street morphine

The frequent drug users reported spending a median of \$80 on street morphine (mean \$75) on a typical occasion in 2014 (Table 10.9). The mean dollar amount spent on street morphine decreased from 2008 to 2014 (down from \$109 to \$75,  $p=0.0021$ ). The dollar amount spent on morphine by frequent drug users in Wellington decreased from \$114 in 2008 to \$80 in 2014 ( $p=0.0197$ ), although the number of respondents providing spending amounts was very low ( $n=5$ ). The dollar amount spent on morphine by the frequent drug users in Christchurch also declined from \$122 in 2008 to \$77 in 2014 ( $p=0.0061$ ). Similarly, the dollar amount spent on morphine by the frequent drug users in Auckland declined from \$116 in 2013 to \$62 in 2014 ( $p=0.0336$ ).

**Table 10 9: Median (mean) dollar amount spent on street morphine (NZD) on typical occasion by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Amount spent on street morphine</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>	<b>Combined modules</b>
<b>Number with knowledge</b>	<b>n=91</b>	<b>n=85</b>	<b>n=86</b>	<b>n=65</b>	<b>n=87</b>	<b>n=81</b>	<b>n=76</b>
Median (mean) amount spent	\$100 (\$109)	\$100 (\$103)	\$100 (\$121)	\$80 (\$101)	\$80 (\$91)	\$80 (\$105)	\$80 (\$75)

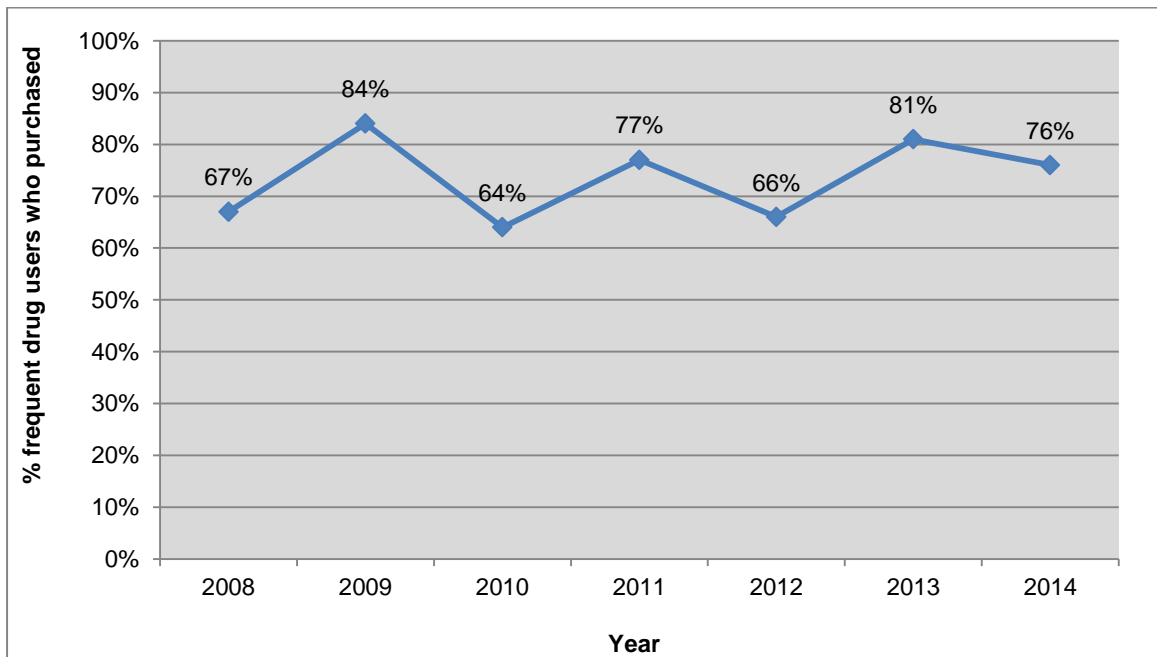
### Time taken to purchase street morphine

Seventy-six percent of the frequent drug users could purchase street morphine in one hour or less in 2014 (Table 10.10). There was no statistically significant change in the proportion of frequent drug users who could purchase street morphine in one hour or less from 2008 to 2014 ( $p=0.4220$ ) (Figure 10.13).

**Table 10 10: Time taken to purchase street morphine by combined frequent drug users, 2008-2014**

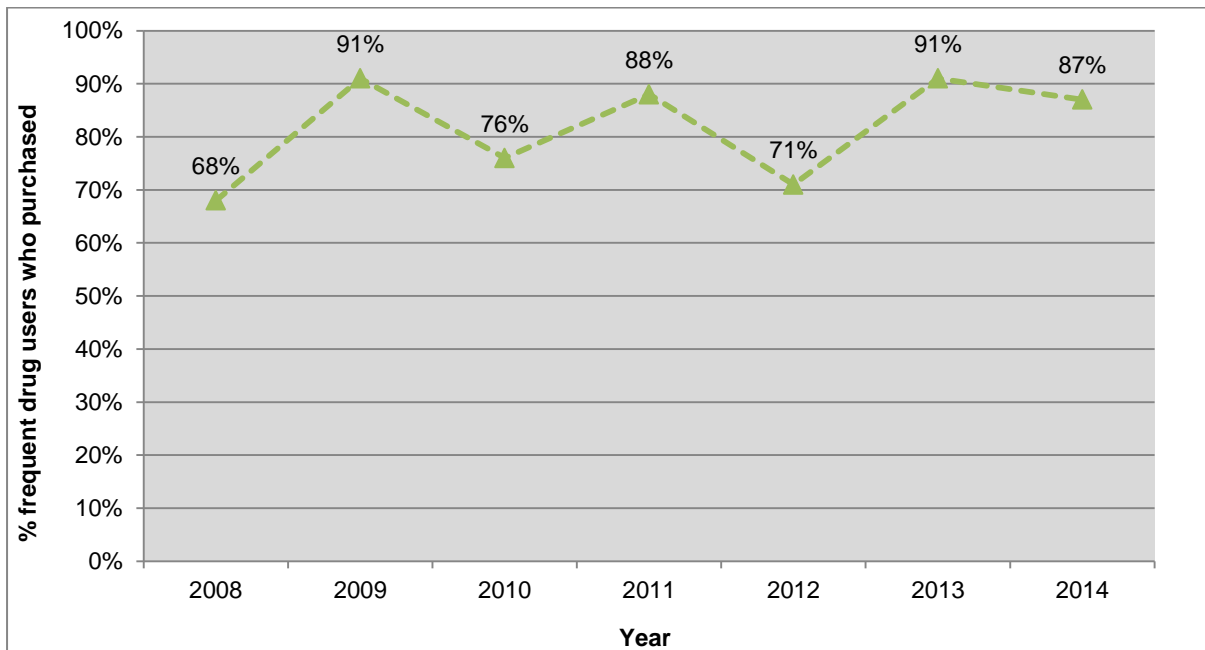
Time to purchase (%)	2008	2009	2010	2011	2012	2013	2014
	<b>Combined modules (n=95)</b>	<b>Combined modules (n=90)</b>	<b>Combined modules (n=89)</b>	<b>Combined modules (n=68)</b>	<b>Combined modules (n=86)</b>	<b>Combined modules (n=81)</b>	<b>Combined modules (n=77)</b>
Months	0	0	1	0	0	0	0
Weeks	0	0	3	0	1	0	2
Days	2	1	2	1	6	5	0
About one day	17	4	15	6	12	2	4
Hours	14	11	14	16	15	12	18
1 Hour	38	39	20	37	30	51	47
Less than 20 mins	29	44	44	40	36	30	29

**Figure 10 13: Proportion of frequent drug users who could purchase street morphine in one hour or less, 2008-2014**



There was also no statistically significant change in the proportion of frequent drug users from Auckland who could purchase morphine in one hour or less from 2008 to 2014 (down from 86% to 70%,  $p=0.1763$ ) (Figure 10.14). In contrast, the proportion of frequent drug users in Christchurch who were able to purchase morphine in one hour or less increased from 68% in 2008 to 87% in 2014 ( $p=0.0317$ ). The proportion of frequent drug users in Christchurch who were able to purchase morphine in one hour or less had previously increased from 71% in 2012 to 91% in 2013 ( $p=0.0072$ ).

**Figure 10 14: Proportion of frequent drug users who could purchase street morphine in one hour or less in Christchurch, 2008-2014**



### Location of purchase of street morphine

In 2014, 90% of the frequent drug users had purchased street morphine from a 'private house', 55% had purchased morphine from an 'agreed public location', 24% from a 'pub/bar/club', 23% from a 'public area', such as a park, and 13% from 'work' (Table 10.11). The proportion of frequent drug users who had purchased street morphine from a 'public area' such as a park, increased from 11% in 2009 to 23% in 2014 ( $p=0.0002$ ), and the proportion who had purchased street morphine from an 'agreed public location' also increased from 22% in 2009 to 55% in 2014 ( $p<0.0001$ ).

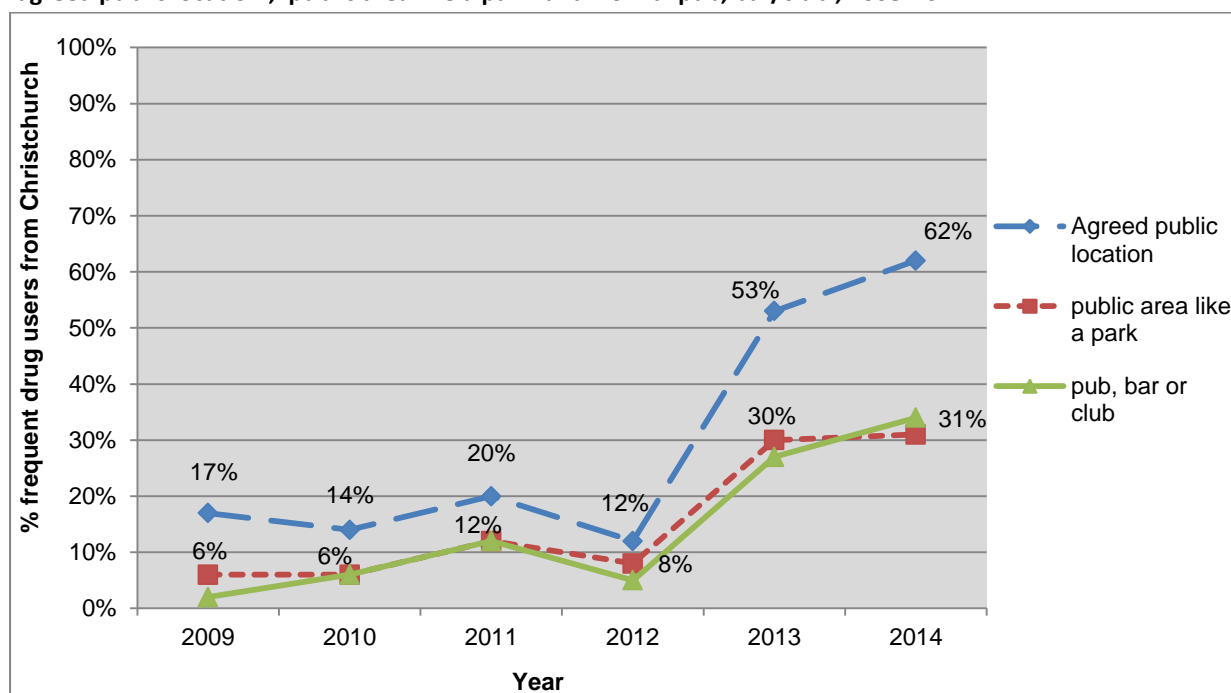


**Table 10 11: Location from which street morphine purchased in the past six months by combined frequent drug users, 2014**

	2009	2010	2011	2012	2013	2014
Location (%)	Combined modules (n=88)	Combined modules (n=87)	Combined modules (n=64)	Combined modules (n=84)	Combined modules (n=82)	Combined modules (n=77)
Private house	89	90	78	91	95	90
Agreed public location	22	27	26	25	51	55
Pub/bar/club	2	5	11	6	18	24
Public area (e.g. park)	11	4	18	15	27	23
Work	0	0	1	4	7	13
'Tinny' house	2	4	6	5	9	9
Street drug market	3	6	16	5	3	6
Educational institute	1	2	1	0	1	3
Internet	0	1	1	0	0	0

The proportion of frequent drug users from Christchurch who purchased morphine from an 'agreed public location' increased from 17% in 2009 to 62% in 2014 ( $p < 0.0001$ ). The proportion who had purchased from an 'agreed public location' had previously increased from 12% in 2012 to 53% in 2013 ( $p < 0.0001$ ). The proportion who purchased street morphine from a 'public area like a park' increased from 6% in 2009 to 31% in 2014 ( $p < 0.0001$ ) (Figure 10.15). The proportion who had purchased from a 'public area like a park' had previously increased from 8% in 2012 to 30% in 2013 ( $p = 0.0054$ ). The proportion of injecting drug users in Christchurch who purchased morphine from a 'pub, bar or club' also increased from 2% in 2009 to 34% in 2014. The low number of respondents in the early years of this series meant we were unable to perform a statistical test. The frequent drug users who had purchased street morphine from a 'private house' also increased slightly from 85% in 2009 to 96% in 2014 ( $p = 0.0021$ ).

**Figure 10 15: Proportion of frequent drug users from Christchurch who purchased street morphine from an 'agreed public location', 'public area like a park' and from a 'pub, bar/club', 2008-2014**



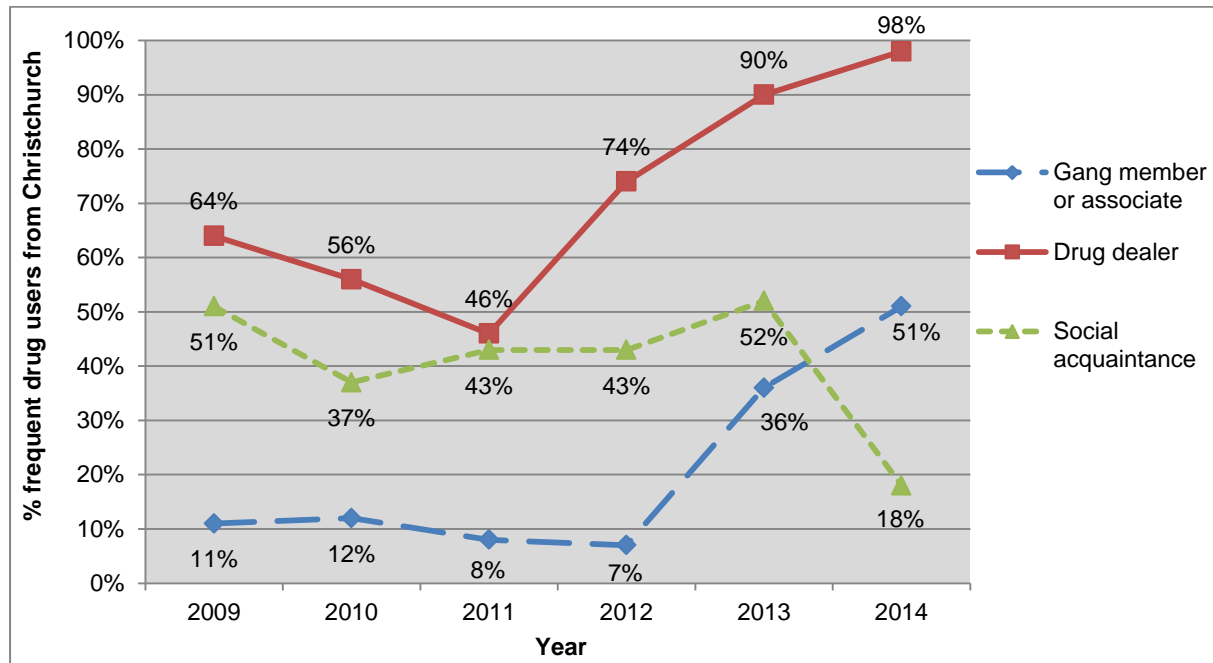
### Types of sellers of street morphine

In 2014, 87% of the frequent drug users had purchased street morphine from a 'drug dealer', 57% had purchased morphine from a 'friend', 38% had purchased morphine from a 'gang member or gang associate' and 25% had purchased from a 'social acquaintance' (Table 10.12). The proportion of frequent drug users who purchased street morphine from a 'drug dealer' increased from 57% in 2009 to 87% in 2014 ( $p < 0.0001$ ), and from 71% in 2013 to 87% in 2014 ( $p = 0.0324$ ). There was also an increase in the proportion of frequent drug users who purchased street morphine from a 'gang member or associate'; up from 10% in 2009 to 38% in 2014 ( $p < 0.0001$ ). In contrast, the proportion of frequent drug who purchased street morphine from a 'social acquaintance' decreased from 56% in 2013 to 25% in 2014 ( $p < 0.0001$ ).

The proportion of frequent drug users from Christchurch who purchased street morphine from a 'gang member or gang associate' increased substantially from 11% in 2009 to 51% in 2014 ( $p < 0.0001$ ) (Figure 10.16). The proportion who purchased from a gang member had previously increased from 7% in 2012 to 36% in 2013 ( $p = 0.0007$ ). The proportion of frequent drug users who purchased morphine from a 'drug dealer' also increased from 64% in 2009 to 98% in 2014 ( $p < 0.0001$ ). The proportion who purchased from a drug dealer had previously increased from 46% in 2011 to 74% in 2012 ( $p = 0.0075$ ), and from 74% in 2012 to 90% in 2013 ( $p = 0.0007$ ). Conversely, there

was a substantial decline in the proportion of frequent drug users from Christchurch who purchased street morphine from 'social acquaintance' (down from 52% in 2013 to 18% in 2014,  $p=0.0003$ ).

**Figure 10 16: Proportion of frequent drug users from Christchurch who purchased street morphine from a 'gang member or associate', 'drug dealer' and from a 'social acquaintance', 2008-2014**



**Table 10 12: People from whom street morphine was purchased in the past six months by combined frequent drug users, 2008-2014**

	2009	2010	2011	2012	2013	2014
Type of person (%)	Combined modules (n=89)	Combined modules (n=88)	Combined modules (n=65)	Combined modules (n=84)	Combined modules (n=82)	Combined modules (n=77)
Drug dealer	67	57	49	75	71	87
Friend	53	57	51	56	46	57
Gang member/associate	10	13	11	10	32	38
Social acquaintance	51	42	45	49	56	25
Partner/family member	3	9	8	4	18	0

**Table 10 13: People from whom street morphine was purchased in the past six months by combined frequent drug users, 2008-2014**

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Type of person (%)</b>	<b>Combined modules (n=89)</b>	<b>Combined modules (n=88)</b>	<b>Combined modules (n=65)</b>	<b>Combined modules (n=84)</b>	<b>Combined modules (n=82)</b>	<b>Combined modules (n=77)</b>
Drug dealer	67	57	49	75	71	87
Friend	53	57	51	56	46	57
Gang member/associate	10	13	11	10	32	38
Social acquaintance	51	42	45	49	56	25
Partner/family member	3	9	8	4	18	0

## **10.8 Seizures of opioids**

The opioid category includes a wide range of opioid products which come in liquids, tablets and powders of varying potencies and product configurations, making comparisons between years problematic. Table 10.13 is a summary of the opioid products seized from 2009-2014, provided by the National Drug Intelligence Bureau (NDIB). Seizures of oxycodone were made from 2012 onwards, mirroring reports of increasing use in the IDMS over the same years. There have also been high levels of seizures of morphine in recent years.

**Table 10 14: Opioid products seized from 2009-2014**

COMMODITY & CLASSIFICATION		2009	2010	2011	2012	2013	2014
<b>Codeine<sup>1</sup></b> Class C2 or C6	Amount Seized	1,532 TE	1,800 TE	1,341 TE	4,457.5 TE & 30ml & 9g	1530.5 TE	1,074 TE & 200ml & 20.15g
	Number of Incidents	26	30	24	46	27	31
<b>Methadone</b> Class B3	Amount Seized	135 TE, 1,100 mg & 153 ml	16 TE & 290 ml	65 ml	452 TE & 354 ml	18 TE & 114 ml	18 TE & 250ml
	Number of Incidents	11	8	3	14	12	3
<b>Morphine</b> Class B1	Amount Seized	732 TE & 86 ml	1,006 TE, 455 ml & 21.5 mg	758.5 TE & 990 ml	433 TE, 11.3g & 1,418.5 ml	1,149 TE & 5,364.5 ml	1,520.5 TE & 1.81g & 21.5ml & 5 ampoules
	Number of Incidents	59	50	30	40	43	42
<b>Oxycodone</b>	Amount Seized	-	-	-	205 TE & 100 ml	681 TE & 1 ml	278 TE & 1g
	Number of Incidents	-	-	-	8	19	16

TE = tablet equivalent

Source: NDIB, 2015

<sup>[1]</sup> includes panadeine

## 10.9 Summary of street morphine trends

- As in previous years, the majority of those commenting on the street morphine market in 2014 were interviewed in Christchurch (65%, n=60)
- Overall, the current availability of street morphine was described as 'easy/difficult' in 2014
- There had previously been a substantial decline in the current availability of street morphine in Christchurch from 2011 to 2013, but availability recovered quite sharply in 2014
- There was also a recovery in the current availability of street morphine in Auckland from 2013 to 2014
- The current median price paid for street morphine was \$1 per milligram (or \$100 per 100 milligrams) in 2014
- The mean price of street morphine increased in Christchurch from \$102 in 2008 to \$112 in 2014. The mean price of morphine in Christchurch had previously increased from \$98 in 2012 to \$114 in 2013
- The proportion of frequent drug users in Christchurch who thought the price of street morphine was 'increasing' had previously increased sharply from 2% in 2011 to 66% in 2013, but then declined to 15% in 2014
- The current strength of street morphine was described as 'medium/high' in 2014
- The frequent drug users in Christchurch reported a decline in the strength of morphine from 2013 to 2014
- Overall, the number of people using street morphine was reported to be the 'same' in 2014
- There was also no change in the number of people using morphine in Christchurch from 2008 to 2014
- The proportion of frequent drug users in Christchurch who purchased morphine weekly or more often increased from 59% in 2008 to 85% in 2014
- The proportion of frequent drug users in Christchurch who could purchase street morphine in one hour or less increased from 68% in 2008 to 87% in 2014. The proportion of frequent drug users in Christchurch who were able to purchase morphine in one hour or less had previously increased from 71% in 2012 to 91% in 2013

- There was an increase in the proportion of frequent drug users in Christchurch who purchased street morphine from an 'agreed public location' (up from 12% in 2012 to 62% in 2014), 'public area' such as a park (up from 8% in 2012 to 31% in 2014) and 'pub/bar or club' (up from 5% in 2012 to 34% in 2014)
- The proportion of frequent drug users from Christchurch who purchased street morphine from a 'gang member or gang associate' increased from 7% in 2012 to 51% in 2014
- The proportion of frequent drug users who purchased from a drug dealer increased from 46% in 2011 to 98% in 2014



# 11. Cocaine

## 11.1 Introduction

Cocaine is a commonly used illegal drug in many countries around the world, including the United States, United Kingdom and Europe (EMCDDA, 2015a; UNODC, 2015b), but use in New Zealand has traditionally been very low level (Field & Casswell, 1999; Wilkins & Sweetsur, 2008). A number of factors appear to contribute to the low level of cocaine use in New Zealand including its high price, uncertain strength, short duration of pharmacological action (i.e. around 20 minutes), the ready availability of longer lasting stimulants such as methamphetamine, New Zealand's geographical isolation from the main cocaine smuggling routes and coca producing countries, and New Zealand's tight border controls (New Zealand Customs Service, 2002). International experience suggests that cocaine and methamphetamine are close substitutes for each other, and one tends to dominate in a locality at the expense of the other (Weisheit & White, 2009).

The 2013 IDMS found some tentative evidence that the use of cocaine may be increasing in New Zealand, albeit from a low level. The proportion of frequent drug users who said 'less' people were using cocaine had decreased from 53% in 2011 to 7% in 2013. The 2014 NZ-ADUM found a steady increase in the proportion of police detainees who have tried cocaine at some point in their lifetimes, but little evidence of increasing recent use and availability. Some of the experimentation with cocaine may have occurred in Australia and other international holiday destinations which have much larger cocaine markets. Cocaine availability has consistently been described as 'very difficult' or 'difficult' over the past five years. The only notable change has been some increase in the strength of cocaine over the past three years. Seizures of cocaine in New Zealand vary greatly from year to year, with the larger amounts seized at the border generally considered to be destined for the Australian market (NDIB, 2014). Nevertheless, the epidemic nature of illegal drug trends, and the speed at which demand and supply conditions for a recreational drug can change, justifies the ongoing monitoring of cocaine markets in New Zealand.

## 11.2 Knowledge of cocaine trends

Only 6% of the frequent drug users interviewed for the 2014 IDMS (n=19) indicated they felt confident enough to comment on the price, purity and availability of cocaine in the previous six months. This included 10% of the frequent methamphetamine users (n=9), 6% of the frequent

ecstasy users (n=7) and 3% of the frequent injecting drug users (n=3). The low number of frequent drug users answering the cocaine section indicates the findings should be interpreted with caution.

## 11.3 Availability of cocaine

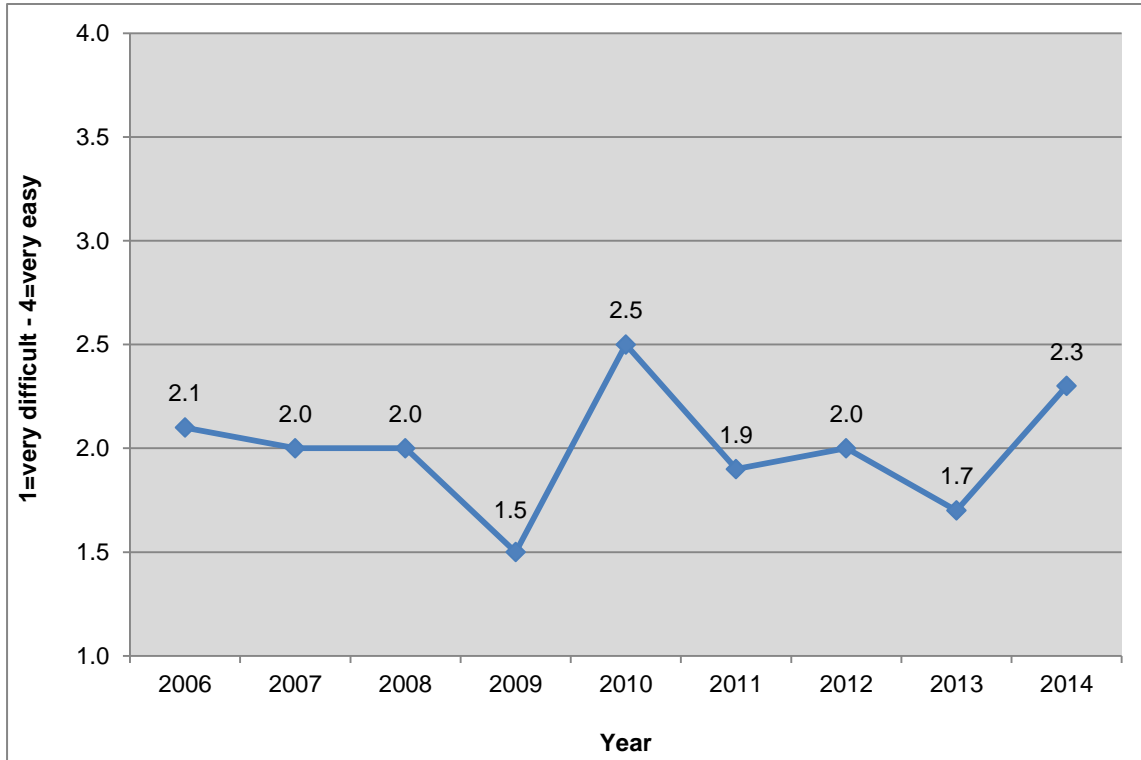
### Current availability of cocaine

The current availability of cocaine was reported to be 'difficult/easy' in 2014 (Table 11.1). Fifty percent of the frequent drug users described the current availability of cocaine as 'difficult'. There was no statistically significant trend in the current availability of cocaine from 2006 to 2014 ( $p=0.9562$ ) (Figure 11.1). However, the current availability of cocaine increased from 2013 to 2014 (up from 1.7 to 2.3), and this increase was very close to being statistically significant ( $p=0.0525$ ).

**Table 11 1: Current availability of cocaine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current availability of cocaine (%)	Combined modules (n=29)	Combined modules (n=29)	Combined modules (n=31)	Combined modules (n=20)	Combined modules (n=24)	Combined modules (n=33)	Combined modules (n=25)	Combined modules (n=17)	Combined modules (n=18)
Very easy [4]	10%	3%	12%	0%	24%	0%	13%	9%	5%
Easy [3]	18%	16%	10%	9%	22%	16%	8%	10%	33%
Difficult [2]	47%	52%	42%	35%	31%	57%	40%	24%	50%
Very difficult [1]	25%	28%	37%	56%	23%	27%	39%	57%	12%
Average availability score (1=very difficult – 4=very easy)	2.1	2.0	2.0	1.5	2.5	1.9	2.0	1.7	2.3
Overall current status	Difficult/very difficult	Difficult/very difficult	Difficult/very difficult	Very difficult/difficult	Difficult/very easy	Difficult/very difficult	Difficult/very difficult	Very difficult/difficult	Difficult/easy

Figure 11 1: Mean score of the current availability of cocaine by combined frequent drug users, 2006-2014



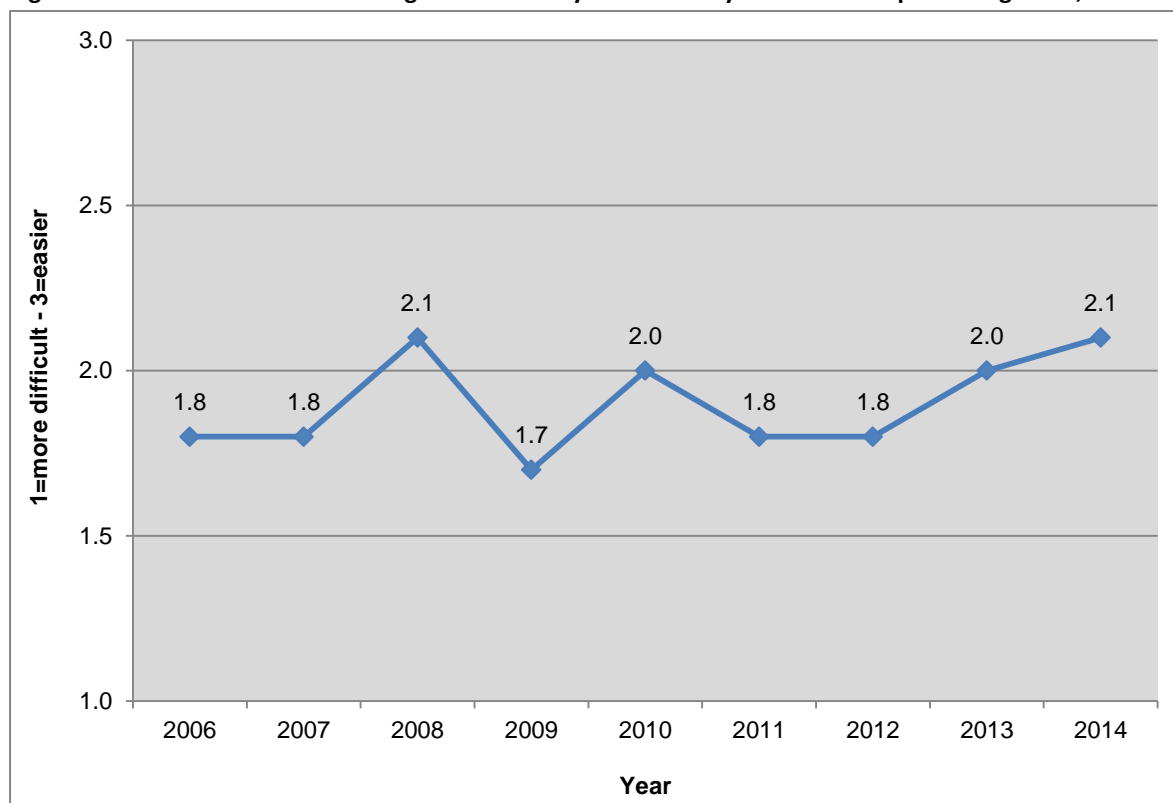
### Change in availability of cocaine

The frequent drug users reported the availability of cocaine had been 'stable/easier' in the previous six months in 2014 (Table 11.2). There was no statistically significant difference in the change in the availability of cocaine from 2006 to 2014 ( $p=0.3314$ ) (Figure 11.2).

**Table 11 2: Change in availability of cocaine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in availability of cocaine (%)	Combined modules (n=30)	Combined modules (n=28)	Combined modules (n=29)	Combined modules (n=16)	Combined modules (n=23)	Combined modules (n=32)	Combined modules (n=32)	Combined modules (n=15)	Combined modules (n=18)
Easier [3]	7%	0%	27%	0%	21%	5%	13%	9%	29%
Stable [2]	56%	65%	55%	56%	38%	61%	47%	65%	31%
Fluctuates [2]	13%	14%	3%	12%	18%	12%	7%	14%	26%
More difficult [1]	23%	21%	15%	32%	22%	22%	33%	12%	14%
Average change in availability score (1=more difficult – 3=easier)	1.8	1.8	2.1	1.7	2.0	1.8	1.8	2.0	2.1
Overall recent change	Stable/ more difficult	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ fluctuates	Stable/ easier

Figure 11 2: Mean score of the change in availability of cocaine by combined frequent drug users, 2006-2014



## 11.4 Price of cocaine

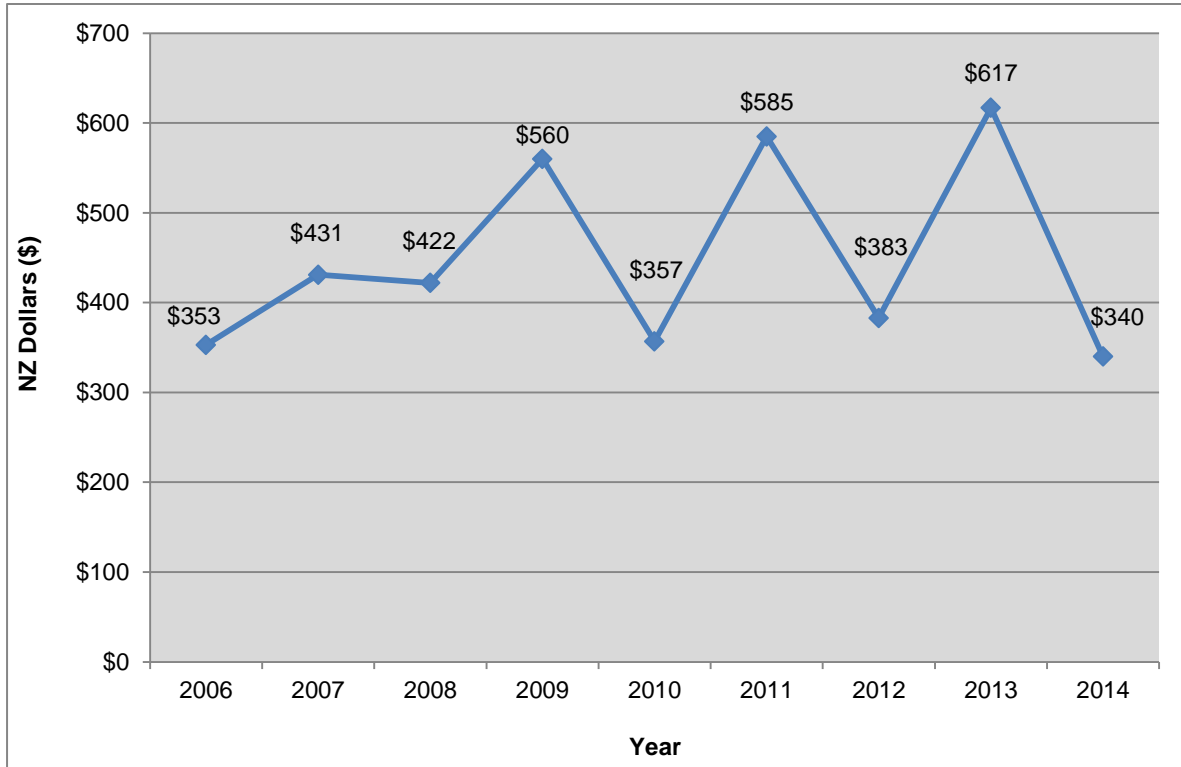
### Current price of cocaine

The median price paid for a gram of cocaine was \$400 in 2014 (Table 11.3). The mean price of a gram of cocaine decreased from \$617 in 2013 to \$340 in 2014 ( $p=0.0188$ ) (Figure 11.3). The number of respondents reporting prices for cocaine has been low in recent years (i.e. 14=2013 & 13=2014) and consequently these results should be treated with caution.

Table 11 3: Current price of cocaine (NZD) by combined frequent drug users, 2006-2014

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current price of cocaine (\$)	Combined modules (n=25)	Combined modules (n=20)	Combined modules (n=25)	Combined modules (n=16)	Combined modules (n=17)	Combined modules (n=29)	Combined modules (n=17)	Combined modules (n=14)	Combined modules (n=13)
Median (mean) price for a gram	\$300 (\$353)	\$350 (\$431)	\$400 (\$422)	\$350 (\$560)	\$350 (\$357)	\$500 (\$585)	\$400 (\$383)	\$500 (\$617)	\$400 (\$340)

Figure 11 3: Mean price of a gram of cocaine (NZD) by combined frequent drug users, 2006-2014



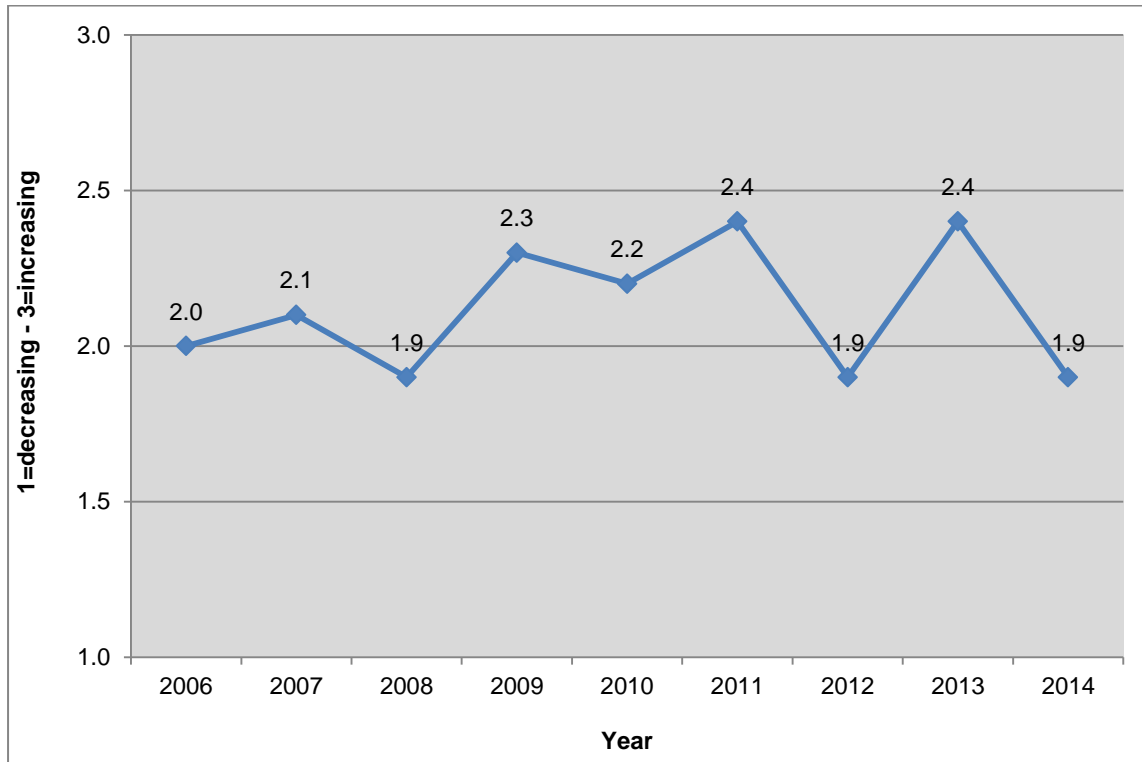
### Change in price of cocaine

The price of cocaine was reported to have been 'stable' over the previous six months in 2014 (Table 11.4). Seventy-two percent of the frequent drug users described the price as 'stable'. The frequent drug users were more likely to describe the price of cocaine as stable from 2013 to 2014 ( $p=0.0059$ ) (Figure 11.4).

**Table 11 4: Change in the price of cocaine in the past six months by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Change in price of cocaine (%)	Combined modules (n=24)	Combined modules (n=22)	Combined modules (n=22)	Combined modules (n=16)	Combined modules (n=22)	Combined modules (n=29)	Combined modules (n=17)	Combined modules (n=14)	Combined modules (n=14)
Increasing [3]	8%	18%	4%	32%	18%	46%	25%	36%	0%
Fluctuating [2]	20%	9%	15%	12%	17%	16%	0%	6%	16%
Stable [2]	64%	69%	65%	50%	65%	29%	44%	58%	72%
Decreasing [1]	9%	4%	16%	6%	0%	9%	31%	0%	12%
Average change in price score (1=decreasing – 3=increasing)	2.0	2.1	1.9	2.3	2.2	2.4	1.9	2.4	1.9
Overall recent change	Stable/ fluctuating	Stable/ increasing	Stable/ decreasing	Stable/ increasing	Stable/ increasing	Increasing/ stable	Stable/ decreasing	Stable/ increasing	Stable

**Figure 11 4: Mean score of the change in price of cocaine in the previous six months by combined frequent drug users, 2006-2014**



## 11.5 Strength of cocaine

### Current strength of cocaine

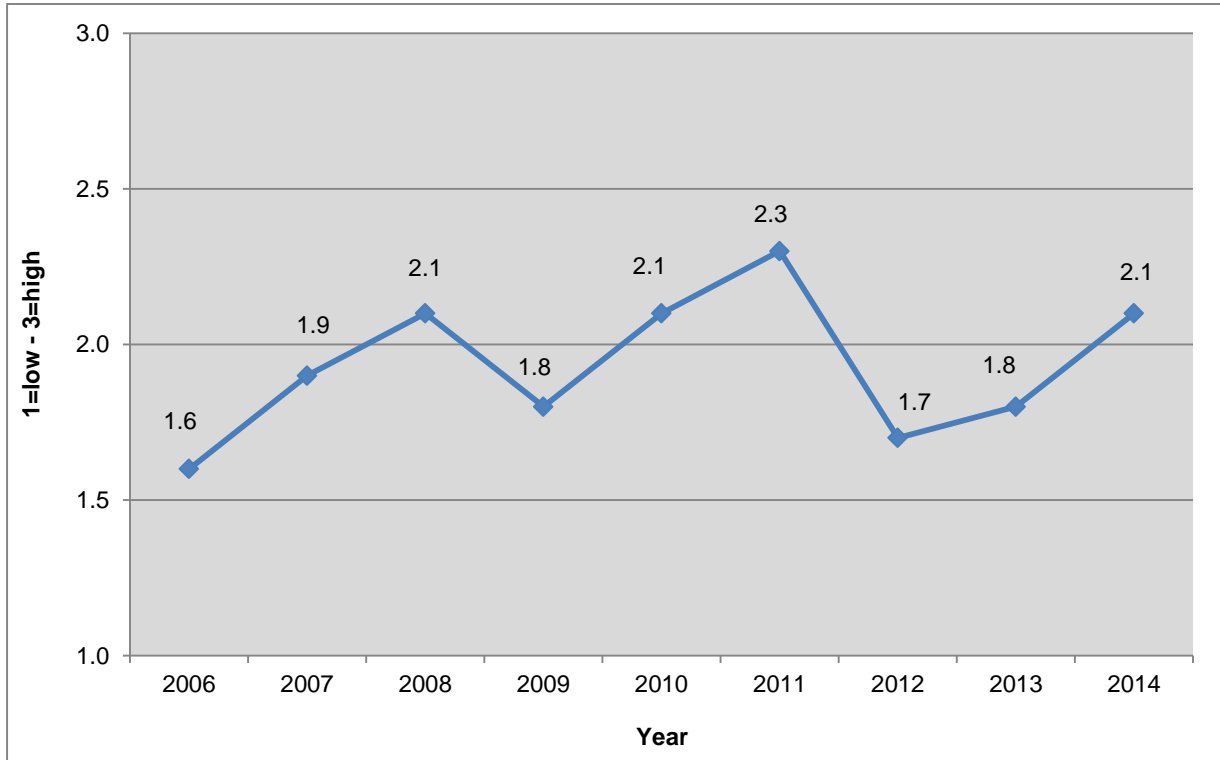
The current strength of cocaine was described as 'fluctuates/high' in 2014 (Table 11.5). There was no statistically significant change in the purity of cocaine from 2006 to 2014 ( $p=0.2708$ ).



**Table 11 5: Current strength of cocaine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Current strength of cocaine (%)	Combined modules (n=24)	Combined modules (n=26)	Combined modules (n=28)	Combined modules (n=16)	Combined modules (n=23)	Combined modules (n=29)	Combined modules (n=21)	Combined modules (n=12)	Combined modules (n=17)
High [3]	13%	26%	28%	24%	35%	40%	15%	24%	32%
Medium [2]	21%	27%	25%	24%	27%	40%	38%	28%	13%
Fluctuates [2]	17%	16%	25%	6%	17%	8%	4%	5%	32%
Low [1]	49%	31%	23%	46%	21%	12%	42%	43%	23%
Average strength score (1=low – 3=high)	1.6	1.9	2.1	1.8	2.1	2.3	1.7	1.8	2.1
Overall current status	Low/medium	Low/medium	High/medium	Low/medium	High/medium	High/medium	Low/medium	Low/medium	Fluctuates/High

Figure 11 5: Mean score of the current strength of cocaine by combined frequent drug users, 2006-2014



### Change in strength of cocaine

The strength of cocaine was described as having been 'stable/fluctuating' in the previous six months in 2014 (Table 11.6). Forty-nine percent of the frequent drug users reported the strength had been 'stable' in 2014. There was no statistically significant difference in the change in strength of cocaine from 2006 to 2014 ( $p=0.5024$ ).

**Table 11 6: Change in strength of cocaine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Change in strength of cocaine (%)</b>	<b>Combined modules (n=20)</b>	<b>Combined modules (n=25)</b>	<b>Combined modules (n=21)</b>	<b>Combined modules (n=14)</b>	<b>Combined modules (n=22)</b>	<b>Combined modules (n=29)</b>	<b>Combined modules (n=16)</b>	<b>Combined modules (n=12)</b>	<b>Combined modules (n=16)</b>
Increasing [3]	5%	4%	18%	7%	9%	3%	14%	0%	6%
Stable [2]	36%	48%	37%	58%	54%	52%	62%	77%	49%
Fluctuating [2]	24%	31%	23%	14%	28%	23%	0%	8%	32%
Decreasing [1]	35%	17%	21%	21%	9%	22%	24%	15%	13%
Average change in strength score (1=decreasing – 3=increasing)	1.7	1.9	2.0	1.9	2.0	1.8	1.9	1.9	1.9
Overall recent change	Stable/ decreasing	Stable/ fluctuating	Stable/ fluctuating	Stable/ decreasing	Stable/ fluctuating	Stable/ fluctuating	Stable/ decreasing	Stable	Stable/ fluctuating

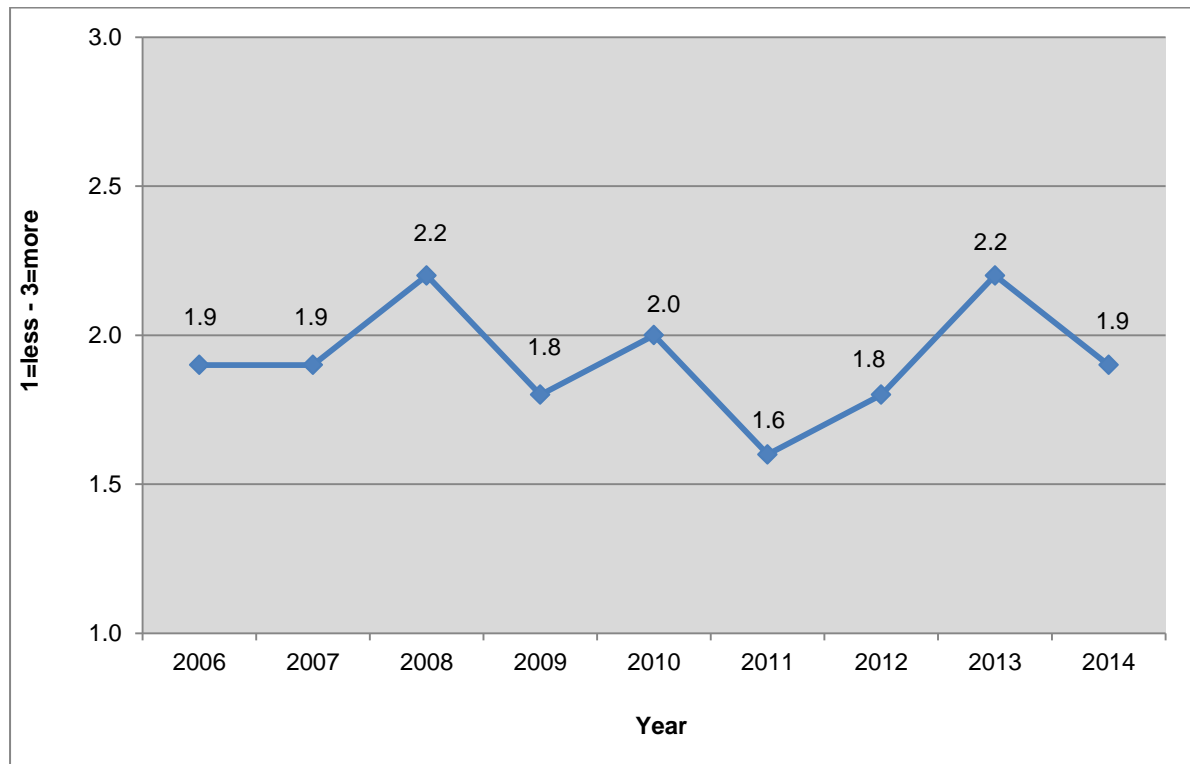
## **11.6 Perceptions of the number of people using cocaine**

The number of people using cocaine was described as 'less/more' compared to six months ago in 2014 (Table 11.7). Forty-three percent reported that 'less' people were using cocaine compared to six months ago in 2014. There was no statistically significant difference in perceptions of the change in the number of people using cocaine from 2006 and 2014 ( $p=0.5388$ ) (Figure 11.6).

**Table 11 7: Perceptions of the number of people using cocaine by combined frequent drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of people using cocaine (%)	Combined modules (n=27)	Combined modules (n=25)	Combined modules (n=23)	Combined modules (n=18)	Combined modules (n=23)	Combined modules (n=27)	Combined modules (n=21)	Combined modules (n=14)	Combined modules (n=17)
More [3]	23%	16%	30%	17%	16%	18%	19%	23%	30%
Same [2]	47%	57%	62%	51%	70%	29%	47%	69%	27%
Less [1]	29%	27%	8%	32%	14%	53%	34%	7%	43%
Average number of people using score (1=less – 3=more)	1.9	1.9	2.2	1.8	2.0	1.6	1.8	2.2	1.9
Overall recent change	Same/ less	Same/ less	Same/ more	Same/ less	Same	Less/ same	Same/ less	Same/ more	Less/ more

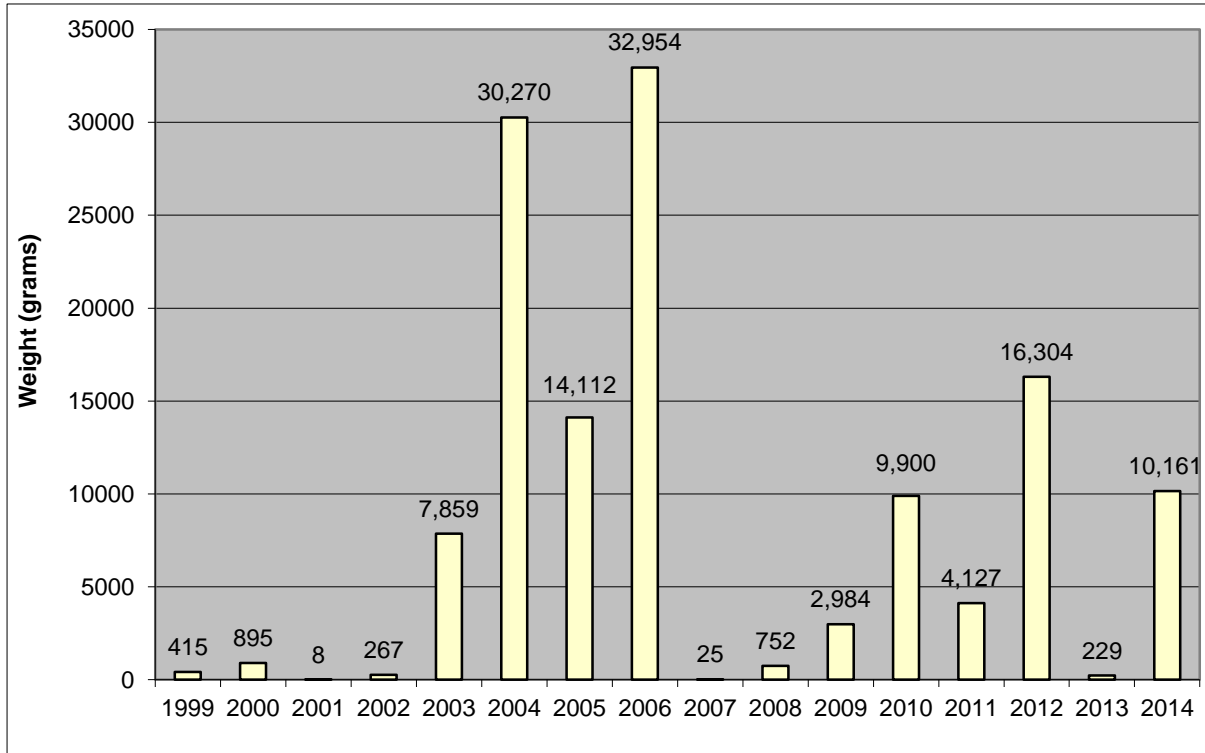
**Figure 11 6: Mean score of the perceptions of the number of people using cocaine by combined frequent drug users, 2006-2014**



### 11.7 Seizures of cocaine

Many of the larger seizures of cocaine in New Zealand are made at the border and considered to be in transit to the larger Australian market (New Zealand Customs Service, 2002). There has been considerable variation in the quantity of cocaine seized year to year over the past ten years or so (Figure 11.7). The largest seizures were made in 2004 (i.e. 30,270 grams), 2006 (32,954 grams) and 2012 (16,304 grams). A total of only 10,161 grams of cocaine was seized in 2014, of which three seizures were over one kilogram and considered to be destined for the New Zealand domestic market (NDIB, 2015). There were also a number of smaller seizures of cocaine in 2014 which may have been ordered from the dark web (NDIB, 2015).

Figure 11 7: Grams of cocaine seized in New Zealand, 1999-2014



Source: NDIB, 2015

## 11.8 Summary of cocaine trends

- The low number of frequent drug users answering the cocaine section (n<20) indicates the findings should be interpreted with caution
- The current availability of cocaine was reported to be 'difficult/easy' in 2014
- The current availability of cocaine increased from 2013 to 2014
- The availability of cocaine was described to have been 'stable/easier' in the previous six months in 2014
- The median price paid for a gram of cocaine was \$400 in 2014
- The frequent drug users were more likely to report the price of cocaine had been stable from 2013 to 2014
- The current strength of cocaine was reported to be 'fluctuates/high' in 2014
- The number of people using cocaine was described as 'less/more' in 2014
- A total of 10,161 grams of cocaine was seized in 2014, and this was considerably more than the 229 grams seized in 2013, but less than 16,304 grams seized in 2012



## 12. Heroin

### 12.1 Introduction

The international supply of heroin to New Zealand has been poor since the late 1970s (Newbold, 2000). As a consequence, injecting drug users in New Zealand largely use pharmaceutical opioids illicitly diverted from the health system, principally morphine or more recently oxycodone, or make their own heroin from morphine and codeine, commonly known as ‘homebake’ heroin (Wilkins, et al., 2011b). However, some heroin continues to be available in New Zealand and there remains a risk that a larger heroin market could develop if international supply conditions improve (New Zealand Customs Service, 2002).

### 12.2 Knowledge of heroin trends

Twelve percent of the frequent drug users interviewed for the 2014 IDMS (n=35) indicated they felt confident enough to comment on the price, purity and availability of heroin in the previous six months. This included 18% of the frequent methamphetamine users (n=17), 15% of the frequent injecting drug users (n=15) and 3% of the frequent ecstasy users (n=3). The relatively small number of frequent drug users answering the heroin section of the IDMS indicates the findings in this chapter should be interpreted with caution.

### 12.3 Availability of heroin

#### Current availability of heroin

The frequent drug users reported the current availability of heroin was ‘easy/very difficult’ in 2014 (Table 12.1). There was no statistically significant trend in the availability of heroin from 2008 to 2014 (p=0.6570).

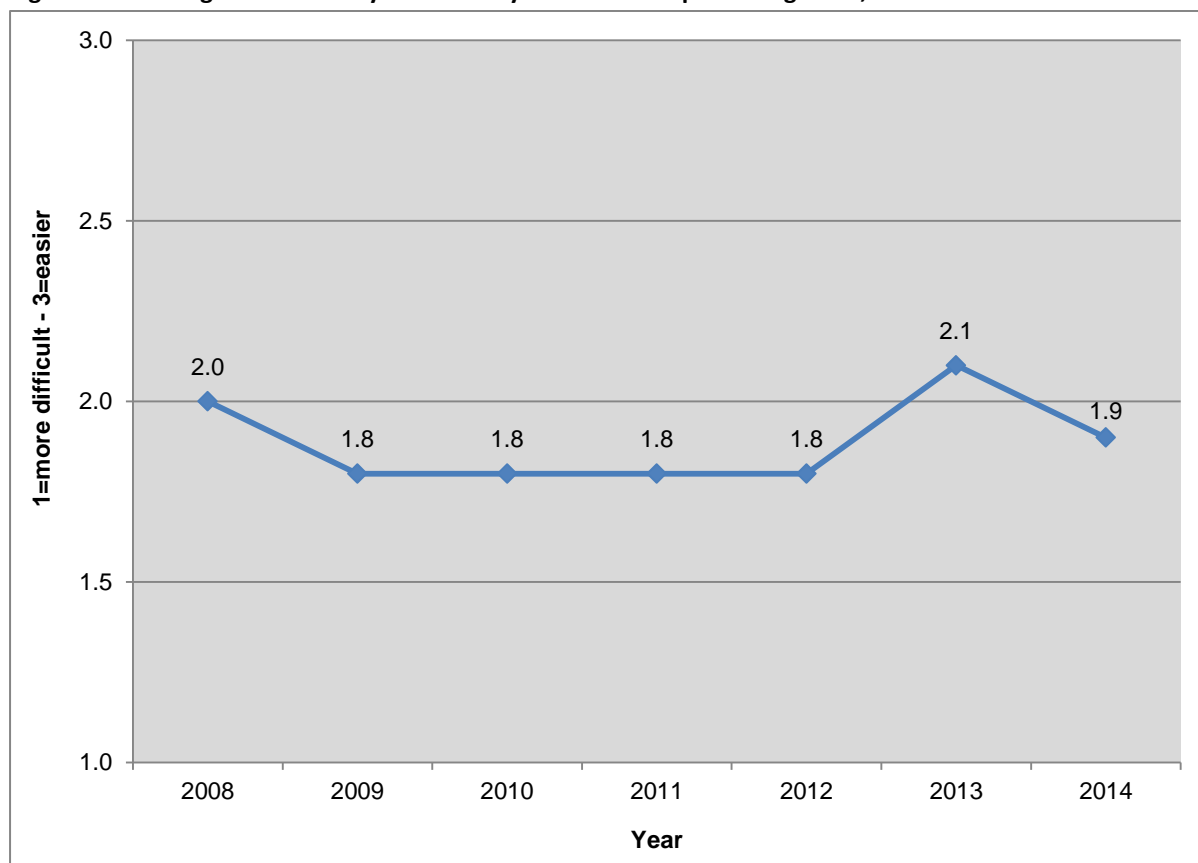
**Table 12 1: Current availability of heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
Current availability of heroin (%)	Combined modules (n=38)	Combined modules (n=40)	Combined modules (n=47)	Combined modules (n=34)	Combined modules (n=20)	Combined modules (n=14)	Combined modules (n=33)
Very easy [4]	20%	27%	18%	26%	30%	31%	17%
Easy [3]	23%	22%	38%	18%	25%	10%	37%
Difficult [2]	27%	23%	28%	37%	35%	25%	16%
Very difficult [1]	30%	29%	16%	20%	10%	34%	26%
Average availability score (1=very difficult–4=very easy)	2.3	2.5	2.6	2.5	2.8	2.4	2.5
Overall current status	Very difficult/difficult	Very difficult/very easy	Easy/difficult	Difficult/very easy	Difficult/very easy	Very difficult/very easy	Easy/Very difficult

### Change in availability of heroin

The frequent drug users reported the availability of heroin had been ‘stable/more difficult’ in the previous six months in 2014 (Table 12.2). There was no statistically significant difference in the change in availability of heroin from 2008 to 2014 ( $p=0.9353$ ), with the frequent drug users largely describing the availability of heroin as ‘stable/more difficult’ (Figure 12.1).

**Figure 12 1: Change in availability of heroin by combined frequent drug users, 2006-2014**



**Table 12 2: Change in availability of heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Change in availability of heroin (%)</b>	<b>Combined modules (n=37)</b>	<b>Combined modules (n=40)</b>	<b>Combined modules (n=45)</b>	<b>Combined modules (n=34)</b>	<b>Combined modules (n=20)</b>	<b>Combined modules (n=13)</b>	<b>Combined modules (n=32)</b>
Easier [3]	17%	7%	11%	11%	6%	30%	12%
Stable [2]	62%	55%	43%	46%	49%	44%	56%
Fluctuates [2]	7%	7%	13%	17%	21%	6%	8%
More difficult [1]	14%	30%	33%	26%	24%	20%	24%
Average change in availability score (1=more difficult – 3=easier)	2.0	1.8	1.8	1.8	1.8	2.1	1.9
Overall recent change	Stable/easier	Stable/more difficult	Stable/more difficult	Stable/more difficult	Stable/more difficult	Stable/easier	Stable/more difficult

## 12.4 Price of heroin

### Current price of heroin

The median price of a milligram of heroin was \$1 in 2014 (or \$100 per 100 milligrams) and the mean price was \$1.06 in 2014 (Table 12.3). There was no statistically significant change in the mean price of a milligram of heroin from 2008 to 2014 ( $p=0.6747$ ).

**Table 12 3: Current median (mean) price of heroin (NZD) by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Current price of heroin</b>	<b>Combined modules (n=32)</b>	<b>Combined modules (n=39)</b>	<b>Combined modules (n=39)</b>	<b>Combined modules (n=22)</b>	<b>Combined modules (n=17)</b>	<b>Combined modules (n=10)</b>	<b>Combined modules (n=16)</b>
Median (mean) price for a milligram	\$1.00 (\$1.06)	\$1.00 (\$1.01)	\$1.00 (\$1.11)	\$1.00 (\$1.11)	\$1.00 (\$0.95)	\$1.00 (\$0.92)	\$1.00 (\$1.06)

### Change in price of heroin

The price of heroin was reported to have been ‘stable/fluctuating’ over the past six months in 2014 (Table 12.4). There was no statistically significant difference in perceptions of the change in the price of heroin from 2008 to 2014 ( $p=0.2128$ ), with the price largely described as stable.

**Table 12 4: Change in the price of heroin in the past six months by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Change in price of heroin (%)</b>	<b>Combined modules (n=31)</b>	<b>Combined modules (n=37)</b>	<b>Combined modules (n=37)</b>	<b>Combined modules (n=29)</b>	<b>Combined modules (n=20)</b>	<b>Combined modules (n=9)</b>	<b>Combined modules (n=28)</b>
Increasing [3]	20%	8%	13%	26%	4%	0%	3%
Fluctuating [2]	7%	0%	5%	2%	11%	0%	19%
Stable [2]	60%	77%	73%	64%	81%	73%	64%
Decreasing [1]	13%	16%	8%	8%	5%	27%	15%
Average change in price score (1=decreasing – 3=increasing)	2.1	1.9	2.1	2.2	2.0	1.7	1.9
Overall recent change	Stable/ increasing	Stable	Stable	Stable/ increasing	Stable	Stable	Stable/ fluctuating

## 12.5 Purity of heroin

### Current purity of heroin

The current purity of heroin was described as ‘medium/fluctuates’ in 2014 (Table 12.5). A lower proportion of frequent drug users described the purity of heroin as ‘high’ from 2008 to 2014 (down from 2.4 to 2.0,  $p=0.0312$ ).

**Table 12 5: Current purity of heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
Current purity of heroin (%)	Combined modules (n=36)	Combined modules (n=35)	Combined modules (n=40)	Combined modules (n=32)	Combined modules (n=18)	Combined modules (n=9)	Combined modules (n=27)
High [4]	55%	38%	32%	30%	38%	29%	14%
Medium [3]	17%	42%	18%	45%	34%	16%	42%
Fluctuates [2]	11%	11%	42%	17%	22%	45%	30%
Low [1]	17%	8%	8%	8%	6%	10%	15%
Average purity score (1=low – 4=high)	2.4	2.3	2.2	2.2	2.3	2.2	2.0
Overall current status	High/ Medium/ low	Medium/ high	Fluctuates/ high	Medium/ high	High/ medium	Fluctuates/ High	Medium/ fluctuates

### Change in purity of heroin

The purity of heroin was described as ‘stable/fluctuating’ over the past six months in 2014 (Table 12.6). The frequent drug users were slightly more likely to describe the purity of heroin as fluctuating from 2008 to 2014, and but the difference was not statistically significant ( $p=0.1404$ ).

**Table 12 6: Change in purity of heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
Change in purity of heroin (%)	Combined modules (n=35)	Combined modules (n=35)	Combined modules (n=37)	Combined modules (n=31)	Combined modules (n=17)	Combined modules (n=10)	Combined modules (n=24)
Increasing [3]	16%	14%	5%	9%	0%	16%	9%
Stable [2]	61%	67%	70%	53%	64%	65%	51%
Fluctuating [2]	23%	6%	22%	29%	23%	12%	28%
Decreasing [1]	0%	13%	3%	10%	12%	8%	11%
Average change in purity score (1=decreasing – 3=increasing)	2.2	2.0	2.0	2.0	1.9	2.1	2.0
Overall recent change	Stable/ fluctuating	Stable/ increasing	Stable	Stable/ fluctuating	Stable/ fluctuating	Stable/ increasing	Stable/ fluctuating

## 12.6 Perceptions of the number of people using heroin

The number of people using heroin was described as ‘same/more/less’ compared to six months ago in 2014 (Table 12.7). Overall, the frequent drug users were slightly more likely to say there were more people using heroin from 2008 to 2014 (up from 1.9 to 2.0, 0.0288). The frequent drug users had previously reported ‘more’ people were using heroin from 2008 to 2013 (up from 1.9 to 2.5,  $p=0.0069$ ), and from 2012 to 2013 (up from 1.9 to 2.5,  $p=0.0302$ ). However, a lower proportion said ‘more’ people were using heroin from 2013 to 2014 (down from 2.5 to 2.0), and this decline was very close to being statistically significant ( $p=0.0546$ ). The low number of respondents answering the question in 2013 ( $n=12$ ) indicates these result should be treated with caution.

**Table 12 7: Perceptions of the number of people using heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Number of people using heroin (%)</b>	<b>Combined modules (n=32)</b>	<b>Combined modules (n=41)</b>	<b>Combined modules (n=46)</b>	<b>Combined modules (n=29)</b>	<b>Combined modules (n=18)</b>	<b>Combined modules (n=12)</b>	<b>Combined modules (n=29)</b>
More [3]	22%	7%	23%	44%	15%	61%	28%
Same [2]	45%	59%	46%	23%	63%	27%	43%
Less [1]	33%	34%	31%	33%	22%	12%	28%
Average number of people using score (1=less – 3=more)	1.9	1.7	1.9	2.1	1.9	2.5	2.0
Overall recent change	Same/ less	Same/ less	Same/ less	More/ Less	Same/ less	More/ same	Same/ More/ less

## 12.7 Summary of heroin trends

- The low number of frequent drug users reporting knowledge of heroin trends (e.g. 14=2013, 33=2014) indicates the findings in this chapter should be treated with some caution
- The current availability of heroin was described as 'easy/very difficult' in 2014
- The availability of heroin was reported to have been 'stable/more difficult' in 2014, and this has largely been the assessment since 2009
- The median price of a milligram of heroin was \$1 (or \$100 per 100 milligrams) in 2014
- The price of heroin was reported to have been 'stable/fluctuating' in the past six months in 2014
- A lower proportion of frequent drug users described the current purity of heroin as 'high' from 2008 to 2014
- A higher proportion of frequent drug users said the 'same' number of people were using heroin from 2013 to 2014



## **13. Homebake morphine/heroin**

### **13.1 Introduction**

'Homebake' morphine or heroin is an opioid manufactured by drug users in makeshift 'kitchen' laboratories from a codeine base (Newbold, 2000). Homebake morphine emerged in New Zealand in the early 1980s in response to the general shortage of internationally sourced heroin brought about by the arrest and dismantling of the 'Mr Asia' heroin smuggling network (Newbold, 2000). Detections of 'homebake' heroin laboratories have been spasmodic in recent years (NDIB, 2013).

### **13.2 Knowledge of homebake morphine/heroin trends**

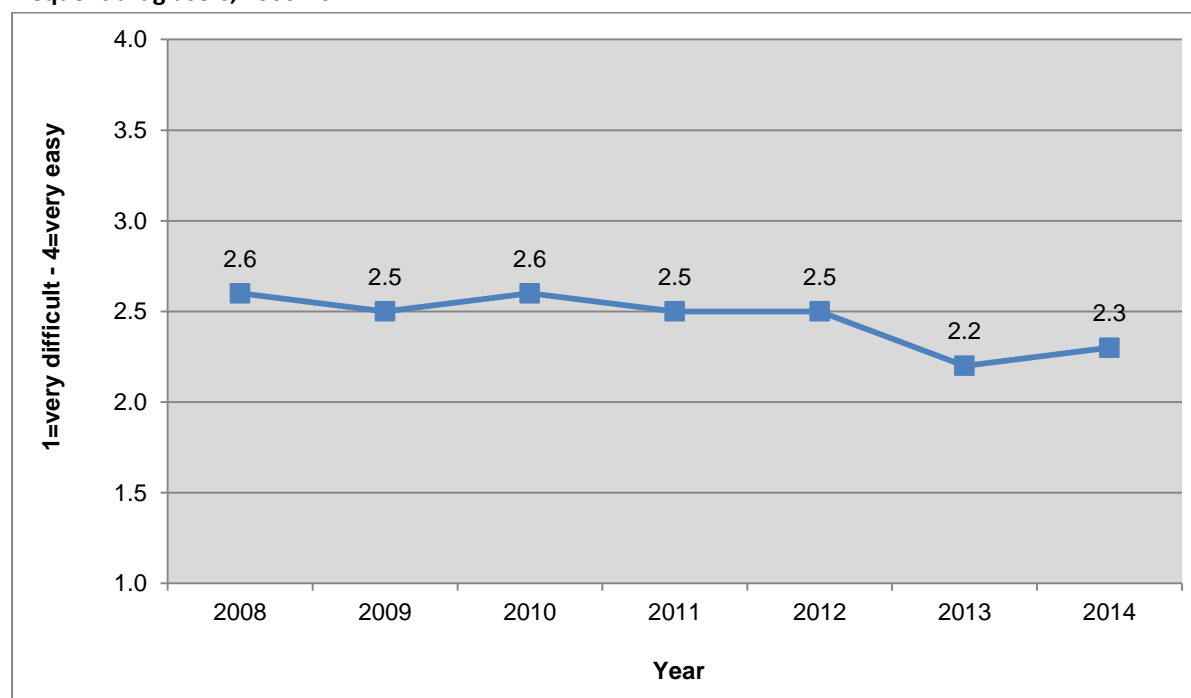
Twelve percent of the frequent drug users interviewed for the 2014 IDMS (n=38) indicated they felt confident enough to comment on the price, purity and availability of homebake morphine/heroin in the previous six months. This included 20% of the frequent injecting drug users (n=20), 16% of the frequent methamphetamine users (n=16) and 2% of the frequent ecstasy users (n=2). The fairly low number of frequent drug users who responded to the homebake section in 2008 and 2012 reduces the ability of the statistical tests to establish reliable trends over time.

### **13.3 Availability of homebake morphine/heroin**

#### **Current availability of homebake morphine/ heroin**

The frequent drug users reported the current availability of homebake morphine/heroin was 'easy/very difficult/difficult' in 2014 (Table 13.1). There was a decline in the current availability of homebake morphine/heroin from 2008 to 2014 (down from 2.6 to 2.3,  $p=0.0486$ ).

**Figure 13 1: Figure 13.1 Mean score of the current availability of homebake morphine/heroin by combined frequent drug users, 2006-2014**



**Table 13 1: Current availability of homebake morphine/heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Current availability of homebake morphine/heroin (%)</b>	<b>Combined modules (n=27)</b>	<b>Combined modules (n=45)</b>	<b>Combined modules (n=58)</b>	<b>Combined modules (n=58)</b>	<b>Combined modules (n=20)</b>	<b>Combined modules (n=46)</b>	<b>Combined modules (n=40)</b>
Very easy [4]	19%	6%	20%	19%	21%	22%	16%
Easy [3]	30%	43%	32%	33%	33%	16%	32%
Difficult [2]	44%	43%	37%	33%	22%	18%	20%
Very difficult [1]	7%	8%	11%	15%	24%	43%	32%
Average availability score (1=very difficult – 4=very easy)	2.6	2.5	2.6	2.5	2.5	2.2	2.3
Overall current status	Difficult/easy	Easy/difficult	Difficult/easy	Easy/difficult	Easy/Very difficult	Very difficult/very easy	Easy/Very difficult/difficult

### Change in availability of homebake morphine/heroin

The frequent drug users reported the availability of homebake morphine/heroin had been ‘more difficult/stable’ in the previous six months in 2014 (Table 13.2). There was no statistically significant difference in assessments of the change in availability of homebake morphine/heroin from 2008 to 2014 ( $p=0.9986$ ), with many describing availability as ‘more difficult’.

**Table 13 2: Change in availability of homebake morphine/heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Change in availability of homebake morphine/heroin (%)</b>	<b>Combined modules (n=26)</b>	<b>Combined modules (n=45)</b>	<b>Combined modules (n=57)</b>	<b>Combined modules (n=55)</b>	<b>Combined modules (n=20)</b>	<b>Combined modules (n=46)</b>	<b>Combined modules (n=39)</b>
Easier [3]	11%	4%	11%	6%	11%	12%	9%
Stable [2]	38%	46%	46%	58%	49%	32%	38%
Fluctuates [2]	9%	9%	4%	10%	10%	7%	12%
More difficult [1]	42%	41%	39%	25%	30%	49%	40%
Average change in availability score (1=more difficult – 3=easier)	1.7	1.6	1.7	1.8	1.8	1.6	1.7
Overall recent change	More difficult/stable	Stable/more difficult	Stable/more difficult	Stable/more difficult	Stable/more difficult	More difficult/stable	More difficult/stable

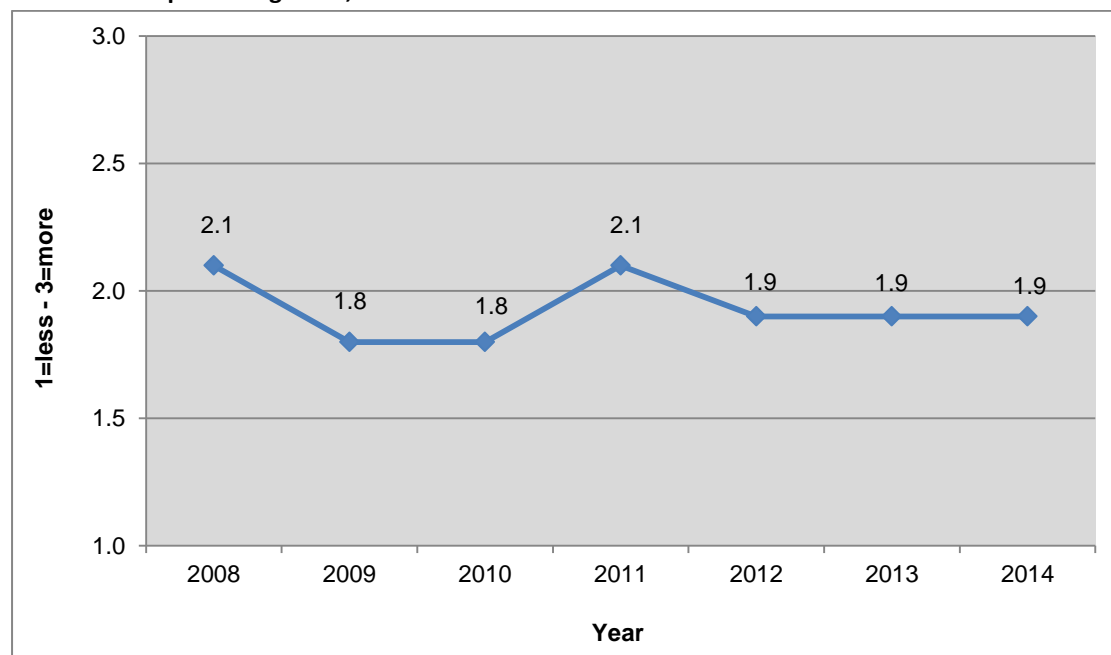
### 13.4 Perceptions of the number of people using homebake morphine/heroin

The number of people using homebake morphine/heroin was described as the ‘same/less’ in 2014 (Table 13.3). There was no statistically significant difference in perceptions of the change in the number of people using homebake morphine/heroin from 2008 to 2014 ( $p=0.5966$ ) (Figure 13.1).

**Table 13 3: Perceptions of the number of people using homebake morphine/ heroin by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Number of people using homebake morphine/heroin (%)</b>	<b>Combined modules (n=26)</b>	<b>Combined modules (n=46)</b>	<b>Combined modules (n=58)</b>	<b>Combined modules (n=54)</b>	<b>Combined modules (n=18)</b>	<b>Combined modules (n=45)</b>	<b>Combined modules (n=35)</b>
More [3]	32%	15%	16%	29%	21%	31%	23%
Same [2]	46%	53%	50%	49%	50%	25%	41%
Less [1]	22%	31%	34%	21%	34%	45%	36%
Average number of people using score (1=less – 3=more)	2.1	1.8	1.8	2.1	1.9	1.9	1.9
Overall recent change	Same/ more	Same/ less	Same/ less	Same/ more	Same/ less	Less/ more	Same/ less

**Figure 13 2: Mean score of the perceptions of the number of people using homebake morphine/heroin by combined frequent drug users, 2008-2014**



### **13.5 Summary of homebake morphine/heroin trends**

- The low number of frequent drug users answered the homebake morphine/heroin section in some years indicates the results from this chapter should be interpreted with some caution
- The current availability of homebake morphine/heroin was described as 'easy/very difficult/difficult' in 2014
- There was a decline in the current availability of homebake morphine/heroin from 2008 to 2014
- The frequent drug users described the number of people using homebake morphine/heroin as the 'same/less' in 2014

## **14. Street methadone**

### **14.1 Introduction**

Methadone is a synthetic opioid which is prescribed as a substitute to treat opioid dependency. Methadone is a slow release opioid (i.e. it typically has a half-life of 24 hours or more) which allows an opiate addict to take it only once per day without experiencing opioid withdrawal symptoms (Rassool, 2009). Methadone maintenance allows dependent opioid users to stabilise their lives, improve their health, complete a treatment programme, improve their relationships and pursue employment without experiencing problems associated with opioid withdrawal or having to purchase opioids from the black market. Methadone is generally prescribed as a liquid syrup or tablet to be swallowed. Methadone is sometimes diverted from its treatment purpose and sold on the 'streets' as an illegal drug. The IDMS tracks trends in 'street' methadone, that is methadone which has been diverted and illegally sold or bartered. When the interviewers ask the frequent drug users if they have knowledge about recent trends in 'street' methadone they specify that they are not referring to methadone which has been prescribed to the frequent drug user as part of a methadone maintenance program.

### **14.2 Knowledge of street methadone trends**

Twenty-four percent of the frequent drug users interviewed for the 2014 IDMS (n=75) indicated they felt confident enough to comment on the price, purity and availability of 'street' methadone in the previous six months. This included 58% of the frequent injecting drug users (n=59), 13% of the frequent methamphetamine users (n=13) and 3% of the frequent ecstasy users (n=3).

## 14.3 Availability of street methadone

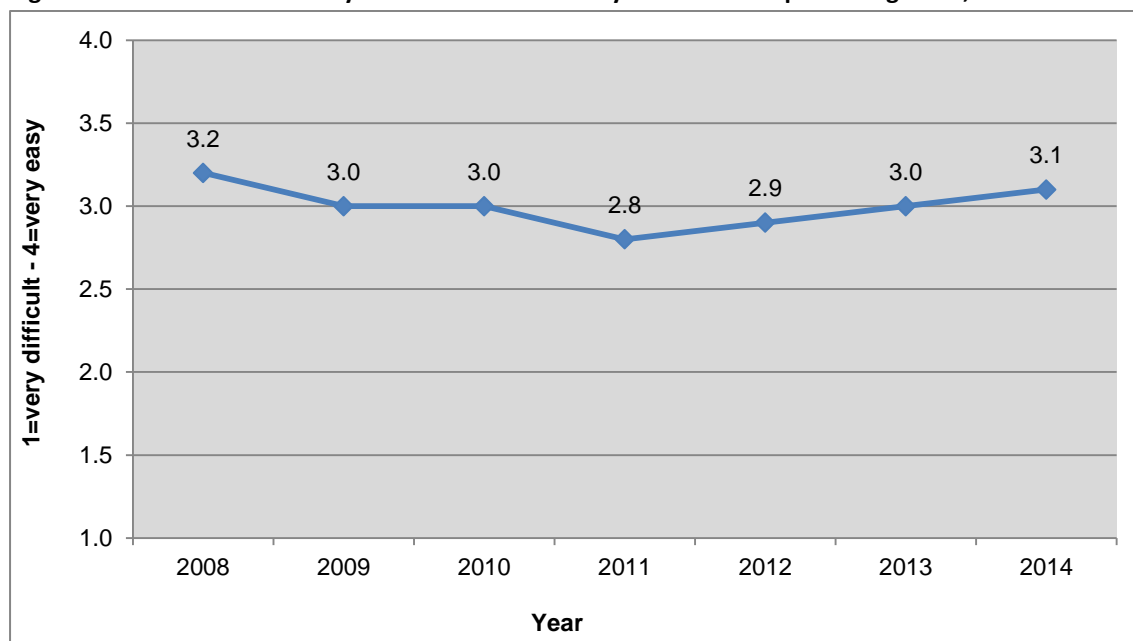
### Current availability of street methadone

The frequent drug users reported the current availability of street methadone was 'easy/very easy' in 2014 (Table 14.1). There was no statistically significant change in the current availability of street methadone from 2008 to 2014 ( $p=0.3492$ ) (Figure 14.1). The availability of street methadone had previously declined from 2008 to 2011 (down from 3.2 to 2.8,  $p=0.0033$ ).

**Table 14 1: Current availability of street methadone by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Current availability of street methadone (%)</b>	<b>Combined modules (n=86)</b>	<b>Combined modules (n=78)</b>	<b>Combined modules (n=91)</b>	<b>Combined modules (n=72)</b>	<b>Combined modules (n=47)</b>	<b>Combined modules (n=60)</b>	<b>Combined modules (n=74)</b>
Very easy [4]	32%	30%	30%	16%	26%	35%	31%
Easy [3]	55%	47%	45%	50%	40%	36%	50%
Difficult [2]	12%	21%	20%	33%	35%	22%	16%
Very difficult [1]	1%	2%	4%	1%	0%	8%	3%
Average availability score (1=very difficult – 4=very easy)	3.2	3.0	3.0	2.8	2.9	3.0	3.1
Overall current status	Easy/very easy	Easy/very easy	Easy/very easy	Easy/difficult	Easy/difficult	Easy/very easy	Easy/very easy

**Figure 14 1: Current availability of street methadone by combined frequent drug users, 2008-2014**



### Change in availability of street methadone

The frequent drug users reported the availability of street methadone had been ‘stable/fluctuating’ in the past six months in 2014 (Table 14.2).

**Table 14 2: Change in availability of street methadone by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Change in availability of street methadone (%)</b>	<b>Combined modules (n=85)</b>	<b>Combined modules (n=75)</b>	<b>Combined modules (n=91)</b>	<b>Combined modules (n=70)</b>	<b>Combined modules (n=47)</b>	<b>Combined modules (n=59)</b>	<b>Combined modules (n=72)</b>
Easier [3]	7%	13%	12%	4%	7%	13%	22%
Stable [2]	74%	67%	60%	67%	65%	55%	41%
Fluctuates [2]	8%	5%	14%	12%	17%	21%	30%
More difficult [1]	11%	14%	14%	17%	12%	11%	7%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.0	2.0	1.9	1.9	2.0	2.1
Overall recent change	Stable	Stable/ more difficult	Stable/ fluctuates	Stable/ more difficult	Stable/ fluctuates	Stable/ fluctuates	Stable/ fluctuates



## 14.4 Perceptions of the number of people using street methadone

The number of people using street methadone was described as being 'same/more' in 2014 (Table 14.3). The proportion of frequent drug users who reported the 'same' number of people were using street methadone increased from 2013 to 2014, and this change was close to being statistically significant ( $p=0.0716$ ).

**Table 14 3: Perceptions of the number of people using street methadone by combined frequent drug users, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Number of people using street methadone (%)</b>	<b>Combined modules (n=82)</b>	<b>Combined modules (n=77)</b>	<b>Combined modules (n=91)</b>	<b>Combined modules (n=66)</b>	<b>Combined modules (n=46)</b>	<b>Combined modules (n=60)</b>	<b>Combined modules (n=74)</b>
More [3]	31%	25%	36%	32%	23%	56%	41%
Same [2]	65%	60%	56%	57%	67%	38%	49%
Less [1]	4%	15%	9%	11%	10%	6%	11%
Average number of people using score (1=less – 3=more)	2.3	2.1	2.3	2.2	2.1	2.5	2.3
Overall recent change	Same/ more	Same/ more	Same/ more	Same/ more	Same/ more	More/ same	Same/ more

## 14.5 Summary of street methadone trends

- The current availability of street methadone was described as 'easy/very easy' in 2014
- The availability of street methadone was reported to have been 'stable/fluctuates' in 2014
- The number of people using street methadone was described as the 'same/more' in 2014
- The proportion of frequent drug users who reported the 'same' number of people were using street methadone increased from 2013 to 2014

## **15. Street BZP**

### **15.1 Introduction**

Benzylpiperazine (BZP) was the principal psychoactive ingredient in a range of ‘legal highs’, known as ‘party pills’, which were legally sold and widely used in New Zealand during the mid-2000s. BZP has effects similar to low potency amphetamine (i.e. approximately 10% the potency of dexamphetamine) (Bye et al., 1973; Campbell et al., 1973; Expert Advisory Committee on Drugs, 2004, p.5; Gee et al., 2005). BZP was prohibited in April 2008 following the release of a number of studies linking its use to health risks (see Gee, et al., 2005; Sheridan et al., 2007; Wilkins, et al., 2008). Following the prohibition of BZP, the prevalence of BZP use among the general population fell from 15.3% in 2006 to 3.2% in 2009 (Wilkins & Sweetsur, 2013). The availability of BZP declined and the price increased following its prohibition (Wilkins, et al., 2014b). The use of BZP among the frequent drug users interviewed for the IDMS has also declined substantially. For example, the proportion of frequent ecstasy users who had used BZP declined from 65% in 2006 to 5% in 2013 (Wilkins, et al., 2014b).

### **15.2 Knowledge of street BZP trends**

Only 3% of the frequent drug users interviewed for the 2014 IDMS (n=10) indicated they felt confident enough to comment on the price, purity and availability of street BZP in the previous six months. This included 5% of the frequent injecting drug users (n=5), 5% of the frequent methamphetamine users (n=4) and 1% of the frequent ecstasy users (n=1). The low numbers of frequent drug users answering the BZP section indicates the trends identified in this chapter should be treated with some caution.

### **15.3 Availability of street BZP**

#### *Current availability of street BZP*

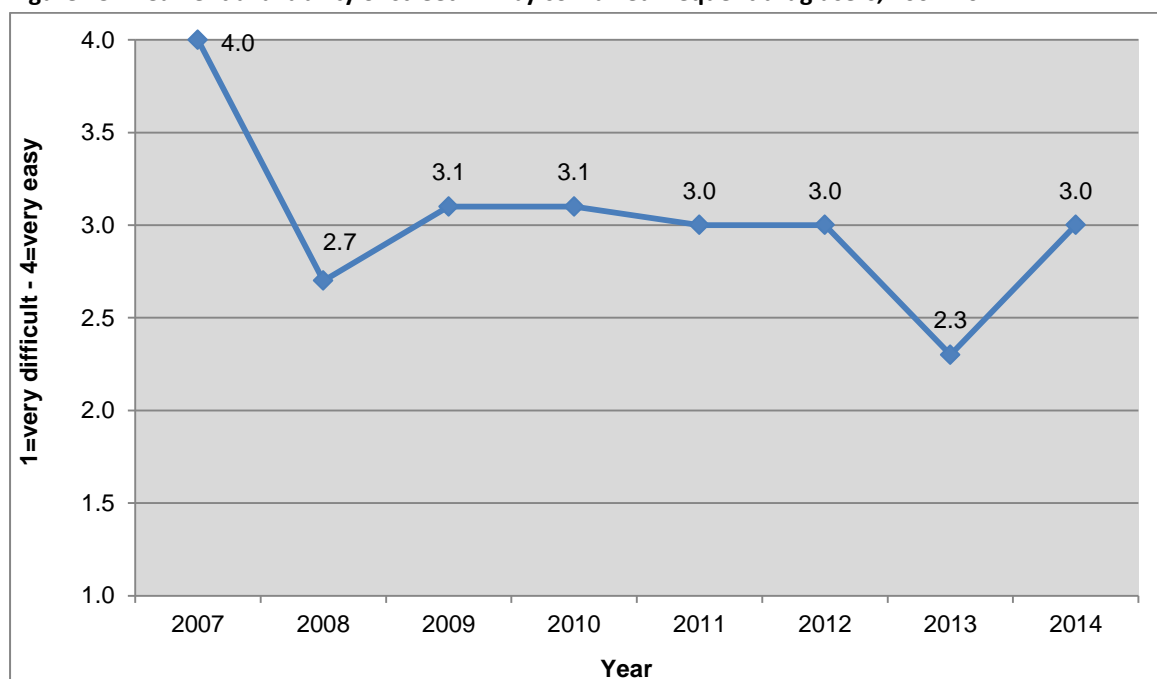
The frequent drug users described the current availability of street BZP as ‘easy’ in 2014 (Table 15.1). There was a decline in the current availability of BZP from 2007 to 2014 (down from 4.0 to 3.0,  $p < 0.0001$ ), with a particularly large decline observed following the imposition of the prohibition in

2008 (down from 4.0 to 2.7,  $p < 0.0001$ ) (Figure 15.1). However, there has been some recovery in the current availability of BZP from 2013 to 2014 (up from 2.3 to 3.0,  $p = 0.0409$ ).

**Table 15 1: Current availability of street BZP by combined frequent drug users, 2007-2014**

	2007	2008	2009	2010	2011	2012	2013	2014
<b>Current availability of BZP (%)</b>	<b>Combined modules (n=54)</b>	<b>Combined modules (n=49)</b>	<b>Combined modules (n=48)</b>	<b>Combined modules (n=39)</b>	<b>Combined modules (n=37)</b>	<b>Combined modules (n=20)</b>	<b>Combined modules (n=12)</b>	<b>Combined modules (n=10)</b>
Very easy [4]	98%	15%	44%	42%	33%	35%	12%	9%
Easy [3]	2%	47%	29%	32%	34%	35%	29%	83%
Difficult [2]	0%	36%	20%	19%	30%	31%	33%	8%
Very difficult [1]	0%	2%	6%	8%	4%	0%	26%	0%
Average availability score (1=very difficult – 4=very easy)	4.0	2.7	3.1	3.1	3.0	3.0	2.3	3.0
Overall current status	Very easy	Easy/difficult	Very easy/easy	Very easy/easy	Easy/very easy	Easy/very easy	Difficult/Easy	Easy

**Figure 15 1: Current availability of street BZP by combined frequent drug users, 2007-2014**



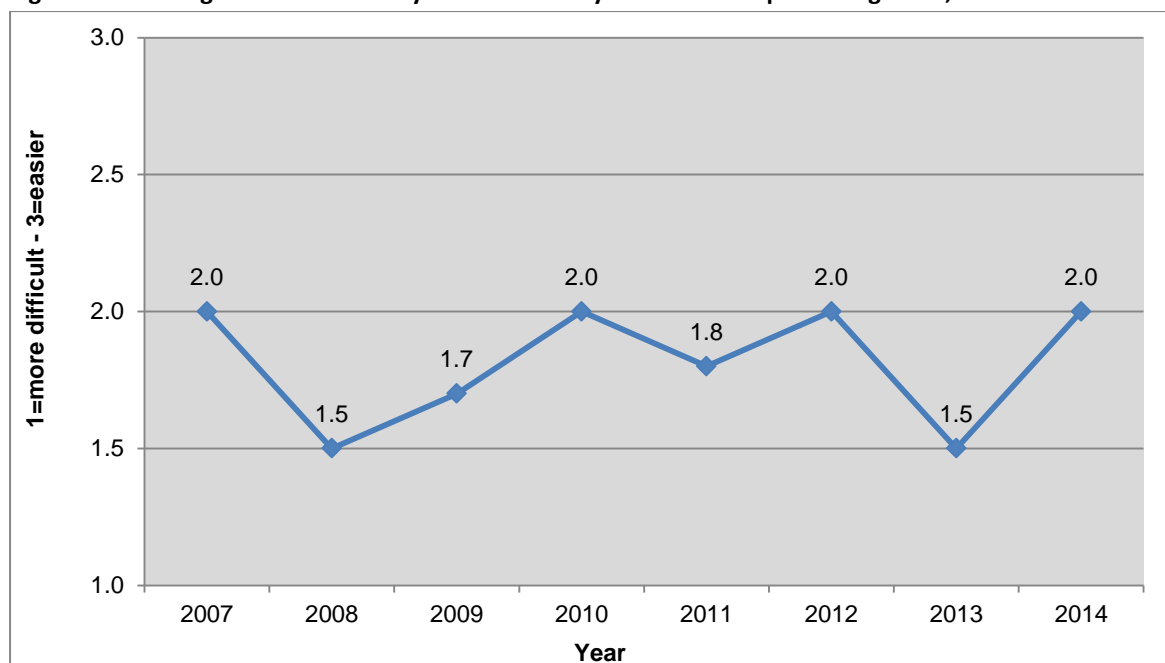
### Change in availability of street BZP

The frequent drug users reported the availability of street BZP had been 'stable' in the previous six months in 2014 (Table 15.2). A higher proportion of frequent drug users described the availability of BZP as 'stable' from 2013 to 2014 (up from 1.5 to 2.0,  $p=0.0282$ ) (Figure 15.2). The availability of BZP had previously sharply declined from 2007 to 2008 ( $p<0.0001$ ).

**Table 15 2: Change in availability of street BZP by combined frequent drug users, 2007-2014**

	2007	2008	2009	2010	2011	2012	2013	2014
<b>Change in availability of BZP (%)</b>	<b>Combined modules (n=53)</b>	<b>Combined modules (n=48)</b>	<b>Combined modules (n=49)</b>	<b>Combined modules (n=38)</b>	<b>Combined modules (n=29)</b>	<b>Combined modules (n=18)</b>	<b>Combined modules (n=12)</b>	<b>Combined modules (n=10)</b>
Easier [3]	3%	12%	11%	15%	7%	23%	0%	9%
Stable [2]	92%	22%	51%	66%	60%	45%	46%	83%
Fluctuates [2]	0%	2%	0%	0%	3%	10%	5%	0%
More difficult [1]	5%	65%	38%	19%	30%	21%	49%	8%
Average change in availability score (1=more difficult – 3=easier)	2.0	1.5	1.7	2.0	1.8	2.0	1.5	2.0
Overall recent change	Stable	More difficult/stable	Stable/more difficult	Stable/more difficult	Stable/more difficult	Stable/easier	More difficult/Stable	Stable

**Figure 15 2: Change in the availability of street BZP by combined frequent drug users, 2007-2014**



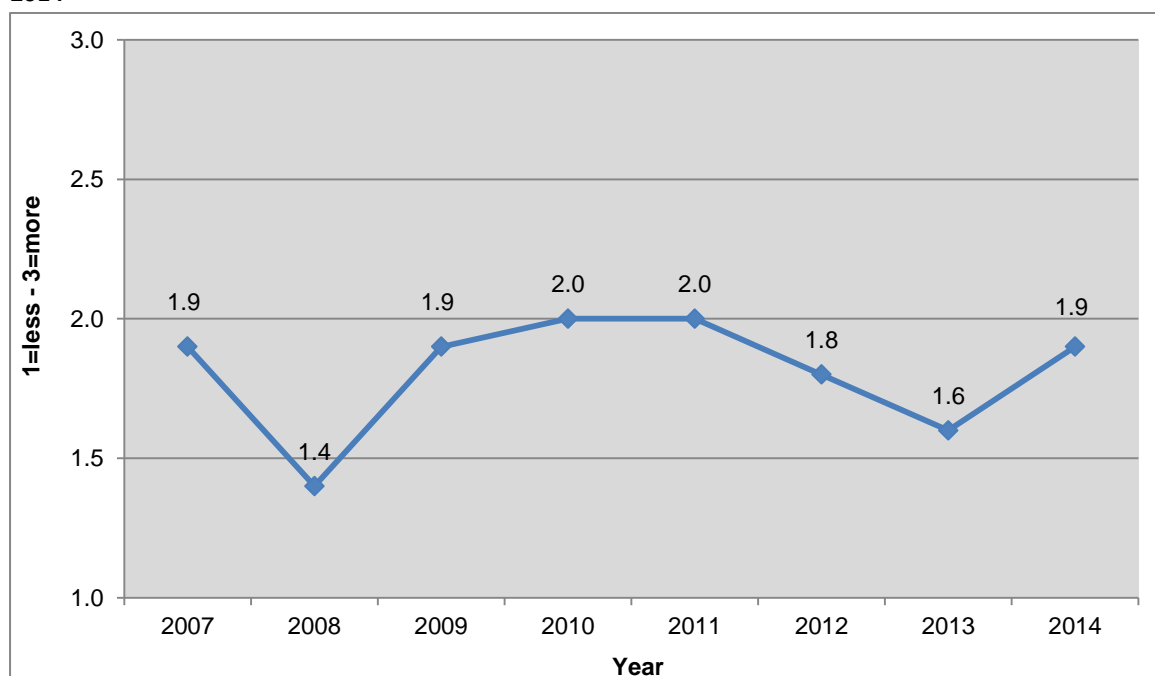
## 15.4 Perceptions of the number of people using street BZP

The number of people using street BZP was described as being 'less/more' in 2014 (Table 15.3). There was a large increase in the proportion of frequent drug users who said 'less' people were using BZP from 2007 to 2008 (up from 40% to 74%,  $p=0.0026$ ), the year of the BZP prohibition (Figure 15.3).

**Table 15 3: Perceptions of the number of people using street BZP by combined frequent drug users, 2007-2014**

	2007	2008	2009	2010	2011	2012	2013	2014
Number of people using street BZP (%)	Combined modules (n=53)	Combined modules (n=50)	Combined modules (n=48)	Combined modules (n=40)	Combined modules (n=33)	Combined modules (n=20)	Combined modules (n=13)	Combined modules (n=9)
More [3]	29%	15%	36%	37%	33%	9%	0%	33%
Same [2]	30%	12%	17%	26%	34%	60%	58%	19%
Less [1]	40%	74%	48%	37%	33%	31%	42%	47%
Average number of people using score (1=less – 3=more)	1.9	1.4	1.9	2.0	2.0	1.8	1.6	1.9
Overall recent change	Less/same	Less	Less/more	More/less	Same/less	Same/less	Same/less	Less/more

**Figure 15 3: Perceptions of the number of people using street BZP by combined frequent drug users, 2007-2014**



## 15.5 Summary of street BZP trends

- The current availability of street BZP was described as 'easy' in 2014
- There was a decline in the current availability of street BZP from 2007 to 2014, with a particularly large decline reported following the prohibition of BZP in 2008
- However, there was some recovery in the current availability of BZP from 2013 to 2014
- A higher proportion of frequent drug users said the availability of BZP was 'stable' from 2013 to 2014
- The number of people using street BZP was described as 'less/more' in 2014
- Seventy-four percent of the frequent drug users reported that 'less' people were using BZP following its prohibition in 2008
- Forty-seven percent of the frequent drug users reported that 'less' people were using BZP in 2014

## **16. Health risks and the social harm of drug use**

### **16.1 Introduction**

Drug and alcohol use is associated with a range of health and social problems including physical and psychological illness, drug dependency, relationship breakdowns, family dysfunction, poor educational achievement, violence, property crime, poverty, sexual assault, accidents, unsafe work practices, dangerous driving, unemployment, social welfare dependency and low work productivity (Ministry of Health, 2009; Wilkins, et al., 2011b). A number of vulnerable social groups are particularly 'at risk' from drug use and related harm including adolescents, those suffering from mental illness, marginalised and lower socio-economic groups, and those from dysfunctional family environments (Ministry of Health, 2009). Some psychoactive drugs can cause strong psychological and physical dependency which makes it difficult for users to stop use even when they are experiencing serious harmful consequences.

### **16.2 Drug-related life impacts**

The frequent drug users were asked if they had experienced any of a range of negative social consequences from their drug use in the previous six months. The interviewer explained that these questions only referred to incidents they had experienced 'due to your drug use'. The frequent methamphetamine users commonly reported 'no money for luxuries' (73%), 'arguing with others' (72%), losing their temper' (71%), and 'doing something under the influence of drugs which they later regretted' (62%) as a result of their drug use in the past six months in 2014 (Table 16.1). Many frequent methamphetamine users also reported 'damaging a friendship' (61%), 'upsetting a family relationship' (57%), 'getting into debt' (55%), having 'no money for food or rent' (50%), 'having unprotected sex' (48%), being 'unable to remember what happened the night before' (47%) and 'ending a personal relationship' (40%) due to their drug use. Twenty-nine percent had overdosed on drugs in the previous six months in 2014.



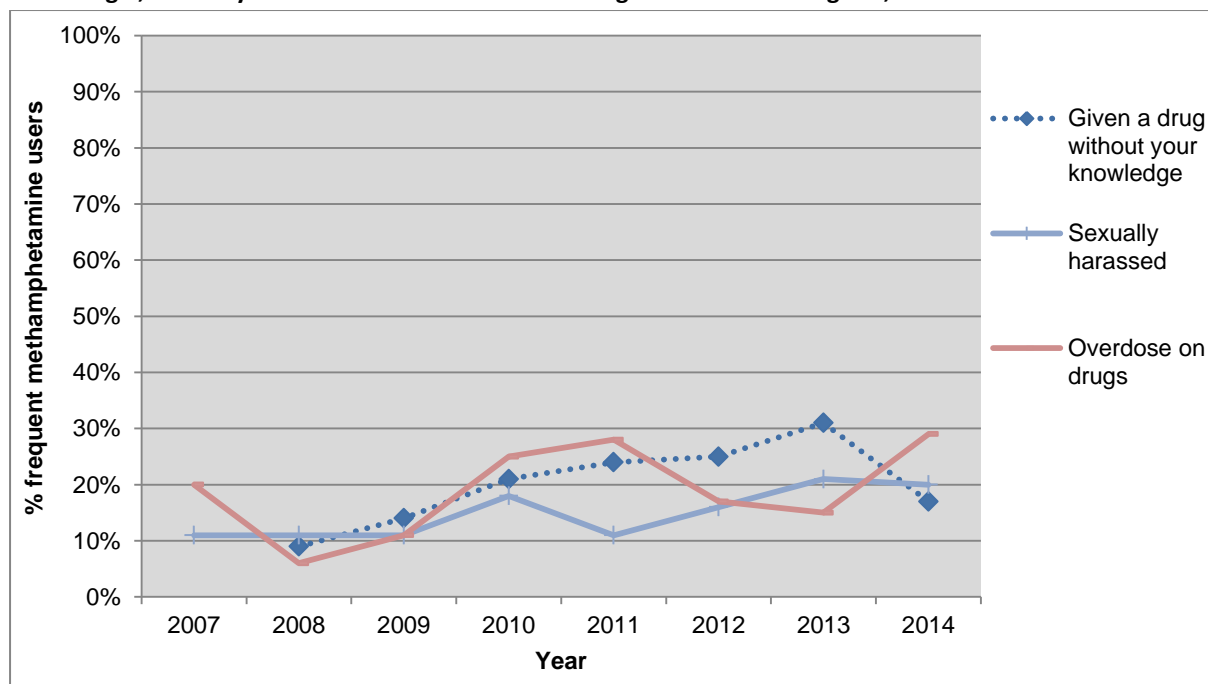
**Table 16 1: Drug-related incidents by frequent drug user group, 2014**

Drug related incident (%)	Meth-amphetamine users (n=101)	Ecstasy users (MDMA) (n=109)	Intravenous drug users (IDU) (n=102)
No money for luxuries	73	38	81
Argued with others	72	31	68
Lost your temper	71	30	69
Did something under the influence of drugs and later regretted it	62	62	56
Damaged a friendship	61	12	56
Upset a family relationship	57	14	52
Got into debt/owing money	55	24	74
No money for food or rent	50	14	61
Had unprotected sex	48	36	22
Couldn't remember what happened the night before	47	65	35
Ended a personal relationship	40	13	29
Verbally or physically threatened	39	20	45
Had reduced work/study performance	38	54	39
Physically hurt someone else	37	9	23
Got arrested	30	5	26
Took sick leave/did not attend classes	30	53	30
Physically hurt yourself	29	26	33
Had sex and later regretted it	29	29	25
Overdosed on drugs	29	10	12
Spent some nights sleeping rough (i.e. living on the streets)	28	6	14
Were physically assaulted	28	8	30
Damaged property (you)	27	25	26
Passed out	24	29	33
Stole property (you)	23	7	28
Was kicked out of where I was living	20	0	15
Were sexually harassed	20	5	12
Someone gave you a drug without your knowledge	17	9	14
Sacked/lose business/quit study course	15	3	16
Someone spiked your drink	12	3	5
Were sexually assaulted	11	4	6

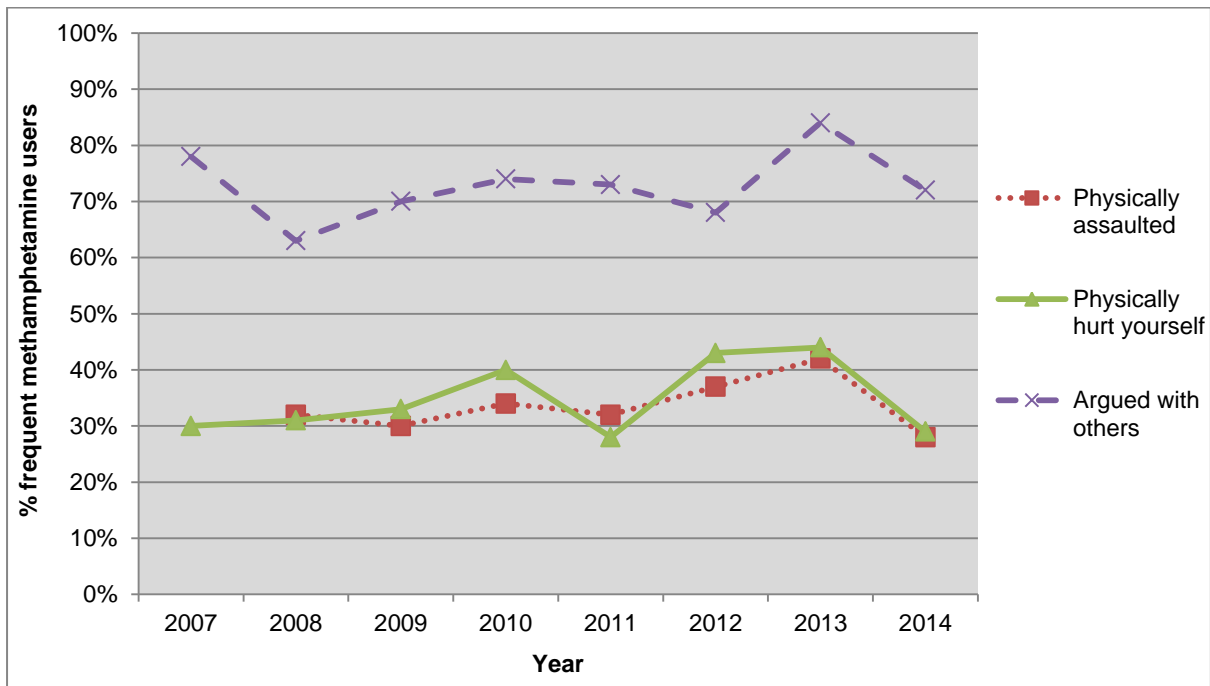
A higher proportion of frequent methamphetamine users reported they had been ‘given a drug without their knowledge’ (up from 9% in 2008 to 17% in 2014,  $p=0.0009$ ), been ‘sexually harassed’ (up from 11% in 2007 to 20% in 2014,  $p=0.0080$ ) and had ‘overdosed on drugs’ (up from 15% in 2013 to 29% in 2014,  $p=0.0160$ ) (Figure 16.1).

Conversely, a lower proportion of frequent methamphetamine users had ‘damaged property’ (down from 56% in 2007 to 27% in 2014,  $p=0.0010$ ), ‘stolen property’ (down from 45% in 2007 to 23% in 2014,  $p=0.0012$ ), ‘had reduced work/study performance’ (down from 68% in 2007 to 38% in 2014,  $p=0.0036$ ), ‘passed out’ (down from 47% in 2013 to 24% in 2014,  $p=0.0005$ ), ‘argued with others’ (down from 84% in 2013 to 72% in 2014,  $p=0.0301$ ), ‘physically hurt themselves’ (down from 44% in 2013 to 29% in 2014,  $p=0.0216$ ) and had been ‘physically assaulted’ (down from 42% in 2013 to 28% in 2014,  $p=0.0419$ ) due to their drug use (Figure 16.2 & 16.3).

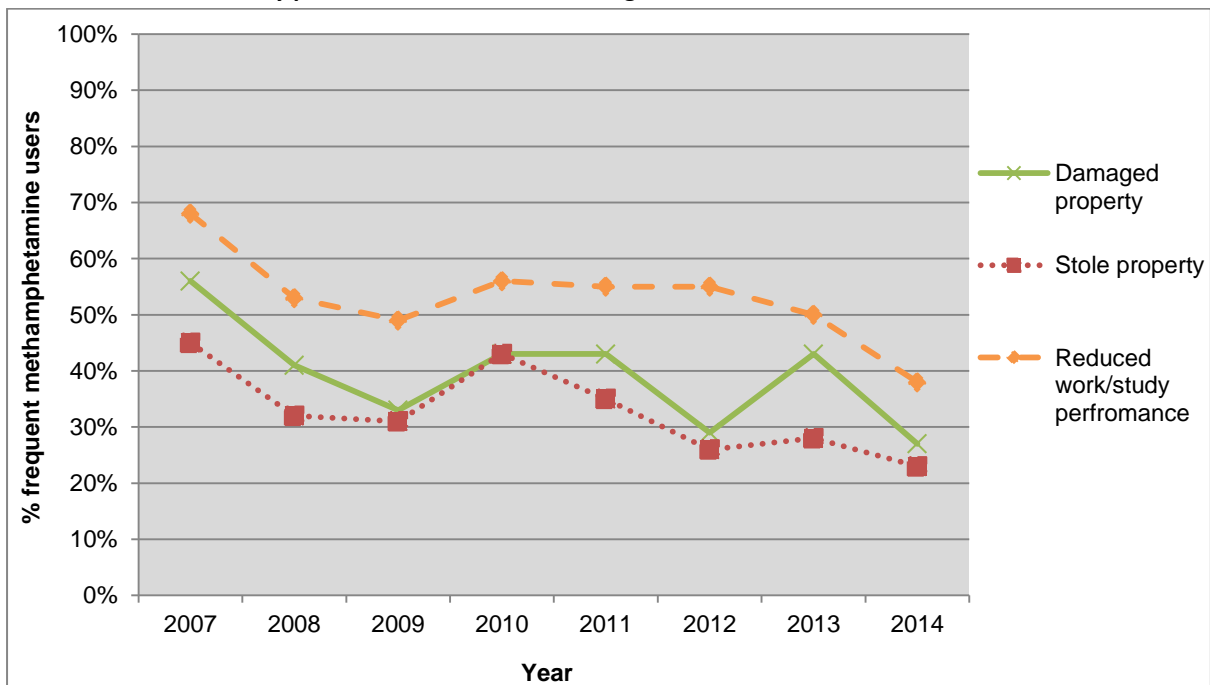
**Figure 16 1: Proportion of frequent methamphetamine users who had been ‘given a drug without their knowledge’, ‘sexually harassed’ and ‘overdosed on drugs’ due to their drug use, 2007-2014**



**Figure 16 2: Proportion of frequent methamphetamine users who had 'physically hurt themselves', were 'physically assaulted' and 'argued with others' due to their drug use, 2007 -2014**

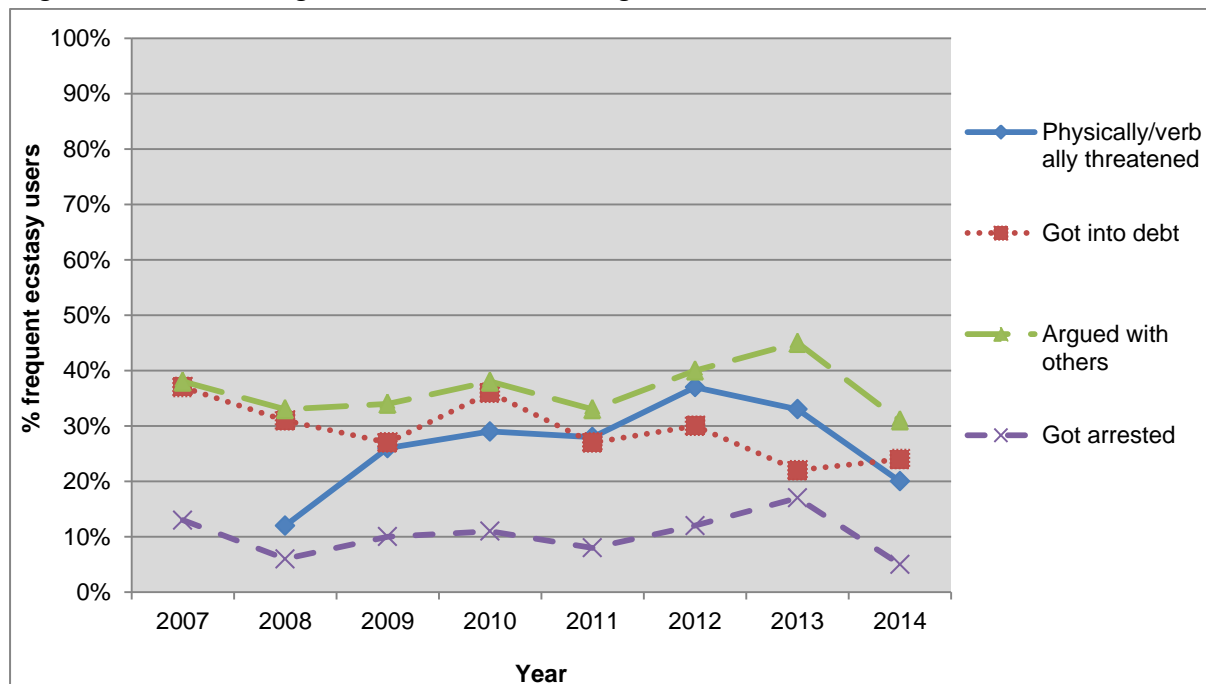


**Figure 16 3: Proportion of frequent methamphetamine users who had 'damaged property', 'stole property', and 'reduced work/study performance' due to their drug use, 2007-2014**



The frequent ecstasy users commonly reported that as a result of their drug use they were ‘not able to remember what happened the night before’ (65%), had ‘done something under the influence of a drug which they later regretted’ (62%), had ‘reduced work/study performance’ (54%), ‘took sick leave or did not attend classes’ (53%), ‘had no money for luxuries’ (38%) and ‘had unprotected sex’ (36%) (Table 16.1).

**Figure 16 4: Proportion of frequent ecstasy users who were ‘physically/verbally threatened’, ‘got into debt’, ‘argued with others’ and ‘got arrested’ due to their drug use, 2008-2014**



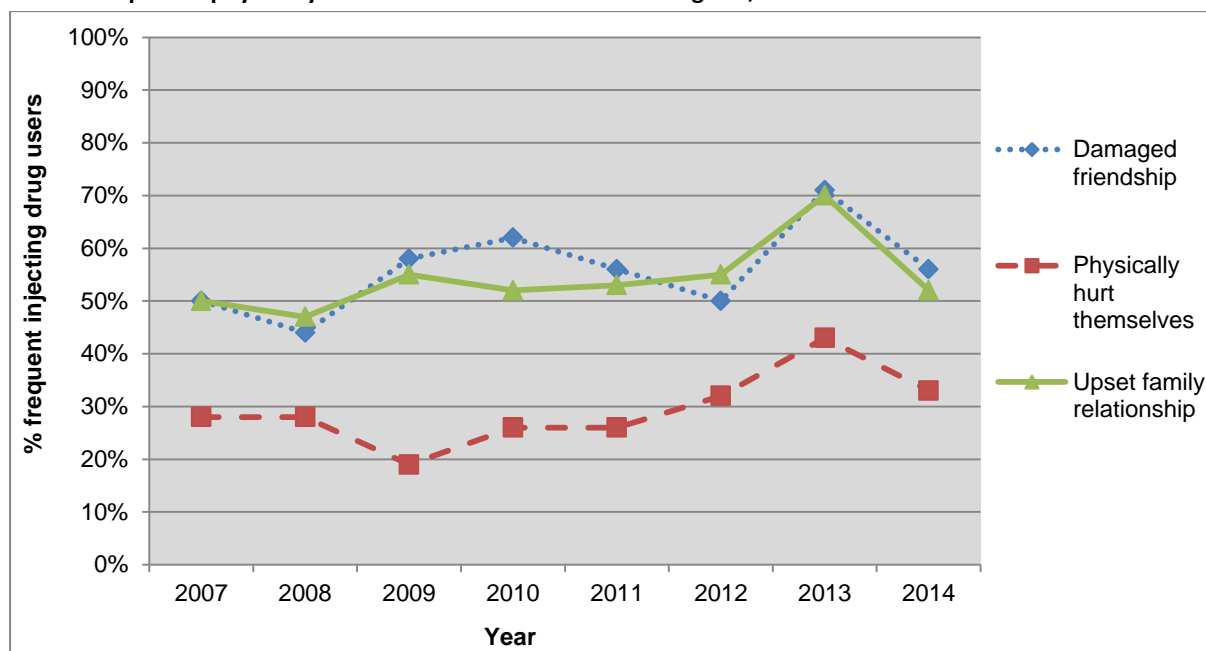
The frequent ecstasy users were less likely to report that they had been ‘physically or verbally threatened’ (down from 33% in 2013 to 20% in 2014,  $p=0.0302$ ), had ‘upset a family relationship’ (down from 25% in 2013 to 14% in 2014,  $p=0.0325$ ), ‘got into debt’ (down from 37% in 2007 to 24% in 2014,  $p=0.0117$ ), ‘argued with others’ (down from 45% in 2013 to 31% in 2014,  $p=0.0251$ ), ‘got arrested’ (down from 17% in 2013 to 5% in 2014,  $p=0.0081$ ) and spent ‘some nights sleeping rough’ (down from 16% in 2013 to 6% in 2014,  $p=0.0285$ ) due to their drug use (Figure 16.4).

The frequent injecting drug users commonly reported that as a result of their drug use they had ‘no money for luxuries’ (81%), ‘got into debt’ (74%), ‘lost their temper’ (69%), ‘argued with others’ (68%) and had ‘no money for food or rent’ (61%) during the previous six months in 2014. The frequent injecting drug users were more likely to report ‘damaging a friendship’ (up from 50% in 2007 to 56% in 2014,  $p=0.0209$ ), ‘physically hurting themselves’ (up from 28% in 2007 to 33% in 2014,  $p=0.0172$ )

and ‘upsetting a family relationship’ (up from 50% in 2007 to 52% in 2014,  $p=0.0384$ ) as a result of their drug use (Figure 16.5).

Conversely, there was a decrease in the proportion of frequent injecting drug users who reported having ‘unprotected sex’ (down from 40% in 2007 to 22% in 2014,  $p=0.0017$ ), not being able to ‘remember what happened the night before’ (down from 50% in 2013 to 35% in 2014,  $p=0.0354$ ), ‘ending a personal relationship’ (down from 49% in 2013 to 29% in 2014,  $p=0.0042$ ) and having to ‘spend some nights sleeping rough’ (down from 32% in 2013 to 14% in 2014,  $p=0.0044$ ).

**Figure 16 5: Proportion of frequent injecting drug users who had ‘damaged friendship’, ‘upset a family relationship’ and ‘physically hurt themselves’ due to their drug use, 2007-2014**



### 16.3 Drug type responsible for drug-related life impacts

The frequent drug users who had experienced a drug related harmful incident were asked what drug type they considered to be ‘mainly responsible’ for their drug-related problems. Respondents were asked to name only one drug type to provide a clear direction for drug policy response. However, a small number of respondents provided more than one drug type. Table 16.2 presents the findings for each of the three groups of frequent drug users for 2014. The overwhelming majority of methamphetamine users nominated methamphetamine (69%) as the drug type mainly responsible for their drug-related problems, followed by alcohol (9%) and heroin (7%). The frequent ecstasy users named three drug types as mainly responsible for their drug-related problems; alcohol (49%),

ecstasy (32%), and cannabis (14%). The frequent injecting drug users nominated morphine (56%), methamphetamine (12%), heroin (10%), methylphenidate (Ritalin™) (9%), alcohol (6%) and methadone (4%) as mainly responsible for their drug related problems. There was no change in the drug types nominated as responsible for drug-related problems among any of the frequent drug user groups.

**Table 16 2: Drug types mainly responsible for drug related incidents by frequent drug user group, 2014**

Drug type (%)	Methamphetamine users (n=97)	Ecstasy users (MDMA) (n=96)	Intravenous drug users (IDU) (n=98)
Morphine	2	0	56
Methamphetamine	69	2	12
Alcohol	9	49	6
Methylphenidate (Ritalin)	0	0	9
Benzodiazepines	0	2	1
Methadone	2	0	4
Heroin	7	0	10
Ecstasy (MDMA)	1	32	0
Amyl nitrate	1	0	0
Homebake heroin	0	0	2
Amphetamine	1	0	1
Oxycodone	1	0	0
Cannabis	3	14	1
Codeine	0	0	0
Tobacco	0	0	0
LSD	0	4	0
Crystal methamphetamine	1	1	1
Mephedrone	0	0	0
Street BZP	0	0	0
Cocaine	0	0	0
Non-BZP party pills	0	0	0
Synthetic cannabis	1	0	0
Tramadol	0	0	0
Other	0	3	2
Steroids	0	0	1
Zopiclone	0	0	1

## 16.4 Medical and health services

The frequent drug users were asked if they had accessed any of a range of medical and other health services 'in relation to their drug use' in the previous six months in 2014. The same question was asked in previous IDMS surveys, although several additional help and information services were included in 2010, reflecting a number of initiatives undertaken as part of the Government's Methamphetamine Action Plan.

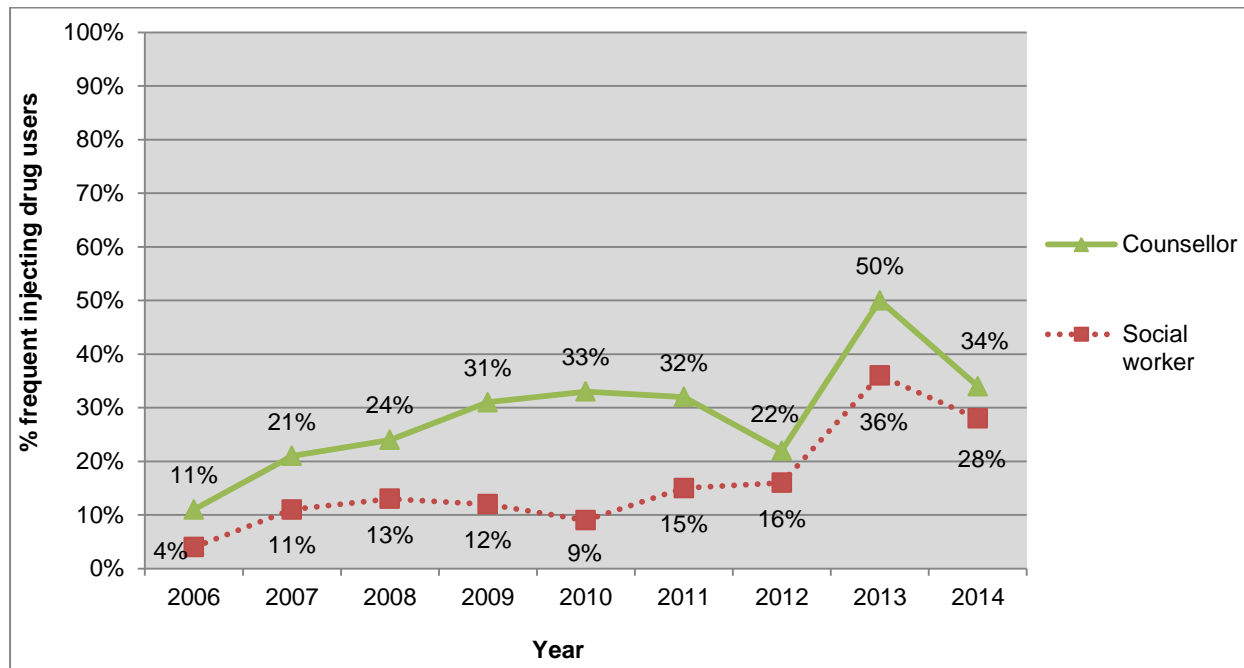
As in previous years, the frequent injecting drug users had the highest level of contact with medical and other health services. The health services they most commonly accessed in 2014 were a 'needle exchange' (90%), 'electronic needle dispenser' (54%), 'pharmacy' (48%), 'drug and alcohol worker' (43%), 'General Practitioner' (i.e. medical doctor) (37%), 'counsellor' (34%), and 'social worker' (28%) (Table 16.3). The proportion of frequent injecting drug users who had accessed a 'counsellor' in relation to their drug use increased from 11% in 2006 to 34% in 2014 ( $p < 0.0001$ ), and the proportion who had accessed a 'social worker' increased from 4% in 2006 to 28% in 2014 ( $p < 0.0001$ ) (Figure 16.6). Conversely, the proportion who had accessed a pharmacy in relation to drug use declined from 58% in 2007 to 48% in 2014 ( $p = 0.0432$ ).

**Table 16 3: Proportion of frequent injecting drug users who had accessed medical and health services in relation to drug use in the past six months, 2006-2014**

Medical and health service (%)	2006 (n=92)	2007 (n=108)	2008 (n=130)	2009 (n=99)	2010 (n=128)	2011 (n=99)	2012 (n=104)	2013 (n=101)	2014 (n=103)
Needle exchange	-	93	69	87	83	87	89	82	90
Electronic needle dispenser	-	47	46	44	40	28	41	48	54
Pharmacy	-	58	49	52	62	55	46	39	48
Drug and Alcohol worker	39	54	29	42	46	37	39	51	43
General Practitioner	36	35	43	52	56	44	49	32	37
Counsellor	11	21	24	31	33	32	22	50	34
Social worker	4	11	13	12	9	15	16	36	28
First Aid	9	7	6	5	13	13	4	13	13
Psychologist	6	10	10	10	8	7	8	18	12
Accident and Emergency	13	10	11	9	19	11	20	10	11
Meth-Help or Drug-Help websites	-	-	-	-	2	6	6	4	11
Hospital (admitted)	9	9	10	6	13	14	14	6	10
Alcohol and Drug Helpline	-	-	-	-	6	6	5	12	9
Psychiatrist	8	11	13	8	7	8	14	13	8
Ambulance	12	9	6	6	13	15	11	6	8



**Figure 16 6: Proportion of frequent injecting drug users who had accessed a 'counsellor' and a 'social worker' in relation to drug use in the past six months, 2006-2014**

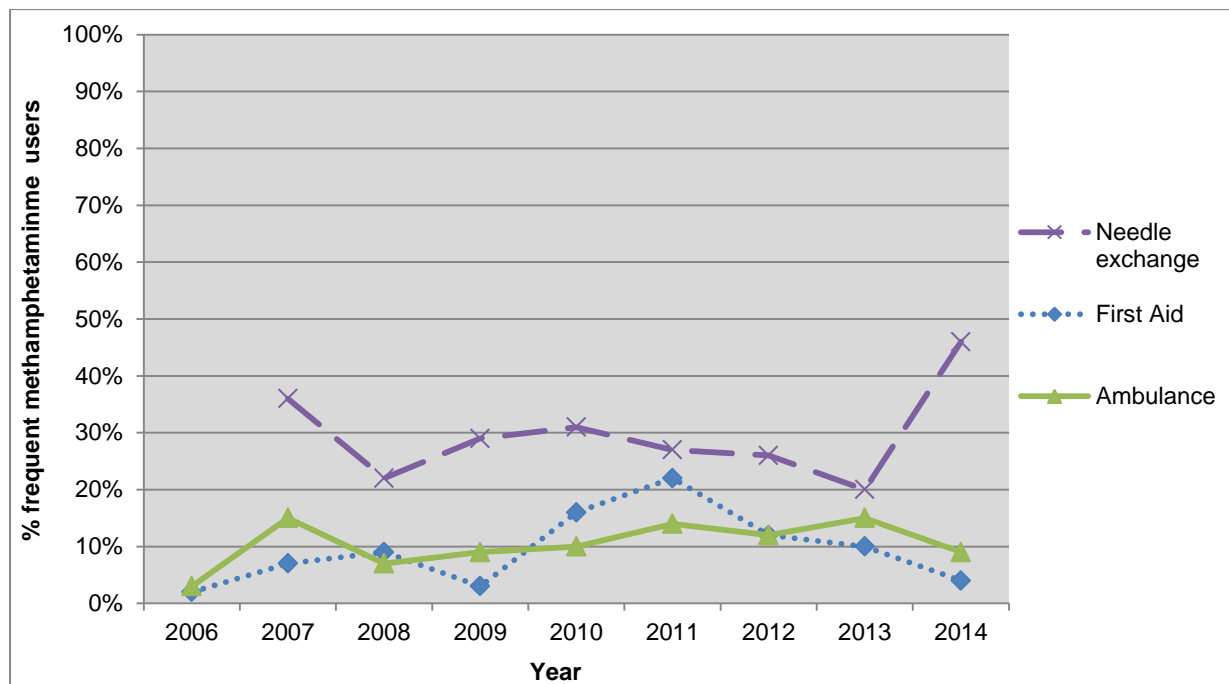


Many of the frequent methamphetamine users had also had contact with medical and other health services in relation to their drug use. The services which the frequent methamphetamine users had most commonly accessed in 2014 were a 'needle exchange' (46%), 'drug and alcohol worker' (23%), a 'General Practitioner' (22%), 'counsellor' (19%), 'pharmacy' (19%) and an 'electronic needle dispenser' (18%) (Table 16.4). There was an increase in the proportion of frequent methamphetamine users who had accessed an 'ambulance' (up from 3% in 2006 to 9% in 2014,  $p=0.0367$ ), received 'First Aid' (up from 2% in 2006 to 4% in 2014,  $p=0.0376$ ), accessed a 'needle exchange' (up from 20% in 2013 to 46% in 2014,  $p<0.0001$ ) and accessed a 'social worker' (up from 7% in 2006 to 10% in 2014), with the latter increase close to statistical significance ( $p=0.0653$ ) (Figure 16.7). The proportion of frequent methamphetamine users who were 'admitted to hospital' declined from 17% in 2013 to 7% in 2014 ( $p=0.0331$ ).

**Table 16 4: Proportion of frequent methamphetamine users who had accessed medical and health services in relation to drug use in the past six months, 2006-2014**

Medical and health service (%)	2006 (n=114)	2007 (n=110)	2008 (n=137)	2009 (n=105)	2010 (n=130)	2011 (n=110)	2012 (n=100)	2013 (n=93)	2014 (n=100)
Needle exchange	-	36	22	29	31	27	26	20	46
Drug and Alcohol worker	37	36	25	33	33	29	26	36	23
General Practitioner	27	38	22	26	22	29	32	37	22
Counsellor	34	40	24	31	29	30	29	28	19
Pharmacy	-	27	15	20	29	23	25	16	19
Electronic needle dispenser	-	19	10	17	16	10	15	17	18
Psychologist	9	14	3	4	7	12	5	17	11
Social worker	7	13	6	11	12	7	14	18	10
Ambulance	3	15	7	9	10	14	12	15	9
Meth-Help or Drug-Help websites	-	-	-	-	5	8	10	12	9
Accident and Emergency	6	17	11	10	18	15	10	23	7
Hospital (admitted)	4	12	5	8	19	22	9	17	7
Psychiatrist	9	10	7	8	6	10	8	15	7
Alcohol and Drug Helpline	-	-	-	-	5	13	7	22	6
First Aid	2	7	9	3	16	22	12	10	4

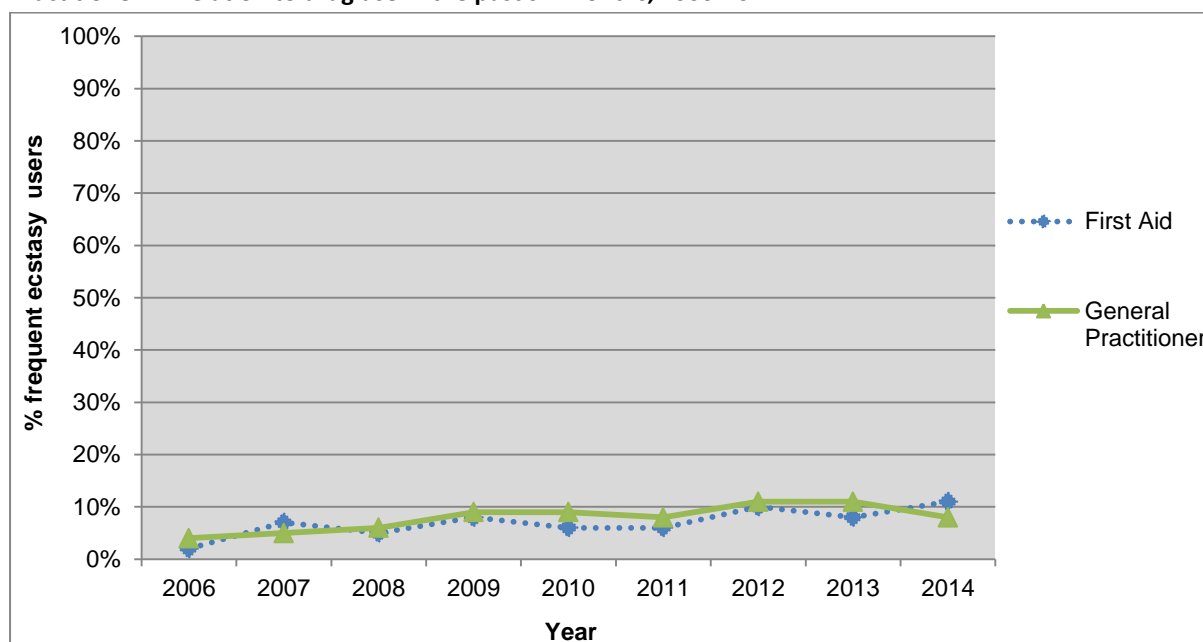
**Figure 16 7: Proportion of frequent methamphetamine users who received 'First Aid', 'accessed an ambulance', 'accessed a social worker' and 'accessed needle exchange' in relation to drug use in the past six months, 2006-2014**



Conversely, a lower proportion of frequent methamphetamine drug users had accessed a 'counsellor' (down from 34% in 2006 to 19% in 2014,  $p=0.0193$ ), an 'accident and emergency department' (down from 23% in 2013 to 7% in 2014,  $p=0.0027$ ), the 'Alcohol and Drug Helpline' (down from 22% in 2013 to 6% in 2014,  $p=0.0018$ ), a 'drug and alcohol worker' (down from 36% in 2013 to 23% in 2014,  $p=0.0360$ ) and a 'General Practitioner' (down from 37% in 2013 to 22% in 2014,  $p=0.0180$ ) in relation to their drug use.

The frequent ecstasy users had lower level of contact with medical and other health services compared to the injecting drug users and methamphetamine users. However a minority of ecstasy users had accessed health services which suggest serious health incidents such as an ambulance (7%) and accident and emergency department (6%). The services which they most commonly accessed in relation to their drug use in 2014 were 'First Aid' (11%), a 'General Practitioner' (8%), 'counsellor' (8%), 'pharmacy' (7%), 'ambulance' service (7%) and 'accident and emergency department' (6%) (Table 16.5). A higher proportion of frequent ecstasy users reported accessing a 'General Practitioner' (up from 4% in 2006 to 8% in 2014,  $p=0.0382$ ) and 'First Aid' (up from 2% in 2006 to 11% in 2014,  $p=0.0124$ ) in relation to their drug use (Figure 16.8).

**Figure 16 8: Proportion of frequent ecstasy users who had ‘received First Aid’ and ‘accessed a General Practitioner’ in relation to drug use in the past six months, 2006-2014**



**Table 16 5: Proportion of frequent ecstasy users who had accessed medical and health services in relation to drug use in the past six months, 2006-2014**

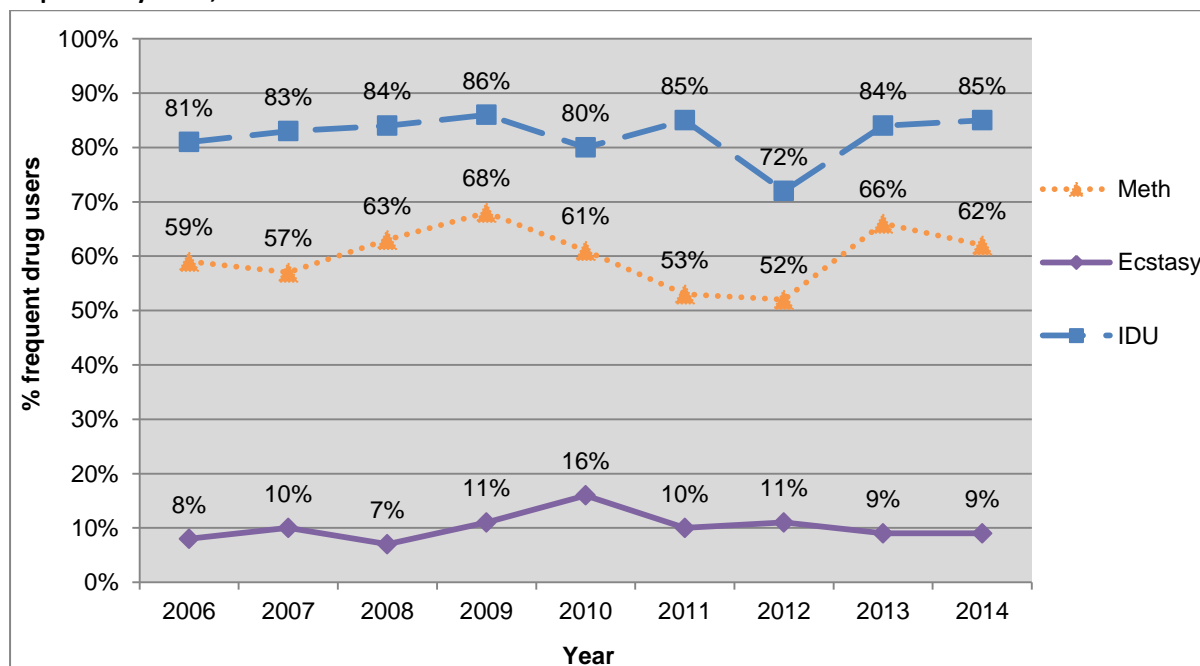
Medical and health service (%)	2006 (n=111)	2007 (n=105)	2008 (n=135)	2009 (n=111)	2010 (n=153)	2011 (n=160)	2012 (n=126)	2013 (n=118)	2014 (n=109)
First Aid	2	7	5	8	6	6	10	8	11
General Practitioner	4	5	6	9	9	8	11	11	8
Counsellor	5	8	7	3	9	6	11	6	8
Pharmacy	-	12	4	5	3	5	8	8	7
Ambulance	4	3	4	6	5	4	7	5	7
Accident and Emergency	8	5	6	11	5	5	9	6	6
Needle exchange	-	6	1	3	1	3	1	3	5
Drug and Alcohol worker	2	6	4	3	6	3	6	6	4
Hospital (admitted)	2	1	3	6	3	3	7	2	4
Electronic needle dispenser	-	5	1	2	1	1	1	1	3
Social worker	0	2	1	1	4	1	3	4	2
Alcohol and Drug Helpline	-	-	-	-	3	1	6	1	2
Psychologist	0	2	2	0	3	2	3	5	1
Psychiatrist	0	2	1	0	3	2	1	2	1
Meth-Help or Drug-Help websites	-	-	-	-	3	0	6	1	0

## 16.5 Drug dependency

The drug dependency of the frequent drug users was assessed using a five item short dependency scale (SDS) (see Gossop et al., 1995). The SDS has previously been validated as an instrument for identifying drug dependency among users of various drug types including amphetamine, alcohol, cocaine and cannabis (Gossop, et al., 1995; Martin et al., 2006; Topp & Mattick, 1997). Those frequent drug users scoring four or more on the combined five enumerated questions of the SDS are categorised as drug dependent. Each type of frequent drug user answered questions in relation to the drug type they were recruited for (i.e. frequent methamphetamine users answered in relation to methamphetamine; frequent ecstasy users answered in relation to ecstasy; and frequent injecting drug users in relation to the main drug they injected).

Eighty-five percent of the frequent injecting drug users, 62% of the frequent methamphetamine users and 9% of the frequent ecstasy users were assessed to be drug dependent in 2014 (Figure 16.9). There was no change in extent of drug dependency for any of the frequent drug user groups from 2006 to 2014.

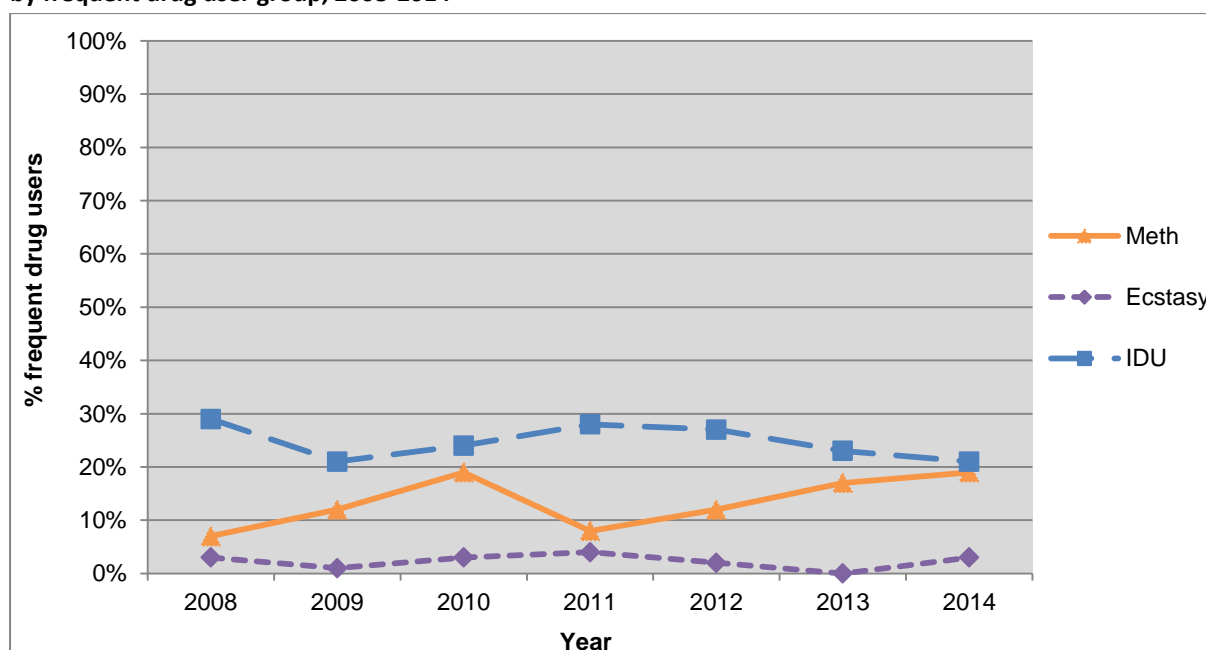
**Figure 16 9: Proportion of frequent drug user groups who were assessed as drug dependent using the Short Dependency Scale, 2006-2014**



## 16.6 Mental illness

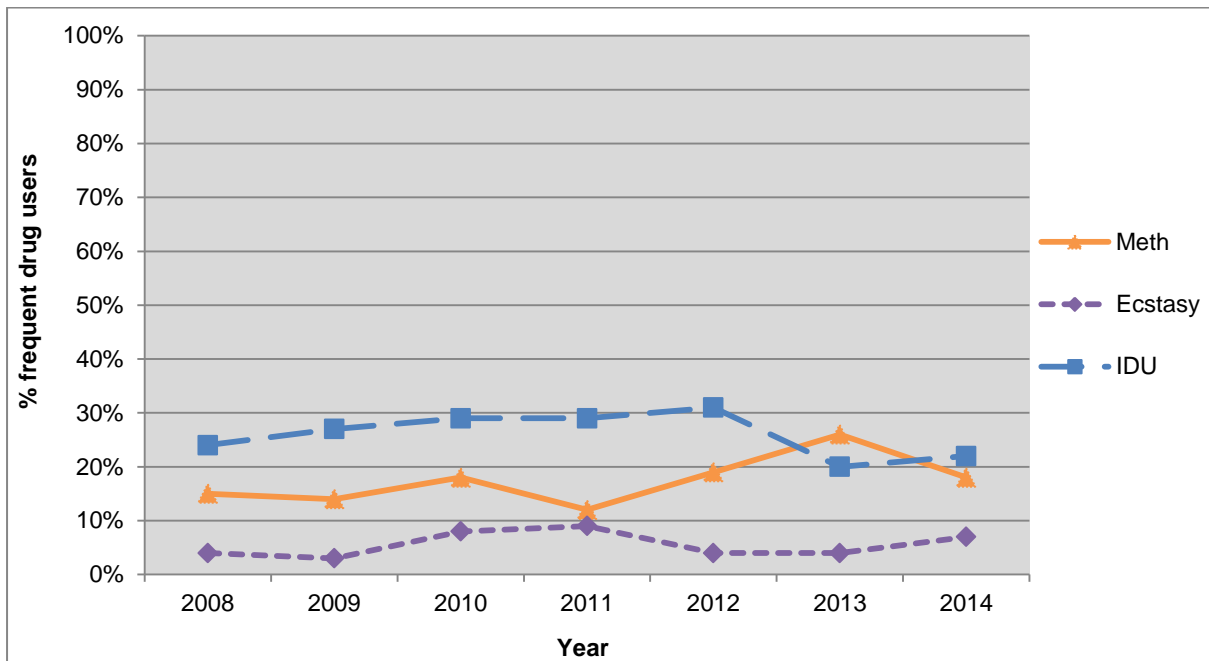
The frequent drug users were asked if they had ever suffered from any form of mental illness, such as depression, anxiety, psychosis or schizophrenia. Forty-six percent of the injecting drug users, 42% of the methamphetamine users and 19% of the ecstasy users had suffered from a mental illness at some point in their lives. Twenty-one percent of the frequent injecting drug users, 19% of the frequent methamphetamine users and 3% of ecstasy users had been spent at least one night in a mental health facility (Figure 16.10). The proportion of frequent methamphetamine users who had spent at least one night in a mental health facility increased from 7% in 2008 to 19% in 2014 ( $p=0.0241$ ).

**Figure 16 10: Proportion of frequent drug users who had stayed in a psychiatric facility overnight or longer by frequent drug user group, 2008-2014**



Twenty-two percent of injecting drug users, 18% of methamphetamine users and 7% of ecstasy users were currently receiving treatment for a mental illness in 2014. The proportion of frequent methamphetamine users currently receiving treatment for a mental illness increased from 15% in 2008 to 18% in 2014, and this increase was close to being statistically significant ( $p=0.0612$ ) (Figure 16.11).

Figure 16 11: Proportion of frequent drug user group who are currently receiving treatment for a mental illness, 2008-2014



## 16.7 Summary of health risks and social harm from drug use

### *Drug related harm*

- The frequent methamphetamine users commonly reported having ‘no money for luxuries’ (73%), ‘arguing with others’ (72%), ‘losing their tempers’ (71%), and ‘doing something under the influence of drugs which they later regretted’ (62%) as a result of their drug use in 2014
- A higher proportion of frequent methamphetamine users reported they had been ‘given a drug without their knowledge’ (up from 9% in 2008 to 17% in 2014), ‘sexually harassed’ (up from 11% in 2007 to 20% in 2014) and ‘overdosed on drugs’ (up from 15% in 2013 to 29% in 2014)
- The frequent injecting drug users commonly reported that as a result of their drug use they had ‘no money for luxuries’ (81%), had ‘got into debt’ (74%), ‘lost their temper’ (69%), ‘argued with others’ (68%) and had ‘no money for food or rent’ (61%)
- The frequent injecting drug users were more likely to report ‘physically hurting themselves’ (up from 28% in 2007 to 33% in 2014), ‘damaging a friendship’ (up from 50% in 2007 to 56% in 2014) and ‘upsetting a family relationship’ (up from 50% in 2007 to 52% in 2014) in relation to their drug use
- The frequent ecstasy users commonly reported that as a result of their drug use they were ‘not able to remember what happened the night before’ (65%), had ‘done something under the influence of a drug which they later regretted’ (62%), had ‘reduced work/study performance’ (54%), ‘took sick leave or did not attend classes’ (53%), ‘had no money for luxuries’ (38%) and ‘had unprotected sex’ (36%)
- The frequent ecstasy users were less likely to have been ‘physically or verbally threatened’ (down from 33% in 2013 to 20% in 2014), and to have ‘upset a family relationship’ (down from 25% in 2013 to 14% in 2014)
- The overwhelming majority of methamphetamine user’s nominated methamphetamine (69%) as the drug type mainly responsible for their drug-related problems, followed by alcohol (9%) and heroin (7%)
- The frequent ecstasy users named three drug types as mainly responsible for their drug-related problems; alcohol (49%), ecstasy (32%) and cannabis (14%)



- The frequent injecting drug users nominated morphine (56%), methamphetamine (12%), heroin (10%), methylphenidate (Ritalin™) (9%), alcohol (6%) and methadone (4%) as mainly responsible for their drug related problems
- Eighty-five percent of the frequent injecting drug users, 62% of the frequent methamphetamine users and 9% of the frequent ecstasy users were assessed to be drug dependent in 2014

#### *Accessing medical and health services*

- The health services the injecting drug users most commonly accessed in 2014 were a 'needle exchange' (90%), 'electronic needle dispenser' (54%), 'pharmacy' (48%), 'drug and alcohol worker' (43%), 'General Practitioner' (37%), 'counsellor' (34%), and 'social worker' (28%)
- An increasing proportion of frequent injecting users had accessed a 'counsellor' (up from 11% in 2006 to 34% in 2014) and a 'social worker' (up from 4% in 2006 to 28% in 2014) in relation to their drug use
- The health services which the frequent methamphetamine users had most commonly accessed in 2014 were a 'needle exchange' (46%), 'drug and alcohol worker' (23%), 'General Practitioner' (22%), 'counsellor' (19%), 'pharmacy' (19%) and an 'electronic needle dispenser' (18%)
- There was an increase in the proportion of frequent methamphetamine users who had accessed a 'needle exchange' (up from 20% in 2013 to 46% in 2014,  $p < 0.0001$ ), an 'ambulance' (up from 3% in 2006 to 9% in 2014), and received 'First Aid' (up from 2% in 2006 to 4% in 2014) in relation to their drug use
- The health services which the frequent ecstasy users had most commonly accessed in 2014 due to their drug use were 'First Aid' (11%), a 'General Practitioner' (8%), 'counsellor' (8%), 'pharmacy' (7%), 'ambulance' service (7%) and 'accident and emergency department' (6%)
- A higher proportion of frequent ecstasy users reported accessing a 'General Practitioner' (up from 4% in 2006 to 8% in 2014) and 'First Aid' (up from 2% in 2006 to 11% in 2014) in relation to their drug use

#### *Mental illness*

- Forty-six percent of the injecting drug users, 42% of the methamphetamine users and 19% of the ecstasy users had suffered from a mental illness at some point in their lifetimes

- Twenty-one percent of the frequent injecting drug users, 19% of the frequent methamphetamine users and 3% of the ecstasy users had stayed in a psychiatric facility overnight or longer
- Twenty-two percent of injecting drug users, 18% of methamphetamine users and 7% of ecstasy users were currently receiving treatment for a mental illness in 2014
- The proportion of frequent methamphetamine users who had spent at least one night in a mental health facility increased from 7% in 2008 to 19% in 2014
- The proportion of frequent methamphetamine users currently receiving treatment for a mental illness increased from 15% in 2008 to 18% in 2014

## **17. Drug and alcohol treatment**

### **17.1 Introduction**

Drug and alcohol treatment provides a means for substance users to address their drug use problems. The benefits of successful drug treatment extend beyond the user themselves to include partners, children, extended family, friends, work colleagues and local community (Babor et al., 2010). Drug treatment can also play a part in reducing acquisitive crime and the size of the illegal drug market by removing heavy drug users who commit property crime and sell drugs to pay for their drug habits (Wilkins & Sweetsur, 2011a, 2011b). Problematic substance users are most receptive to entering treatment immediately following a serious drug related incident such as an accident, overdose, loss of employment, breakdown of personal relationship, arrest or imprisonment (ADANZ, 2009). It is therefore important to have treatment places readily available to take advantage of these 'windows of opportunity' for change. The criminal justice system can play an important role in this process by making treatment a feature of diversion, sentencing and parole conditions (Caulkins & Reuter, 2009; Hough, 1996).

### **17.2 Extent needed help to reduce drug use**

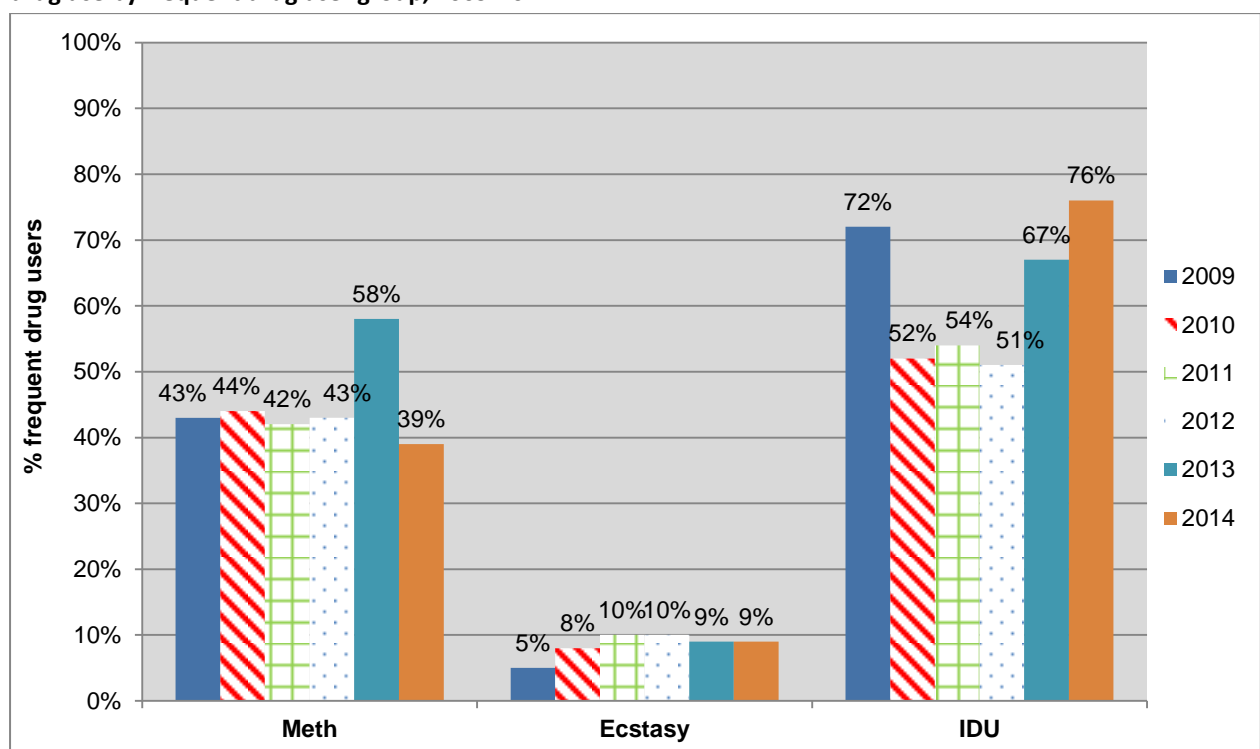
The frequent drug users were first asked about the extent to which they felt they needed help to reduce their drug use. Fifty-three percent of the frequent injecting drug users and 20% of the frequent methamphetamine users reported they needed 'a lot' of help to reduce their drug use in 2014 (Table 17.1). In contrast, nearly eight out of ten of the frequent ecstasy users believed they needed 'no help at all' to reduce their drug use.

**Table 17 1: Extent to which the frequent drug users felt they needed help to reduce their drug use by frequent drug user group, 2009-2014**

Extent felt needed help (%)	Methamphetamine users						Ecstasy users						Intravenous drug users					
	2009 (n=105)	2010 (n=124)	2011 (n=101)	2012 (n=100)	2013 (n=92)	2014 (n=96)	2009 (n=111)	2010 (n=151)	2011 (n=159)	2012 (n=125)	2013 (n=117)	2014 (n=109)	2009 (n=99)	2010 (n=125)	2011 (n=91)	2012 (n=104)	2013 (n=99)	2014 (n=102)
A lot of help [3]	25	22	29	25	29	20	2	3	3	5	4	3	46	28	20	27	45	53
Some help [2]	18	22	12	18	29	19	3	5	7	5	5	6	26	24	34	24	22	23
A little help [1]	18	20	17	22	25	34	18	18	17	17	18	12	14	25	13	14	8	9
No help at all [0]	39	37	41	36	16	27	77	74	72	72	73	79	14	23	32	35	25	14
Mean score (0='no help' – 3='a lot' of help')	1.3	1.3	1.3	1.3	1.7	1.3	0.3	0.4	0.4	0.4	0.4	0.3	2.0	1.6	1.4	1.4	1.9	2.2

The methamphetamine users were less likely to feel they needed help to reduce their drug use from 2013 to 2014 (down from 1.7 to 1.3,  $p=0.0112$ ). There had previously been a spike in frequent methamphetamine users wanting help to reduce their drug use, from 2012 to 2013 (up from 1.3 to 1.7,  $p=0.0157$ ). The frequent injecting drug users were more likely to believe they needed help to reduce their drug use from 2013 to 2014 (up from 1.9 to 2.2), and this increase was close to being statistically significant ( $p=0.0767$ ) (Table 17.1 and Figure 17.1). The frequent injecting drug users were previously more likely to believe they needed help to reduce their drug use from 2012 to 2013 (up from 1.4 to 1.9,  $p=0.0149$ ).

**Figure 17 1: Proportion of the frequent drug users who felt they needed at least some help to reduce their drug use by frequent drug user group, 2009-2014**



### 17.3 Wanted help to reduce drug use but did not get it

The frequent drug users were then asked if they had ever wanted help to reduce their drug use in the previous six months 'but had not got it'. Thirty-nine percent of the frequent injecting drug users, 32% of the frequent methamphetamine users, and 12% of the frequent ecstasy users said they had wanted help but 'had not got it' (Table 17.2). The proportion of frequent ecstasy users who wanted help but did not get it increased from 10% in 2007 to 12% in 2014 ( $p=0.0371$ ). The frequent injecting drug users who wanted help but did not get it increased from 25% in 2013 to 39% in 2014 ( $p=0.0415$ ). Overall, the proportion of frequent methamphetamine users who wanted help but did

not get it increased over the previous nine years, and this steady increase was close to being statistically significant ( $p=0.0547$ ).

**Table 17 2: Proportion of frequent drug users who had wanted help to reduce their drug use in the previous six months but had not got it, 2007-2014**

	<b>Meth users</b>	<b>Ecstasy users</b>	<b>Injecting drug users</b>
<b>2007</b>	<b>n=110</b>	<b>n=105</b>	<b>n=108</b>
	32%	10%	34%
<b>2008</b>	<b>n=137</b>	<b>n=135</b>	<b>n=131</b>
	22%	9%	34%
<b>2009</b>	<b>n=105</b>	<b>n=111</b>	<b>n=98</b>
	21%	3%	23%
<b>2010</b>	<b>n=126</b>	<b>n=152</b>	<b>n=127</b>
	24%	8%	30%
<b>2011</b>	<b>n=110</b>	<b>n=158</b>	<b>n=97</b>
	29%	13%	25%
<b>2012</b>	<b>n=99</b>	<b>n=125</b>	<b>n=104</b>
	34%	13%	32%
<b>2013</b>	<b>n=93</b>	<b>n=118</b>	<b>n=101</b>
	33%	15%	25%
<b>2014</b>	<b>n=99</b>	<b>n=108</b>	<b>n=101</b>
	32%	12%	39%

## **17.4 Barriers encountered when looking for help to reduce drug use**

Those frequent drug users who had wanted help to reduce their drug use but been unable to find it were asked what barriers, if any, they had experienced when trying to find help. They were read a list of 15 common barriers to seeking treatment. The same list of barriers had been read out in previous waves of the IDMS.

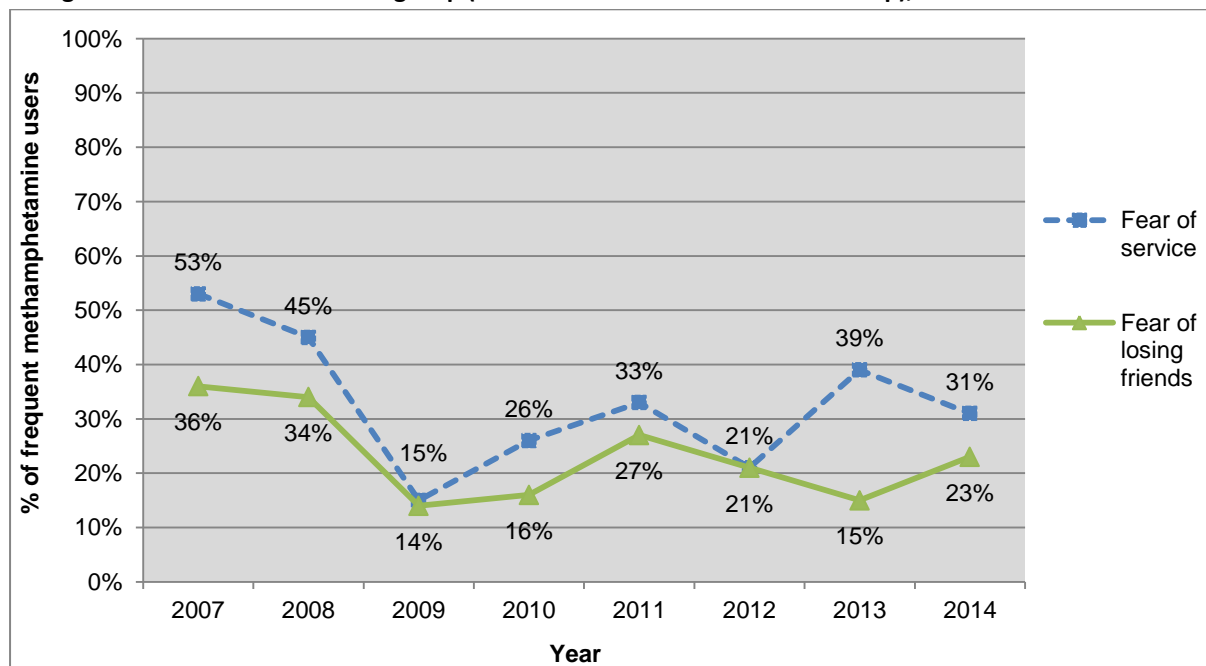
The frequent methamphetamine users had experienced a mean of three barriers to finding help in 2014 (median 2, range 1-14). The barriers they most often experienced were 'fear of what might happen after made contact with a service' (31%), 'social pressure to keep using' (28%), 'concern about impact on job/career' (25%), 'fear of police' (25%), 'didn't know where to go' (23%) and 'fear of losing friends' (23%) (Table 17.3).

**Table 17 3: Barriers experienced by the frequent methamphetamine users when trying to find help to reduce drug use (of those who were unable to find help), 2007-2014**

Barriers to trying to get help (%)	2007 (n=33)	2008 (n=31)	2009 (n=22)	2010 (n=31)	2011 (n=33)	2012 (n=34)	2013 (n=27)	2014 (n=34)
Fear of what might happen after make contact with service	53	45	15	26	33	21	39	31
Social pressure to keep using	48	36	19	39	48	30	40	28
Concern about impact on job/career	36	8	4	23	23	30	27	25
Fear of police	43	27	10	25	20	24	34	25
Didn't know where to go	38	21	22	32	21	27	31	23
Fear of losing friends	36	34	14	16	27	21	15	23
Fear of CYFs or other social welfare agency	22	14	4	9	20	23	27	20
No transport to get there	26	11	9	25	14	23	24	17
Long waiting lists	38	14	18	19	33	32	38	14
Costs too much	26	5	14	23	21	21	20	11
Service not appropriate for my drug use/problems	27	7	18	12	6	18	17	10
Couldn't get appointment at suitable time	35	10	22	22	20	18	24	8
No local service available	27	4	13	13	5	23	11	6
No after-hours service	20	8	9	10	10	9	9	6
Lack of childcare	8	0	0	10	3	3	6	6

Only a fairly modest number of the frequent methamphetamine users had wanted help to reduce their drug use but not got it from 2007 to 2014 (i.e. approximately 30 respondents each year), and this low number of respondents makes it difficult to statistically test for changes over time. Nevertheless, some statistically significant trends were found. The proportion of frequent methamphetamine users who nominated 'long waiting list' as a barrier to finding help decreased sharply from 38% in 2013 to 14% in 2014 ( $p=0.0318$ ). The proportion of frequent methamphetamine users who reported 'fear of what might happen after making contact with a service' as a barrier to seeking help declined from 53% in 2007 to 31% in 2014, and this decrease was close to being statistically significant ( $p=0.0884$ ). The proportion of frequent methamphetamine users who nominated 'fear of losing friends' as a barrier to finding help also decreased from 36% in 2007 to 23% in 2014, and this decrease was also close to being statistically significant ( $p=0.0760$ ) (Figure 17.2).

**Figure 17 2: Proportion of the frequent methamphetamine users who reported 'fear of service' and 'fear of losing friends' as barriers to seeking help (of those who were unable to find help), 2007-2014**





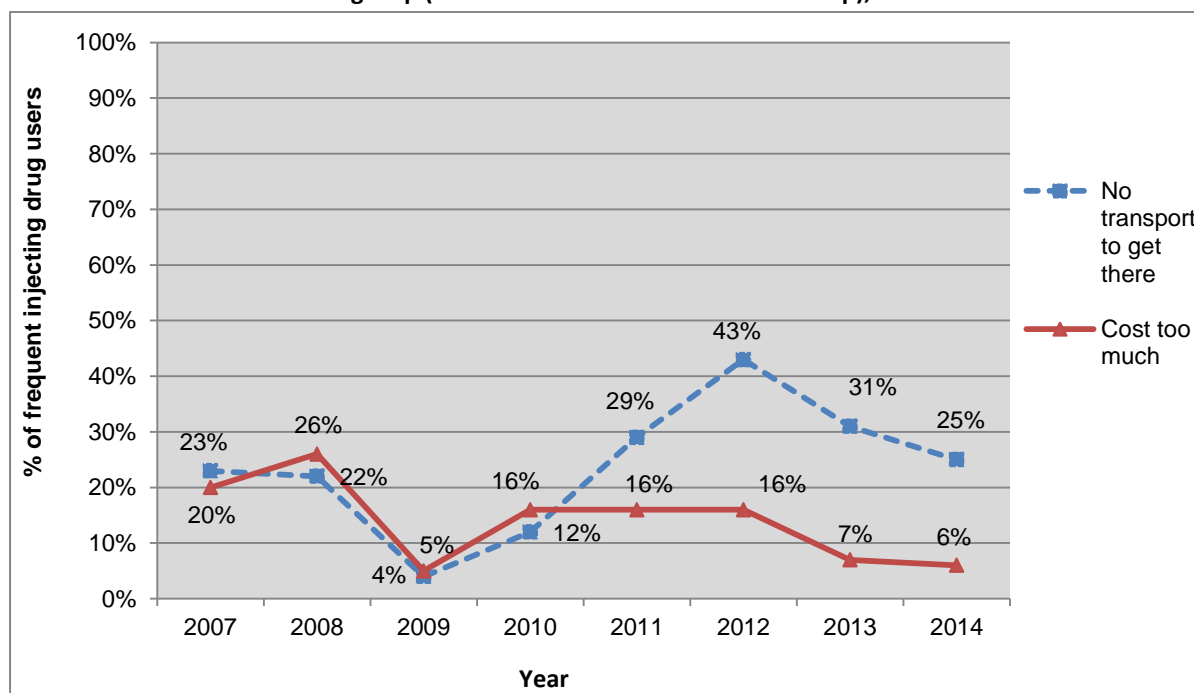
The frequent injecting drug users reported a mean of three barriers to finding help to reduce their drug use in 2014 (median 2, range 1-8). The barriers most often experienced were: 'fear of what might happen after contact with service' (46%), 'long waiting list' (36%), 'couldn't get appointment at suitable time' (32%), 'concern about impact on job/career' (28%), 'no transport to get there' (25%) and 'service not appropriate for my drug use/problems' (25%) (Table 17.4).

**Table 17 4: Barriers experienced by the frequent injecting drug users when trying to find help to reduce drug use (of those who were unable to find help), 2007-2014**

Barriers to trying to get help (%)	2007 (n=36)	2008 (n=45)	2009 (n=25)	2010 (n=39)	2011 (n=26)	2012 (n=32)	2013 (n=24)	2014 (n=40)
Fear of what might happen after contact with service	52	32	20	22	29	49	35	46
Long waiting lists	52	32	33	36	21	41	47	36
Couldn't get appointment at suitable time	41	22	24	18	20	24	37	32
Concern about impact on job/career	21	10	0	9	28	7	10	28
No transport to get there	23	22	4	12	29	43	31	25
Service not appropriate for my drug use/problems	31	13	13	23	34	28	39	25
Fear of CYFs or other social welfare agency	19	16	4	8	29	24	21	18
Social pressure to keep using	28	14	4	8	20	9	22	14
Fear of police	14	24	4	10	25	26	7	14
No after-hours service	22	9	8	10	8	13	22	10
Lack of childcare	0	7	0	8	4	3	7	10
Didn't know where to go	7	17	4	15	28	27	18	9
Costs too much	20	26	5	16	17	16	7	6
Fear of losing friends	14	21	4	2	13	19	7	5
No local service available	18	15	9	5	13	20	8	2

Overall, there was an increase from 2007 to 2014 in the proportion of frequent injecting drug users who reported having ‘no transport’ to get help, but this increase was not statistically significant ( $p=0.0919$ ) (Figure 17.3). Conversely, there was a decrease in the proportion of frequent injecting drug users who reported financial cost (i.e. ‘cost too much’) as a barrier to seeking help (down from 20% in 2007 to 6% in 2014,  $p=0.0279$ ).

**Figure 17 3: Proportion of the frequent injecting drug users who reported ‘no transport to get there’ or ‘cost too much’ as barriers to seeking help (of those who were unable to find help), 2007-2014**



Only a very small number of the frequent ecstasy users had ‘wanted help for their drug use but not got it’ over the previous eight years (i.e. 2007=9; 2008=13; 2009=3; 2010=12; 2011=23; 2012=16; 2013=17; 2014=12). This prevents any meaningful statistical comparison of barriers over time. The most common barriers identified by the frequent ecstasy users in 2014 were ‘social pressure to keep using’ (44%), ‘fear of what might happen after contact with service’ (44%), ‘fear of losing friends’ (44%), ‘didn’t know where to go to find help’ (25%) and ‘concern about impact on job/career’ (25%) (Table 17.5).

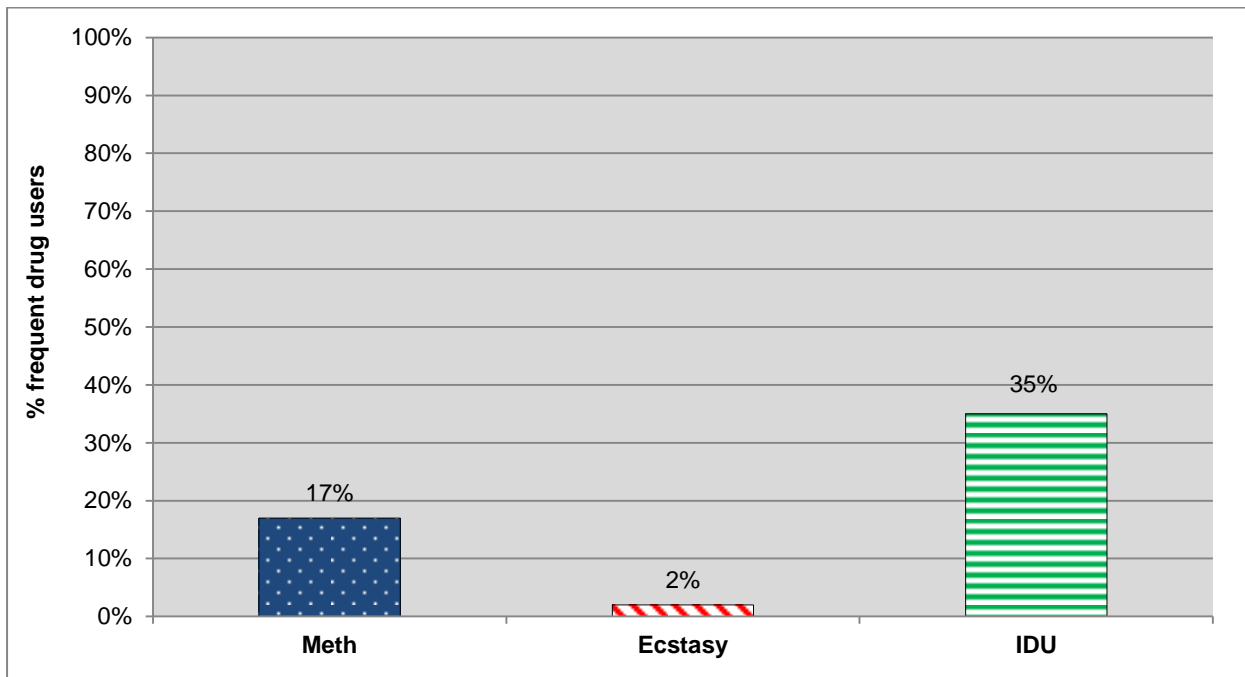
**Table 17 5: Barriers experienced by frequent ecstasy users when trying to find help to reduce drug use (of those who were unable to find help), 2010-2014**

Barriers to trying to get help (%)	2010 (n=12)	2011 (n=23)	2012 (n=16)	2013 (n=17)	2014 (n=12)
Social pressure to keep using	34	52	31	63	44
Fear of what might happen after contact with service	24	9	49	36	44
Fear of losing friends	18	27	20	14	44
Didn't know where to go	41	4	32	27	25
Concern about impact on job/career	25	20	45	19	25
Fear of police	8	7	32	28	16
Long waiting lists	16	9	45	0	16
Couldn't get appointment at good time	8	7	13	0	9
No transport to get there	8	9	32	19	6
Service not appropriate for my drug use/problems	8	26	25	9	6
Fear of CYFs or social welfare agencies	0	4	19	9	6
No after-hours service	8	9	20	5	6
Costs too much	25	17	40	19	0
No local service available	8	0	19	9	0
Lack of childcare	0	5	7	0	0

## 17.5 Drug treatment history

Thirty-five percent of the frequent injecting drug users and 17% of the frequent methamphetamine users were currently in drug treatment (Figure 17.4). Only two of the frequent ecstasy users were currently enrolled in a drug treatment programme.

**Figure 17 4: Proportion of frequent drug users who were currently in drug treatment by frequent drug user group, 2014**



### 17.6 Drug type responsible for drug treatment

Those frequent drug users who were currently in drug treatment were asked what drug or drugs they were receiving treatment for. Again, the numbers are low so percentage results should be interpreted with caution. Of the frequent methamphetamine users who were currently receiving treatment (n=16), 10 were receiving treatment for heroin, seven for morphine, seven for 'homebake' heroin/morphine, four for methadone, four for oxycodone, four for methamphetamine, three for Ritalin and two for benzodiazepines (Table 17.7). Of the intravenous drug users currently receiving treatment (n=35), 76% were being treated for morphine, 19% for heroin, 15% for methadone, 12% for methamphetamine, 11% for Ritalin, 10% for 'homebake' heroin/morphine and 9% for benzodiazepines.

**Table 17 6: Drug type(s) currently in treatment for by frequent drug user group, 2010-2014**

	Frequent methamphetamine users					Frequent injecting drug users				
	2010 (n=23)	2011 (n=18)	2012 (n=14)	2013 (n=13)	2014 (n=16)	2010 (n=47)	2011 (n=33)	2012 (n=34)	2013 (n=26)	2014 (n=35)
Morphine	27	27	54	38	46	57	60	76	86	76
Heroin	13	0	0	0	63	15	9	22	3	19
Methadone	34	11	18	0	22	24	32	17	7	15
Methamphetamine	53	61	58	48	21	5	5	14	4	12
Ritalin	4	7	12	0	16	6	0	11	3	11
Homebake heroin/morphine	4	0	14	13	46	27	9	13	17	10
Benzodiazepines	5	0	6	20	13	9	16	17	0	9
Poppies	0	0	16	0	9	2	3	3	10	7
Zopiclone	-	-	-	-	-	-	-	-	0	4
Alcohol	9	41	14	14	12	7	0	13	0	3
Cannabis	10	20	20	21	6	2	6	6	0	3
Tobacco	0	0	0	0	-	5	3	3	3	3
Crystal methamphetamine	0	5	8	0	9	0	0	0	0	3
Oxycodone	0	0	0	0	22	0	3	0	3	3
Amphetamine	4	5	0	7	6	2	0	3	0	-
Ecstasy	0	0	0	0	-	2	0	3	0	-
Cocaine	0	0	0	0	9	0	0	3	0	-
LSD	0	0	0	0	-	0	0	3	0	-
Amyl nitrate	0	0	0	0	-	0	0	3	0	-
Street BZP	0	0	0	0	-	0	0	3	0	-
Mushrooms	0	0	0	0	-	2	0	3	0	-
Other	10	9	0	0	-	5	2	0	0	-
Codeine	0	0	0	6	0	0	9	0	0	-
Anti –depressant	-	-	0	7	0	-	-	-	0	-
Dextropropoxyphen e	-	-	-	0	6	-	-	-	--	-

## 17.7 Calls to the Alcohol & Drug Help-line

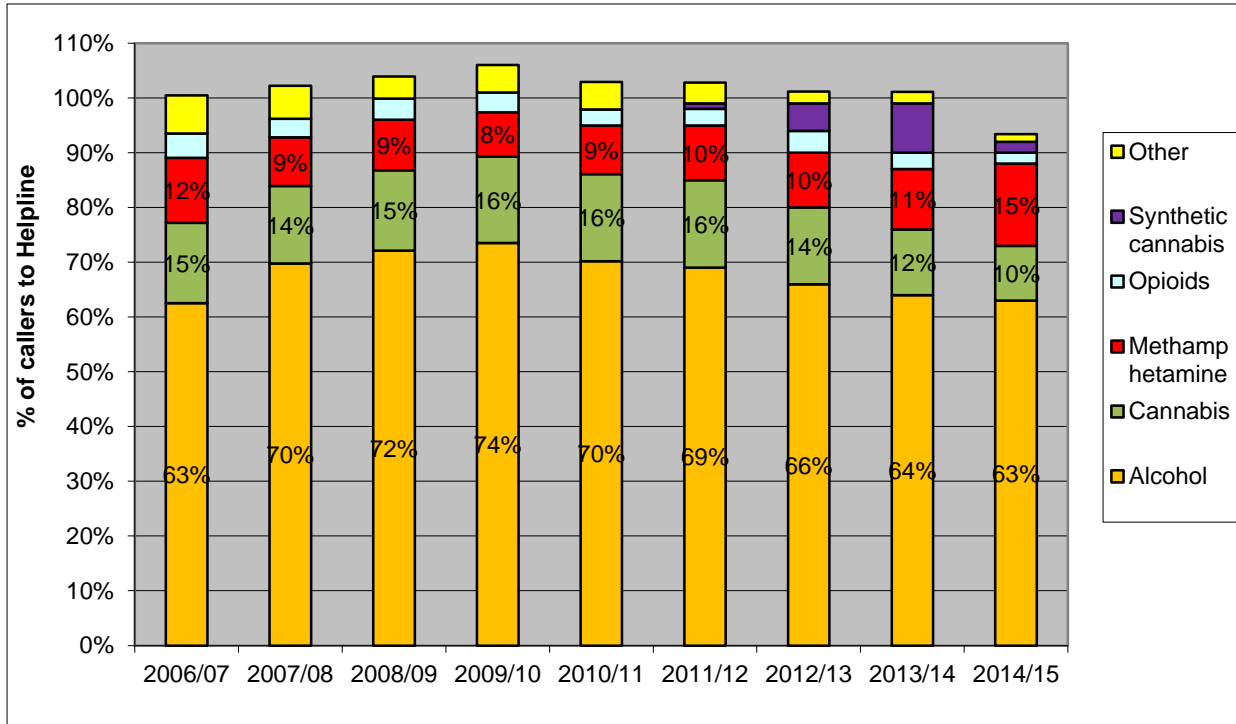
The Alcohol & Drug Help-line is a free national telephone information service operated by the Alcohol and Drug Association of New Zealand (ADANZ). The Help-line provides free confidential information, support and referral service to drug users and to concerned third parties, such as parents, family members and partners. The drug types callers make enquiries about provide a broad indication of trends in problematic drug use in New Zealand. The ADANZ statistics presented in this chapter are of the number of callers rather than number of calls, as a single caller will often call the service a number of times about a problem. A caller may contact the service about more than one drug type.

The proportion of callers seeking help for alcohol problems declined from 74% in 2009/10 to 63% in 2014/15 (Table 17.7). The proportion of callers seeking help for methamphetamine problems increased from 11% in 2013/14 to 15% in 2014/15. There has been a decline in the proportion of callers seeking help for cannabis problems in recent years (down from 16% in 2011/12 to 10% in 2014/15). The proportion of callers seeking help for synthetic cannabinoids increased rapidly from 1% in 2011/12 to 9% in 2013/14, before declining sharply to 2% in 2014/15.

**Table 17 7: Percentage of callers to the Alcohol & Drug Help-line by drug type, 2007 – 2014/15**

Drug type	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Alcohol	63%	70%	72%	74%	70%	69%	66%	64%	63%
Methamphetamine	12%	9%	9%	8%	9%	10%	10%	11%	15%
Cannabis	15%	14%	15%	16%	16%	16%	14%	12%	10%
Synthetic cannabinoids	-	-	-	-	-	1%	5%	9%	2%
Opioids	4%	3%	4%	4%	3%	3%	4%	3%	2%
Others	7%	6%	4%	5%	5%	4%	2%	2%	1%

Figure 17 5: Proportion of callers to the Alcohol & Drug Help-line by drug type, 2007-2014



Source: ADANZ (2015)

## 17.8 Summary of drug treatment

### *Frequent methamphetamine users*

- Twenty percent of the frequent methamphetamine users indicated they needed ‘a lot’ of help to reduce their drug use in 2014
- The methamphetamine users were less likely to feel they needed help to reduce their drug use from 2013 to 2014
- Thirty-two percent of the frequent methamphetamine users had sought help to reduce their drug use but not got it in the past six months in 2014
- The barriers to getting help most often experienced by the frequent methamphetamine users in 2014 were ‘fear of what might happen after made contact with a service’ (31%), ‘social pressure to keep using’ (28%), ‘concern about impact on job/career’ (25%), ‘fear of police’ (25%), ‘didn’t know where to go’ (23%) and ‘fear of losing friends’ (23%)
- A lower proportion of frequent methamphetamine users reported ‘fear of what might happen after making contact with a service’ (down from 53% in 2007 to 31% in 2014) and ‘fear of losing friends’ (down from 36% in 2007 to 23% in 2014) as barriers to finding help
- The proportion of callers to the Alcohol & Drug Help-line seeking help for methamphetamine problems increased from 11% in 2013/14 to 15% in 2014/15

### *Frequent injecting drug users*

- Forty-three percent of the frequent injecting drug users indicated they needed ‘a lot’ of help to reduce their drug use in 2014
- The frequent injecting drug users were more likely to believe they needed help to reduce their drug use from 2013 to 2014
- Thirty-nine percent of the frequent injecting drug users had sought help to reduce their drug use but not got it in the past six months in 2014
- The barriers to getting help most often experienced by the injecting drug users were: ‘fear of what might happen after contact with service’ (46%), ‘long waiting list’ (36%), ‘couldn’t get appointment at suitable time’ (32%), ‘concern about impact on job/career’ (28%), ‘no transport to get there’ (25%) and ‘service not appropriate for my drug use/problems’ (25%)



- The proportion of frequent injecting drug users who reported treatment services ‘cost too much’ as a barrier to seeking help decreased from 20% in 2007 to 6% in 2014
- Of the injecting drug users currently receiving treatment (n=35), 76% were being treated for morphine, 19% for heroin, 15% for methadone, 12% for methamphetamine, 11% for Ritalin, 10% for ‘homebake’ heroin/morphine and 9% for benzodiazepines

#### *Frequent ecstasy users*

- Seventy–nine percent of the frequent ecstasy users indicated they needed ‘no help at all’ to reduce their drug use in 2014
- Twelve percent of the frequent ecstasy users had sought help to reduce their drug use but not got it in the previous six months in 2014
- The barriers to getting help most often experienced by the frequent ecstasy users (n=12) in 2014 were ‘social pressure to keep using’ (44%), ‘fear of what might happen after contact with service’ (44%), ‘fear of losing friends’ (44%), ‘didn’t know where to go’ (25%) and ‘concern about impact on job/career’ (25%)
- The proportion of callers to the Alcohol & Drug Help-line seeking help for synthetic cannabinoids increased sharply from 1% in 2011/12 to 9% in 2013/14, before declining to 2% in 2014/15

## **18. Crime**

### **18.1 Introduction**

As a population, frequent drug users often have higher levels of criminality than the wider population, including offending related to alcohol and drug intoxication such as public nuisance, impaired driving and violence, and financially motivated offending to pay for drug use such as property crime, drug dealing and fraud. However, there remains considerable debate about the causal role drug use plays in encouraging offending (Bennett & Holloway, 2005; Hammersley et al., 1989; Seddon, 2000). Some believe drug use drives criminality, particularly property offending, while others view drug use as a function of the criminal and delinquent lifestyle. What is clear from recent research is that among already criminally active individuals, the frequent use of drugs can accelerate income generating crime (Bennett & Holloway, 2005). In New Zealand, police arrestees who spent \$1,000 or more on methamphetamine per month have been shown to earn \$2,367 more from property crime and \$2,679 more from drug dealing per month than those arrestees who had not spent any money on methamphetamine (Wilkins & Sweetsur, 2011a, 2011b).

This chapter presents the frequent drug users' self-reported levels of criminal offending. While the interviewer clearly explains to the frequent drug user at the start of the interview that all the information they provide is confidential, and the name and contact details of the participant are recorded, it is reasonable to assume there is some level of under-reporting of criminal behaviour due to legal concerns. Nevertheless, given the levels of under-reporting are likely to be fairly constant from year to year, the trends in criminal offending found are likely to be accurate. The chapter also looks at all the different means the frequent drug users used to obtain drugs, and this includes property crime, drug dealing and drug manufacture. The question also provides insight into the use of the prescription medicine system, credit from drug dealers, the borrowing of money and pawning of property as means to obtain drugs.

### **18.2 Property crime**

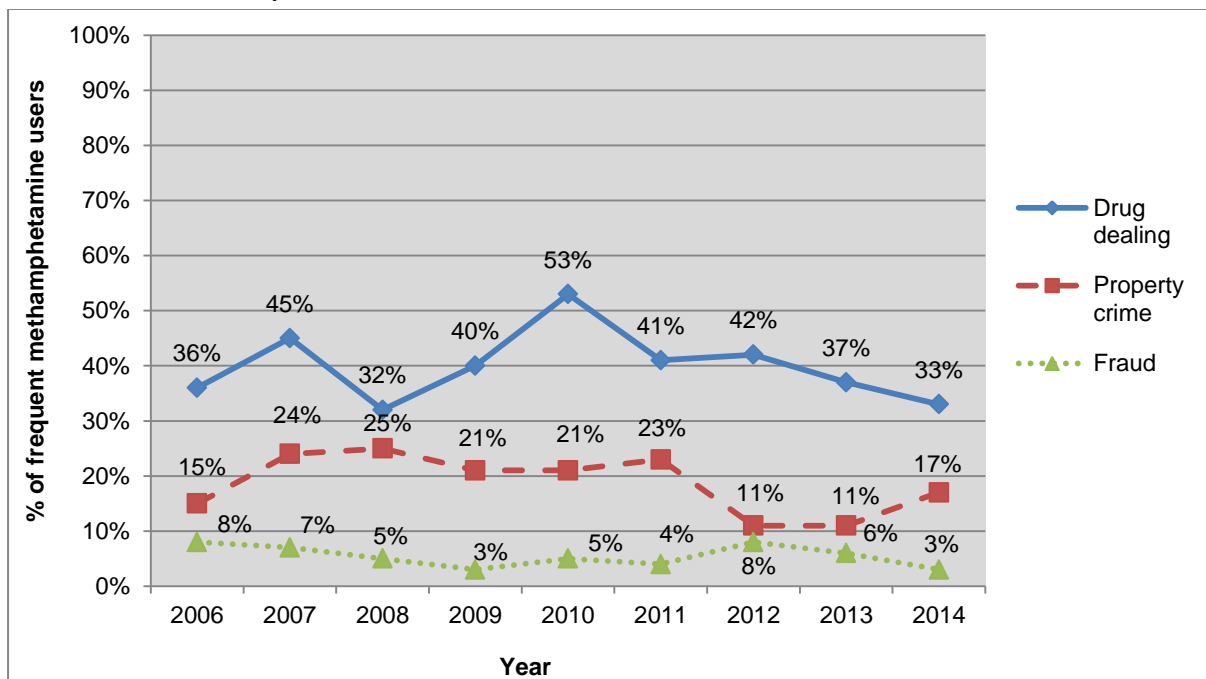
Twenty-four percent of frequent injecting drug users, 17% of the frequent methamphetamine users, and 3% of the frequent ecstasy users self-reported committing a property crime in the previous month in 2014 (Table 18.1). There were no statistically significant changes in the incidence of

property offending in the past month among any of the frequent drug user groups from 2006 to 2014 (Figure 18.1).

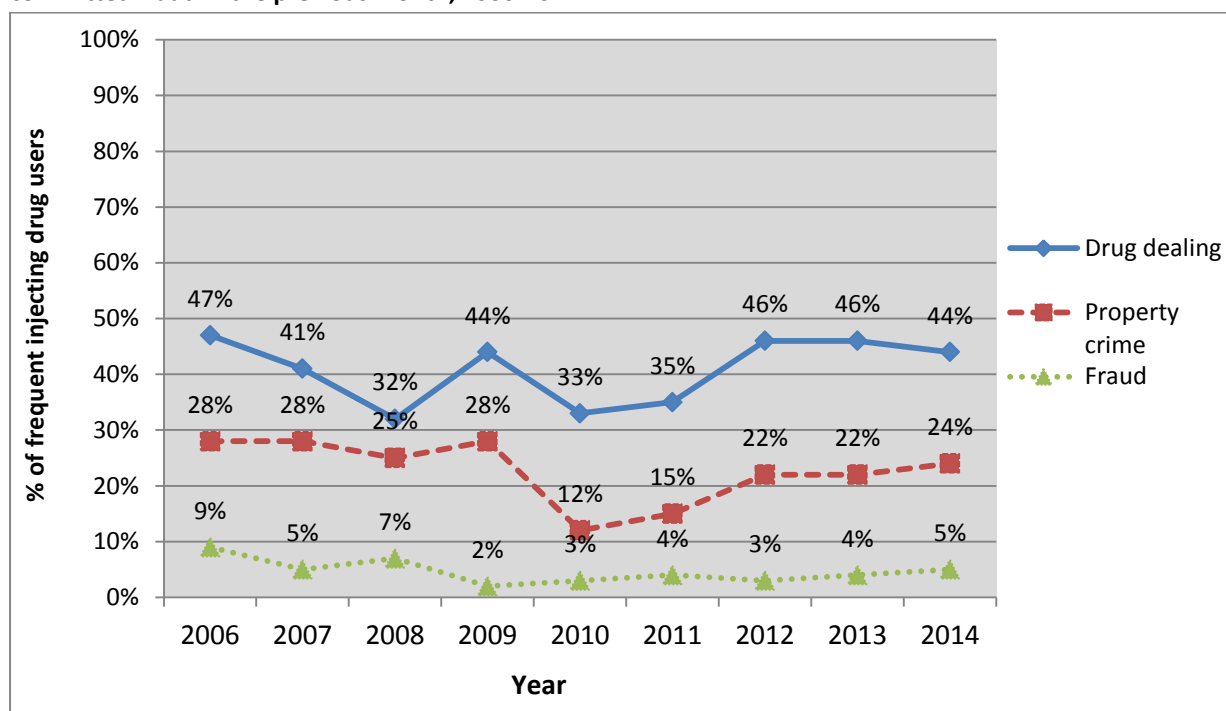
**Table 18 1: Proportion of the frequent drug users who committed property crime, 2014**

Property crime (%)	Methamphetamine users (n=100)	Ecstasy users (MDMA) (n=108)	Intravenous drug users (IDU) (n=101)
Ever committed property crime	52	22	72
Committed property crime in past six months	27	7	30
Committed property crime in past month	17	3	24

**Figure 18 1: Proportion of frequent methamphetamine users who sold drugs, committed property crime and committed fraud in the previous month, 2006-2014**



**Figure 18 2: Proportion of frequent injecting drug users who sold drugs, committed property crime and committed fraud in the previous month, 2006-2014**



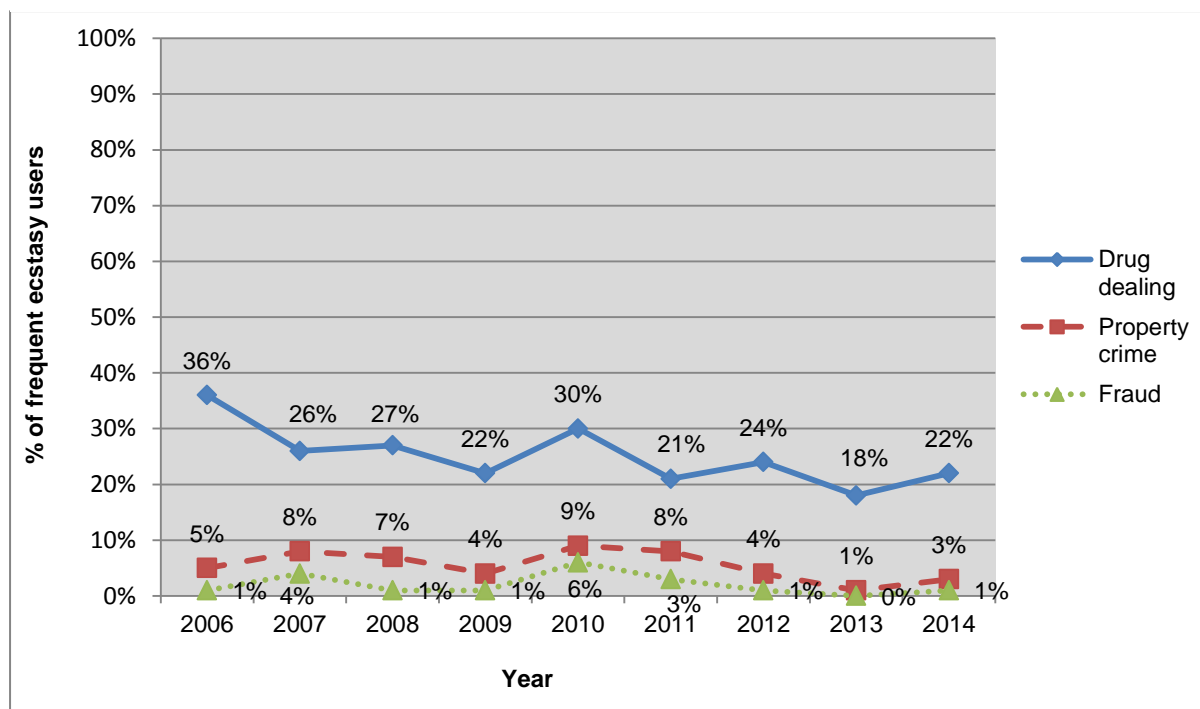
### 18.3 Drug dealing

Forty-four percent of frequent injecting drug users, 33% of frequent methamphetamine users and 22% of frequent ecstasy users had sold drugs in the previous month in 2014 (Table 18.2). The proportion of frequent ecstasy users who had sold drugs in the past month declined from 36% in 2006 to 22% in 2014 ( $p=0.0050$ ) (Figure 18.3).

**Table 18 2: Proportion of the frequent drug users who sold illegal drugs, 2014**

Sold drugs (%)	Methamphetamine users (n=98)	Ecstasy users (MDMA) (n=107)	Intravenous drug users (IDU) (n=102)
Ever sold drugs	72	44	73
Sold drugs in past six months	45	33	53
Sold drugs in past month	33	22	44

**Figure 18 3: Proportion of frequent ecstasy users who sold drugs, committed property crime and committed fraud in the previous month, 2006-2014**



## 18.4 Fraud

Five percent of frequent injecting drug users, 3% of frequent methamphetamine users and 1% ecstasy users reported committing a fraud in the previous month in 2014. (Table 18.3). The proportion of frequent injecting drug users who committed a fraud in the previous month decreased from 9% in 2006 to 5% in 2014, and this decrease was close to being statistically significant ( $p=0.0993$ ) (Figure 18.2).

**Table 18 3: Proportion of the frequent drug users who committed fraud, 2014**

Fraud (%)	Methamphetamine users (n=98)	Ecstasy users (MDMA) (n=108)	Intravenous drug users (IDU) (n=103)
Ever committed fraud	35	6	37
Committed fraud in past six months	8	2	11
Committed fraud in past month	3	1	5

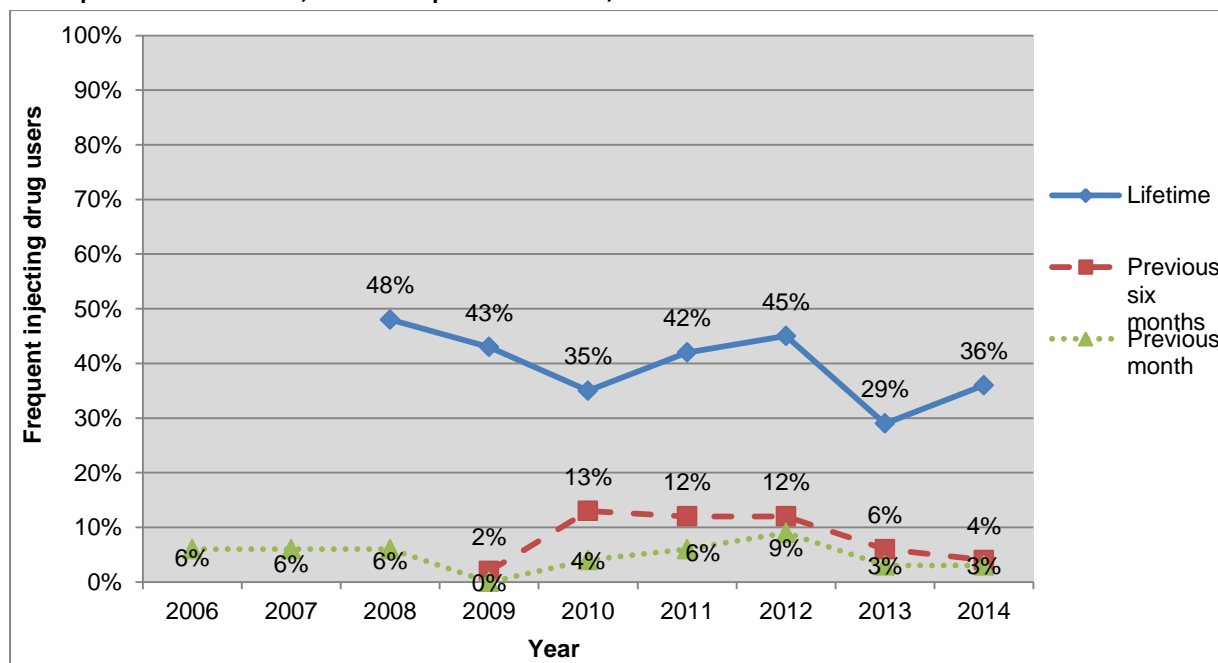
## 18.5 Crime involving violence

The frequent drug users were asked about their histories of committing violent crime. Thirty-nine percent of the frequent methamphetamine users, 36% of the frequent injecting drug users, and 11% of the frequent ecstasy users had committed a violent crime at some point in their lives (Table 18.4). The proportion of frequent injecting drug users who had ever committed a violent crime decreased from 48% in 2008 to 36% in 2014 ( $p=0.0410$ ) (Figure 18.4). Three percent of the frequent methamphetamine users, 3% of the injecting drug users and 1% of the frequent ecstasy users had committed a violent crime in the past month in 2014.

**Table 18 4: Proportion of the frequent drug users who committed violent crime, 2014**

Violent crime (%)	Methamphetamine users (n=99)	Ecstasy users (MDMA) (n=108)	Intravenous drug users (IDU) (n=100)
Ever committed violent crime	39	11	36
Committed violent crime in past six months	13	4	4
Committed violent crime in past month	3	1	3

**Figure 18 4: Proportion of frequent injecting drug users who had committed a violent crime in their lifetime, in the previous six months, and in the previous month, 2006-2014**



## 18.6 Means used to pay for drug use

The frequent drug users were asked about all the different ways they may have used to pay for their drug use in the previous six months. They were read a list of 20 possible payment means and asked to select all the ones that applied to them. Reflecting the social and sharing aspect of drug consumption, the frequent drug users often reported receiving drugs as 'gifts from friends'.

The frequent methamphetamine users also commonly reported obtaining drugs in 2014 with 'credit from dealers' (49%), by 'bartering drugs/goods/services' (49%), with 'social welfare payments' (46%), 'paid employment' (38%), by 'selling drugs to provide personal supply' (36%), and with 'money borrowed from friends' (35%) (Table 18.5). Eighteen percent of the frequent methamphetamine users had paid for their drugs with 'property crime', 17% made their own drugs, and 17% had obtained drugs from a 'family member or friend's prescription'.

**Table 18 5: Different means used by the frequent methamphetamine users to pay for drugs in the past six months, 2006–2014**

Different means of payment for drug use	2006 (n=112)	2007 (n=109)	2008 (n=137)	2009 (n=105)	2010 (n=130)	2011 (n=112)	2012 (n=100)	2013 (n=93)	2014 (n=99)
Gift from friends	80%	87%	69%	69%	85%	82%	95%	82%	79%
Credit from drug dealers	36%	51%	29%	43%	50%	53%	46%	51%	49%
Bartering drugs/ goods/ services	44%	61%	32%	45%	65%	55%	57%	45%	49%
Unemployment benefit/ social welfare benefit	40%	53%	43%	61%	67%	61%	64%	59%	46%
Paid employment	64%	57%	63%	61%	59%	50%	53%	47%	38%
Selling drugs to provide personal supply	46%	49%	29%	38%	62%	48%	45%	47%	36%
Borrowed money from friends	30%	50%	29%	38%	59%	48%	51%	45%	35%
Selling drugs for cash profit	35%	47%	30%	40%	59%	34%	38%	39%	32%
Pawning property	23%	43%	19%	37%	55%	24%	44%	37%	31%
Prescription (in own name)	-	-	15%	21%	25%	27%	25%	24%	19%
Property crime (e.g. burglary, shoplifting, stealing cars)	13%	22%	23%	22%	31%	28%	16%	13%	18%
Made it	-	-	11%	19%	39%	32%	22%	24%	17%
Family member or friend's prescription	-	-	9%	15%	28%	30%	23%	23%	17%
Money from parents (given, borrowed)	20%	28%	26%	29%	32%	29%	25%	26%	15%
Sex work (i.e. prostitution)	3%	15%	8%	8%	7%	8%	19%	9%	15%
Exchange for sexual favours	6%	15%	7%	8%	19%	8%	17%	12%	10%
Fraud	10%	16%	7%	11%	14%	11%	7%	9%	8%
Student loan/allowance	-	-	-	14%	14%	10%	11%	8%	7%
'Doctor shopping' (going to number of doctors for prescription drugs)	-	-	3%	8%	7%	10%	2%	8%	5%



The frequent methamphetamine users were more likely from 2006 to 2014 to pay for their drug use with 'social welfare benefits' (up from 40% to 46%,  $p=0.0098$ ), 'credit from drug dealers' (up from 36% to 49%,  $p=0.0041$ ), 'money borrowed from friends' (up from 30% to 35%,  $p=0.0465$ ), and through 'sex work' (up from 3% to 15%,  $p=0.0176$ ). The proportion of frequent methamphetamine users who obtained their drugs using 'a family member or friend's prescription' increased from 9% in 2008 to 17% in 2014 ( $p=0.0458$ ). There was a decrease in the proportion of frequent methamphetamine users who said they paid for their drugs through 'paid employment' (down from 64% in 2006 to 38% in 2014,  $p<0.0001$ ) and 'student loan/allowance' (down from 14% in 2009 to 7% in 2014,  $p=0.0271$ ).

The frequent ecstasy users commonly obtained drugs as 'gifts from friends' (79%), with 'paid employment' (76%), 'student loan/allowance' (57%), 'money borrowed from parents' (26%), by 'selling drugs to provide personal supply' (21%) and by 'borrowing money from friends' (21%). (Table 18.6). Seventeen percent of frequent ecstasy users had obtained drugs through 'selling drugs for profit', 14% had received 'credit from dealers', 14% by 'bartering drugs/goods/services', and 13% had used a 'prescription in their own name'.

**Table 18 6: Different means used by frequent ecstasy users to pay for drugs in the past six months, 2006–2014**

Different means of payment for drug use	2006 (n=108)	2007 (n=105)	2008 (n=135)	2009 (n=111)	2010 (n=153)	2011 (n=160)	2012 (n=126)	2013 (n=118)	2014 (n=109)
Gift from friends	79%	80%	72%	67%	85%	89%	88%	81%	79%
Paid employment	91%	80%	88%	87%	69%	80%	85%	73%	76%
Student loan/allowance	-	-	-	42%	52%	38%	44%	47%	57%
Money from parents (given, borrowed)	14%	24%	38%	32%	38%	41%	32%	39%	26%
Borrowed money from friends	21%	33%	21%	26%	34%	36%	34%	19%	21%
Selling drugs to provide personal supply	17%	16%	18%	27%	28%	25%	26%	19%	21%
Selling drugs for cash profit	16%	17%	18%	24%	27%	23%	25%	17%	17%
Credit from drug dealers	15%	18%	10%	15%	22%	18%	26%	25%	14%
Bartering drugs/ goods/ services	13%	19%	8%	12%	22%	27%	20%	23%	14%
Prescription (in own name)	-	-	10%	11%	15%	10%	14%	14%	13%
Family member or friend's prescription	-	-	9%	13%	23%	23%	21%	23%	12%
Made it	-	-	8%	6%	11%	15%	12%	13%	7%
Unemployment benefit/ social welfare benefit	18%	30%	18%	10%	14%	20%	9%	11%	3%
'Doctor shopping' (going to number of doctors for prescription drugs)	-	-	1%	0%	2%	1%	1%	1%	3%
Exchange for sexual favours	1%	4%	2%	0%	4%	1%	3%	8%	2%
Sex work (i.e. prostitution)	1%	3%	1%	0%	1%	0%	0%	3%	1%
Fraud	0%	2%	1%	0%	5%	2%	3%	1%	1%
Pawning property	2%	8%	2%	5%	6%	10%	10%	5%	0%
Property crime (e.g. burglary, shoplifting, stealing cars)	2%	1%	1%	1%	4%	4%	3%	3%	0%

The frequent ecstasy users were more likely from 2006 to 2014 to have obtained their drugs with 'money from parents' (up from 15% to 26%,  $p=0.0130$ ). Conversely, the frequent ecstasy users were less likely from 2006 to 2014 to have paid for their drugs using money from 'paid employment' (down from 91% to 76%,  $p=0.0015$ ) and 'social welfare benefits' (down from 18% to 3%,  $p<0.0001$ ). The frequent ecstasy users were also less likely from 2013 to 2014 to have used 'credit from dealers' (down from 25% to 14%,  $p=0.0423$ ), 'exchange for sexual favours' (down from 8% to 2%,  $p=0.0464$ ) and 'a family member or friend's prescription' (down from 23% to 12%,  $p=0.0427$ ).

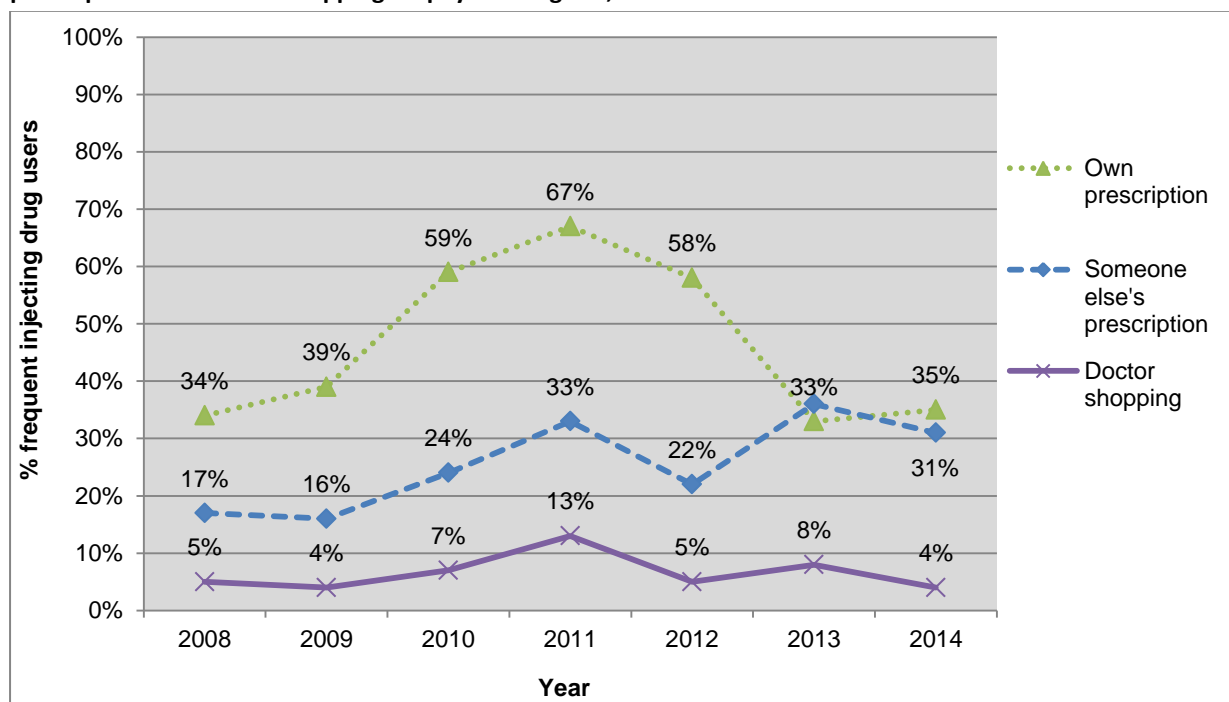
The frequent injecting drug users commonly paid for drugs using 'social welfare benefits' (75%), by 'bartering drugs/goods/services' (62%), with 'credit from drug dealers' (60%), by 'borrowing money from friends' (53%), by 'selling drugs for personal supply' (51%), by 'pawning property' (48%) and with 'paid employment' (41%) (Table 18.7). Thirty-five percent had obtained drugs with a 'prescription in their own name', 31% had used 'a family member or friend's prescription', 24% through 'property crime' and 15% had 'made the drugs' themselves.

**Table 18 7: Different means used by frequent injecting drug users to pay for drugs in the past six months, 2006–2014**

Different means of payment for drug use	2006 (n=92)	2007 (n=108)	2008 (n=129)	2009 (n=99)	2010 (n=128)	2011 (n=99)	2012 (n=104)	2013 (n=101)	2014 (n=103)
Gift from friends	80%	68%	65%	58%	71%	76%	81%	93%	79%
Unemployment benefit/ social welfare benefit	70%	76%	76%	77%	75%	74%	68%	79%	75%
Bartering drugs/ goods/ services	57%	60%	52%	44%	61%	54%	49%	72%	62%
Credit from drug dealers	47%	44%	37%	41%	56%	60%	48%	72%	60%
Borrowed money from friends	48%	46%	31%	34%	36%	52%	37%	60%	53%
Selling drugs to provide personal supply	39%	32%	30%	43%	35%	39%	43%	57%	51%
Pawning property	40%	41%	38%	30%	42%	35%	34%	61%	48%
Paid employment	48%	40%	33%	41%	34%	43%	41%	47%	41%
Selling drugs for cash profit	38%	25%	29%	41%	33%	29%	38%	43%	41%
Prescription (in own name)	-	-	34%	39%	59%	67%	58%	33%	35%
Money from parents (given, borrowed)	27%	23%	29%	16%	27%	26%	16%	42%	33%
Family member or friend's prescription	-	-	17%	16%	24%	33%	22%	36%	31%
Property crime (e.g. burglary, shoplifting, stealing cars)	20%	21%	30%	22%	17%	24%	16%	23%	24%
Sex work (i.e. prostitution)	12%	14%	11%	11%	11%	17%	20%	16%	19%
Made it	-	-	20%	21%	24%	23%	17%	21%	15%
Exchange for sexual favours	6%	8%	8%	4%	7%	7%	12%	17%	13%
Fraud	10%	11%	10%	6%	9%	13%	6%	9%	8%
Student loan/allowance	-	-	-	2%	4%	2%	2%	9%	5%
'Doctor shopping' (going to number of doctors for prescription drugs)	-	-	5%	4%	7%	13%	5%	8%	4%

There was an increase from 2006 to 2014 in the proportion of frequent injecting drug users who paid for their drug use by 'borrowing money from friends' (up from 48% to 53%,  $p=0.0169$ ), 'pawning property' (up from 40% to 48%,  $p=0.0303$ ), 'dealing drugs to provide personal supply' (up from 39% to 51%,  $p=0.0002$ ), with 'money from dealing drugs for personal supply' (up from 38% to 51%,  $p=0.0466$ ), in 'exchange for sexual flavours' (up from 6% to 13%,  $p=0.0031$ ), through 'sex work' (up from 12% to 19%,  $p=0.0424$ ), and using 'credit from drug dealers' (up from 47% in 2006 to 60% in 2014,  $p<0.0001$ ). The proportion of frequent injecting drug users who obtained their drugs using 'a family member or friend's prescription' increased from 17% in 2008 to 31% in 2014 ( $p=0.0006$ ) (Figure 18.5).

**Figure 18 5: Proportion of frequent injecting users who used a prescription (own name), someone else's prescription and 'doctor shopping' to pay for drug use, 2006-2014**



## 18.7 Summary of crime

- The proportion of frequent ecstasy users who had sold drugs in the past month declined from 36% in 2006 to 22% in 2014
- The proportion of frequent injecting users who committed a fraud in the previous month decreased from 9% in 2006 to 5% in 2014
- The frequent methamphetamine users were more likely from 2006 to 2014 to have paid for their drug use with 'social welfare benefits' (up from 40% to 46%), 'credit from drug dealers' (up from 36% to 49%) and 'sex work' (up from 3% to 15%)
- The proportion of frequent methamphetamine users who obtained their drugs using 'a family or friend's prescription' increased from 9% in 2008 to 17% in 2014
- There was a decrease in the proportion of frequent methamphetamine users who paid for their drugs through 'paid employment' (down from 64% in 2006 to 38% in 2014) and 'student loan/allowance' (down from 14% in 2009 to 7% in 2014).
- The frequent injecting drug users were more likely from 2006 to 2014 to have paid for their drug use with 'credit from drug dealers' (up from 47% to 60%), by 'borrowing money from friends' (up from 48% to 53%), 'pawning property' (up from 40% to 48%), 'dealing drugs to provide personal supply' (up from 39% to 51%), and in 'exchange for sexual flavours' (up from 6% to 13%)
- The proportion of frequent injecting drug users who obtained their drugs using 'a family or friend's prescription' increased from 17% in 2008 to 31% in 2014
- The proportion of frequent ecstasy users who obtained their drugs with 'money from parents' increased from 15% in 2006 to 26% in 2014
- The frequent ecstasy users were less likely from 2006 to 2014 to have paid for their drugs using money from 'paid employment' (down from 91% to 76%) and 'social welfare benefits' (down from 18% to 3%)
- The frequent ecstasy users were also less likely from 2013 to 2014 to have obtained drugs using 'credit from dealers' (down from 25% to 14%), 'exchange for sexual flavours' (down from 8% to 2%) and 'a family member or friend's prescription' (down from 23% to 12%)

## **19. Drug enforcement**

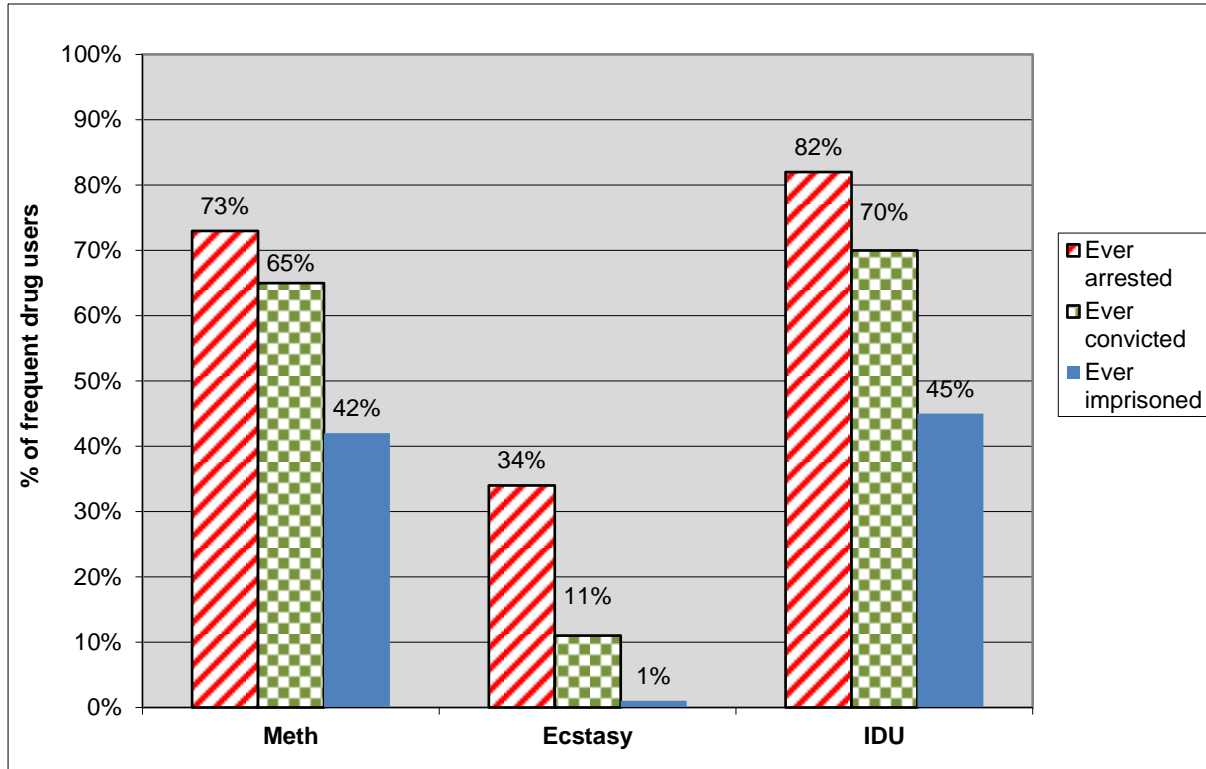
### **19.1 Introduction**

Frequent drug users often have a high level of contact with the police and the wider criminal justice system, either for drug use itself, or for a range of nuisance, anti-social and other criminal behaviour related to their drug use. The arrest of a problematic alcohol and other drug user is increasingly viewed as an opportunity to address the substance use which may drive their offending (Caulkins & Reuter, 2009). Drug courts are the most resource intensive application of this approach, where convicted offenders are ordered to complete a drug treatment programme and submit to regular drug testing as part of their sentencing conditions. Two new drug courts providing intensive supervision of offenders with alcohol and drug issues were established in Auckland in 2012. Pre-Charge Warnings (PCW) were introduced in 2010 for comparatively minor offending, and are intended to target offences committed while intoxicated, particularly by first time offenders (New Zealand Police, 2013). Under the PCW process, police officers can arrest an intoxicated individual, removing them from a situation, but the offender is not charged and prosecuted, and there is no resulting conviction and related life impacts (New Zealand Police, 2013). Offence types eligible for PCWs include 'breach of liquor ban', 'disorderly conduct' and 'possession of cannabis' (New Zealand Police, 2013). Methamphetamine and family violence offences are excluded from the PCW process (New Zealand Police, 2013). Offenders must meet various conditions to be eligible for a PCW including offending history, victim impact, seriousness of offending and demeanour are all considered (New Zealand Police, 2013). Reparation, such as community work, may be a condition of the warning (New Zealand Police, 2013). A total of 1,265 PCWs were issued by Police in November 2015; 161 more than in November 2014 (New Zealand Police, 2015).

### **19.2 History of arrest, conviction and imprisonment**

The frequent drug users were first asked if they had ever been arrested, convicted of a crime or imprisoned. Eighty-two percent of injecting drug users, 73% of the frequent methamphetamine users and 34% of the frequent ecstasy users had been arrested at some point in their lives (Figure 19.1). Seventy percent of the frequent injecting drug users had been convicted of a crime and 45% had been imprisoned. In contrast, only 11% of the frequent ecstasy users had ever been convicted of a crime and only 1% had ever been imprisoned.

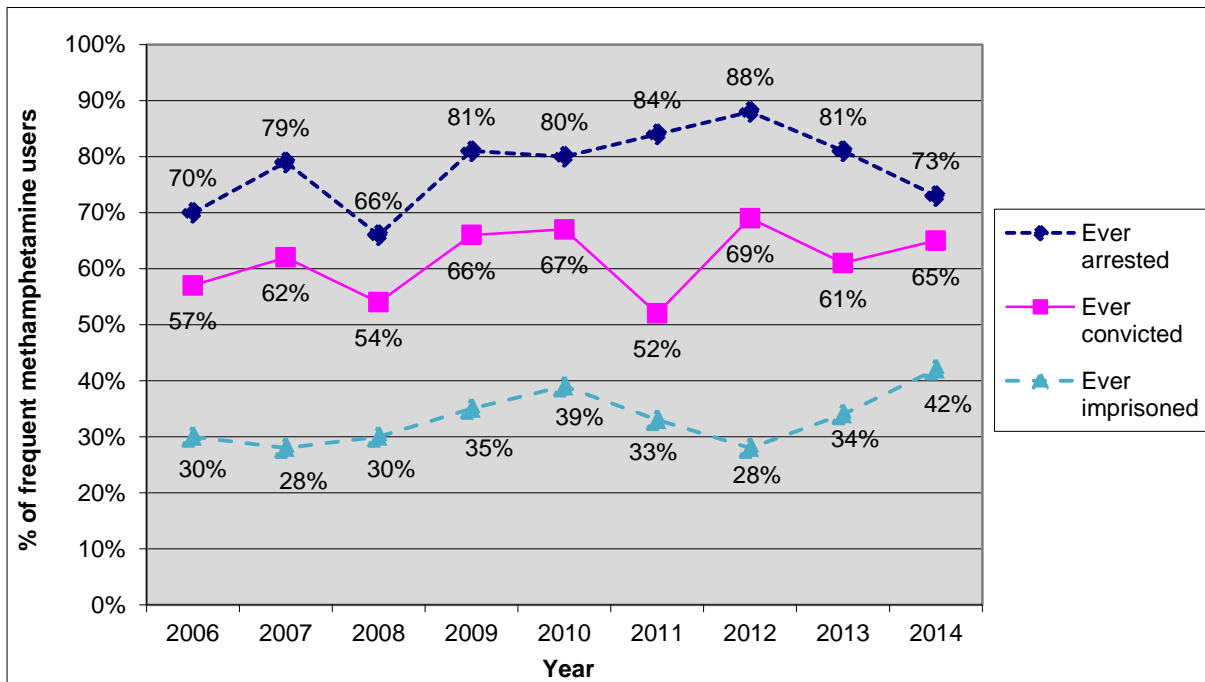
Figure 19 1: Proportion of frequent drug users who had ever been arrested, convicted or imprisoned, 2014



Overall, the proportion of frequent methamphetamine users who had ever been arrested increased from 70% in 2006 to 73% in 2014 ( $p=0.0179$ ) (Figure 19.2). The proportion of methamphetamine users who had ever been imprisoned increased from 30% in 2006 to 42% in 2014, but this increase was not statistically significant ( $p=0.1089$ ). There was no statistically significant change in the proportion of frequent methamphetamine users who had ever been convicted of a crime over the same years.

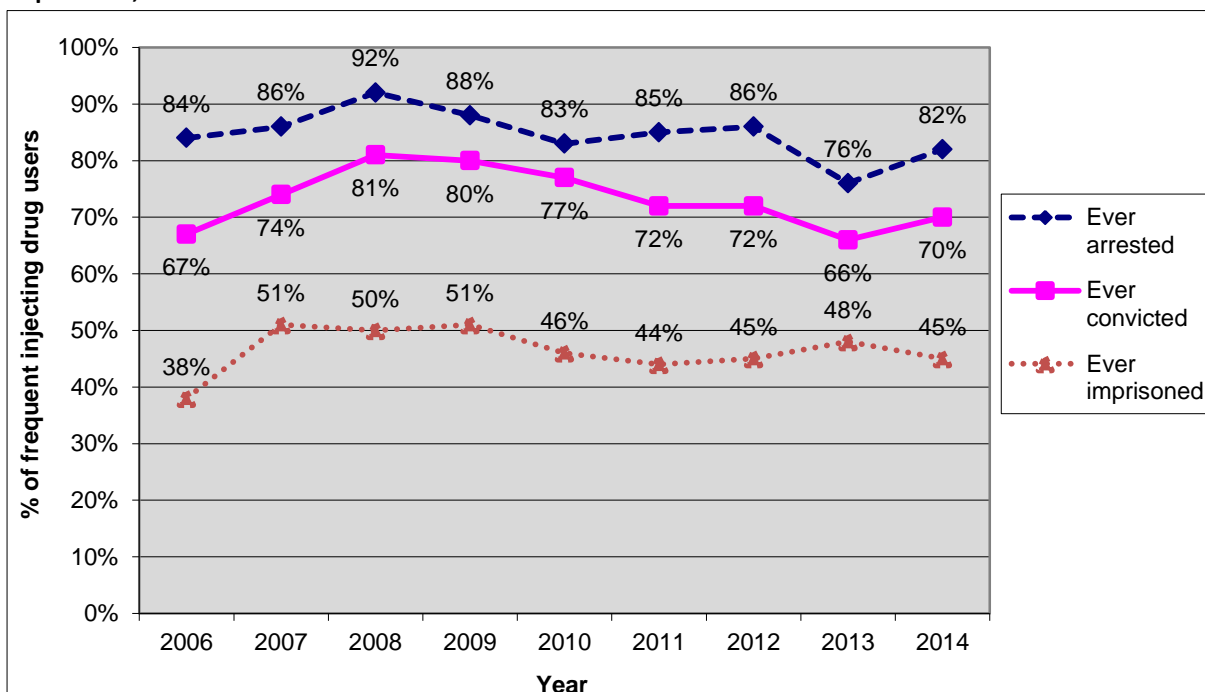


**Figure 19 2: Proportion of frequent methamphetamine users who had ever been arrested, convicted or imprisoned, 2006-2014**



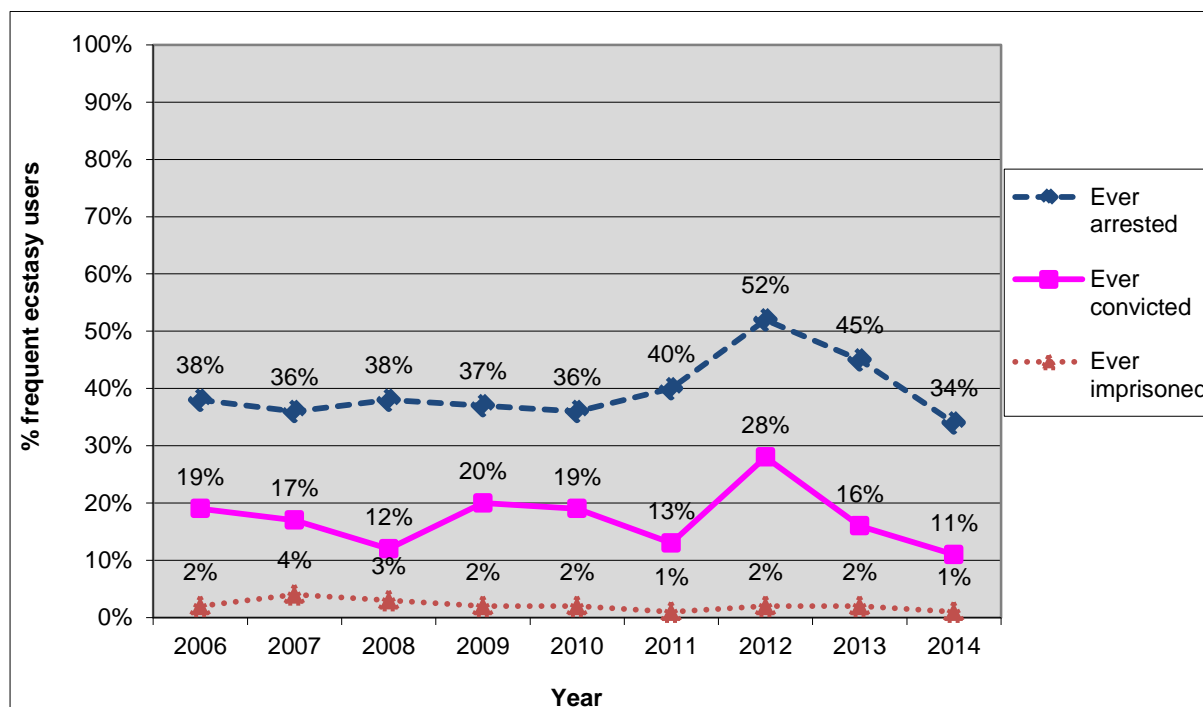
Overall, the proportion of frequent injecting drug users who had ever been arrested declined from 84% in 2006 to 82% in 2014, and this decrease was close to being statistically significant ( $p=0.0599$ ) (Figure 19.3). There was no statistically significant change in the proportion of frequent injecting drug users who had ever been convicted of a crime or imprisoned from 2006-2014.

**Figure 19 3: Proportion of frequent injecting drug users who had ever been arrested, convicted or imprisoned, 2006-2014**



There was no statistically significant change in the proportion of frequent ecstasy users who had ever been arrested, convicted of a crime or imprisoned from 2006 to 2014 (Figure 19.4).

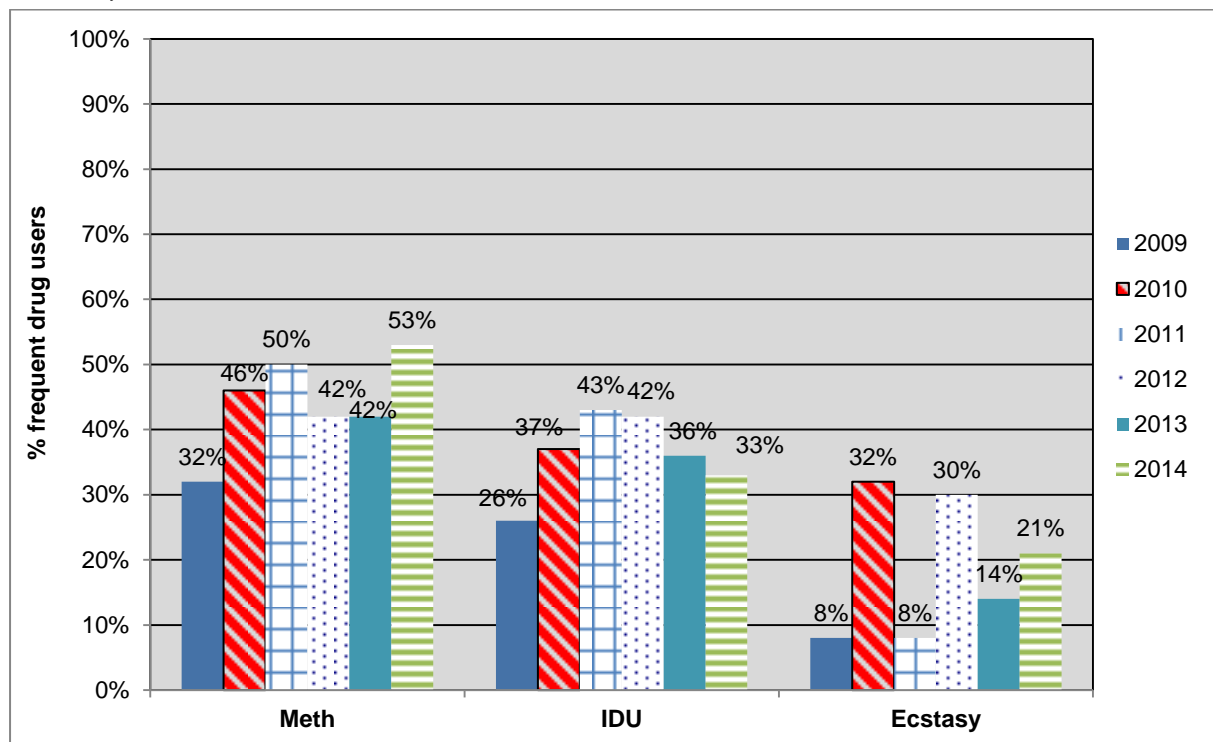
**Figure 19 4: Proportion of frequent ecstasy users who had ever been arrested, convicted or imprisoned, 2006-2014**



### 19.3 Drug treatment as part of sentencing

Those frequent drug users who had been convicted of a crime were asked whether they had received any treatment for alcohol and drug issues as part of their sentence. Fifty-three percent of the frequent methamphetamine users, 33% of the frequent injecting drug users and 21% of the frequent ecstasy users who had been convicted had received alcohol and drug treatment as a part of their sentence in 2014. The proportion of frequent methamphetamine users who had received treatment as part of their sentence also increased from 32% in 2009 to 53% in 2014, and this increase was close to being statistically significant ( $p=0.0776$ ).

**Figure 19 5: Proportion of convicted frequent drug users who received alcohol and drug treatment as part of sentence, 2009-2014**

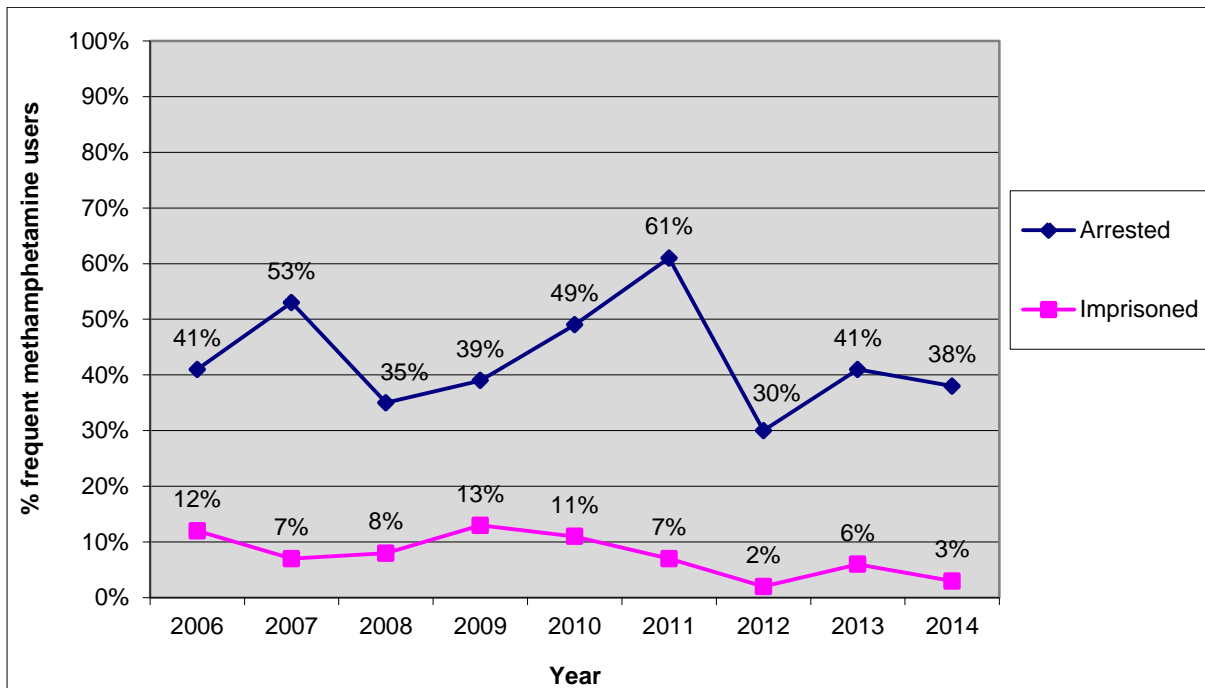


Those frequent drug users who had ever been in prison were asked if they had received alcohol and drug treatment while in prison. Forty-five percent of the frequent methamphetamine users and 30% of the frequent injecting drug users had received treatment while in prison. There was no statistically significant change in levels of treatment in prison among the injecting drug users or methamphetamine users over the past six years. There were not enough frequent ecstasy users who had ever been to prison to make any reliable statistical comparisons over time.

### 19.4 Recent arrest and imprisonment

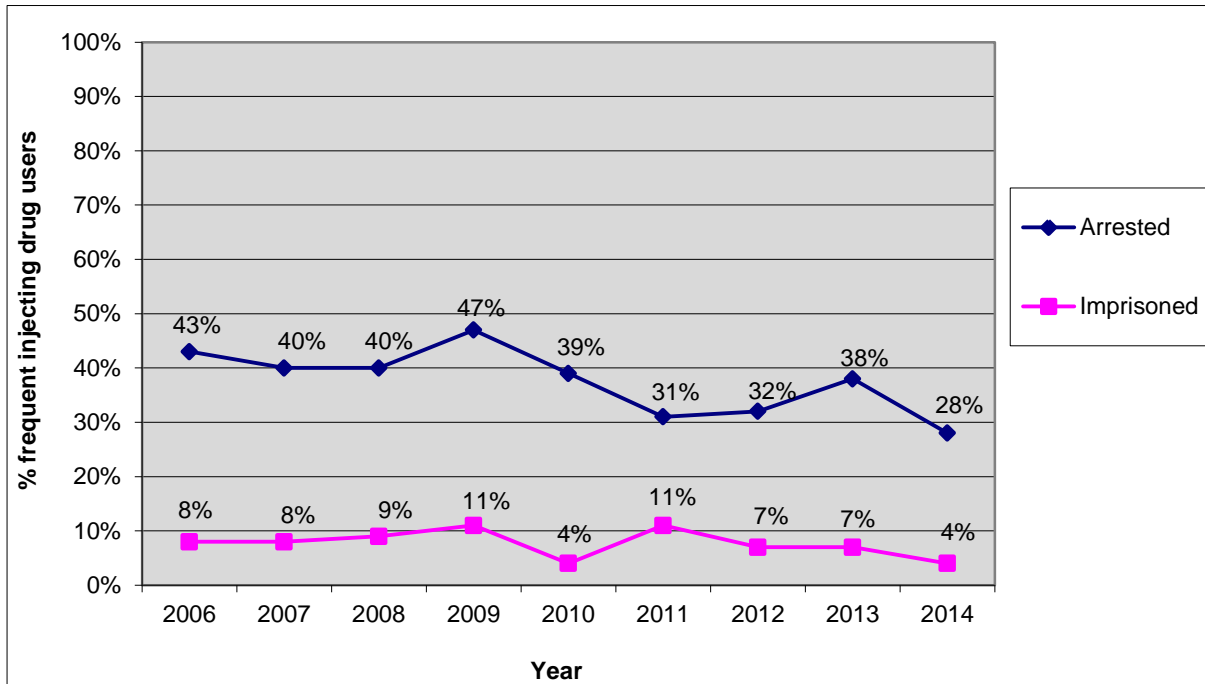
The frequent drug users were also asked if they had been arrested or imprisoned in the previous 12 months. Thirty-eight percent of the frequent methamphetamine users, 28% of the frequent injecting drug users, and 12% of the frequent ecstasy users had been arrested in the past year in 2014. There was no statistically significant change in the proportion of frequent methamphetamine users who had been arrested in the previous year from 2006 to 2014 (i.e. 41% to 38% in 2014,  $p=0.4069$ ) (Figure 19.6). The proportion of frequent methamphetamine users who had been arrested in the past year had previously increased sharply from 35% in 2008 to 61% in 2011 ( $p=0.0147$ ). The proportion of frequent methamphetamine users who had been imprisoned in the previous 12 months declined from 12% in 2006 to 3% in 2014 ( $p=0.0060$ ).

**Figure 19 6: Proportion of frequent methamphetamine users who had been arrested and imprisoned in the previous 12 months, 2006-2014**



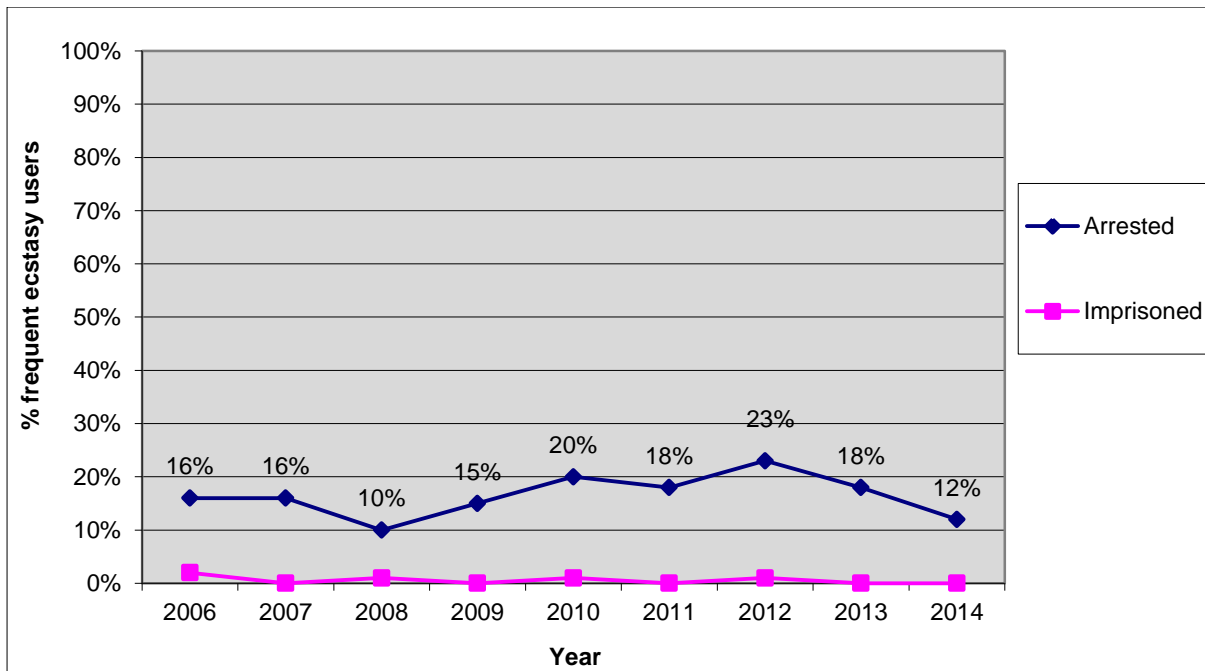
The proportion of frequent injecting drug users who had been arrested in the previous 12 months also declined from 43% in 2006 to 28% in 2014 ( $p=0.0099$ ) (Figure 19.7). There was no change in the proportion of injecting drug users who had been imprisoned in the past year from 2006 to 2014 ( $p=0.2537$ ).

**Figure 19 7: Proportion of frequent injecting drug users who had been arrested and imprisoned in the previous 12 months, 2006-2014**



There was no statistically significant change in the proportion of frequent ecstasy users who had recently been arrested from 2006 to 2014 ( $p=0.3896$ ) (Figure 19.8).

**Figure 19 8: Proportion of frequent ecstasy users who had been arrested and imprisoned in the previous 12 months, 2006-2014**



## 19.5 Offences arrested for in past 12 months

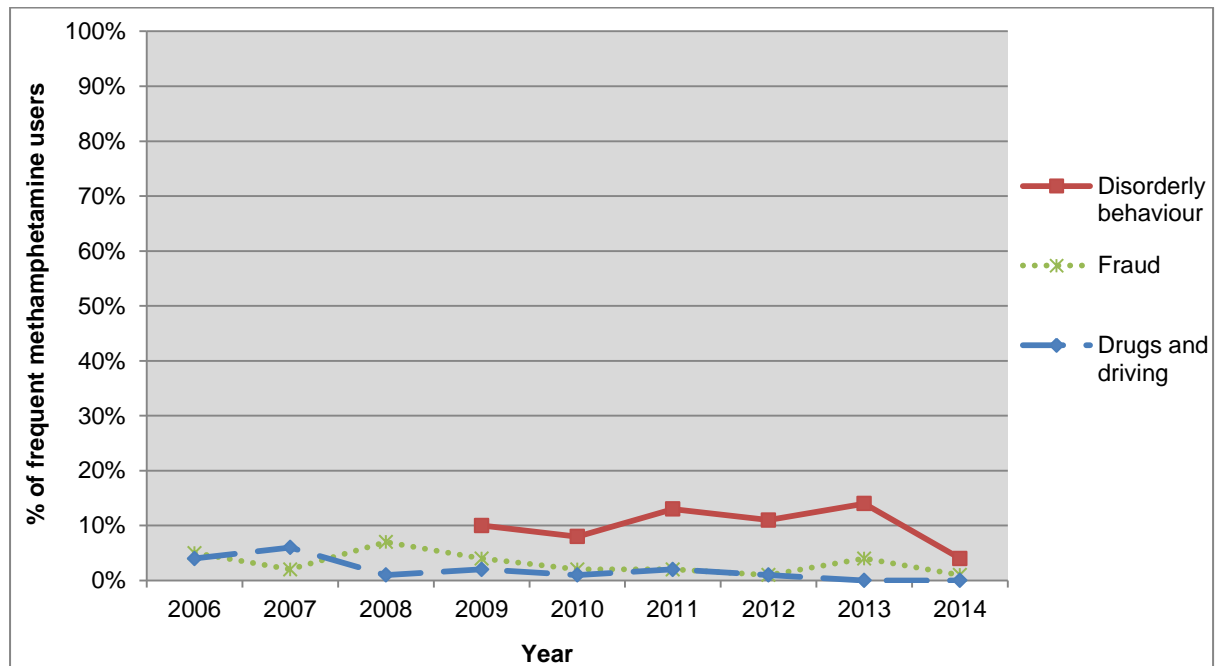
Those frequent drug users who had been arrested in the previous 12 months were asked what offence(s) they had been arrested for during this time. Table 19.1 presents the offences the frequent drug users had been arrested for by the entire sample (not just the ones arrested), to provide an indication of offending behaviour across the whole sample. The offences the frequent methamphetamine users had most commonly been arrested for in 2014 were ‘other offences’ (15%), ‘property crime’ (8%), ‘possession or use of drugs’ (7%), ‘violent crime’ (7%), and ‘disorderly behaviour’ (4%). ‘Other offences’ largely refers to administrative offences against justice including ‘breach of bail’, ‘breach of probation’, failure to appear in court’, ‘warrant to arrest’, ‘unpaid fines’, and ‘breach of a liquor ban’.

**Table 19 1: Proportion of frequent drug users who were arrested for different criminal offences in the past 12 months by frequent drug user group, 2014**

Criminal offences in past 12 months (%)	Meth-amphetamine users (n=97)	Ecstasy users (MDMA) (n=107)	Intravenous drug users (IDU) (n=99)
Disorderly behaviour	4%	8%	2%
Use/possession drugs	7%	1%	2%
Property crime	8%	1%	16%
Violent crime	7%	1%	4%
Drink driving	1%	1%	2%
Fraud	1%	1%	1%
Other driving offence	2%	0%	1%
Drug manufacturing	0%	0%	0%
Other offences	15%	1%	5%
Dealing drugs	1%	0%	1%
Drug driving	0%	0%	3%
Breach of liquor ban	0%	0%	0%
Against Justice	0%	0%	0%

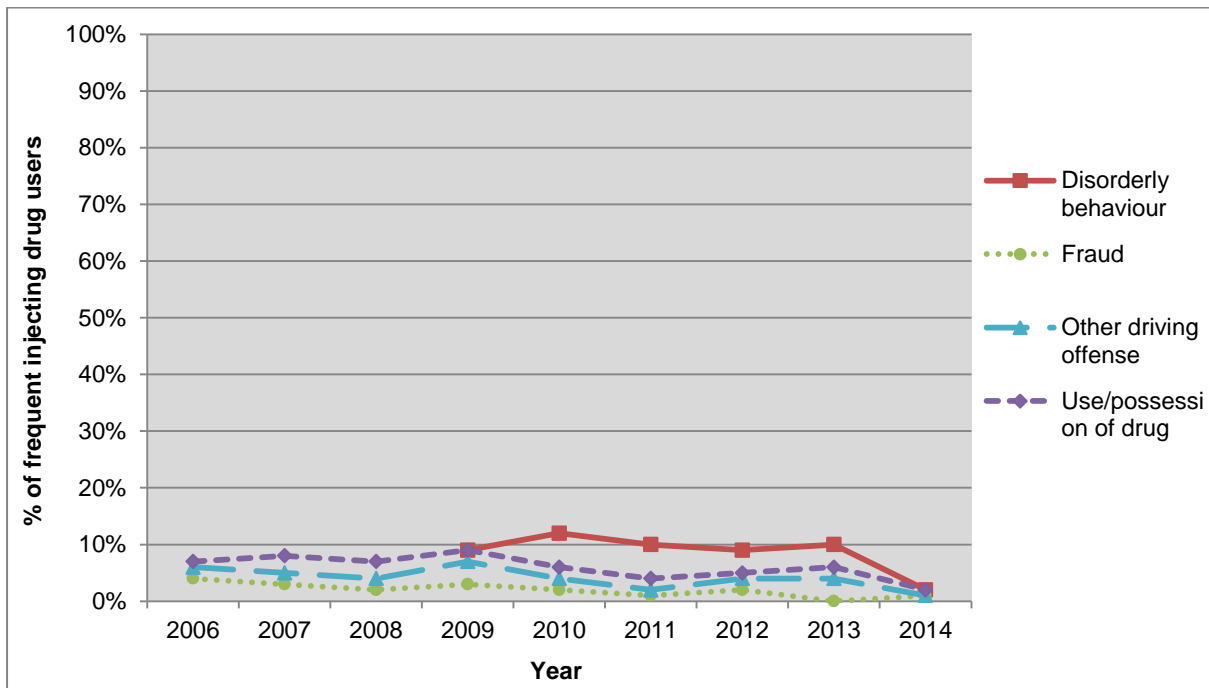
The proportion of frequent methamphetamine users who had been arrested for ‘disorderly behaviour’ decreased (down from 10% in 2009 to 4% in 2014,  $p=0.0013$  and down from 14% in 2013 to 4% in 2014,  $p=0.0205$ ) (Figure 19.9). There were also decreases in the proportion of frequent methamphetamine users who had been arrested for ‘fraud’ (down from 5% in 2006 to 1% in 2014,  $p=0.0295$ ) and ‘drugs and driving’ (down from 4% in 2006 to 0% in 2014,  $p=0.0013$ ).

**Figure 19 9: Proportion of frequent methamphetamine users who had been arrested for disorderly behaviour, fraud and driving under the influence of drugs in the previous 12 months, 2006-2014**



The offences the frequent injecting drug users had most commonly been arrested for were ‘property crime’ (16%), ‘other offences’ (5%) and ‘violent crime’ (4%). A lower proportion of frequent injecting drug users had been arrested for ‘disorderly behaviour’ (down from 8% in 2009 to 2% in 2014,  $p=0.0288$ ) and (down from 10% in 2013 to 2% in 2014,  $p=0.0302$ ) (Figure 19.10). There were decreases in the proportion of frequent injecting users who had been arrested for ‘use/possession of drugs’ (down from 7% in 2006 to 2% in 2014,  $p=0.0395$ ), ‘fraud’ (down from 4% in 2006 to 1% in 2014,  $p=0.0347$ ) and ‘other driving offence’ (down from 6% in 2006 to 1% in 2014,  $p=0.0467$ ).

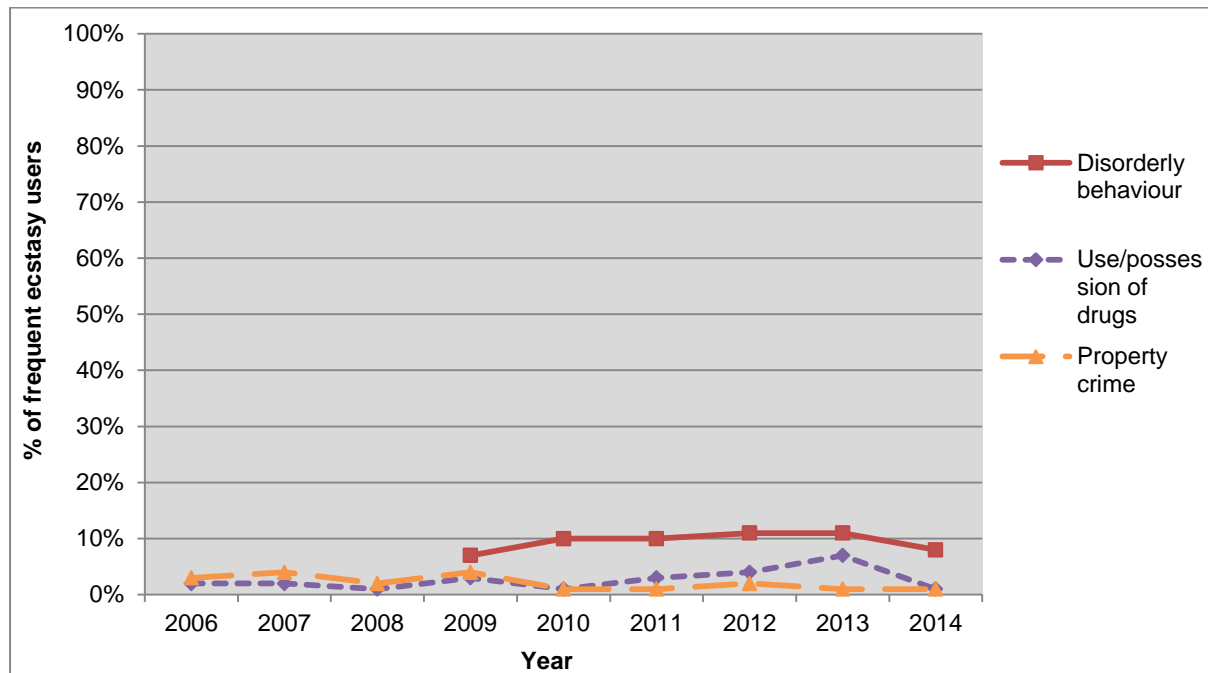
**Figure 19 10: Proportion of frequent injecting drug users who had been arrested for disorderly behaviour, fraud, other driving offence and use/possession of drugs in the previous 12 months, 2006-2014**



Overall, the proportion of frequent ecstasy users arrested for ‘disorderly behaviour’ increased from 7% in 2009 to 8% in 2014 ( $p < 0.0001$ ) (Figure 19.11). The proportion of frequent ecstasy users arrested for the ‘use/possession of drugs’ decreased from 7% in 2013 to 1% in 2014 ( $p = 0.0488$ ). The proportion of frequent ecstasy users arrested for ‘property crime’ decreased from 3% in 2006 to 1% in 2014, and this decline was close to being statistically significant ( $p = 0.0607$ ).



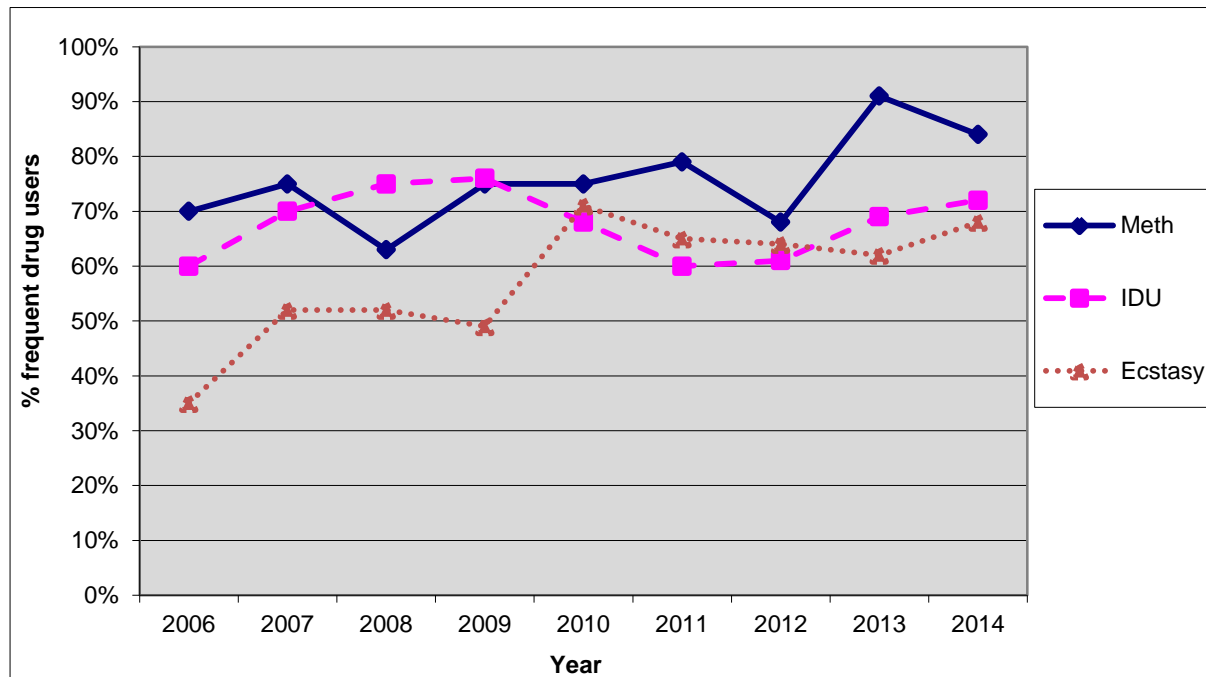
**Figure 19 11: Proportion of frequent ecstasy users who had been arrested for disorderly behaviour, property crime, and use/possession of drugs in the previous 12 months, 2006-2014**



## 19.6 Perceptions of the current level of drug enforcement

The frequent drug users were asked if they had noticed any change in police activity toward drug users in the previous six months. Eighty-four percent of the frequent methamphetamine users, 68% of frequent ecstasy users and 72% percent of frequent injecting drug users had noticed some police activity toward drug users in the past six months in 2014. The proportion of frequent methamphetamine users who had noticed police activity toward drug users increased from 70% in 2006 to 84% in 2014 ( $p=0.0004$ ) (Figure: 19.12). The proportion of frequent methamphetamine users who had noticed police activity toward drug users had previously increased sharply from 68% in 2012 to 91% in 2013 ( $p=0.0001$ ). The proportion of frequent ecstasy users who had noticed police activity toward drug users increased substantially from 35% in 2006 to 68% in 2014 ( $p<0.0001$ ). There was no statistically significant change in the proportion of frequent injecting drug users who had noticed police activity from 2006 to 2014 ( $p=0.7975$ ).

**Figure 19 12: Proportion of frequent drug users who noticed police activity toward drug users in the past six months, 2006-2014**

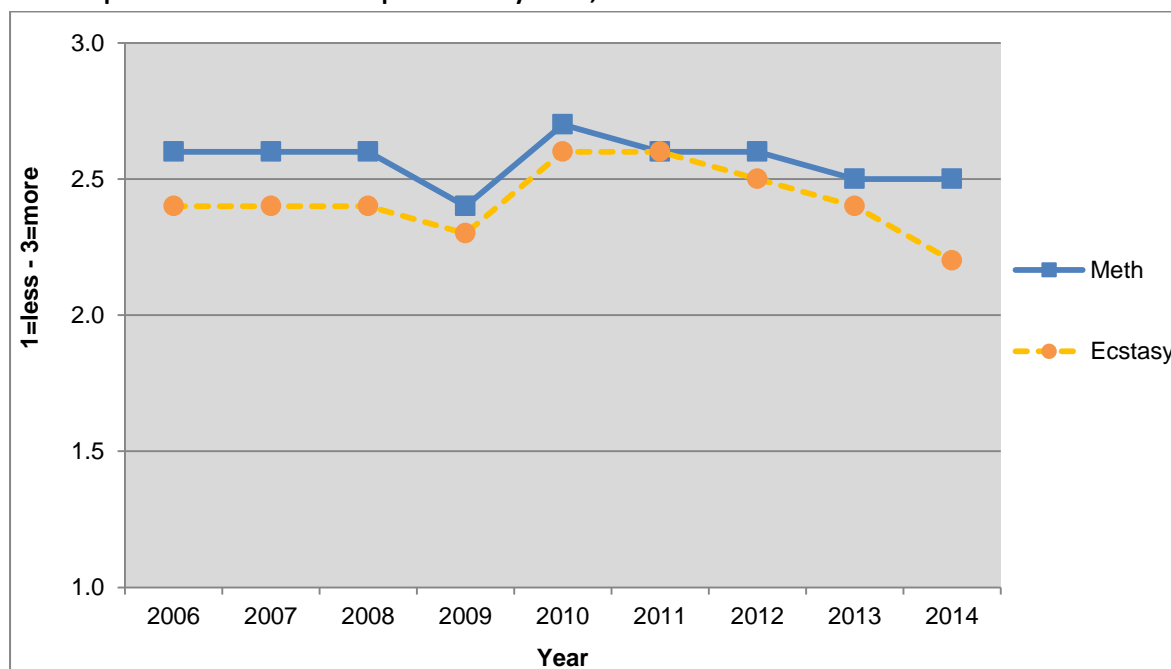


Among those who had noticed police activity towards drug users, 50% of the frequent methamphetamine users, 46% of the frequent injecting drug users and 24% of the frequent ecstasy users reported noticing ‘more’ police activity toward drug users in the previous six months in 2014 (Tables 19.2-19.4). The proportion of frequent methamphetamine users who had noticed ‘more’ police activity towards drug users decreased from 72% in 2006 to 50% in 2014 ( $p=0.0403$ ). There had previously been a sharp increase in the proportion frequent methamphetamine users who reported ‘more’ police activity to drug users from 2009 to 2010 ( $p=0.0017$ ). The proportion of frequent ecstasy users who had noticed ‘more’ police activity toward drug users had also declined, from 50% in 2006 to 24% in 2014 ( $p=0.07030$ ) and from 42% in 2013 to 24% in 2014 ( $p=0.0531$ ), with both decreases close to being statistically significant. Again, the frequent ecstasy users were also previously more likely to have described the level of police activity toward drug users as ‘more’ from 2009 to 2010 ( $p=0.0107$ ). There was no statistically significant change in the level of police activity noticed by the frequent injecting drug users from 2006 to 2014.

**Table 19 2: Frequent methamphetamine users' perceptions of the change in police activity in relation to drug users in the past six months (of those who noticed any change in police activity), 2006-2014**

Change in police activity (%)	Frequent methamphetamine users								
	2006 (n=77)	2007 (n=80)	2008 (n=84)	2009 (n=71)	2010 (n=85)	2011 (n=78)	2012 (n=65)	2013 (n=73)	2014 (n=72)
More [3]	72	63	67	48	72	68	61	53	50
Stable [2]	20	32	30	49	27	30	35	40	48
Less [1]	7	5	3	3	1	4	5	7	3
Average score (1=less activity – 3=more activity)	2.6	2.6	2.6	2.4	2.7	2.6	2.6	2.5	2.5
Overall recent change	More	More/stable	More/stable	Stable/more	More	More/stable	More/stable	More/Stable	More/Stable

**Figure 19 13: Mean score of change in police activity toward drug users in the past six months for frequent methamphetamine users and frequent ecstasy users, 2006-2014**



The frequent injecting drug users were more likely to have described enforcement as ‘increasing’ from 2013 to 2014 (up from 2.3 in 2013 to 2.5 in 2014), but this increase was not statistically significant ( $p=0.1309$ ) (Table 19.4).

**Table 19 3: Frequent ecstasy users' perceptions of the change in police activity in relation to drug users in the past six months (of those who noticed any change in police activity), 2006-2014**

	Frequent ecstasy users								
Change in police activity (%)	2006 (n=42)	2007 (n=50)	2008 (n=57)	2009 (n=48)	2010 (n=97)	2011 (n=94)	2012 (n=78)	2013 (n=56)	2014 (n=56)
More [3]	50	52	48	33	61	67	48	42	24
Stable [2]	45	39	47	67	34	26	49	54	69
Less [1]	5	8	5	0	4	7	3	4	7
Average score (1=less activity – 3=more activity)	2.4	2.4	2.4	2.3	2.6	2.6	2.5	2.4	2.2
Overall recent change	More/stable	More/stable	More/stable	Stable/more	More/stable	More/stable	Stable/more	Stable/more	Stable/more

**Table 19 4: Frequent injecting drug users' perceptions of the change in police activity in relation to drug users in the past six months (of those who noticed any change in police activity), 2006-2014**

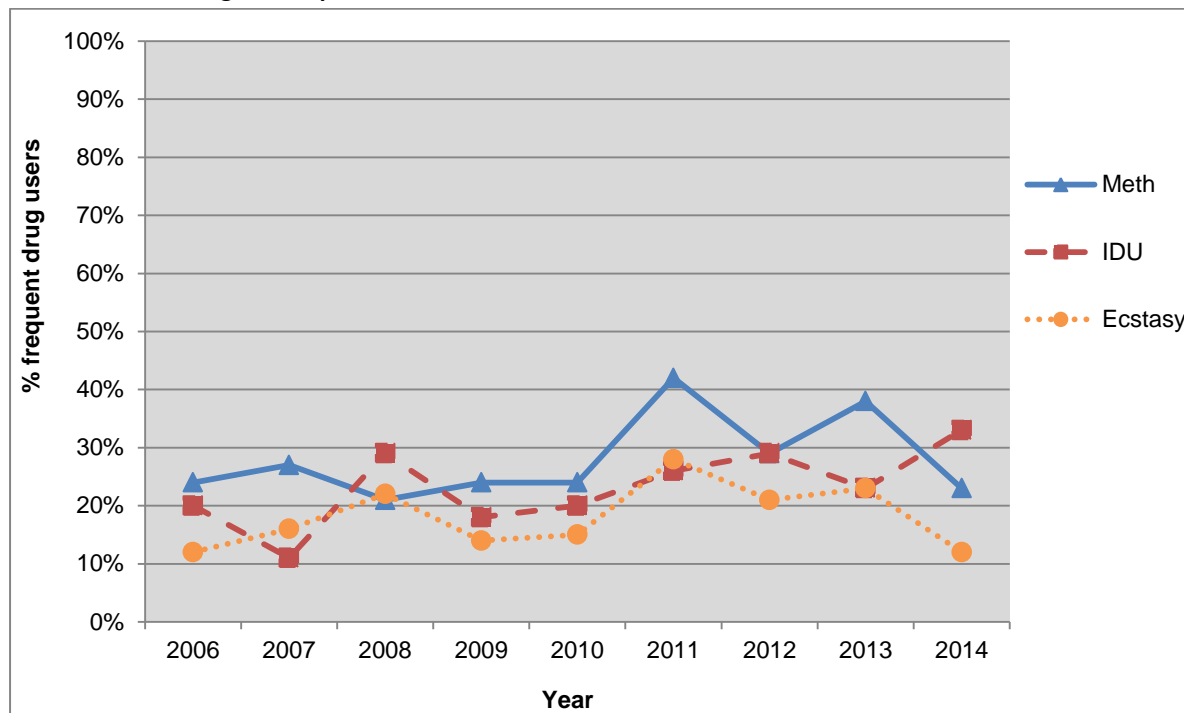
	Frequent injecting drug users								
Change in police activity (%)	2006 (n=55)	2007 (n=69)	2008 (n=89)	2009 (n=66)	2010 (n=79)	2011 (n=50)	2012 (n=61)	2013 (n=56)	2014 (n=66)
More [3]	62	53	70	44	60	55	63	34	46
Stable [2]	32	40	25	49	39	41	34	64	53
Less [1]	5	6	5	6	1	4	3	2	0
Average score (1=less activity – 3=more activity)	2.6	2.5	2.6	2.4	2.6	2.5	2.6	2.3	2.5
Overall recent change	More/stable	More/stable	More	Stable/more	More/stable	More/stable	More/stable	Stable/more	Stable/more

## 19.7 Perceptions of the impact of drug enforcement

The frequent drug users were asked if police activity had made it 'more difficult' for them to obtain drugs in the past six months. Thirty-three percent of the frequent injecting drug users, 23% of the frequent methamphetamine users and 12% of the frequent ecstasy users reported that police activity had indeed made it 'more difficult' for them to obtain drugs in 2014 (Table 19.5). Overall, the proportion of frequent methamphetamine users who reported police activity had made it 'more difficult' for them to obtain drugs increased from 2006 to 2014 ( $p=0.0252$ ), but declined sharply from 38% in 2013 to 23% in 2014 ( $p=0.0185$ ) (Figure 19.14). The proportion of frequent ecstasy users who reported police activity had made it 'more difficult' for them to obtain drugs also decreased from 23% in 2013 to 12% in 2014, and this decrease was very close to being statistically significant

( $p=0.0571$ ). The proportion of frequent injecting drug users who reported police activity had made it 'more difficult' for them to obtain drugs increased from 20% in 2006 to 33% in 2014 ( $p=0.0035$ ).

**Figure 19 14: Proportion of frequent drug users who thought police activity had made it 'more difficult' for them to obtain drugs in the past six months, 2006-2014**



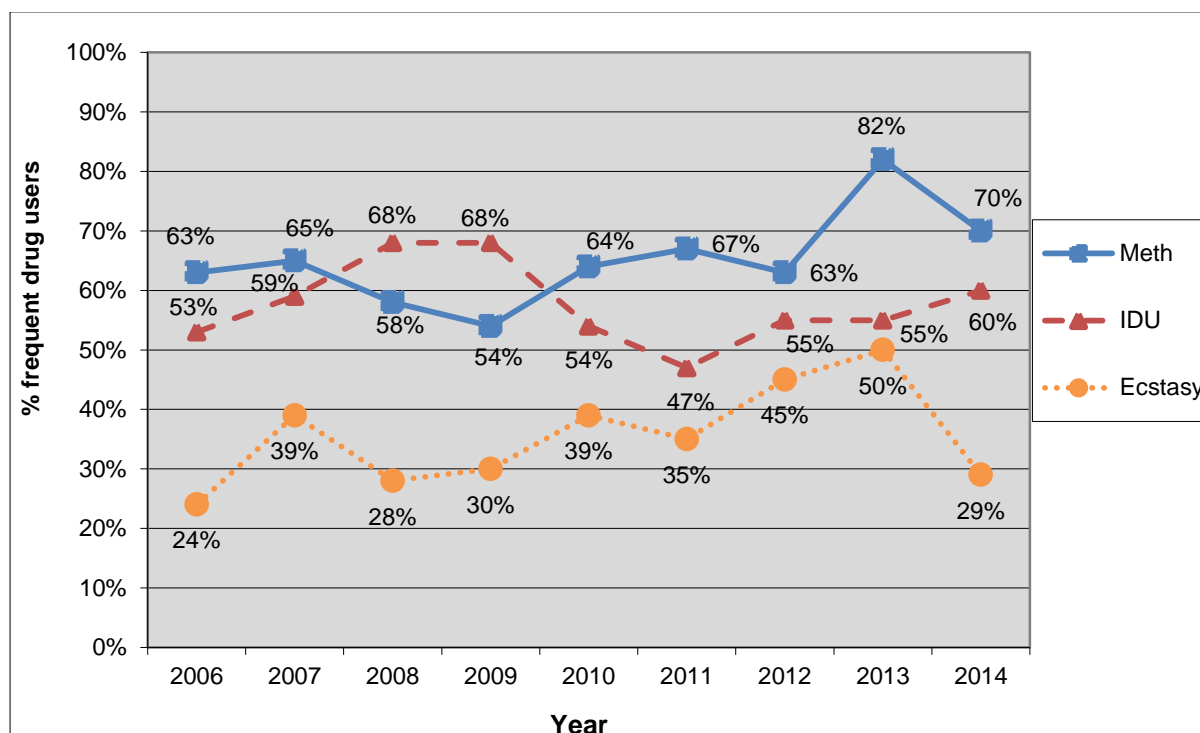
**Table 19 5: Proportion of frequent drug users who thought police activity had made it 'more difficult' for them to obtain drugs in the past six months, 2006-2014**

Police made it more difficult to obtain drugs (%)	2006	2007	2008	2009	2010	2011	2012	2013	2014
	(n=112)	(n=110)	(n=133)	(n=100)	(n=120)	(n=94)	(n=98)	(n=90)	(n=97)
Methamphetamine	24	27	21	24	24	42	29	38	23
	(n=92)	(n=107)	(n=127)	(n=99)	(n=124)	(n=86)	(n=102)	(n=93)	(n=96)
Injecting drug users	20	11	29	18	20	26	29	23	33
	(n=106)	(n=100)	(n=122)	(n=101)	(n=149)	(n=141)	(n=122)	(n=102)	(n=85)
Ecstasy users	12	16	22	14	15	28	21	23	12

## 19.8 Number of friends arrested

Finally, the frequent drug users were asked if there had been any change in the number of their friends arrested in the past six months. Some frequent drug users had not had any of their friends arrested in the past six months. Seventy percent of the frequent methamphetamine users, 60% of the frequent injecting drug users and 29% of the frequent ecstasy users had had a friend arrested in the previous six months in 2014 (Figure 19.15).

**Figure 19 15: Proportion of frequent drug users who had a friend(s) arrested in the past six months, 2006-2014**



Overall, the proportion of frequent ecstasy users who had a friend(s) arrested increased from 2006 to 2014 ( $p=0.0039$ ), but decreased sharply from 50% in 2013 to 29% in 2014 ( $p=0.0024$ ). The proportion of frequent methamphetamine users who had a friend(s) arrested increased from 63% in 2006 to 70% in 2014 ( $p=0.0070$ ), but decreased sharply from 82% in 2013 to 70% in 2014 ( $p=0.0399$ ). The proportion of frequent methamphetamine users who had a friend(s) arrested had previously increased sharply from 63% in 2012 to 82% in 2013 ( $p=0.0025$ ). There was no change in the proportion of injecting drug users who had a friend(s) arrested from 2006 to 2014 ( $p=0.4252$ ).

Those frequent drug users who had had a friend arrested were asked if 'more', 'the same', or 'less' of their friends had been arrested in the past six months. Forty-four percent of the frequent injecting drug users, 38% of the frequent methamphetamine users and 28% of the frequent ecstasy users

reported that 'more' of their friends had been arrested in the previous six months in 2014 (Table 19.6). A lower proportion of frequent methamphetamine users said 'more' of their friends had been arrested from 2006 to 2014 (down from 2.6 to 2.3), and this decline was close to being statistically significant ( $p=0.0608$ ). There was no change in perceptions of the number of friends arrested for the other two frequent drug user groups.

**Table 19 6: Change in the number of friends arrested in the past six months by frequent drug user group (of those who had a friend arrested), 2009-2014**

	Methamphetamine users						Ecstasy users (MDMA)						Intravenous drug users (IDU)					
Number of friends arrested (%)	2009 (n=57)	2010 (n=76)	2011 (n=69)	2012 (n=61)	2013 (n=69)	2014 (n=64)	2009 (n=33)	2010 (n=58)	2011 (n=57)	2012 (n=56)	2013 (n=52)	2014 (n=30)	2009 (n=65)	2010 (n=67)	2011 (n=42)	2012 (n=56)	2013 (n=52)	2014 (n=61)
More [3]	55	63	60	50	52	38	54	57	50	42	29	28	44	53	52	52	42	44
Stable [2]	36	30	29	45	43	56	35	37	37	51	52	65	52	41	45	42	54	56
Less [1]	9	7	11	5	5	6	11	7	13	7	19	7	5	6	3	6	4	0
Average score (1=less arrested – 3=more arrested)	2.5	2.6	2.5	2.5	2.5	2.3	2.4	2.5	2.4	2.3	2.1	2.2	2.4	2.5	2.5	2.5	2.4	2.4
Overall recent change	More/stable	More/stable	More/stable	More/stable	More/stable	Stable/more	More/stable	More/stable	More/Stable	Stable/more	Stable/more	Stable/more	Stable/more	More/stable	More/stable	More/stable	Stable/more	Stable/more



## 19.9 Summary of drug enforcement

### *Frequent methamphetamine users*

- Seventy-three percent of the frequent methamphetamine users had been arrested, 65% had been convicted of a crime, and 42% had been imprisoned at some point in their lives
- The proportion of frequent methamphetamine users who had ever been arrested increased from 2006 to 2014
- The proportion of methamphetamine users who had ever been imprisoned increased from 30% in 2006 to 42% in 2014
- Fifty-three percent of the frequent methamphetamine users who had been convicted of a crime, and 45% of those who had been imprisoned, had received alcohol and drug treatment as part of their sentence in 2014
- The proportion of methamphetamine users who received alcohol and drug treatment as part of their sentence increased from 32% in 2009 to 53% in 2014
- The proportion of frequent methamphetamine users who had been imprisoned in the previous 12 months declined from 12% in 2006 to 3% in 2014
- The offences the frequent methamphetamine users were most commonly arrested for in 2014 were 'other offences' (15%), 'property crime' (8%), 'possession or use of drugs' (7%), 'violent crime' (7%), and 'disorderly behaviour' (4%).
- There were decreases in the proportion of frequent methamphetamine users who had been arrested for 'disorderly behaviour' (down from 10% in 2009 to 4% in 2014), 'fraud' (down from 5% in 2006 to 1% in 2014) and 'drugs and driving' (down from 4% in 2006 to 0% in 2014)
- The proportion of frequent methamphetamine users who had noticed police activity toward drug users increased from 70% in 2006 to 84% in 2014
- The proportion of frequent methamphetamine users who had noticed 'more' police activity towards drug users decreased from 72% in 2006 to 50% in 2014

- The proportion of frequent methamphetamine users who reported police activity had made it 'more difficult' for them to obtain drugs increased steadily from 2006 to 2013, but declined sharply from 38% in 2013 to 23% in 2014
- The proportion of frequent methamphetamine users who had had a friend(s) arrested increased from 63% in 2006 to 82% in 2013, but decreased sharply from 82% in 2013 to 70% in 2014
- A lower proportion of frequent methamphetamine users said 'more' of their friends had been arrested from 2006 to 2014

#### *Frequent injecting drug users*

- Eighty-two percent of the frequent injecting drug users had been arrested, 70% had been convicted of a crime, and 45% had been imprisoned at some point in their lifetimes
- The proportion of frequent injecting drug users who had been arrested in the previous 12 months declined from 43% in 2006 to 28% in 2014
- The offences the frequent injecting drug users were most commonly arrested for were 'property crime' (16%), 'other offences' (5%) and 'violent crime' (4%)
- A lower proportion of frequent injecting drug users were arrested for 'disorderly behaviour' (down from 8% in 2009 to 2% in 2014), 'use/possession of drugs' (down from 7% in 2006 to 2% in 2014), 'fraud' (down from 4% in 2006 to 1% in 2014), 'other driving offence' (down from 6% in 2006 to 1% in 2014)
- The proportion of frequent injecting drug users who reported police activity had made it 'more difficult' for them to obtain drugs increased from 20% in 2006 to 33% in 2014

#### *Frequent ecstasy users*

- Thirty-four percent of the frequent ecstasy users had been arrested, 11% had been convicted of a crime, and 1% had been imprisoned at some point in their lives
- The offence the frequent ecstasy users were most commonly arrested for was 'disorderly behaviour' (8%)
- The proportion of frequent ecstasy users who had noticed police activity toward drug users increased steadily from 35% in 2006 to 68% in 2014

- The proportion of frequent ecstasy users who had noticed 'more' police activity toward drug users declined from 42% in 2013 to 24% in 2014
- The proportion of frequent ecstasy users who reported police activity had made it 'more difficult' for them to obtain drugs decreased from 23% in 2013 to 12% in 2014
- The proportion of frequent ecstasy users who had had a friend(s) arrested decreased from 50% in 2013 to 29% in 2014

## 20. Synthetic Cannabinoids

### 20.1 Introduction

Synthetic cannabinoids have been among the most widely used ‘legal high’ products around the world in recent years, including in New Zealand and Australia (EMCDDA, 2015a; Munro & Wilkins, 2014; Noller, 2014; UNODC, 2015a, 2015b; Wilkins, et al., 2015b). Synthetic cannabinoids are smokable products consisting of plant matter which has been infused with a synthetic cannabinomimetic compound, and are often promoted as legal alternatives to cannabis. Manufacturers have regularly changed the active compounds of products in response to legislative bans and other controls. The use of synthetic cannabinoids has been associated with vomiting, agitation, seizures and psychotic episodes (Every-Palmer, 2010; Ministry of Health, 2014b; Schep, 2014; Wilkins, et al., 2015b).

The passage of the *Psychoactive Substances Act 2013* (PSA) in July 2013 established a legal regulated market for ‘low risk’ psychoactive products (‘legal highs’) in New Zealand (Wilkins, 2014a). Under the new regulatory regime created by the PSA, only psychoactive products which toxicology and clinical trial data had shown to be ‘low risk’ would be approved for legal sale, and approved products could only be purchased by those 18 years or older and would no longer be sold from convenience stores (e.g. corner stores, supermarkets), places that sell alcohol, and outlets which sell automobile fuels. A transitory interim regulatory regime was established immediately following the passage of the PSA, which permitted the sale of a reduced number of existing products, as the product testing standards to establish the risk of products had yet to be developed. Under the interim regime, the number of products available on the legal market was reduced from an estimated 200 unlicensed products to 46 licensed products, and the number of retail outlets was reduced from an estimated 3,000-4,000 largely convenience stores to 156 licensed specialty ones (Wilkins, 2014a).

This interim regime was brought to an abrupt halt in early May 2014, when the Government withdrew all products and retail licenses following public concerns about the health risk of products and the social disruption around stores (Ministry of Health, 2014b). The withdrawal of all licenses effectively prohibited all legal high products and ended the regulated legal market. Some commentators expressed concern that the ban would drive the sale of legal highs underground to the black market, and there were anecdotal reports of illicit sales of synthetic cannabinoids in the months following the ban (NDIB, 2015). In May 2015, 30 people were hospitalised in Auckland

following the use of an unidentified synthetic product (NDIB, 2015). The active ingredient of the product was subsequently identified as MDMB-CHIMICA (NDIB, 2015). There has to date, however, been no overall assessment of the impact of the bans on the availability, price and strength of synthetic cannabinoids.

The 2014 IDMS provides the first opportunity to present research evidence of the impact of the 2014 bans of these former legal products. As outlined in the methodology chapter, the 2014 IDMS interviews were conducted from July to December 2014, several months after the bans were enacted in May 2014. Consequently, the measures of 'current' availability, price and strength all refer to the period after the May bans. The 'change' measures refer to change 'compared to six months' which for most of the sample would include the time before the May bans. The same set of market indicator questions were asked in the 2014 and 2013 IDMS.

## **20.2 Knowledge of synthetic cannabinoids trends**

Twelve percent of the frequent drug users interviewed for the 2014 IDMS (n=31) indicated they felt confident enough to comment on the price, strength and availability of synthetic cannabinoids in the previous six months. The low number of respondents prevents any reliable comparisons by site location overtime.

## **20.3 Availability of synthetic cannabinoids**

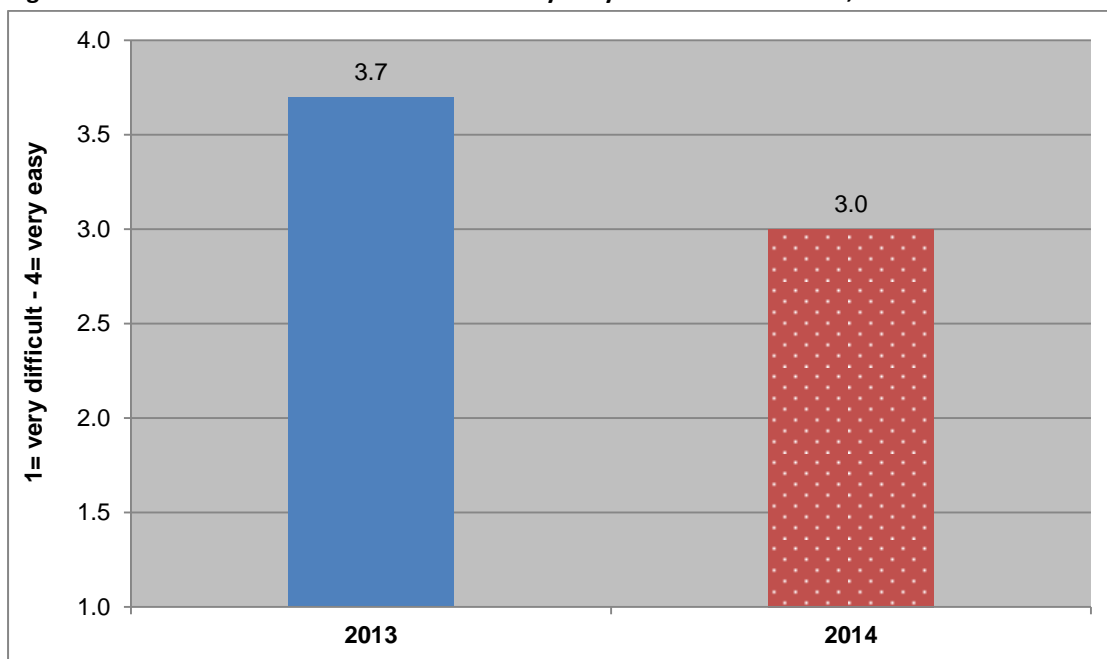
### **Current availability of synthetic cannabinoids**

The frequent drug users reported the current availability of synthetic cannabinoids to be 'easy/very easy' in 2014 (Table 20.1). The current availability of synthetic cannabinoids declined from 2013 to 2014 (down from 3.7 to 3.0,  $p=0.0002$ ) (Figure 20.1).

**Table 20 1: Current availability of synthetic cannabinoids, 2013-2014**

Current availability (%)	2013 (n=67)	2014 (n=29)
Very easy [4]	73%	36%
Easy [3]	20%	38%
Difficult [2]	7%	20%
Very difficult [1]	0%	6%
Average availability score (1=very difficult – 4=very easy)	3.7	3.0
Overall current status	Very easy	Easy/ very easy

**Figure 20 1: Mean score of the current availability of synthetic cannabinoids, 2013-2014**



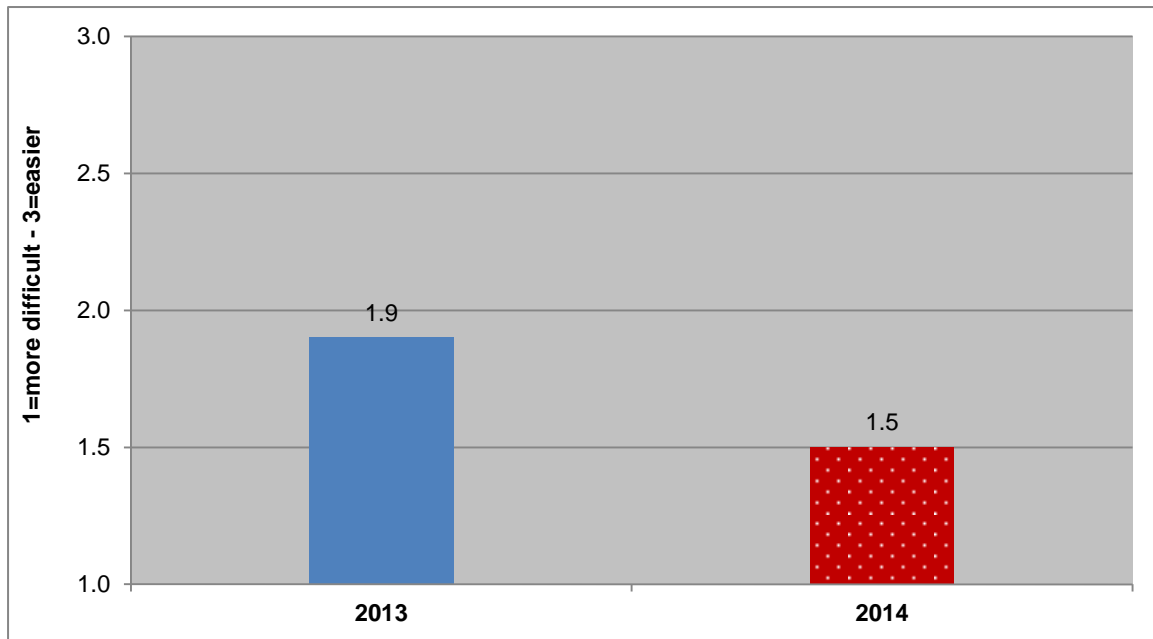
### Change in availability of synthetic cannabinoids

The availability of synthetic cannabinoids was reported to have been ‘more difficult/stable’ over the previous six months in 2014 (Table 20.2). Fifty-seven percent of the frequent drug users described availability as ‘more difficult’ in 2014. A higher proportion of frequent drug users described the availability of synthetic cannabinoids as more difficult from 2013 to 2014 (down from 1.9 to 1.5,  $p=0.0066$ ) (Figure 20.2).

**Table 20 2: Change in availability of synthetic cannabinoids by location, 2013-2014**

Change in availability (%)	2013 (n=65)	2014 (n=29)
Easier [3]	9%	11%
Stable [2]	70%	29%
Fluctuates [2]	2%	3%
More difficult [1]	19%	57%
Average change in availability score (1=more difficult – 3=easier)	1.9	1.5
Overall recent change	Stable	More difficult/stable

**Figure 20 2: Mean score of the change in the availability of synthetic cannabinoids, 2013-2014**



## 20.4 Price of synthetic cannabinoids

### Change in price of synthetic cannabinoids

The price of synthetic cannabinoids was reported to have been ‘increasing/stable’ over the past six months in 2014 (Table 20.3). Fifty-three percent of the frequent drug users reported the price of synthetic cannabinoids had been ‘increasing’ in 2014. There was an increase in the proportion of

frequent drug users who thought the price was increasing from 2013 to 2014 (up from 2.2 to 2.4), but this increase was not statistically significant ( $p=0.1827$ ).

**Table 20 3: Change in the price of synthetic cannabinoids, 2013-2014**

Change in price (%)	2013 (n=59)	2014 (n=26)
Increasing [3]	31%	53%
Fluctuating [2]	6%	7%
Stable [2]	50%	27%
Decreasing [1]	13%	13%
Average change in price score (1=decreasing – 3=increasing)	2.2	2.4
Overall recent change	Stable/ increasing	Increasing/ stable

## 20.5 Strength of synthetic cannabinoids

### Current strength of synthetic cannabinoids

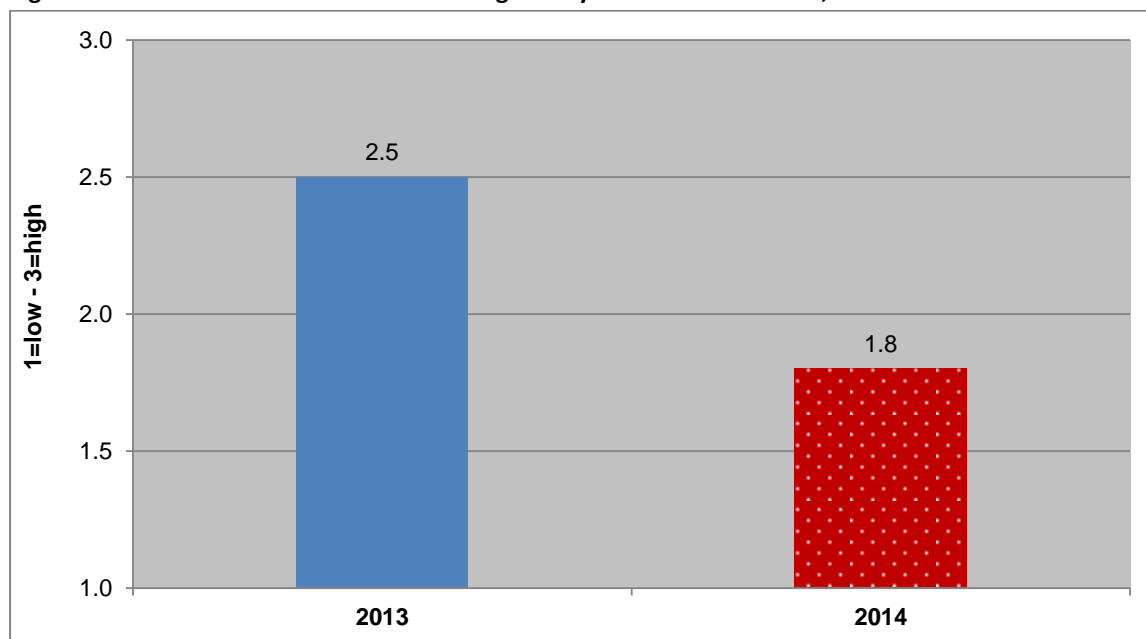
The current strength of synthetic cannabinoids was reported to be ‘medium/low’ in 2014 (Table 20.4). Thirty-three percent of the frequent drug users described the current strength of synthetic cannabinoids as ‘low’. There was a decline in the current strength of synthetic cannabinoids from 2013 to 2014 (down from 2.5 to 1.8,  $p=0.0001$ ) (Figure 20.3).

**Table 20 4: Current strength of synthetic cannabinoids, 2013-2014**

Current strength (%)	2013 (n=65)	2014 (n=28)
High [3]	57%	14%
Medium [2]	23%	37%
Fluctuates [2]	8%	16%
Low [1]	12%	33%
Average strength score (1=low – 3=high)	2.5	1.8
Overall current status	High/ medium	Medium/ low



**Figure 20 3: Mean score of the current strength of synthetic cannabinoids, 2013-2014**



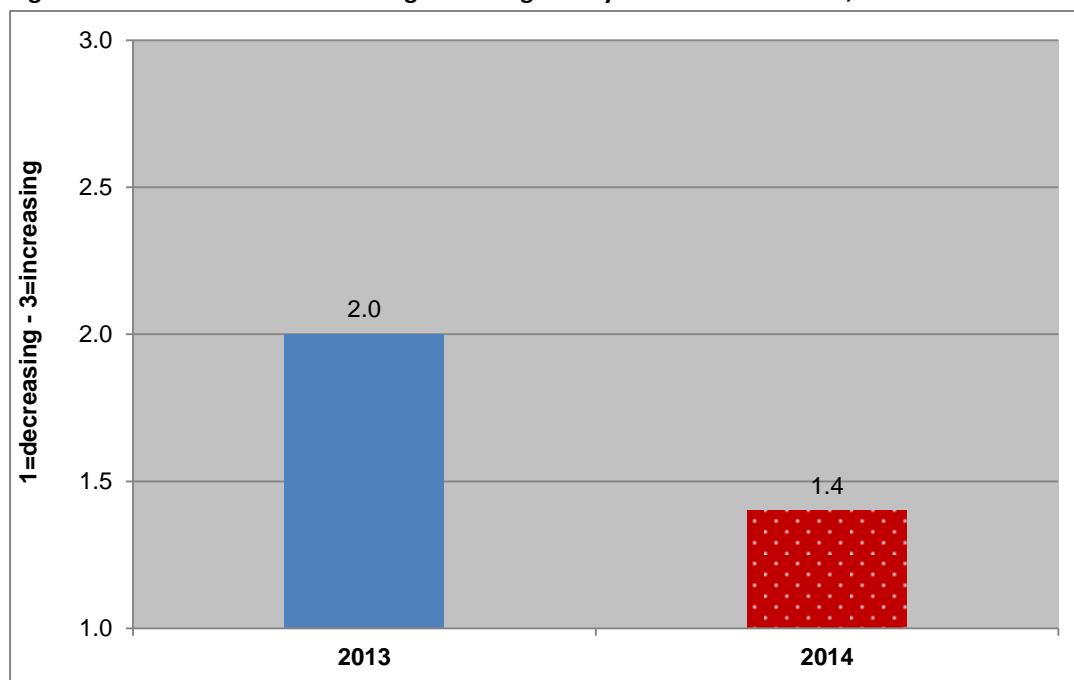
### Change in strength of synthetic cannabinoids

The strength of synthetic cannabinoids was reported to be ‘decreasing/stable’ in the previous six months in 2014 (Table 20.5). Sixty-six percent of the frequent drug users described the strength of synthetic cannabinoids as ‘decreasing’ in 2014. An increasing proportion described the strength of synthetic cannabinoids as decreasing from 2013 to 2014 (down from 2.0 to 1.4,  $p < 0.0001$ ) (Figure 20.4).

**Table 20 5: Change in strength of synthetic cannabinoids, 2013-2014**

Change in strength (%)	2013 (n=62)	2014 (n=27)
Increasing [3]	16%	6%
Stable [2]	54%	16%
Fluctuating [2]	14%	11%
Decreasing [1]	16%	66%
Average change in strength score (1=decreasing 3=increasing)	2.0	1.4
Overall recent change	Stable/ decreasing/ increasing	Decreasing/ Stable

**Figure 20 4: Mean score of the change in strength of synthetic cannabinoids, 2013-2014**



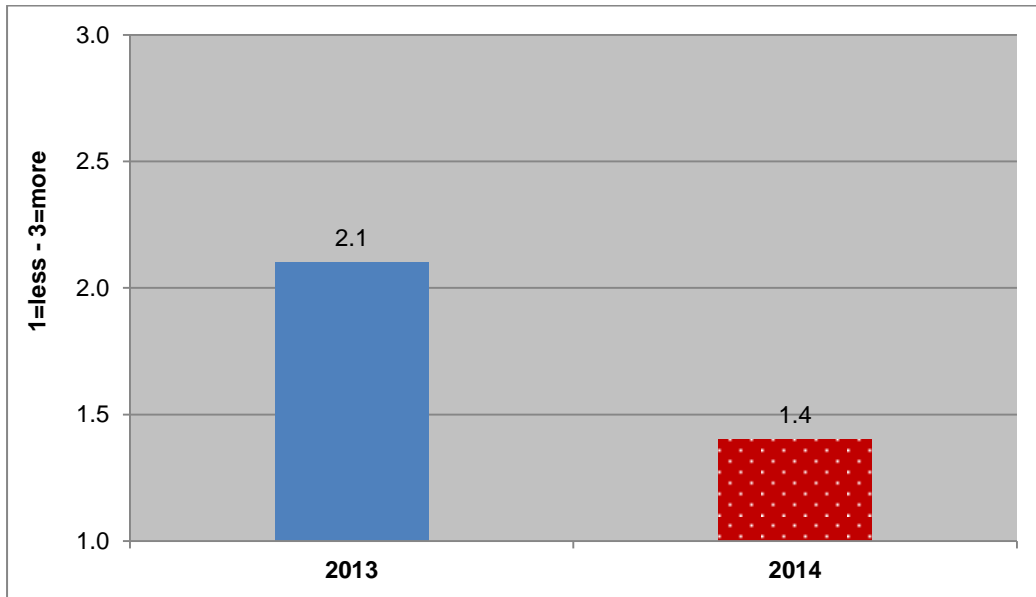
## 20.6 Perceptions of the number of people using synthetic cannabinoids

Seventy percent of the frequent drug users reported that ‘less’ people were using synthetic cannabinoids compared to six months in 2014 (Table 20.6). A higher proportion of frequent drug users reported that less people were using synthetic cannabinoids from 2013 to 2014 (down from 2.1 to 1.4,  $p=0.0014$ ) (Figure 20.5).

**Table 20 6: Perceptions of the number of people using synthetic cannabinoids, 2013-2014**

Number of people using (%)	2013 (n=63)	2014 (n=29)
More [3]	45%	14%
Same [2]	19%	15%
Less [1]	36%	70%
Average number of people using score (1=less – 3=more)	2.1	1.4
Overall recent change	More/less	Less

**Figure 20 5: Mean score of perceptions of the change in the number of people using synthetic cannabinoids, 2013-2014**



## 20.7 Purchase of synthetic cannabinoids

### Time taken to purchase synthetic cannabinoids

Sixty-one percent of the frequent drug users were able to purchase synthetic cannabinoids in one hour or less in 2014 (Table 20.7). The proportion who could purchase synthetic cannabinoids in one hour or less decreased from 91% in 2013 to 61% in 2014 ( $p=0.0120$ ).

**Table 20 7: Time taken to purchase synthetic cannabinoids, 2013-2014**

Time taken to purchase	2013 (n=39)	2014 (n=19)
Months	0	0
Weeks	0	8
Days	3	5
About one day	4	13
Hours	3	15
1 Hour	13	19
Less than 20 mins	78	42

### Location of purchase of synthetic cannabinoids

The frequent drug users were asked about all the locations where they had purchased synthetic cannabinoids in the previous six months in 2014. For many respondents this six month time frame would have included a period of time before synthetic cannabinoids were banned in May 2014. Despite the overlap, the proportion of frequent drug users who purchased synthetic cannabinoids from a 'legal shop' decreased from 91% in 2013 to 63% in 2014 ( $p=0.0077$ ) (Table 20.8). Conversely, there was increased purchasing from 'street drug markets' and 'public areas like a park'.

**Table 20 8: Location from which synthetic cannabinoids were purchased in the past six months, 2013-2014**

Location of purchase (%)	2013 (n=41)	2014 (n=16)
Legal shop	91	63
Public area (e.g. park)	2	26
Street drug market	0	26
Private house	9	23
'Tinny' house	2	9
Agreed public location	0	0
Work	0	0
Pub/bar/club	0	0
Educational institute	0	0
Internet	0	0

### Types of sellers of synthetic cannabinoids

The frequent drug users were asked about all the people they had purchased synthetic cannabinoids from in the previous six months in 2014. Again, for many respondents this would include time before synthetic cannabinoids were banned in May 2014. Despite the overlap, the proportion of frequent drug users who had purchased synthetic cannabinoids from a 'legal retailer' decreased from 94% in 2013 to 71% in 2014 ( $p=0.0243$ ) (Table 20.9).

**Table 20 9: People from whom synthetic cannabinoids were purchased in the past six months, 2013-2014**

Type of person (%)	2013 (n=41)	2014 (n=13)
Legal retailer	94	71
Friend	6	7
Social acquaintance	6	7
Drug dealer	6	7
Gang member/gang associate	0	7
Partner/family member	0	0

## 20.8 Summary of synthetic cannabinoid trends

- In May 2014 the Government withdrew all licenses for legal high products under the *Psychoactive Substances Act*, effectively making the sale of synthetic cannabinoid products illegal
- The current availability of synthetic cannabinoids was described as ‘easy/very easy’ in 2014
- The current availability of synthetic cannabinoids declined from 2013 to 2014
- Fifty-five percent of the frequent drug users reported the availability of synthetic cannabinoids had become ‘more difficult’ over the previous six months in 2014
- Fifty-three percent reported the price of synthetic cannabinoids had been ‘increasing’ over the previous six months in 2014
- The current strength of synthetic cannabinoids was reported to be ‘medium/low’ in 2014
- Sixty-six percent of the frequent drug users described the strength of synthetic cannabinoids as ‘decreasing’ over the past six months in 2014
- Seventy percent of the frequent drug users reported that ‘less’ people were using synthetic cannabinoids compared to the previous six months in 2014
- The proportion of frequent drug users who could purchase synthetic cannabinoids in one hour or less decreased from 91% in 2013 to 61% in 2014
- The proportion of frequent drug users who purchased synthetic cannabinoids from a ‘legal shop’ decreased from 91% in 2013 to 63% in 2014

- There was an increase in the proportion of frequent drug users who had purchased synthetic cannabinoids from a 'street drug market' and 'public area like a park'

## **21. Party Pills**

### **21.1 Introduction**

The term 'party pill' is a slang term used in New Zealand to refer to a broad class of legal high products sold in tablet and pill form, and often marketed as legal alternatives to ecstasy (MDMA). The term originated in the mid-2000s and referred to the range of benzylpiperazine (BZP) 'party pills' widely available during this time (Sheridan, et al., 2007). A small number of 'party pill' products received interim licenses to be sold legally during the PSA interim regime which operated from July 2013 to May 2014 (Wilkins, 2014a). The withdrawal of all PSA product licenses in May 2014 effectively made all 'party pills' illegal.

### **21.2 Knowledge of party pills trends**

Only 3% of the frequent drug users interviewed for the 2014 IDMS (n=8) indicated they felt confident enough to comment on the price, strength and availability of party pills in the previous six months. The very low number of respondents answering this section indicates the results should be treated with caution.

### **21.3 Availability of party pills**

#### **Current availability of party pills**

The current availability of party pills was reported to be 'very easy/very difficult' in 2014 (Table 21.1). Twenty-four percent of the frequent drug users described the current availability of party pills as 'very difficult'. The current availability of party pills declined from 2013 to 2014, but the low number of respondents prevents any statistical comparison.

**Table 21 1: Current availability of party pills by combined frequent drug users, 2013 - 2014**

Current availability (%)	2013 (n=15)	2014 (n=8)
Very easy [4]	66%	55%
Easy [3]	23%	21%
Difficult [2]	10%	0%
Very difficult [1]	0%	24%
Average availability score (1=very difficult – 4=very easy)	3.6	3.1
Overall current status	Very easy/easy	Very easy/very difficult

### Change in availability of party pills

The availability of party pills was reported to have been ‘stable/more difficult’ in the previous six months in 2014 (Table 21.2). Thirty-four percent of the frequent drug users indicated the availability of party pills had become ‘more difficult’ in 2014.

**Table 21 2: Change in availability of party pills, 2013-2014**

Change in availability (%)	2013 (n=15)	2014 (n=8)
Easier [3]	11%	12%
Stable [2]	75%	54%
Fluctuates [2]	9%	0%
More difficult [1]	5%	34%
Average change in availability score (1=more difficult – 3=easier)	2.1	1.8
Overall recent change	Stable	Stable/more difficult

## 21.4 Price of party pills

### Change in price of party pills

The price of party pills was reported to have been ‘increasing/stable’ over the past six months in 2014 (Table 21.3). Forty-five percent of the frequent drug users said the price had been ‘increasing’ in 2014.



**Table 21 3: Change in the price of party pills in the past six months, 2013-2014**

Change in price (%)	2013 (n=14)	2014 (n=8)
Increasing [3]	20%	45%
Fluctuating [2]	18%	0%
Stable [2]	57%	45%
Decreasing [1]	5%	11%
Average change in price score (1=decreasing – 3=increasing)	2.1	2.3
Overall recent change	Stable /increasing	Stable/ increasing

## 21.5 Perceptions of the number of people using party pills

Fifty-six per cent of the frequent drug users reported that ‘less’ people were using party pills over the previous six months in 2014 (Table 20.4).

**Table 21 4: Perceptions of the number of people using party pills, 2013-2014**

Number of people using (%)	2013 (n=15)	2014 (n=7)
More [3]	12%	0%
Same [2]	32%	44%
Less [1]	56%	56%
Average number of people using score (1=less – 3=more)	1.6	1.4
Overall recent change	Less/same	Less/same

## 21.6 Summary of party pills trends

- In May 2014 the Government withdrew all licenses for legal high products under the *Psychoactive Substances Act*, effectively making the sale of party pills illegal
- The low number of frequent drug users answered the party pill section in 2014 (n=8) indicates the results from this chapter should be interpreted with some caution
- The current availability of party pills was reported to be 'very easy/very difficult' in 2014
- Thirty-four percent of frequent drug users reported the availability of party pills had become 'more difficult' in 2014
- Forty-five percent of frequent drug users reported the price of party pills had been 'increasing' in 2014
- Fifty-six per cent of frequent drug users reported that 'less' people were using party pills in the previous six months in 2014

## References

- ACC. (2015). *Australian Crime Commission's Illicit Drug Data Report 2013–14*. Canberra: Australian Crime Commission. <https://crimecommission.gov.au/publications/intelligence-products/illicit-drug-data-report/illicit-drug-data-report-2013-14>.
- Adamson, S., & Sellman, D. (1998). The pattern of intravenous drug use and associated criminal activity in patients on a methadone waiting list. *Drug and Alcohol Review*, 17, 159-166.
- ADANZ. (2009). *Alcohol and Drug Helpline Annual Report*: Alcohol and Drug Association of New Zealand.
- ADANZ. (2015). *Alcohol and Drug Helpline Annual Report*: Alcohol and Drug Association of New Zealand.
- AIHW. (2008). *National Drug Strategy Household Survey* (Drug Statistics, 22). Canberra: Australian Institute of Health and Welfare.
- AIHW. (2011). *2010 National Drug Strategy Household Survey Report* (Number 25). Canberra: Australian Institute of Health and Welfare.
- AIHW. (2014). Illicit use of drugs. [Australian Institute of Health and Welfare]. Retrieved 30 June, 2015, from <http://www.aihw.gov.au/alcohol-and-other-drugs/ndshs-2013/ch5/>
- Babor, T., Caulkins, J., Edwards, G., Fischer, B., Foxcroft, D., Humphreys, K., Obot, I., Rehm, J., Room, R., Rossow, I., & Strang, J. (2010). *Drug Policy and the Public Good*. Oxford: Oxford University Press.
- Bennett, T., & Holloway, K. (2005). *Understanding Drugs, Alcohol and Crime*. Berkshire: Open University Press.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: problems and techniques of chain referral sampling. *Sociological Methods and Research*, 10, 141-163.
- BPJ. (2012). Update on Oxycodone - what can primary care do about the problem? 44. Retrieved from [http://www.bpac.org.nz/magazine/2012/may/docs/bpj\\_44\\_oxycodone\\_pages\\_8-16\\_pf.pdf](http://www.bpac.org.nz/magazine/2012/may/docs/bpj_44_oxycodone_pages_8-16_pf.pdf)
- Breen, C., Topp, L., & Longo, M. (2002). *Adapting the IDRS Methodology to Monitor Trends in Party Drug Markets: Findings of a Two-Year Feasibility Trial* (NDARC Technical Report Number 142). Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Bye, C., Munro-Faure, A., Peck, A., & Young, P. (1973). A comparison of the effects of l-benzylpiperazine on human performance tests. *European Journal of Clinical Pharmacology*, 6, 163-169.
- Campbell, H., Cline, W., Evans, M., Lloyd, J., & Peck, A. (1973). Comparison of the effects of dexamethamphetamine and l-benzylpiperazine in former addicts. *European Journal of Clinical Pharmacology*, 6, 170-176.
- Caulkins, J., & Reuter, P. (2009). Towards a harm-reduction approach to enforcement. *Safer Communities*, 8(1), 9-23.
- Department of the Prime Minister and Cabinet. (2014). *Tackling Methamphetamine: Indicators and Progress Report*, April. Wellington: New Zealand Government. [http://www.dpmc.govt.nz/sites/all/files/publications/indicators\\_and\\_progress\\_report\\_april\\_2014.pdf](http://www.dpmc.govt.nz/sites/all/files/publications/indicators_and_progress_report_april_2014.pdf).
- Department of the Prime Minister and Cabinet. (2015). *Tackling Methamphetamine: Indicators and Progress Report*, October. Wellington: New Zealand Government. <http://www.dpmc.govt.nz/sites/all/files/publications/indicators-and-progress-report-oct2015.pdf>.

- Dunn, M., Degenhardt, G., Campbell, G., George, J., Johnston, J., & Kinner, S., et al. (2007). *Australian Trends in Ecstasy and Related Drug Markets 2006: Findings from the Ecstasy and related Drugs Reporting System (EDRS)* (NDARC Monograph No.61). Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- EMCDDA. (2009). *Annual Report 2009: The State of the Drugs Problem in Europe*. Lisbon, Portugal: European Monitoring Centre for Drugs and Drug Addiction.
- EMCDDA. (2011). *The state of the drugs problem in Europe* (European Monitoring Centre for Drugs and Drug Addiction). Luxembourg: Publications Office of the European Union.
- EMCDDA. (2013a). *EU Drug Markets Report: A strategic analysis*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction. [http://www.emcdda.europa.eu/attachements.cfm/att\\_194336\\_EN\\_TD3112366ENC.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_194336_EN_TD3112366ENC.pdf).
- EMCDDA. (2013b). *European Drug Report 2013: Trends and developments*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction. [http://www.emcdda.europa.eu/attachements.cfm/att\\_213154\\_EN\\_TDAT13001ENN1.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_213154_EN_TDAT13001ENN1.pdf).
- EMCDDA. (2014). *European Drug Report: Trends and Developments*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction. [http://www.emcdda.europa.eu/attachements.cfm/att\\_228272\\_EN\\_TDAT14001ENN.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_228272_EN_TDAT14001ENN.pdf).
- EMCDDA. (2015a). *European Drug Report Trends and Developments 2015*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction.
- EMCDDA. (2015b). New psychoactive substances in Europe: Innovative legal responses. Lisbon: European Monitoring Centre for Drugs and Drug Addiction.
- EMCDDA, & Europol. (2013). *EU drug markets report: a strategic analysis*. Luxembourg: Publications Office of the European Union.
- EMCDDA & Europol. (2014). *EMCDDA–Europol 2013 Annual Report on the implementation of Council Decision 2005/387/JHA*. Luxembourg: Publications Office of the European Union.
- EMCDDA & Europol. (2015). *EMCDDA–Europol 2014 Annual Report on the implementation of Council Decision 2005/387/JHA*. Luxembourg: Publications Office of the European Union.
- ESR. (2014). *ESR Drugs Trends Report February 2013 - October 2013*. Wellington: Institute of Environmental Science and Research.
- Every-Palmer, S. (2010). Warning: legal synthetic cannabinoid-receptor agonists such as JWH-018 may precipitate psychosis in vulnerable individuals. *Addiction*, *105*, 1859-1860.
- Expert Advisory Committee on Drugs. (2004). *The Expert Advisory Committee on Drugs (EACD) Advice to the Minister on: Benzylpiperazine (BZP)*, April. Wellington: EACD.
- Field, A., & Casswell, S. (1999). *Drug Use in New Zealand: Comparison Surveys 1990 & 1998*. University of Auckland: Alcohol and Public Health Research Unit.
- Gawin, F., & Ellinwood, E. (1988). Cocaine and other stimulants: actions, abuse and treatment. *New England Journal of Medicine*, *318*, 1173-1182.
- Gee, P., & Fountain, J. (2007). Party on? BZP party pills in New Zealand. *New Zealand Medical Journal*, *120*(1249), <http://journal.nzma.org.nz/journal/120-1249/2422/>.
- Gee, P., Richardson, S., Woltersdorf, W., & Moore, G. (2005). Toxic effects of BZP-based herbal party pills in humans: a prospective study in Christchurch, New Zealand. *New Zealand Medical Journal*, *118*(1227). Retrieved from <http://www.nzma.org.nz/journal/118-1227/1784/>
- Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W., & Strang, J. (1995). The Severity of Dependence Scale (SDS): psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction*, *90*, 607-614.
- Griffiths, P., Vingoe, L., Hunt, N., Mountenay, J., & Hartnoll, R. (2000). Drug information systems, early warning, and new drug trends: can drug monitoring systems become more sensitive to emerging trends in drug consumption? *Substance Use & Misuse*, *35*, 811-844.
- Hall, W., & Hando, J. (1994). Route of administration and adverse effects of amphetamine use among young adults in Sydney, Australia. *Drug and Alcohol Review*, *13*, 277-284.

- Hammersley, R., Forsyth, A., Morrison, V., & Davies, J. (1989). The relationship between crime and opioid use. *British Journal of Addiction*, *84*, 1029-1043.
- Hando, J., O'Brien, J., Darke, S., Maher, L., & Hall, W. (1997). *The Illicit Drug Reporting System (IDRS) Trial: Final Report* (NDARC Monograph No.31). Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Hough, M. (1996). *Drugs Misuse and the Criminal Justice System: A Review of the Literature* (Drugs Prevention Initiative Paper 15). London: Home Office.
- Hughes, B., & Griffiths, P. (2014). Regulatory approaches to new psychoactive substances (NPS) in the European Union [Commentary]. *Addiction*, *109*(10), 1591-1593.
- Kuhn, C., Swartzwelder, S., & Wilson, W. (1998). *Buzzed: The Straight Facts About the Most Used and Abused Drugs from Alcohol to Ecstasy*. New York: W.W.Norton & Co.
- Martin, G., Copeland, J., Gates, P., & Gilmour, S. (2006). The Severity of Dependence Scale (SDS) in an adolescent population of cannabis users: reliability, validity and diagnostic cut-off. *Drug and Alcohol Dependence*, *83*, 90-93.
- Matsumoto, T., Kamijo, A., Miyakawa, T., Endo, K., Yabana, T., Kishimoto, H., Okudaira, K., Iseki, E., Sakai, T., & Kosaka, K. (2002). Methamphetamine in Japan: the consequences of methamphetamine abuse as a function of route of administration. *Addiction*, *97*, 809-817.
- Maxwell, J. (2011). The prescription drug epidemic in the United States: A perfect storm. *Drug and Alcohol Review*, *30*(3), 264-270.
- McKetin, R., & McLaren, J. (2004). *The Methamphetamine Situation in Australia: A Review of Routine Data Sources*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Ministry of Health. (2009). *Research into knowledge and attitudes to legal drugs: A study among the general public and people with experience of illegal drug use* (UMR Research; Acqumen LTD and UMR Ltd).
- Ministry of Health. (2013). *Amphetamine Use 2012/13: Key findings of the New Zealand Health Survey*, December. Wellington.
- Ministry of Health. (2014a). *Amphetamine use 2013/14: New Zealand Health Survey*. Wellington.
- Ministry of Health. (2014b). Regulatory Impact Statement: Amendment to the Psychoactive Substances Act 2013. Retrieved 11 March, 2015, from <http://www.health.govt.nz/about-ministry/legislation-and-regulation/regulatory-impact-statements/amendment-psychoactive-substance-act-2013>
- Ministry of Health. (2015). *Amphetamine Use 2014/15: New Zealand Health Survey*, December. Wellington.
- Mounteney, J., & Leirvag, S.-V. (2004). Providing an earlier warning of emerging drug trends: The forever system. *Drugs: Education, Prevention and Policy* *11*(6), 449-471.
- Munro, G., & Wilkins, C. (2014). *New Psychoactive Drugs: No Easy Answer*. Melbourne: Australia Drug Foundation.  
[http://www.adf.org.au/images/stories/Policy\\_Advocacy/FINAL\\_PolicyTalk\\_NewPsychoactiveDrugs\\_April2014\\_final.pdf](http://www.adf.org.au/images/stories/Policy_Advocacy/FINAL_PolicyTalk_NewPsychoactiveDrugs_April2014_final.pdf).
- NDIB. (2009). *Personal correspondence*: National Drug Intelligence Bureau.
- NDIB. (2011). *Personal communication*: National Drug Intelligence Bureau.
- NDIB. (2013). *Personal communication*. Wellington: National Drug Intelligence Bureau.
- NDIB. (2014). *Personal communication*. Wellington: National Drug Intelligence Bureau.
- NDIB. (2015). *Personal communication*. Wellington: National Drug Intelligence Bureau.
- New Zealand Customs Service. (2002). *Review of Customs Drug Enforcement Strategies 2002. Project Horizon Outcome Report*. Wellington: New Zealand Customs Service.
- New Zealand Police. (2013). *Pre-Charge Warnings* (Policing Fact Sheet), July.  
<http://www.police.govt.nz/sites/default/files/publications/pre-charge-warnings-fact-sheet.pdf>.

- New Zealand Police. (2015). Latest Monthly Statistical Indicators. Retrieved 21 January 2016, from <https://www.police.govt.nz/about-us/publications-statistics/statistics/monthly-statistics>
- Newbold, G. (2000). *Crime in New Zealand*. Palmerston North: Dunmore Press.
- Nicholas, R., Lee, N., & Roche, A. (2011). *Pharmaceutical drug misuse problems in Australia: Complex issues, balanced responses*. Adelaide: NCETA, Flinders University.
- Noller, G. (2014). *Synthetic Cannabinoid Use in New Zealand: Assessing the harms* (A report to The STAR Trust). Dunedin: Substance Use and Policy Analysis.
- O'Brien, S., Black, E., Degenhardt, L., Roxburgh, A., Campbell, G., & de Graaff, B., et al. (2007). *Australian Drug Trends 2006: Findings from the Illicit Drug Reporting System (IDRS)* (NDARC Monograph No.60). Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Perrone, D., Helgesen, R., & Fischer, R. (2013). United States drug prohibition and legal highs: How drug testing may lead cannabis users to Spice. *Drugs: Education Prevention and Policy*, 20, 216-224.
- Rassool, H. (2009). *Alcohol and Drug Misuse*. Routledge: New York.
- Room, R., Fischer, B., Hall, W., Lenton, S., & Reuter, P. (2010). *Cannabis policy: moving beyond stalemate*. Oxford: Oxford University Press.
- Rychert, M., & Wilkins, C. (2015). What products are considered psychoactive under New Zealand's regulated legal market for new psychoactive substances (NPS, 'legal highs')? Implications for law enforcement and penalties. *Drug Testing and Analysis*, in press.
- Schep, L. (2014). An update on calls received by the National Poisons Centre on synthetic cannabinoids (Oct 2010 to May 2014). Dunedin: New Zealand National Poisons Centre.
- Seddon, T. (2000). Explaining the drug-crime link: theoretical, policy and research issues. *Journal of Social Policy*, 29(1), 95-107.
- Shearer, J., Sherman, J., Wodak, A., & van Beek, I. (2002). Substitution theory for amphetamine users. *Drug and Alcohol Review*, 21, 179-185.
- Sheridan, J., Butler, R., Wilkins, C., & Russell, B. (2007). Legal piperazine-containing party pills – a new trend in substance misuse. *Drug and Alcohol Review*, 26, 335-343
- Sindicich, N., & Burns, L. (2012). *An overview of the 2012 EDRS: Ecstasy returns and the emerging class of drugs* (Ecstasy and Related Drugs Reporting System Drug Trends Bulletin, October). Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.
- Stafford, J., Sindicich, N., & Burns, L. (2009). *Australian Drug Trends 2008 - Findings from the Illicit Drug Reporting System (IDRS)* (Australian Drug Trends Series No. 19). Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Topp, L., & Mattick, R. (1997). Choosing a cut-off on the Severity of Dependence Scale (SDS) for amphetamine users. *Addiction*, 92(7), 839-845.
- UNODC. (2010). *2010 World Drug Report*. Vienna: United Nations Office on Drugs and Crime.
- UNODC. (2011). *Overview of global and regional drug trends and patterns* (World Drug Report 2011). Vienna: United Nations Office on Drugs and Crime.
- UNODC. (2012). *World Drug Report 2012*. Vienna: United Nations Office on Drugs and Crime.
- UNODC. (2013a). *The challenge of new psychoactive substances*. United Nations Office on Drugs and Crime. [http://www.unodc.org/documents/scientific/NPS\\_2013\\_SMART.pdf](http://www.unodc.org/documents/scientific/NPS_2013_SMART.pdf).
- UNODC. (2013b). *World Drug Report 2013*. Vienna: United Nations Office on Drugs and Crime. [http://www.unodc.org/unodc/secured/wdr/wdr2013/World\\_Drug\\_Report\\_2013.pdf](http://www.unodc.org/unodc/secured/wdr/wdr2013/World_Drug_Report_2013.pdf).
- UNODC. (2015a). *Global SMART Update 2015 - Vol. 13* (Vol. 13, March: Special Segment - Synthetic cannabinoids: Key facts about the largest and most dynamic group of NPS). Vienna: United Nations Office on Drugs and Crime. [https://www.unodc.org/documents/scientific/Global\\_SMART\\_Update\\_13\\_web.pdf](https://www.unodc.org/documents/scientific/Global_SMART_Update_13_web.pdf).
- UNODC. (2015b). *World Drug Report 2015*. Vienna: United Nations Office on Drugs and Crime. [https://www.unodc.org/documents/wdr2015/World\\_Drug\\_Report\\_2015.pdf](https://www.unodc.org/documents/wdr2015/World_Drug_Report_2015.pdf).

- Van Buskirk, J., Roxburgh, A., Bruno, R., & Burns, L. (2014). *Drugs and the Internet* (Volume 3, Issue 3). Sydney: National Drug and Alcohol Research Centre.
- Van Buskirk, J., Roxburgh, A., Bruno, R., & Burns, L. (2015). *Drugs and the Internet* (Issue 5), October. Sydney: National Drug and Alcohol Research Centre. <https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/Drugs%20%26%20The%20Internet%20Issue%205.pdf>.
- Watters, J., & Biernacki, P. (1989). Targeted sampling: options for the study of hidden populations. *Social Problems*, 36, 416-430.
- Weisheit, R., & White, W. (2009). *Methamphetamine: Its History, Physiology, and Treatment*. Center City, MN: Hazelden.
- Wilkins, C. (2011). A paradigm shift in recreational drug use: the challenge of legal highs in New Zealand [Letter]. *New Zealand Medical Journal*, 124(1339), 99-101.
- Wilkins, C. (2014a). The interim regulated legal market for NPS ('legal high') products in New Zealand: The impact of new retail restrictions and product licensing. *Drug Testing and Analysis*, 6, 868-875. DOI: 10.1002/dta.1643.
- Wilkins, C. (2014b). Recent developments with the establishment of a regulated legal market for new psychoactive substances ('legal highs') in New Zealand [Letter]. *Drug and Alcohol Review*, 33, 678-680.
- Wilkins, C., Bhatta, K., & Casswell, S. (2002a). The effectiveness of cannabis crop eradication operations in New Zealand. *Drug and Alcohol Review*, 21, 369-374.
- Wilkins, C., Bhatta, K., & Casswell, S. (2002b). The emergence of amphetamine use in New Zealand: findings from the 1998 and 2001 national drug surveys. *New Zealand Medical Journal*, 115(1166), 256-263.
- Wilkins, C., Bhatta, K., Pledger, M., & Casswell, S. (2003). Ecstasy use in New Zealand: findings from the 1998 and 2001 National Drug Surveys. *New Zealand Medical Journal*, 116, 383-393.
- Wilkins, C., & Casswell, S. (2002). The cannabis black market and the case for the legalisation of cannabis in New Zealand. *Social Policy Journal of New Zealand*, 18, 31-43.
- Wilkins, C., & Casswell, S. (2003). Organised crime in cannabis cultivation in New Zealand: an economic analysis. *Contemporary Drug Problems*, 30, 757-777.
- Wilkins, C., Girling, M., Sweetsur, P., & Butler, R. (2005a). *Cannabis and Other Illicit Drug Trends in New Zealand, 2005: Findings from the Cannabis Module of the 2005 Illicit Drug Monitoring System (IDMS)*, November. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE) & Te Ropu Whariki, Massey University.
- Wilkins, C., Girling, M., Sweetsur, P., & Butler, R. (2005b). *Hallucinogens and Other Illicit Drug Trends in New Zealand, 2005: Findings from the Hallucinogen Module of the 2005 Illicit Drug Monitoring System (IDMS)*. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE) & Te Ropu Whariki, Massey University.
- Wilkins, C., Girling, M., Sweetsur, P., & Butler, R. (2005c). *Methamphetamine and Other Illicit Drug Trends in New Zealand, 2005: Findings from the Methamphetamine Module of the 2005 Illicit Drug Monitoring System (IDMS)*, November. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE) & Te Ropu Whariki, Massey University.
- Wilkins, C., Griffiths, R., & Sweetsur, P. (2010). *Recent Trends in Illegal Drug Use in New Zealand, 2006-2009: Findings from the 2006, 2007, 2008 and 2009 Illicit Drug Monitoring System (IDMS)* Auckland: Social and Health Outcomes Research and Evaluation, School of Public Health, Massey University.
- Wilkins, C., Jawalkar, S., & Parker, K. (2013). *Recent trends in illegal drug use in New Zealand 2006-2012: Findings from the 2006, 2007, 2008, 2009, 2010, 2011 and 2012 Illicit Drug Monitoring System (IDMS)*. Auckland: SHORE and Whariki Research Centre, Massey University.
- Wilkins, C., Pledger, M., Bhatta, K., & Casswell, S. (2004a). Patterns of amphetamine use in New Zealand: findings from the 2001 National Drug Survey. *New Zealand Medical Journal*, 117(1190), 796-.

- Wilkins, C., Prasad, J., Parker, K., Moewaka Barnes, H., Asiasiga, L., & Rychert, M. (2015a). *New Zealand Arrestee Drug Use Monitoring (NZ-ADUM) 2010 - 2014* Auckland: SHORE & Whariki Research Centre, College of Health, Massey University.
- Wilkins, C., Prasad, J., Wong, K., & Rychert, M. (2014a). *Recent trends in illegal drug use in New Zealand 2006-2013: Findings from the 2006, 2007, 2008, 2009, 2010, 2011, 2012 and 2013 Illegal Drug Monitoring System (IDMS)*. Auckland: SHORE & Whariki Research Centre, Massey University.
- Wilkins, C., Prasad, J., Wong, K., Rychert, M., & Graydon Guy, T. (2015b). An exploratory study of the health harms and utilisation of health services of frequent legal high users under an interim regulated legal high market in central Auckland *New Zealand Medical Journal*, *in press*, November.
- Wilkins, C., Reilly, J., & Casswell, S. (2005a). Cannabis 'tinny' houses in New Zealand; implications for the use of cannabis and other drugs in New Zealand. *Addiction*, *100*, 971-980.
- Wilkins, C., Reilly, J., Pledger, M., & Casswell, S. (2005b). Estimating the dollar value of the illicit market for cannabis in New Zealand. *Drug and Alcohol Review*, *24*(3), 227-234.
- Wilkins, C., Reilly, J., Rose, E., Roy, D., Pledger, M., & Lee, A. (2004b). *The Socio-Economic Impact of Amphetamine Type Stimulants in New Zealand: Final Report*. Auckland: Centre for Social and Health Outcomes Research and Evaluation, Massey University. <http://www.shore.ac.nz/projects/ATS%20research.htm>  
<http://www.police.govt.nz/resources/2004/meth-impact/>.
- Wilkins, C., & Rose, E. (2003). *A Scoping Report on the Illicit Drug Monitoring System (IDMS)*. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE), Massey University.
- Wilkins, C., & Sweetsur, P. (2006). Exploring the structure of the illegal market for cannabis in New Zealand. *De Economist*, *154*(4), DOI 10.1007/s10645-10006-19029-10647.
- Wilkins, C., & Sweetsur, P. (2008). Trends in population drug use in New Zealand: Findings from national household surveying of drug use in 1998, 2001, 2003 and 2006. *New Zealand Medical Journal*, *121*, 61-71.
- Wilkins, C., & Sweetsur, P. (2011). The seizure rate of cannabis crop eradication operations in New Zealand, 1998-2009. In T. Decorte, G. Potter & M. Bouchard (Eds.), *World Wide Weed: Global Trends in Cannabis Cultivation and its Control*: Ashgate.
- Wilkins, C., & Sweetsur, P. (2011a). The association between spending on methamphetamine and cannabis for personal use and earnings from acquisitive crime among police detainees in New Zealand. *Addiction*, *106*, 789-797.
- Wilkins, C., & Sweetsur, P. (2011b). The association between the number of days of methamphetamine use and the level of earnings from acquisitive crime among police detainees in New Zealand. *Bulletin on Narcotics, Volume LX, 2008*, 59-77.
- Wilkins, C., & Sweetsur, P. (2013). The impact of the prohibition of BZP legal highs on the prevalence of BZP, new legal highs and other drug use in New Zealand. *Drug and Alcohol Dependence*, *127*, 72-80.
- Wilkins, C., Sweetsur, P., & Girling, M. (2008). Patterns of benzylpiperazine/trifluoromethylphenylpiperazine (BZP/TFMPP) party pill use and adverse effects in a population sample in New Zealand. *Drug and Alcohol Review*, *27*, 633-639.
- Wilkins, C., Sweetsur, P., & Griffiths, R. (2011a). Recent trends in pharmaceutical drug use among frequent injecting drug users, frequent methamphetamine users and frequent ecstasy users in New Zealand, 2006-2009. *Drug and Alcohol Review*, *30*, 255-263.
- Wilkins, C., Sweetsur, P., Moewaka Barnes, H., Smart, B., Asiasiga, L., & Warne, C. (2012a). *New Zealand Arrestee Drug Use Monitoring (NZ-ADUM) - 2011 Results*. Auckland: SHORE and Whariki Research Centre, School of Public Health, Massey University.



- Wilkins, C., Sweetsur, P., & Parker, K. (2014b). The impact of the prohibition of benzylpiperazine (BZP) "legal highs" on the availability, price and strength of BZP in New Zealand. *Drug and Alcohol Dependence*, 144, 47-52.
- Wilkins, C., Sweetsur, P., Smart, B., & Griffiths, R. (2011b). *Recent Trends in Illegal Drug Use in New Zealand, 2006-2010: Findings from the 2006, 2007, 2008, 2009 and 2010 Illicit Drug Monitoring System (IDMS)*: Social and Health Outcomes Research and Evaluation (SHORE), Massey University.
- Wilkins, C., Sweetsur, P., Smart, B., Warne, C., & Jawalkar, S. (2012b). *Recent Trends in Illegal Drug Use in New Zealand, 2006-2011: Findings from the 2006, 2007, 2008, 2009, 2010 and 2011 Illicit Drug Monitoring System (IDMS)*. Auckland: Social and Health Outcomes Research and Evaluation (SHORE), SHORE and Whariki Research Centre, Massey University.
- Yska, R. (1990). *New Zealand Green: The Story of Marijuana in New Zealand*. Auckland: David Bateman.

## Appendix 1: Lifetime drug use

\* Statistically significant correlation from 2006 to 2014 at  $p < 0.05\%$

\*\* Statistically significant difference between 2013 vs. 2014 at  $p < 0.05\%$

**Table A.1: Lifetime use of different drug types by frequent methamphetamine users, 2006-2014**

Drug type	2006 Ever used (n=114)	2007 Ever used (n=110)	2008 Ever used (n=137)	2009 Ever used (n=105)	2010 Ever used (n=130)	2011 Ever used (n=113)	2012 Ever used (n=100)	2013 Ever used (n=93)	2014 Ever used (n=101)	2006 Median age first used (mean)	2007 Median age first used (mean)	2008 Median age first used (mean)	2009 Median age first used (mean)	2010 Median age first used (mean)	2011 Median age first used (mean)	2012 Median age first used (mean)	2013 Median age first used (mean)	2014 Median age first used (mean)
<b>Methamphetamine</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	23 (25) years	22 (24) years	21 (24) years	20 (22) years	20 (23) years	21 (24) years	21 (25) years	22 (26) years	20 (23) years**
<b>Cannabis</b>	98%	99%	100%	100%	99%	97%	97%	95%	93%	14 (14) years	14 (14) years	14 (15) years	14 (14) years	14 (14) years	15 (15) years	14 (14) years	15 (16) years	14 (14) years**
<b>Tobacco</b>	90%	97%	94%	94%	95%	96%	99%	91%	89%	13 (13) years	13 (13) years	13 (13) years	13 (13) years	13 (13) years	14 (14) years	13 (13) years	14 (15) years	14 (15) years
<b>Alcohol</b>	98%	99%	100%	96%	96%	98%	93%	89%	90%	13 (13) years	13 (12) years	14 (13) years	13 (13) years	13 (13) years	15 (15) years	13 (13) years	14 (15) years	13 (13) years***
<b>Amphetamine</b>	86%	84%	88%	81%	72%	72%	78%	69%	71% *	18 (20) years	17 (19) years	18 (19) years	18 (19) years	18 (19) years	19 (20) years	18 (20) years	18 (21) years	-
<b>Ecstasy</b>	85%	87%	88%	89%	84%	82%	85%	68%	77%	22	21	18	19	18	18	20	18	18

									*	(23) years	(22) years	(20) years	(22) years	(20) years	(23) years	(22) years	(22) years	(21) years
<b>LSD</b>	83%	90%	79%	87%	69%	77%	83%	65%	72%	18 (18) years	16 (17) years	17 (17) years	17 (18) years	18 (18) years	18 (19) years	18 (19) years	18 (18) years	17 (18) years
<b>Hallucinogenic mushrooms (psilocybin)</b>	-	82%	63%	83%	68%	66%	79%	60%	60% *	-	17 (18) years	17 (18) years	18 (18) years	16 (18) years	17 (19) years	18 (19) years	17 (18) years	-
<b>Crystal methamphetamine</b>	78%	78%	68%	73%	53%	58%	74%	55%	74% * **	25 (26) years	24 (26) years	20 (24) years	20 (22) years	21 (25) years	22 (24) years	23 (25) years	22 (25) years	22 (27) years
<b>Synthetic cannabis</b>	-	-	-	-	22%	52%	57%	49%	57%	-	-	-	-	21 (23) years	26 (29) years	28 (37) years	29 (29) years	31 (31) years
<b>Codeine</b>	-	-	53%	53%	45%	35%	47%	42%	48%	-	-	18 (20) years	18 (20) years	20 (21) years	19 (22) years	20 (23) years	20 (22) years	20 (27) years *
<b>Ritalin (methylphenidate)</b>	49%	59%	51%	61%	47%	47%	60%	41%	49%	27 (25) years	23 (25) years	20 (21) years	18 (20) years	22 (25) years	25 (26) years	20 (24) years	20 (21) years	19 (24) years
<b>Benzodiazepines</b>	48%	62%	40%	41%	46%	38%	44%	41% *	52%	18 (20) years	18 (19) years	19 (20) years	18 (20) years	19 (20) years	20 (22) years	18 (21) years	18 (22) years	18 (21) years *
<b>Tramadol</b>	-	-	-	-	-	30%	40%	37%	39%	-	-	-	-	-	24 (26) years	25 (28) years	28 (28) years	27 (28) years
<b>Cocaine</b>	65%	53%	55%	54%	45%	41%	49%	35%	46% *	21 (23) years	20 (21) years	21 (22) years	22 (23) years	21 (22) years	21 (22) years	22 (24) years	20 (22) years	22 (23) years
<b>Anti-depressants</b>	13%	30%	31%	35%	43%	44%	32%	33%	37% *	20 (20) years	21 (22) years	20 (22) years	21 (23) years	21 (23) years	22 (25) years	25 (26) years	19 (21) years	22 (23) years

<b>Nitrous oxide</b>	60%	63%	63%	66%	45%	41%	56%	33%	37% *	19 (21) years	18 (20) years	17 (19) years	18 (18) years	18 (20) years	20 (22) years	18 (19) years	20 (20) years	18 (26) years
<b>Amyl nitrate</b>	45%	54%	60%	59%	46%	34%	47%	33%	46% *	18 (20) years	18 (20) years	18 (19) years	17 (20) years	18 (20) years	18 (20) years	18 (19) years	20 (22) years	-
<b>BZP party pills</b>	75%	78%	32%	38%	34%	28%	31%	30%	24% *	25 (27) years	25 (26) years	22 (25) years	21 (23) years	25 (27) years	23 (25) years	24 (25) years	20 (21) years	28 (27) years **
<b>GHB</b>	36%	44%	38%	40%	35%	41%	27%	29%	36%	27 (28) years	25 (26) years	24 (25) years	22 (25) years	22 (24) years	19 (22) years	24 (27) years	21 (24) years	-
<b>Morphine</b>	-	-	40%	44%	45%	42%	45%	28%	45% **	-	-	20 (22) years	20 (22) years	21 (24) years	21 (23) years	21 (23) years	22 (22) years	24 (27) years * **
<b>Ketamine</b>	33%	35%	36%	43%	35%	24%	33%	26%	36%	22 (26) years	23 (25) years	23 (25) years	23 (26) years	20 (23) years	21 (23) years	26 (30) years	20 (24) years	-
<b>Non-BZP party pills</b>	-	-	-	-	22%	34%	38%	23%	31%	-	-	-	-	23 (26) years	22 (24) years	21 (25) years	26 (26) years	28 (29) years
<b>Opium poppies</b>	-	-	21%	31%	32%	37%	39%	22%	27%	-	-	20 (22) years	20 (20) years	19 (21) years	20 (21) years	20 (22) years	20 (23) years	-
<b>Salvia divinorum</b>	-	-	-	-	-	13%	33%	20%	24%	-	-	-	-	-	18 (20) years	18 (20) years	24 (26) years	18 (25) years
<b>Methadone</b>	30%	46%	36%	32%	34%	42%	30%	18%	33% * **	25 (26) years	25 (26) years	24 (25) years	22 (22) years	24 (26) years	23 (25) years	21 (23) years	24 (25) years	29 (29) years
<b>Heroin</b>	31%	40%	32%	25%	30%	31%	31%	13%	34% **	20 (21)	20 (21)	20 (21)	18 (21)	20 (22)	20 (21)	21 (23)	19 (21)	19 (22)

										years	years	years	years	years	years	years	years	years
<b>Homebake heroin/morphine</b>	-	-	30%	25%	32%	31%	25%	13%	24% * **	-	-	22 (24) years	20 (22) years	22 (24) years	21 (22) years	19 (20) years	20 (24) years	20 (25) years
<b>2C drugs</b>	-	-	-	-	-	17%	13%	13%	11%	-	-	-	-	-	22 (23) years	21 (23) years	23 (23) years	-
<b>Oxycodone</b>	-	-	3%	11%	11%	15%	19%	12%	22% * **	-	-	27 (28) years	25 (27) years	30 (32) years	33 (32) years	33 (30) years	24 (26) years	28 (31) years
<b>Mephedrone</b>	-	-	-	-	-	18%	25%	9%	16%	-	-	-	-	-	22 (25) years	22 (24) years	29 (27) years	20 (21) years
<b>DMT</b>	-	-	-	-	-	5%	8%	6%	4%	-	-	-	-	-	22 (23) years	21 (21) years	23 (27) years	-
<b>MDPV</b>	-	-	-	-	-	2%	2%	2%	4%	-	-	-	-	-	30 (25) years	23 (23) years	20 (20) years	-
<b>Methylone</b>	-	-	-	-	-	2%	6%	1%	7%	-	-	-	-	-	38 (37) years	21 (19) years	17 (17) years	-
<b>Fentanyl</b>	-	-	-	-	-	4%	3%	0%	0%	-	-	-	-	-	24 (25) years	17 (18) years	-	-
<b>4-MEC</b>	-	-	-	-	-	2%	0%	0%	1%	-	-	-	-	-	29 (29) years	-	-	-

**Table A.2: Lifetime use of different drug types by frequent ecstasy (MDMA) users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Drug type	Ever used (n=111)	Ever used (n=105)	Ever used (n=135)	Ever used (n=111)	Ever used (n=153)	Ever used (n=160)	Ever used (n=125)	Ever used (n=118)	Ever used (n=109)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	
Ecstasy	100%	100%	100%	100%	100%	100%	100%	100%	100%	18 (19) years	18 (20) years	18 (19) years	18 (18) years	18 (18) years	18 (19) years	18 (18) years	18 (18) years	18 (18) years	18 (18) years *
Alcohol	99%	100%	99%	98%	100%	100%	98%	98%	100%	14 (13) years	14 (13) years	14 (13) years	14 (14) years	13 (13) years	14 (14) years	14 (14) years	14 (14) years	14 (14) years	15 (15) years **
Cannabis	99%	99%	99%	100%	96%	98%	98%	97%	91%	15 (15) years	14 (15) years	15 (15) years	15 (16) years	15 (15) years	15 (15) years	15 (16) years	15 (15) years	15 (15) years	15 (15) years
Tobacco	78%	84%	88%	82%	88%	90%	90%	89%	87% *	14 (14) years	14 (14) years	14 (14) years	14 (14) years	14 (14) years	15 (15) years	15 (15) years	15 (15) years	15 (15) years	15 (15) years **
LSD	79%	68%	78%	78%	61%	70%	78%	72%	66%	18 (18) years	18 (19) years	18 (18) years	19 (19) years	18 (18) years	18 (19) years	18 (18) years	18 (19) years	18 (19) years	18 (18) years
Synthetic cannabis	-	-	-	-	36%	70%	68%	58%	49%	-	-	-	-	19 (20) years	20 (21) years	20 (22) years	18 (21) years	17 (20) years	
Ritalin (methylphenidate)	39%	36%	39%	48%	55%	53%	58%	55%	52% *	18 (18) years	18 (20) years	18 (19) years	18 (18) years	18 (19) years	18 (19) years	18 (19) years	18 (19) years	18 (19) years	18 (19) years
Amphetamine	73%	64%	48%	63%	54%	52%	65%	55%	49%	19 (19) years	18 (19) years	18 (18) years	18 (19) years	19 (19) years	19 (19) years	19 (19) years	18 (19) years	-	

									*	years	years	years	years	years	years	years	years	
<b>Hallucinogenic mushrooms (psilocybin)</b>	-	65%	59%	62%	51%	58%	64%	53%	43%*	-	18 (19) years	18 (18) years	18 (18) years	18 (18) years	18 (19) years	18 (18) years	18 (18) years	-
<b>Nitrous oxide</b>	92%	84%	85%	81%	64%	54%	66%	50%	27%***	18 (19) years	16 (17) years	16 (17) years	17 (18) years	17 (17) years	17 (17) years	16 (17) years	17 (18) years	17 (17) years
<b>Codeine</b>	-	-	49%	35%	41%	47%	46%	49%	32%**	-	-	18 (19) years	18 (19) years	18 (19) years	18 (18) years	18 (21) years	18 (18) years	18 (18) years
<b>Salvia divinorum</b>	-	-	-	-	-	40%	56%	49%	38%	-	-	-	-	-	19 (19) years	18 (20) years	18 (18) years	18 (18) years
<b>Amyl nitrate</b>	50%	46%	47%	69%	56%	46%	53%	40%	31%*	18 (19) years	19 (20) years	18 (18) years	18 (18) years	18 (17) years	18 (18) years	17 (18) years	18 (19) years	-
<b>Tramadol</b>	-	-	-	-	-	27%	35%	36%	30%	-	-	-	-	-	19 (21) years	20 (21) years	19 (20) years	19 (20) years
<b>Non-BZP party pills</b>	-	-	-	-	50%	51%	68%	35%	31%	-	-	-	-	18 (20) years	19 (20) years	18 (18) years	18 (20) years	19 (20) years
<b>BZP party pills</b>	91%	94%	42%	48%	54%	34%	31%	35%	19%***	19 (20) years	18 (19) years	18 (19) years	18 (19) years	17 (18) years	17 (18) years	19 (21) years	17 (19) years	17 (19) years
<b>Methamphetamine</b>	50%	44%	32%	32%	25%	30%	34%	32%	17%***	19 (21) years	19 (20) years	19 (20) years	21 (22) years	19 (20) years	20 (21) years	20 (21) years	19 (20) years	20 (21) years
<b>2C drugs</b>	-	-	-	-	-	18%	24%	28%	31%	-	-	-	-	-	20 (21) years	20 (20) years	19 (21) years	19 (20) years
<b>Mephedrone</b>	-	-	-	-	-	26%	38%	27%	30%	-	-	-	-	-	20 (20) years	20 (20) years	19 (20) years	19 (19) years

<b>Benzodiazepines</b>	26%	26%	23%	22%	20%	24%	28%	27%	20%	20 (21) years	19 (19) years	20 (20) years	19 (19) years	19 (21) years	20 (21) years	18 (20) years	19 (20) years	20 (19) years
<b>Cocaine</b>	41%	30%	41%	38%	25%	32%	30%	25%	26% *	21 (21) years	20 (21) years	20 (21) years	22 (22) years	20 (21) years	20 (21) years	21 (22) years	20 (21) years	20 (21) years
<b>Anti-depressants</b>	9%	15%	18%	19%	21%	25%	30%	23%	13% *	16 (18) years	19 (20) years	18 (19) years	19 (20) years	19 (21) years	18 (19) years	19 (20) years	18 (18) years	21 (21) years **
<b>Ketamine</b>	32%	21%	25%	37%	24%	23%	36%	22%	19%	21 (21) years	20 (21) years	19 (22) years	19 (22) years	19 (20) years	20 (21) years	20 (22) years	19 (22) years	-
<b>GHB</b>	34%	26%	26%	22%	15%	17%	12%*	17%	5% * **	21 (20)	20 (22)	19 (21)	19 (21) years	20 (22) years	19 (19) years	20 (23) years	20 (22) years	-
<b>Morphine</b>	-	-	19%	12%	14%	15%	20%	15%	15%	-	-	19 (19) years	18 (17) years	20 (19) years	19 (21) years	20 (21) years	20 (21) years	18 (19) years
<b>Oxycodone</b>	-	-	5%	7%	5%	13%	9%	15%	4% **	-	-	21 (22) years	20 (22) years	22 (24) years	20 (22) years	19 (23) years	19 (24) years	16 (16) years
<b>Opium poppies</b>	-	-	14%	11%	13%	15%	21%	13%	18%	-	-	18 (19) years	18 (20) years	21 (21) years	19 (20) years	19 (20) years	19 (19) years	-
<b>Methadone</b>	8%	5%	6%	7%	7%	7%	8%	12%	9%	19 (19) years	20 (26) years	20 (21) years	22 (24) years	20 (21) years	19 (21) years	18 (22) years	19 (21) years	18 (19) years
<b>Crystal methamphetamine</b>	19%	23%	18%	16%	8%	10%	17%	11%	8% *	20 (21) years	19 (20) years	20 (21) years	21 (22) years	20 (20) years	18 (19) years	21 (24) years**	18 (19) years **	19 (22) years
<b>Methylone</b>	-	-	-	-	-	4%	8%	10%	15%	-	-	-	-	-	23 (23) years	18 (19) years	20 (25) years	19 (20) years



<b>DMT</b>	-	-	-	-	-	3%	8%	10%	10%	-	-	-	-	-	25 (24) years	19 (21) years	20 (20) years	19 (21) years
<b>Homebake heroin/morphine</b>	-	-	2%	4%	3%	7%	6%	8%	2%	-	-	22 (20) years	22 (21) years	19 (23) years	20 (21) years	20 (23) years	20 (21) years	19 (19) years
<b>Heroin</b>	9%	7%	10%	8%	5%	5%	7%	6%	3%	19 (21) years	19 (19) years	22 (22) years	22 (23) years	22 (20) years	21 (22) years	20 (19) years	18 (19) years	19 (19) years
<b>MDPV</b>	-	-	-	-	-	2%	4%	2%	8%	-	-	-	-	-	21 (24) years	18 (19) years	19 (26) years	20 (20) years
<b>4-MEC</b>	-	-	-	-	-	0%	1%	2%	0%	-	-	-	-	-	-	18 (18) years	22 (28) years	-
<b>Fentanyl</b>	-	-	-	-	-	1%	3%	0%	0%	-	-	-	-	-	20 (20) years	18 (18) years	-	-

**Table A.3: Lifetime use of different drug types by frequent injecting drug users, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014
Drug type	Ever used (n=93)	Ever used (n=109)	Ever used (n=132)	Ever used (n=99)	Ever used (n=128)	Ever used (n=99)	Ever used (n=104)	Ever used (n=101)	Ever used (n=102)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)	Median age first used (mean)
Alcohol	99%	100%	97%	88%	95%	96%	99%	96%	98%	13 (13) years	13 (13) years	13 (13) years	13 (12) years	14 (13) years	13 (13) years	14 (14) years	14 (13) years	13 (13) years
Cannabis	100%	100%	97%	98%	95%	99%	98%	95%	96%	14 years	14 (14) years	14 (14) years	14 (14) years	15 (14) years	15 (15) years	14 (14) years	15 (15) years	14 (15) years
Tobacco	93%	94%	93%	93%	96%	96%	95%	95%	96%	13 (14) years	13 (13) years	13 (14) years	13 (14) years	14 (13) years	13 (14) years	14 (14) years	15 (15) years	13 (14) years
Methamphetamine	74%	77%	74%	94%	76%	85%	87%	89%	81%*	25 (25) years	29 (29) years	24 (27) years	26 (28) years	26 (29) years	24 (28) years	24 (26) years	21 (24) years	21 (26) years
Morphine	-	-	90%	92%	84%	81%	88%	86%	86%	-	-	21 (23) years	23 (24) years	21 (23) years	22 (23) years	20 (22) years	20 (21) years	19 (21) years *
Ritalin (methylphenidate)	74%	78%	72%	70%	77%	74%	85%	85%	74%	25 (25) years	25 (26) years	25 (26) years	28 (28) years	27 (27) years	30 (28) years	25 (27) years	22 (23) years	24 (27) years **
LSD	90%	85%	81%	89%	80%	79%	83%	75%	74%*	17 (17) years	17 (18) years	18 (18) years	18 (18) years	18 (18) years	18 (19) years	18 (19) years	18 (18) years	18 (18) years
Homebake heroin/morphine	-	-	62%	78%	79%	72%	69%	74%	72%	-	-	22 (24) years	24 (25) years	22 (23) years	25 (25) years	24 (25) years	21 (22) years	19 (22) years *

<b>Methadone</b>	85%	87%	88%	84%	86%	84%	82%	73%	84%*	22 (23) years	23 (25) years	22 (25) years	24 (26) years	24 (25) years	24 (26) years	23 (25) years	24 (25) years	25 (26) years
<b>Ecstasy</b>	70%	59%	66%	72%	63%	64%	71%	72%	75%	21 (24) years	22 (25) years	20 (24) years	23 (26) years	23 (26) years	21 (24) years	24 (26) years	19 (21) years	19 (22) years *
<b>Codeine</b>	-	-	70%	71%	81%	74%	82%	69%	75%	-	-	18 (20) years	22 (24) years	20 (22) years	22 (25) years	22 (24) years	20 (21) years	20 (25) years * **
<b>Oxycodone</b>	-	-	21%	38%	39%	46%	54%	67%	51% * **	-	-	29 (32) years	35 (34) years	36 (34) years	36 (34) years	33 (32) years	27 (29) years	34 (34) years **
<b>Benzodiazepines</b>	85%	86%	66%	77%	84%	77%	79%	60%	73%*	18 (19) years	18 (20) years	18 (20) years	19 (20) years	18 (21) years	20 (21) years	20 (21) years	20 (20) years	20 (22) years *
<b>Opium poppies</b>	-	-	68%	74%	80%	73%	84%	58%	56%*	-	-	20 (22) years	20 (23) years	20 (22) years	22 (23) years	23 (24) years	20 (21) years	-
<b>Hallucinogenic mushrooms (psilocybin)</b>	-	81%	73%	76%	77%	68%	73%	48%	48%*	-	18 (20) years	18 (20) years	18 (19) years	18 (19) years	18 (20) years	18 (20) years	18 (19) years	-
<b>Amphetamine</b>	80%	69%	73%	87%	70%	70%	69%	46%	61%* **	18 (19) years	18 (20) years	19 (20) years	19 (21) years	18 (20) years	18 (20) years	19 (20) years	18 (20) years	-
<b>Nitrous oxide</b>	68%	59%	60%	57%	60%	43%	59%	46%	47%*	21 (23) years	20 (22) years	18 (20) years	20 (22) years	18 (20) years	18 (19) years	18 (21) years	18 (19) years	17 (21) years
<b>Amyl nitrate</b>	70%	59%	62%	64%	65%	60%	64%	44%	45%*	17 (18) years	18 (20) years	17 (19) years	18 (21) years	17 (19) years	18 (20) years	20 (22) years	19 (20) years	-
<b>Tramadol</b>	-	-	-	-	-	45%	65%	44%	46%	-	-	-	-	-	33 (33) years	34 (33) years	28 (27) years	28 (29)

																		years
<b>Crystal methamphetamine</b>	55%	50%	58%	63%	46%	60%	52%	42%	46%	25 (25) years	28 (29) years	24 (26) years	27 (28) years	24 (25) years	27 (29) years	25 (27) years	22 (24) years	23 (27) years
<b>Synthetic cannabis</b>	-	-	-	-	14%	22%	45%	41%	40%*	-	-	-	-	30 (30) years	37 (36) years	39 (38) years	31 (30) years	30 (31) years
<b>Cocaine</b>	47%	50%	62%	58%	63%	52%	64%	40%	44%	22 (23) years	21 (22) years	23 (23) years	23 (24) years	24 (25) years	24 (25) years	25 (25) years	22 (23) years	23 (24) years
<b>Heroin</b>	72%	51%	62%	68%	58%	55%	61%	39%	55%* **	19 (20) years	20 (21) years	21 (22) years	21 (22) years	20 (22) years	20 (21) years	20 (21) years	20 (21) years	22 (26) years * **
<b>Anti-depressants</b>	19%	24%	41%	46%	56%	59%	52%	38%	37%*	20 (23) years	20 (21) years	22 (23) years	23 (24) years	21 (24) years	25 (26) years	23 (23) years	20 (22) years	20 (23) years
<b>BZP party pills</b>	49%	57%	31%	39%	48%	41%	41%	35%	43%	25 (28) years	32 (31) years	34 (32) years	33 (32) years	30 (30) years	30 (32) years	30 (30) years	15 (27) years	25 (28) years
<b>Ketamine</b>	24%	20%	34%	33%	27%	28%	26%	32%	34%	25 (27) years	23 (25) years	24 (25) years	28 (29) years	26 (27) years	24 (26) years	28 (31) years	23 (27) years	-
<b>Salvia divinorum</b>	-	-	-	-	-	20%	32%	23%	24%	-	-	-	-	-	38 (33) years	30 (31) years	20 (22) years	22 (27) years
<b>2C drugs</b>	-	-	-	-	-	9%	5%	16%	8%	-	-	-	-	-	27 (26) years	30 (26) years	20 (21) years	35 (29) years
<b>Non-BZP party pills</b>	-	-	-	-	13%	16%	42%	14%	30%* **	-	-	-	-	31 (31) years	33 (34) years	27 (29) years	25 (25) years	27 (27) years

<b>Mephedrone</b>	-	-	-	-	-	9%	8%	13%	9%	-	-	-	-	-	30 (31) years	32 (38) years	20 (23) years	32 (32) years **
<b>GHB</b>	23%	16%	25%	22%	23%	19%	25%	11%	18%	27 (28) years	22 (23) years	27 (26) years	30 (29) years	30 (29) years	24 (28) years	23 (27) years	24 (29) years	-
<b>Methylone</b>	-	-	-	-	-	1%	2%	11%	7%	-	-	-	-	-	29 (29) years	25 (21) years	23 (23) years	-
<b>DMT</b>	-	-	-	-	-	2%	1%	9%	1%	-	-	-	-	-	16 (19) years	19 (19) years	23 (23) years	-
<b>Fentanyl</b>	-	-	-	-	-	3%	10%	7%	13%	-	-	-	-	-	25 (30) years	38 (35) years	26 (31) years	-
<b>4-MEC</b>	-	-	-	-	-	1%	1%	3%	1%	-	-	-	-	-	26 (26) years	25 (25) years	21 (23) years	-
<b>MDPV</b>	-	-	-	-	-	1%	3%	3%	3%	-	-	-	-	-	49 (49) years	25 (30) years	32 (28) years	-

## Appendix 2: Current drug use

\* Statistically significant correlation from 2006 to 2014 at  $p < 0.05\%$

\*\* Statistically significant difference between 2013 vs. 2014 at  $p < 0.05\%$

**Table A.5: Proportion of frequent methamphetamine users who used different drug types in the past six months, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014
Drug type	Last 6mths (n=114)	Last 6mths (n=110)	Last 6mths (n=137)	Last 6mths (n=105)	Last 6mths (n=130)	Last 6mths (n=113)	Last 6mths (n=100)	Last 6mths (n=93)	Last 6mths (n=101)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Injected past 6mths	Injected past 6mths	Injected past 6mths	Injected past 6mths	Injected past 6mths	Injected past 6mths	Injected past 6mths	Injected past 6mths	Injected past 6mths
Methamphetamine	100%	97%	100%	100%	99%	100%	100%	100%	100%	40 (57) days	52 (68) days	25 (38) days	26 (45) days	26 (45) days	20 (40) days	26 (51) days	52 (66) days	40 (58) days	28%	34%	23%	36%	29%	33%	33%	28%	53% * **
Cannabis	86%	88%	83%	85%	87%	83%	87%	88%	76% **	150 (117) days	182 (125) days	114 (111) days	142 (110) days	144 (113) days	48 (88) days	156 (116) days	96 (98) days	104 (108) days*	-	-	-	-	-	-	-	-	-
Tobacco	80%	84%	84%	84%	86%	84%	95%	80%	87%	182 (160) days	182 (174) days	182 (170) days	182 (172) days	182 (168) days	182 (165) days	182 (171) days	182 (168) days	182 (170) days	-	-	-	-	-	-	-	-	-
Alcohol	87%	79%	86%	83%	82%	81%	82%	80%	81%	48 (67) days	48 (67) days	52 (76) days	52 (68) days	52 (67) days	30 (52) days	52 (62) days	52 (70) days	50 (72) days	-	-	-	-	-	-	-	-	-
Tramadol	-	-	-	-	-	14%	24%	49%	18%	-	-	-	-	-	4 (9) days	6 (28) days	10 (62) days	20 (54) days	-	-	-	-	-	0%	8%	0%	30%
Crystal methamphetamine	64%	64%	61%	53%	29%	37%	51%	41%	55% *	30 (55) days	25 (46) days	24 (31) days	12 (29) days	12 (24) days	7 (30) days	26 (51) days	26 (45) days	20 (38) days	28%	35%	25%	40%	33%	27%	34%	34%	54% * **
Ecstasy	50%	51%	47%	41%	43%	44%	47%	35%	34% *	4 (7) days	4 (9) days	5 (6) days	3 (7) days	6 (13) days	5 (9) days	6 (19) days	5 (11) days	2 (7) days	17%	7%	6%	4%	7%	19%	17%	3%	16%









Table A.6: Proportion of frequent ecstasy users who used different drug types in the past six months, 2006-2014

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014
Drug type	Last 6mths (n=111)	Last 6mths (n=105)	Last 6mths (n=135)	Last 6mths (n=111)	Last 6mths (n=153)	Last 6mths (n=160)	Last 6mths (n=126)	Last 6mths (n=118)	Last 6mths (n=108)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths
Ecstasy	100%	100%	100%	100%	100%	100%	99%	97%	100%	6 (8) days	6 (11) days	8 (12) days	7 (12) days	10 (14) days	7 (13) days	8 (17) days	8 (14) days	7 (12) days *	0%	4%	0%	1%	1%	1%	3%	5%	1%
Alcohol	98%	96%	95%	95%	99%	98%	97%	94%	98%	48 (50) days	52 (66) days	50 (57) days	52 (54) days	50 (56) days	48 (54) days	48 (50) days	52 (49) days	40 (46) days *	-	-	-	-	-	-	-	-	-
Cannabis	92%	89%	91%	89%	89%	84%	90%	85%	82% *	28 (59) days	40 (63) days	50 (76) days	50 (69) days	30 (61) days	25 (57) days	50 (74) days	50 (71) days	25 (61) days	-	-	-	-	-	-	-	-	-
Tobacco	61%	67%	72%	68%	73%	73%	82%	62%	66%	170 (106) days	100 (104) days	172 (114) days	182 (141) days	120 (103) days	180 (118) days	182 (126) days	100 (101) days	52 (88) days	-	-	-	-	-	-	-	-	-
LSD	48%	41%	45%	47%	32%	31%	32%	47%	40%	3 (4) days	2 (5) days	3 (4) days	2 (5) days	3 (3) days	2 (4) days	2 (6) days	2 (4) days	2 (5) days	-	-	-	-	-	-	-	-	-
Amphetamine	31%	30%	23%	25%	28%	20%	26%	30%	31%	2 (5) days	2 (5) days	3 (4) days	2 (5) days	2 (4) days	3 (4) days	2 (9) days	3 (8) days	3 (8) days	3%	3%	0%	3%	2%	0%	0%	0%	4%
Ritalin (methyl-phenidate)	13%	15%	19%	19%	32%	25%	24%	29% *	32%	4 (12) days	3 (7) days	3 (11) days	2 (12) days	2 (13) days	3 (10) days	3 (17) days	2 (10) days	4 (12) days	16%	6%	0%	9%	0%	2%	0%	0%	2%
Codeine	-	-	24%	21%	22%	23%	21%	23%	13%	-	-	4 (17) days	3 (11) days	3 (6) days	4 (6) days	3 (13) days	6 (19) days	6 (12) days	-	-	0%	0%	0%	0%	0%	0%	0%
Synthetic cannabis	-	-	-	-	21%	45%	24%	22%	6% **	-	-	-	-	2 (7) days	4 (21) days	5 (20) days	3 (27) days	6 (7) days	-	-	-	-	-	-	-	-	-

<b>Hallucinogenic mushrooms (psilocybin)</b>		32%	30%	31%	26%	23%	19%	22%	23% *		2 (3) days	2 (5) days	2 (12) days	1 (3) days	2 (3) days	2 (13) days	2 (5) days	2 (3) days									
<b>Methamphetamine</b>	21%	23%	13%	13%	8%	15%	18%	16%	12%	3 (13) days	5 (6) days	2 (9) days	2 (17) days	5 (22) days	2 (5) days	2 (18) days	2 (10) days	2 (16) days	9%	8%	0%	13%	8%	14%	14%	9%	7%
<b>Tramadol</b>						12%	16%	15%	18%						3 (8) days	5 (30) days	6 (14) days	6 (22) days						0%	5%	0%	0%
<b>Nitrous oxide</b>	47%	32%	28%	24%	24%	7%	19%	14%	7% *	6 (9) days	3 (7) days	2 (3) days	2 (13) days	2 (7) days	4 (2) days	2 (4) days*	2 (4) days										
<b>Mephedrone</b>						11%	22%	13%	16%						6 (10) days	2 (5) days	5 (7) days	2 (7) days						1%	0%	0%	0%
<b>Benzodiazepines</b>	13%	10%	10%	12%	12%	10%	10%	13%	17%	4 (14) days	6 (45) days	3 (10) days	4 (10) days	5 (10) days	2 (15) days	6 (36) days	6 (24) days	4 (14) days	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Amyl nitrate</b>	17%	16%	14%	26%	28%	9%	7%	12%	7%*	2 (5) days	1 (2) days	2 (4) days	2 (5) days	3 (4) days	2 (7) days	2 (14) days	6 (9) days *										
<b>2C drugs</b>						4%	13%	12%	16%						4 (4) days	1 (3) days	2 (5) days	2 (2) days									
<b>Non-BZP party pills</b>					24%	21%	13%	10%	8%					1 (2) days	2 (3) days	2 (3) days	2 (3) days	2 (2) days					0%	0%	0%	0%	0%
<b>Salvia divinorum</b>						5%	7%	9%	3%						2 (2) days	2 (2) days	2 (2) days	1 (1) day									
<b>Cocaine</b>	9%	5%	18%	9%	7%	8%	7%	8%	11%	2 (2) days	2 (7) days	2 (4) days	2 (3) days	2 (3) days	1 (2) days	2 (8%) days	3 (4) days	2 (3) days	0%	0%	0%	0%	10%	0%	0%	0%	0%
<b>Oxycodone</b>			2%	4%	2%	3%	2%	8%	1% **			1 (1) day	2 (4) days	1 (1) day	1 (2) days	3 (7) days	1 (3) days	10 (10) days			0%	19%	0%	18%	36%	17%	100%
<b>Ketamine</b>	10%	11%	9%	20%	7%	2%	15%	8%	7%	2 (7) days	2 (4) days	1 (4) days	1 (4) days	2 (4) days	1 (1) days	2 (6) days	1 (2) days		0%	0%	0%	4%	0%	0%	0%	0%	0%

<b>Crystal methamphetamine</b>	5%	11%	6%	6%	2%	2%	6%	8%	5%	15 (30) days	1 (4) days	3 (14) days	2 (5) days	2 (16) days	1 (1) days	6 (32) days	15 (22) days	6 (33) days	21%	0%	0%	28%	33%	0%	14%	10%	14%
<b>Opium poppies</b>	-	-	4%	2%	2%	4%	3%	7%	0%	-	-	2 (5) days	7 (5) days	2 (3) days	1 (12) days	4 (13) days	2 (7) days	3 (6) days	-	-	0%	0%	-	-	-	-	-
<b>Anti-depressants</b>	3%	5%	7%	6%	8%	11%	8%	6%	9%	3 (5) days	4 (4) days	182 (125) days	14 (80) days	31 (88) days	90 (97) days	182 (119) days	180 (127) days	176 (112) days *	0%	19%	0%	0%	0%	0%	10%	0%	0%
<b>Methadone</b>	2%	3%	2%	1%	5%	2%	4%	6%	4%*	6 (6) days	1 (56) days	104 (61) days	182 (182) days	2 (8) days	2 (62) days	3 (38) days	11 (12) days	1 (4) days	50%	35%	0%	100%	14%	33%	0%	0%	45%
<b>Methylone</b>	-	-	-	-	-	1%	3%	6%	10%	-	-	-	-	-	1 (13) days	1 (5) days	6 (7) days	-	-	-	-	-	-	-	-	-	-
<b>BZP party pills</b>	65%	46%	25%	15%	11%	5%	9%	5% *	7%*	4 (7) days	5 (12) days	2 (7) days	3 (8) days	1 (7) days	1 (2) days	3 (13) days	1 (2) days	2 (2) days *	0%	0%	0%	0%	0%	0%	8%	0%	0%
<b>Morphine</b>	-	-	6%	6%	3%	2%	7%	5%	5%	-	-	1 (2) days	5 (21) days	2 (35) days	3 (63) days	4 (19) days	2 (17) days	4 (9) days	-	-	20%	25%	0%	55%	35%	11%	16%
<b>GHB</b>	10%	10%	4%	6%	4%	8%	3%	4%	4%*	3 (12) days	1 (4) days	2 (3) days	1 (2) days	1 (2) days	6 (5) days	1 (47) days	5 (5) days	1 (2) days	-	-	-	-	-	-	-	-	-
<b>Heroin</b>	0%	0%	1%	3%	0%	1%	1%	2%	1%	-	-	3 (3) days	6 (7) days	-	93 (93) days	6 (6) days	1 (10) days	1 (1) day	0%	0%	0%	100%	0%	100%	100%	0%	100%
<b>Homebake heroin/morphine</b>	-	-	1%	1%	1%	2%	2%	1%	2%	-	-	120 (120) days	6 (6) days	3 (3) days	3 (26) days	30 (17) days	1 (1) day	30 (26) days	-	-	0%	100%	0%	23%	56%	0%	100%
<b>DMT</b>	-	-	-	-	-	1%	4%	1%	5%	-	-	-	-	-	3 (3) days	1 (1) day	1 (1) day	-	-	-	-	-	-	-	-	-	-



**Table A.7: Proportion of frequent injecting drug users who used different drug types in the past six months, 2006-2014**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006	2007	2008	2009	2010	2011	2012	2013	2014
Drug type	Last 6mths (n=93)	Last 6mths (n=109)	Last 6mths (n=132)	Last 6mths (n=99)	Last 6mths (n=128)	Last 6mths (n=99)	Last 6mths (n=104)	Last 6mths (n=104)	Last 6mths (n=103)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Median days used (mean)	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths	Injecte d past 6mths
<b>Tobacco</b>	85%	89%	82%	88%	88%	82%	89%	83%	83%	182 (181) days	182 (173) days	182 (172) days	182 (175) days	182 (176) days	182 (178) days	182 (176) days	182 (175) days	182 (166) days									
<b>Cannabis</b>	78%	86%	70%	72%	72%	77%	71%	77%	69%	182 (123) days	120 (107) days	100 (99) days	96 (102) days	104 (108) days	90 (92) days*	120 (110) days	52 (91) days *	52 (79) days *									
<b>Morphine</b>			54%	62%	55%	49%	67%	70%	68%*			50 (85) days	65 (88) days	48 (75) days	40 (76) days	52 (80) days	50 (78) days	72 (90) days			97%	95%	99%	98%	100%	100%	99%
<b>Alcohol</b>	67%	70%	61%	60%	69%	61%	69%	68%	71%	12 (48) days	13 (36) days	25 (50) days	48 (62) days	48 (62) days	26 (51) days	26 (55) days*	52 (88) days	52 (66) days*									
<b>Ritalin (methylphenidate)</b>	43%	46%	37%	40%	49%	43%	53%	62%	59% *	6 (40) days	20 (41) days	16 (33) days	12 (34) days	15 (33) days	26 (57) days	26 (65) days *	20 (44) days *	20 (34) days *	87%	94%	98%	98%	95%	98%	82%	91%	97%
<b>Methamphetamine</b>	40%	44%	47%	50%	38%	50%	46%	55%	44%	10 (44) days	4 (12) days	12 (30) days	7 (25) days	12 (31) days	15 (32) days	20 (33) days	6 (38) days	6 (33) days	71%	66%	83%	84%	90%	89%	80%	90%	86% *
<b>Methadone</b>	74%	71%	73%	73%	73%	67%	56%	54%	69% * **	52 (93) days	182 (134) days	182 (128) days	182 (113) days	180 (110) days	182 (122) days	60 (91) days	120 (101) days	45 (79) days *	65%	63%	84%	80%	80%	76%	80%	62% **	63%
<b>Benzodiazepines</b>	57%	54%	37%	46%	61%	46%	47%	46%	57%	15 (43) days	12 (46) days	52 (82) days	26 (60) days	25 (63) days	24 (56) days	15 (56) days	20 (55) days	14 (39) days	12%	12%	21%	8%	14%	9%	15%	18%	8%

<b>Oxycodone</b>			9%	18%	18%	21%	25%	46%	20%* **			5 (17) days	4 (27) days	5 (13) days	6 (24) days	10 (37) days	20 (28) days*	5 (8 days) **			100%	100%	87%	86%	92%	88%	91%
<b>Codeine</b>			27%	26%	38%	43%	49%	40%	46%			10 (33) days	4 (51) days	15 (53) days	7 (36) days	14 (62) days	5 (29) days**	5 (16) days			24%	19%	18%	20%	21%	9%	33%*
<b>Homebake heroin/morphine</b>			18%	24%	26%	20%	19%	25%	15%			30 (61) days	12 (39) days	26 (73) days	21 (54) days	8 (19) days	20 (45) days**	13 (42) days			100%	100%	100%	100%	94%	100%	100%
<b>Synthetic cannabis</b>					9%	17%	23%	21%	10% **					2 (3) days	5 (12) days	4 (12) days	40 (57) days**	10 (39) days									
<b>Amphetamine</b>	18%	17%	22%	15%	15%	22%	13%	20%	17%	4 (18) days	10 (26) days	10 (23) days	7.5 (34) days	4 (27) days	6 (25) days	7 (17) days	5 (24) days	6 (22) days	72%	62%	82%	87%	84%	81%	63%	82%	64%
<b>Anti-depressants</b>	8%	9%	19%	18%	30%	21%	24%	19%	18%*	2 (8) days	182 (136) days	182 (153) days	182 (164) days	182 (150) days	182 (156) days	182 (141) days	182 (152) days	182 (164) days	0%	0%	4%	0%	0%	0%	8%	0%	5%
<b>Crystal methamphetamine</b>	24%	17%	30%	27%	17%	23%	21%	17%	24%	12 (43) days	5 (15) days	20 (30) days	5 (11) days	4 (13) days	5 (10) days	6 (12) days*	7 (45) days*	14 (46) days	69%	81%	86%	78%	95%	77%	74%	84%	80%
<b>Ecstasy</b>	30%	22%	18%	13%	20%	10%	20%	16%	15%*	3 (6) days	1 (8) days	5 (13) days	2 (3) days	2 (5) days	4 (6) days	3 (10) days	6 (9) days	2 (4 days) **	45%	33%	44%	31%	44%	57%	42%	36%	47%
<b>Tramadol</b>						14%	31%	15%							5 (16) days	6 (39) days	5 (33) days							3%	15%	0%	
<b>Heroin</b>	25%	11%	21%	19%	19%	14%	13%	14%	17%	20 (72) days	30 (54) days	18 (70) days	52 (76) days	16 (45) days	30 (60) days	24 (39) days	2 (32) days**	6 (29) days*	100%	92%	100%	95%	100%	100%	91%	94%	90%
<b>Hallucinogenic mushrooms (psilocybin)</b>		10%	10%	10%	12%	3%	10%	14%	10%		2 (3) days	4 (6) days	2 (2) days	3.5 (7) days	3 (4) days	1 (2) days	2 (5) days	3 (6 days)									





<b>Non-BZP party pills</b>					7%	1%	3%	1%	7%					6 (30 days)	1 (1) days	182 (13) days	6 (6) days	2 (10) days					23%	0%	61%	100%	87%
<b>MDPV</b>						0%	3%	1%	3%							2 (13) days	12 (12) days										
<b>GHB</b>	4%	2%	2%	4%	2%	1%	5%	0%	3%	1 (2) days	1 (1) day	5 (4) days	1 (1) day	6 (5) days	12 (12) days	3 (7) days		7 (9) days									