

Alcohol Off-licence Purchases and Subsequent Harm

Summary report

January 2017

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Any queries regarding this report should be directed to HPA at the following address:

Health Promotion Agency
PO Box 2142
Wellington 6140
New Zealand
www.hpa.org.nz
research@hpa.org.nz

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INTRODUCTION

The purpose of this report is to provide a brief summary of the findings from research that was conducted in Wellington City on alcohol-related harm (ARH). It accompanies the full report entitled *Alcohol Off-Licence Purchases and Subsequent Harm* and the method report entitled *Alcohol Purchasing Research: Method Report*.

BACKGROUND

Wellington City Council (WCC) approached the Health Promotion Agency to conduct research on alcohol purchases made at off-licensed premises (ie, supermarkets, liquor stores, and grocery stores that sell alcohol) in the city. WCC was interested in learning about consumption and purchasing patterns as well as the ARH occurring subsequent to these purchases. The findings would be used to help inform the development of their Local Alcohol Policy (LAP).

In brief, the method involved an online survey that assessed people's experiences with alcohol-related harm following purchase of alcohol from off-licensed premises. A more detailed description of the method can be found in the Appendix and in the full report titled *Alcohol Purchasing from Off-licensed Premises: Method Report*.

RESULTS

Notable characteristics of the sample include the following:

- 1794 people for the main analyses
- The majority of the sample comprised younger age groups (76% were aged 18 to 27 years)
- The majority of the sample comprised people living in the Lambton ward¹ (72%)
- About half (54%) had already consumed alcohol prior to intercept
- The majority (81%) had planned their off-licence purchase (ie, they had decided prior to arriving at the store to purchase alcohol that evening)
- The majority (79%) went out after intercept (ie, they did not go home for the rest of the evening)
- The average number of alcoholic drinks consumed on the evening of intercept (in total) was 7.9.

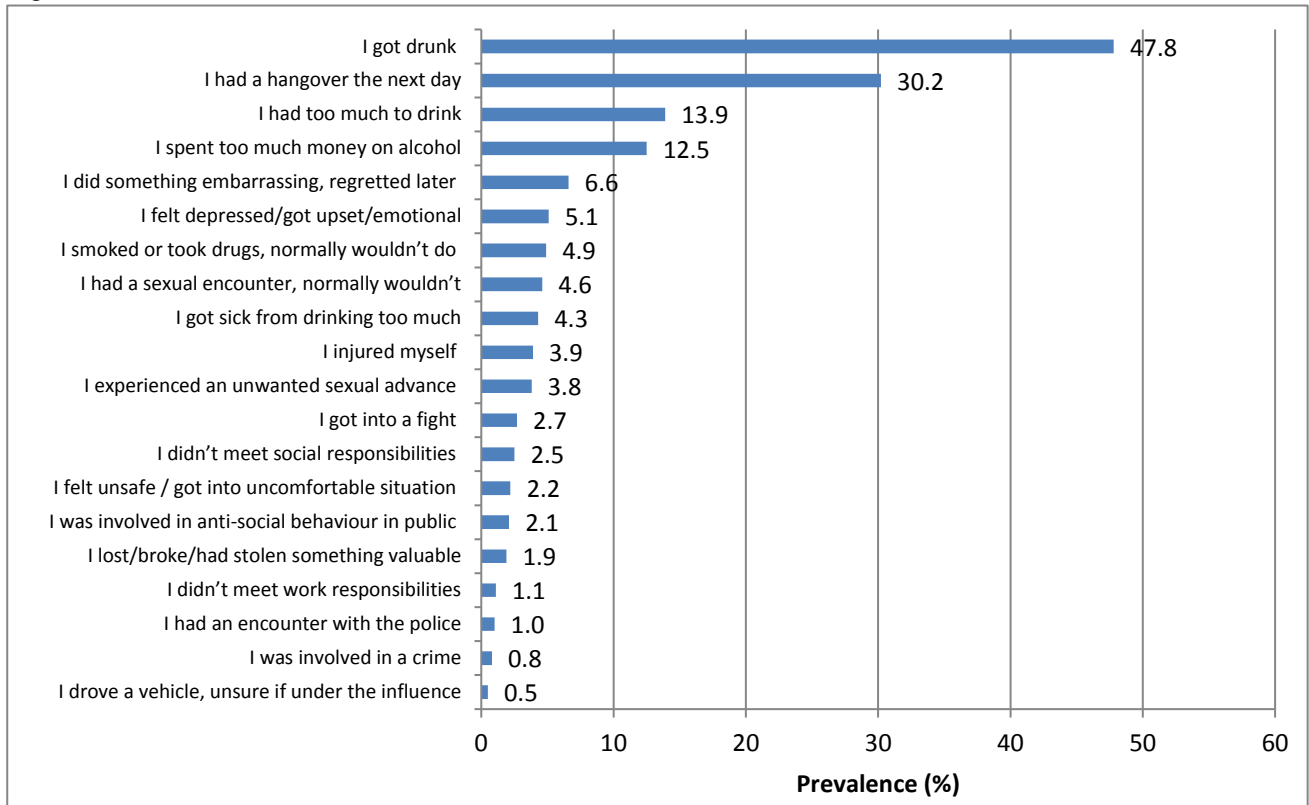
Two categories of harms were created for the purpose of this report:

1. The total number of harms that each respondent reported having experienced.
2. Whether or not people experienced a 'low prevalence' harm, defined as those harms whose prevalence was less than 10%. This second category was created to analyse those experiences that may be more severe, given their lower frequency of occurring.

Figure 1 shows the prevalence of each alcohol-related harm that was included in the questionnaire. Consumption-related harms were by far the most common, with nearly half reporting that they got drunk and almost a third reporting that they had a hangover the next day.

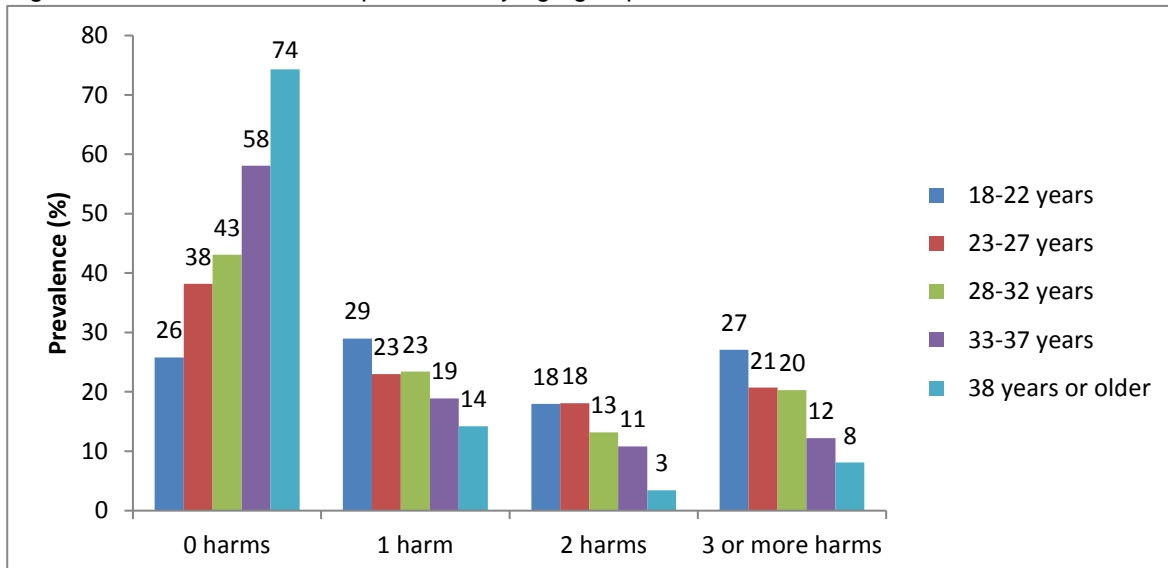
¹ For the geographic boundaries of the wards referred to in this report, see: <http://wellington.govt.nz/~media/your-council/elections/2016/files/all-wltn-wards2016-2019.pdf>

Figure 1. Prevalence of alcohol-related harms



Being in a younger age group was associated with experiencing a greater number of harms (Figure 2). For example, 27% of 18 to 22-year-olds reported having experienced three or more harms compared with 8% of those aged 38 or older. Conversely, the majority (74%) of those aged 38 or older reported having experienced no harms, compared with 26% of 18 to 22-year-olds.

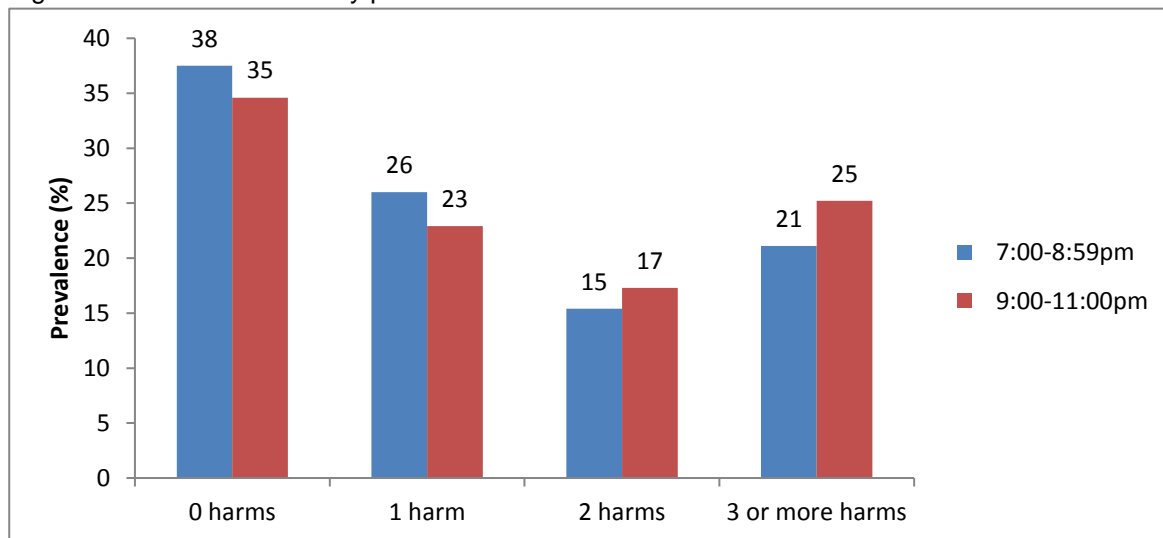
Figure 2. Number of harms experienced by age group



Being in a younger age group was also associated with experiencing at least one low-prevalence harm. Respondents aged 18 to 22 years had five times the odds of having experienced a low-prevalence harm compared to those aged 38 or older (adjusted odds ratio = 5.25, 95% confidence interval: 2.17-12.67).

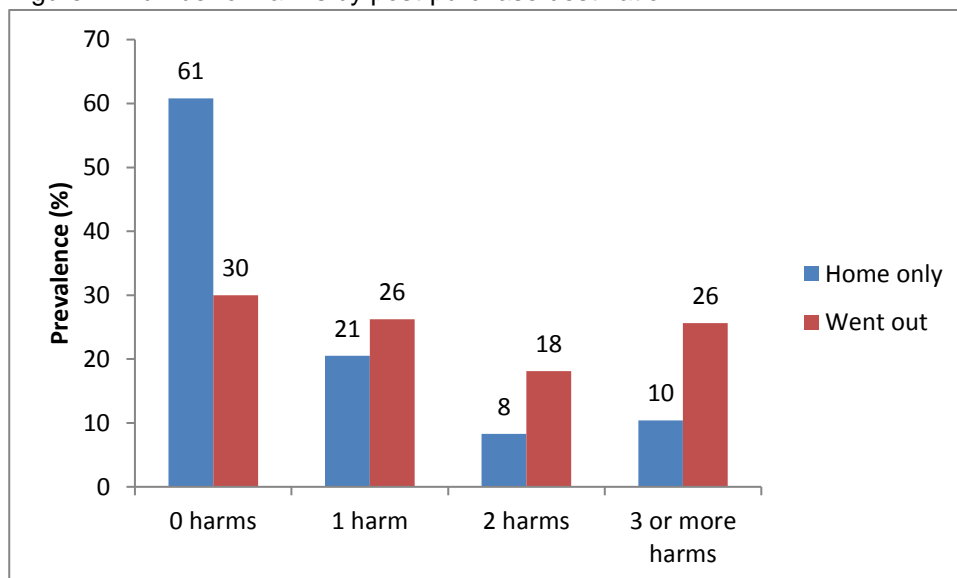
There was a relationship found between the time that the alcohol was purchased and the number of harms experienced (Figure 3). That is, earlier purchases (7:00-8:59pm) were associated with fewer harms experienced compared with later purchases (9:00-11:00pm). However, this association was not found when analysing the relationship between purchase time and the experience of low-prevalence harms; those who purchased earlier in the evening were just as likely to report having experienced a low-prevalence harm as those who purchased later.

Figure 3. Number of harms by purchase time



Respondents who went home after intercept and stayed home for the evening reported experiencing fewer harms than those who went out (Figure 4). More than half of those who went home (61%) reported experiencing no harms, compared with 30% of those who went somewhere other than home. Conversely, those who went out experienced three or more harms at more than double the rate (26%) of those who went home (10%). This association was not found when analysing low-prevalence harms; those who went home were just as likely to report having experienced a low-prevalence harm as those who went out.

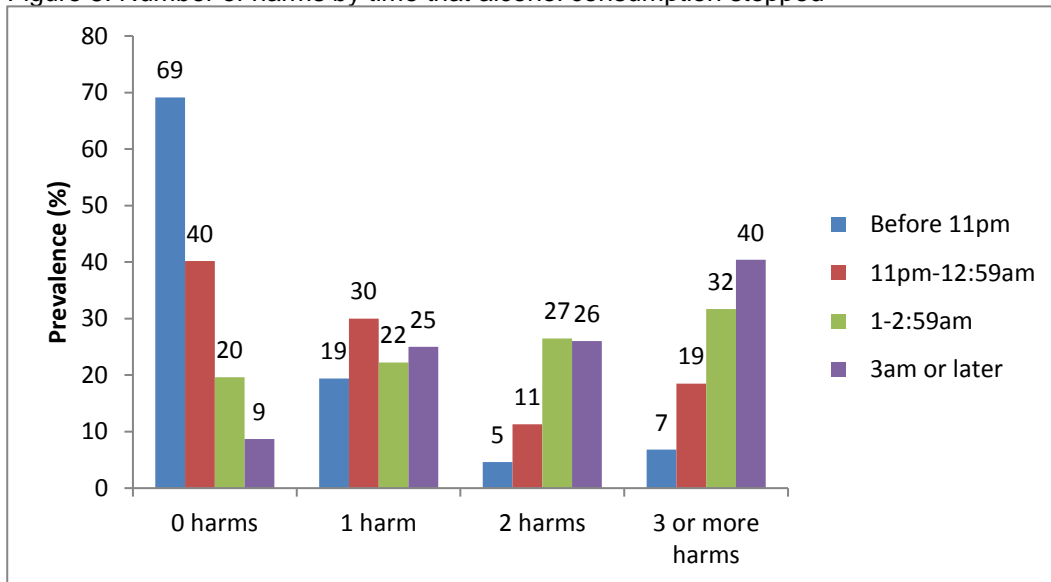
Figure 4. Number of harms by post-purchase destination



The time that respondents reported having stopped consuming alcohol on the evening of intercept was related to the number of harms they reported having experienced (Figure 5). The later that

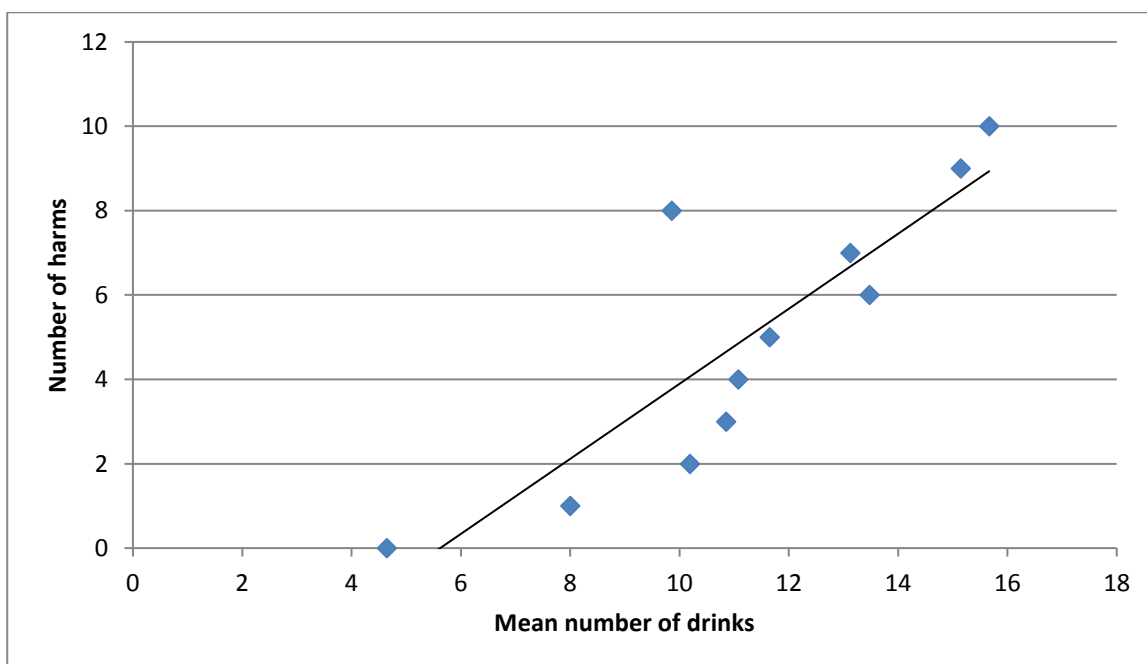
drinking ended, the greater the number of harms reported. For example, 7% of respondents who stopped drinking before 11:00pm reported three or more harms compared with 40% of those whose drinking ended at 3:00am or later. When analysing low-prevalence harms, this association was not found. Those who stopped drinking earlier in the evening were just as likely to report having experienced a low-prevalence harm as those who stopped drinking later.

Figure 5. Number of harms by time that alcohol consumption stopped



The relationship between the amount of alcohol consumed and the number of harms experienced is of a linear pattern (Figure 6). That is, as the number of drinks consumed increased, so did the number of harms. The mean number of drinks consumed among those who experienced no harms was 4.6, compared with 15.7 drinks among those who experienced 10 or more harms.

Figure 6. Number of harms by mean number of drinks



The number of drinks consumed was also associated with the experience of a low-prevalence harm (adjusted odds ratio = 1.15, 95% confidence interval: 1.11-1.19). That is, for each additional

drink consumed, the respondent had 1.15 times the odds of experiencing a low-prevalence harm. The mean number of drinks among those who experienced a low-prevalence harm was 9.9, compared with 7.1 among those who did not.

In summary, the final model for all harms experienced showed that the following variables were associated with experiencing a greater number of harms: being female, younger age groups, later purchase time, purchases made from supermarkets and liquor stores (compared to grocery stores), going out after purchase, stopping drinking later in the evening, and the total number of drinks consumed.

When assessing the subgroup of harms that had low prevalence, the following variables were associated with experiencing at least one of those types of harms: being female, younger age groups, residing in the Onslow-Western ward, purchases made from liquor stores (compared to grocery stores), and total number of drinks consumed.

Table 1 summarises the results from both models. The models control for all the relevant variables together, so that each variable that is found to be associated with harm has a relationship with harm that is independent from the other variables.

Table 1. Independent variables found to be associated with alcohol-related harm

Independent variable	Associated with experiencing...	
	...a greater number of all harms	...at least one low-prevalence harm
Gender	Yes	Yes
Age group	Yes	Yes
Ethnicity	No	No
Ward	No	Yes
Evening of intercept (Friday/Saturday)	No	No
Type of off-licence premises	Yes	Yes
Alcohol consumed prior to intercept	No	No
Time that drinking started that day	No	No
Purchase type (Planned/Oppportunistic)	No	No
Purchase time (7-8:59pm/9-11pm)	Yes	No
Type of alcohol purchased	No	No
Post-purchase destination (Home/Out)	Yes	No
Time stopped drinking alcohol	Yes	No
Total number of drinks consumed	Yes	Yes

There are several limitations that should be noted with regards to this research. First, it is a cross-sectional study that captures a snapshot of ARH occurring on a series of weekend evenings in Wellington. It can explore associations between the independent variables and ARH, but it cannot demonstrate causality. The findings may not be applicable to communities other than Wellington.

REFERENCES

1. Research New Zealand. HPA Attitudes and Behaviour towards Alcohol Survey 2010-2012: Report 1.2 – Planning, actions and consequences of the last drinking occasion (Adults, 18 years and over) [Internet]. Wellington: Health Promotion Agency; 2014 [cited 2015 Nov 9]. Available from: <http://www.hpa.org.nz/research-library/research-publications/attitudes-and-behaviour-towards-alcohol-survey-2010-2012-report-1-2>
2. Sale and Supply of Alcohol Act [Internet]. 2012 [cited 2015 Sep 14]; Available from: <http://www.legislation.govt.nz/act/public/2012/0120/latest/whole.html>

APPENDIX

Method

HPA contracted a research provider (Research First) to collect the data for the study. Interceptors were stationed outside 14 off-licensed premises in the CBD from 7pm until 11pm on a total of 10 Friday and Saturday evenings in June, July, and August 2015. People exiting the premises who had purchased alcohol during those times and intended to consume some of that alcohol that evening were invited to participate in the study. Those who agreed were contacted the next day via email with a link to an online survey, which asked questions about their off-licence alcohol purchase, drinking behaviours, and experiences on the evening of intercept. Some of these experiences included events that are considered to be alcohol-related harms. Respondents were asked about 20 such harms, which included experiences such as those related to over-consumption, social and work responsibilities, anti-social behaviour, economic impacts, physical outcomes, and being involved in a crime or with the police. Questions relating to ARH were adapted from New Zealand's Attitudes and Behaviour towards Alcohol Survey (ABAS)^[1] and from the definition of ARH in the Sale and Supply of Alcohol Act 2012 ('the Act')^[2], which features a broad definition of ARH.

Two categories of harms were created for the purpose of this report. The first includes all harms from the ABAS questionnaire. The total number of harms that each respondent reported having experienced was calculated to create a 'number of harms' variable. The second category consists of a subset of the harms from the first, and includes only those harms whose prevalence was less than 10%. Thus, it includes a range of social, financial and/or physical harms but excludes the harms related to getting drunk, drinking too much, having a hang-over, and spending too much money on alcohol. This second category is referred to as 'low-prevalence harms' and was created to analyse those experiences that may be more severe given their lower frequency of occurring. In addition, given the broad definition of harm as defined by the Act, this low prevalence harm category presents an opportunity to analyse harms according to a narrower definition, which may be more suitable in some contexts beyond that of the Act. The results in this summary regarding low-prevalence harms are presented as the likelihood of experiencing at least one of these types of harms. Given their lower frequency of occurring, low-prevalence harms were not summed, and therefore analyses related to the 'number of harms' were not conducted with regards to this subset.

Analyses were conducted to calculate the prevalence of alcohol-related harms in the sample. Two statistical models were built for each harm category to assess which factors (eg demographics, circumstances related to the purchase such as time of day, and alcohol consumption-related behaviours) played a role in experiencing a greater number of harms (for all harms) or the likelihood of experiencing at least one low-prevalence harm.