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Beyond the drinker:

Longitudinal patterns in alcohol's harm to others

Anne-Marie Laslett | Sarah Callinan | Janette Mugavin | Heng Jiang | Michael Livingston | Robin Room

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CAPR has also undertaken a pioneering study in Australia: *The Range and Magnitude of Alcohol's Harm to Others* (also known as the 2008 HTO Study) which measured alcohol-related harms to people other than the drinker ('third party harms'). The results were included in the WHO's *Global Status Report on Alcohol and Health 2011,* and the study is being used by the WHO as a model for such studies globally.

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CONTENTS

ACRONYMS, ABBREVIATIONS AND GLOSSARY 5

EXECUTIVE SUMMARY 6

1. INTRODUCTION AND OVERVIEW 11

2. METHODS 16

3. ALCOHOL'S HARM TO OTHERS REPORTED IN 2011 AND 2008: SIMILARITIES AND DIFFERENCES 28

4. CONTINUITY AND CHANGE IN ALCOHOL'S HARM TO OTHERS 36

5. THE RELATIONSHIP BETWEEN OTHERS' DRINKING AND QUALITY OF LIFE 53

6. HELP-SEEKING BEHAVIOUR IN RESPONSE TO ALCOHOL'S HARM TO OTHERS 60

7. SUMMARY AND DISCUSSION 64

8. REFERENCES 70

APPENDIX A: FIGURES, BOXES AND TABLES 74

APPENDIX B: HARM TO OTHERS - 2011 SURVEY 76

APPENDIX C: COMPARING RESULTS FROM TWO WAYS OF ASKING "HOW MUCH HAS THE DRINKING AFFECTED YOU NEGATIVELY?" 97

APPENDIX D: TECHNICAL REPORT ON PROCEDURES IN THE 2011 FIELDWORK 99

ACRONYMS AND ABBREVIATIONS

AIHW	Australian Institute of Health and Welfare
ED	Emergency Department
EQ-5D	European Quality of Life-5 Dimensions (self-report questionnaire score)
HH	Household
HREC	Human Research Ethics Committee (Eastern Health)
HRQoL	Health-Related Quality of Life
HTO	(Alcohol's) Harm to Others
NHMRC	National Health and Medical Research Council
NICE	National Institute for Health and Clinical Excellence
NS	Non-significant
PWI	Personal Wellbeing Index
R+I	Relatives and Intimate partners
SHORE	Social Health Outcomes, Research & Evaluation research centre (of Massey University, Auckland, NZ)
SEIFA	Socio-Economic Index For Areas (a measure produced by the Australian Bureau of Statistics)
SRC	Social Research Centre
WHO	World Health Organization

GLOSSARY

2008 HTO Study	The study reported in the 2010 document *The Range and Magnitude of Alcohol's Harm to Others*, including results from a survey conducted in 2008 and an analysis of register data from relevant agencies (e.g. health, social, welfare and justice).
2008 HTO Survey	The survey conducted within the 2008 HTO Study.
2011 HTO Survey	The follow-up HTO Survey, conducted in between October 2011 and February 2012.
Heavy drinker (HD)	Someone who the respondent reports to be "a fairly heavy drinker or drinks a lot sometimes" (in the 12 months prior to each HTO Survey). The terms 'fairly heavy drinker' and 'someone who drinks a lot sometimes' were open to respondent's own interpretation.
Heavy drinking occasions	Occasions on which a respondent drank five or more standard drinks in a single session.
Known problematic drinkers	Household members, non-household relatives and intimate partners, friends and co-workers identified by the respondent as heavy drinkers, and whose drinking adversely affected the respondent in the 12 months prior to each HTO Survey.
Non-household relatives and intimate partners	People who are relatives, girlfriends, boyfriends, or ex-partners of the respondent (but did not live with the respondent in the 12 months prior to each HTO Survey).
Social circle	A respondent's social circle includes household members, relatives, intimate partners, co-workers and friends.
Strangers	Includes people not known and not well-known to the respondent.
Turnover	The gross amount of change in either direction in a measured characteristic.

EXECUTIVE SUMMARY

BACKGROUND

In 2008, the first comprehensive study of the harms from alcohol experienced by people other than the drinker was undertaken in Australia. The study, published in 2010 as *The Range and Magnitude of Alcohol's Harm to Others* (Laslett et al. 2010), involved a population survey (2008 HTO Survey) and analysis of secondary data from a range of government agencies. The study concluded from the population survey that many Australians had been affected by a range of problems caused by the drinkers around them. Serious consequences of others' drinking were also evident in many of Australia's societal response systems. The study identified national annual totals of 14,000 hospitalisations, 70,000 incidents of alcohol-related assault and 20,000 cases of alcohol-related child abuse (Laslett et al. 2010).

The same report showed that almost three-quarters of the population reported that they had experienced at least some negative effect, and 14 per cent reported they had been affected to a large extent, by others' drinking. Furthermore, 29 per cent of respondents experienced harm attributable to the drinking of someone known to them, and 70 per cent experienced harm attributable to the drinking of someone they did not know well, or a stranger (Laslett et al. 2010).

BUILDING THE PICTURE

This report builds upon the 2008 HTO Study by revisiting the people who were surveyed to determine whether they continue to be affected by the harms incurred from others' drinking. The follow-up survey conducted in 2011 (2011 HTO Survey), closely followed the questionnaire used in the initial survey, focusing on adverse consequences to the respondent (or the respondent's child) from the drinking of family, friends, co-workers and strangers.

By revisiting a sample of those surveyed in 2008, the 2011 HTO Survey allows examination of the stability and change in harm from others' drinking, and what predicts changes in these harms from 2008 to their level in 2011. More specifically, the study addressed the following research questions:

1. What percentage of respondents in the 2011 follow-up sample were affected by others' drinking?
2. How did the 2011 HTO Survey findings compare with those of the 2008 HTO Survey?
3. Does a respondent's status in 2008, or changes in his/her circumstances from 2008 to 2011, predict harm from others' drinking in 2011?
4. What factors predict harm from others' drinking in 2011?
5. What predicts who is newly harmed among those who were not previously?
6. Among those harmed in 2008, what predicts who will not be harmed again in 2011?
7. What factors predict persistent harm from others' drinking, in comparison to persistent absence of such harm?
8. How do changes in the number of drinkers in respondents' lives and changing patterns of alcohol's harm to others affect respondents' quality of life and wellbeing?
9. For what proportion of the sample do problems associated with others' drinking result in use of services?
10. What predicts contact with emergency and health-related services because of others' drinking in 2011?

KEY FINDINGS

- In 2008 the first comprehensive study of the harms from alcohol experienced by people other than the drinker was undertaken in Australia.
- In 2011, 1,106 people involved in the original study were re-contacted to participate in a repeat survey to determine the stability and change in harm from others' drinking over time.
- Forty-four per cent of respondents reported having been negatively affected by others' drinking in 2011.
- Sixty-two per cent of respondents had experienced harm from others' drinking in at least one or both surveys.
- Personal experience of harm (or lack of harm) did not change for the majority (70 per cent) of respondents between 2008 and 2011, with almost a third of respondents harmed by others' drinking in both years (32 per cent) and 38 per cent not harmed in either year.
- Past experience of harm was a strong predictor of harm, with 65 per cent of respondents experiencing harm in 2008 reporting this again in 2011.
- The number of heavy drinkers in respondents' households and among other relatives and intimate partners in 2008 was a strong predictor of respondents' experience of alcohol-related harm in 2011.
- For each additional heavy drinker within their households, respondents were almost six times more likely to experience persistent harm from known problematic drinkers in their lives.
- Respondents' socio-economic characteristics and own risky drinking patterns had little bearing on harms arising or subsiding due to the problematic drinking of a family member or friend, suggesting that this type of harm is dispersed throughout the demographic and social groups within the sample.
- To reduce the significant social problem of alcohol's harm to others, policy responses at community, state and national levels are needed to diminish the prevalence of heavy drinking in the population.

THE 2011 HTO SURVEY

A total of 1,106 respondents completed the HTO Survey in 2011. One in six respondents (17 per cent) reported that they had been adversely affected by the heavy drinking of household members and other (non-household) relatives and intimate partners in 2011. A third of respondents (33 per cent) reported that they had been negatively affected by strangers' drinking. Combining adverse effects from any person's drinking (i.e. strangers or known problematic drinkers in the respondent's social circle), 44 per cent of respondents reported having been negatively affected in 2011.

COMPARING THE 2008 AND 2011 HTO SURVEYS

Somewhat smaller percentages of respondents reported being adversely affected by the heavy drinking of problematic drinkers they knew in the 2008 and 2011 HTO Surveys (29 per cent versus 24 per cent respectively). Similarly, a slightly smaller percentage of respondents reported harm from strangers' drinking in the 2011 survey than did so in 2008 (33 per cent versus 37 per cent). Overall, a slightly lower percentage of respondents reported harm from any other's drinking (i.e. strangers or known problematic drinkers) (44 per cent in 2011 versus 50 per cent in 2008). The decrease for those affected by strangers' drinking was statistically significant for the total sample and for men, as was the reduction in harms from others' drinking overall, but not for women. Given that younger respondents reported higher rates of harm from others' drinking, and the respondents in the sample are now three years older, the decrease is likely in part attributable to this age difference.

STABILITY AND CHANGE IN HARMS FROM OTHERS' DRINKING

In analysing the 2008 and 2011 data together, the majority of respondents (62 per cent) had experienced harm from another person's drinking in either or both years. The situation for the majority of respondents did not change between 2008 and 2011. The biggest contributor to this stability was the proportion of respondents for whom harms were not present in either year (38 per cent), although almost a third of respondents were harmed in both years (32 per cent). However, this apparent stability masks the substantial turnover in harms from others' drinking, amounting to around 30 per cent of the sample. For those who have been harmed previously, there is considerable evidence of discontinuation of harm, although this is mostly counterbalanced by the emergence of new harm from others' drinking that was not evident previously.

THE CORRELATES OF STABILITY AND CHANGE

Past harm was a strong predictor of harm from others' drinking in 2011. This suggests that particular attention might be paid to those who report problems, since recurrence of harm to them is more likely than harm occurring to others for the first time.

Harms from known problematic drinkers were predicted by the number, and change in the number, of heavy drinkers who were household members or non-household relatives and intimate partners of a respondent. While the respondent's age and gender were also associated with harm, this was primarily because younger people and women had more heavy drinkers in their household or as an intimate partner.

In examining harms from strangers, age was a factor, and changes in the number of non-household relatives and intimate partners who were heavy drinkers again predicted whether respondents were more likely to experience harm from strangers in 2011. Changes in the number of heavy-drinking friends were also predictive of harm from strangers in 2011.

INITIATION AND DISCONTINUATION OF HARMS IN 2011

Higher numbers of heavy drinkers within a respondent's household and among non-household relatives and intimate partners in 2008, as well as increases in the numbers of these drinkers over time, were significant predictors of new harms from known problematic drinkers in 2011. New harms from strangers' drinking were associated with more heavy-drinking co-workers in 2008, an increase in heavy-drinking co-workers, and younger age.

Having fewer heavy drinkers within the household and among non-household relatives and intimate partners than in 2008 was a predictor of no longer reporting harm from known problematic drinkers in 2011. Decreases in the number of heavy-drinking relatives, intimate partners and friends were associated with discontinuation of harm from strangers in 2011.

PERSISTENCE OF HARMS IN 2011

Contrasting persistence of harm (in both the 2008 and 2011 surveys) with absence of harm in either year starkly differentiates who is most likely to suffer continuing harm from others' drinking. Persistent harm from known heavy drinkers was associated with the number of heavy drinkers in the respondent's social circle, especially household members and relatives and intimate partners, whereas heavy drinking relatives and intimates and heavy-drinking co-workers were associated with persistent harm from strangers' drinking.

In analysing harms from strangers, younger age was associated with persistence of such harms, although age was not a factor in predicting persistent harms from known problematic drinkers. Both for harm from the drinking of strangers and for harm from the drinking of those that they knew, increases in the numbers of heavy-drinking household members and non-household relatives and intimate partners, as well as being younger in age, predicted persistence of harm in respondents' lives.

CHANGES IN QUALITY OF LIFE AND WELLBEING

Lower (self-reported) quality of life and wellbeing were associated with increased exposure to heavy drinkers in respondents' lives who were non-household relatives and intimate partners. However, changes in harms from others' drinking were not significantly associated with changes in quality of life or wellbeing. This means that while the presence of more heavy-drinking non-household relatives and intimate partners was linked to lower quality of life and wellbeing, a reduction or an increase in reported harms from others' drinking was not significantly associated with changes in respondents' reports of their own wellbeing.

HELP-SEEKING BEHAVIOURS OF THOSE AFFECTED BY OTHERS' DRINKING

In 2011, of the respondents harmed by others' drinking, 13 per cent had called the police and seven per cent had called a health-related service because of other people's drinking in the previous 12 months. The majority of calls concerned a stranger's drinking (74 per cent); 16 per cent related to the drinking of people respondents knew, and a further ten per cent to the drinking of both strangers and people known to respondents. Previous calls to police because of others' drinking was the dominant predictor of calls to police in 2011. Reports of harm, especially previous harm from strangers' drinking, also played a significant part in predicting respondents' use of police services.

CONCLUSION

Overall, the 2011 HTO Survey indicated that 44 per cent of respondents were harmed by others' drinking in 2011, a smaller percentage than were harmed in 2008 (50 per cent). This was partly, but not completely, explained by the increasing age of the sample. Harm persisted in 2011 for three in ten respondents, and 62 per cent were harmed in one or both years.

The strongest predictor of harm from others' drinking in 2011 was having experienced harm in the past, even after other variables were controlled for. However, even taking this into account, reporting higher numbers of heavy drinkers in one's life was also a steady predictor of experiencing harm. In particular, the number of heavy drinkers in a respondent's household, or heavy drinkers who were relatives or intimate partners, was an important predictor of harm from known problematic drinkers. In the case of harm from strangers, increases in the number of heavy-drinking friends, along with non-household relatives and intimate partners, were the most significant predictors of harm. This makes intuitive sense, with harm from within the respondent's circles being linked with heavy-drinking family members but harm from strangers having a stronger link to heavy-drinking friends, since having heavy-drinking friends is likely to indicate how often a respondent might be out in a social environment where harm from strangers is more likely.

The demographics of the person being harmed, or even how much they themselves drink, are not strong predictors of experiencing harms from others' drinking. Instead, as described above, the key predictive factors are the number of heavy drinkers in a person's life and changes in this number over time.

The presence of more heavy drinkers in respondents' lives was also associated with lower health-related quality of life scores but, somewhat at odds with this, reported harm and change in harm attributable to these drinkers were not statistically significant as predictors of change in quality of life or wellbeing. Finally, the 2011 HTO Survey suggests that the majority of respondents have not sought assistance for harms caused by others' drinking from emergency or health-related services. Among respondents who had done so, assistance was sought most often from police, and more often when the respondent had sought such assistance in the past.

IMPLICATIONS FOR FUTURE RESEARCH AND POLICY

The social worlds of heavy drinking stretch across economic class and other demographic variables. The 2008 and 2011 HTO Surveys suggest that the size of respondents' heavy-drinking social circles is a strong predictor of the harm they will experience. This suggests that, to reduce the high rates of harm from others' drinking, policy responses at community, state and national levels are needed to diminish the prevalence of heavy drinking in the population.

Alongside heavy-drinking social contexts, younger age is predictive of harms from strangers over time. Therefore policies that aim to control the contexts in which young people drink, such as those policies that limit trading hours, the density of outlets as well as the enforcement of responsible service of alcohol policies and increased late-night public transport options will improve the safety and wellbeing of young people.

The study's results suggest that successful efforts to reduce rates of heavy-drinking individuals could, in turn, reduce the number of people being harmed by the drinking of others. Policy options such as increasing the price of alcohol are likely to contribute to reductions in pre-drinking by younger people and overall alcohol consumption in the population. Such policies that aim to reduce overall alcohol consumption will also reduce the harm to drinkers from their alcohol consumption, as well as diminish the impacts on services, such as police and hospital systems.

1 INTRODUCTION AND OVERVIEW

KEY POINTS

- Australia's first Alcohol's Harm To Others (HTO) Study was conducted in 2008, involving a cross-sectional population survey and analyses of secondary data from a range of sources.
- The 2008 HTO Study found that consequences of others' drinking were widespread and often severe. Another key finding highlighted an association between reduced wellbeing and exposure to heavy drinkers within respondents' social circles.
- The 2008 HTO Study and other studies investigating harm due to others' drinking have relied on cross-sectional data, thus only providing information about a single point in time. In order to understand the long-term impact and influence of problems associated with others' drinking, longitudinal investigations are needed.
- The aim of the current study (the 2011 HTO Study) is to examine the stability and change in harm from others' drinking between 2008 and 2011.

1.1 ALCOHOL'S HARM TO OTHERS: NEW PERSPECTIVES AND UNDERSTANDINGS

Most research on alcohol-related harms focuses predominantly on the harms that are experienced by drinkers themselves. For much of the last century, treatment and public health systems have also focused on managing people who consume alcohol. Researchers, too, with a few exceptions, have focused on drinkers' perceptions, drinkers' problems and responses to these. But drinking can also result in harm to individuals other than the drinker, as highlighted by drink-driving casualties (Gusfield 1981) and Fetal Alcohol Spectrum Disorders (Khalil et al. 2010; May & Gossage 2011; Meyer-Leu et al. 2011; Mullally et al. 2011). More broadly, Orford et al. (2013) have used qualitative data to outline the many ways in which families of alcohol-dependent people are negatively affected, while a number of studies have identified negative impacts on health and wellbeing due to drinking in spousal relationships. In these specific circumstances, recognition of harm to individuals from someone else's drinking has increased in recent decades (Connor et al. 2009; Greenfield et al. 2005; Laslett et al. 2013; Room 1996). Overall, much less attention has been paid to the broader perspective of alcohol's harm in household and family relationships and more widely in the community.

This changed in 2008, when the first comprehensive study of alcohol's harm to others was undertaken in Australia. *The Range and Magnitude of Alcohol's Harm to Others* (2008 HTO Study) examined the harms experienced by people around the drinker as a result of the drinker's alcohol consumption. This study involved a population survey (2008 HTO Survey) and analysis of secondary data from a range of government department data systems (e.g. health, social, welfare and justice). As part of the 2008 HTO Study, a model for understanding the social roles that may be affected by others' drinking was described (Laslett et al. 2010), which demonstrated the ways in which intimate, family, household, friendship, work and public roles may be affected by heavy drinkers.

1.2 FINDINGS FROM THE 2008 HTO STUDY: UNDERSTANDING THE SIZE OF THE PROBLEM

The broad picture that emerged from the 2008 HTO Study (Laslett et al. 2010) was that many Australian family and community members have been affected by a range of problems because of the drinkers around them. The effects identified were widespread and sometimes severe. Serious consequences of others' drinking were evident in many of Australia's societal response systems, in the police records of those who were victims of street assaults and domestic violence, in child protection cases, and in hospital and mortality databases. The 2008 HTO Study identified annual totals of almost 14,000 hospitalisations, 70,000 incidents of alcohol-related assault and 20,000 cases of alcohol-related child abuse (Laslett et al. 2010).

Alongside these severe harms, the 2008 HTO Survey showed that a much larger proportion of the Australian community was adversely affected by others' drinking, but these harms were generally not registered or managed by societal response systems. Almost three-quarters of the population reported that they had experienced at least some negative effect, and 14 per cent reported they had been affected to a large extent by others' drinking (Laslett et al. 2010). The 2008 HTO Survey found that 29 per cent of respondents experienced harm attributable to the drinking of someone known to them, 70 per cent experienced harm attributable to the drinking of someone they did not know well or a stranger (Laslett et al. 2010), and 22 per cent of those with children in their care felt one or more of these children had experienced harm attributable to the drinking of others in the last 12 months (Laslett et al. 2012).

Furthermore, analysis of the 2008 HTO Survey data found a significant cross-sectional association between reduced health and wellbeing and the number of heavy drinkers that respondents identified in their social circles. In particular, it was found that wellbeing, measured by the Personal Wellbeing Index (PWI) (International Wellbeing Group 2006), was significantly reduced when the respondent reported harm from drinkers outside the his/her household, while health-related quality of life (measured using the EuroQol Group 5-Dimension Self-Report Questionnaire score (EQ-5D) (The EuroQol Group 2009) was reduced by the presence of heavier drinkers both inside and outside the household (Laslett et al. 2010).

These findings have been reproduced in other settings. For example, Casswell et al. (2011) found that exposure to heavy drinkers (both within and outside the household) was associated with reductions in both health-related quality of life and wellbeing in a New Zealand sample (using the same measures as the previous Australian work).

1.3 IDENTIFYING THOSE MOST AFFECTED WHILE UNDERSTANDING THE WIDESPREAD NATURE OF ALCOHOL'S HARM TO OTHERS

Since the Australian 2008 HTO Study, and the New Zealand sister study in 2009 (Casswell et al. 2011), several studies have commenced across the world. Furthermore, conceptual aspects of the 2008 HTO Study and a modified version of the HTO Survey (World Health Organization, 2012) have been adopted as an international collaborative research effort by the World Health Organization (WHO) as part of its implementation of the Global Strategy on Alcohol (World Health Organization, 2010).

The 2008 HTO Study and other studies with similar framings have investigated variations by age and gender in the rates of harms experienced because of others' drinking. Findings suggest that young men are more likely to be physically abused and women sexually abused by someone who has been drinking (Connor et al. 2009), and women are more likely to live with and be affected by a known problematic drinker than men (Laslett et al. 2011). In an Australian population survey carried out in 2010, 18-19 year olds emerged as the age group most likely to experience verbal or physical assault from drinkers (Australian Institute of Health and Welfare 2011). A recent Finnish study found that women were more likely than men to experience harm attributable to the drinking of others, and that within the sphere of private space, the harm to women was more serious (Huhtanen & Tigerstedt 2012).

While gender and age appear to play a strong role in who is affected by others' drinking, the 2008 HTO Survey revealed few differences overall in Australia by socio-economic status (Laslett et al. 2010), suggesting that these harms are not limited to small and marginalised sections of the community.

The 2008 HTO Study and the developing research agenda across the globe (e.g. in Thailand, Nigeria, Chile, Switzerland) paints a troubling picture of the range of effects of individuals' drinking in terms of harm to those around them. However, the picture has been cross-sectional, showing relationships at one particular point in time.

1.4 STUDYING DRINKING PATTERNS AND PROBLEMS LONGITUDINALLY

Public health policy seeks to improve what is happening in a society and its population. To achieve this, it is necessary to measure and understand change and its conditions and determinants. Such studies of change can examine patterns at a population or subpopulation level – for instance, focusing on a particular community, studied continuously or repeatedly over time – or they can focus on a more microcosmic level, following individuals, families or small groups over time. The desire to understand change at these more intimate levels has driven the emergence of longitudinal studies that follow individuals or small groups over time. Such studies often enrol individuals or groups in an initial survey and then re-interview them at a later time to track patterns and predictors of change or continuity.

There have been many studies that have examined the changes in an individual's drinking over time. The application of such a longitudinal design to drinking patterns and problems has a lengthy history. Although data were collected retrospectively, Raymond Pearl's study of the relationship of drinking patterns to later mortality can be regarded as a landmark beginning to this line of research (Pearl 1926). By 1988, there had been sufficient work in the area for a review monograph (Fillmore 1988), and longitudinal studies of drinking patterns have continued to appear (e.g. Kerr et al. 2002).

The basic finding of these studies has been that there is substantial 'turnover', or change, in the amount of drinking from one observation to another. Young adults show greater change in patterns of drinking than older adults, and heavier drinkers show more change than those drinking lightly or abstaining when interviewed (Kerr et al. 2002). Some of this turnover reflects various kinds of measurement error; it is well established that there is substantial misreporting – particularly underreporting – of alcohol consumption (Gmel & Rehm 2004). But there is also a great deal of real change, with significant fluctuation in patterns of drinking among those who have periods of heavy drinking (even among those who are eventually identified as alcohol-dependent), so that many of those who are drinking heavily when interviewed at one time will not be doing so when re-interviewed. This phenomenon of 'regression to the mean' has been recognised as a consideration when, for instance, measuring the effects of a policy or treatment intervention (Skog & Rossow 2006; Babor 2008).

As might be expected, such fluctuations have also been found in patterns of problems arising from drinking when these are measured from the perspective of the drinker; that is, by asking drinkers at two or more time points about problems they have recently experienced with their drinking. Although fluctuations in heavy drinking and associated problems are greater for younger than for older adults, there is still considerable turnover between interviews in reporting of alcohol-related problems among those middle-aged and older (Fillmore 1987).

The 2011 HTO Survey was conducted to follow up respondents in the 2008 HTO Survey to examine stability and change in harm from others' drinking in an Australian sample. In particular, this report of analyses of 2008 and 2011 HTO data aims to determine what factors may predict these patterns over time.

1.5 STUDYING HARM FROM OTHERS' DRINKING LONGITUDINALLY: EXTRA DIMENSIONS OF VARIATION

While the established tradition of research in the area of problem drinking has approached alcohol-related harms from the perspective of the drinker, many of the harms from drinking are incurred by others. For this reason, a major focus of the Centre for Alcohol Policy Research (CAPR) studies of alcohol's harm to others has been to approach the issue of alcohol-related problems from the perspective of the 'others' – people in the Australian community with a variety of connections or relationships to drinkers for whom the drinking may result in harm.

Following a sample over time, and asking them again about harms they have experienced from others' drinking, is addressing a somewhat different range of questions to those posed by a longitudinal follow-up of drinkers about their problems with their own drinking. At follow-up, the person interviewed may still live with, or be strongly linked to, a heavy drinker who was a source of harm at the first interview. For instance, a respondent may be reporting on whether he/she is continuing to experience harms from a spouse's long-term drinking. However, it is also possible that any harm the respondent may be experiencing at follow-up is from another drinker altogether, who may be within the respondent's social circle or a stranger. Thus there may be no connection between the people causing an individual harm in the two time periods.

Over a three-year period, as studied with the HTO Surveys, the chance that any harms experienced at both reporting times are attributable to the same drinker is much less than 100 per cent. However, this chance varies with the drinker's relationship to the respondent: the likelihood that a respondent will be affected by the same drinker who is part of his/her household will probably be greater than the chance that harms will come from the same friend, which in turn will be greater than the likelihood of harms coming from the same stranger. The pattern of harms respondents report experiencing from others' drinking will thus be subject to both variations in the drinking patterns of those around them and to variations in the composition of their social circles.

1.6 DRINKING'S HARM TO OTHERS OVER TIME: REVIEW OF THE EVIDENCE

While there have been few or no studies that have re-interviewed a general population sample across two time points about their experiences of harm from others' drinking, there is some relevant research to explore.

As mentioned in Section 1.4, most of the research to date focused on continuity or change over time in alcohol's harms to others has been conducted with drinkers in treatment, and asked them about how they think their family life has been affected. One Russian study that surveyed the harmful drinker found that baseline levels of drinking were predictive of future harm in the form of family disruption (Keenan et al. 2011). Another study by this group found that, in a 14-year follow-up of married couples, divorce was strongly predicted by both the frequency and the quantity of spirits drunk per occasion by the husband, and even more strongly by the relatively uncommon pattern of binge drinking by the wife – though these patterns showed some variation across regions of Russia (Keenan at al. 2013).

In this review of the literature, studies involving close relatives of the drinker have been deemed as relevant to a longitudinal analysis. Although such (often qualitative) data are not strictly longitudinal, the studies do relate to relationships that continue over time. These studies rarely distinguish between drinking and drug use, though drinking is usually predominant.

Jim Orford and his colleagues have built a suite of literature describing the experiences of affected family members, including studies in a number of cultures (Orford et al. 2010). The informants or respondents in the studies have been members of the family affected by the substance user, and the emphasis has been on the deterioration of close family relationships, ill-health, signs of strain and other adverse effects. In addition, much of Orford's work has focused on how family members cope with the situation (whether by putting up with it, standing up to it, or withdrawing), and on the often-inadequate extent of outside support available to family members dealing with the situation.

A United States (US) study used advertisements in newspapers and other media to recruit 110 "concerned family members and significant others" who were "troubled" about an individual's alcohol and/or drug use. While there were few substantial differences in rates by problem domain between spouses and parents of the user and by gender of the respondent, problems in the "domain of the family" were more often reported by those living with the substance user than those who were not (Benishek et al. 2011). An analysis of the 2008 HTO Survey interviews – the initial survey used in the present analysis – also found that living with the known problematic drinker was a strong predictor of the respondent having been adversely affected "a lot," rather than "a little" (Berends et al. 2012).

Concerning relationships outside the close family, there have been few studies directly addressing harms from drinking which have implications for predicting continuity or change over time. Perhaps most relevant to the issue of continuity versus change are studies which are focused not on harms from drinking but rather on continuities in heavy-drinking cultures – i.e. examining the extent to which social worlds of heavy drinking act as a 'glue,' keeping participants to patterns of heavy drinking (Room 1973). It is clear from the lengthy tradition of observational studies of drinking places that the circles of friendship and mutual support among the 'regulars' at the bar are an important factor in sustaining a pattern of heavy drinking (Room 1972; 1981). Conversely, studies of the work of Alcoholics Anonymous and other mutual-help groups have found that a substantial element contributing to their success is their encouragement and ability to serve as an instrument of changes in patterns of friendship and sociability, away from other 'serious drinkers' to friends supportive of quitting (Humphreys et al. 1999).

These lines of work raise the question of the potential importance of immersion in heavy-drinking worlds in predicting continuity in the experience of harms from the drinking of others – including the drinking of friends, relatives and workmates.

1.7 THE RESEARCH GAP AND KEY QUESTIONS

It is clear from the literature described above that dealing with the resulting incidents and aftermath of someone's drinking, and covering for the drinker's incapacities, absorbs large amounts of time and the emotional energy of close family members. However, these findings provide only the corner of the picture, in which a person's heavy drinking often continues for a considerable time and yet, despite all that occurs, relationships persist. The literature does not address or answer the questions of how much turnover there is in alcohol's harm to others, and whether this varies by relationship. Nor does the literature directly address the extent to which heavy drinking is a part of the social context of a relationship, and the extent to which immersion in a heavy-drinking social circle may predict continuity in harms from others' drinking.

This research gap is addressed in this study. The 2008 HTO Survey enabled the establishment of a baseline, a clear estimate of the range and magnitude of alcohol's harms to others in Australia. The 2011 HTO Survey enables the harm from others' drinking to be followed up over time. The overall aim of the current study is to examine the stability and change in harm from others' drinking between 2008 and 2011.

The key research questions addressed are:

1. What percentage of respondents in the 2011 follow-up sample were affected by others' drinking? (Chapter 3)
2. How did the 2011 HTO Survey findings compare with those of the 2008 HTO Survey? (Chapter 3)
3. Does a respondent's status in 2008, or changes in his/her circumstances from 2008 to 2011, predict harm from others' drinking in 2011? (Chapter 4)
4. What factors predict harm from others' drinking in 2011? (Chapter 4)
5. What predicts who is newly harmed among those who were not previously? (Chapter 4)
6. Among those harmed in 2008, what predicts who will not be harmed again in 2011? (Chapter 4)
7. What factors predict persistent harms from others' drinking, in comparison to persistent absence of such harm? (Chapter 4)
8. How do changes in the number of drinkers in respondents' lives and changing patterns of alcohol's harm to others affect respondents' quality of life and wellbeing? (Chapter 5)
9. For what proportion of the sample do problems associated with others' drinking result in use of services? (Chapter 6)
10. What predicts contact with emergency and health-related services because of others' drinking in 2011? (Chapter 6)

2 METHODS

KEY POINTS

- A follow-up study design of 2008 and 2011 HTO Surveys was used to examine harms from others' drinking over time. This study design incorporated data from those interviewed in both the 2008 and the 2011 HTO Surveys.
- The research approach aims to understand how the baseline variables and changes in these variables over time predict harm in 2011.
- The main outcome variables used in the study are harm from strangers' drinking, harm from problematic drinkers in the respondent's social circle, overall harm from others' drinking, health-related quality of life and wellbeing, and help-seeking behaviours of those affected by others' drinking in 2011.
- Predictor variables used to examine the key outcomes of harm include measures of harm in 2008 (past harm), socio-demographic variables, the respondent's own drinking pattern, and the numbers of heavy drinkers and changes in the numbers of heavy drinkers in different relationships with the respondent.
- Simple descriptive analyses and logistic regression techniques were used to analyse the data bivariately and then multivariately, adjusting for the effects of other variables in the analysis.
- 1,106 participants completed the Harm to Others (HTO) follow-up survey between October 2011 and February 2012. The response rate for the follow-up survey was 42 per cent of the initial 2008 sample and 48 per cent of those in that sample who agreed to participate in future studies.
- Age was the only significant predictor of attrition from the 2008 to the 2011 HTO Survey.

The 2008 HTO Survey looked at the ways in which Australians had been harmed because of the drinking of others across a full range of possible impacts, from less severe to serious harms, at one point in time (Wilkinson et al. 2009; Laslett et al. 2010). The follow-up 2011 HTO Survey closely followed the questionnaire used in the initial survey. As described in Chapter 1, the key aim of this study is to report upon the longitudinal patterns in harm from others' drinking, and what predicts changes in these harms from 2008 to their new levels in 2011.

In 2011 ethics approval was obtained from the Eastern Health Human Research Ethics Committee (HREC) in Victoria. The Social Research Centre (SRC), which conducted the fieldwork for the initial survey, also conducted the computer-assisted telephone interviews for the follow-up survey on behalf of the CAPR.

2.1 RESEARCH ANALYSIS APPROACH

From the time of development of the 2008 HTO Study, the researchers were aware that longitudinal studies provided a stronger research design to understand patterns of interactions and causation than cross-sectional studies. Provisions were made at the time of the initial study to re-interview participants who agreed to be re-contacted. Both survey questionnaires captured the number of heavy drinkers (if any) in respondents' lives and adverse consequences to respondents (or their children) in the previous 12 months from the drinking of family, friends, co-workers and strangers (or those not well-known to the respondent).

The longitudinal data from the 2008 and 2011 surveys presented a unique opportunity to examine how individual experience of alcohol's harm to others changed over time. However, these opportunities were accompanied by challenges in optimising analysis of these data. The first question was how to analyse the data to account for the respondent's situation in 2008 and in 2011, and the level of change (if any) between the two time points. An option initially considered was the use of change scores, often used as outcome variables in longitudinal studies to measure the difference between initial and follow-up scores describing, for example, changes in levels of anxiety or depression (Christensen et al. 2002). However, in the HTO Study, this approach presents difficulties because changes in harm scores do not account for the original state, so that someone with a change score of 0 may have been harmed at both time points or neither point of time. Furthermore, change scores are not appropriate outcome variables when it is believed that the outcome at time point 1 (in this case, 2008) will affect the outcome at time point 2 (2011) (Allison 1990). As discussed in Chapter 3, those who reported experiencing harm in the 2008 HTO Survey were more likely to experience it again in 2011, so this method was not deemed appropriate in the current study.

To gain greater insight into alcohol's harm to others, both whole-sample holistic models (Chapter 2, Section 2.1.1) and partial-sample models that examine particular changes (Chapter 2, Section 2.1.2) are used in this report. While it is expected that many of these analyses will yield similar results, it is important to examine these questions in different ways. The analyses also examine seemingly similar questions from opposite perspectives. Initiation of harm from others' drinking may not be precipitated simply by the inverse of something that predicts discontinuation.

2.1.1 OVERALL MODELS PREDICTING HARM OVER TIME (WHOLE-SAMPLE MODELS)

The models presented in Chapter 4 (Section 4.2) are logistic regression models with harm in 2011 as a dichotomous (yes/no) outcome variable. Harm in 2008, also a dichotomous variable, is included as a predictor variable. This method enabled an examination of the existence of harm (or lack thereof) in 2008 as a predictor of harm in 2011. Both the starting point of each respondent (i.e. either harmed or not harmed in 2008) is accounted for, as well as changes in a respondent's life between 2008 and 2011. One of the primary advantages of this method is that (unlike the methods outlined below that answer more specific questions on the initiation, discontinuation or persistence of harm) all participants are included in this model. As such, a more global overview of the prediction of harm over time is provided.

Another feature of these models is the use of change scores in the numbers of heavy drinkers in different areas of a respondent's social circle as predictor variables. Therefore, in the multivariate models it is possible to examine how, for example, an increase in the number of heavy drinkers in a respondent's household will affect the likelihood of experiencing harm in 2011, while taking into account both the number of heavy drinkers in the household in 2008 and whether or not the person was harmed then.

2.1.2 INITIATION, DISCONTINUATION AND PERSISTENCE OF HARM MODELS (PARTIAL-SAMPLE MODELS)

The whole-sample models outlined above in effect assume that the predictors of change in one direction will mirror the predictors of change in the other direction. As this may not be true, additional models are presented that predict separately the initiation (Chapter 4, Section 4.3), the discontinuation (Chapter 4, Section 4.4) and the persistence of harm (Chapter 4, Section 4.5). For example, in the case of discontinuation of harm, those who were harmed in 2008 are taken as the starting point of analyses to identify what factors predict not being harmed again in 2011. Previous examples of this mode of analysis include studies investigating discontinuation of smoking (Braverman, Aarø & Hetland 2007) or initiation of substance use (Hartman et al. 2013). One of the real advantages of investigating the data in this way is that the predictors of initiation of harm may not simply be the inverse of the predictors of discontinuation of harm.

Some of those people reporting harm at a given time point may not have been harmed before and may not be harmed again. Conversely there may be some respondents who experienced a brief respite from harm that included the 12 months prior to the survey. This is a confounding factor in any cross-sectional research, so the opportunity to examine those who were harmed at both time points and compare them to those who were harmed at neither provides a more focused, longer term view of the correlates of harm. These models, predicting persistence of harm, are shown in Chapter 4 (section 4.5).

2.2 SAMPLE RESPONSE RATE AND ATTRITION ANALYSIS

The 2008 HTO survey sample was based on a national probability sample intended to be as representative as possible of the population of Australians aged 18 years or older, and the sample was weighted to match census distributions in order to better meet this aim. In the present analyses, which include 2008 and 2011 survey data, sampling weights were not used, since the emphasis of this study is on patterns of change and continuity at the level of the individual respondent and his/her social environment. In part, this is why any percentages that are referred to within the document should not be taken as representative of rates in the Australian population. However, research questions about change at the individual level are less sensitive to the question of representativeness than, for instance, questions about the best estimate of rates overall in a population.

The sampling frame in the 2008 Survey was based upon Australian telephone landlines, excluding business numbers. In 2011 the sampling frame of the longitudinal study was by definition limited to the 2,304 participants (87 per cent of those interviewed in 2008) who agreed then to be re-contacted.

A total of 1,106 respondents completed the follow-up survey between October 2011 and February 2012. The response rate for the 2011 HTO Survey, on the basis of all those interviewed in 2008, was 42 per cent. This response rate was lower than hoped, so it was important to test whether the losses from 2008 to 2011 were random and not systematic. A logistic regression model from the 2008 data, predicting being a respondent in 2011, is shown in Table 2.1.

Reduced alcohol consumption in a follow-up sample has been attributed to differential attrition of heavy drinkers (Grittner et al. 2011). As a parallel phenomenon, it may be that any reduction in harm reported over time is, at least in part, attributable to the attrition of those who were being harmed more. However, as can be seen in Table 2.1, age is the only significant predictor of participation/attrition from the 2008 to 2011 HTO Surveys. Participants in the older age group were more likely to respond in 2011, whilst younger participants were less likely to respond.

Table 2.1 Logistic regression model predicting participation in second survey from first survey responses		
Variable	**BIVARIATE**	**MULTIVARIATE**
Age		
18-35	1 (Ref)	1 (Ref)
36-55	2.81***	2.85***
56 and over	2.81***	2.80***
Gender		
Female	1 (Ref)	1 (Ref)
Male	0.97	0.99
Rurality		
Cities	1 (Ref)	1 (Ref)
Regional	1.19*	1.19
Remote	1.09	1.06
Neighbourhood affluence		
Most disadvantaged	1 (Ref)	1 (Ref)
2	1.11	1.06
3	1.06	0.97
4	1.22	1.21
Least disadvantaged	1.03	1.08
5+ drinking occasions/week [a]	1.01	1.04
Harm from problematic drinkers		
None	1 (Ref)	1 (Ref)
A little	1.04	1.18
A lot	0.98	1.08
Harm from strangers		
None	1 (Ref)	1 (Ref)
A little	0.80**	0.88
A lot	1.07	1.15

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

N=2599.

[a] The number of times that the respondent stated he/she drank five or more standard drinks in a session in a week.

In order to further examine the differences between the samples, the demographic characteristics of the sample, in various forms, are shown in Table 2.2. The mean age at the 2008 HTO Survey of those who responded in 2011 was 50.7 years, versus 45.6 years for those who did not respond in 2011. Substantial attrition of young adults is a common problem in longitudinal sampling (e.g. Bergman et al. 2010; Redwood et al. 2011), and none of the other factors were significant in the multivariate model (see Table 2.1).

Table 2.2 Demographic characteristics of the HTO sample					
Variable	**TOTAL 2008 WEIGHTED**	**TOTAL 2008 UNWEIGHTED**	**2008: NOT A RESPONDENT IN 2011**	**2008: RESPONDENT IN 2011**	**2011 ANSWER**
(N)	**2,646**	**2,646**	**1,543**	**1,103**	**1,103**
Gender (% male)	**48.7**	**41.1**	**40.8**	**41.5**	**41.5**
Average age in 2008	**45.5**	**47.8**	**45.6**	**50.7**	**50.7**
Employment status					
Working (%)	63.3	60.2	60.6	59.7	59.2
Studying (%)	7.1	5.3	6.5	3.5	1.8
Retired (%)	16.8	19.5	17.5	22.2	25.4
Home duties (%)	8.2	9.2	9.3	9.1	6.7
Other (%)	4.4	5.8	6.1	5.4	6.9
Household					
Live alone (%)	9.2	17.8	18.2	17.3	17.8
With under 18s (%)	39.6	39.3	40.1	38.1	35.6
With over 18s only (%)	51.2	42.9	41.7	44.6	46.6
Neighbourhood affluence					
Most disadvantaged (%)	14.9	14.2	14.7	13.5	14.4
2 (%)	17.4	17.2	17.1	17.4	16.8
3 (%)	19.7	19.9	20.0	19.6	19.7
4 (%)	22.1	22.3	21.2	23.8	24.0
Least disadvantaged (%)	25.9	26.5	27	25.7	25.1
Rurality					
City (%)	54.3	55.5	57.2	53.1	52.6
Regional (%)	40.6	39.8	38.1	42.1	42.9
Remote (%)	5.1	4.8	4.8	4.8	4.5

In the first column, the demographics of the full weighted 2008 sample are shown; the second column also shows the full 2008 sample, but without weighting. The 2008 demographics of those who did not respond in 2011 are shown in the third column, and the 2008 demographics of those who did respond in 2011 are shown in the fourth column. Finally, demographics of the 2011 sample are shown in the fifth column. Note that in order to keep comparability, the age shown in this fifth column is the age at the 2008 sample, and thus is the same as that shown in the fourth column.

As can be seen, most of these proportions are similar, with the exception of the proportion of respondents who live alone being lower (9.2 per cent) in the weighted 2008 sample than it is in the other samples. This indication that people living alone are overrepresented in the unweighted samples is most likely to be a reflection of their automatically being the potential respondent if and when they answer the phone, while someone who lived with three other adults would only have a one in four chance of being chosen to participate, and for any of the others there would be a further step of follow-up and recruitment. As would be expected given the attrition analysis, age in 2008 was higher for those also in the 2011 sample than for those who were not. Furthermore, employment status was different, probably due to an increase in the proportion of retired respondents.

Pilot testing for the follow-up survey was undertaken in October 2011 and a total of 15 interviews were completed with an average interview length of 24 minutes. A larger pilot was not conducted as the survey instrument had changed little from 2008.

2.3 SURVEY MEASURES

The original survey was developed specifically for the 2008 HTO Study, drawing on the available literature, in consultation with a team working on a related study at the Centre for Social Health Outcomes Research Evaluation (SHORE) in New Zealand (Wilkinson et al. 2009). For the most part, the 2011 survey instrument included the same set of questions as those asked in 2008. However, a small number of additional questions were added, for example to capture change in household composition between 2008 and 2011, and some specific consequences of harm.

The follow-up 2011 HTO Survey included questions on the number and relationship of heavy drinkers in the respondent's life, and on harm from these heavy drinkers (including the person who had most harmed the respondent) and harm from strangers' drinking. For a copy of the substantive questions in the survey instrument see Appendix B.

2.4 KEY OUTCOME VARIABLES

The key outcome variables collected by the survey are the different types of harm and states of health-related quality of life and wellbeing respondents reported experiencing in the past 12 months in 2011. The outcomes investigated in the study research questions are listed below.

2.4.1 HARM FROM KNOWN PROBLEMATIC DRINKERS' AND STRANGERS' DRINKING

In both iterations of the HTO Survey, respondents were asked about the heavy drinkers in their lives in terms of their relationship to them, and asked to state whether or not the heavy drinker's (or group of heavy drinkers') consumption had negatively affected them. These questions were repeated for:

- household members (including family and non-family members)
- non-household relatives and intimate partners
- friends
- co-workers.

Collectively, the people in these four subcategories of the respondent's social circle whose drinking adversely affected the respondent in the previous 12 months are referred to in this report as 'known problematic drinkers'.

Respondents were then asked to assess the overall level of harm they had experienced from known problematic drinkers in terms of whether they were harmed "a lot" or "a little." In 2011, 266 of the 1,106 respondents (24.1 per cent) stated that they had one or more known problematic drinkers in their lives and they had either been harmed "a little" or "a lot" by the known problematic drinker whose drinking had been most harmful. Typically, known problematic drinkers were people living with the respondent, family members (either co-habiting or not) or a friend.

In addition to examining harm from known problematic drinkers, the analysis also examined harm from the drinking of strangers (including someone not well-known to the respondent). In 2011, 359 (32.5 per cent) of the respondents stated that they considered themselves harmed, either "a little" or "a lot," in the past 12 months by the drinking of strangers.

Respondents' self-assessment of harm from others' drinking was used to generate three main outcome variables, describing harm from known problematic drinkers, harm from strangers, and harm from both of these groups. Finally, a simple measure of experience of harm from either known problematic drinkers' or strangers' drinking was used to measure "any harm."

2.4.2 INITIATION AND DISCONTINUATION OF HARM

Initiation of harm from known problematic drinkers is based on respondents who were not harmed by known problematic drinkers in 2008 but were in 2011, with the measure of harm based on a respondent's own judgement that he/she was harmed either "a little" or "a lot."

Initiation of harm from strangers was similarly identified.

Analogously, discontinuation of harm from known problematic drinkers is based on respondents who were harmed by known problematic drinkers in 2008 but not harmed in 2011. Discontinuation of harm from strangers was similarly identified.

2.4.3 PERSISTENT HARM

A respondent's own judgement of whether he/she was harmed either "a little" or "a lot" at both time points was used as a measure of persistent harm from known problematic drinkers, from strangers, and from both groups. Those harmed at both time points are compared in the persistence analysis with those not harmed at either time point.

2.4.4 PERSONAL WELLBEING

Personal wellbeing was measured using the Personal Wellbeing Index (PWI), a standardised tool developed by Cummins et al. (2003). The PWI measures satisfaction across eight domains (standard of living, health, life achievements, personal relationships, safety, community, security and spirituality) and combines the results to produce a well-validated measure of overall subjective wellbeing with a minimum of 0 (complete dissatisfaction) and maximum of 100 (complete satisfaction). Full details of the scoring method used to create the PWI are available in the PWI manual (The International Wellbeing Group 2006).

2.4.5 QUALITY OF LIFE

Health-related quality of life (HRQoL) was measured using the EQ-5D (European Quality of Life-5 Dimensions), a standardised and non-disease-specific measure (the EuroQol Group 1990). This scale is a well-validated and widely-used measure of HRQoL (Rabin & de Charro 2001). To complete this measure, respondents were required to self-rate their own health across five domains (mobility, self care, usual activities, pain/discomfort and anxiety/depression) with three possible ratings (no problems, some problems, or major problems). The responses for these five items have been converted into a combined utility score, with a score of one equivalent to full health and a theoretical score of zero equivalent to death. This conversion was undertaken using weights derived from a large-scale UK study of health preferences (Dolan et al. 1995) to take into account that problems in some domains are more burdensome than problems in others. In the present analyses, this utility score was then multiplied by 100 to put it in the same metric as the PWI (0-100).

2.4.6 SERVICE USE

Use of services in the last 12 months because of others' drinking was measured as part of the HTO Surveys, with only respondents who reported any harm from another person's drinking asked about service use. Use of services included calls to the police and use of health-related services including:

- hospitals or emergency departments (ED)
- other medical treatment (other than a hospital or ED)
- seeking counselling or professional advice, or contact with self-help groups or organisations.[1]

[1] The use of self-help groups was a new item included in the 2011 survey.

A dichotomous measure of harm was developed that distinguished respondents who reported calling the police due to the drinking of others from those who reported experiencing harm but did not use these services. The four health-related services described above were combined into one dichotomous 'yes'/'no' variable, where a 'yes' response indicated use of at least one health-related service.

Contextual information about the last call respondents made to the police was also collected in the 2011 survey (but not in 2008). Specifically, respondents were asked to indicate if they called police because of strangers' drinking, the drinking of people they knew, or both. Furthermore, respondents were asked to report the main reason for the call from a list of responses, and could choose one or more of: verbal disagreement, noise, physical fight/assault, trespassing, vandalism, robbery and other.

2.5 KEY PREDICTOR VARIABLES

2.5.1 DEMOGRAPHICS

Three main demographic predictors are used in this report: gender, age and neighbourhood affluence (as an indicator of social position). Gender remained constant between the two time points for all respondents, and age obviously changed systematically, with differences in years of age between the two time points being between two and four years. Neighbourhood status varied very little, since respondents of both surveys who moved tended to move into a neighbourhood with the same dichotomised Socio-Economic Index For Areas (SEIFA) level (see Box 2.1) as their previous residence. Because of these considerations, 2008 responses for these three variables are used in all analyses.

Box 2.1 Demographic predictor variables

PREDICTOR VARIABLE	DESCRIPTION
Gender	In regression models the reference category is men, so odds ratio numbers above 1.0 indicate that the outcome variable in question is more common in women.
Age	In most analyses, age is broken into three categories, all of which are based on age as of the time of the 2008 survey; 18-35, 36-55, 56 and older. 18-35 is the reference category for most of these analyses; therefore high numbers (odds ratios above 1.0) would indicate that the outcome variable in question is more common in the older group in question when compared to the youngest group.
Neighborhood affluence	The measure of neighbourhood affluence in this study is based on the SEIFA[2] score for each respondent's postcode. Neighbourhood affluence is measured on a scale of 1 to 5, where 1 is the most disadvantaged and five is the least disadvantaged. In order to facilitate interpretation of results, the 1 to 5 scale was re-coded into two groups of roughly equal size, low affluence (score of 1-3) and high affluence (score of 4-5, used as the reference category).

2.5.2 RESPONDENTS' RISKY DRINKING

The measure of the respondent's own alcohol consumption used in the current study is the number of times per week that the respondent stated he or she drank five or more standard drinks in a session (i.e. how many 'heavy drinking occasions' in a week). This is the number of drinks that the National Health and Medical Research Council (NHMRC) considers 'risky' in a single session (National Health and Medical Research Council 2009). As some of the frequency response options needed to be converted from answers in terms of 'per month' or 'per year', these were all transformed to a number of times per week, thus resulting in a continuous variable that could range from zero to seven (five plus occasions). For instance, if a respondent reported drinking five or more standard drinks on a single occasion once a fortnight, he/she would have a score of 0.5, if he/she reported doing so three times a week he/she would have a score of three. As there is sometimes interest in the frequency of heavier drinking at either time point and sometimes in the change in the frequency between the two time points, two different predictor variables were used in the analyses (see Box 2.2).

[2] SEIFA stands for Socio-Economic Indexes For Areas and is a measure constructed by the Australian Bureau of Statistics. SEIFA shows how disadvantaged an area is compared with other areas in Australia (ABS 2006).

Box 2.2 Risky drinking predictor variables

PREDICTOR VARIABLE	DESCRIPTION
Five plus occasions/week 2008	The number of times that the respondent reported drinking five or more standard drinks in a session ('heavy drinking occasions') in a week.
Five plus occasions/week difference	The change in the number of heavy-drinking occasions reported by the respondent between 2008 and 2011 (positive values indicate an increase in heavy-drinking occasions, negative values indicate a reduction).

2.5.3 HEAVY DRINKERS IN THE RESPONDENT'S SOCIAL CIRCLE

A common theme throughout this report is that the number of heavy drinkers in a respondent's social circle is examined as a predictor of, among other things, harm. Respondents were asked to nominate heavy drinkers (people who the respondent considered "fairly heavy drinkers, or who drink a lot sometimes") in different relationships to them. These have been summarised into five relationship types:

- people in the respondent's household
- relatives and intimate partners (not living with the respondent)
- friends
- co-workers
- others (including acquaintances, neighbours, etc.).

When examining harm from 'known problematic drinkers', using exposure to heavy drinkers as a predictor could at first glance seem somewhat tautological, as it is not possible for respondents to be harmed by known problematic drinkers if they have no heavy drinkers in their lives. However, the question of whether a person's drinking had "negatively affected you in some way in the last 12 months" was asked separately from asking the respondent to list by relationship persons whom he/she considered to be someone who is "a fairly heavy drinker, or drinks a lot sometimes," and the fact that heavy drinkers in the respondent's social circle may be an important predictor of harm is an issue that deserves further examination.

Apart from this, the contingent relationship between reporting adverse consequences from others' drinking and having a heavy drinker in one's life is dealt with in a number of ways. First of all, in any regression models predicting harm, the number of heavy drinkers, rather than a dichotomous variable indicating the presence or absence of heavy drinkers, is used. This means that much of the variation in the heavy-drinking variable is not attached to the contingency for harm. Secondly, numbers of heavy drinkers in respondents' social circles are analysed in four categories – household members, relatives and intimate partners, friends and co-workers – reducing multicollinearity. For instance, it is possible for a person to be harmed by a co-worker who is a heavy drinker while having no heavy-drinking friends. Finally, the fifth category of drinkers, 'other heavy drinkers', which includes neighbours, acquaintances and classmates, is not included in these analyses, providing an extra degree of freedom.

As with some of the previously mentioned predictors, there is sometimes interest in both the number of heavy drinkers at either time point and the change in this number over time. Therefore there are two types of predictor variable for each heavy drinker category. The key predictor variables are listed in Box 2.3.

Box 2.3 Heavy drinker predictor variables

PREDICTOR VARIABLE	DESCRIPTION
Household heavy drinkers 2008	The number of household members identified in 2008 as "heavy drinkers or people who drink a lot sometimes."
Non-household relatives and intimate partners heavy drinkers 2008	The number of non-household relatives or intimate partners identified in 2008 as "heavy drinkers or people who drink a lot sometimes."
Friend heavy drinkers 2008	The number of friends identified in 2008 as "heavy drinkers or people who drink a lot sometimes."
Co-worker heavy drinkers 2008	The number of co-workers identified in 2008 as "heavy drinkers or people who drink a lot sometimes."
Total number of heavy drinkers 2008	The combined number of household members, non-household relatives and intimate partners, friends and co-workers in respondents' life identified in 2008 as "heavy drinkers or people who drink a lot sometimes."
Household heavy drinkers difference	The change in the number of household heavy drinkers reported by the respondent between 2008 and 2011 (positive values indicate an increase in household heavy drinkers from 2008 to 2011; negative values indicate a reduction).
Non-household relatives and intimate partners heavy drinkers difference	The change in the number of non-household relatives and intimate partners heavy drinkers reported by the respondent between 2008 and 2011 (positive values indicate an increase in relatives and intimate partners heavy drinkers from 2008 to 2011; negative values indicate a reduction).
Friend heavy drinkers difference	The change in the number of heavy-drinking friends reported by the respondent between 2008 and 2011 (positive values indicate an increase in heavy-drinking friends from 2008 to 2011; negative values indicate a reduction).
Co-worker heavy drinkers difference	The change in the number of co-worker heavy drinkers reported by the respondent between 2008 and 2011 (positive values indicate an increase in co-worker heavy drinkers from 2008 to 2011; negative values indicate a reduction).
Number of heavy drinkers difference	The change in the number of all heavy drinkers reported by the respondent between 2008 and 2011 (positive values indicate an increase in heavy drinkers from 2008 to 2011; negative values indicate a reduction).

2.5.4 HARMS

Finally, when predicting the likelihood of harm from known problematic drinkers or strangers in 2011, an important predictor variable was the existence of the corresponding harm in 2008. This was included so that the focus of the multivariate models could be on the change in the existence of harm over time, taking into account the respondent's status prior to the period studied. This predictor variable is always dichotomous and is derived from the 2008 version of the question asked to gain the outcome variable in 2011. Therefore, a model with an outcome variable of harm from known problematic drinkers in 2011 will include the existence of harm from known problematic drinkers in 2008 as a predictor variable. This approach is discussed in more detail in Section 2.6.

Predictor variables based on a continuous measure of harm from drinkers were used in multivariate models predicting quality of life and wellbeing (Chapter 5). Scores from 2011 were calculated using the respondents' gauge of how much harm they experienced from known problematic drinkers and strangers on a scale of 0-10. However, this question was not asked in 2008, so when scores from both time points are of interest, those who stated they were harmed "a little" by either a stranger or a known problematic drinker were given a score of 3.5 and those who stated they were harmed "a lot" were given a score of 8. The rationale behind this scoring is detailed in Appendix C.

In Chapter 6, a further set of harm predictor variables were used in a multivariate model predicting calls to police about others' drinking. These variables are based on the total number of specific harms respondents reported. In both the 2008 and 2011 surveys, respondents were asked if they had experienced any of 14 specific harms in the previous 12 months from the known problematic drinker whose drinking had been most harmful. For example, the specific harms items included "been emotionally hurt or neglected because of their drinking" and "stopped seeing them because of their drinking."

In addition, all respondents, regardless of whether they had been harmed by a known problematic drinker, were asked if they had experienced any of 14 specific harms in the past 12 months from strangers' drinking, including items such as "been involved in a traffic accident because of someone's drinking" and "felt unsafe in a public place because of strangers' drinking."

Within the multivariate models, the predictor variables are based on the totals reported in 2008, as well as the change in the number of specific harms experienced from known problematic drinkers' and strangers' drinking from 2008 to 2011.

The various harm predictor variables used in the multivariate analyses are shown in Box 2.4.

Box 2.4 Harm predictor variables

PREDICTOR VARIABLE	DESCRIPTION
Harm from known problematic drinkers in 2008	This dichotomous variable is a measure of the existence of harm from known problematic drinkers in 2008. When using harm from known problematic drinkers in 2011 as an outcome variable, the existence of harm from known problematic drinkers in 2008 will be used as a predictor variable.
Harm from strangers in 2008	This dichotomous variable is a measure of the existence of harm from strangers' drinking in 2008. For instance, when using harm from a stranger in 2011 as an outcome variable, the existence of harm from a stranger in 2008 will be used as a predictor variable.
Any harm in 2008	This dichotomous variable is a measure of the existence of harm from the drinking of either known problematic drinkers or strangers in 2008. For instance, when using any harm in 2011 as an outcome variable, the existence of any harm in 2008 will be used as a predictor variable.
Known problematic drinkers harm score	The amount of harm the respondent reported from a known problematic drinker (for 2008 responses, "a lot" = a score of 8; a little = a score of 3.5; none = a score of 0).
Stranger harm score	The amount of harm the respondent reported from strangers' drinking (for 2008 responses, "a lot" = a score of 8; a little = a score of 3.5; none = a score of 0).
Known problematic drinkers harm score difference	The difference between the amount of harm respondents report from known problematic drinkers they knew in 2011 and 2008.
Stranger harm score difference	The difference between the amount of harm respondents report from strangers' drinking in 2011 and 2008.
Called police in 2008	This dichotomous variable is a measure whether the respondents called the police because of others' drinking in 2008.
Number of known problematic drinker harms in 2008	The number of specific harms from a known problematic drinkers' drinking (from a list of 14 harm questions) reported by the respondent in 2008.
Number of known problematic drinker harms difference	The change in the number of harms from a known problematic drinker's drinking reported by the respondent between 2008 and 2011 (positive values indicate an increase in number of harms from 2008 to 2011; negative values indicate a reduction).
Number of stranger harms in 2008	The number of specific harms from strangers' drinking (from a list of 14 harm questions) reported by the respondent in 2008.
Number of stranger harms difference	The change in the number of harms from strangers' drinking reported by the respondent between 2008 and 2011 (positive values indicate an increase in number of harms from 2008 to 2011; negative values indicate a reduction).

2.6 DATA ANALYSIS

Analyses in this study are based on the 1,106 Australian adults who participated in both the first and second waves of the HTO Surveys. While there were 2,645 respondents in the 2008 survey, only the 1,106 who also completed the 2011 survey were used in the analyses for this report (including analyses of only the 2008 data). This enables comparisons between responses at the two time points.

All data analysis was conducted with Stata version 12. Throughout the report, simple descriptive statistics have been used, e.g. percentages, means and confidence intervals. Where tests of statistical difference between the 2008 and 2011 surveys have been examined, Chi-square tests have been used for categorical data, and t-tests and Pearson's r correlation coefficients for continuous data. The primary method of analysis in this report is logistic regression. As noted in the section outlining commonly-used outcome variables, many of these are dichotomous (e.g. a respondent either was or was not harmed), with the models providing a way to compare these two groups. In a few cases the outcome variable is continuous, rather than dichotomous, such as the continuous any harm score and PWI. In these instances multiple linear regression models were developed instead.

Where not otherwise noted, analyses are conducted on the entire 2011 sample. However, where a specific question could be better answered by removing some of the sample, then a limited sample is used. Examples of this include analysis of whether respondents report the use of services, or where a particular form of change over time is being examined. For instance, where initiation of harm is examined in Chapter 4, Section 4.3, the sample is made up of those who were not harmed in 2008, with the aim of the analysis to predict who among them went on to be harmed in 2011.

In all tables showing regression type analyses, the word 'Ref' in round brackets denotes the reference category of a categorical predicator variable. For example, 'Age' is a predictor variable in many of the analyses, and '18-35' is the reference category. Results reported in regression type analyses indicate whether the 'reference category' (e.g. aged '18-35') makes a difference to the outcome being measured, relative to the other category of the predictor variable (e.g. aged 36-55).

In analyses where the outcome variable is categorical, for example '2008 HTO Survey respondents participated in the 2011 HTO Survey (Yes; No)' (see Table 2.1), a '1' is shown before the text '(Ref)', and the '1' denotes the reference value in logistic regression models, however, if the outcome variable is continuous (e.g., Health-Related Quality of Life (HRQoL) score (see Table 5.2), the reference value is '0' in linear regression models. For ease of reading, a zero is not included before the text (Ref).

When interpreting the relationship between the predictor and the outcome variable, any significant number above the reference number indicates a positive relationship and any significant number below the reference number indicates a negative relationship.

The use of 'Ref' to notate the reference category (and reference number) is a standard reporting practice.

In Chapter 4, more conventional longitudinal models including the whole sample are used, examining the prediction of harm in 2011 based on a range of variables collected in 2008, as well as the existence of the same type of harm in that year. The strength of including harm in 2008 as a predictor of harm in 2011 is that it allows assessment of what would predict an increase (or decrease) in the likelihood of harm. Coupled with the difference scores for the number of heavy drinkers in respondents lives and the respondent's own drinking, it is possible to assess what changes in a respondent's life predict an increased likelihood of harm.

The use of an earlier measure of an outcome variable in a regression model is sometimes thought to be inappropriate, especially in tightly-controlled experimental research. However, as discussed in Section 2.1, change scores are not appropriate outcome variables when it is believed that the outcome at time point 1 will affect the outcome at time point 2 (Allison 1990). As will be shown in Chapter 4, those who reported experiencing harm in the 2008 HTO Survey (time point 1) are more likely to experience it again in 2011 (time point 2). Accordingly, the use of the existence versus absence of harm in 2008 as a predictor variable, in an analysis predicting harm in 2011, is an appropriate method for examining predictors of change in the existence of harm over time.

3 ALCOHOL'S HARM TO OTHERS REPORTED IN 2011 AND 2008: SIMILARITIES AND DIFFERENCES

KEY POINTS

- One in four respondents (24 per cent) reported that they had been adversely affected by the heavy drinking of household and non-household family members, relatives and intimate partners, co-workers, friends and others they knew in 2011. A third of respondents reported that they had been negatively affected by strangers' drinking. In total, 44 per cent of respondents reported having been negatively affected by others' drinking in 2011.
- In 2011, men were more likely to report the presence of heavy-drinking friends and co-workers than women. Women were more likely than men to report the presence of heavy-drinking family, partners and household members and harm from these drinkers.
- In 2011, younger age was significantly associated both with the presence and average number of reported heavy drinkers in respondents' lives and with harm.
- Examining the distributions of heavy drinkers in respondents' lives and harms to respondents by relationships, age and gender, the 2011 HTO Survey data highlight significant patterns not previously explored. In particular, the number of heavy drinkers in a respondent's life emerged as a strong predictor of harm from others' drinking in 2011.
- There was a significant but small decrease in the percentage of respondents in the sample reporting harm from others' drinking between 2008 and 2011. The decrease predominantly relates to harm from drinkers in more distal relationships (e.g. friend, stranger) to the respondent, and is partly explained by respondents' increased age. There was also a strong relationship between decreasing numbers of heavy drinkers in respondents' lives and increasing age.

This chapter presents the 2011 HTO Survey data, but only briefly, as the most valuable contribution the 2011 data make is by way of comparison with the 2008 HTO Survey.

The research questions addressed in this chapter are:

1. What percentage of respondents in the 2011 follow-up sample were affected by others' drinking?
2. How did the 2011 HTO Survey findings compare with those of the 2008 HTO Survey?

3.1 THE 2011 HTO SURVEY

A total of 1,106 respondents completed the 2011 HTO Survey. One in four respondents (24 per cent) reported that they had been adversely affected by the heavy drinking of family members, others in their household, non-household relatives, intimate partners, co-workers, friends or others they knew (e.g. neighbours, teachers, classmates) in the previous 12 months. A third of respondents reported that they had been negatively affected by strangers' drinking. Counting the adverse effects from any person's drinking (i.e. strangers or known problematic drinkers in the respondent's social circle), 44 per cent of respondents reported having been negatively affected in 2011. Other descriptive results for 2011 are presented in comparison to the 2008 survey data.

In the 2008 and 2011 HTO Surveys, respondents were asked a series of questions on concrete adverse effects from the known problematic drinker whose drinking had been most harmful. In 2011, the most common harms from the most harmful known problematic drinker reported by respondents were being "emotionally hurt or neglected" (62.1 per cent), that the problematic drinker "negatively affected a social occasion" (58.5 per cent), and having a "serious argument (excluding physical violence)" (51.3 per cent). The same three adverse effects were also the most common harms reported in 2008 (see Table 3.1).

Table 3.1 Specific harms from the known problematic drinker who had most negatively affected the respondent in the previous 12 months by gender, 2008 and 2011

VARIABLE	MALE (%)		FEMALE (%)		TOTAL (%)	
(N)	2008 (115)	2011 (94)	2008 (212)	2011 (170)	2008 (328)	2011 (265)
Emotionally hurt or neglected	44.7	56.4	64.3	65.1	57.1	62.1
Negatively affected at a social occasion	60.0	62.8	67.5	55.9	64.9	58.5
Drinker failed to do something they were being counted on to do	62.0	56.4	55.3	48.5	57.5	51.5
Serious argument (excluding physical violence)	53.9	53.2	51.2	50.6	52.0	51.3
Stopped seeing them	33.0	35.5	33.2	31.0	33.3	32.4
Felt threatened	30.4	26.6	21.0	21.2	24.2	23.0
Drinker broke or damaged something that mattered	15.2	11.7	13.3	11.7	14.0	11.7
Physically hurt	5.3	7.5	4.3	3.5	4.6	4.9
At risk in a car when they were driving	4.3	4.7	5.3	7.5	5.8	4.9
Forced or pressured into sex	2.6	2.1	0.5	0.6	1.2	1.1

The denominators are the numbers of respondents who reported harm from a known problematic drinker at that time point

Respondents were also asked a series of questions about concrete adverse effects from the drinking of strangers. As in 2008, the three most common harms from strangers' drinking reported by respondents in 2011 were "kept awake and disturbed at night" (35.6 per cent), "avoided drunk people or places where drinkers are known to hang out" (33.5 per cent), and "annoyed by vomit, urination or littering" (24.1 per cent) (see Table 3.2).

Table 3.2 Specific harms from strangers' drinking reported in the previous 12 months by gender, 2008 and 2011

VARIABLE	MALE (%)		FEMALE (%)		TOTAL (%)	
(N)	2008 (458)	2011 (458)	2008 (645)	2011 (645)	2008 (1,106)	2011 (1,106)
Kept awake and disturbed at night	36.5	34.1	39.7	36.7	38.3	35.6
Avoided drunk people or places where drinkers are known to hang out	43.9	34.3	39.7	32.8	41.5	33.5
Annoyed by vomit, urination or littering	23.3	24.1	23.4	19.4	23.4	21.4
Felt unsafe in public place	21.1	16.2	23.0	18.2	22.1	17.3
Experienced troubles or noise related to licensed venue	20.4	15.3	16.2	15.6	18.0	15.4
Verbally abused	19.7	16.7	13.0	11.2	15.8	13.4
Threatened	12.5	11.1	6.8	4.8	9.1	7.4
Involved in a serious argument	11.6	9.4	7.4	4.7	9.2	6.6
Physically abused	3.7	1.5	2.2	1.2	2.8	1.4
Involved in a traffic accident	1.1	0.2	0.8	0.2	0.9	0.2
Forced or pressured into sexual activity	0.4	0.4	0.2	0.0	0.3	0.2

The denominator is the total sample who completed the 2008 and 2011 surveys.

3.2 NEGATIVE EFFECTS IN DIFFERENT RELATIONSHIP CATEGORIES AND CUMULATIVELY, 2008 AND 2011

Table 3.3 shows, for each gender and for all 1,106 respondents who completed the HTO Survey in both years, the percentages of respondents who report in 2008 and 2011 being negatively affected in the previous year by others' drinking, including that of known problematic drinkers and strangers. The table proceeds cumulatively outwards from the household, adding in the effects of non-household relatives and intimate partners, then friends and co-workers. Lastly, effects on the respondent of the drinking of strangers and others not well-known to the respondent are added in, to tally all harms from others experienced by the respondent in the last 12 months. It should be noted that the denominator for these percentages is all respondents in the sample; those who do not report being adversely affected by a co-worker in the last 12 months, for instance, include those who had been unemployed in that period and thus did not have co-workers.

3.2.1 NEGATIVE EFFECTS DUE TO KNOWN PROBLEMATIC DRINKERS' DRINKING

Similar percentages of respondents reported having heavy drinkers in their family or household who had negatively affected them in 2011 as had reported this in 2008 (18 per cent versus 17 per cent). Female respondents were generally more likely than males to report harm from household members, as was the case in 2008. A similar proportion of respondents (15 per cent versus 13 per cent) reported that the drinking of relatives or girlfriends, boyfriends and ex-partners who do not live in the household had negatively affected them. Again in 2011, as in 2008, women (15 per cent) reported this significantly more often than men (10 per cent). Pooling responses concerning household members and non-household relatives and intimate partners, 17 per cent of the sample reported the drinking of at least one person in these categories had negatively affected them in the last year. The results were very similar in the sample at the two points in time (18 per cent versus 17 per cent).

Ten and eight per cent of respondents in 2008 and 2011 respectively, reported that a friend's drinking negatively affected them, with men and women equally likely to report this in 2011. Men were slightly more likely than women to report that a co-worker's drinking had negatively affected them, with slightly fewer respondents overall reporting this in 2011. Combining the co-worker and friend categories with a residual 'other' category, a significantly smaller percentage of respondents reported harm from this group in 2011 than in 2008 (13 per cent versus 17 per cent).

Pooling responses for all relationship types, around one-quarter (24 per cent) of respondents reported being negatively affected by the drinking of someone in these categories (i.e. known problematic drinkers) in 2011. This was significantly less than in 2008 (29 per cent versus 24 per cent). The reduction in percentages of respondents affected by the drinking of known problematic drinkers between 2008 and 2011 was significant for women (33 per cent versus 27 per cent) but not men (25 per cent versus 20 per cent).

Table 3.3 Percentage of respondents harmed by the drinking of those in different relationships in 2008 and 2011

VARIABLE	MALE (%)		FEMALE (%)		TOTAL (%)	
(N)	2008 (458)	2011 (458)	2008 (645)	2011 (645)	2008 (1,103)	2011 (1,103)
Negatively affected by						
Household (HH) member	3.3	4.2	7.3	6.5	5.6	5.5
Relatives and intimate partners (non- HH)	10.5	9.6	17.4	15.0	14.5	12.8
Household member, or non-HH relative or intimate partner (pooled)	12.9	12.2	22.3	19.5	18.4	16.6
Friend	11.1	9.4	8.7	7.6	9.8	8.3
Co-worker	6.8	4.2	4.0	3.4	5.2	3.7
Friend, co-worker or other[a]	17.0	12.9	16.1	12.7	16.6	12.8*
Negatively affected by any of the above (problematic drinkers)	24.6	20.2	32.8	26.5*	29.4	24.0**
Negatively affected by strangers	38.0	31.4*	35.9	33.2	36.7	32.5*
Respondent negatively affected by any others' drinking	47.2	39.7*	52.6	47.1	50.3	44.1**

Differences in percentages of reported total harms between the 2008 and 2011 surveys are tested for significance with Chi-square tests: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

[a] This category includes other heavy drinkers that do not fit in the listed categories.

3.2.2 NEGATIVE EFFECTS DUE TO STRANGERS' DRINKING

As in the 2008 HTO Survey (Laslett et al. 2010), much higher proportions of respondents reported being negatively affected in the last year by the drinking of a stranger than by someone they knew. In 2011, a total of 33 per cent (compared with 37 per cent in 2008) reported that they had been negatively affected by strangers' drinking. Although men and women were similarly likely to have been troubled by strangers' drinking in 2011 (33 per cent versus 31 per cent), the decrease between the two time points was significant for men but not for women (Table 3.3).

3.2.3 NEGATIVE EFFECTS DUE TO ANY OTHER PERSON'S DRINKING

Counting the adverse effects from any person's drinking (i.e. strangers or known problematic drinkers), 44 per cent of respondents in 2011 and 50 per cent in 2008 reported having been negatively affected. This reduction in reported harms from others' drinking was significant in the overall sample, and significant for men but not for women when analysed by gender.

These findings suggest that the prevalence of alcohol-related harm from others' drinking has significantly but moderately decreased in the sample between 2008 and 2011, with the decline concentrated primarily in the more distal relationships.

3.3 HEAVY DRINKERS IN RESPONDENTS' LIVES

In 2011, each respondent identified 2.75 heavy drinkers (on average) in their life, compared with 3.33 heavy drinkers (on average) in 2008. These heavy drinkers, in various relationships with the respondent, comprise the respondent's social context of heavy drinkers.

Table 3.4 presents the percentages of respondents with heavy drinkers in their lives in 2008 and 2011 by gender, and the mean number of these drinkers in each relationship category per respondent (including in the denominator those with no heavy drinkers in that relationship category). In 2011, respondents were most likely to report the presence of heavy-drinking friends (34 per cent) and non-household relatives and intimate partners (29 per cent), reporting on average 1.44 and 0.40 heavy drinkers in these categories respectively. Respondents reported slightly higher figures for heavy-drinking friends (37 per cent; average 1.52) and non-household relatives and intimate partners (34 per cent; average 0.51) in 2008 than 2011.

In both years, women were more likely to report the presence of heavy-drinking household members as well as non-household relatives and intimate partners, while men were more likely to report the presence of heavy-drinking friends and co-workers. Overall, men reported significantly more heavy drinkers in their lives than women did.

Table 3.4 Percentage of respondents reporting, and average numbers of, heavy drinkers (HD) in each relationship category by gender in 2008 and 2011

VARIABLE	MALE (%)		FEMALE (%)		TOTAL (%)	
(N)	2008 (458)	2011 (458)	2008 (645)	2011 (645)	2008 (1,106)	2011 (1,106)
Heavy Drinker (HD) in household (HH)[a]	8.08	9.4	17.05	12.6	13.3***	11.2
Average no. HH HDs	*0.10*	*0.10*	*0.19*	*0.14*	*0.15****	*0.12*
HD among non-HH relatives and intimate partners (R+I)	28.6	24.2	37.5	31.6	33.8**	28.6**
Average no. R+I HDs	*0.40*	*0.35*	*0.58*	*0.44*	*0.51****	*0.40**
HD in HH and/or non-HH R+I	32.3	29.9	46.4	38.6	40.5***	35.0**
Average no. HH and R+I HDs	*0.50*	*0.45*	*0.77*	*0.58*	*0.66****	*0.52**
HD among friends	45.0	39.7	32.1	30.4	37.4***	34.3***
Average no. friends HDs	*2.22*	*1.86*	*1.02*	*1.15*	*1.52****	*1.44***
HD among co-workers	24.9	18.6	11.9	11.3	17.3***	1.4
Average no. co-worker HDs	*1.84*	*0.96*	*0.38*	*0.45*	*0.99****	*0.66**
HD in 'other'[b] category	14.0	9.4	14.7	11.8	14.4	10.8
Average no. 'other' HDs	*0.16*	*0.10*	*0.16*	*0.13*	*0.16*	*0.12*
Any known HD within social circle	**70.7**	**62.5**	**67.3**	**60.3**	**68.7**	**61.2**
Average no. HD overall	**4.72**	**3.37**	**2.34**	**2.31**	**3.33*****	**2.75****

HD = heavy drinker, someone who is "a fairly heavy drinker, or drinks a lot sometimes." Average numbers of heavy drinkers are calculated on a base of all respondents.

HH = household; non-HH= non-household; R+I = relatives and intimate partners.

Difference by gender in 'any HD' percentages tested for significance with Chi-square (X2) tests; difference by gender in 'average no. HDs' tested by t-test. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

[a] Household members include partner, son or daughter, parent, sibling, and non-family household members.

[b] Other relationship includes neighbours and others not defined.

Table 3.5 presents percentages of respondents who had heavy drinkers of various relationship types in their lives by age group, as well as the average number of heavy drinkers in the relationship category. In 2011 in every relationship grouping, with two exceptions (any heavy drinkers in the household and those in the "other heavy drinker" category), age was significantly inversely associated with both the presence of drinkers and the average number of reported drinkers in respondents' lives. The relationship between age and presence and number of heavy drinkers was strongest for friends, but also apparent for co-workers and non-household relatives and intimate partners. The youngest age group was most likely to report the existence of any heavy drinkers in their social circle, and to have the highest average number of heavy drinkers. Compared to older respondents, the middle-aged group also had higher percentages of heavy drinkers in their lives and reported higher average numbers of drinkers in their lives.

Table 3.5 The percentage of respondents who reported a heavy drinker for each relationship category, and average number of heavy drinkers reported for each relationship category in 2008 and 2011, by age group

VARIABLE	18-35 YEARS (%)		36-55 YEARS (%)		56+ YEARS (%)	
(N)	2008 (119)	2011 (119)	2008 (474)	2011 (474)	2008 (513)	2011 (513)
HD in household (HH)[a]	15.6	16.0	16.0	12.0	9.3**	9.4
Average no. HH HDs	*0.16*	*0.19*	*0.19*	*0.14*	*0.11***	*0.10**
HD among non-HH relatives and intimate partners (R+I)	41.9	31.1	36.0	32.1	28.4**	24.7*
Average no. R+I HDs	*0.63*	*0.43*	*0.56*	*0.46*	*0.40***	*0.33**
HD in HH and/or non-HH R+I	47.5	39.5	43.1	37.8	35.0**	31.3*
Average no. HH and R+I HDs	*0.79*	*0.61*	*0.75*	*0.60*	*0.50****	*0.43***
HD among friends	50.0	45.4	40.0	39.3	30.2***	27.0***
Average no. friends HDs	*2.43*	*2.77*	*1.45*	*1.68*	*1.28**	*0.91****
HD among co-workers	20.6	20.2	24.1	21.9	8.2***	5.9**
Average no. co-worker HDs	*0.98*	*1.17*	*1.32*	*1.13*	*0.59*	*0.10****
HD in 'other'[b] category	15.0	6.7	17.4	12.0	10.9*	10.5
Average no. 'other' HDs	*0.18*	*0.08*	*1.98*	*0.14*	*0.12**	*0.11*
Any known HD within social circle	**78.8**	**72.3**	**75.3**	**67.9**	**57.7*****	**52.2*****
Average no. HD overall	**4.37**	**4.62**	**3.72**	**3.55**	**2.49***	**1.56*****

HD = heavy drinker, someone who is "a fairly heavy drinker, or drinks a lot sometimes." Average numbers of heavy drinkers are calculated on a base of all respondents.

HH = household; non-HH= non-household; R+I = relatives and intimate partners.

Difference by gender in 'any HD' percentages tested for significance with Chi-square (X2) tests; difference by gender in 'average no. HDs' tested by t-test. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

[a] Household members include partner, son or daughter, parent, sibling, and non-family household members.

[b] Other relationship includes neighbours and others not defined.

3.4 CAN AGE EXPLAIN SOME OF THE DECREASE IN HARM AND NUMBER OF HEAVY DRINKERS?

Given that the respondents had aged an average of three years between interviews, and that younger adults are considerably more likely than older people to have been harmed by others' drinking, age was explored as a possible reason behind some of the difference in the overall findings in 2008 and 2011.

In the attrition analysis (Section 2.2) it was noted that younger respondents were less likely to complete the 2011 HTO Survey than older respondents. In response to these findings, a regression analysis was conducted on the 2008 HTO data to ascertain what proportion of the decrease in harm between the two time points could be attributed to age. For this analysis, the outcome variable was a total harm score, where being harmed "a little" by the drinking of known problematic drinkers or strangers was given a score of 3.5, while anyone experiencing "a lot" of harm in either of these three fields was given a score of 8 (see Appendix C). Finally, those who experienced no harm in either of these three fields received a score of 0. As such, each respondent received a harm score between 0 and 16. While the vast majority of the analyses in this study only includes those who participated in both waves, when the full 2008 sample was re-examined, the mean harm score was 2.88 and in the re-interviewed sample in 2011 it was 2.37.

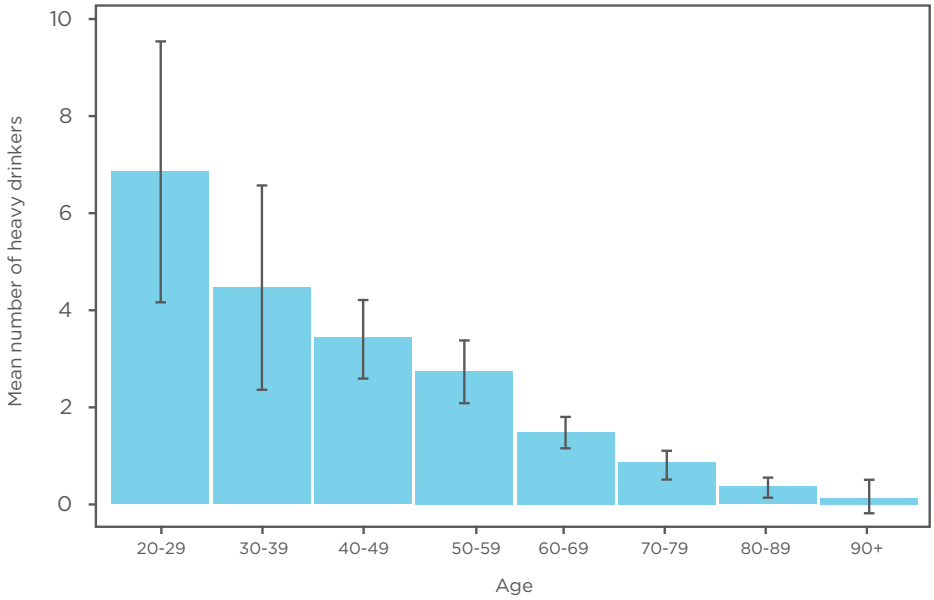
A regression analysis with this harm score as the outcome variable, and with age as the only predictor variable, was calculated on the full 2008 sample in order to ascertain how much respondents' harm scores would be expected to drop per year as they age. On this basis, a person's overall harm score would be expected to drop approximately 0.053 for each year he/she aged, and therefore a respondent's score would be expected to drop 0.16 over the three years between the two surveys. As this drop of 0.16 points is 26.8 per cent of the 0.59 overall drop in harm score in the sample, it could be said that about a quarter of the drop in harm between the two time points could be attributed to the aging of the sample.

3.4.1 AGE AND HEAVY DRINKERS

Given the findings about heavy drinkers and the loss of younger respondents from the sample described in Chapter 2, the relationship between the number of heavy drinkers in respondents' lives and age was also examined.

As can be seen in Figure 3.1, the mean number of heavy drinkers in the lives of respondents steadily dropped as age increased, as the negative correlation between the two would suggest ($r(1105) = -0.217$, $p < .001$). The interaction of exposure to heavy drinkers in respondents' social circles and age will be discussed throughout this report.

Figure 3.1 Mean number of heavy drinkers in the respondents' social circles by age group (2011 respondents, confidence intervals indicated by bars)



3.5 CORRELATES OF EXPOSURE TO HEAVY DRINKERS AND HARM

The next section focuses on the social drinking context of respondents, age, gender and their relationship with harm. Using the 2011 cross-sectional data only, a preliminary analysis was undertaken to determine whether age, gender and the number of drinkers in respondents' lives (and the relationships of these drinkers to the respondent) were potential factors in explaining the harm experienced from others' drinking.

3.5.1 HARM FROM HEAVY DRINKERS AMONG FAMILY AND FRIENDS

As Table 3.6 shows, women were significantly more likely than men to report being harmed by the drinking of family (household members and non-household relatives and intimate partners) or friends in 2011, and younger respondents were significantly more likely than older to report harm from others. These results are consistent with the analysis of the 2008 HTO Survey (Laslett et al. 2011). Harm from known problematic drinkers' alcohol consumption in 2011 was predicted by the number of heavy drinkers who were household members, non-household relatives and intimate partners and friends reported by respondents.

3.5.2 HARM FROM STRANGERS' DRINKING

In terms of those respondents who reported harm from strangers' drinking, bivariate results in Table 3.6 indicate that younger respondents were significantly more likely to report this than older respondents, and there were no significant differences by gender. When the numbers of heavy drinkers in the respondent's life were examined, higher numbers of heavy drinkers among friends, co-workers and non-household relatives and intimate partners significantly predicted harm in 2011. Of all the relationship categories analysed, only the number of heavy-drinking household members was not significantly associated with harm from strangers' drinking.

Table 3.6 Bivariate prediction of harm from drinkers in 2011		
VARIABLE	**KNOWN PROBLEMATIC DRINKERS**	**STRANGERS**
Gender		
Male	1(Ref)	1(Ref)
Female	1.40*	1.09
Age		
18-35	1(Ref)	1(Ref)
36-55	0.93	0.94
56 and over	0.57*	0.49***
Heavy drinkers among:		
Household members	5.55***	1.35
Relatives and intimate partners[a]	3.50***	1.41***
Friends	1.13***	1.12***
Co-worker	1.02	1.05*

$p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

N = 1,096

[a] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent

3.6 CONCLUSION

Almost half of the respondents in the 2011 HTO Survey experienced harm from others' drinking, and similar demographic predictors were identified to those found in the 2008 HTO Study. A modest but significantly smaller percentage of respondents experienced harm from others' drinking in 2011 compared with 2008. This was partly explained by an increase in age of the respondents and is, in considerable part, specific to a decrease in harms from drinkers in more distal relationships to the respondent.

In the 2008 HTO Survey, the existence and correlates of the pools of heavy drinkers in respondents' social circles were not investigated in any detail. However, the impact of heavy drinkers in a respondent's social circle clearly emerged when examined in analyses of the 2011 data. Hence, in future chapters, the numbers of heavy drinkers in respondents' lives and the extent to which they predict the occurrence of, and changes in, harm are systematically considered.

4 CONTINUITY AND CHANGE IN ALCOHOL'S HARM TO OTHERS

KEY FINDINGS

- Almost a third of respondents were harmed by others' drinking in both 2008 and 2011 (32 per cent), although 38 per cent were not harmed in either year. However, this apparent stability masks substantial turnover in harms from others' drinking, amounting to around 30 per cent of the sample.
- Sixty-two per cent of respondents reported they had experienced some harm from others' drinking in at least one of the surveys.
- The strongest predictor of harm from others' drinking in 2011 was having experienced harm from others' drinking in 2008.
- The number of, and increases in the number of, heavy drinkers among respondents' household members were significant predictors of harm from known problematic drinkers.
- Contact with heavy-drinking friends was a strong predictor of harm from strangers' drinking.
- Demographic characteristics do not strongly predict experiencing harm in 2011, once harm in 2008 is controlled.
- Changes in the level of harm from others' drinking are fairly evenly spread across the population, and are not limited to small and marginalised sections of the community.
- Having more heavy drinkers within the household and among non-household relatives and intimate partners was associated with the initiation of harm from the drinking of known problematic drinkers, typically family members or friends.
- Respondents with fewer heavy-drinking household members, relatives and intimate partners were significantly more likely to cease being harmed from the drinking of known problematic drinkers between 2008 and 2011.
- Respondents' socio-economic characteristics and risky drinking patterns had little bearing on harms arising or subsiding due to the problematic drinking of a family member or friend, suggesting that this type of harm is dispersed throughout the demographic and social groups within the sample.
- Being younger, having more heavy-drinking co-workers in 2008, and an increase in the number of heavy drinking co-workers from 2008 to 2011 were associated with the initiation of harm from strangers in 2011.
- Respondents who frequently drank at risky levels in 2008 were more likely to cease being harmed from strangers' drinking, as were respondents with less exposure to heavy-drinking friends and relatives and intimate partners in that year.
- Respondents who experienced persistent harm (i.e. harm in both 2008 and 2011) from known problematic drinkers had more heavy drinkers in their household, and more heavy-drinking non-household relatives and intimate partners in 2008, compared with respondents who reported no harm in either year.
- For each additional heavy drinker in their household, respondents were almost six times more likely to experience persistence of harm from known problematic drinkers.
- Younger age and a higher number of heavy-drinking relatives and intimate partners were positive predictors of persistent harm from strangers' drinking, as was the number of heavy-drinking co-workers in 2008.

This chapter focuses on stability and change in alcohol's harm to others: that is, for what proportion of the sample does their experience of harm from others' drinking remain stable, improve or worsen? The analyses focus on those harmed in neither survey, both surveys and those whose situation changed (i.e. they were harmed in 2008 but then not in 2011 or, conversely, they were harmed in 2011 but not 2008). In both years, respondents were asked about harm from others' drinking in the previous 12 months, so the data relate to two separate periods of 12 months, with no information specifically on the two interim years.

The research questions examined in this chapter are:

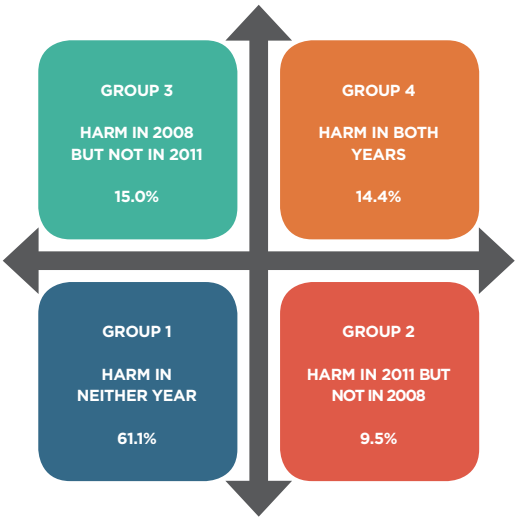
3. Does the respondent's status in 2008, or changes in the respondent's circumstances from 2008 to 2011, predict harm from others' drinking in 2011? (Section 4.1)
4. What factors predict harm from others' drinking in 2011? (Section 4.2)
5. What predicts who is newly harmed among those who were not previously? (Section 4.3)
6. Among those harmed in 2008, what predicts who will not be harmed again in 2011? (Section 4.4)
7. What factors predict persistent harm from others' drinking, in comparison to persistent absence of such harm? (Section 4.5)

4.1 PREVALENCE OF CONTINUITY AND CHANGE IN HARM FROM OTHERS' DRINKING

4.1.1 HARM FROM KNOWN PROBLEMATIC DRINKERS

Respondents were asked to identify heavy drinkers in their social circle (i.e. household members, non-household relatives and intimate partners, friends and work colleagues) and then asked whether these people had negatively affected them (i.e. caused harm) in the last 12 months. Analysing the data from the 1,106 respondents who completed the HTO Surveys in both 2008 and 2011, the majority (61 per cent) of the sample did not report knowing a heavy drinker whose drinking had an adverse effect on them in the past 12 months in either year. Twenty-five per cent of respondents reported knowing a heavy drinker whose drinking adversely affected them (i.e. known problematic drinker) in one of the survey years (with 15 per cent reporting a known problematic drinker in 2008 and not in 2011, and ten per cent of respondents identifying a known problematic drinker in 2011 but not in 2008). A significant minority of respondents, 14 per cent, identified a known problematic drinker at both points in time (See Figure 4.1).

Figure 4.1 Proportion of respondents experiencing harm from known problematic drinkers in 2008 and 2011 (N = 1,106)

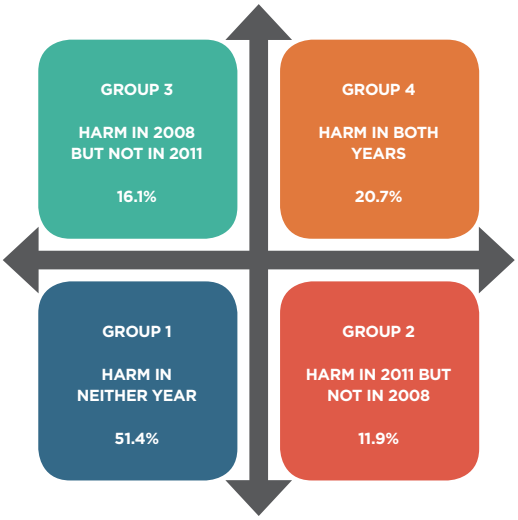


Thus, for the majority (76 per cent) of participants in the survey, presence or absence of harm from known problematic drinkers did not change. For the remaining one-quarter of participants there was change, more often for the better rather than for the worse.

4.1.2 HARM FROM STRANGERS

Harm from strangers' drinking was more widely reported than harm from problematic drinkers the respondent knew. As can be seen in Figure 4.2, 51 per cent of respondents experienced harm in neither year from strangers' drinking, while 21 per cent did so in both years. Again for the majority of respondents (72 per cent), their experience of harms from strangers' drinking remained stable. A total of 28 per cent of respondents reported changes in their situation, with a larger percentage (16 per cent) experiencing respite from harm than the 12 per cent who experienced harm in 2011 when they had not reported this previously.

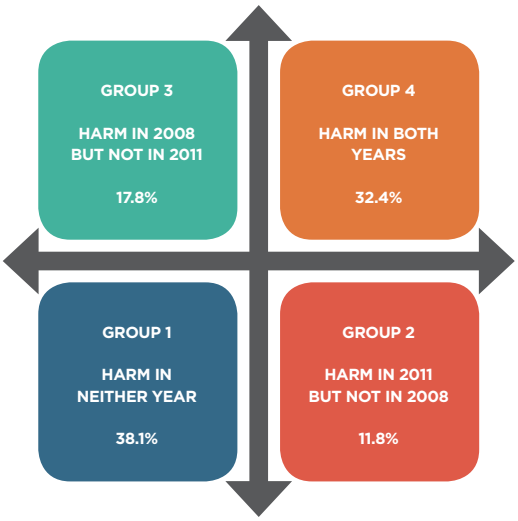
Figure 4.2 Proportion of respondents experiencing harms from strangers' drinking in 2008 and 2011 (N = 1,104)



4.1.3 ANY HARM

Examining whether respondents were harmed in any way by known problematic drinkers' and/or strangers' drinking in the 2008 and 2011 HTO Surveys, it is apparent that a much smaller percentage of the sample avoided harm altogether in the two time periods than in the separate analyses of harm from known problematic drinkers and strangers. Only 38 per cent of respondents were harmed in neither year; the majority were harmed at one or both time points (62 per cent). As can be seen in Figure 4.3, for the majority of respondents (71 per cent) their experience of harm from others' drinking remained stable. When harms from known problematic drinkers and strangers are considered together, the percentage of respondents who experienced harm in both years (32 per cent) begins to approach the level of the group that was harmed in neither year (38 per cent). A total of 30 per cent of respondents reported changes in their situation, and again, a larger percentage reported experiencing respite from harm than those who newly reported experiencing harm in 2011 (18 per cent versus 12 per cent).

Figure 4.3 Proportion of respondents experiencing any harm from known problematic drinkers and/or strangers' drinking in 2008 and 2011 (N = 1,104)



Another way of considering these questions is to ask, what are the chances of being harmed again if you were harmed by others' drinking at the first time point? Answers from this analysis are highlighted in Box 4.1.

Box 4.1 Changing patterns of harm

WHAT ARE THE CHANCES OF BEING HARMED...

by someone you know?

Nearly half (49 per cent) of the 324 respondents who were harmed by known problematic drinkers in 2008 were again harmed by known problematic drinkers in 2011.

Conversely, of the 778 respondents not harmed by known problematic drinkers in 2008, around 14 per cent were harmed by known problematic drinkers in 2011.

by strangers?

A total of 56 per cent of the 406 respondents who were harmed by the drinking of strangers in 2008 reported being harmed by strangers' drinking again in 2011.

Nineteen per cent of the 698 respondents who did not experience harm from strangers' drinking in 2008 reported being harmed by strangers' drinking in 2011.

by anyone?

For the 553 respondents who experienced any harm from other people's drinking in 2008, 65 per cent of them were harmed again by another's drinking in 2011.

Of the 550 respondents who were not harmed by other's drinking in 2008, 24 per cent reported being harmed by someone else's drinking in 2011.

4.2 PREDICTORS OF ALCOHOL'S HARM TO OTHERS OVER TIME

This section examines changes in overall harm, including both changes up and changes down, in a common analysis; that is, taking into account initiation and discontinuation of alcohol-related harm from others in the time span between the 2008 and the 2011 HTO Surveys. The aim of this analysis is to examine whether a respondent's status in 2008, or changes in his/her circumstances between 2008 and 2011, can predict harm in 2011. Thus, by adjusting for baseline sample characteristics including the harm respondents experienced in 2008, and including individual changes in the respondent's drinking networks, the predictors of changes in harm from others' drinking over time are examined.

4.2.1 HARM FROM KNOWN PROBLEMATIC DRINKERS

In 2011, 266 respondents reported harm from known problematic drinkers, while 840 did not. Bivariate and multivariate logistic regression models outlining the differences between these two groups are shown in Table 4.1. As can be seen in the bivariate models, those who reported harm from known problematic drinkers in 2008 were six times more likely to report this again in 2011 than those who did not. Women were more likely to report such harm, and those aged 56 and over were less likely than those in the youngest age group. The number of heavy drinkers in all four relationship categories (i.e. household members, non-household relatives and intimate partners, co-workers, friends) in 2008 was a significant positive predictor of harm in 2011, as was an increase from 2008 to 2011 in heavy drinkers among non-household relatives and intimate partners and friends.

In Model 1, controlling for 2008 harm from known problematic drinkers and examining the strength of the demographic predictors multivariately, older respondents and men were still less likely to report harm in 2011, although the prediction is no longer significant. In Model 2, the two respondent drinking variables (the number of times a respondent reported drinking five or more standard drinks in a session in a week, and the change in this item over time) both remained non-significant predictors of harm, when 2008 harm was controlled. In Model 3, all the heavy drinker variables were entered into the same model, along with the report of harm in 2008. Even after controlling for harm in 2008, the numbers of household, non-household relatives and intimate partners and co-worker heavy drinkers in 2008 were still significant predictors of harm in 2011, as was an increase in household and non-household

relatives and intimate partner heavy drinkers. The importance of the number of heavy-drinking friends decreased, once other types of heavy drinkers and previous harm were controlled for.

Finally, in Model 4, all variables were entered into the model. After controlling for all other variables, those who were harmed in 2008 were still almost four times more likely to be harmed in 2011 than those who were not. None of the demographic predictors remained significant in this model: age, gender and neighbourhood affluence did not predict harm. Finally, the 2008 number and change over time in household and non-household relatives and intimate partner heavy drinkers were significant positive predictors of harm in 2011, along with the number of co-worker heavy drinkers.

Table 4.1 Bivariate and multivariate models predicting harm from known problematic drinkers in 2011

	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
Harm from known problematic drinkers in 2008					
No	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)
Yes	6.18***	5.81***	6.06***	4.12***	3.89***
Gender					
Male	1 (Ref)	1 (Ref)			1 (Ref)
Female	1.40*	1.25			1.24
Age (2008)					
18-35	1 (Ref)	1 (Ref)			1 (Ref)
36-55	1.09	0.97			1.04
56 and over	0.55**	0.65			0.83
Neighbourhood affluence (2008)					
Low affluence	1 (Ref)	1 (Ref)			1 (Ref)
High affluence	1.04	1.08			1.13
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	1.07		1.09		0.92
5+ drinking occasions/week[a] difference[b]	1.05		1.12		0.99
Heavy drinkers among (2008):					
Household members	3.17***			5.03***	5.18***
Relatives and intimate partners[c]	1.74***			2.73***	2.67***
Friends	1.04*			1.03	1.04
Co-worker	1.04*			1.05*	1.05*
Difference[d] in heavy drinkers among:					
Household members	1.31			4.25***	4.18***
Relatives and intimate partners[c]	1.41***			2.99***	2.95***
Friends	1.04*			1.05	1.05
Co-worker	0.98			1.01	1.01

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

N = 1,078.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

4.2.2 HARM FROM STRANGERS

In 2011, 359 respondents stated that they had been harmed as a result of strangers' drinking, with 746 reporting that they had not. Bivariate and multivariate logistic regression models predicting harm from strangers' drinking are shown in Table 4.2. As can be seen in the bivariate results, those who were harmed by strangers in 2008 were more than five times more likely to be harmed again in 2011. Furthermore, older respondents were less likely to be harmed by strangers. Finally, the number of relatives and intimate partner heavy drinkers in 2008 and an increase in the number of heavy-drinking friends between 2008 and 2011 were also significant positive predictors of being harmed by strangers.

In Model 1, containing all the demographic variables, those aged over 55 were less likely to be harmed than those in the youngest age group, with no other significant predictors. The drinking of the respondent was not a significant predictor of harm from strangers in Model 2. In Model 3 an increase in the number of relatives and intimate partners and friend heavy drinkers were significant positive predictors of harm in 2011, even after controlling for harm from strangers in 2008. Finally, in Model 4, when all variables were included, those who were harmed by strangers' drinking in 2008 were still nearly five times more likely to be harmed in this way again in 2011. Older respondents were approximately half as likely to be harmed as those who were under 36 years of age. Interestingly, after controlling for the other predictors of harm, a decrease in the respondent's own frequency of heavier drinking from 2008 to 2011 became a significant predictor of harm from strangers' drinking in 2011.

Table 4.2 Bivariate and multivariate models predicting harm from strangers' drinking in 2011					
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
Harm from strangers in 2008					
No	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)
Yes	5.54***	5.10***	5.50***	5.19***	4.79***
Gender					
Male	1 (Ref)	1 (Ref)			1 (Ref)
Female	1.09	1.12			1.09
Age (2008)					
18-35	1 (Ref)	1 (Ref)			1 (Ref)
36-55	0.82	0.88			0.95
56 and over	0.37***	0.50**			0.55**
Neighbourhood affluence (2008)					
Low affluence	1 (Ref)	1 (Ref)			1 (Ref)
High affluence	0.97	0.90			0.92
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	0.92		0.89		0.80*
5+ drinking occasions/weeka difference[b]	1.04		0.96		0.89
Heavy drinkers among (2008):					
Household members	0.99			0.99	0.95
Relatives and intimate partnersc	1.23**			1.23	1.21
Friends	1.01			1.03	1.04
Co-worker	1.01			1.02	1.02
Difference[d] in heavy drinkers among:					
Household members	1.34			1.32	1.28
Relatives and intimate partners[c]	1.04			1.29*	1.28*
Friends	1.07***			1.07**	1.07**
Co-worker	1.01			1.02	1.02

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

N = 1,089.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

4.3 PREDICTORS OF INITIATION OF HARM FROM OTHERS' DRINKING

The focus of this section is to identify factors associated with harms from others' drinking that arise in respondents' lives between 2008 and 2011 (i.e. initiation of harm).

4.3.1 HARM FROM KNOWN PROBLEMATIC DRINKERS

In the following analysis, the group that did not report being harmed by known problematic drinkers in either year (n=664) is compared to the 104 respondents who were not harmed in 2008 but went on to be harmed in 2011. Therefore, this analysis uses only a part of the total sample re-interviewed in 2011.

Bivariate logistic regression results shown in Table 4.3 indicate that there were significant relationships between demographic variables and initiation of harms from known problematic drinkers. Respondents who were harmed for the first time in 2011 had significantly more heavy-drinking household members, relatives and intimate partners, and co-workers in their social circles in 2008 than those who did not report harm from known problematic drinkers in either 2008 or 2011. There was also a significant association between an increase in heavy-drinking household members and/or heavy drinking non-household relatives and intimate partners from 2008 to 2011 and initiation of harm in 2011.

In Model 1, none of the demographic variables were significant predictors of harm arising in 2011 from known problematic drinkers. These findings suggest that the initiation of harm from these drinkers was not limited to particular gender, age or socio-economic groups within the sample. Similarly, the drinking pattern of the respondent himself/herself did not predict the initiation of harm from known problematic drinkers (see Model 2).

In Model 3, both the number and change over time in heavy drinkers among the respondent's household and non-household relatives and intimate partners were significant predictors of harm arising in 2011, as was the number of (but not change in numbers of) heavy-drinking co-workers. Interestingly, the odds ratios for the number of household heavy drinkers and change over time in household heavy drinkers were higher in Model 3 compared with the bivariate model. This increase is most likely a reflection of a negative correlation between the number of, and change over time in, household heavy drinkers.

Based on the results in the final model, including all the covariates simultaneously, the numbers of household, non-household relatives and intimate partners, and co-worker heavy drinkers in 2008 were still significant predictors of harm from known problematic drinkers, as was an increase in two heavy drinker groups – household members and non-household relatives and intimate partners – from 2008 to 2011.

Table 4.3 Bivariate and multivariate models predicting initiation of harm from known problematic drinkers					
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
Gender					
Male	1 (Ref)	1 (Ref)			1 (Ref)
Female	1.38	1.35			1.33
Age (2008)					
18-35	1 (Ref)	1 (Ref)			1 (Ref)
36-55	0.96	0.96			0.88
56 and over	0.63	0.62			0.66
Neighbourhood affluence (2008)					
Low affluence	1 (Ref)	1 (Ref)			1 (Ref)
High affluence	0.94	0.93			0.93
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	0.97		0.98		0.88
5+ drinking occasions/week[a] difference[b]	1.04		1.03		1.03
Heavy drinkers among (2008):					
Household members	2.52**			6.02***	5.77***
Relatives and intimate partners[c]	1.32*			2.09***	1.97***
Friends	1.03			1.02	1.03
Co-worker	1.04*			1.06*	1.06*
Difference[d] in heavy drinkers among:					
Household members	3.19***			5.26***	5.42***
Relatives and intimate partners[c]	2.02***			2.57***	2.52***
Friends	1.01			1.02	1.02
Co-worker	0.98			1.02	1.02

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

N = 770.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

4.3.2 HARM FROM STRANGERS

In order to investigate factors that may predict the onset of harm from strangers, respondents who reported harm from strangers' drinking in 2011 but not in 2008 (n=131) were compared to respondents who were not harmed from strangers' drinking in either year (n=556).

The bivariate results in Table 4.4 show that younger respondents (aged 18-35) are 2.6 times[3] more likely to report initiation of harm from strangers' drinking compared to respondents aged 56 years and older. This finding was statistically significant and suggests that being younger was a positive predictor of experiencing new harm from strangers' drinking in 2011. Furthermore, there was a significant positive relationship between the initiation of harm from strangers' drinking and the number of non-household relatives and intimate partner heavy drinkers respondents had in their lives. A respondent's own heavy drinking in 2008, and change in drinking pattern over time, was not predictive of initiation of harm from strangers' drinking in 2011.

[3] Result of reversed odds ratio of 0.38 for respondents aged 56 years and older.

The association between age and the initiation of harm from strangers' drinking remained significant in Model 1, after adjusting for the other demographic covariates in the model. In Model 2, neither of the respondent drinking variables significantly predicted harm arising in 2011 from strangers' drinking. In Model 3, with all the heavy drinker covariates included, the 2008 number of and change over time in heavy-drinking co-workers were significant positive predictors of experiencing harm from strangers' drinking in 2011. The number of heavy-drinking non-household relatives and intimate partners in the respondent's life in 2008 was also a significant predictor of harm in 2011.

In the final model, when all covariates were accounted for, younger respondents were still twice as likely as older respondents to report new (i.e. initiation of) harm from strangers. Furthermore, the number of heavy-drinking co-workers and an increase in the number of heavy-drinking co-workers between 2008 and 2011 remained significant predictors. However, the number of heavy-drinking non-household relatives and intimate partners was no longer a significant predictor.

Table 4.4 Bivariate and multivariate models predicting initiation of harm due to strangers' drinking

	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
Gender					
Male	1 (Ref)	1 (Ref)			1 (Ref)
Female	1.24	1.18			1.22
Age (2008)					
18-35	1 (Ref)	1 (Ref)			1 (Ref)
36-55	0.82	0.82			0.93
56 and over	0.38**	0.39**			0.47*
Neighbourhood affluence (2008)					
Low affluence	1 (Ref)	1 (Ref)			1 (Ref)
High affluence	0.98	0.93			0.95
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	1.01		1.00		0.93
5+ drinking occasions/week[a] difference[b]	0.97		0.97		0.99
Heavy drinkers among (2008):					
Household members	0.93			1.06	0.90
Relatives and intimate partners[c]	1.31*			1.40*	1.35
Friends	1.00			1.01	1.02
Co-worker	1.03			1.18**	1.16*
Difference[d] in heavy drinkers among:					
Household members	1.67			1.77	1.63
Relatives and intimate partners[c]	0.90			1.14	1.11
Friends	1.04			1.03	1.02
Co-worker	0.99			1.15*	1.13*

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

N = 690.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

4.4 PREDICTORS OF DISCONTINUATION OF HARM FROM OTHERS' DRINKING

The focus of this section is to identify factors associated with harms from others' drinking that remit (discontinue) in respondents' lives between 2008 and 2011.

4.4.1 HARM FROM KNOWN PROBLEMATIC DRINKERS

In these analyses, respondents who experienced harm from the drinking of known problematic drinkers in 2008, but not in 2011, (n=163) are compared to respondents who were harmed both in 2008 and in 2011 (n=156). For these analyses, the meaning of the odds ratios is reversed: a factor that predicts remission of harm will have an odds ratio below 1.0.

As the bivariate results in Table 4.5 show, having fewer heavy-drinking household members and fewer heavy-drinking non-household relatives and intimate partners was significantly associated with discontinuation of reported harm from known problematic drinkers in 2011. Decreases in the number of heavy-drinking non-household relatives and intimate partners and heavy-drinking friends between 2008 and 2011 were also predictors of discontinued harm.

Models 1 and 2 include all demographic covariates and respondents' own drinking covariates respectively. In these models, the variables remained non-significant predictors of discontinued harm from known problematic drinkers. These results suggest that a shift in harm status was not strongly related to the gender, age, or socio-economic status of respondents within the sample.

The impact of the respondents' networks of heavy drinkers on experience of harm in 2011 from known problematic drinkers was examined in Model 3. Results indicate that respondents with fewer heavy-drinking household members and non-household relatives and intimate partners in 2008 were significantly more likely to cease being harmed, as were respondents who reported a decrease over time in the number of heavy-drinking household members, relatives and intimate partners.

In Model 4, with all the covariates included, results indicate that respondents with fewer heavy drinkers in their household and among their social circles of relatives and intimate partners were significantly more likely to cease being harmed, as were respondents who reported a decrease over time in heavy drinkers among these two groups. Interestingly, after controlling for all the covariates, a decrease in the number of heavy-drinking friends between 2008 and 2011 became a significant predictor of remission of harm.

Table 4.5 Bivariate and multivariate models predicting a discontinuation of harm from known problematic drinkers					
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
Gender					
Male	1 (Ref)	1 (Ref)			1 (Ref)
Female	0.89	0.88			0.88
Age (2008)					
18-35	1 (Ref)	1 (Ref)			1 (Ref)
36-55	1.09	1.00			0.69
56 and over	1.58	1.42			0.78
Neighbourhood affluence (2008)					
Low affluence	1 (Ref)	1 (Ref)			1 (Ref)
High affluence	0.74	0.78			0.63
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	0.91		0.82		1.04
5+ drinking occasions/week[a] difference[b]	0.88		0.78		1.01
Heavy drinkers among (2008):					
Household members	0.47***			0.23***	0.21***
Relatives and intimate partners[c]	0.75**			0.27***	0.26***
Friends	0.96			0.98	0.96
Co-worker	0.97			0.98	0.98
Difference[d] in heavy drinkers among:					
Household members	0.89			0.32**	0.34**
Relatives and intimate partners[c]	0.66***			0.26***	0.25***
Friends	0.94*			0.92	0.91*
Co-worker	1.01			0.99	0.99

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

N = 320.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

4.4.2 HARM FROM STRANGERS

Findings in this section are based on two groups of respondents: those who reported that they experienced harm from strangers' drinking in 2008, but not in 2011 (n=176), and respondents who reported harm from strangers' drinking in both surveys (n=226). Consistent with the previous section, discontinuation of harm refers to being harmed in 2008 but not reporting harm in the second (2011) survey.

The bivariate results in Table 4.6 show that the respondents' own drinking patterns in 2008 were significantly associated with discontinued harm, with respondents who reported higher levels of risky drinking (i.e. frequently drinking five or more standard drinks in a session per week) curiously more likely to report discontinuation of harm in 2011 than respondents reporting lower levels of risky drinking. A decrease in the number of heavy-drinking non-household relatives and intimate partners and friends in respondents' lives between 2008 and 2011 was also significantly associated with discontinued harm from strangers' drinking in 2011.

In Model 1, the demographic variables (gender, age and neighbourhood affluence) continued not to predict discontinuation of harm from strangers' drinking. In terms of respondents' own drinking covariates

included in Model 2, a respondent's risky drinking pattern in 2008 remained a significant predictor of discontinued harm, although changes in the respondent's drinking patterns between 2008 and 2011 were not. In Model 3, all the heavy drinker variables were entered into the same model. Consistent with the bivariate analysis, respondents who reported fewer heavy-drinking relatives and intimate partners and heavy-drinking friends in 2011 (compared with 2008) were more likely to cease being harmed by strangers in 2011. The other heavy drinker variables were not significant predictors of discontinuation of harm.

When all the covariates were entered into Model 4, respondents' riskier alcohol consumption patterns in 2008 remained a significant predictor of discontinued harm from strangers' drinking. As Model 4 shows, for each additional session a respondent had five or more standard drinks per week in 2008, the odds of remission of harm from strangers' drinking increased by a factor of 1.3. Decreases in the number of heavy-drinking friends and non-household relatives and intimate partners continued to have a significant association with discontinuation of harm from strangers. In the final model, exposure to heavy-drinking friends in 2008 became a significant predictor of discontinued harm from strangers' drinking in 2011.

Table 4.6 Bivariate and multivariate models predicting discontinuation of harm due to strangers' drinking

	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
Gender					
Male	1 (Ref)	1 (Ref)			1 (Ref)
Female	0.94	0.95			1.06
Age (2008)					
18-35	1 (Ref)	1 (Ref)			1 (Ref)
36-55	1.06	1.09			1.04
56 and over	1.41	1.50			1.51
Neighbourhood affluence (2008)					
Low affluence	1 (Ref)	1 (Ref)			1 (Ref)
High affluence	1.14	1.14			1.14
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	1.29*		1.31*		1.55**
5+ drinking occasions/week[a] difference[b]	0.96		1.05		1.20
Heavy drinkers among (2008):					
Household members	1.13			1.05	0.98
Relatives and intimate partners[c]	1.07			0.86	0.85
Friends	1.01			0.94	0.91*
Co-worker	1.02			1.01	1.01
Difference[d] in heavy drinkers among:					
Household members	0.83			0.98	1.00
Relatives and intimate partners[c]	0.75**			0.66**	0.66*
Friends	0.93**			0.90**	0.88**
Co-worker	0.99			0.99	0.99

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

N = 402.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

4.5 PREDICTORS OF PERSISTENCE OF HARM FROM OTHERS' DRINKING

The analyses described in this section assess whether factors such as age and contact with heavy drinkers have an impact on persistence of harm from others' drinking; that is, respondents' experiences of harm in both 2008 and 2011, as compared to respondents who did not experience that harm in either year.

Within this section, a series of logistic regressions have been used to examine persistent harm. The primary outcome variable is 'persistence of harm', where persistent harm refers to respondents who reported harm due to someone else's drinking in both the 2008 and 2011 HTO Surveys, and compares those who were harmed at both time points with those who were harmed at neither. The logistic regression models also use the core set of socio-demographic and heavy drinking predictor variables outlined in Chapter 2. Around one-third of respondents (32 per cent) were persistently harmed by the drinking of either strangers or known problematic drinkers.

4.5.1 HARM FROM KNOWN PROBLEMATIC DRINKERS

An estimated 14 per cent of respondents reported being harmed by a known problematic drinker in both years. This section examines predictors of the persistence of harm in terms of respondents who experienced harm from known problematic drinkers' drinking in 2008 and again in 2011 (n=157), in comparison to those who did not report harm from known problematic drinkers in either year (n=666).

Based on bivariate results in Table 4.7, women were significantly more likely to report persistent harm from known problematic drinkers than men, and older respondents were significantly less likely to report persistent harm from known problematic drinkers compared with the younger respondents. Bivariate findings also indicate that respondents who experienced persistent harm had significantly more heavy drinkers in each of the four relationship categories (i.e. household members, relatives and intimate partners, friends, co-workers).

In Model 1, women were more likely to report persistent harm from known problematic drinkers' drinking and respondents aged 56 years and older were less likely to report persistent harm than those in the youngest age group. In Model 2, once the four heavy drinker covariates were included, the numbers of heavy drinkers in a respondent's household and among their non-household relatives and intimate partners and co-workers, remained significantly associated with persistent harm. However, the association between the number of heavy-drinking friends in the respondent's life in 2008 and persistent harm from a known problematic drinker was no longer significant.

In the final model, with all the covariates included, only exposure to heavy-drinking household members, and non-household relatives and intimate partners predicted persistent harm over time from the drinking of known problematic drinkers. Based on Model 3 results, each additional heavy drinker in the respondent's household in 2008 raised the odds of reporting persistent harm from known problematic drinkers (typically family members or friends) almost six-fold, compared to those reporting no such harm in either year.

In summary, respondents who experienced persistent harm from known problematic drinkers had more heavy drinkers in their households, and more heavy-drinking non-household relatives and intimate partners, even after demographic variables were taken into account.

Table 4.7 Bivariate and multivariate models predicting persistence of harm from known problematic drinkers				
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3
Gender				
Male	1 (Ref)	1 (Ref)		1 (Ref)
Female	1.65**	1.66**		1.30
Age (2008)				
18-35	1 (Ref)	1 (Ref)		1 (Ref)
36-55	1.36	1.43		1.48
56 and over	0.47**	0.49*		0.71
Neighbourhood affluence (2008)				
Low affluence	1 (Ref)	1 (Ref)		1 (Ref)
High affluence	1.07	0.99		0.97
5+ drinking occasions/week[a] (2008)	1.14		1.07	1.07
Heavy drinkers among (2008):				
Household members	7.21***		6.47***	5.90***
Relatives and intimate partners[c]	2.86***		2.80***	2.66***
Friends	1.03*		0.97	0.98
Co-worker	1.04*		1.04*	1.04

*p < 0.05; **p < .01; ***p < 0.001.

N = 823

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

4.5.2 HARM FROM STRANGERS

Just over one in five respondents (21 per cent) reported being harmed in both years by the drinking of strangers or people they did not know well. This section is focused on the prediction of harm from strangers in both time points (n=226), as compared to those who did not experience such harm at either time point (n=559).

The bivariate results in Table 4.8 show that respondents in the youngest age group are four times[4] more likely to report persistent harm from strangers' drinking compared to respondents aged 56 years and older. No other demographic covariates had a significant association with persistent harm from strangers. The number of heavy-drinking non-household relatives and intimate partners and co-workers in a respondent's life in 2008 were both associated with persistent harm from strangers' drinking.

The inverse association between age and persistent harm from strangers' drinking remained significant in Model 1, which included all the demographic covariates and the respondent's drinking pattern in 2008. In Model 2, with the four heavy drinker covariates accounted for, the number of heavy-drinking non-household relatives and intimate partners and heavy-drinking co-workers in the respondent's life were still significant predictors of persistent harm.

In the final model, with all covariates included (Model 3), younger people continued to be four times more likely to experience persistent harm from strangers, in comparison to respondents aged 56 years and older. With respect to heavy drinkers in a respondent's life in 2008, the number of heavy-drinking non-household relatives and intimate partners was still a positive predictor of persistent harm from strangers' drinking, as was the number of heavy-drinking co-workers. However, there were no significant relationships between persistence of harm from strangers' drinking and the number of heavy drinkers among household members or friends. These statistical findings are not fully consistent with an explanation of the patterning of harm in terms of respondents' global involvement in a heavy-drinking social context. Another discrepancy in such an explanation is the fact that, when heavy drinkers in the respondent's social circle are taken into account (Model 3), respondents who themselves drink five or more standard drinks in a session more frequently are actually significantly less likely to experience persistent harm from strangers' drinking.

[4] Result of reversed odds ratio of 0.26 for respondents aged 56 years and older.

Table 4.8 Bivariate and multivariate models predicting persistence of harm due to strangers' drinking				
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3
Gender				
Male	1 (Ref)	1 (Ref)		1 (Ref)
Female	0.98	0.95		0.87
Age (2008)				
18-35	1 (Ref)	1 (Ref)		1 (Ref)
36-55	0.74	0.74		0.71
56 and over	0.26***	0.26***		0.26***
Neighbourhood affluence (2008)				
Low affluence	1 (Ref)	1 (Ref)		1 (Ref)
High affluence	1.04	0.97		1.02
5+ drinking occasions/week[a] (2008)	0.90		0.84	0.77*
Heavy drinkers among (2008):				
Household members	1.14		1.01	0.91
Relatives and intimate partners[c]	1.51***		1.49***	1.49***
Friends	1.03		1.02	1.02
Co-worker	1.07*		1.06*	1.05*

*p < 0.05; **p < .01; ***p < 0.001.

N = 785

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

4.6 SUMMARY

For the majority of respondents, their experience of harms from others' drinking, including known problematic drinkers and strangers, did not change over the study period. For 38 per cent this was because they were not harmed in either year, although 32 per cent were harmed in both years. Almost two-thirds of the sample (62 per cent) reported being harmed in at least one year studied.

There were a few curious findings in Chapter 4. For example, in Table 4.6, Model 4, respondents' riskier alcohol consumption patterns predicted discontinuation (and not initiation) of harm from strangers' drinking. Perhaps these respondents became accustomed to, or tolerated, a certain level of harm from strangers, perceiving nuisance and even occasionally physical harm as what might be expected from a night out. For example, Huhtanen & Tigerstedt (2012) describe how men tolerate higher levels of alcohol-related problems than women before reporting being affected by them.

In general the findings were consistent across harm types – demographic characteristics did not strongly predict experiencing harm in 2011, once harm in 2008 was controlled for. Changes in the level of harm from others' drinking were fairly evenly spread across the population, and were not limited to small and marginalised sections of the community. Repeatedly, past harm and the number of baseline heavy drinkers in the respondent's social circle, as well as changes in the number of heavy drinkers in these groups over time, were the strongest predictors of harm from others' drinking. A range of models were used to test whether these findings held overall and in both directions. For example, when the numbers of heavy drinkers in the respondents' lives increased, respondents were more likely to report they had been harmed by others' drinking in 2011. When the numbers of heavy drinkers in respondents' lives diminished over time, respondents were less likely to report harm from others' drinking in 2011. The overall (whole-sample) model, which accounted for changes in both directions over time, also successfully predicted harm in 2011. These findings are consistent with a social view of harm to others from drinking, where respondents who live in familial and wider social networks with larger numbers of heavy drinkers appear to be at a greater risk of harm from others' drinking.

Almost a third of respondents were persistently affected by others' drinking in both years, around one-fifth by strangers' drinking and 14 per cent by problematic drinkers they knew. Respondents who experienced persistent harm from a known problematic drinker in their lives had more heavy drinkers in their household, and more heavy-drinking non-household relatives and intimate partners than those who did not experience harm from a known problematic drinker in either year. The bonds of family are perceived to be more binding and less likely to change than friendship, making harm from those in closer relationships more likely to be persistent.

Age, in addition to the number of heavy-drinking relatives and intimate partners, was a positive predictor of persistent harm from strangers' drinking, as was the number of heavy-drinking co-workers. Older age was protective and significantly less likely to predict persistent harm to others in 2011 in comparison to the youngest age group. The number of heavy-drinking friends at baseline (2008) was not associated with persistent harm from strangers.

5 THE RELATIONSHIP BETWEEN OTHERS DRINKING AND QUALITY OF LIFE

KEY POINTS

- Respondents with a higher number of heavy-drinking relatives and intimate partners in their lives in 2008 reported lower personal wellbeing in 2011, and respondents with more heavy-drinking relatives and intimate partners in 2011 than 2008 reported reductions in health-related quality of life over time.
- There was no significant association between the change in the number of household heavy drinkers and either health-related quality of life or wellbeing, although this may in part have been due to the limited amount of change in household heavy drinker exposure in the sample.
- The analyses presented in this chapter found no longitudinal association between respondents' experience of harm from other people's drinking and subjective measures of health and wellbeing (once previous levels of wellbeing were controlled for).

Chapter 5 examines the potential impacts that other peoples' drinking may have on a person's health-related quality of life (HRQoL) and self-reported wellbeing (Personal Wellbeing Index).

The research question addressed in this chapter is:

8. How do changes in the number of drinkers in respondents' lives and changing patterns of alcohol's harm to others affect quality of life and wellbeing?

This chapter is divided into two sections: the first aims to examine whether the number of heavy drinkers in respondents' social circles and changes in this number over time are correlated with their HRQoL and wellbeing. The second explores whether changes in self-reported harms from others' drinking are associated with changes in overall measures of HRQoL and wellbeing.

5.1 RELATIONSHIP BETWEEN KNOWING HEAVY DRINKERS AND HRQoL AND WELLBEING

One of the aims of this follow-up analysis was to examine whether the identified cross-sectional associations between HRQoL (using the EQ-5D score, where a score of one is equivalent to full health and a score of zero is equivalent to death), wellbeing (using the Personal Wellbeing Index - PWI) and the number of heavy drinkers in someone's social circle were evident over time. To assess these relationships, a similar modelling strategy to that used in Chapter 4 (Section 4.2) was employed, with models controlling for previous levels of HRQoL and wellbeing, as well as previous exposure to heavy drinkers, and any change in exposure to heavy drinkers between the two survey waves. In other words, the conceptual framework considers wellbeing (or HRQoL) as a function of:

- previous wellbeing (or HRQoL)
- demographic factors
- previous drinking patterns and exposure to heavy drinkers
- changes in drinking patterns and exposure to heavy drinkers.

The full range of variables used are laid out and discussed in more detail in Chapter 2.

5.1.1 RESULTS

There was little sign of overall change in HRQoL or wellbeing in the sample. The mean EQ-5D score in 2008 was 0.84. In 2011 it had barely changed over time – to 0.83. Similarly, the mean levels of wellbeing in the sample did not change significantly between 2008 and 2011 (77.0 in 2008 versus 77.4 in 2011). This lack of change at the mean level hides a reasonable amount of individual level variation on each measure.

Overall, 319 respondents (29 per cent) reported a decline in HRQoL between 2008 and 2011, 291 (26 per cent) reported improved HRQoL and 496 (45 per cent) reported no change. Similarly, on the PWI, 465 (44 per cent) reported decreased wellbeing, 531 (50 per cent) reported improved wellbeing, 72 (7 per cent) reported no change.

A series of models examining the associations between socio-demographics, drinking behaviour, exposure to heavy drinkers and wellbeing (based on PWI scores) is presented in Table 5.1. In the bivariate models, women reported higher levels of wellbeing than men, as did people living in more socio-economically advantaged suburbs. Respondents in the middle age group reported significantly lower levels of wellbeing than the youngest respondents. Respondents' drinking patterns had no significant relationship with wellbeing, while a greater number of non-household relatives and intimate partners and friends reported to be heavy drinkers was associated with lower wellbeing.

In the final model, with all variables included (Model 4), only previous PWI, age, and heavy-drinking non-household relatives and intimate partners in 2008 were significantly associated with wellbeing in 2011, with PWI in 2008 positively predicting PWI in 2011, and middle and older age, and the existence of more heavy-drinking relatives and intimate partners, predicting lower PWI. The significant relationship with heavy-drinking non-household relatives and intimate partners suggests that respondents who had more of these in their lives in 2008 reported lower wellbeing in 2011, controlling for their 2008 wellbeing level.

Table 5.1 Bivariate and multivariate models predicting Personal Wellbeing Index (PWI) in 2011					
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
PWI in 2008	**0.62*** **	**0.62*** **	**0.62*** **	**0.62*** **	**0.61*** **
Gender					
Male	(Ref)	(Ref)			Ref)
Female	2.07**	0.47			0.64
Age (2008)					
18-35	(Ref)	(Ref)			(Ref)
36-55	-2.65**	-2.23**			-2.49**
56 and over	-0.67	-1.62			-1.94*
Neighbourhood affluence (2008)					
Low affluence	(Ref)	(Ref)			(Ref)
High affluence	1.52*	0.99			0.92
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	-0.39		0.14		0.35
5+ drinking occasions/week[a] difference[b]	-0.27		-0.11		0.08
Heavy drinkers among (2008):					
Household members	-0.50			0.97	0.81
Relatives and intimate partners[c]	-1.26**			-0.96*	-0.96*
Friends	0.01			0.02	0.02
Co-worker	-0.16*			-0.11	-0.15
Difference[d] in heavy drinkers among:					
Household members	0.24			0.61	0.61
Relatives and intimate partners[c]	0.08			-0.62	-0.55
Friends	-0.03			-0.03	-0.04
Co-worker	-0.03			-0.07	-0.10

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

N = 1,054 excludes 38 who did not provide complete responses to the PWI items (in one or both waves), seven who did not provide data on their own drinking, four for whom SEIFA quintile could not be estimated, and three with missing data for gender.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

A similar set of models focusing on health-related quality of life is presented in Table 5.2. In the bivariate models, none of the variables measuring exposure to heavy drinkers were correlated with HRQoL. Significant positive associations were found for previous EQ-5D score and neighbourhood affluence, while older respondents reported significantly lower HRQoL. In the final model, with all the covariates included, the age and gender effects remained significant, as did the effect of previous levels of HRQoL. There were two significant associations with exposure to heavy drinkers. Change in the number of heavy-drinking relatives and intimate partners in respondents' lives was negatively associated with levels of HRQoL – i.e. if a respondent reported more relatives and intimate partner heavy drinkers in 2011 than in 2008, his/her HRQoL generally declined.

Table 5.2 Linear regression models of health-related quality of life (EQ-5D) in 2011						
EQ-5D IN 2011	**BIVARIATE**	**MODEL 1**	**MODEL 2**	**MODEL 3**	**MODEL 4**	**MODEL 5**
EQ-5D in 2008	**0.66*****	**0.63*****	**0.66*****	**0.66*****	**0.63*****	**0.63*****
Gender						
Male	(Ref)	(Ref)			(Ref)	(Ref)
Female	-1.84	-2.34*			-2.72*	-2.53*
Age (2008)						
18-35	(Ref)	(Ref)			(Ref)	(Ref)
36-55	-6.17***	-2.76**			-2.86	-2.54
56 and over	-13.91***	-5.75***			-5.93***	-4.38*
Neighbourhood affluence (2008)						
Low affluence	(Ref)	(Ref)			(Ref)	(Ref)
High affluence	4.46***	1.44			1.40	1.42
Frequency of respondent's drinking						
5+ drinking occasions/week[a] (2008)	0.25		0.47		-0.11	-0.11
5+ drinking occasions/week[a] difference[b]	0.28		0.94		0.87	0.85
Heavy drinkers among (2008):						
Household members	1.81			3.43*	3.35*	2.42
Relatives and intimate partners[c]	-0.36			-1.31	-1.33	-1.02
Friends	0.19			0.06	0.00	-0.003
Co-worker	-0.14			0.12	0.00	-0.005
Difference[d] in heavy drinkers among:						
Household members	0.42			2.15	1.96	1.34
Relatives and intimate partners[c]	-1.09			-2.36**	-2.47**	-2.06**
Friends	-0.02			0.02	-0.03	0.02
Co-worker	0.14			0.13	0.05	0.05
Household status						
Lives alone						(Ref)
Lives with other adults and children						3.37*
Lives with other adults and children						-2.63
Lives with children only						4.96**

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

N = 1,091 excludes seven who did not provide data on their own drinking, four for whom SEIFA quintile could not be estimated, and three with missing data for gender.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

[d] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

Puzzlingly, people living in households with more heavy drinkers in 2008 had improvements in their HRQoL between the two survey waves. One possibility is that the effect is, in part, being driven by an overarching positive relationship between living with other people and HRQoL. Indeed, when household status (living with other adults versus not living with other adults) is included in the model results (see Model 5, Table 5.2), the relationship between household heavy drinkers and HRQoL disappears and is replaced by a strong positive association between living with other adults and HRQoL.

5.2 RELATIONSHIP BETWEEN EXPERIENCING ALCOHOL-RELATED HARMS FROM OTHERS AND HRQoL AND WELLBEING OVER TIME

The previous analyses (Section 5.1) focused only on whether knowing heavy drinkers in 2008 (and changes in the number known by 2011) was associated with HRQoL and wellbeing in 2011. A more direct examination of the link between alcohol's harm to others and wellbeing and HRQoL is possible using the self-reported data on experience of harm provided by respondents across the 2008 and 2011 HTO Surveys. To provide an estimate of such a relationship, calculated harm scores for both harms relating to a known problematic drinker and those relating to strangers were used.

Simple analyses undertaken in the 2008 HTO Survey found that respondents who reported higher levels of harm also reported lower average levels of HRQoL. For example, respondents who experienced "a lot" of harm from strangers in 2008 had an average EQ-5D score of 0.80, significantly lower than those who experienced no harm from strangers (mean = 0.86). Similarly, respondents reporting "a lot" of harm from a known problematic drinker had lower levels of HRQoL than those who experienced no such harm (0.79 versus 0.86).

In this modelling approach, rather than focusing on the number of heavy drinkers in respondents' lives, the key independent variables relate to the extent to which respondents report being harmed in any way by others' drinking, using the harm score scales described in Section 2.5.4 and Appendix C. As in the previous section, previous PWI and EQ-5D scores are controlled for, and measures of harm in 2008 and change in harm are included as covariates. The same demographic characteristics (age, gender, socio-economic disadvantage) are included in the final models.

5.2.1 RESULTS

The models incorporating separate stranger and known problematic drinkers harm scores are presented in Tables 5.3 (wellbeing) and 5.4 (HRQoL).

In simple bivariate analyses (see Table 5.3), both harm scores in 2008 were negatively associated with wellbeing (PWI) in 2011, although changes in harm scores had no significant impact. For the analyses focusing on HRQoL (Table 5.4), the amount of harm experienced from known problematic drinkers in 2008 was negatively associated with HRQoL in 2011, but again there were no significant bivariate associations with changes in harm scores. When models were adjusted for previous levels of HRQoL and wellbeing, demographic variables and drinking behaviours, there were no significant associations identified between either harm score and HRQoL or wellbeing.

Table 5.3 Bivariate and multivariate models of Personal Wellbeing Index (PWI) in 2011					
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
PWI in 2008	**0.62*** **	**0.62*** **	**0.62*** **	**0.62*** **	**0.61*** **
Gender					
Male	(Ref)	(Ref)			(Ref)
Female	2.07**	0.47			0.51
Age (2008)					
18-35	(Ref)	(Ref)			(Ref)
36-55	-2.65*	-2.23**			-2.20**
56 and over	-0.67	-1.62			-1.66
Neighbourhood affluence (2008)					
Low affluence	(Ref)	(Ref)			(Ref)
High affluence	1.52*	0.99			0.98
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	-0.39		0.14		0.20
5+ drinking occasions/week[a] difference[b]	-0.27		-0.11		0.03
Known problematic drinker harm score 2008	**-0.42****			**0.01**	**-0.01**
Stranger harm score 2008	**-0.63*** **			**-0.21**	**-0.22**
Known problematic drinker harm score difference[c]	**-0.03**			**-0.12**	**-0.14**
Stranger harm score difference[c]	**-0.05**			**-0.18**	**-0.18**

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

N = 1,048.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Difference scores = 2011 score – 2008 score for each variable.

Table 5.4 Bivariate and multivariate models predicting EQ-5D in 2011					
	BIVARIATE	MODEL 1	MODEL 2	MODEL 3	MODEL 4
EQ-5D in 2008	**0.66*** **	**0.63*** **	**0.66*** **	**0.66*** **	**0.63*** **
Gender					
Male	(Ref)	(Ref)			(Ref)
Female	-1.84	-2.34*			-2.54*
Age (2008)					
18-35	(Ref)	(Ref)			(Ref)
36-55	-6.17***	-2.76***			-2.99*
56 and over	-13.91***	-5.75***			-6.14***
Neighbourhood affluence (2008)					
Low affluence	(Ref)	(Ref)			(Ref)
High affluence	4.46***	1.44			1.37
Frequency of respondent's drinking					
5+ drinking occasions/week[a] (2008)	0.25		0.47		-0.06
5+ drinking occasions/week[a] difference[b]	0.28		0.94		0.80
Known problematic drinker harm score 2008	**-0.52***			**-0.01**	**0.01**
Stranger harm score 2008	**-0.25**			**0.11**	**-0.13**
Known problematic drinker harm score difference[c]	**0.16**			**-0.04**	**-0.03**
Stranger harm score difference[c]	**0.29**			**0.01**	**-0.07**

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

N = 1,086..

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Difference scores = 2011 score – 2008 score for each variable.

5.3 SUMMARY

Lower HRQoL and wellbeing were predicted by increased exposure to heavy drinkers in respondents' lives who were non-household relatives and intimate partners. However, changes in harm from others' drinking were not associated with changes in HRQoL or wellbeing. This may in part have been due to the limited amount of change in household heavy drinker exposure in the sample. The analyses presented in this chapter found no longitudinal association between the experience of harm from other people's drinking and subjective measures of health and wellbeing (once previous levels were controlled for).

6 HELP-SEEKING BEHAVIOUR IN RESPONSE TO ALCOHOL'S HARM TO OTHERS

KEY FINDINGS

- In 2011, of the 727 respondents who were harmed by someone else's drinking, 13 per cent called the police and seven per cent called a health-related service at least once because of other people's drinking in the previous 12 months.
- The majority of calls concerned a stranger's drinking (74 per cent), 16 per cent were due to the drinking of people they knew, and a further ten per cent called police due to the drinking of both strangers and people they knew.
- Previous calls to police because of others' drinking appear to be the dominant predictor of calls to police in 2011. Reports of harm, especially previous harm from strangers' drinking, also played a significant part in respondents' use of police services.

Seeking services such as police or professional counselling is an important indicator of the physical and emotional toll people may experience due to others' drinking, as many people will endure substantial problems before they decide to ask for help (Zajdow 2002). While the following analyses are based on a small group of respondents, the findings offer an opportunity to investigate potential impacts on individuals and essential community services, in particular police.

The research questions addressed in this chapter are:

9. For what proportion of the sample do problems associated with others' drinking result in use of services?
10. What predicts contact with emergency and health-related services because of others' drinking in 2011?

To answer these questions, the analysis is primarily focused on respondents who reported that they were harmed "a little" or "a lot" by another person's drinking, including known problematic drinkers, strangers, or both. This group was asked about their use of community services in the last 12 months because of the drinking of others (see Chapter 2, Section 2.4.6 for details).

While this chapter starts by presenting basic frequencies of service use, including police and health-related services, the main analysis focuses on police, since calls to the police are by far the most common service use reported by respondents. The analysis uses the longitudinal strategy outlined in Chapter 2: i.e. the 2008 HTO Survey 'police' variable is included in the logistic regression analysis as a predictor variable. Furthermore, given the likelihood that the respondent's police use in 2008 strongly relates to his/her 2011 police use, and interacts with other predictors, 2008 police use is included as a control variable in all multivariate regression analyses. The other predictor variables are described in Section 2.5.

6.1 TYPE OF SERVICE AND CIRCUMSTANCES OF CALLS

In 2011, of the 727 respondents who were harmed by the drinking of a known problematic drinker and/or a stranger, 13 per cent (N=93) called the police at least once as a result. Concerning the most recent call made to police by these respondents, the majority concerned a stranger's drinking (74 per cent), 16 per cent were due to the drinking of people respondents knew, and a further 10 per cent related to the drinking of both strangers and known people. The three most common reasons for calling the police were noise (43 per cent), physical fight or assault (30 per cent) and verbal disagreement (25 per cent).

Altogether, 47 respondents called one or more health-related services in 2011 for help with problems due to others' drinking. Of this group, 58 per cent received counselling or professional advice because of other people's drinking or the problems it was causing, 51 per cent received support or advice from self-help services and 13 per cent received medical treatment (Table 6.1).

Table 6.1 Service use because of others' drinking, 2011	
Of those who were harmed in 2011 (n=727):	
Called police	12.8
Used health-related services	6.5
Of those who called the police (n=93)	
Most recent call to police was made about:	
Strangers	74.2
Known person	16.1
Both strangers and known person	9.7
Reason for calling police[a] (n=93)	
Noise	43.0
Physical fight/assault	30.1
Verbal disagreement	24.7
Vandalism	12.9
Other	10.8
Trespassing	7.5
Of those who used health-related services a (n=47): type of service	
Counselling	57.5
Self-help or support group	51.1
Medical	12.8

[a] Respondents were able to select more than one response.

6.2 PREDICTING CONTACT WITH POLICE

Using logistic regression, the following analyses predicts which respondents harmed by others' drinking called police in 2011 (n=93), compared to respondents who reported being harmed by the drinking of a known problematic drinker or stranger in 2011 but did not call police (n=634). Based on the bivariate results shown in Table 6.2, respondents who called the police in 2008 were nearly seven times more likely than others to take this action again in 2011. The number of heavy drinkers (i.e. heavy-drinking household members, relatives and intimate partners and co-workers) the respondent knew in 2008 and change in this number from 2008 to 2011 had no significant relationship with whether respondents called police in 2011 because of others' drinking and the trouble it caused.

Table 6.2 Factors that predict calling the police in 2011 because of others' drinking						
EQ-5D IN 2011	**BIVARIATE**	**MODEL 1**	**MODEL 2**	**MODEL 3**	**MODEL 4**	**MODEL 5**
Called police in 2008						
No	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)
Yes	6.71***	6.35***	6.99***	6.7***	5.94***	6.02***
Gender						
Male	1 (Ref)	1 (Ref)				1 (Ref)
Female	0.85	0.79				0.85
Age (2008)						
18-35	1 (Ref)	1 (Ref)				1 (Ref)
36-55	1.53	1.43				1.89
56 and over	0.81	0.98				1.40
Neighbourhood affluence (2008)						
Low affluence	1 (Ref)	1 (Ref)				1 (Ref)
High affluence	0.80	0.86				0.87
Frequency of respondent's drinking						
5+ drinking occasions/week[a] (2008)	1.05		0.90			0.85
5+ drinking occasions/week[a] difference[b]	0.86		0.79			0.72
Number of known heavy drinkers in 2008	1.01			1.03		1.01
Difference in number of known heavy drinkers[c]	1.00			1.02		1.01
Number of known problematic drinkers harms 2008	1.20***				1.08	1.06
Number of stranger harms 2008	1.38***				1.34***	1.33***
Number of known problematic drinkers harms difference[d]	1.12*				1.13	1.14*
Number of stranger harms difference[d]	0.99				0.92	0.91

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

N = 727.

[a] The number of times that the respondent stated they drank five or more standard drinks in a session in a week.

[b] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[c] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

[d] Difference in number of specific harms = 2011 number of specific harms reported – 2008 number of specific harms reported.

In terms of harms experienced (i.e. specific harmful events or circumstances respondents faced), bivariate results indicate that the number of harms reported in 2008 due to strangers' drinking and due to a known problematic drinker's drinking were both significant predictors of police contact in 2011. An increase in the number of harms from a known problematic drinker's drinking since 2008 was also a predictor of calling police in 2011 – i.e. if a respondent reported a higher number of specific harms due to a known problematic drinker's drinking in 2011 than 2008, they were more likely to call police due to others' drinking in 2011.

Although there were no significant differences attributable to age and neighbourhood affluence, the difference in odds ratios suggest that women and respondents living in more affluent neighbourhoods were less likely to call police in 2011 than their counterparts. Furthermore, respondents in the oldest age category were less likely to call police in 2011 compared with those aged 35 years or under, whereas middle-aged respondents were more likely to do so than younger respondents. Neighbourhood affluence and the respondent's own drinking had no statistically significant association with calls to police in 2011.

When models were adjusted for previous calls to police, socio-demographic variables and the respondent's drinking behaviour, the strong association between calls to police in 2008 and calls in 2011 remained (Models 1 and 2). As illustrated in Model 3, previous exposure to heavy drinkers and the difference in exposure to heavy drinkers from 2008 to 2011 did not predict calls to police in 2011. In Model 4, all the specific harm variables were entered into the same model along with previous calls to police. Apart from previous calls to police, the number of harms due to strangers' drinking in 2008 was the only variable significantly associated with calls to police in 2011. This suggests that for each additional harm respondents experienced in 2008 from strangers' drinking, respondents were 1.3 times more likely to call police in 2011.

In the final model, which includes all the covariates, three factors were significantly associated with calls to police in 2011. Previous calls to police was still the strongest predictor, as respondents who called the police previously were six times more likely to call police in 2011 than those who did not call police in 2008. The remaining two predictors related to harms from others' drinking. An increase in the number of harms due to a known problematic drinker's drinking between 2008 and 2011 was predictive of calls to police in 2011. The other predictor in this survey was a higher number of harms from strangers' drinking in 2008.

6.3 SUMMARY

The first (2008) HTO Survey did not examine whether service use due to harm from others' drinking related largely to the drinking of strangers or heavy drinkers the respondents knew. Indeed, about three-quarters of respondents in 2011 who were harmed by others' drinking and contacted the police or health-related services about associated problems did so because of the drinking of strangers. Around 16 per cent of these respondents called a service about the drinking of those they knew, and 10 per cent were concerned about both the drinking of strangers and those they knew.

Previous calls to police (as reported in 2008) because of others' drinking appear to be the dominant predictor of calls to police in 2011. Reports of harm, especially previous harm from strangers' drinking, also play a part in respondents' use of police services. There were too few reported instances of contact to analyse the predictors of health-related service use.

7 SUMMARY AND DISCUSSION

7.1 PREDICTORS OF CHANGE AND STABILITY IN HARMS FROM OTHERS' DRINKING: OVERVIEW ACROSS ANALYSES

The 2008 HTO Study underlined how a cross-section of the adult Australian general population was affected by others' drinking at one point in time (Laslett et al. 2010). The present study adds the substantial dimension of patterns in time to the previous HTO Study.

The picture in 2011 is relatively similar to that in 2008: there are age differences in rates of harms from others' drinking, including harms from strangers and known problematic drinkers in respondents' lives. There was however a moderate but significant decrease in harm from others' drinking in the sample between 2008 and 2011, particularly from those in relationships more distal to the respondent.

This report pays more attention to a dimension which turns out to be important cross-sectionally, as well as in predicting change in the experience of harm: the presence and number of heavy drinkers in the concentric and overlapping circles in which a respondent moves. Often the strongest predictors of harm from others, and of its initiation and persistence, are the numbers of heavy drinkers among household members and non-household relatives and intimate partners – even though respondents name many more friends and co-workers as heavy drinkers than household members or relatives. For harm from strangers, however, the number of heavy-drinking friends is more predictive – most probably because having heavy-drinking friends indicates some propensity to public drinking, with a greater exposure to risk from the drinking of strangers.

Table 7.1 looks across the different analyses reported in Chapter 4 predicting harm in 2011 from another's drinking, summarising the results of the full multivariate models in each of nine analyses. The final two columns are for the overall (full-sample) model (Section 4.2), which considers prediction of harm from known problematic drinkers or from a stranger's drinking, controlling for whether the same harm existed in 2008. The analyses of initiation (Section 4.3) predict harm in 2011 among those who did not experience harm in 2008, while the analyses of discontinuation (Section 4.4) predict whose harm will remit among those suffering harm in 2008. The analyses of persistence (Section 4.5) predict harm both in 2008 and 2011, compared to those with no harm at either time.

The different subsamples on which the analyses were done, and the different dependent variables, mean that there is considerable variation in results. But there is also substantial consistency. Increases in numbers of heavy drinkers in the respondent's circles were often predictive of harms from others' drinking in 2011 even when harms in 2008 were included as a control. This was particularly true for heavy drinkers in the household or non-household relatives and intimate partners when predicting harm from a known problematic drinker. As expected, the relationships identified ran in the same direction as the models for initiation and persistence, and in the opposite direction in analyses of 2008 harms that discontinued in 2011. This consistency of results suggests that the number of heavy drinkers in respondents' lives is critical when discussing continuity and change in alcohol's harm to others.

There is thus consistent evidence suggesting that within networks of heavy drinkers a variety of harms occur, and these results are found both cross-sectionally and longitudinally. This is seen in the occurrence of harm from others' drinking in its entirety over time, and in its persistence, initiation and remission.

In this research, age, gender and a respondent's drinking pattern were linked to harms from others' drinking but, with the exception of age, did not make a further contribution to predicting harm once heavy drinkers in the respondents' social circles were included in the analysis. The findings underline the importance of heavy drinking around the respondent, but do not undercut the importance of demographic factors. Rather, they indicate a common social context both of heavy-drinking social circles and of harm from others' drinking. In particular, the heavy drinking and the harms from others both occur particularly among young adults.

Table 7.1 Predicting harm from others' drinking: Comparisons of multivariate outcome models (including all covariates)

DEPENDENT VARIABLE: HARM FROM	KNOWN PROBLEMATIC DRINKERS	STRANGER	KNOWN PROBLEMATIC DRINKERS	KNOWN PROBLEMATIC DRINKERS	KNOWN PROBLEMATIC DRINKERS	STRANGER	STRANGER	STRANGER
PREDICTING TYPE OF HARM:	OVERALL	OVERALL	INITIATION	DISCONTINUATION	PERSISTENT	INITIATION	DISCONTINUATION	PERSISTENT
Harm from known problematic drinkers/strangers in 2008								
Yes	↑	↑						
Gender								
Female	-	-	-	-	-	-	-	-
Age (Reference age ≤35 years)								
36-55	-	-	-	-	-	-	-	-
56 and over	-	↓	-	-	-	↓	-	↓
Neighbourhood affluence							-	
High affluence	-	-	-	-	-	-	-	-
5+ drinking occasions/week 2008	-	↑	-	-	-	-	-	↓
Difference in 5+ drinking occasions/week[a]	-	-	-	-		-	-	
Heavy drinkers among (2008):								
Household members	↑	-	↑	↓	↑	-	-	-
Relatives and intimate partners[c]	↑	-	↑	↓	↑	-	-	↑
Friends	-	-	-	-	-	-	↓	-
Co-workers	↑	-	↑	-	-	↑	-	↑
Difference in number of heavy drinkers among:[b]								
Household members	↑	-	↑	↓		-	-	
Relatives and intimate partners[c]	↑	↑	↑	↓		-	↓	
Friends	-	↑	-	↓		-	↓	
Co-workers	-	-	-	-		↑	-	

Predicting type of harm: Overview harm models (section 4.2); initiation (Section 4.3); discontinuation (Section 4.4); persistence (Section 4.5).

↑ denotes significant positive relationship; ↓ denotes significant negative relationship

– denotes that the significance values of coefficients or odds ratios did not meet the 0.05 criteria for significance;

blank cells denote that the estimates are unavailable as these variables were not included in these models.

[a] Difference in number of 5+ drinking occasions/week = 2011 number of 5+ drinking occasions/week – 2008 number of 5+ drinking occasions/week.

[b] Difference in number of heavy drinkers = 2011 number of heavy drinkers – 2008 number of heavy drinkers for each variable.

[c] Relatives and intimate partners = Relative, girlfriend, boyfriend, or ex-partner not living with the respondent.

7.2 HEALTH-RELATED QUALITY OF LIFE AND WELLBEING

The results of these analyses provide some longitudinal support for the cross-sectional relationships between exposure to heavy drinkers and reduced HRQoL and wellbeing identified previously. In particular, there was a relationship between increases in the number of heavy-drinking relatives and intimate partners outside the household and reported reductions in HRQoL between 2008 and 2011.

However, somewhat surprisingly, there were no longitudinal associations identified between HRQoL or wellbeing and household heavy drinkers, although this may in part have been due to the limited amount of change in household heavy drinker exposure in the sample. The vast majority of respondents (88 per cent) reported no change in the number of household heavy drinkers in their lives, with most of these (911 out of 977) reporting no household heavy drinkers in either 2008 or 2011.

The overall results may reflect the homeostatic nature of quality of life measures (Cummins et al. 2002), whereby subjective reports of health and wellbeing tend to drift towards a steady level, regardless of changes in people's circumstances. Indeed other studies have also shown minimal change over time in quality of life and wellbeing (e.g. Lucas et al. 2003), and the current study found smaller differences over time in comparison with the size of cross-sectional differences identified in the 2008 HTO Study (Laslett et al. 2010). The idea that some people, despite living in damaging situations, accept and adapt to them is not new, and is discussed particularly in the Al-Anon and domestic violence literature, and in the literature that discusses how spouses and children learn to live in dysfunctional alcoholic families (Zajdow 2002).

However, there is other evidence that indicates that larger social circles are associated with wellbeing and health-related quality of life (Livingston et al. 2010), suggesting that, while a decrease in harm may be associated with decreases in the number of heavy drinkers in a person's life, it may also be the case that if the size of one's social circle decreases because heavy drinkers are lost, and this decrease is not compensated for by other friends and relatives, quality of life and wellbeing may in fact be compromised. Therefore building new social circles as well as decreasing heavy-drinking networks may be important, if more moderate drinking patterns cannot be encouraged within existing social circles.

7.3 HELP-SEEKING BEHAVIOURS

Overall, service use was relatively low across the sample. However, of the small group of respondents who reported service use in 2011, the majority called police. For the most part, calls to police were made due to the drinking of strangers and related to noise, physical fights or assault and verbal disagreements. Based on further analyses, factors that predicted calling police due to others' drinking were previous use of police services due to others' drinking and previous experiences of harm from strangers' drinking. Given only a few factors were found to be associated with police service use over time, this finding suggests that further research should be undertaken to examine whether services are used repeatedly because the problems they are called about are not resolved, or because they have been effective and therefore respondents are more likely to use them again. Larger studies are needed to investigate predictors of use of health and other welfare services and their effectiveness in addressing harms from others' drinking.

7.4 IMPLICATIONS FOR FUTURE RESEARCH, POLICY AND PRACTICE

The research findings in this report emphasise and add to the findings from the first HTO Study, published in *The Range and Magnitude of Alcohol's Harm to Others* in 2010. While the first report indicated that around 52 per cent of Australians had been negatively affected by others' drinking in the past year, the current report underlines that for around one-third of the sample surveyed in both years, harm from others' drinking is persistent. Around one in five respondents reported that they had been affected by strangers' drinking at both time points and 14 per cent reported that they had been affected by the drinking of someone they knew in both 2008 and 2011.

That the social drinking context of the respondent mattered surfaced time after time in these analyses. This meant that respondents who at baseline (2008) lived with more heavy drinkers, who worked with more heavy drinkers, or who had more heavy-drinking friends, were at greater risk of experiencing harm from others' drinking over time. Moreover, the chances of experiencing harm from others' drinking increased

when the numbers of heavy drinkers in respondents' lives increased. These contextual factors were more critical to the prediction of harm from others' drinking than underlying social factors such as age, gender or socio-economic factors. This does not mean that these factors are not relevant, but that, for example, young people experience more harms from others' drinking because of the social contexts within which they live and drink, and because of whom they live with, befriend and drink with, rather than because of their age per se.

That the harms are spread widely across age and income groups and genders suggests that the 'prevention paradox' (Kreitman 1986) applies even more strongly to harm to others from drinking than it does to harm to the drinker. The prevention paradox implies that the majority of cases do not occur in the heaviest-drinking or dependent proportion of the population, but in the proportion of the population that only occasionally drinks heavily. This broad spread of the harms to others from drinking in the population implies that policies need to be equally broad in their application. As has been demonstrated empirically in studies both in Australia (Livingston 2011) and elsewhere (e.g. Cohen et al. 2006), measures that restrict the availability of alcohol, increase alcohol taxes and prices are likely to be particularly effective in reducing alcohol's harms to others in the general population, and among young drinkers (Babor et al. 2010).

While the findings regarding heavy-drinking social contexts were consistent, younger age was predictive of harms from strangers' drinking over time. This suggests that universal alcohol control policies should be supplemented by strategies that target the contexts in which young people drink. The types of options that may benefit young people have been recently summarised in the *Patron Offending and Intoxication in Night-Time Entertainment Districts* (POINTED) study, in which Miller et al. (2013) studied and analysed young people's nights out drinking in entertainment districts across Australia. The results, which showed high rates of intoxication that increased as the night wore on, suggested that policies limiting opening hours and enforcing responsible service (i.e. restricting sales to the under-aged or intoxicated), along with increased availability of later-night public transport, would improve the safety of young people.

Alcohol prices have decreased in Australia relative to spending power, and a range of policies that increase taxes and prices should reduce harms to the drinker (Carragher, Chalmers & Wales, 2011) and those around them. Strategies that increase the price of alcohol are likely to work to decrease harms to others from drinking in the general population and particularly among young people.

Young people are particularly sensitive to price (Godfrey 2007; Babor et al. 2010), and the difference in price between on- and off-premises alcohol consumption can result in incentives that move drinking to different and often unregulated environments (Miller et al. 2013); for example 'pre-drinking' (consumption of alcohol at home, prior to going out). Increasing the price of alcohol may contribute both to reductions in pre-drinking and drinking when young people are out.

Large-scale alcohol policy interventions have acted to reduce mortality and hospitalisations of drinkers, and in the context of harm to others, have also resulted in reductions in alcohol-related violence. However, whether reductions in a broader range of harms to others will result has not been studied. Surveillance research of harms to others from drinking would enable the monitoring and evaluation of the effects of the introduction of such policies over time. Ongoing cross-sectional surveys of the harm to others from drinking would meet this research gap, particularly if complemented with ongoing collection of alcohol sales data.

This study also holds policy implications for institutions of societal response, assistance and support. It is clear from the results in Chapter 4 that the presence of heavy drinkers in the household or family predicts that the respondent will continue to be harmed, or experience new harm from others' drinking if they have not previously. The 2008 HTO Study showed that harms from others' drinking place a heavy burden on government systems, including health, justice, policing, welfare and treatment services. Indeed the annual tangible costs of the harm from others' drinking totalled $13.4 billion. Service use data from the 2008 survey further inform us that 13 per cent of respondents had called the police in the previous 12 months because of others' drinking and five per cent had sought help from a health service because of someone else's drinking (Mugavin, Livingston & Laslett 2014).

Policies that reduce the harms to others from drinking will diminish the strain on a range of service agencies (in particular police) in the longer term. However, it is recognised that if treatment services are modified to improve access to those affected by others' drinking and better target their needs (as opposed to the needs of drinkers per se) there may be an initial increase in demand for treatment from those affected by others' drinking.

Currently, other qualitative studies undertaken by the CAPR (see Manton et al. 2014) suggest that the troubles for individuals around the drinker seem rather invisible to major social response agencies, with respondents surveyed seldom describing the use of services to meet their needs. In the 2008 HTO Survey, 13 per cent of respondents had called the police in the previous 12 months because of others' drinking and five per cent had sought help from a health service. The 2011 data in this report show that the social agency most often called on by those troubled by others' drinking was the police, and most of the calls to the police were about the drinking of strangers.

Only a small proportion (6.5 per cent) of those reporting harm from anyone in 2011 contacted health or counselling services for help with problems "due to other people's drinking." It may not be at all clear to most in this situation what agency they should call. This finding is consistent with a view from another angle offered in the work of Moore et al. (2011), in which asking social agencies and services about cases in their caseloads of teenagers dealing with alcohol problems in their families was not productive; recruiting such cases for the study proved "extremely difficult." This suggests a need to promote greater recognition in social and health agencies of the problems that those around a heavy drinker may be experiencing, and studies and training concerning what responses might be most helpful. The work of Orford et al. (2010) in developing effective treatment for those affected by others' drinking should be considered here; for example, their work has shown that brief interventions may be effective in managing problems of those affected by other drinkers and drug users in their families (Copello et al. 2010).

At the level of treatment policy, Templeton (2013) has noted that the UK National Treatment Agency for Substance Misuse called in 2010 for "developing services for families and carers as well as involving them in treatment," and the 2011 quality standard on alcohol dependence and harmful use of the UK National Institute for Health and Clinical Excellence (NICE) includes a statement that "families and carers of people who misuse alcohol [should] have their own needs identified, including those associated with the risk of harm, and [should be] offered information and support" (NICE 2011, p 10).

There has been some gradual re-orientation of existing treatment systems overseas (Copello et al. 2013) and in Australia to better meet the needs of those affected by others' drinking. South Australian research has been engendering moves to make alcohol and drug systems more family-friendly, not only to involve family members in drinkers' treatment, but also to be more responsive to the needs of family members of clients (Trifonoff et al. 2010). Victoria's plan for managing alcohol and drug problems focuses strongly on reducing the anti-social behaviour and violence associated with alcohol and recognises the importance of ensuring others' needs are met by the treatment system, stating that "improved child and family focused treatment services are essential to meet our shared responsibility to Victoria's vulnerable children" (State Government of Victoria 2013, p 40). Turning Point (a Victorian addiction treatment, education and research agency) has recently developed a brief telephone intervention for alcohol and other drug counsellors working with significant others affected by heavy-drinking (and/or drug-using) family members and friends, based on the 5-step method of Copello et al. (2010) (Best et al. 2014). How best to reach and serve those adversely affected by others' drinking deserves consideration and action by Australian treatment authorities, professionals and agencies.

However, recent Australian government actions, at both federal and state levels, to constrain costs in alcohol and other drug treatment systems are likely to have diminished the capacity of treatment agencies to take on new tasks and streams of clients; services to families of heavy drinkers are not defined as core functions for which governments will pay.

While many studies have focused on managing the violence and health concerns associated with drinking, a wider range of harms from others' drinking and how they have been addressed by alcohol policy interventions has been largely neglected by the research community. Many studies assess the death and injury rates for drinkers associated with the increases or decreases in alcohol controls (Babor et al. 2010), but few pay attention to effects on harms to others from drinking, although there are small studies of how drinking restrictions in small outback communities in Australia can reduce hospital admissions for mothers and children in Indigenous communities (e.g. Gray et al. 2000; Donnelly et al. 2006). While it is known that interventions that limit price, availability and advertising of alcohol have beneficial effects upon drinkers' problems, it is important to test the validity of expectations that these effects will 'spill over' to improve the lives of those affected by others' drinking. Moreover, while there is some surveillance of alcohol-related violence (e.g. domestic assaults and child protection reports), there is acknowledgement that only a fraction of incidents come to the attention of police and/or health and social services. The often-uncounted harms and costs that significantly affect the many more individuals affected by alcohol's

harm to others also deserve further research, policy attention and measured responses. Ongoing research about the harms to others from drinking would highlight the problem, act as a lever for action and enable monitoring of successful alcohol control and harm minimisation strategies.

The recent growth in the body of work internationally on harm to others from drinking has made it even more apparent that the size of the problem merits both individual treatment and community or universal policy interventions. This report makes plain the persistent and ongoing nature of alcohol's harm to others, and underlines important alcohol policy, service and research options to reduce and monitor harms from others' drinking.

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APPENDIX A: FIGURES, BOXES AND TABLES

LIST OF FIGURES

Figure 3.1	Mean number of heavy drinkers in the respondents' social circles by age group (2011 respondents, confidence intervals indicated by bars)	**34**
Figure 4.1	Proportion of respondents experiencing harm from known problematic drinkers in 2008 and 2011 (N = 1,106)	**37**
Figure 4.2	Proportion of respondents experiencing harms from strangers' drinking in 2008 and 2011 (N = 1,104)	**38**
Figure 4.3	Proportion of respondents experiencing any harm from known problematic drinkers and/or strangers' drinking in 2008 and 2011 (N = 1,104)	**38**
Figure C.1	Proportion of respondents stating they were harmed a little or a lot by a known problematic drinker per 1-10 rating of harm.	**97**
Figure C.2	Proportion of respondents stating they were harmed "a little" or "a lot" by strangers per 1-10 rating of harm.	**98**

LIST OF BOXES

Box 2.1	Demographic predictor variables	**23**
Box 2.2	Risky drinking predictor variables	**24**
Box 2.3	Heavy drinker predictor variables	**25**
Box 2.4	Harm predictor variables	**26**
Box 4.1	Changing patterns of harm	**39**

LIST OF TABLES

Table 2.1	Logistic regression model predicting participation in second survey from first survey responses	**19**
Table 2.2	Demographic characteristics of the HTO sample.	**20**
Table 3.1	Specific harms from the known problematic drinker who had most negatively affected the respondent in the previous 12 months by gender, 2008 and 2011	**29**
Table 3.2	Specific harms from strangers' drinking reported in the previous 12 months by gender, 2008 and 2011.	**29**
Table 3.3	Percentage of respondents harmed by the drinking of those in different relationships in 2008 and 2011	**30**
Table 3.4	Percentage of respondents reporting, and average numbers of, heavy drinkers (HD) in each relationship category by gender in 2008 and 2011	**32**
Table 3.5	The percentage of respondents who reported a heavy drinker for each relationship category, and average number of heavy drinkers reported for each relationship category in 2008 and 2011, by age group	**33**
Table 3.6	Bivariate prediction of harm from drinkers in 2011	**35**
Table 4.1	Bivariate and multivariate models predicting harm from known problematic drinkers in 2011	**40**
Table 4.2	Bivariate and multivariate models predicting harm from strangers' drinking in 2011	**42**
Table 4.3	Bivariate and multivariate models predicting initiation of harm from known problematic drinkers	**44**
Table 4.4	Bivariate and multivariate models predicting initiation of harm due to strangers' drinking	**45**
Table 4.5	Bivariate and multivariate models predicting a discontinuation of harm from known problematic drinker	**47**
Table 4.6	Bivariate and multivariate models predicting discontinuation of harm due to strangers' drinking	**48**
Table 4.7	Bivariate and multivariate models predicting persistence of harm from known problematic drinkers	**50**
Table 4.8	Bivariate and multivariate models predicting persistence of harm due to strangers' drinking	**51**
Table 5.1	Bivariate and multivariate models predicting Personal Wellbeing Index (PWI) in 2011	**55**
Table 5.2	Linear regression models of health-related quality of life (EQ-5D) in 2011	**56**
Table 5.3	Bivariate and multivariate models of Personal Wellbeing Index (PWI) in 2011	**58**
Table 5.4	Bivariate and multivariate models predicting EQ-5D in 2011	**59**
Table 6.1	Service use because of others' drinking, 2011	**61**
Table 6.2	Factors that predict calling the police in 2011 because of others' drinking	**62**
Table 7.1	Predicting harm from another's drinking: Comparisons of multivariate outcome models (including all covariates)	**65**
Table C.1	Results from tracking activities	**100**

APPENDIX B: HARM TO OTHERS' - 2011 SURVEY

Following is a truncated version of the questionnaire as prepared and used by the Social Research Centre (in Computer-Assisted Telephone Interviewing format) for the 2011 re-interview survey on alcohol's harm to others. Introductory questions, e.g. to get to the right respondent, and non-substantive closing questions, e.g., concerning possible recontact, are omitted here. All the substantive questions are reproduced here.

0851 AUSTRALIAN ALCOHOL'S HARM TO OTHERS STUDY: FOLLOW-UP SURVEY

*SECTION A. HOUSEHOLD QUESTIONS

*(ALL)
Aintro I'll begin with some questions about you and your household...
1. Continue
*(ALL)
A1 RECORD GENDER OF RESPONDENT
1. Respondent is male
2. Respondent is female

*(ALL)
A2 Firstly, how old are you?
1. Age given (SPECIFY___)(RANGE 18 TO 99) (GO TO A3)
2. 17 or younger (RESELECT, ELSE GO TO TERM1)
3. Refused

*(REFUSED AGE) (A2=3)
A2a Which of the following age groups are you in? READ OUT
1. 18 - 24 years
2. 25 - 34 years
3. 35 - 44 years
4. 45 – 54 years
5. 55 – 64 years
6. 65 – 74 years
7. 75 + years
8. (Refused) (GO TO TERMINATION SCRIPT 2)

*(ALL)
A3 APART from yourself, how many OTHER people aged 18 years or over usually live in your household?
1. Number given (SPECIFY____) (RANGE 1 TO 11)
2. No others (GO TO A5X)
3. Refused (GO TO A5X)

PREA5 IF A3=1 IS 1 (ONE OTHER PERSON 18+ IN HOUSEHOLD) GO TO A5 INTROA, OTHERWISE GO TO A5 INTROB

*(OTHERS 18+ IN HOUSEHOLD)
A5 INTROA What is that person's relationship to you?
INTROB Thinking of the (oldest/next oldest) of these people, what is that person's relationship to you?
INTERVIEWER NOTE: IF STEP PARENT (INCLUDING GRANDPARENT CODE AS FATHER, MOTHER, GRANDFATHER, GRANDMOTHER
1. Husband
2. Wife
3. MALE partner / de facto
4. FEMALE partner / de facto
5. Son
6. Daughter
7. Stepson or partner's son
8. Stepdaughter or partner's daughter
9. Father
10. Mother
11. Grandfather
12. Grandmother
13. Brother
14. Sister
15. Other MALE relative

16. Other FEMALE relative
17. MALE friend / flatmate
18. FEMALE friend / flatmate
19. Other MALE (SPECIFY_____)
20. Other FEMALE (SPECIFY _____)
21. (Refused)

*[REPEAT LOOP (A5) FOR ALL HOUSEHOLD MEMBERS - ALLOW UP TO 11 PEOPLE]
*[CLOSE LOOP FOR ALL HOUSEHOLD MEMBERS]
*(ALL)
A5x How many children aged 0 to 17 usually live in your household?
1. Number given (SPECIFY____) (RANGE 1 TO 9)
2. None (GO TO A5DUM)
3. Refused (GO TO A5DUM)

PREA5x1 IF A5x=1 IS 1 (ONE CHILD <18 IN HOUSEHOLD) GO TO A5x1 INTROA, OTHERWISE GO TO A5x1 INTROB
*(CHILDREN <18 IN HOUSEHOLD)
*START LOOP
*PROGRAMMER – MAXIMUM ITERATIONS = 9
A5x1 INTROA What is that child's relationship to you?
INTROB Thinking of the (oldest/next oldest) of these children, what is that child's relationship to you?
1. Son
2. Daughter
3. Stepson or partner's son
4. Stepdaughter or partner's daughter
5. Granddaughter
6. Grandson
7. Other MALE relative
8. Other FEMALE relative
9. Other MALE (SPECIFY_____)
10. Other FEMALE (SPECIFY _____)
11. (Refused)

A5x2 How old is the child?
INTERVIEWER NOTE: IF AGED LESS THAN 12 MONTHS CODE AS 0

1. Age given (SPECIFY___)(RANGE 0 TO 17)
2. Refused

PREA5x3 IF A5x2=0 TO 2 SKIP AUTO CODE A5x3=2
A5x3 Was this child (usually) living in your household when we spoke with you in 2008?

1. Yes
2. No
3. Refused

*REPEAT LOOP (A5x1 THRU TO A5x3) FOR ALL CHILDREN <18 IN HOUSEHOLD – ALLOW UP TO 9 CHILDREN)
*END LOOP
*(ALL)
A5DUM PROGRAMMER CREATE DUMMY VARIABLE FOR PRESENCE OF CHILDREN AGED 13-17 IN HOUSEHOLD
1. One child 13-17 in household (A5X2)
2. Two or more children aged 13-17 in household (A5X2)
3. No children 13-17 in household / Refused (All others) (A5X2)

A6DUM PROGRAMMER CREATE DUMMY VARIABLE FOR PRESENCE OF CHILDREN UNDER 18 IN HOUSEHOLD (SECTION G FILTER)
1. Child/ren under 18 years in household (A5X=1)
2. No children under 18 in household / Refused (All others)

A7DUM PROGRAMMER CREATE DUMMY VARIABLE FOR PRESENCE OF PEOPLE 13+ IN HOUSEHOLD (SECTION D FILTER)
1. One person 13+ in household (A3=1 AND A5DUM=3) OR (A3 NOT=1 AND A5DUM=1)
2. Two or more people 13+ in household (A3 + A5X2 = 2 OR MORE AGED 13+)
3. No people 13+ in household / Refused (All others)

*(ALL)
A7 Which of the following best describes your main activity at the moment? Are you....
1. Self-employed
2. Working in paid employment
3. Doing study or training
4. Unemployed and looking for work
5. Doing unpaid voluntary work
6. Retired

7. Engaged in home duties
8. Unable to work, or
9. Doing something else (SPECIFY_____)
10. (Can't Say)
11. (Refused)

*(ALL)
A8 And for most of your life, what has been your MAIN occupation?
1. Manager / administrator
2. Professional
3. Associate professional
4. Trades persons
5. Advanced clerical or service
6. Intermediate clerical or service
7. Intermediate production or transport
8. Elementary clerical or service
9. Labourers and related workers
10. NEVER BEEN IN PAID EMPLOYMENT
11. Other (SPECIFY_____)
12. (Refused)

*SECTION B. PERSONAL WELLBEING INDEX

*(ALL)
Bintro As part of the study, we would like to know a little about your health and wellbeing in the last 12 months.....
The first group of questions uses a scale from zero to 10. Zero means you feel completely dissatisfied. 10 means you feel completely satisfied. And 5 means you feel neutral - neither satisfied nor dissatisfied.
CLARIFY AS NECESSARY: There are no right or wrong answers..... just think about your life as a whole.
Would you like me to go over this again for you? EXPLAIN SCALE AGAIN AS NECESSARY
1. Continue

*(ALL)
B1 So, thinking about your own life and your personal circumstances....
How satisfied are you with....
STATEMENTS
a. Your life as a whole
b. Your standard of living
c. Your health
d. What you are achieving in life
e. Your personal relationships
f. How safe you feel
g. Feeling part of your community
h. Your future security
i. Your spirituality or religion

RESPONSE FRAME
0 Completely dissatisfied
1 .
2 .
3 .
4 .
5 Neutral – neither satisfied nor dissatisfied
6 .
7 .
8 .
9 .
10 Completely satisfied
11 (Can't say)
12 (Refused)

*SECTION C. EUROQOL – 5D

*(ALL)
INTRO NOW I HAVE SOME QUESTIONS ABOUT YOUR HEALTH (I REALIZE SOME OF THESE MAY SEEM REPETITIVE BUT PLEASE BEAR WITH ME - WE ASK THE SAME QUESTIONS OF EVERYONE)...
1. Continue

*(ALL)
C1. Which of these statements best describes your own state of health today.....
1. I have NO problems in walking about
2. I have SOME problems in walking about, or
3. I am confined to bed
4. (Can't say)
5. (Refused)

*(ALL)
C2. (Which of these statements best describes your own state of health today.....)
1. I have NO problems with self care
2. I have SOME problems washing or dressing myself or
3. I am unable to wash or dress myself
4. (Can't say)
5. (Refused)

*(ALL)
C3. (Which of these statements best describes your own state of health today.....)
1. I have NO problems with performing my usual activities
2. I have SOME problems with performing my usual activities or
3. I am unable to perform my usual activities
4. (Can't say)
5. (Refused)

*(ALL)
C4. (Which of these statements best describes your own state of health today.....)
1. I have NO pain or discomfort
2. I have MODERATE pain or discomfort or
3. I have EXTREME pain or discomfort
4. (Can't say)
5. (Refused)

*(ALL)
C5. (Which of these statements best describes your own state of health today.....)
1. I am NOT anxious or depressed
2. I am MODERATELY anxious or depressed or
3. I am EXTREMELY anxious or depressed
4. (Can't say)
5. (Refused)

INTERVIEWER NOTE: IF RESPONDENT SOUNDS UPSET/DEPRESSED, PLEASE SAY SOMETHING LIKE: "THERE'S A TELEPHONE NUMBER I CAN GIVE YOU IF YOU WOULD LIKE TO TALK TO SOMEONE" AND GIVE THEM LIFELINE: 131 114
*(ALL)
TIMESTAMP 1

*SECTION D. HEAVY DRINKERS IN YOUR LIFE

*(ALL)
Dintro Now we are interested in the people you have been in contact with over the last 12 months and their drinking. We do not need to know names, just their relationships to you.
PRED1 IF A3=2 OR 3 (NO OTHER ADULTS IN HOUSEHOLD / REFUSED NUMBER OF PEOPLE IN HOUSEHOLD) AND A5DUM =3 (NO CHILDREN 13-17 IN HOUSEHOLD/REFUSED NUMBER OF CHILDREN IN HOUSEHOLD) GO TO D4. OTHERS CONTINUE
*START LOOP
*PROGRAMMER – MAXIMUM ITERATIONS = NUMBER OF PERSONS IN HOUSEHOLD AGED 13 OR OLDER (FROM A3 AND A5x2)
IN FIRST ITERATION OF LOOP, DISPLAY "....any current member of your household"
IN FOLLOWING ITERATIONS OF LOOP, DISPLAY "...any other current members of your household"
*(OTHER HOUSEHOLD MEMBERS AGED 13 OR OVER)
D1 Thinking about the last 12 months, <has there been any CURRENT MEMBER OF YOUR HOUSEHOLD who you would consider to be / would you consider the OTHER MEMBER OF YOUR HOUSEHOLD to be>a fairly heavy drinker, or someone who drinks a lot sometimes?
PROGRAMMER NOTE: INSERT SECOND PHRASE WHEN A7DUM=1 (ONE OTHER PERSON 13+ IN HH)
1. Yes
2. No (GO TO D4)
3. (Can't say) (GO TO D4)
4. (Refused) (GO TO D4)

PRED2 IF A7DUM=1 (ONE OTHER PERSON 13+ IN HH) AND A5= 1-20 (R PROVIDES RELATIONSHIP), GO TO D3, OTHERWISE CONTINUE
*(FAIRLY HEAVY DRINKER IN HOUSEHOLD) (D1=1)
D2 What is their relationship to you?
DISPLAY CODEFRAME FROM A5. DISPLAY "OTHER SPECIFY" RESPONSE (NOT PRECODE)
10. (Refused)

*(FAIRLY HEAVY DRINKER IN HOUSEHOLD) (D1=1)
D3 And would you say your <INSERT RESPONSE TO D2/ INSERT RESPONSE TO A5 IF ONLY ONE OTHER PERSON IN HOUSEHOLD>'s drinking negatively affected you in some way in the last 12 months?
*PROGRAMMER NOTE: IF "REFUSED" RELATIONSHIP AT D2 (AND EQUIVALENT QUESTIONS THROUGHOUT SECTION D), DISPLAY "that person" AT D3.
1. Yes
2. No
3. (Can't say)
4. (Refused)

*END LOOP
*START LOOP
*PROGRAMMER – MAXIMUM ITERATIONS = 8
IN FIRST ITERATION OF LOOP, DISPLAY "....any relative or boy/girlfriend"
IN FOLLOWING ITERATIONS OF LOOP, DISPLAY "...any other relative or boy/girlfriend"
*(ALL)
D4 (And) at any time in the last 12 months, has there been any RELATIVE OR BOYFRIEND OR GIRLFRIEND who does NOT live with you, who you would consider to be a fairly heavy drinker or someone who drinks a lot sometimes?
INTERVIEWER NOTE: BOY/GIRLFRIEND IS A ROMANTIC RELATIONSHIP, NOT JUST A FRIEND
REMIND AS NECESSARY: We are referring to relatives who you have been in contact with in the last 12 months
1. Yes
2. No (GO TO PRED10)
3. (Can't say) (GO TO PRED10)
4. (Refused) (GO TO PRED10)

*(RELATIVE/ BOYFRIEND/GIRLFRIEND WHO IS A FAIRLY HEAVY DRINKER (D4=1)
D5 What is their relationship to you?

PROGRAMMER NOTE: PLEASE DISPLAY LIST AS TWO COLUMNS LIKE THIS SO FITS ON SINGLE SCREEN

1. Son	11. Daughter
2. Father	12. Mother
3. Brother	13. Sister
4. Grandfather	14. Grandmother
5. Uncle	15. Aunt
6. Ex-husband	16. Ex-wife
7. Ex-partner: MALE	17. Ex-partner: FEMALE
8. Current boyfriend	18. Current girlfriend
9. Ex-boyfriend	19. Ex-girlfriend
0. Other MALE (SPECIFY _____)	20. Other FEMALE (SPECIFY _____)
	21. (Refused)

*(RELATIVE / BOYFRIEND/ GIRLFRIEND WHO IS A FAIRLY HEAVY DRINKER (D4=1)
D6 And would you say your <INSERT RESPONSE TO D5>'s drinking has negatively affected you in some way in the last 12 months?
1. Yes
2. No
3. (Can't say)
4. (Refused

*END LOOP
PRED10 IF A7=1,2,5 (CURRENTLY EMPLOYED/VOLUNTEERING) CONTINUE. OTHERS GO TO D12
*(CURRENTLY EMPLOYED/VOLUNTEERING)
D10 And at any time in the last 12 months, have there been any CO-WORKERS who you would consider to be a fairly heavy drinker or someone who drinks a lot sometimes?
1. Yes
2. No (GO TO D12)
3. (Don't have any co-workers) (GO TO D12)
4. (Can't say) (GO TO D12)
5. (Refused) (GO TO D12)

*(CO-WORKER WHO IS A FAIRLY HEAVY DRINKER) (D10=1)
D10a How many (co-workers fall into this category)?
1. Number given (SPECIFY_____) (RANGE 1 TO 200)
2. (Can't say)
3. (Refused)

*(CO-WORKER WHO IS A FAIRLY HEAVY DRINKER) (D10=1)
D11 Overall, would you say their drinking negatively affected you in some way in the last 12 months?
1. Yes
2. No
3. (Can't say)
4. (Refused)

*(ALL)
D12 And what about FRIENDS who do NOT live with you? In the last 12 months, would you consider any of them to be a fairly heavy drinker or someone who drinks a lot sometimes?
1. Yes
2. No (GO TO PRED14)
3. (Can't say) (GO TO PRED14)
4. (Refused) (GO TO PRED14)

*(FRIEND IS FAIRLY HEAVY DRINKER) (D12=1)
D12a How many MALE (friends fall into this category)?
1. Number given (SPECIFY_____) (RANGE 0 TO 99)
2. (Can't say)
3. (Refused)

*(FRIEND IS FAIRLY HEAVY DRINKER) (D12=1)
D12b How many FEMALE (friends fall into this category)?
1. Number given (SPECIFY_____) (RANGE 0 TO 99)
2. (Can't say)
3. (Refused)

PRED13 IF D12A1=1 TO 99 OR D12B1=1 TO 99 (PROVIDED NUMBER) CONTINUE, ELSE GO TO PRED14.
*(FRIEND IS FAIRLY HEAVY DRINKER) (D12a=1 and/or D12b=1)
D13 Overall, would you say their drinking has negatively affected you in some way in the last 12 months?
1. Yes
2. No (GO TO PRED14)
3. (Can't say) (GO TO PRED14)
4. (Refused) (GO TO PRED14)

*(FRIENDS DRINKING HAD NEGATIVE AFFECT)
D13a How many of these friends have negatively affected you in some way in the last 12 months?
1. Number given (SPECIFY_____) (RANGE 1 TO 99) (MAXIMUM ALLOWABLE RANGE SHOULD BE SET TO THE SUM OF D12A=1 AND D12B=1)
2. (Can't say)
3. (Refused)

PRED14 IF D5=6, 7, 9, 16, 17, 19 (MENTIONED EX-PARTNER PREVIOUSLY) GO TO D14 INTRO B. OTHERS GO TO D14 INTRO A.
*(ALL)
D14 INTRO A And has there been an EX-PARTNER, who has been present in your life in the last 12 months, who you would consider to be a fairly heavy drinker or someone who drinks a lot sometimes?
INTRO B And apart from the ex-partner you've already told me about, has there been any other EX-PARTNER, who has been present in your life in the last 12 months, who you would consider to be a fairly heavy drinker or someone who drinks a lot sometimes?
INTERVIEWER NOTE: Ex-partner includes all ex's - ex-wives, ex-husbands, ex-boyfriend, ex-girlfriend, etc
1. Yes
2. No (GO TO D16)
3. (Can't say) (GO TO D16)
4. (Refused) (GO TO D16)

*(EX-PARTNER IS FAIRLY HEAVY DRINKER) (D14=1)
D15 And would you say their drinking negatively affected you in some way in the last 12 months?
1. Yes
2. No
3. (Can't say)
4. (Refused)

*START LOOP
*PROGRAMMER – MAXIMUM ITERATIONS = 4
*(ALL)
D16 In the last 12 months, has there been ANY OTHER PERSON YOU KNOW WELL who you would consider to be a fairly heavy drinker, or someone who drinks a lot sometimes?
1. Yes
2. No (GO TO DDUM)
3. (Can't say) (GO TO DDUM)
4. (Refused) (GO TO DDUM)

*(OTHER PERSON WHO IS A FAIRLY HEAVY DRINKER) (D16=1)
D17 What is that person's relationship to you? DO NOT PROMPT
1. Neighbour
2. Former house-mate
3. Other (SPECIFY__)
4. (Refused)

*(OTHER PERSON WHO IS A FAIRLY HEAVY DRINKER) (D16=1)
D18 And would you say their drinking negatively affected you in some way in the last 12 months?
1. Yes
2. No
3. (Can't say)
4. (Refused)

*END LOOP
*(ALL)
DDUM PROGRAMMER CREATE DUMMY VARIABLE – FAIRLY HEAVY DRINKER IDENTIFIED?
1. No one identified as fairly heavy drinker whose drinking has negatively affected respondent in some way ((D3=2 OR D3=3 OR D3=4) AND (D6=2 OR D6=3 OR D6=4) AND (D11=2 OR 3 OR 4), AND... ETC. (I.E DK / REF INCLUDED)
2. One person only identified as fairly heavy drinker whose drinking has negatively affected respondent in some way (BASED ON D3=1 OR D6=1 OR D11=1 ETC)
3. Two or more persons identified as fairly heavy drinker whose drinking has negatively affected respondent in some way (BASED ON D3=1 OR D6=1 OR D11=1, ETC)
*(ALL)
TIMESTAMP 2
*(ALL)
PRED19 IF DDUM=1 (NO ONE IDENTIFIED AS FAIRLY HEAVY DRINKER) GO TO PREGIntro. OTHERS CONTINUE
*(AT LEAST ONE FAIRLY HEAVY DRINKER IDENTIFIED) (DDUM=2 OR 3)
PRED19_1 IF DDUM=2 GO TO D19 INTRO A. OTHERS (DDUM=3) GO TO D19 INTRO B
*(AT LEAST ONE FAIRLY HEAVY DRINKER IDENTIFIED WHO HAS NEGATIVELY AFFECTED R) (DDUM=2 OR 3)
D19 INTRO A Now, just thinking about your <insert D2 or D5 or "co-worker" IF F11=1>'s drinking and how this has affected you ... overall in the last 12 months, how much has the drinking of this person affected you negatively? Would you say....
INTRO B Now, just thinking about those people who's drinking and how this has affected you ... overall in the last 12 months, how much has the drinking of all of these people affected you negatively? Would you say....
1. A lot, or
2. A little
3. (Can't say) AVOID
4. (Refused)

PRED19b IF DDUM=2 GO TO D19b INTRO A. OTHERS (DDUM=3) GO TO D19b INTRO B
*(AT LEAST ONE FAIRLY HEAVY DRINKER IDENTIFIED WHO HAS NEGATIVELY AFFECTED R) (DDUM=2 OR 3)
D19b INTRO A And on a scale of 1 to 10, where 1 is a little and 10 is a lot, how much has the drinking of this person affected you negatively in the last 12 months?
INTRO B And on a scale of 1 to 10, where 1 is a little and 10 is a lot, how much has the drinking of all of these people affected you negatively in the last 12 months?
1. Number given (SPECIFY_____) (RANGE 1 TO 10)
2. (Can't say)
3. (Refused)

DDUM4 PROGRAMMER CREATE DUMMY VARIABLE FOR AFFECTED NEGATIVELY BY FAIRLY HEAVY DRINKER (For PreJIntro filter)
1. Affected negatively by fairly heavy drinker (D3=1 OR D6=1 OR D11=1 OR D13=1 OR D15=1 OR D18=1 OR D19=1 OR 2)
2. Not affected negatively by fairly heavy drinker (All others)

PRED20 IF DDUM=2 (ONE PERSON ONLY IDENTIFIED AS FAIRLY HEAVY DRINKER) AUTOFILL D20 AND GO TO DDUM1. OTHERS (DDUM=3) CONTINUE
*(ASKED OF TWO OR MORE PERSONS IDENTIFIED AS FAIRLY HEAVY DRINKER) (DDUM=3) (AUTOFILLED FOR DDUM=2)
D20 And thinking about all of these people, overall, whose drinking has most negatively affected you in the last 12 months?
DISPLAY LIST OF PERSONS IDENTIFIED AS FAIRLY HEAVY DRINKER
DISPLAY CATEGORY AND RELATIONSHIP (WHERE RELEVANT), EG.
1. Household member – partner
2. Immediate family member – son
3. Other relative – brother in law
4. Close friend
5. Co-worker
6. Other person - neighbour
7. (Can't say
8. (Refused)

PREDDRK IF D20 ="Can't say" OR "Refused", CONTINUE; OTHERWISE GO TO PROGRAMMER NOTE THAT FOLLOWS DDRK
DDRK For the rest of this survey, we need to focus on ONE heavy drinker. The computer can select one randomly if you can't decide.

INTERVIEWER NOTE: GO BACK TO D20 IF RESPONDENT PROVIDES A HEAVY DRINKER
PROGRAMMER NOTE: IF D20="Can't say" OR "Refused", SELECT REFERENCE DRINKER ACCORDING TO FOLLOWING HIERARCHY; Current Member Of Your Household, ELSE Relative / boyfriend / girlfriend ELSE Ex-partner ELSE friend ELSE Co-worker ELSE Any other person. (IE FROM "CLOSEST" TO "FURTHEST AWAY")
IF >1 FAIRLY HEAVY DRINKER IN SELECTED CATEGORY, RANDOMLY SELECT REFERENCE DRINKER FROM WITHIN THIS CATEGORY
*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT) (D19=1, 2, OR 3)
DDUM1 PROGRAMMER CREATE DUMMY VARIABLE FOR REFERENCE DRINKER CURRENTLY IN HOUSEHOLD
1. Person whose drinking has most negatively affected respondent in last 12 months is current household member (BASED ON D20 / D3)
2. All others

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
PRED21 IF DDUM1=1 (REFERENCE DRINKER IS CURRENT HOUSEHOLD MEMBER) GO TO DDUM2. OTHERS CONTINUE.
*(REFERENCE DRINKER NOT CURRENT HOUSEHOLD MEMBER)
D21 And just to confirm, have you lived with your <INSERT RESPONSE TO D20> at all in the last 12 months?
1. Yes
2. No
3. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
DDUM2 PROGRAMMER CREATE DUMMY VARIABLE FOR REFERENCE DRINKER LIVED IN HOUSEHOLD AT ANY TIME IN LAST 12 MONTHS
1. Reference drinker lived in respondent's household at some time in last 12 months (DDUM1=1 OR D21=1)
2. All others

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
DDUM3 PROGRAMMER CREATE DUMMY VARIABLE FOR GENDER OF REFERENCE PERSON (USED IN SECTION F) FROM D20
1. Reference person is male (son, father, brother, uncle, nephew, etc)
2. Reference person is female
3. Gender of reference person unknown (e.g. partner, close friend, anyone at work, other person, cousin)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT
D22 When we spoke with you last time, was your <INSERT RESPONSE TO D20>'s drinking negatively affecting you then? IF NECESSARY: We last spoke with you around three years ago.
1. Yes
2. No (GO TO D24)
3. Unsure/Can't remember (GO TO INTGEN)
4. (Refused) (GO TO INTGEN)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT
D23 Did this person's drinking negatively affect you the most at that time?
INTERVIEWER NOTE: THIS PERSON IS THE HEAVY DRINKER THAT NEGATIVELY AFFECTED THE RESPONDENT MORE THAN ANYONE ELSE'S DRINKING IN 2008.
1. Yes (GO TO INTGEN)
2. No
3. Unsure/Can't remember (GO TO INTGEN)
4. (Refused) (GO TO INTGEN)

*(DIFFERENT PERSONS DRINKING NEGATIVELY AFFECTING RESPONDENT (MOST) NOW)
D24 Does the heavy drinker, whose drinking most affected you in 2008, still negatively affect you?
1. Yes
2. No
3. Unsure/Can't remember
4. (Refused)

*SECTION E. DESCRIPTIVE SECTION

Intgen INTERVIEWER RECORD YOUR GENDER

1. Interviewer is male
2. Interviewer is female

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
Eintro Now, I am going to ask you some questions about the impact of your <INSERT RESPONSE TO D20>'s drinking on your life. A few of the questions relate to sensitive topics such as sexual activities and abuse. Not all of the questions may be relevant to you. You can skip any questions that you feel uncomfortable answering.

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
PREE1 IF INTGEN= 1 (INTERVIEWER AND RESPONDENT SAME GENDER) GO TO E1. OTHERS CONTINUE

*(RESPONDENT IS DIFFERENT GENDER TO INTERVIEWER)
PREEintro IF A1=1 (RESPONDENT IS MALE) GO TO INTRO A, OTHERS GO TO INTRO B

*(RESPONDENT IS DIFFERENT GENDER TO INTERVIEWER)
EIntro INTRO A Would you prefer to speak with a male interviewer who could call you back for this section of the questionnaire? INTRO B Would you prefer to speak with a female interviewer who could call you back for this section of the questionnaire?

1. Continue
2. Make appointment for call back by interviewer of same gender

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E1 Thinking about the last 12 months, please tell me how many times, if any, each of the following have happened because of your <INSERT RESPONSE TO D20>'s drinking, including because they were intoxicated, feeling the effects of alcohol or hung over?
So, how many times in the last 12 months....
STATEMENTS
a. Did you have a serious argument that did NOT include physical violence because of (his / her / their) drinking?
b. Did you feel threatened because of (his / her / their) drinking?
c. Were you emotionally hurt or neglected because of (his / her / their) drinking?
d. Were you physically hurt by them because of (his / her / their) drinking?
e. Did you have to stop seeing them because of (his / her / their) drinking?
f. Were you put at risk in the car when they were driving, because of (his / her / their) drinking?
g. Were you forced or pressured into sex or something sexual because of (his / her / their) drinking?
h. Did they negatively affect a social occasion you were at because of (his / her / their) drinking?
i. Did they fail to do something they were being counted on to do because of (his / her / their) drinking?
j. Did they break or damage something that mattered to you because of (his / her / their) drinking?

RESPONSE FRAME
1. Once
2. Twice
3. Three times
4. Four times
5. Five or more times (SPECIFY___) (RANGE 5 TO 999)
6. None
7. (Can't say)
8. (Refused)

PREE1X2 IF E1j = 1 TO 5 (THEY BROKE SOMETHING THAT MATTERED TO YOU) CONTINUE, OTHERWISE GO TO E1X
*(BROKEN OR DAMAGED SOMETHING) (E1j =1, 2, 3, 4, 5)
E1x2 What was the estimated out of pocket expense because of this?
1. Amount of money given (SPECIFY $_____) (RANGE 1 TO 999999)
2. Item of sentimental value – can't put $ value on it
3. (Can't say)
4. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT AND LIVED IN THE RESPONDENTS HOUSEHOLD IN THE LAST 12 MONTHS)
E1x Still thinking about the last 12 months, how often...
STATEMENTS
k. Could you not bring friends home because of (his / her / their) drinking? (ONLY DISPLAY IF DDUM2=1) (REFERENCE DRINKER LIVED IN RESPONDENT'S HOUSEHOLD AT SOME TIME IN LAST 12 MONTHS)
l. Did they not do their share of work around the house because of (his / her / their) drinking? (ONLY DISPLAY IF DDUM2=1)
m. Did you have to leave home to stay somewhere else because of (his / her / their) drinking? (ONLY DISPLAY IF DDUM2=1)

RESPONSE FRAME
1. Once
2. Twice
3. Three times
4. Four times
5. Five or more times (SPECIFY___) (RANGE 5 TO 999)
6. None
7. (Can't say)
8. (Refused)

PREE1x3 IF E1X(j) = 1 TO 5 (HAD AT LEAST ONE OCCASION WHERE YOU HAD TO LEAVE HOME TO STAY SOMEWHERE) CONTINUE, OTHERWISE GO TO E1x4

*(STAYED SOMEWHERE)
E1x3 And how many days did this involve in total?

INTERVIEWER NOTE: ENCOURAGE BEST ESTIMATE

1. Number of days given (SPECIFY _____) (RANGE 0.5 to 365; ALLOW DECIMALS)
2. (Don't know)
3. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
PREE1x4 IF DDUM2=1, CONTINUE. OTHERWISE, GO TO PREE1x1

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E1x4 Was there less money for household expenses because of (his / her / their) drinking?
RESPONSE FRAME
1. Once
2. Twice
3. Three times
4. Four times
5. Five or more times (SPECIFY___) (RANGE 5 TO 999)
6. None
7. (Can't say)
8. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E2intro Next, some questions about things that you may have done for your <INSERT RESPONSE TO D20> because of (his / her / their) drinking.
1. Continue

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E2 How many times in the last 12 months did you have to SPEND TIME CARING FOR THEM because of (his / her / their) drinking?
1. One or more (SPECIFY_____) (RANGE 1 TO 999)
2. None (GO TO E3)
3. (Can't say) (GO TO E3)
4. (Refused) (GO TO E3)

*(SPENT TIME CARING) (E2=1)
E2a How much time did this take out of your normal routine?
ENCOURAGE BEST ESTIMATE
1. Time given in hours (SPECIFY_____) (RANGE 0.25 TO 99; ALLOW DECIMALS)
2. Time given in days (SPECIFY_____) (RANGE 0.5 TO 365; ALLOW DECIMALS)
3. Time given in weeks (SPECIFY_____) (RANGE 1 TO 52)
4. (Can't say)
5. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E3 How many times in the last 12 months did you have to TAKE ON EXTRA RESPONSIBILITIES CARING FOR CHILDREN OR OTHERS because of (his / her / their) drinking?

1. One or more (SPECIFY_____) (RANGE 1 TO 999)
2. None (GO TO E5)
3. (Can't say) (GO TO E5)
4. (Refused) (GO TO E5)

*(TOOK ON EXTRA CARING RESPONSIBILITIES) (E3=1)
E3a How much time did this take out of your normal routine?
ENCOURAGE BEST ESTIMATE
1. Time given in hours (SPECIFY_____) (RANGE 0.25 TO 99; ALLOW DECIMALS)
2. Time given in days (SPECIFY_____) (RANGE 0.5 TO 365; ALLOW DECIMALS)
3. Time given in weeks (SPECIFY_____) (RANGE 1 TO 52)
4. (Can't say)
5. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E5 How many times in the last 12 months have you had to CLEAN UP AFTER THEM because of (his / her / their) drinking?
1. Once
2. Two or more times (SPECIFY_____) (RANGE 2 TO 999) (GO TO E5b)
3. None (GO TO E6)
4. (Can't say) (GO TO E6)
5. (Refused) (GO TO E6)

*(HAD TO CLEAN UP AFTER THEM ONCE) (E5=1)

E5a How much time did this take (in hours or days)?
ENCOURAGE BEST ESTIMATE
1. Time given in hours (SPECIFY_____) (RANGE 0.25 TO 99; ALLOW DECIMALS) (GO TO E6)
2. Time given in days (SPECIFY_____) (RANGE 0.5 TO 365; ALLOW DECIMALS(GO TO E6)
3. (Can't say) (GO TO E6)
4. (Refused) (GO TO E6)

*(HAD TO CLEAN UP AFTER THEM TWICE OR MORE) (E5=2)
E5b How many hours did this take EACH time, on average?
ENCOURAGE BEST ESTIMATE
1. Time given in hours (SPECIFY_____) (RANGE 0.25 TO 99; ALLOW DECIMALS)
2. Time given in days (SPECIFY_____) (RANGE 0.5 TO 365; ALLOW DECIMALS)
3. (Can't say)
4. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E6 How many times in the last 12 months did you have to take (his / her / their) somewhere or pick them up because of their drinking?
1. Once
2. Two or more times (SPECIFY_____) (RANGE 2 TO 999) (GO TO E6b)
3. (None (GO TO E7)
4. Can't say) (GO TO E7)
5. (Refused) (GO TO E7)

*(HAD TO TAKE THEM SOMEWHERE) (E6=1)
E6a How much time did this take?
ENCOURAGE BEST ESTIMATE
1. Time given in hours (SPECIFY_____) (RANGE 0.25 TO 99; ALLOW DECIMALS) (GO TO E7)
2. (Can't say) (GO TO E7)
3. (Refused) (GO TO E7)

*(HAD TO TAKE THEM SOMEWHERE TWICE OR MORE) (E6=2)
E6b How many hours did this take each time, on average?
ENCOURAGE BEST ESTIMATE
1. Time given in hours (SPECIFY_____) (RANGE 0.25 TO 99; ALLOW DECIMALS)
2. (Can't say)
3. (Refused)

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
E7 Overall, in the last 12 months, how much has the drinking of your <INSERT RESPONSE TO D20> negatively affected you? Would you say....
1. A lot
2. A little, or
3. Not at all (GO TO EDUM)
4. (Can't say) (GO TO EDUM)
5. (Refused) (GO TO EDUM)

*(NEGATIVELY EFFECTED) (E7 = 1 or 2)
E8 And on a scale of 1 to 10, where 1 is a little and 10 is a lot, how much has the drinking of this person affected you negatively in the last 12 months?
1. Number given (SPECIFY_____) (RANGE 1 TO 10)
2. (Can't say)
3. (Refused)

EDUM PROGRAMMER CREATE DUMMY VARIABLE - EXPERIENCED HARM DUE TO REFERENCE DRINKER
1. Experienced a harm: E1(a-j) = 1 TO 5 OR E1x(H-J) = 1 TO 5 OR E1x4 = 1 TO 5 OR E2 = 1 OR E3 = 1 OR E5 = 1,2 OR E6 = 1,2 OR E7 = 1,2
2. Not experienced a harm: (Other than above)

*SECTION F. DEMOGRAPHICS OF IDENTIFIED DRINKER

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
Fintro Now a few questions about your <INSERT RESPONSE TO D20>...
1. Continue

PREF1 IF DDUM3=3 (GENDER OF REFERENCE PERSON UNKNOWN) CONTINUE. OTHERS (GENDER OF REFERENCE PERSON KNOWN) AUTOFILL F1 FROM DDUM3 AND CONTINUE TO F2
*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
F1 PERSON IS: <DISPLAY RESPONSE TO D20>
RECORD GENDER OF PERSON (ASK ONLY IF NECESSARY)
Is your <INSERT RESPONSE TO D20> male or female?
1. Male
2. Female

*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
F2 How old is your <INSERT RESPONSE TO D20>?
1. Number given (SPECIFY_____) (RANGE 1 TO 99) GO TO F3
2. (Can't say/unsure)
3. (Refused) GO TO F3

*(IF UNSURE OF AGE (F2=2))
F2a Would you say they are.. (READ OUT AS APPROPRIATE)
1. Younger than 20
2. In their 20's
3. In their 30's
4. In their 40's
5. In their 50's
6. In their 60's
7. In their 70's
8. Older
9. (Can't say) AVOID
10. (Refused)

*PROGRAMMER NOTE: INSERT "he" OR "she" THROUGHOUT SECTIONS G AND F BASED ON GENDER AT F1.
*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
F3 The next questions are about your <INSERT RESPONSE TO D20 >'s drinking....
You indicated that (he / she) drinks fairly heavily or drinks a lot sometimes. How often does (he / she) drink in this way?
1. Every day (GO TO F4)
2. 5 to 6 days a week (GO TO F4)
3. 3 to 4 days a week (GO TO F4)
4. 1 to 2 days a week (GO TO F4)
5. 2 to 3 days a month (GO TO F4)
6. About 1 day a month (GO TO F4)
7. Less often (GO TO F4)
8. (No longer drink, gave up in the last 12 months) (GO TO F3b)
9. (Can't say)
10. (Refused) (GO TO F4)

*(CAN'T SAY HOW OFTEN REFERENCE DRINKER DRINKS FAIRLY HEAVILY)
F3a Would you say it was....
1. Once a week or more (GO TO F4)
2. Less than once a week (GO TO F4)
3. (Can't say) (GO TO F4)
4. (Refused) (GO TO F4)

*(REFERENCE DRINKER NO LONGER DRINKS) (F3=8)
F3b You indicated that (he / she) USED TO drink fairly heavily or used to drink a lot sometimes. How often did (he / she) used to drink in this way?
1. Every day
2. 5 to 6 days a week
3. 3 to 4 days a week
4. 1 to 2 days a week
5. 2 to 3 days a month
6. About 1 day a month
7. Less often
8. (Can't say)
9. (Refused)

*PROGRAMMER NOTE: USE PAST TENSE FOR F3=8 IN F4 AND F5, ELSE USE PRESENT TENSE
*REFERENCE TO "pot" IN F4 TO BE TAILORED BY STATE IN SAMPLE RECORD:
STATE= VIC, QLD, TAS: pot
STATE=NSW, WA, ACT: middy
STATE=SA: pot (or schooner)
STATE=NT: pot (or handle)
*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
F4 As you may know, a standard drink is equal to 1 pot or middy of full strength beer, three-quarters of a stubbie, 1 small glass of wine, 1 pub sized shot of spirits, or two-thirds of a can or bottle of premixed spirits or alcoholic soda.
So, to understand what you mean by a fairly heavy drinker....How many standard drinks (does / did) (he / she) have on average when (he / she) (drinks / drank) fairly heavily or a lot? Would you say...
1. 20 or more standard drinks a day (GO TO F5)
2. 11 – 19 standard drinks a day (GO TO F5)
3. 7 – 10 standard drinks a day (GO TO F5)
4. 5 – 6 standard drinks a day (GO TO F5)
5. 3 – 4 standard drinks a day (GO TO F5)
6. 1 – 2 standard drinks a day (GO TO F5)
7. Less than 1 standard drink per day (GO TO F5)
8. (Can't say)
9. (Refused) (GO TO F5)

(CAN'T SAY NUMBER OF STANDARD DRINKS) (F4=8)
F4a Well, would you say it was.....
1. 5 or more standard drinks
2. Less than 5 standard drinks
3. (Can't say)
4. (Refused)

IF NECESSARY: Five or more standard drinks would be about two-thirds of a bottle of wine or three and a half stubbies.
*(REFERENCE DRINKER NEGATIVELY AFFECTED RESPONDENT A LITTLE / A LOT)
F5 How often (did / does) (he / she) have five or more standard drinks?
IF NECESSARY: This would be about two-thirds of a bottle of wine or three and a half stubbies.
1. Every day (GO TO Gintro)
2. 5 to 6 days a week (GO TO Gintro)
3. 3 to 4 days a week (GO TO Gintro)
4. 1 to 2 days a week (GO TO Gintro)
5. 2 to 3 days a month (GO TO Gintro)
6. About 1 day a month (GO TO Gintro)
7. Less often (GO TO Gintro)
8. Never (GO TO Gintro)
9. (Can't say)
10. (Refused) (GO TO Gintro)

*(CAN'T SAY HOW OFTEN HAD FIVE OR MORE STANDARD DRINKS) (F5=9)
F5a Well, would you say it was.....
1. Once a week or more
2. Less than once a week
3. I know they have 5 drinks or more sometimes but I don't know how often
4. (Can't say)
5. (Refused)

*SECTION G. CHILDREN SECTION

* (ALL)
Gintro The next few questions relate to children and other people's drinking, excluding your own drinking.....

INTERVIEWER NOTE: 'OTHER PEOPLE' REFERS TO ANYONE – WHETHER RESPONDENT HAS ALREADY MENTIONED THEM OR NOT

INTERVIEWER NOTE: OTHER PEOPLE DOES NOT MEAN RESPONDENT

1. Continue

PREGintro1 IF A6DUM=1 (CHILDREN UNDER 18 PRESENT IN HOUSEHOLD) CONTINUE. OTHERS GO TO G1

*(CHILDREN UNDER 18 PRESENT IN HOUSEHOLD)
Gintro1 Apart from the children in your household...

1. Continue

*(ALL)
G1 Are there any children 17 or younger NOT living in your household for whom you have some parental responsibility?

1. Yes
2. No (GO TO PREG3)
3. (Can't say) (GO TO PREG3)
4. (Refused) (GO TO PREG3)

*(HAS OTHER CHILDREN 17 AND UNDER NOT LIVING IN HOUSEHOLD) (G1=1)
G2 How many?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six or more (SPECIFY___) (RANGE 6 TO 12)
7. (Refused)

PREG3 IF A6DUM=1 AND G1=2 or 3 or 4 (CHILDREN UNDER 18 PRESENT IN HOUSEHOLD BUT NOT OTHER CHILDREN) GO TO G3 INTROA;
IF A6DUM=2 ANDG1=1 (HAS OTHER CHILDREN UNDER 18 NOT LIVING IN HOUSEHOLD BUT NONE IN HOUSEHOLD) GO TO G3 INTROB
IF A6DUM=1 AND G1=1 (CHILDREN UNDER 18 PRESENT IN HOUSEHOLD AND HAS OTHER CHILDREN UNDER 18 NOT LIVING IN HOUSEHOLD) GO TO G3 INTROC;
OTHERWISE GO TO PREHIntro

*(CHILDREN PRESENT IN HOUSEHOLD / HAS OTHER CHILDREN) (A6DUM = 1 OR G1=1)
G3 INTROA Thinking about the children under 18 who live in your household, how many times, if any, in the last 12 months ...
INTROB Thinking about these children, how many times, if any, in the last 12 months ...
INTROC Thinking about all the children under 18 you've mentioned, whether they live with you or not, how many times, if any, in the last 12 months .....

STATEMENTS
a. Was one or more left in an unsupervised or unsafe situation because of someone else's drinking?
b. How many times) was one or more yelled at, criticised or otherwise verbally abused because of someone else's drinking?
c. (How many times) was one or more physically hurt because of someone else's drinking?
d. (How many times) did one or more of these children witness serious violence in the home because of someone else's drinking?

(How many times) was the child protection agency or family services called because of someone else's drinking?
RESPONSE FRAME
1. Once
2. Twice
3. Three times
4. Four times
5. Five or more times (SPECIFY___) (RANGE 5 TO 999)
6. None
7. (Can't say)
8. (Refused)

PREG3a IF CHILDREN EXPERIENCING HARM (ANY G3 a –e =1 OR 2 OR 3 OR 4 OR 5)CONTINUE. OTHERS GO TO G4
*(CHILDREN EXPERIENCING HARM) (G3a –e =1, 2 ,3 ,4 ,5)
G3a What was the relationship to the child(ren) of that person/those people? (MULTIPLES ACCEPTED)
1. Parent
2. Step parent, or spouse or partner of the child's parent
3. Child's guardian (A PERSON WITH AN ONGOING LEGAL RESPONSIBILITY FOR THE CARE AND PROTECTION OF THE CHILD)
4. Sibling
5. Another relative
6. Family friend or person with whom the child comes into contact, such as a sports coach, teacher, or priest
7. Someone else (SPECIFY _____)

*(CHILDREN PRESENT IN HOUSEHOLD / HAS OTHER CHILDREN) (A6DUM = 1 OR G1=1)
G4 How much has the drinking of other people, negatively affected (this child / these children) in the last 12 months? Would you say....
1. A lot
2. A little
3. Not at all (GO TO PREG6)
4. (Can't say) (GO TO PREG6)
5. (Refused) (GO TO PREG6)

*(CHILDREN NEGATIVELY AFFECTED) (G4 = 1 OR 2)

G5 And on a scale of 1 to 10, where 1 is a little and 10 is a lot, how much has the drinking of other people negatively affected this child/these children in the last 12 months?
1. Number given (SPECIFY_____) (RANGE 1 TO 10)
2. (Can't say)
3. (Refused)

PREG6 IF A6DUM=1 AND G1=2 or 3 or 4 (CHILDREN UNDER 18 PRESENT IN HOUSEHOLD BUT NOT OTHER CHILDREN) GO TO G6 INTROA;
IF A6DUM=2 ANDG1=1 (HAS OTHER CHILDREN UNDER 18 NOT LIVING IN HOUSEHOLD BUT NONE IN HOUSEHOLD) GO TO G6 INTROB
IF A6DUM=1 AND G1=1 (CHILDREN UNDER 18 PRESENT IN HOUSEHOLD AND HAS OTHER CHILDREN UNDER 18 NOT LIVING IN HOUSEHOLD) GO TO G6 INTROC;
OTHERWISE GO TO PREHIntro

*(CHILDREN PRESENT IN HOUSEHOLD / HAS OTHER CHILDREN) (A6DUM = 1 OR G1=1)
G6intro The next few questions relate to children and your drinking in the last 12 months...

1. Continue
*PROGRAMMER NOTE: IF G6A=9 (DON'T DRINK) ASK G7 & G7A PRIOR TO ASKING OTHER STATEMENTS. G7 AND G7A ARE NOT ASKED OF ANYONE IF G6=NOT 9.
*(CHILDREN PRESENT IN HOUSEHOLD / HAS OTHER CHILDREN) (A6DUM = 1 OR G1=1)
G6 INTROA Thinking again about the children under 18 who live in your household, how many times, if any, in the last 12 months ...
INTROB Thinking again about these children, how many times, if any, in the last 12 months ...
INTROC Thinking again about all the children under 18 you've mentioned, whether they live with you or not, how many times, if any, in the last 12 months .....

STATEMENTS
a. Was one or more left in an unsupervised or unsafe situation because of your drinking?
b. (How many times) was one or more yelled at, criticised or otherwise verbally abused because of your drinking?
c. (How many times) was one or more physically hurt because of your drinking?
d. (How many times) did one or more of these children witness serious violence in the home because of your drinking?
e. (How many times) was the child protection agency or family services called because of your drinking?

RESPONSE FRAME
1. Once
2. Twice
3. Three times
4. Four times
5. Five or more times (SPECIFY___) (RANGE 5 TO 999)
6. None
7. (Can't say)
8. (Refused)
9. I don't drink (ONLY DISPLAY FOR G6A)

*DON'T DRINK
G7 Have you been a non-drinker for the last 12 months or more?

1. Yes – have not been drinking during the last 12 months (GO TO IINTRO)
2. No – have been a drinker at some time during the last 12 months
3. Can't say (GO TO IINTRO)
4. Refused (GO TO IINTRO)

*HAVE BEEN A DRINKER DURING THE LAST 12 MONTHS (G7=2)
G7a These questions are about the time in the last 12 months when you were drinking.

1. SNAP BACK TO G6a

PREG8 IF A6DUM=1 OR G1=1 (CHILDREN PRESENT IN HOUSEHOLD/HAS OTHER CHILDREN) CONTINUE, ELSE GO TO IINTRO
*(CHILDREN PRESENT IN HOUSEHOLD / HAS OTHER CHILDREN) (A6DUM = 1 OR G1=1)
G8 How much has your own drinking negatively affected (this child / these children) in the last 12 months? Would you say....
1. A lot
2. A little
3. Not at all (GO TO IINTRO)
4. (Can't say) (GO TO IINTRO)
5. (Refused) (GO TO IINTRO)

*(CHILD/REN NEGATIVELY AFFECTED) (G8 = 1 OR 2)

G9 And on a scale of 1 to 10, where 1 is a little and 10 is a lot, how much has your drinking negatively affected this child/these children in the last 12 months?
1. Number given (SPECIFY_____) (RANGE 1 TO 10)
2. (Can't say)
3. (Refused)

*SECTION I. ALCOHOL-RELATED HARM IN THE COMMUNITY

*(ALL)
Iintro We would now like to ask you about STRANGERS or PEOPLE YOU DON'T KNOW VERY WELL.
1. Continue
*(ALL)
TIMESTAMP3
*(ALL)
I1 In the last 12 months, how many times have you...
STATEMENTS
a. Been kept awake at night or disturbed because of someone's drinking?
b. Been verbally abused because of someone's drinking?
c. Been physically abused because of someone's drinking?
d. Been threatened because of someone's drinking?
e. Been involved in a serious argument because of someone's drinking?
f. Felt unsafe while waiting for or using public transport because of someone's drinking?
g. Felt unsafe in any other public place because of someone's drinking?
h. Gone out of your way to avoid drunk people or places where drinkers are known to hang out?
i. Been annoyed by people vomiting, urinating or littering when they have been drinking?
j. Experienced trouble or noise because of drinkers at a licensed venue?
k. Been involved in a traffic accident because of someone's drinking?
l. Been forced or pressured into sexual activity because of someone's drinking?

RESPONSE FRAME
1. One or more (SPECIFY_____) (RANGE 1 TO 999)
2. None
3. (Can't say)
4. (Refused)

*(ALL)
I4 Still thinking about strangers and people you don't know very well, how many times in the last 12 months did you have your house, car or property damaged because of their drinking?
1. One or more (SPECIFY_____) (RANGE 1 TO 999)
2. None (GO TO PREI5)
3. (Can't say) (GO TO PREI5)
4. (Refused) (GO TO PREI5)

*(HOUSE, CAR OR PROPERTY DAMAGED)
I4a What was the approximate dollar value of the damage to your property?
1. Amount given (SPECIFY $____) (RANGE 1 TO 999999)
2. (Can't say)
3. (Refused)

PREI5 IF I4=2, 3, OR 4 (NO DAMAGE TO HOUSE, CAR OR PROPERTY) GO TO I5 INTRO A. OTHERS GO TO I5 INTRO B
*(ALL)
I5 INTRO A How many times in the last 12 months did any person affected by alcohol damage your clothes or other belongings?
INTRO B Apart from these items, how many times in the last 12 months did any person affected by alcohol damage your clothes or other belongings?
1. One or more (SPECIFY_____) (RANGE 1 TO 999)
2. None (GO TO I8)
3. (Can't say) (GO TO I8)
4. (Refused) (GO TO I8)

*(CLOTHES OR OTHER BELONGINGS DAMAGED) (I5=1)
I5a What is the approximate dollar value of repairing or replacing the damaged item(s)?
1. Amount given (SPECIFY $____) (RANGE 1 TO 99999)
2. (Can't say)
3. (Refused)

*(ALL)
I8 So overall, how much has the drinking of strangers or people you don't know very well negatively affected you in the last 12 months? Would you say...
1. A lot
2. A little, or
3. Not at all
4. (Can't say)
5. (Refused)

IDUM PROGRAMMER CREATE DUMMY VARIABLE - EXPERIENCED HARM FROM STRANGER
1. Experienced harm from stranger: I1a-I =1 or I4=1 or I5=1 or I8=1 or 2
2. Not experienced harm from stranger: (If otherwise)
PREI9 IF I8=1 OR 2 (DRINKING OF STRANGERS HAD A NEGATIVE AFFECT CONTINUE, ELSE GO TO PREJINTRO
*(NEGATIVELY AFFECTED) (I8 = 1 or 2)
I9 And on a scale of 1 to 10, where 1 is a little and 10 is a lot, how much has the drinking of strangers or people you don't know very well negatively affected in the last 12 months?
1. Number given (SPECIFY_____) (RANGE 1 TO 10)
2. (Can't say)
3. (Refused)

*SECTION J. SERVICE USE

*(ALL)
PREJIntro IF DDUM4=1 OR EDUM= 1 OR IDUM=1, (RESPONDENT HAS EXPERIENCED HARM / BEEN NEGATIVELY AFFECTED DUE TO OTHERS' DRINKING) CONTINUE. OTHERWISE GO TO KIntro

*(EXPERIENCED HARM DUE TO OTHERS' DRINKING)
Jintro Now thinking about services you may have used in the last 12 months because of people's drinking, including people you know AND strangers...

1. Continue

*(EXPERIENCED HARM DUE TO OTHERS' DRINKING)
J1 How many times did you call the police (because of other people's drinking)?
1 One or more (SPECIFY____) (RANGE 1 TO 999)
2 None (GO TO J3)
3 (Can't say) (GO TO J3)
4 (Refused) (GO TO J3)

*(CALLED THE POLICE ONE OR MORE TIMES)
J1a How much time in total did this take out of your normal activities in hours or days– this includes time spent waiting for police, time spent with police, and so on?
1. Time given in hours (SPECIFY_____) (RANGE 1 TO 99)
2. Time given in days (SPECIFY_____) (RANGE 1 TO 365)
3. (Can't say)
4. (Refused)

*(CALLED THE POLICE ONE OR MORE TIMES)
J2x Thinking of the (last) time you called the police, did you make the call because of strangers' drinking, people you know or both?
1. Strangers
2. Known persons
3. Both – strangers and known persons
4. (Can't say)
5. (Refused)

*(CALLED THE POLICE ONE OR MORE TIMES)
J2xa And what was the main reason you called the police? (MULTIPLES ACCEPTED)
1. Verbal disagreement
2. Noise
3. Physical fight/assault
4. Trespassing
5. Vandalism
6. Robbery
7. Other (SPECIFY)
8. (Can't say)
9. (Refused)

*(EXPERIENCED HARM DUE TO OTHERS' DRINKING)
J3 (How many times in the last 12 months)
Have YOU been admitted to hospital or an emergency department (due to other people's drinking)?
INTERVIEWER NOTE: THIS QUESTION ASKS ABOUT RESPONDENT'S INJURIES, NOT THE DRINKER'S
1. One or more (SPECIFY____) (RANGE 1 TO 99)
2. None (GO TO J2)
3. (Can't say) (GO TO J2)
4. (Refused) (GO TO J2)

*(ADMITTED TO HOSPITAL OR EMERGENCY DEPARTMENT)
J3a How much time in total did this take out of your normal activities, in hours or days, including time spent getting to and from the hospital?
1. Time given in hours (SPECIFY_____) (RANGE 1 TO 99)
2. Time given in days (SPECIFY_____) (RANGE 1 TO 365)
3. (Can't say)
4. (Refused)

*(ADMITTED TO HOSPITAL OR EMERGENCY DEPARTMENT)
J3b What were your total out of pocket expenses for your treatment?
1. Amount given (SPECIFY_____) (RANGE 1 TO 99999)
2. No out of pocket expenses
3. (Can't say)
4. (Refused)

*(EXPERIENCED HARM DUE TO OTHERS' DRINKING)
J2 (How many times in the last 12 months have you..)
Received any OTHER medical treatment (due to other people's drinking)?
1. One or more (SPECIFY____) (RANGE 1 TO 999)
2. None (GO TO J4)
3. (Can't say) (GO TO J4)
4. (Refused) (GO TO J4)

*(GOT TREATMENT AT A MEDICAL OR HEALTH CENTRE)
J2a How much time in total did this treatment take out of your normal activities, including time spent getting to and from the medical or health centre, in hours or days?
1. Time given in hours (SPECIFY_____) (RANGE 1 TO 99)
2. Time given in days (SPECIFY_____) (RANGE 1 TO 365)
3. (Can't say)
4. (Refused)

*(GOT TREATMENT AT A MEDICAL OR HEALTH CENTRE)
J2b What were your total out of pocket expenses for this medical treatment?
1. Amount given (SPECIFY_____) (RANGE 1 TO 99999)
2. No out of pocket expenses
3. (Can't say)
4. (Refused)

*(EXPERIENCED HARM DUE TO OTHERS' DRINKING)
J4 (How many times in the last 12 months have you)
Received counselling or professional advice, including calling a helpline, because of other people's drinking or the problems it was causing?
1. One or more (SPECIFY____) (RANGE 1 TO 99)
2. None (GO TO J5)
3. (Can't say) (GO TO J5)
4. (Refused) (GO TO J5)

*(GOT COUNSELLING OR PROFESSIONAL ADVICE)
J4a How many hours did this take out of your normal activities over the last 12 months?
1. Time given in hours (SPECIFY_____) (RANGE 1 TO 99)
2. Time given in days (SPECIFY_____) (RANGE 1 TO 365)
3. (Can't say)
4. (Refused)

*(GOT COUNSELLING OR PROFESSIONAL ADVICE)
J4b What were your total out of pocket expenses for this counselling?
1. Amount given (SPECIFY_____) (RANGE 1 TO 99999)
2. No out of pocket expenses
3. (Can't say)
4. (Refused)

*(EXPERIENCED HARM DUE TO OTHERS' DRINKING)
J5 How many times in the last 12 months have you received support or advice from self-help services, because of other people's drinking or the problems it was causing?
IF NECESSARY, A SELF-HELP SERVICE IS PROVIDE BY PEOPLE WHO HAVE EXPERIENCED SIMILAR PROBLEMS EG AL-ANON.
1. One or more (SPECIFY____) (RANGE 1 TO 99)
2. None
3. (Can't say)
4. (Refused)

PREJ6 IF A7 = 1,2,5 (CURRENTLY WORKING/VOLUNTEERING) CONTINUE. OTHERWISE GO TO Kintro
*(EXPERIENCED HARM AND IS WORKING)
J6 And how many days, if any, have you had to take off work in the last 12 months due to other people's drinking?
1. Number of days given (SPECIFY_____) (RANGE 1 TO 365)
2. None
3. (Can't say)
4. (Refused)

*SECTION K. DEMOGRAPHICS FOR THE RESPONDENT

*(ALL)
Kintro Now I have some questions about yourself and your household....
1. Continue
*(ALL)
K4 What is your postcode?
DISPLAY POSTCODE FROM SAMPLE RECORD
1. Postcode correct
2. Postcode incorrect – collect new postcode (SPECIFY_____) (RANGE 800 TO 8999)
3. Don't know postcode – collect suburb / locality (SPECIFY_____)
4. (Refused) (RETURN POSTCODE FROM SAMPLE RECORD)
*(ALL)
K6 What is your total HOUSEHOLD income, FROM ALL SOURCES, BEFORE TAX OR ANYTHING ELSE IS TAKEN OUT? (READ OUT AS REQUIRED)

IF NECESSARY: By household income we mean income earned by you and others living in your household, and any income from other sources, such as child support or pensions.

INTERVIEWER NOTE: IF ON OLD AGE/ DISABILITY PENSION CODE AS 2 ($1-$14,999 PER YEAR)

1.	No income	
2.	$1-$14,999 per year	($1-$287 per week)
3.	$15,000-$29,999 per year	($288-$577 per week)
4.	$30,000-$39,999 per year	($578-$769 per week)
5.	$40,000-$49,999 per year	($770-$962 per week)
6.	$50,000-$74,999 per year	($963-$1442 per week)
7.	$75,000-$109,999 per year	($1,443-$ $2,115 per week)
8.	$110,000-$144,999 per year	($2,115-$2,788 per week)
9.	145,000 or more per year	($2,789 or more per week)
10.	(Don't know)	
11.	(Refused)	

PREK7 IF A3 = 2 AND A5X = 2 (RESPONDENT LIVES ALONE) GO TO L1. OTHERWISE CONTINUE.
*(2+ PEOPLE IN HH)
K7 How much of the total household income do you yourself provide? Would you provide...
(READ OUT)
1. All of it
2. More than half
3. About half
4. Less than half, or
5. None
6. (Can't say)
7. (Refused)

*SECTION L. DRINKING QUESTIONS FOR THE RESPONDENT

*(ALL)
L1 And to finish off, just a few questions about your own drinking..
In the last 12 months, how often did you have an alcoholic drink of any kind?
1. Every day (GO TO L2)
2. 5 to 6 days a week (GO TO L2)
3. 3 to 4 days a week (GO TO L2)
4. 1 to 2 days a week (GO TO L2)
5. 2 to 3 days a month (GO TO L2)
6. About 1 day a month (GO TO L2)
7. Less often (GO TO L2)
8. Gave up in last 12 months (GO TO L5)
9. Not drunk in last 12 months/ Never drunk alcohol (END1)
10. (Can't say)
11. (Refused) (GO TO END1)

INTERVIEWER NOTE: IF SAY DOES NOT DRINK, PROBE WHETHER DRUNK WITHIN LAST 12 MONTHS
*(CAN'T SAY HOW OFTEN HAS ALCOHOLIC DRINK)
L1a Would you say it was....
1. Once a week or more, or
2. Less than once a week
3. (Can't say) (GO TO END1)
4. (Refused) (GO TO END1)

*PROGRAMMER NOTE: SAME DISPLAY RULES RE: "POT" AS FOR F4
*(ALL EXCEPT NO LONGER DRINKS / NEVER DRINKS/ DK / REF HOW OFTEN DRINKS) (L1=8, 9 11 OR L1a=3 OR 4)
L2 On a day that you usually have an alcoholic drink, how many standard drinks do you usually have?
IF NECESSARY BY STANDARD DRINK WE MEAN ANY DRINK EQUAL TO 1 POT OR MIDDY OF FULL STRENGTH BEER, THREE-QUARTERS OF A STUBBIE, 1 SMALL GLASS OF WINE, 1 PUB SIZED SHOT OF SPIRITS OR TWO-THIRDS OF A CAN OR BOTTLE OF PREMIXED SPIRITS OR ALCOHOLIC SODA.
1. 20 or more standard drinks a day (GO TO L3)
2. 11 – 19 standard drinks a day (GO TO L3)
3. 7 – 10 standard drinks a day (GO TO L3)
4. 5 – 6 standard drinks a day (GO TO L3)
5. 3 – 4 standard drinks a day (GO TO L3)
6. 1 – 2 standard drinks a day (GO TO L3)
7. Less than 1 standard drink per day (GO TO L3)
8. (Can't say)
9. (Refused) (GO TO L3)

*(CAN'T SAY HOW MANY STANDARD DRINKS HAS IN A DAY) (L2=8)
L2a Would you say it was....
1. 5 or more standard drinks or
2. Less than 5 standard drinks
3. (Can't say)
4. (Refused)

IF NECESSARY: This would be about two-thirds of a bottle of wine or three and a half stubbies.
*(ALL EXCEPT NO LONGER DRINKS / NEVER DRINK/ DK/REF HOW OFTEN DRINKS) (L1=8, 9, 11 , OR L1a=3 OR 4)
L3 How often do you have five drinks or more?
1. Every day (GO TO L4)
2. 5 to 6 days a week (GO TO L4)
3. 3 to 4 days a week (GO TO L4)
4. 1 to 2 days a week (GO TO L4)
5. 2 to 3 days a month (GO TO L4)
6. About 1 day a month (GO TO L4)
7. Less often (GO TO L4)
8. Never (GO TO L4)
9. (Can't say)
10. (Refused) (GO TO L4)

*(CAN'T SAY HOW OFTEN HAS FIVE DRINKS OR MORE) (L3=9)
L3a Would you say it was....
1. Once a week or more, or
2. Less than once a week
3. (Can't say)
4. (Refused)

*(ALL EXCEPT NO LONGER DRINKS NEVER DRINK/ DK/REF HOW OFTEN DRINKS) (L1=8, 9, 11, OR L1a=3 OR 4)
*(ALL EXCEPT NO LONGER DRINKS NEVER DRINK/ DK/REF HOW OFTEN DRINKS) (L1=8, 9, 11, OR L1a=3 OR 4)
L4 Overall, in the last 12 months, how much would you say your drinking has negatively affected other people? Would you say it was....
(READ OUT)
1. A lot
2. A little, or
3. Not at all (GO TO END1)
4. (Can't say) (GO TO END1)
5. (Refused) (GO TO END1)

*(NEGATIVELY AFFECTED OTHERS) (L4 = 1 OR 2)

L4a And on a scale of 1 to 10, where 1 is a little and 10 is a lot, how much has your drinking negatively affected other people in the last 12 months?
1. Number given (SPECIFY_____) (RANGE 1 TO 10) (GO TO END1)
2. (Can't say) (GO TO END1)
3. (Refused) (GO TO END1)

*(RESPONDENT NO LONGER DRINKS) (L1=8)
L5 You indicated that you USED TO drink. On a day that you usually had an alcoholic drink, how many standard drinks did you usually have?
IF NECESSARY BY STANDARD DRINK WE MEAN ANY DRINK EQUAL TO 1 POT OR MIDDY OF FULL STRENGTH BEER, THREE-QUARTERS OF A STUBBIE, 1 SMALL GLASS OF WINE, 1 PUB SIZED SHOT OF SPIRITS OR TWO-THIRDS OF A CAN OR BOTTLE OF PREMIXED SPIRITS OR ALCOHOLIC SODA.
1. 20 or more standard drinks a day (GO TO L6)
2. 11 – 19 standard drinks a day (GO TO L6)
3. 7 – 10 standard drinks a day (GO TO L6)
4. 5 – 6 standard drinks a day (GO TO L6)
5. 3 – 4 standard drinks a day (GO TO L6)
6. 1 – 2 standard drinks a day (GO TO L6)
7. Less than 1 standard drink per day (GO TO L6)
8. (Can't say)
9. (Refused) (GO TO L6)

*(CAN'T SAY HOW MANY STANDARD DRINKS HAS IN A DAY) (L5=8)
L5a Would you say it was....
1. 5 or more standard drinks
2. Less than 5 standard drinks
3. (Can't say)
4. (Refused)

IF NECESSARY: Five or more standard drinks would be about two-thirds of a bottle of wine or three and a half stubbies.
*(USED TO DRINK L5 = 1, 2, 3, 4, 5, 6, 7, 9 OR L5a=1, 2)
L6 How often do you have five drinks or more?
1. Every day (GO TO END1)
2. 5 to 6 days a week (GO TO END1)
3. 3 to 4 days a week (GO TO END1)
4. 1 to 2 days a week (GO TO END1)
5. 2 to 3 days a month (GO TO END1)
6. About 1 day a month (GO TO END1)
7. Less often(GO TO END1)
8. Never (GO TO END1)
9. (Can't say)
10. (Refused) (GO TO END1)

*(CAN'T SAY HOW OFTEN HAS FIVE DRINKS OR MORE) (L6=9)
L6a Would you say it was....
1. Once a week or more, or
2. Less than once a week
3. (Can't say)
4. (Refused)

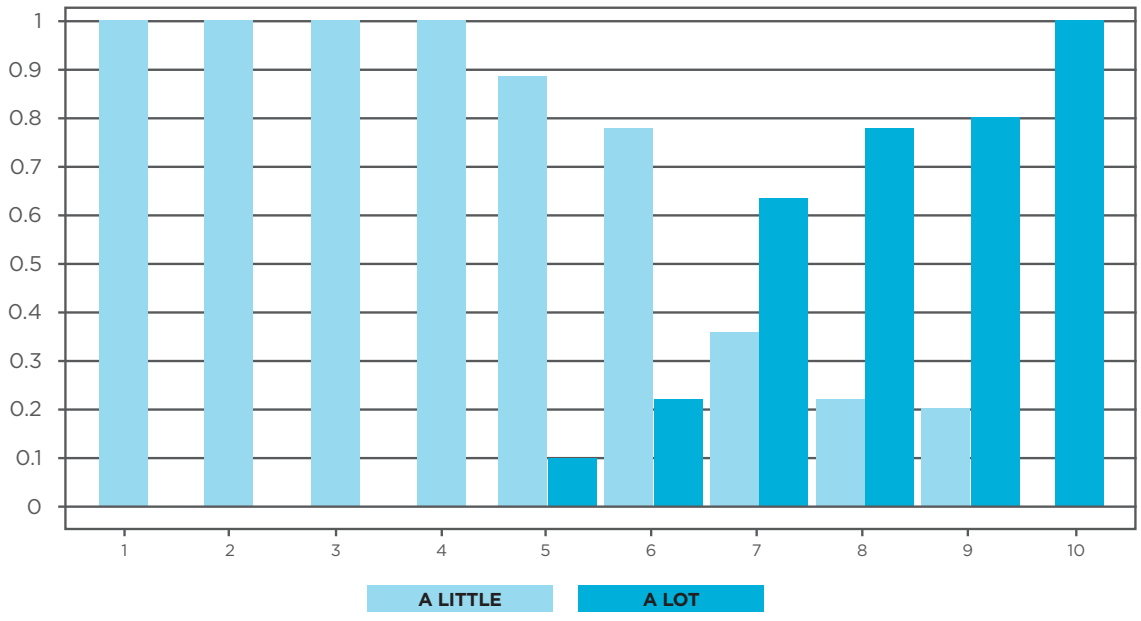
APPENDIX C: COMPARING RESULTS FROM TWO WAYS OF ASKING "HOW MUCH HAS THE DRINKING AFFECTED YOU NEGATIVELY?"

As noted in Chapter 2, respondents were asked about the harm that they had experienced attributable to the drinking of others in a few different ways. Of interest in the current study, they were asked about the most harmful heavy drinker in their lives (if any) and the harm they had experienced attributable to the drinking of strangers or people they do not know well. In 2011, respondents were asked to state whether they were harmed "a little" or "a lot," and also to give the level of harm they experienced on a score of 1-10; however in 2008 they were only asked if they were harmed "a little" or "a lot." Therefore the aim is to ascertain what score from 1-10 could be given to represent being harmed "a little" or "a lot" in 2008 to aid in the longitudinal analysis.

HARM FROM A KNOWN PROBLEMATIC DRINKER

Analyses in this section are based on the 246 respondents who stated that they had experienced harm at the hands of a known problematic drinker in 2011. In Figure C.1 the percentage of respondents who stated that they were harmed "a little" (72 per cent) or "a lot" (28 per cent) for each score is shown. The mean score of the 177 respondents who stated that they were harmed "a little" was 3.81, while the mean score of the 69 respondents who stated they were harmed "a lot" was 8.19.

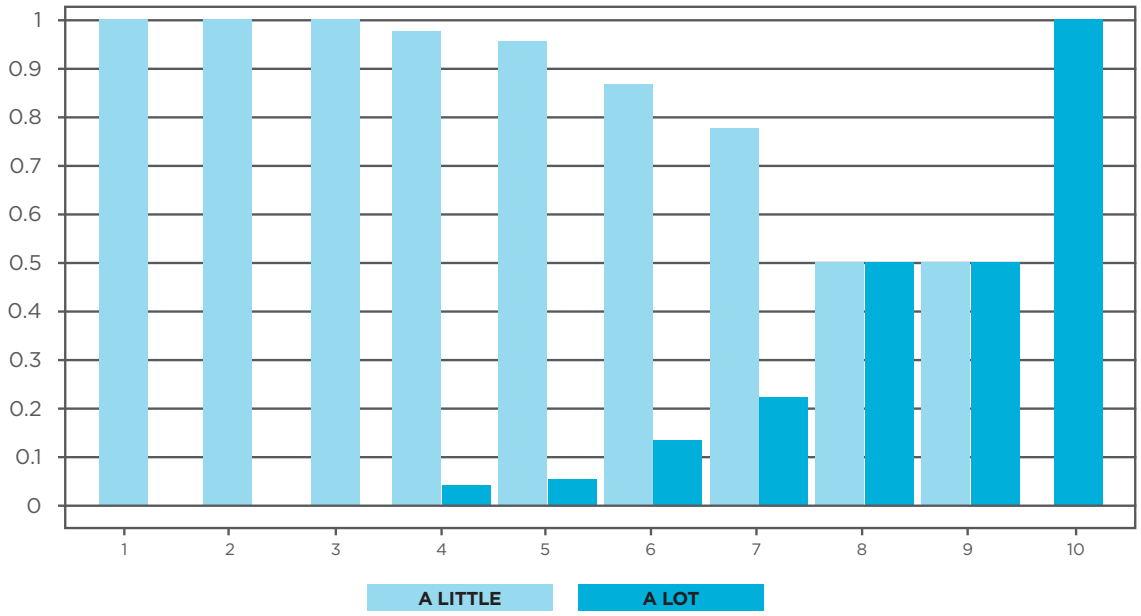
Figure C.1 Proportion of respondents stating they were harmed a little or a lot by a known problematic drinker per 1-10 rating of harm.



HARM FROM STRANGERS

These analyses are restricted to the 359 respondents who stated that they had experienced harm at the hands of strangers in 2011. In Figure C.2 the percentage of respondents who stated that they were harmed "a little" (82.5 per cent) or "a lot" (7.5 per cent) for each score is shown. The mean score of the 322 respondents who stated that they were harmed "a little" was 3.02; while the mean score of the 27 respondents who stated they were harmed "a lot" was 8.26. These mean scores are similar to those given for known problematic drinker harm, despite the percentage of people stating that they were harmed "a lot" being lower. This supports the idea that respondents are calibrating the different types of harm in a similar manner for the two different rating types.

Figure C.2 Proportion of respondents stating they were harmed "a little" or "a lot" by strangers per 1-10 rating of harm.



CONCLUSION

Given the smaller number of respondents with children that were harmed, this analysis was only run for stranger and known problematic drinker harm. Bringing this information on harm from strangers and known problematic drinkers it was decided that when a continuous variable was needed for harm experienced for 2008 or 2008 and 2011 combined that a score of 3.5 would be used for those harmed "a little" and 8 for those harmed "a lot" by known problematic drinkers or strangers, or when reporting harm to children.

APPENDIX D: TECHNICAL REPORT ON PROCEDURES IN THE 2011 FIELDWORK

This section is an excerpt (sections 2-4) from the technical report written by the Social Research Centre at the end of the 2011 HTO Survey. [5]

SAMPLE AND CALL PROCEDURES

RESPONDENT SELECTION

All respondents who had agreed to be re-contacted in the 2008 study were deemed to be in-scope for the follow-up survey. When attempting to re-contact sample members, no identifying information was provided to non-respondents as to the nature of the study or who the study was on behalf of to ensure privacy and confidentiality was maintained, as advised by ethics.

CALL PROCEDURES

The prescribed call procedures for the Harm to Others follow-up survey included:

- no limit specified to the number of calls attempted to establish contact
- controlling the spread of call attempts such that, subject to other outcomes being achieved, contact attempts were spread over weekdays late afternoon to early evening (4.00 pm to 6.00 pm), weekdays mid to late evening (after 6.00 pm to 8.30 pm) and weekends (10.00 am to 6.00 pm). No calls were attempted outside these times, except by firm appointment.

1800 NUMBER OPERATION

The Social Research Centre operated a 1800 number throughout the study period to handle any questions about participation in the survey (setting an appointment time, seeking clarification about the survey, refusing to participate, etc.).

PRE-SURVEY APPROACH LETTERS

While it was planned to send primary approach letters to all respondents that provided a full name and address in 2008 (60.5 per cent of those that agreed to be re-contacted) prior to initiating calls, which would have resulted in this did not eventuate due to time constraints associated with a delay in ethics approval. However, sample members who wanted more information about the survey were given the option of being sent a letter via post, email or fax prior to their participation. There were no requests for further information via this method.

With the continuation of interviewing after the Christmas period, it was deemed appropriate to send out pre-survey approach letters to those sample members whom we were not able to contact. In total, 146 letters were sent out by postal mail, and where address details could not be verified 131 letters were sent via email. Interviewing post-Christmas resulted in 41 additional interviews being completed.

Pre-survey approach letters were also utilised in instances where tracking activities yielded a new address.

[5] Petroulias T & Day K (2012). The Range and Magnitude of Alcohol's Harm to Others – Follow Up: Methodology Report. North Melbourne: Social Research Centre.

SUNDRY RESPONSE MAXIMISATION PROCEDURES

In addition to providing the 1800 number and offering to send an introductory letter, other response maximisation procedures included:

- referring sample members to the Turning Point survey hotline number on an as required basis
- hosting a web-page containing responses to frequently asked questions on the Social Research Centre website
- ensuring appropriately trained interviewers were used on the survey (refer to Field Team Briefing, below).

TRACKING RESPONDENTS

For respondents who were no longer contactable on the telephone number provided in 2008, 'tracking' for a current number was initiated via the following methods:

- seeking forward contact details from the current occupant
- searches using various online tools (such as the White Pages).

Of the 581 records that were identified as numbers suitable for tracking, 259 (44.6 per cent) new numbers were sourced. Where possible, a pre-approach letter was used to establish contact prior to trying the new phone number. Those with full name and postal address details (n=32) were sent a pre-approach letter by postal mail and those who provided an email address during the initial survey (n=15) were sent a pre-approach letter via email. The remaining records (n=212) were not sent a pre-approach letter as they either did not supply an address (postal or email), a complete name or both. In these cases the new phone number was the only form of contact available. In total, 31 interviews were achieved with numbers sourced from tracking activity.

Table C.1 Results from tracking activities

TRACKING ACTIVITIES	n	%	INTERVIEWS ACHIEVED n	INTERVIEWS ACHIEVED %
Total sample members requiring 'tracking' (respondent no longer available on the number provided in 2008)	581	100.0		
No new number sourced	322	55.4		
Possible new number sourced	**259**	**44.6**		
Total letter sent	47	18.1	8	17.0
Pre-approach letter by mail	*32*	*12.4*	*5*	*15.6*
Pre-approach letter by email	*15*	*5.8*	*3*	*20.0*
No letter sent	212	81.9	23	10.8
Interviews achieved as a proportion of sample members requiring 'tracking' (n=581)			**31**	**5.3**

QUESTIONNAIRE DESIGN

QUESTIONNAIRE OVERVIEW

Turning Point provided a near final version of the questionnaire for the follow-up survey.

While the majority of the questionnaire remained unchanged from the version used in 2008, some questions were removed and a number of new questions were included. Refer to Appendix 2 of the technical report for a detailed account of questionnaire changes.

A formal pilot testing phase was used to test the changes.

QUESTIONNAIRE PILOT TESTING

Pilot testing was undertaken between 25 October and 27 October 2011. A total of 15 interviews were completed with an average interview length of 24.0 minutes

Standard operational testing procedures were utilised to ensure the Computer-Assisted Telephone Interview (CATI) script accurately reflected the agreed "hard copy" questionnaire. These included:

- reading directly from the Word version of the questionnaire into the CATI program to eliminate the possibility of typographical errors occurring in the set up process
- programming the skips and sequence instructions as per the hard copy questionnaire
- generating test frequency counts to check the structural integrity of the questionnaire
- checking the questionnaire in "practice" mode to review on-screen presentation and sequencing.

The main areas of interest during pilot testing were questionnaire length, and the testing of new survey questions. Minor changes were made to the questionnaire as a result of pilot testing.

Preliminary pilot test data was provided to Turning Point for review but was not included in the main data set.

The final questionnaire is provided at Appendix B.

DATA COLLECTION AND QUALITY CONTROL

ETHICAL CONSIDERATION

The Eastern Health Human Research Ethics Committee (HREC) approved the survey methodology and content.

Ethical considerations in undertaking the survey included:

- ensuring informed consent
- ensuring the voluntary nature of participation was clearly understood
- protecting the privacy and confidentiality of respondent information.

A 1800 survey hotline number was available to sample members with a view to providing a point of reference for query resolution and for any survey-generated request for information relating to alcohol support services.

The privacy and confidentiality of respondent information was also protected by the Social Research Centre's contract with Turning Point Drug and Alcohol Centre as well as our adherence to the appropriate privacy laws. In addition, the Social Research Centre is bound to adhere to Australian Society for Medical Research Privacy Principles and the Australian Market and Social Research Society Code of Professional Behaviour.

The ethical considerations incumbent upon researchers when undertaking surveys of this nature were duly emphasised in the survey briefing materials and interviewer training provided by the Social Research Centre (see Section 4.2 and Appendix D). In addition, interviewers were provided with appropriate referral numbers to provide to respondents upon request/as required. These included:

- the Social Research Centre 1800 number – for questions about who is conducting the study and how the respondent's telephone number was obtained
- the Chair, the Eastern Health Human Research Ethics Committee (HREC)
- the Survey hotline number staffed by researchers from Turning Point for queries relating to the legitimacy of the survey or any concerns or queries about why the survey was being conducted
- referral to DirectLine – the nominated telephone counselling service.

FIELD TEAM BRIEFING

All interviewers and supervisors selected to work on the Harm To Others follow-up survey attended a comprehensive three hour briefing session prior to commencing work on the project, delivered by the Social Research Centre project manager. The briefing covered:

- project background and context
- respondent selection procedures
- strategies to gain cooperation, deal with reluctant respondents and minimise mid-survey terminations
- a detailed examination of the survey questions and pre-coded response lists, with a focus on ensuring the uniform interpretation of questions and responses
- item-specific data quality issues
- an emphasis on the importance of adhering to sample management protocols
- an emphasis on strict adherence to the call regime designed to protect the privacy and confidentiality of respondents
- response maximisation procedures relevant to the survey.

A comprehensive practice interviewing and role play module, such that the first "live" interview conducted by each interviewer is not a "trial."

An additional briefing on sensitive subject matter was undertaken to ensure interviewers were prepared with techniques to deal with respondents who may be emotionally affected by the subject material.

A total of 17 interviewers worked on the project.

FIELDWORK QUALITY CONTROL PROCEDURES

The in-field quality monitoring techniques applied to this project included:

- validation of 70 interviews (or just over 6 per cent of each interviewer's work, in accordance with ISO 20252 standards) via remote monitoring (covering the interviewer's approach and commitment gaining skills, as well as the conduct of the interview)
- field team de-briefing after the first shift, and thereafter, whenever there was important information to impart to the field team in relation to data quality, consistency of interview administration, techniques to avoid refusals, appointment making conventions or project performance
- maintenance of an "interviewer hand-out" document addressing respondent liaison issues and tips for refusal avoidance
- examination of verbatim responses to "other specify" questions
- monitoring (listening in) by the Social Research Centre project managers.

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