



## AN ANALYSIS OF ALCOHOL AND PSYCHO-STIMULANT USE FROM THE 2007 NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY

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**Aim:** *The aim of this paper is to examine what proportion of current alcohol consumers are also current consumers of psycho-stimulants in the Australian population.*

**Method:** *Using population survey data obtained from the 2007 National Drug Strategy Household Survey, this brief considers the proportion of alcohol drinkers who report recent consumption of amphetamines and cocaine.*

**Results:** *Among the sample of survey respondents 18 years and over results showed that the level of psycho-stimulant use was low among the population of alcohol consumers. This finding was evident even among those drinkers who reported drinking most frequently and in the most risky manner. For those respondents estimated to be at the highest risk for alcohol-related harm, only 12.9 per cent reported use of amphetamines and 8.6 per cent reported use of cocaine in the 12 months prior to the survey.*

**Conclusion:** *These findings suggest that in the general population, concurrent use of alcohol and psycho-stimulants is likely to be low.*

### INTRODUCTION

Recent crime victim surveys show that a quarter of all assaults involving male perpetrators and 16 per cent of all assaults involving female perpetrators occur on licensed premises (Australian Bureau of Statistics, 2006). The vast majority of assaults recorded by police on licensed premises are, not surprisingly, flagged as alcohol-related (NSW Bureau of Crime Statistics and Research, unpublished 2010). It has recently been suggested, however, that some of the violence occurring on licensed premises might be attributable to a combination of alcohol and illicit substances, (e.g., psycho-stimulants, such as amphetamines) rather than to alcohol use alone (ABC News, May 2008; Walters, 2010). It has also been suggested that the combined use of alcohol and illicit drugs makes it difficult to enforce laws concerning the responsible use of alcohol (Australian Hotels Association New South Wales, 2010).

There is evidence that psycho-stimulant use increases the risk of violent behaviour (McKetin, McLaren, Riddell, & Robins, 2006). There is also evidence that a high proportion of psycho-stimulant users (e.g., users of amphetamine and cocaine) also consume alcohol (Australian Institute of Health and Welfare, 2008a). To properly gauge the prevalence of concurrent alcohol and psycho-stimulant intoxication on licensed premises, however, we need to know what proportion of persons on

licensed premises under the influence of alcohol are also under the influence of psycho-stimulants. There are, unfortunately, no data at present that can be used to estimate this proportion. The best that can be done with existing data is to determine what proportion of current alcohol consumers are also current consumers of psycho-stimulants. If this percentage is high, there are grounds for concern that psycho-stimulants may be contributing to violence on licensed premises. The purpose of this brief, then, is to use national survey data to examine the prevalence of psycho-stimulant use among alcohol consumers.

### METHOD

The national survey data used in the analysis were drawn from the 2007 National Drug Strategy Household Survey to investigate the level of alcohol and psycho-stimulant use in the Australian population. This survey collects population-level information on licit and illicit drug use and has been conducted approximately every two to three years since 1985. The 2007 survey involved 23,356 respondents (aged 12 years and over) from across Australia. The detailed findings from this survey and descriptions of the survey methodology are outlined in two reports published by the Australian Institute of Health and Welfare (AIHW, 2008a; 2008b).

For the current brief, reported rates of use of psycho-stimulant drugs (amphetamines and cocaine) and alcohol among respondents aged 18 and over (n= 21,846) were the focus of descriptive analyses. For amphetamines<sup>1</sup> and cocaine, we examined the prevalence of use within 12 months prior to interview. For alcohol, we examined both the frequency of reported drinking and the estimated short-term (monthly) risk of alcohol-related harm<sup>2</sup> in the last 12 months. Short-term risk of alcohol-related harm was measured by the quantity of alcohol consumed during any drinking episode, as defined in the 2001 Australian Alcohol Guidelines (National Health and Medical Research Council, 2001).<sup>3</sup> Specifically, 'Low risk' was associated with drinking six standard drinks on a single occasion for males and four standard drinks for females. 'Risky' was associated with seven to ten drinks per episode for males and five to six drinks for females. 'High risk' was associated with eleven or more drinks for males and seven or more drinks for females. It is important to note, however, that these indicators did not account for whether psycho-stimulant drugs and alcohol were consumed together, but instead focused on whether respondents reported any consumption of alcohol and psycho-stimulants in the year prior to the survey interview.

In order to obtain population prevalence estimates of alcohol and psycho-stimulant use, recommended survey weightings were applied to all analyses, with the strata and clusters accounted for in the estimate of the confidence intervals.

## RESULTS

In the year prior to the 2007 survey, 84.4 per cent of respondents aged 18 and over reported drinking alcohol, with 52.1 per cent reporting drinking on at least a weekly basis. Approximately 10.6 per cent of the population were estimated to be at high risk of short-term alcohol-related harm. With respect to illicit drug use, 2.4 per cent reported taking amphetamines and 1.7 per cent reported taking cocaine.

### Recent psycho-stimulant use among consumers of alcohol

Table 1 presents the reported levels of recent amphetamine and cocaine use among consumers of alcohol, broken down by level of alcohol consumption. As indicated in the table, there is a slightly higher level of recent amphetamine/cocaine use among individuals who report drinking at least weekly compared to those who drink less frequently. However, the highest reported

**Table 1. Recent use of amphetamines and cocaine among alcohol drinkers**

Frequency of alcohol consumption	Recent amphetamine use (n = 21,456)		Recent cocaine use (n = 21,488)	
	Yes	No	Yes	No
Daily	1.80% (1.10, 2.50)	98.20% (97.50, 98.90)	1.50% (0.84, 2.15)	98.50% (97.85, 99.16)
Weekly	3.90% (3.31, 4.49)	96.10% (95.51, 96.69)	3.27% (2.72, 3.82)	96.73% (96.18, 97.28)
Less than weekly	1.57% (1.20, 1.94)	98.43% (98.06, 98.80)	0.45% (0.28, 0.62)	99.55% (99.38, 99.72)
Ex-drinker/Non-drinker <sup>a</sup>	0.25% (0.07, 0.43)	99.75% (99.57, 99.93)	0.05% (0.00, 0.12)	99.95% (99.88, 100.00)

Note. 95% confidence intervals are provided in brackets. Chi-square tests indicated that group differences were statistically significant at  $p < .0001$  for both recent amphetamine use and recent cocaine use.

<sup>a</sup> Includes those who reported not drinking in last 12 months and those who reported never consuming a full serve of alcohol.

**Table 2. Recent use of amphetamines and cocaine and risk of short-term alcohol-related harm**

Risk of alcohol-related harm	Recent amphetamine use (n = 21,456)		Recent cocaine use (n = 21,488)	
	Yes	No	Yes	No
High risk	12.86% (10.80, 14.93)	87.14% (85.07, 89.20)	8.55% (6.79, 10.31)	91.45% (89.69, 93.21)
Risky	3.33% (2.44, 4.23)	96.67% (95.77, 97.56)	3.59% (2.57, 4.60)	96.41% (95.40, 97.43)
Low risk	1.04% (0.82, 1.26)	98.96% (98.74, 99.18)	0.68% (0.49, 0.87)	99.32% (99.13, 99.51)
Abstainer	0.25% (0.07, 0.43)	99.75% (99.57, 99.93)	0.05% (0.00, 0.12)	99.95% (99.88, 100.00)

Note. 95% confidence intervals are provided in brackets. Chi-square tests indicated that group differences were statistically significant at  $p < .0001$  for both recent amphetamine use and recent cocaine use.

level of amphetamine/cocaine use was very low (less than 4 per cent of weekly drinkers), indicating that psycho-stimulant use is relatively uncommon amongst even the most frequent consumers of alcohol.

Table 2 shows the reported levels of recent amphetamine and cocaine use among consumers of alcohol, broken down by risk of short-term alcohol-related harm. In line with the above findings, there is a significantly higher level of recent amphetamine/cocaine use among individuals in the highest risk categories for harm compared with those in the low risk/abstainer categories. However, even among those at the highest risk of alcohol-related harm, use of psycho-stimulants was low (12.9% amphetamines; 8.6% cocaine), further demonstrating that psycho-stimulant use is relatively infrequent among the population of alcohol consumers.

## DISCUSSION

The aim of this brief was to examine the prevalence of use of illicit psycho-stimulants (e.g., amphetamines, cocaine) among consumers of alcohol in a representative sample of the Australian population. The results indicate that the proportion of alcohol consumers who also report using psycho-stimulants is low, even among heavy drinkers. Among weekly drinkers, for example, less than four per cent of the population of eligible pub patrons report use of amphetamines/cocaine in the last 12 months. Furthermore, among those respondents at the highest risk of short-term alcohol-related harm, approximately 1 in 8 report recent use of amphetamines, while less than 1 in 10 report recent use of cocaine.

The current findings suggest that concurrent use of alcohol and psycho-stimulants on licensed premises is not likely to be very high. Even if all those who report consuming both alcohol and psycho-stimulants do so concurrently on licensed premises, they would comprise only a small proportion of all alcohol consumers. As it happens, respondents in the 2007 National Drug Strategy Household Survey were most likely to report usually using amphetamines and cocaine either at home or at a friend's house (AIHW, 2008a). There is, nonetheless, one important caveat surrounding our findings. While the national survey data indicate that the overall proportion of alcohol consumers who are also users of psycho-stimulants is quite low, heavy drinkers on licensed premises may differ in systematic ways from heavy users in general. Specifically, it is possible that psycho-stimulant use among heavy drinkers on licensed premises is high (in general or at some locations) even if it is not high among the general population of heavy drinkers. While this seems unlikely, research into the drug use practices among heavy drinkers on licensed premises is needed to properly settle the issue.

## NOTES

- 1 Refers to use of meth/amphetamine for non-medical purposes.
- 2 Risk of harm occurring at least once a month.
- 3 The current guidelines at the time of survey completion. The most recent guidelines, *Australian guidelines to reduce health risks from drinking alcohol*, were released in early 2009.

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