

**TRACKING THE AVAILABILITY OF DRUGS IN NEW ZEALAND:  
IMPLICATIONS FOR POLICY RESPONSE**

Chris Wilkins, Senior Researcher<sup>1</sup>  
Paul Sweetsur, Statistician  
Centre for Social and Health Outcomes Research and Evaluation (SHORE)  
Massey University

**Abstract**

Drug use imposes a range of health and social costs on New Zealand society. Measures of the availability of drugs are important for understanding levels of drug use and changes in drug use over time. Policy makers can directly affect levels of drug availability through a range of policy tools, including age restrictions, vendor regulation, varying levels of enforcement, and changing the legal classification of drug types. This paper presents population-level data on the current availability, and recent change in availability, of the 11 most commonly used drug types in New Zealand. Alcohol, tobacco and BZP/TFMPP party pills (i.e. the legally available drugs) were found to be by far the easiest drug types to obtain. Cannabis was the most easily available illegal drug, although it was much less available than the legal drugs. Cannabis was assessed by last-year users to be relatively more difficult to obtain in 2006 compared to 1998, 2001 and 2003. Amphetamine was also assessed to be relatively more difficult to obtain in 2006 compared to 2001. The decline in the availability of amphetamine occurred during a period after 2001 of sustained focus by drug enforcement agencies on disrupting clandestine methamphetamine manufacture and supply. A fall in the availability of nitrous oxide in 2006 followed a tightening of the rules concerning its sale by the Ministry of Health. Our findings suggest that policy makers can negatively affect the availability of a drug and, in turn, its level of use, with effective policy interventions.

**INTRODUCTION**

Drug use imposes a range of health and social costs on New Zealand, including death, illness, mental health problems, injuries from accidents, violence, property crime, family and relationship breakdown, and child neglect (Ministerial Committee on Drug Policy 2007). Much of the monitoring of drug use has traditionally involved measures of the prevalence of

---

<sup>1</sup> **Acknowledgements**

The authors gratefully acknowledge the different funding sources involved in each of the survey waves. The 1998 and 2001 National Drug Surveys were funded by contestable research grants from the Health Research Council and partially by direct funding from the Ministry of Health. The 2003 HBS-Drug Use survey was directly funded by the Ministry of Health and carried out as part of the Public Health Intelligence Health Behaviours Survey Monitor. The legal party pill survey was funded from the 2005/06 round of the National Drug Policy Discretionary Fund (NDPDF). The NDPDF is jointly managed by the Inter-Agency Committee of Drugs and the Ministerial Committee on Drug Policy. The national household comparison analysis presented in this paper was funded from the 2006/07 NDPDF. We would like to acknowledge all the researchers and interviewers who worked on the different survey waves, and all those members of the New Zealand public who participated in the surveys.

**Correspondence**

Dr Chris Wilkins, Senior Researcher, Drugs Team Leader, Centre for Social and Health Outcomes Research and Evaluation (SHORE), Massey University, PO Box 6137, Wellesley St., Auckland, www.shore.ac.nz, Ph. 64 9 366 6136, Fax. 64 9 366 5149.

use of a drug type within the population, and how the population prevalence changes over time (see Black and Casswell 1993, Field and Casswell 1999, SHORE 2004, Wilkins, Casswell, et al. 2002). However, measures of the availability of a drug type can also provide valuable information that can be used to inform the development of effective drug policy.

Measures of drug availability are of particular interest to policy makers because drug policy can directly affect levels of drug availability through a range of policy tools, such as purchase age restrictions, product taxation, vendor licensing, hours of trading, vendor density, advertising restrictions, increasing enforcement, and changes to a drug's legal classification (see Babor et al. 2003, Ministry of Health 2004). The level of use of a drug is generally closely related to its availability: greater availability can lead to more convenient purchase, which in turn can lead to increased use. Rising availability of a drug type can often be a forewarning of future increases in the use of a drug. In the case of illegal drugs, increasing levels of availability can indicate increased dealing, smuggling and clandestine manufacture, or more open public selling of illegal drugs, such as from street drug markets. Measures of drug availability can therefore assist in understanding changes in use, and consequently inform policy responses (Wilkins, Bhatta, et al. 2002, Wilkins et al. 2006).

The concept of drug availability has been most widely used in relation to legal drugs, such as alcohol and tobacco (Ministry of Health 2004, World Health Assembly 1999). In the alcohol literature, availability is most often used to refer to the "accessibility or convenience" of purchasing alcohol (Babor et al. 2003:117). In the illegal drugs literature, availability is discussed under the term "search costs", which refers to the time buyers must spend finding sellers and completing transactions in the illegal drugs market (see Kleiman 1992, Moore 1977). In this paper we use the term "availability" in its widest sense, meaning the ease or difficulty of physically obtaining a drug.

The aim of this paper is to present data on the current availability, and change in availability, of the 11 most commonly used drug types in New Zealand. Longer-term trends in the availability of cannabis, amphetamine and ecstasy are also examined. The final section of the paper places the findings in the context of recent drug policy in New Zealand.

## METHOD

National household surveying of drug use was conducted in New Zealand in 1998, 2001, 2003 and 2006 using the same Computer Assisted Telephone Interview (CATI) survey methodology (see Field and Casswell 1999, Wilkins, Casswell, et al. 2002, SHORE 2004, Wilkins, Sweetsur, et al. 2006). Respondents were informed that the study was being conducted on behalf of the Ministry of Health and that everything they said would be confidential. The age range of the respective survey waves were truncated to those aged 15-45 years old for the purposes of our analysis to allow valid comparisons back to the 1998 survey. The general population samples of each survey wave were compared.

Those respondents who reported using a drug type in the past 12 months were asked to describe the drugs current availability using a four-point scale (i.e. very easy, easy, difficult, very difficult), and to indicate whether the drugs availability had changed in the past 12 months using a three-point scale (i.e. easier, same, harder).<sup>2</sup> In the 2006 survey wave,

---

<sup>2</sup> There was an exception in the case of cannabis. In the 2001 and 2003 surveys only those who had purchased cannabis in the past 12 months were asked about the change in the availability of cannabis.

respondents were asked to describe the current availability and change in availability of a range of drug types. The 1998 survey asked respondents about the change in the availability of cannabis compared to a year ago, and this question was asked in the subsequent 2001, 2003 and 2006 survey waves. In the 2001 survey, respondents were asked about the change in the availability of amphetamine and ecstasy (MDMA) compared to a year ago, and these questions were included in all subsequent survey waves. The respective sample sizes for each survey wave were: 5,475 in 1998, 5,504 in 2001, 3,042 in 2003 and 1,902 in 2006. The response rates for the survey waves were 79% in 1998, 80% in 2001, 68% in 2003 and 69% in 2006.<sup>3</sup>

To provide an overall quantitative measure of the current availability, and change in availability, of a drug type, we calculated the mean score for each drug type by enumerating the scale provided<sup>4</sup>. These values were defined as follows.

Current availability scores

- 1 Very easy
- 2 Easy
- 3 Difficult
- 4 Very difficult

Change in availability scores

- 1 Easier
- 2 Same
- 3 Harder

## RESULTS

### Current Availability of All Drug Types

Table 1 presents the current availability of the 11 most commonly used drug types from the 2006 survey. The drug types considered by last-year users to be most easily available were alcohol (mean score 1.3), tobacco (1.3) and BZP/TFMPP (i.e. benzylpiperazine and trifluoromethylphenylpiperazine) party pills (1.3). Approximately three-quarters of last-year users of these drug types described their current availability as very easy. Cannabis was considered by last-year users to be the most easily available illegal drug (2.0), with 31% of last-year users saying cannabis was very easy to obtain at present. Amphetamine (2.5) and ecstasy (MDMA) (2.5) were judged by last-year users to be at similar overall levels of current availability, although more amphetamine users considered amphetamine to be very easy to obtain at the moment. LSD (3.0), cocaine (3.1) and hallucinogenic mushrooms (3.1) were considered by last-year users to be the most difficult drugs to obtain at present. Forty-five

---

<sup>3</sup> The response rates quoted are for the original age ranges of the surveys. It was not possible to recalculate the response rates for the different surveys for the truncated age range because we cannot distinguish the non-response by age.

<sup>4</sup> One-way ANOVAs were used to test for differences in the mean score for a question between 2006 and the other survey waves. To ensure reliable statistical comparisons, we restricted our analysis to the drug types that included 10 or more respondents in the 2006 wave. All analysis was completed in the SAS statistical environment and controlled for the effects of weighting and stratification.

percent of those who had used cocaine in the past year described it as very difficult to obtain at the moment.

**Table 1 Current availability of different drug types, 2006**

Drug type	Very easy (%) [1]	Easy (%) [2]	Difficult (%) [3]	Very difficult (%) [4]	n	Mean score
Alcohol	74	22	3	1	1633	1.3
Tobacco	72	24	4	0	653	1.3
BZP/TFMPP party pills	76	20	3	0	292	1.3
Cannabis	31	39	28	3	299	2.0
Kava	30	32	21	17	30	2.3
Nitrous oxide	21	42	21	16	51	2.3
Amphetamines	22	23	43	13	57	2.5
Ecstasy (MDMA)	12	34	49	5	69	2.5
LSD	9	10	56	26	33	3.0
Hallucinogenic mushrooms	6	13	43	39	25	3.1
Cocaine	14	6	35	45	21	3.1

### Change in the Availability of All Drug Types

Table 2 presents findings from the 2006 survey on how the availability of the drug types had changed compared to a year ago. The drug types which the greatest proportion of last-year users considered to have become easier to obtain in the past 12 months were BZP/TFMPP party pills (1.6), kava (1.7), ecstasy (1.8) and alcohol (1.8). Forty-five percent of those who had used party pills in the past 12 months said that party pills were easier to obtain in 2006 compared to 12 months ago. Thirty-two percent of last-year ecstasy users said that ecstasy was easier to obtain in 2006 compared to the previous year. Twenty-four percent of alcohol drinkers considered alcohol to be easier to obtain in 2006 compared to a year ago. In 2006 the overall availability of amphetamine and cannabis was considered to be stable.

The drug types which the largest proportion of last-year users considered to have become harder to obtain in the past 12 months were hallucinogenic mushrooms (2.3) and nitrous oxide (2.4). Fifty-three percent of last-year users of nitrous oxide said that it was harder to get in 2006 compared to the previous 12 months. Approximately one-third of last-year users of LSD and cocaine considered these drug types to have become harder to obtain compared to a year ago.

**Table 2 Change in the availability of different drug types, 2006**

Drug type	Easier (%) [1]	Same (%) [2]	Harder (%) [3]	n	Mean score
BZP/TFMPP arty pills	45	50	5	261	1.6
Kava	29	68	3	27	1.7
Ecstasy (MDMA)	32	52	16	69	1.8
Alcohol	24	71	6	1600	1.8
Tobacco	17	74	9	646	1.9
Cannabis	16	64	19	292	2.0
Amphetamines	26	52	22	58	2.0
LSD	18	51	32	30	2.1
Cocaine	20	49	31	21	2.1
Hallucinogenic mushrooms	16	43	41	24	2.3
Nitrous oxide	17	30	53	54	2.4

### Change in the Availability of Cannabis

Table 3 presents last-year cannabis users' assessment of how the availability of cannabis has changed compared to a year ago, from the 1998, 2001, 2003 and 2006 survey waves. It is worth noting that there was some change in the types of respondents who answered this question between the survey waves. In 1998 and 2006 all those who reported using cannabis in the past year were asked the question about the change in the availability of cannabis. In 2001 and 2003 only those who reported purchasing cannabis in the past year were asked the question. As those answering the question are asked to assess the cannabis environment (i.e. any changes in the availability of cannabis) rather than report their own individual behaviour, we have included a comparison between all survey waves.

The statistical test between 2006 and 1998 compares identical groups of respondents (i.e. last-year users of cannabis). Cannabis was assessed to be relatively harder to obtain compared to a year ago in 2006 compared to 1998 (2.0 vs. 1.7,  $p < 0.0001$ ). This was largely due to a lower proportion of last-year cannabis users saying it had become easier to get cannabis compared to a year ago in 2006 compared to 1998 (16% vs. 34%). Cannabis was also judged to be relatively harder to obtain compared to a year ago in 2006 compared to 2001 (2.0 vs. 1.8,  $p < 0.0001$ ) and compared to 2003 (2.0 vs. 1.9,  $p = 0.0437$ ). As with the comparison between 2006 and 1998, these differences were largely due to a lower proportion of last-year users saying it had become easier to get cannabis compared to a year ago in 2006 compared to 2003 and 2001.

**Table 3 Change in availability of cannabis, 1998, 2001, 2003 and 2006**

	1998	n	1998 vs. 2006	2001*	n	2001 vs. 2006	2003*	n	2003 vs. 2006	2006	n
<b>Easier [1]</b>	34%	272		33%	164		31%	59		16%	45
<b>Same [2]</b>	54%	470		52%	272		49%	121		64%	190
<b>Harder [3]</b>	12%	97		15%	76		20%	47		19%	57
<b>Mean score</b>	1.7		$p < 0.0001$	1.8		$p < 0.0001$	1.9		$p = 0.0437$	2.0	

\* In 2001 and 2003, only those who had purchased cannabis in the past year were asked this question

### Change in the Availability of Amphetamine and Ecstasy (MDMA)

Table 4 presents last-year amphetamine users' assessment of how the availability of amphetamine had changed compared to a year ago, from the 2001, 2003 and 2006 survey waves. Amphetamine was assessed to be relatively more difficult to obtain compared to a year ago in 2006 compared to 2001 (2.0 vs. 1.7,  $p = 0.0049$ ). This result was largely due to a lower proportion of last-year amphetamine users saying that amphetamine had become easier to obtain compared to a year ago in 2006 versus 2001 (26% vs. 47%), and a higher proportion saying that amphetamine had become harder to obtain compared to a year ago in 2006 versus 2001 (22% vs. 13%).

**Table 4 Change in availability of amphetamine, 2001, 2003 and 2006**

	2001	n	2001 vs. 2006	2003	n	2003 vs. 2006	2006	n
<b>Easier [1]</b>	47%	103		46%	44		26%	16
<b>Same [2]</b>	40%	95		29%	26		52%	29
<b>Harder [3]</b>	13%	26		25%	23		22%	13
<b>Mean score</b>	1.7		p = 0.0049	1.8		p = 0.1653	2.0	

Table 5 presents last-year ecstasy users' assessment of the availability of ecstasy compared to a year ago from the 2001, 2003 and 2006 survey waves. There was no statistically significant difference in the assessment of change in the availability of ecstasy (MDMA) between the survey waves.

**Table 5: Change in availability of ecstasy (MDMA), 2001, 2003 and 2006**

	2001	n	2001 vs. 2006	2003	n	2003 vs. 2006	2006	n
<b>Easier [1]</b>	48%	77		38%	26		32%	21
<b>Same [2]</b>	38%	60		35%	21		52%	36
<b>Harder [3]</b>	14%	19		28%	18		16%	12
<b>Mean score</b>	1.7		p = 0.1004	1.9		p = 0.6643	1.8	

## CONCLUSION

The findings from the 2006 wave of national household surveying provide the most complete picture of the current availability of different drug types in New Zealand. It is important when interpreting these results to note that these are assessments of the availability of a drug type by last-year users of the drug, rather than the wider general public. Because current drug users are already connected with social networks of sellers and users, their assessments of the availability of a drug type do not generally reflect how available the drug is to the wider population of non-users. Current drug users do, however, provide informed assessments of the availability of a drug type and hence "expert" insight into current levels of supply and ease of purchase.

The legal drug types -- alcohol, tobacco and BZP/TFMPP party pills -- were considered, by far, to be the most easily available drug types in New Zealand. In 2006, these drug types were all legitimately sold from public retail outlets. It is worth noting that while cannabis was the most widely available illegal drug, it was considered to be much less available than these legal drugs. The difference in availability between the illegal cannabis and the legal drug types illustrates the negative impact prohibition can have on the supply and sale of a drug type. It is not the case, as is sometimes claimed, that cannabis prohibition has no impact on the availability of cannabis in New Zealand.

The relatively high availability of cannabis compared to the other illegal drugs in New Zealand reflects the size of the illegal market for cannabis and the fact that it is the drug type most often sold from semi-public "tinny" houses and from street drug markets. Findings from the 2006 Illicit Drug Monitoring System (IDMS) indicate that 30% of the frequent drug users who had purchased cannabis in the past six months had done so from a tinny house, and 15% had purchased cannabis from the street (Wilkins et al. 2007). A study of the impact of cannabis tinny houses in New Zealand indicated that 15--17-year-olds were more likely to

purchase their cannabis from public tinny houses than through private personal networks (Wilkins et al. 2005). The New Zealand Police have undertaken a number of raids on tinny houses in recent times, and these operations have confirmed the central role that gangs play in the operation of these drug retail outlets. The ability of gangs to quickly find new personnel to reopen tinny houses following a police raid makes it difficult for the authorities to close down these places for any length of time.

A number of innovative, low-intensity drug enforcement tactics have been used in other countries to disrupt open street drug markets, such as a high-profile police presence at selling locations; the confiscation of the cars and sending of police warnings to the owners of cars observed soliciting for illegal drugs; altering traffic flows to reduce the ease of access to selling locations; and increasing both formal and informal surveillance of selling sites through the use of CCTV surveillance and appointment of site managers (see Edmunds et al. 1996, Kleiman 1992, Reuter and Kleiman 1986, Reuter and MacCoun 1992). The advantage of these low-intensity tactics is that they disrupt the viability of street drug markets by making potential customers reluctant to return to the selling location for fear of identification and arrest, without swamping the criminal justice system with low-level drug prosecutions.

Legal BZP/TFMPP party pills was the drug type which the greatest proportion of last-year users judged to have become easier to obtain compared to a year ago in 2006. The marketing and use of party pills increased rapidly in New Zealand around 2004. Early attempts by the Expert Advisory Committee on Drugs (EACD) to recommend a classification of BZP/TFMPP party pills were undermined by the lack of scientific research on the health and social risks of recreational BZP use (i.e. the main active ingredient of party pills) (Expert Advisory Committee on Drugs 2004). In order to obtain the necessary information to classify BZP, the Government commissioned a series of research studies to investigate the health and social risks of BZP party pills. While this research was being completed the Government acted in October 2005, establishing an age limit of 18 years old on the purchase of BZP products, banning the distribution of free promotional samples containing BZP, and prohibiting the advertising of BZP party pills in major media, including television, radio and print media. The Expert Advisory Committee on Drugs (EACD) reviewed the findings of the completed research in late 2006 and recommended that BZP be classified as Class C drugs under the Misuse of Drugs Act 1975 (Expert Advisory Committee on Drugs 2006). In December 2006 the Government announced its intention to follow the advice provided by the EACD, but was required to go through a formal public consultation process before reaching a final decision. The legislation to schedule BZP as a Class C drug was drawn up and passed in late 2007 with the ban coming into effect on the 1 April 2008. To facilitate a smooth transition to the new law an amnesty on the possession of small amounts of BZP for personal use was put into effect until September 2008. Our findings from the 2006 survey suggest that the initial age and advertising restrictions imposed on BZP/TFMPP party pills in October 2005 had little impact on the availability of party pills to current users. In the 2006 survey, which was conducted in February to March of that year, only 5% of party pill users surveyed indicated that the availability of party pills had become harder to obtain compared to 12 months ago. By this time the use of BZP/TFMPP party pills was well established among young people, and the age and advertising restrictions did not address the number and type of retail outlets which sold party pills, including places which sold alcohol, or the price of these products to young people.

Our findings concerning changes in the availability of cannabis and amphetamine are broadly consistent with subsequent trends in the population prevalence of these drug types. Cannabis

was assessed by last-year users to be relatively more difficult to obtain in 2006 compared to 1998, 2001 and 2003. The prevalence of use of cannabis declined in 2006 compared to 2001 (i.e. from 20% in 2001 to 18% in 2006) (Wilkins and Sweetsur 2007). A number of factors are likely to have impacted on the availability of cannabis during this time including changes in young peoples drug preferences, and the greater profit available to drug dealers and drug smugglers from manufacturing and selling other drug types such as ecstasy and methamphetamine. Annual seizures of cannabis plants made by the New Zealand Police increased in 2003--2005 compared to the previous three years (i.e. 105,131 plants in 2000, 90,857 plants in 2001, 73,772 plants in 2002, 193,740 plants in 2003, 162,263 plants in 2004, and 137,863 plants in 2005) and this may have also been a factor. Amphetamine was assessed to be relatively more difficult to obtain in 2006 compared to 2001. The prevalence of amphetamine use was found to have levelled off in 2003 compared to 2001 (Wilkins et al. 2006). The declining availability of amphetamine, and the levelling out of its use, occurred during a period of sustained focus by drug enforcement agencies on amphetamine manufacture and supply after 2001. The number of clandestine amphetamine laboratories dismantled each year by the New Zealand Police increased from 41 laboratories in 2001, to 170 in 2002, to approximately 200 in the subsequent years (i.e. 202 labs in 2003, 182 in 2004 and 204 in 2005). The number of tablets of ephedrine (i.e. the main ingredient used to manufacture methamphetamine) seized by the New Zealand Customs Service increased from 33,000 tablets in 2001 to 255,000 tablets in 2002, 1.9 million tablets in 2004 and 2.0 million tablets in 2005. Methamphetamine was also reclassified as a Class A drug during this time.

Last-year users of nitrous oxide indicated that nitrous oxide had become more difficult to obtain in 2006, with 53% of last-year users saying nitrous oxide was harder to obtain compared to 12 months ago. The fall in the availability of nitrous oxide followed a government campaign to tighten up its conditions of sale, with the Ministry of Health writing to retailers explaining that it was illegal to sell nitrous oxide for recreational use and warning that prosecutions could follow.

Our findings suggest that policy makers can have a negative impact on the availability, and in turn the level of use, of drugs with effective policy interventions. They also show that measures of drug availability can help to understand the levels of drug use and changes in drug use. Consequently, measures of drug availability should be viewed as important information by policy makers when developing and evaluating drug policy responses.

## REFERENCES

- Babor, T., R. Caetano, S. Casswell, G. Edwards, N. Giesbrecht, K. Graham, et al. (2003) *Alcohol: No Ordinary Commodity -- Research and Public Policy*, Oxford University Press, Oxford.
- Black, S., and S. Casswell (1993) "Recreational drug use in New Zealand" *Drug and Alcohol Review*, 12:37--48.
- Edmunds, M., M. Hough and N. Urquia (1996) *Tackling Local Drug Markets*, Crime Detection and Prevention Series Paper 80, Police Research Group, Home Office, London.
- Expert Advisory Committee on Drugs (2004) *The Expert Advisory Committee on Drugs (EACD) Advice to the Minister on: Benzylpiperazine (BZP)*, Expert Advisory Committee on Drugs, Wellington.
- Expert Advisory Committee on Drugs (2006) *Further EACD Advice on Benzylpiperazine (BZP) and Related Substances*, Expert Advisory Committee on Drugs, Wellington.

- Field, A., and S. Casswell (1999) *Drugs in New Zealand: A National Survey 1998*, Alcohol and Public Health Research Unit, University of Auckland, Auckland.
- Kleiman, M. (1992) *Against Excess: Drug Policy for Results*, Basic Books, New York.
- Ministerial Committee on Drug Policy (2007) *National Drug Policy 2007--2012*, Ministry of Health, Wellington.
- Ministry of Health (2004) *Clearing the Smoke: A Five-Year Plan for Tobacco Control in New Zealand*, Ministry of Health, Wellington.
- Moore, M.H. (1977) *Buy and Bust*, Lexington Publishers, Lexington, MA.
- Reuter, P., and M.A.R. Kleiman (1986) "Risks and prices: An economic analysis of drug enforcement" in M. Tonry and N. Morris (eds.) *Crime and Justice: An Annual Review of Research*, Vol. 7, (pp. 289--340), University of Chicago Press, Chicago.
- Reuter, P.H., and R.J. MacCoun (1992) "Street drug markets in inner-city neighbourhoods" in J.B. Steinberg, D.W. Lyon and M.E. Vaiana (eds.) *Urban America*, Rand, Santa Monica.
- SHORE (2004) *2003 Health Behaviours Survey: Drug Use Methodology Report*, Centre for Social and Health Outcomes Research and Evaluation and Te Ropu Whariki, Massey University, Auckland.
- Wilkins, C., K. Bhatta and S. Casswell (2002) "The emergence of amphetamine use in New Zealand: Findings from the 1998 and 2001 National Drug Surveys" *New Zealand Medical Journal*, 115:256--263.
- Wilkins, C., S. Casswell, K. Bhatta and M. Pledger (2002) *Drug Use in New Zealand: National Surveys Comparison 1998 and 2001*, Alcohol and Public Health Research Unit, Auckland.
- Wilkins, C., M. Girling and P. Sweetsur (2007) *Recent Trends in Illegal Drug Use in New Zealand, 2006: Findings From the 2006 IDMS*, Centre for Social and Health Outcomes Research and Evaluation and Te Ropu Whariki, Massey University, Auckland.
- Wilkins, C., J. Reilly and S. Casswell (2005) "Cannabis 'tinny' houses in New Zealand: Implications for the use of cannabis and other drugs in New Zealand" *Addiction*, 100:971--980.
- Wilkins, C., and P. Sweetsur (2007) *Trends in Drug Use in the Population in New Zealand: Findings From National Household Drug Surveying in 1998, 2001, 2003 and 2006*, Centre for Social and Health Outcomes Research and Evaluation and Te Ropu Whariki, Massey University, Auckland.
- Wilkins, C., P. Sweetsur and S. Casswell (2006) "Recent population trends in amphetamine use in New Zealand: Comparisons of findings from national household drug surveying in 1998, 2001 and 2003" *New Zealand Medical Journal*, 119, [www.nzma.org.nz/journal/119-1244/2285/](http://www.nzma.org.nz/journal/119-1244/2285/).
- World Health Assembly (1999) "Towards a WHO framework convention on tobacco control" paper presented at Fifty-second World Health Assembly 17--25 May, (WHA52.18), World Health Organization, Geneva.