

# Young Australians' Alcohol Reporting System (YAARS)

## National Report 2016/17



National Drug  
Research Institute,  
Curtin University

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## Preventing harmful drug use in Australia

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- Mental Health and Alcohol and other Drug Program, Department of Health (NSW)
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# Executive Summary

While in recent years many Australian teenagers choose not to drink at all, in 2016 one in five 14-19 year olds still drank at levels that put them at risk of injury, at least once a month (1). Teenagers are particularly vulnerable to alcohol-related harms – 15-19 year olds have the highest per capita alcohol-related emergency department presentations compared to other age groups (2), and even modest quantities of alcohol may have deleterious effects on adolescent brains (3).

The Young Australians' Alcohol Reporting System (YAARS) is a research project that aims to provide insight into the risky drinking patterns of adolescents aged 14-19, by taking a 'snapshot' of the details of their most recent risky drinking occasion (4). Teenagers were sampled from the heaviest drinking quartile of their age and gender cohort. These young people were selected as they are experiencing or contributing to significant alcohol-related harms, are underrepresented in national general population surveys, and quality information among such groups is essential to designing and evaluating the impact of prevention and other interventions.

This project combines information from existing data sources with targeted surveying of at-risk young people to provide:

- An early warning system on risky patterns of alcohol consumption, contexts of use and related harms that will also allow tracking of changes in use and harm over time; and,
- Provide timely information on patterns of use and related problems to inform policy, prevention and treatment initiatives.

From October 2016 to March 2017 over 3,400 surveys were conducted with risky drinking 14-19 year olds in every Australian jurisdiction. Two survey modalities were used: face-to-face interview (n=596) and a shorter-duration self-administered online survey (n=2,869). Participants were screened as eligible if their drinking patterns placed them in the 'top 25%' of drinkers in their age and gender cohort. For example, 16-17 year olds screened positive if they were consuming five or more standard drinks per drinking occasion, at least twice a month over the past 12 months. As the recruitment occurred primarily through social media advertisements, the sample was self-selected and non-random.

## Key Findings

### *Demographics*

- Just over half of the sample (56%) were female;
- The 16-17 and 18-19 year old age groups were of equal size (each 42% of the sample) and 14-15 year olds comprised 16% of the sample; and,
- Participants appeared to be engaged in study options in proportions that were similar to general population adolescents.

### *'Usual' drinking patterns*

- Half of the respondents had consumed their first full standard drink (SD) by age 14, two years earlier than the general population average of 16 years of age, as estimated by the National Drug Strategy Household Survey 2016; and,
- Almost all (96%) were consuming 5+ SD at least once a month, and half were consuming 11+ SD at least once a month.



### *Last risky drinking session*

- The most recent risky drinking session predominantly (79%) occurred in the fortnight prior to survey, either on a Friday (23%) or Saturday (44%);
- Almost all (93%) 14-17 year olds and three-quarters (74%) of 18-19 year olds drank in a private location such as a friend's home or a public location such as a park;
- More than half (56%) of 18-19 year olds and 7% of 14-17 year olds drank at a licenced venue such as a hotel;
- Drinking duration was an average of 6.4 hours;
- Average quantity consumed was 15.0 SD (13.6 for females, 16.8 for males; with older respondents drinking more);
- Most (88%) reported this quantity this was fairly typical of what they usually drank;
- Most 14-17 year olds had their alcohol purchased for them (45% given it by friends, 32% had someone buy it for them);
- Three quarters (74%) of 18-19 year olds purchased their own alcohol directly from a licensed liquor store
- A quarter used at least one illicit or non-prescribed drug in this session (most commonly cannabis; 19%); and,
- Three quarters (78%) experienced at least one negative consequence as a result of last session's drinking; such as:
  - Hangover (35%);
  - Saying or doing embarrassing things (34%);
  - Feeling sick to their stomach/throwing up (20%);
  - Not being able to remember large stretches of time ('blacking out'; 19%);
  - Being injured due to their drinking (18%);
  - Participating in sexual activity they ordinarily wouldn't do (6%); and,
  - Verbally abusing someone because of their drinking (5%).

### *Alcohol-related outcomes beyond the last risky drinking session*

- In the past 12 months 83% had been injured as a result of their drinking and 7% had attended a hospital emergency department for an alcohol-related injury;
- Most (85%) had AUDIT-C scores of 6 or more, which suggested alcohol-related harm;
- Harm indicators increased with age – older respondents tended to drink more and report more associated harms;
- A sixth had AUDIT scores that suggested alcohol dependence;

### *Harms experienced due to others' drinking*

Respondents' past 12 month experience of 13 harms as perpetrated by someone else who had been drinking included:

- 65% had a party ruined;
- 61% reported they had received unwanted sexual attention;
- 47% had their clothes or other belongings ruined;
- 35% were yelled at, criticised or verbally abused; and,
- 14% were physically hurt.

### *Supply of alcohol to underage drinkers*

- Half of participants aged 17 and younger had ever attempted to purchase alcohol from liquor stores before, and half of their most recent successful attempts took less than one hour for a purchase;
- Most (89%) 14-17 year olds participants had ever previously received alcohol from a friend aged 18 and over who was attending the same party.

- A further nine supply scenarios were described, with past supply varying by the relationship between the recipient and supplier, drinking environment and whether there was an exchange of money for the alcohol;
- Three quarters of 18-19yr old participants stated they would give alcohol to a 16-17 year old, so long as the younger teenager was perceived to be in a safe environment; and,
- Most 18-19 year old participants also reported they would feel more responsible for the safety of a friend under the age of 18 if they gave them alcohol to drink.

#### *Sleep*

- There appears to be a relationship between sleep disturbance and alcohol use;
- More than a third displayed symptoms suggestive of clinical insomnia; and,
- Almost three quarters of the respondents used a drug to get to sleep or to stay awake in the past 2 weeks:
  - 65% used a stimulant to stay awake; and,
  - 32% had used a depressant drug to get to sleep.

#### *Popular strategies used in the past 12 months while drinking to reduce harms*

- Knowing where your drink was at all times (74%);
- Going home with a friend (68%);
- Drinking water while drinking alcohol (46%); and,
- Avoiding trying to keep up or out drink others (30%).

#### *Professional help*

- 29% thought they *should* cut down on their drinking and 31% *wanted* to cut down; and,
- Two thirds (68%) would feel comfortable speaking to a health worker about their drinking or someone else's drinking through a free and anonymous service that was telephone based, whereas 72% would feel comfortable with an online typing-based chat system.

### **Conclusion**

This study successfully accessed an at risk sample of young Australian drinkers who were experiencing substantial levels of harm, which have not necessarily been identified in official statistics. Our findings complement existing general population surveys which usually underrepresent this high risk group. This information will be useful for policy makers, clinicians and parents, and ultimately young people themselves, as a means of tapping into the experiences and needs of this population and for designing and implementing effective interventions.

There is evidence of very heavy drinking among some young people that contributes to significant harm for them and for others. Significant levels of harm indicate the need for carefully targeted interventions and the results also suggests that a significant proportion of those sampled would welcome such an approach.

Though this was a non-random sample, our large sample size spanned all jurisdictions with participants engaged in a variety of study options and occupations, and their reports were similar to those found elsewhere in the literature. Furthermore, respondents' most recent drinking occasion was described as fairly typical, and the recall period for most was within a short time of the interview taking place i.e. less than a fortnight.

The details associated with this most recent drinking occasion among this young sample highlight how consumption within private locations is the norm, and how quantities are consumed at levels well beyond what is considered risky for adults.

The proposed aims and outcomes were achieved through the demonstration of an effective methodology for accessing an otherwise difficult to reach population, and in exploring key drinking issues specific to this group. The use of social-media driven recruitment and the mixed methods of both face-to-face interviewing and online surveying allowed for a timely, modest-cost data collection strategy

This project demonstrates that it would be feasible to replicate this model on an annual or biannual basis to provide a continuing trend of core consumption and harm data. It will also allow the exploration of current issues, as they emerge, to inform policy and other interventions targeted at reducing alcohol-related harm among this vulnerable group of young high-risk drinkers. It is important to also note that future iterations of the approach will allow the addition of new and specific modules. For example, if Governments were interested in information to: inform prevention and policy strategies; identify exposure and response to alcohol promotions; or, inform understanding of the experience of specific mental health conditions amongst this group, these modules could be incorporated.

# 1. Introduction

Australia's alcohol attributable harms increased between 2001 and 2010 despite relatively stable per capita consumption (5-7). This is also being observed among young Australians and there is evidence that drinking patterns appear to be polarising with an observed increase in both abstainers and heavy drinkers, with the rise of alcohol harms attributed to this latter risky drinking group (8).

In 2016, one in five 14-19 year olds reported drinking at levels considered to be putting them at risk of injury at least once during the previous month (1). Australians aged 15-24 account for approximately half of alcohol-related serious road injuries and a third of hospitalisations for injuries caused by violence (9). There was a 35% increase in per capita alcohol-related emergency department presentations amongst 15-19 year olds between 2005 and 2011 (2). In addition to these acute harms, there is increasing concern that adolescents are also particularly vulnerable to the deleterious effects of alcohol on their developing brains. There is emerging evidence that even modest levels of drinking during adolescence are associated with subtle but significant neurological changes which may adversely affect a young person's memory and capacity to learn (3).

Teenagers who consume alcohol at risky levels are overrepresented in harm statistics but underrepresented in general population health surveys. As general population surveys are designed to capture the community as a whole, they may not capture certain subgroups such as people who are of school age but may not be attending school, or ask questions that do not sufficiently capture the episodic nature of teenage risky single occasion drinking (10). The Young Australians' Alcohol Reporting System (YAARS) is a research project that aims to provide insight into the risky drinking patterns of young Australians aged 14-19, by taking a 'snapshot' of the details of their most recent risky drinking occasion (4).

In 2016 and 2017, YAARS surveyed and interviewed over 3,400 14-19 year old risky drinkers in all eight states and territories of Australia. The research aims were to identify:

- High risk drinking practices and alcohol-related harms not otherwise recorded in existing data;
- Factors contributing to, or mitigating the experience of acute and chronic alcohol-related harms amongst this group through a detailed account of the most recent risky drinking session (recognising the episodic nature of much drinking by young people);
- Triangulation of project findings with other relevant data to provide a summary of current drinking patterns, factors that influence these patterns of drinking and related problems amongst young Australians; and,
- Strategies that can target and enhance effective prevention and other responses to alcohol-related harm among young people.

The National Drug Research Institute (NDRI; Curtin University, WA) is the national coordinator for YAARS. The project was first trialled with three collaborating centres in 2013: NDRI, the National Drug and Alcohol Research Centre (NDARC, University of New South Wales, NSW) and Turning Point (TP; Monash University, VIC).

In 2016 and 2017, the collaboration expanded nationally to include the School of Psychology at the University of Tasmania (TAS), the National Centre for Education and Training on Addiction (NCETA) at Flinders University (SA), ACT Health (ACT), the School of Education at Charles Darwin University (NT), and the Institute for Social Science Research at the University of Queensland (QLD). The 2016-2017 project was funded by the Australian Government Department of Health.

## 1.1. Alcohol use amongst young Australians

Alcohol use is the leading risk factor for global burden of disease amongst 15-24 year olds, accounting for 8% of their total disease burden (11, 12). The National Health and Medical Research Council (NHMRC) recommends that, for people under the age of 18, not drinking alcohol is the safest option. Their guidelines for healthy adults describes the consumption of five or more standard drinks in a single sitting as increasing the risk of injury arising from that occasion of drinking (13).

The National Drug Strategy Household survey (NDSHS) reported that in 2016, the majority (56%) of 14-19 year old Australians had not used alcohol in the past 12 months. However, almost a fifth (18%) of 14-19 year olds drank five or more standard drinks at least once a month (1).

As shown in Table 1, risky alcohol use significantly increases with age (1, 14). For example, in 2016, the consumption of five or more standard drinks at least once a month was reported by less than 1% of general population 12-15 year olds (not in table), 15% of 16-17 year olds and 37% of 18-19 year olds. This pattern is mirrored in the Australian School Survey on Alcohol and Drugs (ASSAD), with the reported prevalence of risky alcohol use in the past seven days almost doubling in each year group: from 2% at age 14, 5% at age 15, 10% at 16 years and 18% at age 17. Individuals' drinking patterns established during adolescence tend to continue into early adulthood (20-24 years of age), when risky drinking peaks (1, 15).

**Table 1. Summary of most recent general population datasets on teenage alcohol consumption**

2016 National Drug Strategy Household Survey (NDSHS)				
<i>5+ standard drinks at least once a month</i>		14-19 years	16-17 years	18-19 years
		%	%	%
Male		19.9	16	41.1
Female		15.9	12.8	32.6
All		18.0	14.6	36.9
<i>11+ standard drinks at least once a month</i>		14-19 years	16-17 years	18-19 years
		%	%	%
All		5.9	4.6	12.7

2014 Australian School Survey on Alcohol and Drugs (ASSAD)					
<i>1+ drinks past month</i>		14 years	15 years	16 years	17 years
		%	%	%	%
Male		15.7	30.2	44.2	54.4
Female		20.4	29.6	47.1	57.7
All		18.0	29.9	45.6	56.1
<i>5+ drinks past seven days</i>		14 years	15 years	16 years	17 years
		%	%	%	%
Male		2.1	5.7	11.9	21.7
Female		1.7	3.8	8.7	14.0
All		1.9	4.8	10.3	17.9

### Trends in youth alcohol use

While in recent years most high school age Australian teenagers choose not to drink at all, it seems that those who are continuing to drink may be drinking in higher quantities per occasion (1, 6, 8, 14, 16).

As shown by the blue dashed line in Figure 1, half of Australian high school students aged 16-17 drank alcohol in the past seven days in 1984, whereas less than a third had done so in 2014 (14). The age at which Australians consumed their first full standard drink has significantly risen from 14.8 years in 1995 to 16.1 years in 2016 (1). This ‘adolescent abstention trend’ has been observed for at least the past decade, and is noted in other populations such as in Great Britain (17), the United States (18), and Europe (19).

In contrast, over the past two decades, there has been a slight increase in the proportion of adolescent Australians who consume alcohol at riskier levels (6, 20). For example, as can be seen with the orange solid line in Figure 1, 39% of 16-17 year old school students drank 5+ drinks in a single sitting in 1990, whereas in 2014 43% of students in this age bracket did the same (14).

This consumption is a concern as those who regularly drink at high risk levels are much more likely to have experienced alcohol-related harms (13). Over 80% of all alcohol consumed by 14-17 year olds is drunk at high risk levels for acute harm (21). This group of teenagers may be drinking in greater quantities and contributing to the elevated rates of alcohol-related harm seen in some Australian jurisdictions (2, 6, 9, 22, 23). For example, as seen in the columns in Figure 1, alcohol-related emergency department presentations among 15-19 year old Australians rose by 35% from 2005 to 2012. With an estimated 15,000 presentations for alcohol-related injuries per year amongst these 15-19 years, they had the highest per capita rate of presentations compared to other age groups, including those aged 20-29 (2, 24).

**Figure 1. Australian teenage drinking trends 1984 to 2014**

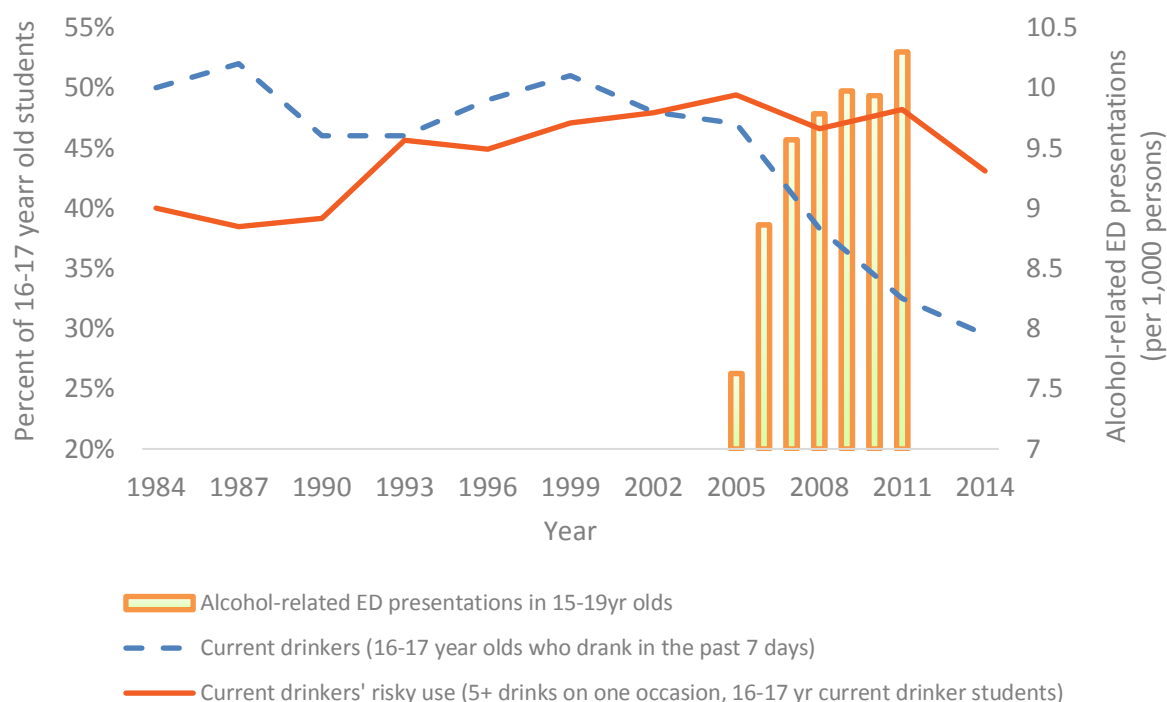


Figure note. Student consumption data from the Australian School Student Alcohol and Drug (ASSAD) 1984 to 2014 surveys. (14). Emergency department data from 2005-06 to 2011-12 includes all Australian jurisdictions excluding Tasmania (2).

## 1.2. Rationale and aims

There is ongoing community and political concern in relation to alcohol consumption amongst young people. The Australian Government has committed to preventing and intervening in intoxicated behaviour, especially among those under 18 (25).

The YAARS project aimed to investigate the group of young risky drinkers who are overrepresented in the experience of alcohol-related harms and underrepresented in the current general population surveys such as the NDSHS and ASSAD (4, 14).

In order to effectively respond to alcohol-related harms among young people, enhanced information was needed about the nature, patterns and contexts of use. Engaging with young people and ensuring their input, was recognised as crucial in informing the direction of policy, prevention and treatment efforts. Thus, The Young Australians Alcohol Reporting System (YAARS) combined information from existing data sources with data gathered from at-risk young people (14-19 years old) to provide:

- An early warning system on risky patterns of alcohol consumption, contexts of use and related harms that will also allow tracking of changes in use and harm over time;
- Timely information on patterns of use and related problems to inform policy, prevention and treatment initiatives; and,
- The establishment of structured target groups of young at-risk drinkers across all jurisdictions to enable the future development and implementation of other key initiatives and satellite investigations such as assessment of the relationship of risky alcohol use to mental health disorders.

The current project aimed to reach young people whose drinking put them at risk of harm at a critical transition stage. These transitions include moving from being under the legal purchase age to over the legal purchase age, and the move from school to work or post-secondary education and training. More broadly, this period of adolescence is also associated with a development phase associated with risk taking behaviour, and the move from close parental supervision to greater independence and peer influence.

As described above, there are currently two national surveys that collect data about drinking among young people that this study intends to complement: the NDSHS (1); and the ASSAD (14). The NDSHS survey is the largest continuously run alcohol and other drug investigation in Australia and surveyed almost 24,000 Australians aged 12+ in 2016. The NDSHS is conducted every three years with the first findings released the year after data collection. Though this comprehensive survey uses representative sampling techniques, there are significant non-response rates and it does underrepresent certain groups. For example, the youngest were the least represented vis a vis their estimated resident population (16). Further, as regular drinking is a minority behaviour in this age group, this has implications for sample size. For example, there were less than 300 14-19 year olds in the NDSHS 2013 sample who consumed 5+ standard drinks at least once a month limiting the capacity to meaningfully analyse the data, especially across different age groups (e.g. due to the wide variation in access to alcohol), and regions.

The ASSAD aims to provide an overview of alcohol and other drug use amongst school students across Australia. It is conducted every three years and in 2014, 23,000 secondary school students aged between 12 and 17 years participated in the survey. This survey covers a broad range of alcohol and other drugs used by students, however, does not capture young people who are no longer in school (e.g. have gone to TAFE instead). Also, due to variation in methodologies, the alcohol quantities derived from the ASSAD are not directly comparable to the NDSHS estimates. For example, the ASSAD's alcohol quantity measure of the number of drinks consumed on each day last week can underestimate consumption as:

- Adolescent alcohol consumption tends to be episodic and opportunistic. Therefore recording last week's use may not capture other recent drinking (for example, drinking that occurred a fortnight ago);
- The use of the term 'drinks' rather than standardised measures such as the standard drink concept/standard drink visual guide; and,
- Exclusion of values above 20 drinks on a single day.

These surveys have been designed to provide overviews of the alcohol and other drug related behaviour and attitudes of representative samples of the general population (NDSHS) and children in school (ASSAD). However, while representative, a limitation is that they do not include the highly specific questions of regular users which could provide important information about this high risk group. In contrast, YAARS aimed to provide insight into the context, patterns and consequences of heavy drinking young people who are at particular risk of alcohol-related harm. By concentrating recruitment efforts on higher-risk users, YAARS captured a sample size that allowed for examination of responses across ages and jurisdictions. Furthermore, this project allowed for the systematic monitoring of patterns of use among at-risk young people in a way that could provide an early warning mechanism about changes in patterns of use and harm and to inform policy, prevention and other interventions. The use of mixed methodologies and new technologies has the potential to allow for data collection to occur every year, with the key findings released within 6-12 months. Lack of timely data on young high risk drinkers can be a major barrier to effective responses and to analysis of the approaches that are adopted.

The main purpose of the present YAARS project is to investigate risky alcohol use among young people and, should the project be refunded, and as successive years of data accrue, to enable emergent trends to be used in part as an early warning system to detect developing patterns of problematic alcohol use and associated harms. To achieve this, the research design has been modelled on the well-established illegal drug monitoring and early-warning systems the Illicit Drug Reporting System (26) and the Ecstasy and Related Drugs Reporting System (27).



## 2. Method

Australia is a large country with diversity in and between jurisdictions, metropolitan, regional, rural and remote areas. An advisory committee was formed during the piloting of this project consisting of a young service user and a representative from services that respond to young people affected by drug use, and government representatives from WA, VIC and NSW.

The current study collected data across the nation's eight main jurisdictions: our six states and two internal territories. There was one national study coordinator based in Perth, and a site coordinator in each of the eight capital cities (Canberra, Sydney, Darwin, Brisbane, Adelaide, Hobart, Melbourne and Perth).

The capital city based site coordinators and their interviewing teams conducted face-to-face interviews with young people residing in the metropolitan areas of those cities, and recruited both metro and regional young people to participate via an online self-administered survey.

The mixed-methodology was combined online technology to reach a diverse and geographically disparate group of at-risk young people, coupled with rich data available through face-to-face interview.

Recruitment and survey completion ran over two phases: October-November 2016 and mid January-March 2017.

All research team members who had contact with the young people received training, a detailed procedure manual and held a jurisdiction-specific Working with Children Check (28). The study was approved by the following Human Research Ethics Committees:

- Curtin University (HR 52/2014);
- University of New South Wales (HR 52/2014);
- Monash University (1032);
- University of Tasmania (H16018);
- Flinders University (OH-00111)
- ACT Health Research Records and Governance Office (ETH.9.16.185);
- Charles Darwin University (H16094); and,
- University of Queensland (2016001535).

## 2.1. Sample and recruitment

The non-probability based sampling framework was designed to access the heaviest drinking 20-25% of 14 to 19 year olds in Australia.

It is acknowledged that regular heavy drinking also occurs among those younger than 14, although rates are substantially lower (1). Furthermore, due to the particular ethical and practical challenges associated with accessing those under the age of 14, the focus was placed on young people aged 14 and over (29).

Figure 2. Flowchart of YAARS target population and sample

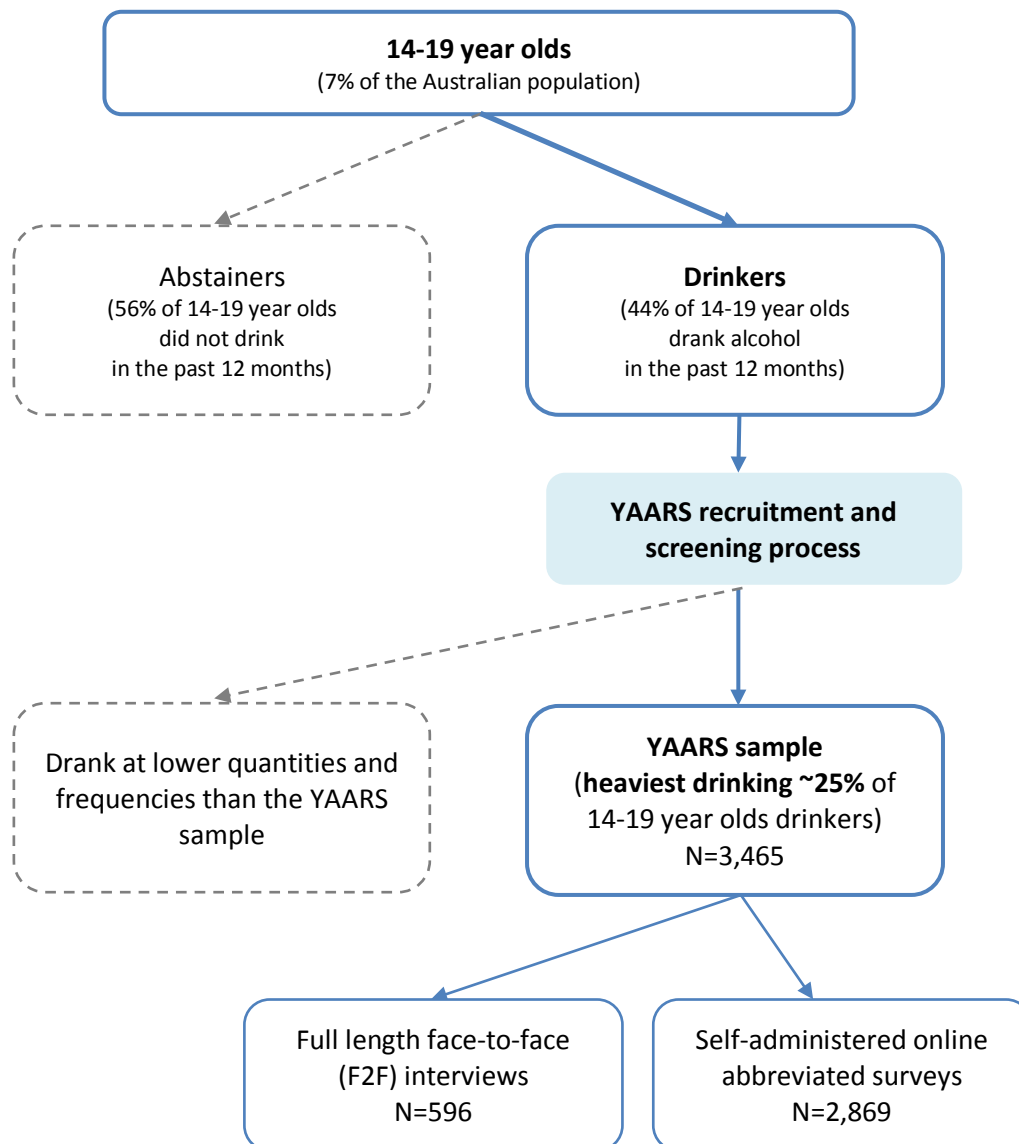


Figure note. Estimations of population proportion by age (30), and drinking in the past 12 months (1) were both estimated for the year of 2016.

As illustrated in Figure 2, 14-19 year olds represent 7% of the Australian people, and teenage risky drinkers represent an even smaller proportion of the population (1%). To access such a small proportion of the Australian population, targeted convenience sampling techniques were used for

recruitment. With 99% of 15-17 year olds accessing the Internet in 2014/15 for 18 hours per week on average, Internet-based advertising was considered a key method to reach the target population (31).

The majority (86%) of the sample was recruited using paid social media advertisements (see Table 2). The social media advertisements were targeted at the 14-19 year old age group and within jurisdictional boundaries so that jurisdiction-specific content and site coordinator contact details could be presented to potential participants. Other recruitment sources included through word of mouth ('snowballing'; 14%), and posters (3%) in higher education institutions, youth sports clubs, health agencies which specialise in youth services.

The age and location targeting capability of social-media platforms was one of the primary reasons why we were able to access a population that has previously been difficult to reach through broader recruitment methods such as street press advertisements. For example, the social media provider could access users' age and only display the advertisement to the relevant group. The advertisement further encouraged self-selection of drinkers with the copy 'Are you aged 14-19 and drink regularly'? Therefore, by the time a potential participant chose to find out more information about the research by clicking on the advertisement, it was highly likely that they were in the target age group and were drinkers (i.e. ~3% of the Australian population). The remaining screening for eligible participants was completed via computer programming or research staff, and is outlined in the following section (2.3).

**Table 2. Recruitment method for YAARS sample**

	Survey modality		
	F2F	Self-administered	Total
Facebook advertisement	47.4%	75.8%	69.9%
Instagram advertisement	12.5%	17.8%	16.7%
A poster at university	4.5%	1.4%	2.1%
A poster in a shop	0.2%	0.3%	0.2%
A postcard	0.0%	0.1%	0.1%
Through a friend	36.8%	8.1%	14.0%
An electronic newsletter	0.0%	0.2%	0.2%
A service I use (e.g. youth health service)	4.1%	0.3%	1.1%
Other recruitment method	2.2%	0.7%	1.0%
Any social media advert	58.6%	92.9%	85.8%
Total	584	2234	2818

Earlier samples derived using the YAARS recruitment method have been compared to two Australian youth datasets from 2009 and 2010 which used representative sampling techniques. The YAARS sample reported similar rates of fortnightly consumption of 11+ standard drinks, but were more likely to be drawn from a capital city area and the report a lower recreational income (32). Comparisons with an age-matched 2016 NDSHS sample were not possible at the time of the writing of this report as the NDSHS full dataset was not yet available.

### 2.3. Eligibility criteria

Inclusion criteria were developed using the data sources relevant to the target group of 14-19 year old Australians and available at the time of project design. The three determined to be the most useful (i.e. have rigorous methodologies and be relevant to our sample) were the:

- 2009 Victorian Youth Alcohol and Drugs Survey (VYADS; Random Digit Dialling of landlines with 71% response rate; sampling 5,000 16-24 year olds; 2,465 aged 16-19) (33);
- 2013 National Drug Strategy Household Survey (NDSHS; 26,648 Australians aged 12+; 1256 were aged 14-19 across Australia) (16); and,
- 2011/2014 Australian Secondary School Alcohol and Drug (ASSAD) surveys (sampling 12-17 year olds with 2,917 14-17 year old WA school students) (34).

These three surveys supplied the most current data prior to the current project's data collection and were used to estimate the drinking patterns of the 'top 25% of drinkers' of each age group (see Table 3).

**Table 3. Inclusion criteria used for the YAARS 2016/17 data collection**

	14-15 year olds	16-17 year olds	18-19 year olds
Males	1+SD once a month	5+ SD twice a month	9+SD twice a month
Females	1+ SD once a month	5+ SD twice a month	7+ SD twice a month

Table note. SD=standard drinks in a single sitting. These inclusion criteria were designed to capture the 'riskiest drinking 25%' of each age bracket. The proportion of each age-cohort the inclusion criteria would select for were estimated using datasets available at the time: <sup>a</sup>NDSHS 2013 <sup>b</sup>VYADS 2009 <sup>c</sup>ASSAD 2014.

There was a two-stage eligibility screening process for the face-to-face interviews: initially with a research staff member through telephone or email prior to the booking of the interview, and verification during the interview via survey logic programming. The self-administered online survey participants were screened only via survey programming.

If a young person wished to complete a face-to-face interview, a local research team member was contacted for screening. Several options for contact were available including email, SMS, voice message and live telephone call. The research team were encouraged to conduct as much of the screening process through telephone call as possible as this direct interaction maximised the accuracy of the selection process. Contact information was available from selected jurisdictions: the average number of potential participants who contacted researchers per site was 258 (range 134-484), and an average of 42% of initial contact attempts resulted in a F2F interview.

If the young people wished to participate through the self-administered online survey their eligibility screening was completed by a computer program. This within-survey computer programming based screening was determined by the respondents' past 12 month drinking patterns, as assessed by the 'quantity frequency matrix' described in section 3.2 of this report. More specifically, over 300 'IF-THEN' conditions screened for combinations of alcohol quantities and consumption frequencies. For example, IF the quantity of '9-10 standard drinks in a day' was selected in combination with the consumption frequency of '2-3 days a month', THEN the participant was screened as 'Eligible'. Of the

6917 individuals who accessed the online self-administered survey information page, 5354 completed the eligibility criteria, and 2869 (53%) were screened as eligible.

## 2.4. Face-to-face interviews

Data were collected from every state and jurisdiction of Australia through a combination of face-to-face (F2F) interviewer-administered interviews and online self-administered surveys.

Each capital city site conducted approximately 90 F2F interviews:

- Interview questions were primarily quantitative (number or multiple choice based);
- Took approximately 45 minutes to administer;
- Participants were reimbursed \$AU40 in cash or a retail voucher for their time and costs associated with attending;
- Responses were collected via an electronic tablet device and an online survey using Qualtrics software; and,
- Interviews were conducted in neutral venues acceptable to participants such as coffee shops and similar venues.

Each site was encouraged to balance their sample along gender, age and student status. An even gender split was desired. The interviews included a cap on the number of university students as, in the past, this group has responded more enthusiastically to recruitment strategies than other, non-university, groups. Jurisdiction-specific participant demographics are available in the site reports.

Recruitment of participants was through a variety of sources: project websites; paid advertisements on social media, project posters and postcards posted around technical and further education institutions (TAFEs), universities and youth services; email lists at TAFEs and universities; and, by word of mouth ('snowballing'). Advertising material was professionally designed with the aim to maximise appeal to the target population. A reimbursement offer for face-to-face interviews was included in the advertising materials. Initial contact from potential participants was either by email, telephone or text message. Local variation in recruitment, for example, whether respondents were referred to the national recruitment webpage ([ndri.curtin.edu.au/research/yaars](http://ndri.curtin.edu.au/research/yaars)) or a jurisdiction specific page has been described in the site reports.

Meetings for those respondents who met the inclusion criteria and fit the quotas were scheduled over the phone or by email. Once the site quota was filled, young people enquiring about the study were directed to the online survey.

Interviews were conducted in either a public place, such as a coffee shop, or in a meeting room at the interviewer's workplace. The surveys were conducted on a one to one basis, so that the participant's responses were not able to be influenced by the presence of a parent or partner, for example. The interview questions were administered by a trained interviewer via an electronic tablet device (iPads, iPad minis and Samsung Galaxy tablets). The face-to-face interviews ran for approximately 45 minutes.

At the start of each survey the interviewer described the purpose of the survey, covered the participant's rights, gave the participant an opportunity to ask any questions, obtained verbal consent and given their reimbursement. At the end of each survey, the participant was provided with contact details of the site coordinator in case they had any questions that arose for them later, a project information postcard to pass on to a friend, and some local health service information in case they wished to seek advice or information from local services.

## 2.5. Self-administered online surveys

An abbreviated version of the F2F questionnaire was available online for those who preferred not to, or were unable to complete, a F2F interview. The inclusion criteria for the online survey was the same for the F2F interview and the survey software presented the screening questions.

There were no limits set for the number of participants completing the online component. F2F interviewees were not permitted to complete the online survey and online participants could only complete the survey once. In order to restrict duplicate self-administered online surveys, the survey software recognised the same computer attempting to access the survey multiple times. The online survey was open for the same time period that face-to-face interviews were being conducted.

Participant recruitment for the self-administered survey primarily relied on the social media based F2F recruitment efforts outlined in 2.1 and 2.4. A typical recruitment pathway would be that a potential respondent would see the advertisement for the F2F interview on social media, click on the advert, and would be routed to the project website hosted by a participating research centre. At this point, they would be presented with information that there were two survey administration modalities available. The F2F and self-administered options were presented side by side, and the potential participant could choose either to (i) contact a jurisdiction-specific staff member to enquire about an interview, or (ii) click on a hyperlink to take them to the self-administered survey.

The chance to win one of 400 \$40 retail vouchers following the completion of a self-administered survey was advertised as a strategy to enhance recruitment. Although it was designed to be anonymous, the contributions of participants in the online survey were acknowledged by giving them the opportunity to provide their email address for entry into the prize draw. Upon completion of the alcohol survey, participants were automatically rerouted to a separate site to register their details for the prize draw. The prize draw site and alcohol use survey were not linked. So, while the pool of prize draw entrants were individuals who had undergone screening for the alcohol survey, the content of their alcohol survey remained unknown.

Of the 2898 self-administered surveys screened as 'eligible', 79% were completed in full, 6% completed 71-83% of the survey, 8% completed 43-69% of the survey and 7% completed  $\leq 30\%$  of the survey. It took an average of 20.1 minutes to complete all parts of the survey (excluding outliers  $\geq 60$  minutes [n=30 60-99 minutes, n=60 100-999 minutes, n=13 1000-10000 minutes]).

## 2.6. Survey content overview

Survey questions were developed specifically for this study and adapted from established international, national and local surveys to enable comparison, and to ensure we complemented current data collections.

The data from this project were predominantly quantitative, supplemented with a small number of open-ended qualitative items. The methodology focused on the most recent occasion when the young person drank more than recommended in the NHMRC low risk single occasion drinking guidelines for adults (or any drinking in the past month amongst 14-15 year olds).

The use of event-level data allowed for a rich context to be described - the linking of specific quantities of alcohol consumed, at what kind of location, the presence of other drinking peers/adults, with risks such as pre-loading with alcohol before the event, and identification of protective factors, in relation to likelihood of experience of a single instance of harm such as physical assault.

Beyond the last risky drinking session, other outcomes such as drink driving in the past 12 months, symptoms of dependence, age of initiation, mental health issues and other drug use were also assessed.

The table below provides an overview of the YAARS survey contents and which modules were asked across the survey modalities. The content of each section is discussed in further detail in the results section.

**Table 4. Overview of the YAARS survey contents**

Section	Survey modality		Description
	F2F	Self-admin	
A Usual alcohol use	✓	✓	Nineteen questions including: age of initiation to alcohol, frequency of use and quantity consumed in single sittings over the past six to twelve months.
B Background	✓	✓	Ten demographic and socio-economic items including: employment, languages spoken, home postcode, social service use and recreational income.
C v 1 Most recent drinking occasion (up to six drinking locations)	✓	-	This section asked about the most participants' "last drinking session" – how long ago the occasion occurred, plans for the session, drinking companions, responsible adult supervision, pre-drinking, how typical this drinking session was, and what transport they used to get home.  F2F interviewees answered a series of looped questions for every drinking location they visited. The following details were collected separately for up to six drinking locations: drinking location, transport between locations, time spent drinking, alcohol quantity, types of beverages consumed, source of alcohol, and amount spent on alcohol.
C v 2 Most recent drinking occasion (all locations combined)	✓	✓	The variables listed above were answered combining all drinking locations visited in the last session.
D Outcomes of alcohol use	✓	✓	Thirty-three outcomes that may have occurred at the last drinking session or at another time in the past 12 months. This included Kahler's 24-item Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ).



E	Other drug use	✓	✓	Seventeen drugs other than alcohol that may have been consumed at the last drinking session or at another time in the past 6 months.
F	Emergency department use/service provision	✓	-	Fourteen items including: riding with an alcohol affected driver, being injured due to alcohol, risk of alcohol dependence AUDIT questions (F2F respondents complete the 10-item AUDIT, the self-administered respondents have the three AUDIT-C questions), motivations to cut down on drinking (wants to keep drinking the same quantities, or to reduce their use etc.), and preferred service delivery mode (telephone vs. online).
G	Sleep	✓	-	Assessment of alcohol-related sleep disturbances. Includes Morin's Insomnia Severity Index (ISI), weeknight/weekend night time sleeping and napping, shift work, and use of alcohol and other drugs either as sleep aids or to stay awake. Also, Kessler's psychological distress scale (K6) and Tangney's Brief Self Control (B-SC) scale which are related to both alcohol use and sleep disturbance.
H	Harms due to others' drinking	✓	✓	Thirteen harms that may have occurred in the past 12 months due to someone else's drinking. E.g. being harassed or bothered at a party or some other private setting. This section includes the four item Brief Physical Punishment Scale (BPPS) which is associated with experience of alcohol related physical assault.
I	Protective Behaviours	✓	✓	Fifteen safety/harm reduction behaviours from Martens' Protective Behavioral Strategies Scale (PBSS).
J	Licensed venues	✓	✓	Three items on the ease of underage access/purchase of alcohol, an additional three items on the frequency of drinking in licensed venues vs. private locations vs. public locations.
K	Secondary supply (14-17 year olds)	✓	-	<ul style="list-style-type: none"> <li>• 8 scenarios when underage participants asked for alcohol from older individuals</li> <li>• 10 scenarios were underage participants were provided alcohol by older individuals</li> <li>• Six items about their knowledge of secondary supply laws.</li> </ul>
K	Secondary supply (18-19 year olds)	✓	-	<ul style="list-style-type: none"> <li>• Twenty-four Motivational factors that impact on people's compliance with laws (items were grouped into five motivational factors: Deterrence, Social Norms, Personal Morality, Perceived Legitimacy of authorities and Procedural Fairness).</li> <li>• Frequency of supply to underage individuals under eight scenarios</li> <li>• Six items about their knowledge of secondary supply laws.</li> </ul>
L	Self-generated identification code	✓	✓	<ul style="list-style-type: none"> <li>• Self-generated identification codes (SGICs) were generated from 11 'security' questions designed to match participants' surveys across years. E.g. 'What is the first letter of your mother's first name?'</li> <li>• Seven of these items were adapted from a previously validated scale (35), and the remaining four were being trialled for their potentially greater anonymity.</li> </ul>
M	Recruitment	✓	✓	How the participant found out the study, whether they wished to be contacted again for further participation/main results of study and if there was anything else they wished to describe.

## 3. Results

This results chapter is presented in 13 parts which essentially reflect the order and grouping of the sections as they appeared in the full questionnaire. To assist the reader, discussion points are included with the results they refer to rather than in a separate 'Discussion' section.

### *Explanatory notes*

Most tables present results separately by survey administration modality and/or by demographic. The interviewer administered surveys were conducted face-to-face and this modality has been abbreviated as 'F2F' in the tables. The self-administered online surveys are abbreviated as 'self-administered'. 'Both modalities' combines both the interviewer and self-administered responses.

The term 'demographic' summarises age and gender information into four main categories: Males aged 14 to 17, Males aged 18 to 19, Females aged 14 to 17, and Females aged 18 to 19. While most tables have been presented in two age categories, if the data varied substantially by age, three age categories were used: 14-15; 16-17; and, 18-19.

In this report, the 'Total' or 'All' groups are often larger than the sum of the female and male groups. The 45 eligible respondents who reported as transgender or preferred not to disclose their gender have been included within the 'Total' or 'All' scores.

Alcohol quantity was reported via a number of standard drinks consumed, and using the beverage-specific response method. Respondents were provided with a visual prompt through a standard drink chart to facilitate recall, and the beverage-specific response method is outlined in the 'last risky drinking session alcohol quantity' section (3.3).

The upper alcohol quantity limit was set at 50 standard drinks as higher quantities were likely to have been spurious. The consumption of 50 or more standard drinks over 24 hours by a healthy average Australian weight young male was estimated to generate a Blood Alcohol Content (BAC) of 0.6%. BACs over 0.4% are considered unusually high and potentially lethal, though non-lethal BAC presentations of up to 0.78% are documented (36). Of note is that there is substantial variation the effect of BAC on an individual depending on factors such as alcohol tolerance (37), and the period of time the drinking occurred over (e.g. a 'single drinking occasion' may have run for over 24hours, resulting in a lower BAC).

Some participants did not answer all the questions – the resulting 'missing values' were not included in the computation of descriptive percentages and statistics such as averages. The 'Total' or 'n' included the tables reflect the number of participants who responded to the item.

### 3.1. Sample description

In late 2016 and early 2017 a total of 6,078 14-19 year olds were screened for study eligibility. These young people were screened as either the 'riskiest drinking 25%' or as 'lower risk drinkers'.

As described in section 2.3, the following inclusion criteria were used to identify the eligible participants who were the 'riskiest drinking 25%' of their age and gender cohort:

- 14-15 year olds who drank 1+ standard drink(s) in a single sitting at least once a month;
- 16-17 year olds who drank 5+ standard drinks per occasion, at least twice a month;
- 18-19 year old females who drank 7+ standard drinks per sitting at least twice a month; and,
- 18-19 year old males who drank 9+ standard drinks per occasion at least twice a month.

Young people screened as consuming in lower quantities or frequencies ('lower risk' participants) provided demographic and past 12 month drinking responses as a part of the screening process, but are not be described further in this report. This report focuses on the young people who were screened as the higher risk drinkers who from this point on, are simply referred to as 'the participants', or 'the sample'.

There were a total of 3,465 eligible participants:

- 596 completed the longer questionnaire, face-to-face with an interviewer; and,
- 2,869 completed at least the screening process for the shorter, self-administered online survey (79% completed the online survey in full).

As seen in Table 5, participant numbers per jurisdiction were broadly proportional to population size (i.e. there were more participants from more densely populated jurisdictions).

**Table 5. Eligibility screening by jurisdiction**

Survey modality	Screening status	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Unknown postcode	Total
F2F	Lower Risk	9	15	11	9	25	17	14	28	0	128
	Eligible	74	103	31	91	80	51	73	93	0	596
	Total screened	83	118	42	100	105	68	87	121	0	724
Self-administered	Lower Risk	189	585	59	38	259	216	642	358	139	2485
	Eligible	204	909	55	89	215	256	607	386	148	2869
	Total screened	393	1494	114	127	474	472	1249	744	287	5354
Both survey modalities	Lower Risk	198	600	70	47	284	233	656	386	139	2613
	Eligible	278	1012	86	180	295	307	680	479	148	3465
	Total screened	476	1612	156	227	579	540	1336	865	287	6078
Jurisdiction population ('000)		396	7727	245	4843	1708	519	6070	2617	n/a	24129

Table note. Participant postcodes were cross referenced with the Australian Bureau of Statistics' geographical framework for an allocation of a jurisdiction, and a Greater Capital City Statistical Area (GCCSA) (38). The GCCSA capital city boundaries include the urban areas of each jurisdiction's capital city as well as non-urban areas with strong links to the city for example, though commuting for work or study. Two F2F interviews were conducted in ACT but provided NSW postcodes; two F2F interviews were conducted in SA that had postcodes from NSW and VIC; one F2F interview was conducted in TAS that had a VIC postcode. Estimated jurisdiction resident population estimated to be current as of 2016 (30).

As seen in greater detail in Table 6, just over half of the eligible participants were female (56%; N=3,465). The 1% of participants who identified as transgender or preferred not to disclose their gender have been represented within the 'total' scores.

The 16-17 and 18-19 year old age groups were of equal size (each 42% of the sample), and the 568 14-15 year olds comprised 16% of the sample. Note that the selection criteria for 14-15 year olds called for the consumption of at least one standard drink at least once a month, and the average age of the first full standard drink as reported by the NDSHS in 2016 was 16.1 years of age (1).

Most YAARS participants (85%) were students - 53% were attending school, 29% a university, and 4% a technical and further education (TAFE) institution. A third (32%) of these students also worked casually or part time. Another 6% were unemployed, 4% employed full time, 2% were trade apprentices, and <1% were engaged full time in home duties. The YAARS participants appeared to be engaged in various study options in proportions that were similar to general population adolescents. On a national basis, in 2016, 83% of Australian 15-19 year olds were currently enrolled to study. Most (57%) 15-19 year olds were enrolled in high school, 18% were enrolled in higher education (studying for a bachelor degree or higher qualification), and 6% at a TAFE institution (39). Jurisdiction specific schooling requirements are summarised in the site reports.

More than three-quarters (82%) of this sample were from a greater capital city catchment area. As the face-to-face interviews were coordinated and conducted by capital city based teams, 97% of the F2F participants were within the capital city boundaries. In contrast, the self-administered online survey was able to reach a broader geographical sample with a fifth (21%) from a non-capital city area. In 2016, 67% of Australians lived within a capital city boundary (40).

The F2F participants were asked about their current accommodation and 83% lived in their family home (93% of 14-17 and 72% 18-19 year olds), 9% in a place they rented (3% of 14-17 year olds and 16% of 18-19 year olds), and 4% in a boarding house or hostel.

Most (89%) of this sample spoke only English at home, and 5% identified as Aboriginal and Torres Strait Islander. This is comparable to representative population data. In the 2016 Census, 73% of Australians only spoke only English at home and 2.8% of Australians identified as being Aboriginal and Torres Strait Islander (40, 41). More specific population estimates of Aboriginal and Torres Strait Islander young people are available via the 2011 Census, when 5% percent of 15-19 year old Australians identified as Aboriginal and Torres Strait Islander (30).

A third (29%) reported a weekly recreational income of \$39 or less, 27% had \$40-79, 26% \$80-159, and 16% more than \$160. The F2F participants were asked about their use of a social service and 15% were recipients of Centrelink benefits such as student allowance or a Health care card.

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*In 2016 and 2017, over 3,400 risky drinking 14-16 year olds were surveyed.*

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**Table 6. Demographic characteristics of YAARS sample**

		Survey modality					
		F2F		Self-administered		Total	
		n	%	n	%	n	%
Gender	Male	311	52%	1161	41%	1472	43%
	Female	283	48%	1665	58%	1948	56%
	Transgender	1	<1%	18	1%	19	1%
	I do not identify as any of the above/ prefer not to say	1	<1%	25	1%	26	1%
	Total	596	100%	2869	100%	3465	100%
Age	14-15	88	15%	480	17%	568	16%
	16-17	237	40%	1205	42%	1442	42%
	18-19	271	46%	1184	41%	1455	42%
	Total	596	100%	2869	100%	3465	100%
Occupation	School student (full time)	272	46%	1519	54%	1791	53%
	TAFE student (or equivalent; full time)	11	2%	71	3%	82	2%
	TAFE student (or equivalent; part time)	12	2%	62	2%	74	2%
	University student (full time)	195	33%	749	27%	944	28%
	University student (part time)	5	1%	42	2%	47	1%
	Trade apprentice (full time)	5	1%	52	2%	57	2%
	Trade apprentice (part time)	3	1%	24	1%	27	1%
	Employed (casual or part time)	239	40%	906	32%	1145	34%
	Employed (full time)	20	3%	112	4%	132	4%
	Unemployed	44	7%	171	6%	215	6%
	Home duties (full time)	1	<1%	37	1%	38	1%
	Other	10	2%	57	2%	67	2%
	Total	596	100%	2799	100%	3395	100%
Languages spoken in home	English only	513	86%	2320	90%	2833	89%
	English and another language(s)	81	14%	273	11%	354	11%
	Total	594	100%	2593	100%	3187	100%
Aboriginal and/or Torres Strait Islander (ATSI)	ATSI	24	4%	133	5%	157	5%
	Not ATSI	572	96%	2736	95%	3308	96%
	Total	596	100%	2869	100%	3465	100%
Greater Capital City Statistical Area	Capital city area	575	97%	2153	79%	2728	82%
	Non-capital city area	17	3%	568	21%	585	18%
	Total	592	100%	2721	100%	3313	100%
Weekly budget available for recreational use	≤\$10	28	5%	145	5%	173	5%
	\$10-39	115	20%	703	26%	818	24%
	\$40-79	171	29%	721	26%	892	27%
	\$80-119	115	20%	494	18%	609	18%
	\$120-159	57	10%	206	8%	263	8%
	≥ \$160	102	17%	428	16%	530	16%
	Do not know	1	<1%	63	2%	64	2%
Total	589	100%	2760	100%	3349	100%	

### 3.2. 'Usual' alcohol use patterns

#### *Age of initiation*

The age of initiation is the age at which the first full standard drink of alcohol or more is consumed. Earlier exposure to alcohol is associated with greater experience of alcohol use problems in later adolescence and into adulthood (42). A quarter (24%) of the respondents had consumed their first full standard drink by age 13, 50% by age 14, 76% by age 15, and 93% by age 16 (n=3332). In comparison, the mean age of initiation in the general Australian population was 16.1 years in 2016 (1).

#### *AUDIT-C*

The Alcohol Use Disorders Identification Test (AUDIT) is a valid and reliable screening tool developed by the World Health Organisation to detect risky drinking patterns. It is commonly used in both clinical and research settings (43). The original AUDIT has 10 items comprised of three subscales covering consumption (items 1-3), dependence (items 4-6) and alcohol-related problems (items 7-10).

The three item consumption subscale is also known as the AUDIT-C and is almost equal in accuracy in predicting hazardous drinking (44). The AUDIT-C items were presented to all young people who engaged with the study, across both screening statuses (eligible or lower risk), and survey administration modalities (F2F or online). The full 10-item test was administered only to the F2F participants.

In response to the first AUDIT-C item, 41% said they drank at least twice a week (see Table 7). The second AUDIT-C item asked about the number of standard drinks consumed in a typical day when drinking. This item was asked as an open ended question and the numerical responses were categorised in line with the five AUDIT response options. An eighth (16%) of the sample reported they typically had four or fewer drinks, 47% 5-9 drinks, and 37% typically had 10 or more. In the last AUDIT-C item, 42% reported they drank 6 or more standard drinks in a single occasion weekly or more frequently and 58% monthly or less frequently.

Most participants (85%) had an AUDIT-C total scores of six or greater. Cut-off points to identify hazardous drinking can vary (44), however, the Australian AUDIT describe scores of 6 and greater as potentially indicating alcohol-related "harm for those groups more susceptible to the effects of alcohol, *such as young people ...*" (45). AUDIT-C scores generally increased with age – the average score was 6 for 14-15 year olds, 7 for 16-17 year olds, 8 for 18 year olds and 9 for 19 year olds.

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*The majority (85%) of participants screened positive for alcohol-related harm, suggesting they were consuming alcohol in a pattern that was hazardous to their safety.*

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**Table 7. AUDIT-C items**

		F2F	Self-admin	Both modalities
How often do you have a drink containing alcohol?	Never	0.0%	0.0%	0.0%
	Monthly or less	2.9%	10.1%	8.8%
	2-4 times a month	49.7%	50.0%	49.9%
	2-3 times a week	38.9%	33.0%	34.0%
	4 or more times a week	8.5%	7.0%	7.2%
	Total	591	2861	3452
Over the past 6 months, how many standard drinks do you have on a typical day when you are drinking?	<2.99	1.9%	5.5%	4.9%
	3 or 4	7.6%	11.7%	11.0%
	5 or 6	19.8%	19.3%	19.4%
	7 to 9	32.1%	26.8%	27.7%
	10 or more	38.7%	36.7%	37.0%
	Total	592	2843	3435
How often do you have six or more standard drinks in one occasion?	Never	0.0%	2.0%	1.6%
	Less than monthly	4.0%	13.2%	11.7%
	Monthly	36.3%	46.0%	44.3%
	Weekly	58.7%	36.7%	40.5%
	Daily or almost daily	1.0%	2.1%	1.9%
	Total	595	2861	3456

AUDIT-C score $\geq 6$	F2F		Self-admin		Both modalities	
	%	N	%	N	%	N
M 14-17	89.9%	169	77.1%	652	79.8%	821
M 18-19	97.1%	137	96.8%	502	96.9%	639
F 14-17	90.7%	150	72.9%	983	75.3%	1133
F 18-19	96.9%	128	94.2%	660	94.7%	788
Total	93.3%	586	83.0%	2840	84.8%	3426

### Quantity-frequency matrix

Respondents were asked 'How often in the past 12 months have you had each of the following number of standard drinks in a day?' These items were based on the 'quantity-frequency' matrix used in the National Drug Strategy Household Survey (16).

This matrix listed 11 frequency categories ranging from 'everyday' to 'never', and 10 quantities ranging from '30 or more standard drinks in a day' to 'alcohol free days'. Compared to the NDSHS, this study presented two additional frequency categories: 'about 1 day every 2 months', and 'about 1 day every 3 months', to capture consumption that may be occurring between once a month and once a year.

This matrix was used to assess potential participants' eligibility for the survey. All participants were drinking at least one standard drink at least once a month as this level of consumption was a part of the inclusion criteria. It is of note that the survey programming allowed for the inclusion criteria to be assessed across multiple quantity and frequency categories. For example, a 14-15 year old female was eligible if she consumed 5+ standard drinks (SD) in a single occasion, at least twice a month. She may not have endorsed consuming 5-6 SD 2-3 times a month, but would have been considered eligible as she consumed 5-6 SD about 1 day a month as well as 7-8 SD 1 day a month (the combination being the equivalent of 5+SD at least twice a month).

For ease of interpretation, consumption of various quantities have been summarised below as occurring either at least once a month, or at least twice a month (see Table 8 and Table 9).

As previously described, the NHMRC recommends the consumption of four or fewer drinks in a single sitting for an adult to minimise the risk of an injury resulting from that drinking session (13). No similar data are available for people under the age of 18 and the NHMRC indicates the safest option is not "not drinking."

Three quarters of the 14-15 year olds (74%) and all of those aged 16-19 were consuming 5+SD at least once a month.

The following proportions of participants consumed 11+SD at least once a month:

- 31% of 14-15 year olds;
- 41% of 16-17 year olds; and,
- 62% of the 18-19 year olds.

---

*Almost half (48%) of the participants were consuming 11+ standard drinks at least once a month.*

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**Table 8. Quantities consumed in a single session, at least once a month, over the past 12 months**

Both survey modalities							
Quantity	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	All
	%	%	%	%	%	%	%
30+ SD	8.2	7.9	14.1	5.8	5.3	5.5	7.8
20+ SD	15.5	15.3	28.8	9.9	8.8	11.6	15.1
11+ SD	39.1	51.3	77.1	25.5	33.0	49.6	48.1
9+ SD	50.7	78.9	95.2	40.6	63.1	87.1	74.6
7+ SD	60.4	95.2	100.0	52.5	88.1	100.0	89.0
5+ SD	73.9	100.0	100.0	73.9	100.0	100.0	95.8
3+ SD	88.9	100.0	100.0	90.1	100.0	100.0	98.3
1+ SD	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	207	620	645	345	804	799	3465

F2F interview							
Quantity	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	All
	%	%	%	%	%	%	%
30+ SD	5.4	4.5	8.6	3.9	1.0	4.6	4.9
20+ SD	16.2	14.2	23.6	5.9	3.9	10.8	13.3
11+ SD	48.6	46.3	83.6	17.6	26.5	51.5	50.3
9+ SD	62.2	82.1	99.3	43.1	58.8	85.4	78.2
7+ SD	73.0	95.5	100.0	66.7	87.3	100.0	92.1
5+ SD	86.5	100.0	100.0	90.2	100.0	100.0	98.3
3+ SD	100.0	100.0	100.0	98.0	100.0	100.0	99.8
1+ SD	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	37	134	140	51	102	130	596

Self-administered survey							
Quantity	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	All
	%	%	%	%	%	%	%
30+ SD	8.8	8.8	15.6	6.1	6.0	5.7	8.4
20+ SD	15.3	15.6	30.3	10.5	9.5	11.8	15.4
11+ SD	37.1	52.7	75.2	26.9	33.9	49.2	47.7
9+ SD	48.2	78.0	94.1	40.1	63.7	87.4	73.8
7+ SD	57.6	95.1	100.0	50.0	88.2	100.0	88.4
5+ SD	71.2	100.0	100.0	71.1	100.0	100.0	95.2
3+ SD	86.5	100.0	100.0	88.8	100.0	100.0	98.0
1+ SD	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	170	486	505	294	702	669	2869

Table note. These values have been computed using the matrix of 10 quantities x 11 frequencies using a two-step process. For example, '20+SD once a month': (i) combines the six frequencies ranging from 'every day' to 'about 1 day a month' for 30+SD in a day into value1; combines the six frequencies ranging from 'every day' to 'about 1 day a month' for 20-29 SD in a day into value2, (ii) '20+SD around once a month' (value3) is the result of a monthly value for 30+SDmonthly (value1) OR 20-29SD monthly (value2).

**Table 9. Quantities consumed in a single session, at least twice a month over the past 12 months**

Both survey modalities							
	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	All
Quantity	%	%	%	%	%	%	%
30+ SD	4.3	4.2	7.0	2.9	3.0	2.8	4.1
20+ SD	8.7	8.1	18.0	5.2	5.1	5.8	8.5
11+ SD	21.3	29.8	53.3	17.7	18.4	30.8	30.0
9+ SD	31.4	53.1	79.5	27.8	36.8	58.9	51.7
7+ SD	40.1	69.8	96.1	35.7	60.0	86.2	70.9
5+ SD	52.7	87.9	97.8	51.9	85.1	92.4	84.3
3+ SD	63.3	91.9	98.3	65.2	90.0	94.6	88.9
1+ SD	78.3	93.9	99.1	80.9	93.2	96.7	93.2
N	207	620	645	345	804	799	3465

F2F interview							
	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	All
Quantity	%	%	%	%	%	%	%
30+ SD	0.0	0.7	3.6	3.9	0.0	1.5	1.7
20+ SD	10.8	5.2	14.3	5.9	2.0	6.9	7.6
11+ SD	21.6	29.9	56.4	15.7	13.7	35.4	32.7
9+ SD	40.5	55.2	90.0	31.4	33.3	66.9	59.2
7+ SD	59.5	76.9	96.4	52.9	61.8	90.0	78.5
5+ SD	67.6	91.0	97.1	68.6	93.1	93.1	89.9
3+ SD	78.4	93.3	97.1	80.4	95.1	93.8	92.6
1+ SD	89.2	94.0	99.3	90.2	96.1	93.8	95.0
N	37	134	139	51	102	130	596

Self-administered survey							
	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	All
Quantity	%	%	%	%	%	%	%
30+ SD	5.3	5.1	7.9	2.7	3.4	3.0	4.6
20+ SD	8.2	8.8	19.0	5.1	5.6	5.5	8.7
11+ SD	21.2	29.8	52.5	18.0	19.1	29.9	29.5
9+ SD	29.4	52.5	76.6	27.2	37.3	57.4	50.1
7+ SD	35.9	67.9	96.0	32.7	59.7	85.5	69.3
5+ SD	49.4	87.0	98.0	49.0	83.9	92.2	83.2
3+ SD	60.0	91.6	98.6	62.6	89.3	94.8	88.1
1+ SD	75.9	93.8	99.0	79.3	92.7	97.3	92.8
N	170	486	505	294	702	669	2869

### 3.3. Last risky drinking session

The 'last risky drinking session' was the most recent occasion participants consumed a minimum quantity of alcohol. This minimum quantity was determined by the respondents' age and gender:

- 14-15 year olds reported on the most recent occasion that they drank 1+ standard drinks in a single sitting;
- 16-17 year olds on last time they had 5+ standard drinks;
- 18-19 year old females on the last time they had 7+ standard drinks; and,
- 18-19 year old males on the last time they had 9+ standard drinks.

As this 'last risky drinking session' was a focus of this project, jurisdiction-specific descriptions of the occasion and other selected findings are summarised in the site reports and bulletins.

#### *When was this drinking session and how typical was it?*

More than a third (39%) described their last risky drinking session as a 'normal get together', 25% as a birthday party, 6% as a festival, 15% as a special occasion, and 15% as an 'other' occasion type (n=3168).

More than half (59%) reported their last risk drinking session as occurring seven or fewer days prior to completing their survey. The recall period was 14 days or less for 79%, and 28 or fewer days for 92% (n=3121). By modality, most (65%) of the F2F sessions seven or fewer days ago (n=595). More than three-quarters (82%) reported it occurred 14 or fewer days ago and the clear majority (93%) reported it occurred 28 or fewer days ago. Similarly, 58% of the self-administered survey respondents had their last risky drinking session seven or fewer days ago. Three-quarters (78%) reported it occurred 14 or fewer days ago and almost all (92%) reported it occurred 28 or fewer days ago (n=2526). Note these percentages exclude 1% of outlier recall periods (27 cases with drinking session dates after the survey date and 10 with recall periods  $\geq 100$ days).

The majority (88%) reported that they usually drank 'a little less', 'a similar amount', or 'a little more' compared to the last risky drinking session they described in the survey. More specifically, 8% said they usually drank a lot less, 26% usually drank a little less, 47% usually drank a similar amount, 15% usually drank a little more, and 5% usually drank a lot more alcohol (n=2525).

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*Most 'last risky drinking sessions' described 'typical' consumption and occurred less than two weeks prior to survey.*

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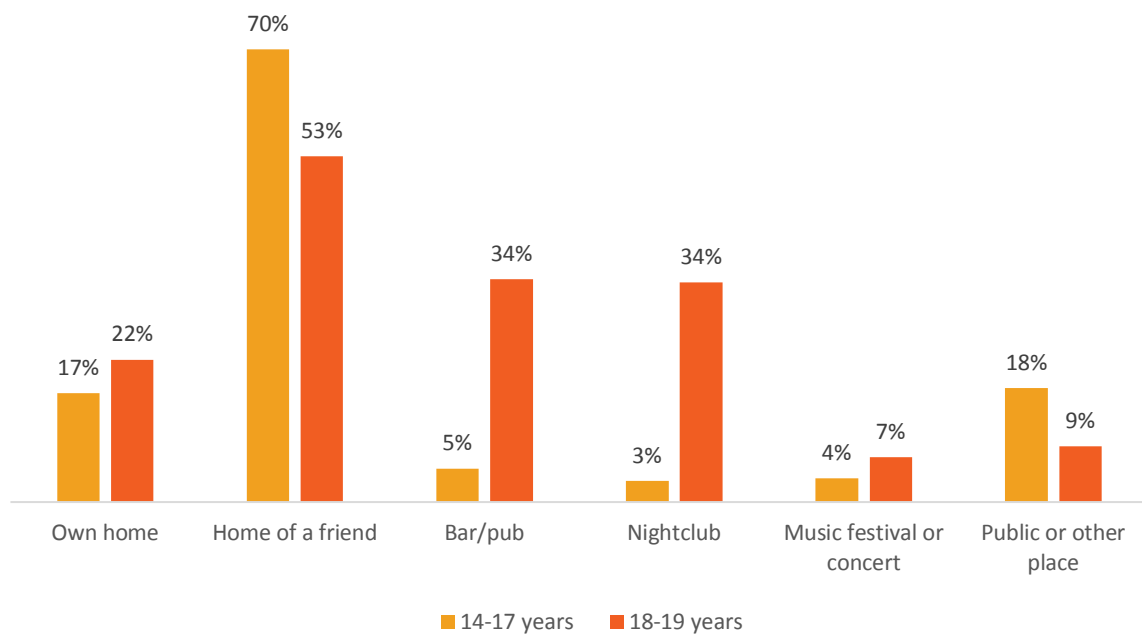
### Drinking location

The most popular drinking location was a friend or acquaintance's home (63%), followed by the respondents' own home (19%), a bar/pub/hotel (17%) or a nightclub (16%; n=3176; see Table 10).

Three quarters (78%) of participants drank at least one private location (friend's home, own home or car), 85% drank in at least one private or public non-licensed location (such as a home, or park), and 27% drank at least one licensed venue (such as a pub or club) at the last risky drinking session.

There was age-based variation in drinking location (see Figure 3). Almost all (93%) 14-17 year olds drank in a private or public non-licensed location, as did almost three quarters (74%) of 18-19 year olds. More than half (56%) of the 18-19 year olds and only 7% of the 14-17 year olds drank at a licensed venue at the most recent drinking occasion.

**Figure 3. Popular last session drinking locations by age**



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*Most (85%) drank in at least one non-licensed location such as a private home at the last risky drinking session.*

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**Table 10. Drinking locations at the last risky drinking session**

Both survey modalities	M 14-17	M 18-19	F 14-17	F 18-19	All
Own home	15%	21%	18%	23%	19%
Home of a friend	70%	57%	70%	51%	63%
Bar or pub or hotel	5%	37%	5%	33%	17%
Nightclub	3%	29%	3%	37%	16%
Music festival or concert	4%	6%	4%	7%	5%
Sporting event or club	1%	3%	1%	1%	1%
Restaurant	0%	2%	1%	3%	2%
Car	1%	1%	2%	2%	1%
School, TAFE, university	1%	2%	0%	3%	1%
Reception centre or function room	1%	3%	2%	2%	2%
Public or other place	20%	11%	16%	7%	14%
Private location (a home or car)	82%	73%	84%	69%	78%
Drank in a non-licensed location (home, car, park, beach etc.)	93%	78%	93%	71%	85%
Drank in a licensed venue (bar, pub, club, casino etc.)	7%	53%	7%	57%	27%
Total	750	534	1069	782	3176

Drinking locations at the last risky drinking session (Table 10 continued)

Face-to-face interviews	M 14-17	M 18-19	F 14-17	F 18-19	All
Own home	15%	24%	23%	32%	23%
Home of a friend	74%	62%	70%	57%	67%
Bar or pub or hotel	7%	34%	9%	39%	21%
Nightclub	5%	31%	3%	49%	20%
Music festival or concert	2%	8%	5%	6%	5%
Sporting event or club	1%	3%	1%	0%	1%
Restaurant	0%	2%	2%	6%	3%
Car	1%	3%	3%	0%	2%
School, TAFE, university	1%	5%	0%	5%	3%
Reception centre or function room	1%	5%	3%	3%	3%
Public or other place	25%	19%	17%	11%	19%
Private location (a home or car)	84%	83%	88%	82%	84%
Drank in a non-licensed location (home, car, park, beach etc.)	91%	91%	93%	82%	90%
Drank in a licensed venue (bar, pub, club, casino etc.)	11%	52%	11%	69%	33%
Total	170	140	152	130	594

Self-administered surveys	M 14-17	M 18-19	F 14-17	F 18-19	All
Own home	15%	20%	17%	21%	18%
Home of a friend	69%	55%	70%	49%	62%
Bar or pub or hotel	5%	38%	5%	31%	17%
Nightclub	2%	28%	4%	35%	15%
Music festival or concert	4%	5%	3%	8%	5%
Sporting event or club	1%	3%	1%	1%	1%
Restaurant	1%	2%	1%	2%	1%
Car	1%	0%	1%	2%	1%
School, TAFE, university	0%	1%	0%	2%	1%
Reception centre or function room	1%	2%	1%	2%	1%
Public or other place	18%	8%	16%	6%	13%
Private location (a home or car)	81%	70%	83%	67%	76%
Drank in a non-licensed location (home, car, park, beach etc.)	93%	74%	93%	69%	84%
Drank in a licensed venue (bar, pub, club, casino etc.)	6%	54%	7%	55%	26%
Total	580	394	917	652	2582

### Time spent drinking

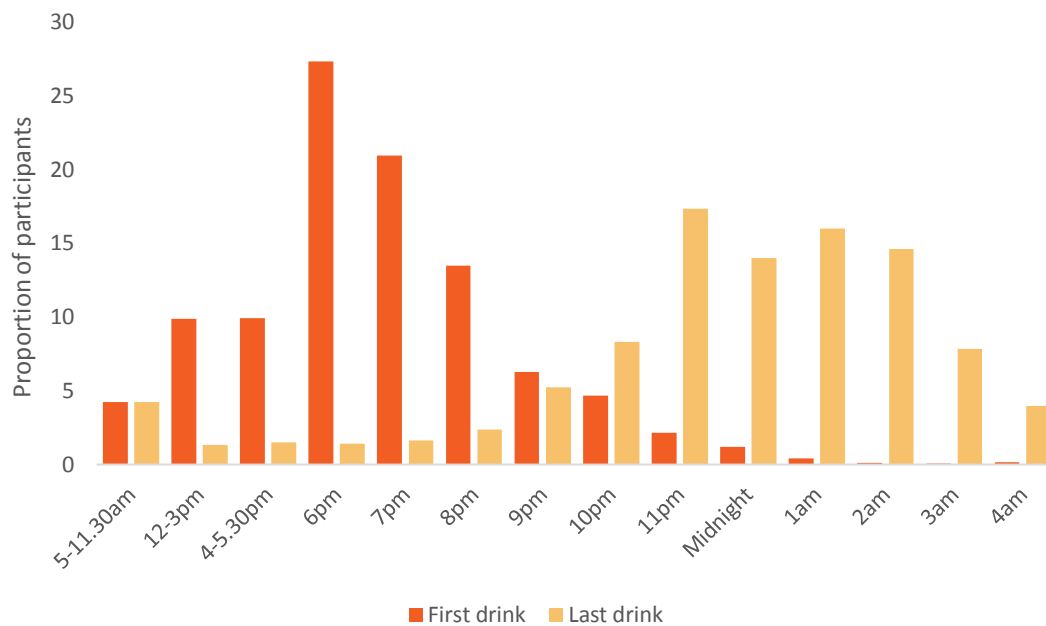
Participants from both survey modalities reported that at the last risky drinking session:

- Two thirds were held on Fridays (23%) or Saturdays (44%);
- The first drink was most commonly consumed in the early evening (33% between 5-6.30pm, 34.4% between 7-8.30pm);
- The last drink around midnight (25% 10-11.30pm, 30% 12-1.30am, 22% 2-3.30am; see Figure 4); and
- The session ran for an average of 6.4 hours (95% CI: 6.3, 6.6, n=3031).

For F2F participants, Fridays (22%) and Saturdays (44%) were the most common days when the drinking session commenced. The first drink was usually consumed in the early evening (29% between 5-6.30pm, 34% between 7-8.30pm), and the last drink around midnight (29% 10-11.30pm, 31% midnight-1.30am, 20% 2-3.30am). The mean drinking session duration was 5.9 hours (95% CI for the mean: 5.7, 6.2, excluding 5 outliers beyond 0-24 hours, n=588).

For self-administered survey participants, Fridays (23%) and Saturdays (45%) were the most popular drinking session day. The first drink was most commonly consumed in the early evening (29% between 5-6.30pm, 38% between 7-8.30pm), and the last drink around midnight (29% 10-11.30pm, 31% midnight-1.30am, 20% 2-3.30am). The mean drinking session duration was 6.5 hours (95% CI for the mean: 6.4, 6.7, excluding 85 outliers beyond 0-24 hours, n=2443).

**Figure 4. Start and finish times for the last risky drinking session**



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*Participants most commonly drank for 6.4 hours on a Saturday night.*

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### *Who else was there*

Respondents described who else was there with them during the drinking session. Most (78%) has close friends, 58% had acquaintances, 20% had a partner, 7% a sibling, 5% another relative, and 5% were with workmates (n=3176).

They were also asked 'was there an adult supervising you and/or your friends on this occasion (not an older friend who was drinking with you, but someone who was a guardian)?' Half of the 14-17 year olds had adult supervision for at least some of the time (18% the entire time, 32% some of the time; n=1850 14-17 year olds).

### *Source of alcohol*

The source of the alcohol consumed at the drinking session varied by age. The majority (90%) of 14-17 year olds had their alcohol purchased on their behalf, with only 14% buying it for themselves. In contrast, 90% of the 18-19 year olds purchased their own alcohol, and 25% had someone else buying it for them (15% both buying their own and being provided; see Table 11).

Amongst 14-17 year olds, the most popular sources were:

- Friends giving the alcohol to them (45%);
- Having someone buy it for them (32%);
- A parent giving it to them to drink without parental supervision (11%);
- Buying the alcohol themselves from a liquor store (10%); and,
- Being supplied at a party (10%; n=1705).

Amongst 18-19 year olds, the most popular sources were:

- Buying it themselves from the liquor store (74%);
- Buying it themselves from a pub or hotel (22%);
- Buying it themselves from another source (18%);
- Friends giving the alcohol to them (21%); and,
- Being supplied at a party (8%; n=2957).

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*Most participants (78%) were drinking with close friends. Most 14-17 year olds had a friend provide them with alcohol, or asked someone to buy it for them, whereas the 18-19 year olds purchased their alcohol for themselves.*

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**Table 11. Source of alcohol consumed at the last risky drinking session**

Both survey modalities	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	Total
<i>I bought the alcohol myself from a ...</i>	%	%	%	%	%	%	%
Licensed liquor store	6.1	14.9	77.1	3.6	9.3	71.9	37.1
Bottle-shop at a pub or hotel	0.6	6.0	22.2	1.4	3.8	22.0	11.5
Restaurant	0.0	0.2	2.4	0.0	0.6	4.8	1.8
Internet	1.2	0.8	0.8	0.0	0.1	0.1	0.4
Another source	4.2	2.5	14.7	1.1	2.1	13.8	7.4
<i>Someone else bought the alcohol for me ...</i>							
Friends gave it to me	38.2	44.8	21.2	43.7	46.1	20.1	34.4
Sibling gave it to me	7.3	5.3	0.6	5.1	8.1	2.0	4.4
Got someone to buy it for me	35.2	29.1	1.6	27.1	35.1	3.8	19.6
Parent gave it to me to drink under their supervision	7.3	7.0	1.4	10.8	7.2	1.5	5.0
Parent gave it to me to drink without supervision	4.8	11.3	2.0	6.1	14.4	2.5	7.3
I took it from home without parental permission	8.5	2.1	0.2	17.0	5.2	0.5	4.0
Supplied at party	8.5	9.3	5.9	8.3	11.2	9.8	9.1
Another person gave it to me	7.3	2.8	3.7	8.7	4.2	4.8	4.7
Total	165	529	510	277	707	732	2957

Source of alcohol consumed at the last risky drinking session (Table 11 continued)

F2F survey modality	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	Total
<i>I bought the alcohol myself from a ...</i>	%	%	%	%	%	%	%
Licensed liquor store	8.1	15.0	71.9	3.9	7.9	58.9	35.5
Bottle-shop at a pub or hotel	0.0	6.0	18.7	0.0	3.0	20.9	10.8
Restaurant	0.0	0.0	0.0	0.0	0.0	6.2	1.5
Internet	2.7	0.0	0.0	0.0	0.0	0.0	0.2
Another source	8.1	6.0	33.1	2.0	5.9	42.6	20.3
<i>Someone else bought the alcohol for me ...</i>							
Friends gave it to me	48.6	50.4	41.7	47.1	63.4	45.0	49.2
Sibling gave it to me	8.1	7.5	0.7	3.9	5.0	3.1	4.2
Got someone to buy it for me	35.1	27.1	0.7	27.5	26.7	7.8	17.1
Parent gave it to me to drink under their supervision	2.7	3.0	2.2	9.8	5.0	2.3	3.5
Parent gave it to me to drink without supervision	5.4	4.5	2.9	3.9	7.9	0.8	3.9
I took it from home without parental permission	5.4	0.0	0.7	7.8	1.0	0.0	1.4
Supplied at party	10.8	8.3	10.1	11.8	13.9	10.9	10.6
Another person gave it to me	13.5	7.5	10.1	19.6	9.9	14.0	11.3
Total	37	133	139	51	101	129	592

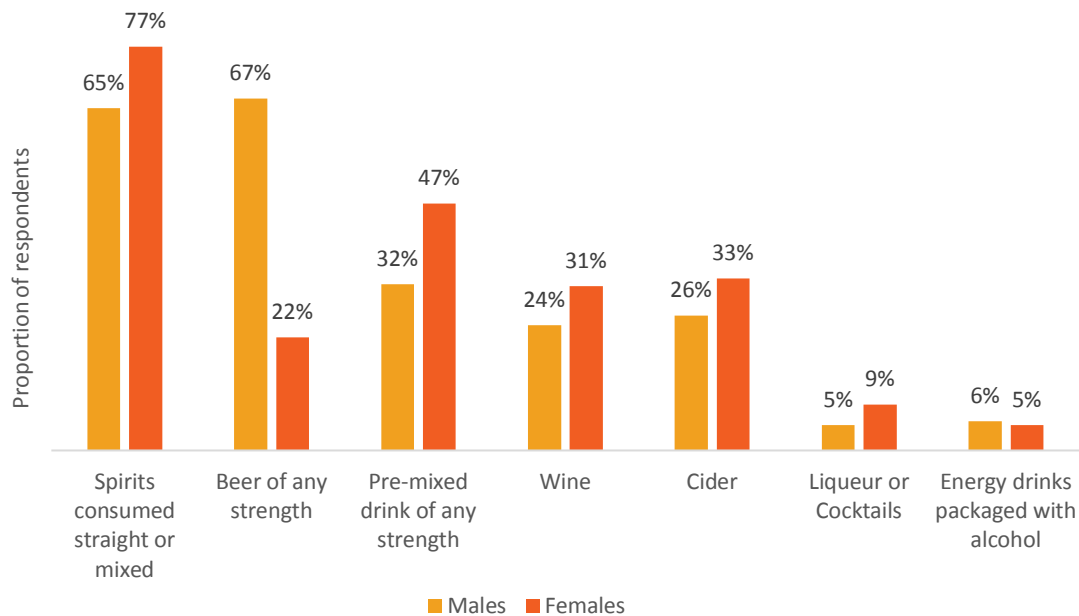
  

Self-administered surveys	M14-15	M16-17	M18-19	F14-15	F16-17	F18-19	Total
<i>I bought the alcohol myself from a ...</i>	%	%	%	%	%	%	%
Licensed liquor store	5.5	14.9	79.0	3.5	9.6	74.6	37.5
Bottle-shop at a pub or hotel	0.8	6.1	23.5	1.8	4.0	22.2	11.7
Restaurant	0.0	0.3	3.2	0.0	0.7	4.5	1.9
Internet	0.8	1.0	1.1	0.0	0.2	0.2	0.5
Another source	3.1	1.3	7.8	0.9	1.5	7.6	4.1
<i>Someone else bought the alcohol for me ...</i>							
Friends gave it to me	35.2	42.9	13.5	42.9	43.2	14.8	30.7
Sibling gave it to me	7.0	4.5	0.5	5.3	8.6	1.8	4.4
Got someone to buy it for me	35.2	29.8	1.9	27.0	36.5	3.0	20.2
Parent gave it to me to drink under their supervision	8.6	8.3	1.1	11.1	7.6	1.3	5.4
Parent gave it to me to drink without supervision	4.7	13.6	1.6	6.6	15.5	2.8	8.2
I took it from home without parental permission	9.4	2.8	0.0	19.0	5.9	0.7	4.6
Supplied at party	7.8	9.6	4.3	7.5	10.7	9.6	8.7
Another person gave it to me	5.5	1.3	1.3	6.2	3.3	2.8	3.0
Total	128	396	371	226	606	603	2365

## Beverage types

Respondents had 12 options that described the strength and packaging details of the alcoholic beverages they consumed. These characteristics were condensed into the eight main beverage types shown in Table 12 and Figure 5. Beverage popularity varied with gender. The most popular beverages amongst females were spirits (77%), pre-mixed drinks (47%), cider (33%) and wine (31%). Males reported consuming beer (67%), spirits (65%), pre-mixed drinks (32%), cider (26%), and wine (24%).

**Figure 5. Beverages types consumed at the last risky drinking session**



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*The most popular drinks were spirits (72%), pre-mixed drinks (41%), beer (40%), cider (30%) and wine (28%).*

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**Table 12. Beverage types consumed at the last risky drinking session**

Both modalities combined	Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
Spirits consumed straight or mixed	64%	67%	65%	76%	78%	77%	72%
Beer	63%	73%	67%	22%	21%	22%	40%
Pre-mixed drink	34%	28%	32%	52%	41%	47%	41%
Wine	24%	24%	24%	27%	37%	31%	28%
Cider	28%	22%	26%	32%	34%	33%	30%
Liqueur or Cocktails	4%	6%	5%	6%	13%	9%	7%
Energy drinks packaged with alcohol	5%	6%	6%	4%	6%	5%	5%
Other	2%	2%	2%	2%	2%	2%	2%
<b>Total</b>	<b>741</b>	<b>531</b>	<b>1272</b>	<b>1061</b>	<b>777</b>	<b>1838</b>	<b>3151</b>

Face-to-face interviews	Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
Spirits consumed straight or mixed	61%	74%	67%	78%	87%	82%	74%
Beer	62%	74%	67%	21%	24%	22%	46%
Pre-mixed drink	19%	20%	19%	35%	28%	32%	25%
Wine	28%	32%	30%	34%	42%	38%	34%
Cider	26%	22%	24%	32%	26%	29%	27%
Liqueur or Cocktails	1%	5%	3%	2%	18%	9%	6%
Energy drinks packaged with alcohol	0%	2%	1%	1%	1%	1%	1%
Other	1%	1%	1%	2%	5%	3%	2%
<b>Total</b>	<b>170</b>	<b>140</b>	<b>310</b>	<b>152</b>	<b>130</b>	<b>282</b>	<b>594</b>

Self-administered surveys	Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
Spirits consumed straight or mixed	65%	65%	65%	76%	76%	76%	72%
Beer	63%	72%	67%	22%	20%	21%	39%
Pre-mixed drink	38%	31%	35%	54%	43%	50%	44%
Wine	23%	20%	22%	26%	36%	30%	27%
Cider	29%	22%	26%	32%	36%	33%	30%
Liqueur or Cocktails	5%	6%	6%	7%	12%	9%	8%
Energy drinks packaged with alcohol	7%	8%	7%	5%	6%	5%	6%
Other	2%	3%	2%	2%	1%	2%	2%
<b>Total</b>	<b>578</b>	<b>395</b>	<b>973</b>	<b>915</b>	<b>649</b>	<b>1564</b>	<b>2580</b>

Participants chose these particular beverages as they liked the taste (62%), the price was right (42%), alcohol strength (35%) or because someone else provided the alcohol (29%; see Table 13).

**Table 13. Reasons for alcohol choice**

Both survey modalities	M 14-17	M 18-19	F 14-17	F 18-19	Total
Price	38.4%	52.6%	33.7%	48.6%	41.9%
Taste	58.5%	70.4%	55.7%	69.3%	62.2%
Alcohol strength	27.0%	33.9%	39.1%	38.5%	35.2%
Not my choice – someone else provided the alcohol	33.9%	21.8%	33.9%	22.5%	29.0%
Other reason	5.8%	8.2%	5.2%	8.1%	6.6%
Total	704	513	987	737	2979

F2F interview	M 14-17	M 18-19	F 14-17	F 18-19	Total
Price	46.5%	62.9%	36.2%	57.7%	50.2%
Taste	52.9%	68.6%	40.1%	66.9%	56.6%
Alcohol strength	17.6%	31.4%	25.7%	25.4%	24.6%
Not my choice – someone else provided the alcohol	41.2%	37.9%	46.7%	37.7%	41.1%
Other reason	14.7%	23.6%	16.4%	32.3%	21.4%
Total	170	140	152	130	594

Self-administered survey	M 14-17	M 18-19	F 14-17	F 18-19	Total
Price	35.8%	48.8%	33.3%	46.6%	39.8%
Taste	60.3%	71.0%	58.6%	69.9%	63.6%
Alcohol strength	30.0%	34.9%	41.6%	41.4%	37.9%
Not my choice – someone else provided the alcohol	31.6%	15.8%	31.6%	19.3%	26.0%
Other reason	3.0%	2.4%	3.1%	3.0%	3.0%
Total	534	373	835	607	2385

## Pre-drinking

'Pre-drinking' is also known as having 'pre's' or 'pre-loading', and is consuming alcohol before you 'go out'. Participants were given the example of pre-drinking when "you and your friends might drink alcohol at home before going out to a nightclub or a house party where there are more people."

Half of the sample (51%) pre-drank at the last risky drinking session. Though there were no significant differences in pre-drinking by gender, participants aged 18-19 were more likely to pre-drink than those aged 14-17 (41% vs 66%;  $X^2=189.18$ ,  $n=3177$ ,  $p<.001$ ; see Table 14).

The F2F participants specified where they pre-drank and the most popular locations were a friend's house (55%), their own house (29%), and a public or other place such as a park, beach, or street (8%;  $n=281$  F2F pre-drinkers).

**Table 14. Pre-drinking at the last risky drinking session**

	Pre-drinking	Male 14-17	Male 18-19	Female 14-17	Female 18-19	Total
F2F	No	67%	41%	67%	30%	53%
	Yes	33%	59%	33%	70%	47%
	Unsure	0%	0%	0%	0%	0%
	Total	171	140	153	130	596
Self-administered	No	58%	33%	50%	31%	45%
	Yes	39%	65%	47%	68%	53%
	Unsure	4%	2%	3%	1%	3%
	Total	580	394	916	652	2581
Both modalities	No	60%	35%	52%	31%	46%
	Yes	38%	63%	45%	68%	52%
	Unsure	3%	2%	3%	1%	2%
	Total	751	534	1069	782	3177

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*More than a third (41%) of 14-17 year olds and two thirds (66%) of 18-19 year olds reported pre-drinking*

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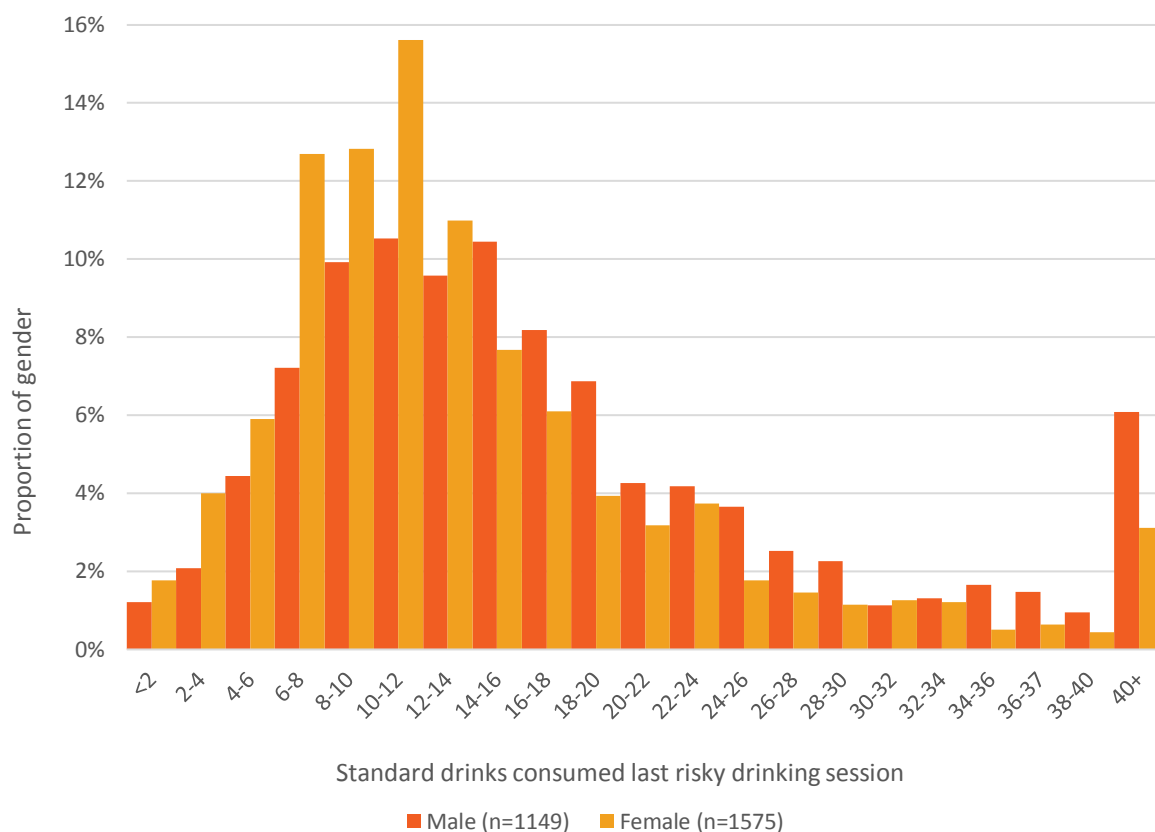
## Alcohol quantity

Similar to the National Drug Strategy Household Survey, alcohol quantities were estimated using a beverage specific response method. This is one of the most accurate self-report techniques for estimating alcohol quantity, as estimates are provided for each type of drink (e.g. wine vs. beer), and less mental arithmetic is required on the part of the respondent (46).

Once respondents chose which of the 12 types of beverage they consumed, 4-7 size options for these beverages were displayed to them. There were a total of 60 fields available for selection that described a specific beverage type, strength, packaging detail and serving unit, with only the fields relevant to the participant being displayed to them. Each of these 60 fields were associated with a standard drink multiplier. So, for example, if the respondent entered '1' into the 'pint of full strength beer' field, this would be converted into '1.8 standard drinks', and summed with the other beverage types selected during the drinking session.

At the last risky drinking session, females drank a mean of 13.6 standard drinks and males drank a mean of 16.8 standard drinks (95% CI [13.2, 14.0] and [16.3, 17.4] respectively; see Figure 6). This gender difference of 3.2 standard drinks was statistically significant (Mann-Whitney U=684485,  $z=-9.68$ ,  $p<.001$ ,  $r=0.19$ ).

**Figure 6. Distribution of alcohol quantity at the last risky drinking session by gender**



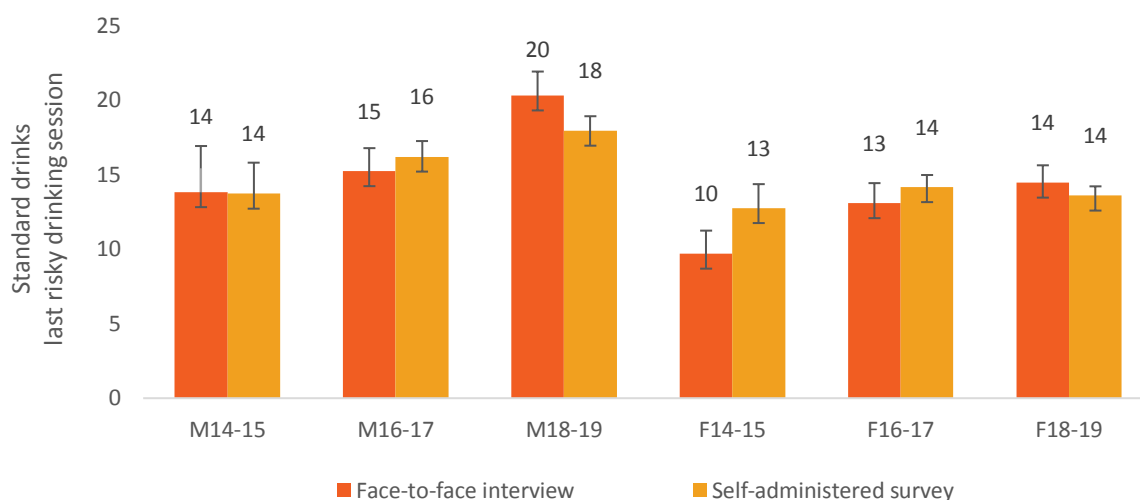
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*Females drank an average of 13.6 standard drinks and males drank an average of 16.8 standard drinks at their last risky drinking session*

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Younger respondents drank significantly less than older respondents (Kruskal-Wallis test with three age groupings,  $X^2(2, n=2714)=77.54, p<.001$ ; see Figure 7).

**Figure 7. Mean alcohol quantity by age and gender at the last risky drinking session**



That is, mean alcohol use was higher amongst males and older respondents:

- Males aged 14-17 drank a mean of 15.5 SD (95% CI [14.7, 16.2]);
- Males aged 18-19 drank a mean of 18.7 SD (95% CI [17.8, 19.5]);
- Females aged 14-17 drank a mean of 13.5 SD (95% CI [12.9, 14.1]); and,
- Females aged 18-19 drank a mean of 13.7 SD (95% CI [13.2, 14.3]); see Table 15)

**Table 15. Alcohol quantity over entire last risky drinking session**

		F2F interview			Self-administered			Both survey modalities		
		Standard drinks		n	Standard drinks		n	Standard drinks		n
		Mean	Median		Mean	Median		Mean	Median	
Gender	Male	17.5	15.0	300	16.6	14.4	824	16.9	14.5	1124
	Female	13.2	12.0	281	13.7	11.3	1278	13.6	11.4	1559
Age	14-15	11.4	10.2	86	13.2	10.2	313	12.8	10.2	399
	16-17	14.4	12.5	230	15.0	12.0	908	14.9	12.1	1138
	18-19	17.5	15.2	267	15.3	13.1	910	15.8	13.6	1177
Two age categories	M 14-17	15.0	12.5	164	15.6	12.9	473	15.5	12.8	637
	M 18-19	20.4	18.4	136	18.0	16.0	351	18.7	16.4	487
	F 14-17	12.0	11.3	151	13.8	11.0	728	13.5	11.0	879
	F 18-19	14.5	12.5	130	13.6	11.8	550	13.7	12.0	680
	X 14-17	8.5	8.5	1	18.5	14.5	20	18.0	13.4	21
	X 18-19	9.6	9.6	1	12.1	9.6	9	11.9	9.6	10
Three age categories	M14-15	13.8	12.0	36	13.8	11.0	116	13.8	11.2	152
	M16-17	15.3	13.2	128	16.2	13.4	357	16.0	13.3	485
	M18-19	20.4	18.4	136	18.0	16.0	351	18.7	16.4	487
	F14-15	9.7	8.4	50	12.8	9.4	189	12.2	9.0	239
	F16-17	13.2	12.3	101	14.2	11.2	539	14.0	11.4	640
	F18-19	14.5	12.5	130	13.6	11.8	550	13.7	12.0	680
Total		15.4	13.3	583	14.9	12.2	2131	15.0	12.5	2714



Recall that the last risky drinking session was defined as the most recent occasion when participants consumed a minimum quantity of alcohol. This minimum was determined by the respondents' age and gender. Those aged 14-15 years consumed 1+SD, those aged 16-17 consumed 5+SD, females aged 18-19 consumed 7+SD, and males 18-19 years consumed 9+SD. That is, while these gender and age related differences are consistent with the literature, these differences are also 'built in' through the study's design via selection criteria and definition of what a risky drinking session was.

Respondents' postcodes were defined as either from a capital city catchment area, or from outside these areas (38). Comparisons were made between the capital cities and outer regions for each of the four main demographic groups (M 14-17, M 18-19, F 14-17, F 18-19), and the following comparisons were statistically significant:

- Males aged 18-19 from non-capital city areas drank an average of 20.86 SD (n=70), significantly more compared to males aged 18-19 from capital city areas (mean=18.26, n=413; Mann Whitney U=12218, z=-2.01, p=.04, r=.09 [small effect]);
- Similarly, females aged 14-17 from non-capital city areas reported consuming an average of 15.10 SD (n=140), significantly more than those from capital city areas (mean=13.22, n=717; Mann Whitney U=43952, z=-2.33, p=.02, r=.08 [small effect]).

Each jurisdiction was compared to the national average calculated using the remaining seven jurisdictions (e.g. ACT vs. non-ACT individuals). Separate Mann-Whitney U tests were run for each of the four main demographic groups and there were three significant differences:

- South Australian females aged 14-17 drank significantly more than females aged 14-17 from the remaining jurisdictions (SA mean=17.92, n=85; remaining sites mean=13.50, n=879; U=28921, z= -2.17, p=.03, r=.07 [very small effect]);
- Tasmanian males aged 14-17 consumed significantly more than the males aged 14-17 from the remaining jurisdictions (TAS mean=18.16, n=59; remaining sites mean=15.46, n=637; U=13568, z=-2.59, p=.01, r=.10 [small effect]); and,
- Victorian females aged 18-19 reported significantly lower quantities compared to 18-19 year old females from the other seven jurisdictions (VIC mean=12.76, n= 168; remaining sites mean=13.75, n=680; U=38401, z=-2.09, p= 0.04, r= .08 [very small effect]).

Note, these capital-city and jurisdiction-based analyses are broad comparisons as there was variation in the distribution of ages within the 14-17 year old group, across jurisdictions. Please see site-reports for further detail.

### *Amount spent on alcohol*

Respondents estimated the amount spent on the alcohol they consumed during the last risky drinking session. They specified separate values for the amount they spent themselves, and the approximate value of the drinks if someone had purchased them on their behalf. A fifth (22%) consumed the equivalent of  $\leq$ \$20 of alcohol, 36%  $\leq$ \$30, 51%  $\leq$ \$40, and 77% consumed  $\leq$ \$70 worth of alcohol. The average value was \$55.20 (median=\$40, n=2608).

### *Getting home*

Respondents were asked about how they got home after this drinking session and when their transport option was organised.

Across both survey modalities (n=2985), the most popular transport options were:

- Getting picked up/a lift with someone (27%);
- Sleeping over at the last drinking location (25%);
- Taxi/Uber (24%); and,
- Walked (13%).

About half (44%) organised this transport option before their first drink, 16% sometime during their drinking session, and 32% after their last drink (n=2864). The younger respondents appeared to organise their transport home at an earlier point than the older participants. Half (53%) of the 14-17 year olds and 24% of the 18-19 year olds organised transport before their first drink, and 24% of 14-17 year olds organised it on their last drink compared to 42% of 18-19 year olds.

### 3.4. Outcomes from last session's alcohol use

Alcohol-related outcomes were assessed over two time periods: the 'last risky drinking session' and the past 12 months. These 32 outcomes covered a range of areas and included the items from the Brief Young Adult Alcohol Consequences Questionnaire (47).

Three quarters (78%) experienced at least one negative consequence as a result of last session's drinking (see Table 16), most commonly:

- Hangover (35%);
- Saying or doing embarrassing things (34%);
- Feeling tired due to their drinking (27%);
- Needing more alcohol to get drunk than they previously needed (21%);
- Feeling sick to their stomach/throwing up (20%); and,
- Not being able to remember large stretches of time ('blacking out'; 19%).

There were also more serious outcomes identified such as:

- Being injured due to their drinking (18%);
- Doing impulsive things they regretted later (16%);
- Participating in sexual activity they ordinarily wouldn't do because of their drinking (6%); and,
- Verbally abusing someone because of their drinking (5%).

---

*Three quarters (78%) experienced at least one negative consequence as a result of last session's drinking*

---

**Table 16. Outcomes experienced in association with the last risky drinking session**

	F2F			Self-administered			Both survey modalities		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	%	%	%	%	%	%	%	%	%
<b>Last session outcomes 1-15</b>									
I found it easier to talk to people due to my drinking	63.9	74.1	68.7	70.2	69.1	69.6	68.6	69.9	69.4
I had a hangover (headache, sick stomach) the morning after I had been drinking	31.9	41.1	36.4	30.7	36.2	34.3	31.1	37.1	34.7
While drinking, I have said or done embarrassing things	25.2	34.4	29.6	33.0	36.3	35.0	30.9	35.9	33.9
I have had less energy or felt tired because of my drinking	29.0	33.3	31.1	24.1	26.2	25.4	25.4	27.4	26.6
I have found that I needed larger amounts of alcohol to feel any effect, or that I could no longer get high or drunk on the amount that used to get me high or drunk	12.9	14.5	13.7	22.1	22.2	22.5	19.7	20.9	20.7
I have felt very sick to my stomach or thrown up after drinking	16.1	23.4	19.5	19.4	21.0	20.5	18.6	21.4	20.3
I've not been able to remember large stretches of time while drinking heavily	17.1	18.1	17.5	19.3	18.9	19.1	18.7	18.7	18.8
I have been injured due to my drinking (inc. cuts & bruises)	15.5	19.5	17.3	15.3	20.2	18.4	15.4	20.1	18.2
I have often found it difficult to limit how much I drink	18.1	16.3	17.3	15.6	19.2	17.9	16.2	18.7	17.8
When drinking, I have done impulsive things I regretted later	14.5	13.6	14.0	14.8	17.7	16.6	14.7	17.0	16.1
I often have ended up drinking on nights when I had planned not to drink	10.3	9.6	9.9	12.9	15.6	14.8	12.2	14.6	13.8
I have taken foolish risks when I have been drinking	14.9	10.6	12.8	16.5	14.4	15.2	16.1	13.8	14.7
I have felt badly about myself because of my drinking	5.8	6.4	6.1	10.9	11.5	11.4	9.6	10.7	10.4
I have passed out from drinking	7.1	4.7	5.9	7.8	7.4	7.8	7.6	7.0	7.4
I have spent too much time drinking	5.8	3.2	4.6	9.3	6.7	7.9	8.4	6.1	7.2
N	308		592	878	1410	2335-	1192	1689	2920-
	-310	282	-594	-889	-1417	2342	-1199	-1699	2936

Table note. Sample size presented as a range as there is <1% variation in response rate across items.

	F2F			Self-administered			Both survey modalities		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	%	%	%	%	%	%	%	%	%
Last session outcomes 16-32									
I picked up or had sex with someone due to my drinking	4.9	6.4	5.6	9.8	7.4	8.5	8.5	7.3	7.9
I had sex without a condom because of my drinking	3.9	3.2	3.5	4.7	4.9	4.8	4.5	4.7	4.6
I participated in sexual activity I ordinarily wouldn't do because of my drinking	3.2	4.6	3.9	6.9	6.9	6.9	6.0	6.5	6.3
My drinking has gotten me into sexual situations I later regretted	6.1	6.4	6.2	5.3	8.0	7.0	5.5	7.7	6.8
My drinking has created problems between myself and my boyfriend or girlfriend or spouse, parents, or other near relatives	4.2	6.0	5.2	3.9	7.0	5.8	3.9	6.8	5.7
The quality of my work or school work has suffered because of my drinking	4.2	5.7	4.9	4.9	5.8	5.5	4.7	5.7	5.4
I have neglected my obligations to family, work, or school because of drinking	4.5	2.8	3.7	5.9	5.7	5.9	5.5	5.2	5.4
I have not gone to work or missed classes at school or university because of drinking, a hangover, or illness caused by drinking	2.6	3.6	3.0	4.3	4.4	4.5	3.9	4.2	4.2
I have become very rude, obnoxious, or insulting after drinking	5.5	2.8	4.2	4.9	4.6	4.8	5.0	4.3	4.7
I have woken up in an unexpected place after heavy drinking	4.5	3.5	4.0	6.6	3.2	4.6	6.1	3.2	4.5
I verbally abused someone because of my drinking	4.9	4.6	4.7	5.8	4.0	4.7	5.6	4.1	4.7
I stole or damaged private or public property (e.g. a sign or fence) due to my drinking	6.5	0.7	3.7	8.4	2.5	4.8	7.9	2.2	4.6
My physical appearance has been harmed by my drinking	3.2	2.5	2.9	3.6	3.9	3.9	3.5	3.7	3.7
I have felt like I needed a drink after I had gotten up (that is, before breakfast)	3.2	0.0	1.7	5.8	3.4	4.4	5.1	2.8	3.9
I have been overweight because of drinking	0.6	0.4	0.5	2.8	3.5	3.3	2.3	2.9	2.7
I physically abused someone or got into a fight because of my drinking	2.6	1.1	1.9	3.0	1.1	1.9	2.9	1.1	1.9
I have driven a car when I knew I had too much to drink to drive safely	0.3	0.7	0.5	2.2	1.3	1.6	1.7	1.2	1.4
At least one of harm from last session	74.2	83.7	78.8	74.5	79.1	77.5	74.4	79.8	77.7
N	308		592	878	1410-	2335-	1192-	1689-	2920-
	-310	282	-594	-889	1417	2342	1199	1699	2937

Table note. Sample size presented as a range as there is <1% variation in response rate across items. At least one harm summary variable includes 30 harms (everything from the list except 'easier to talk' and 'picked up').

### 3.5. Other drug use

Respondents were asked about drugs other than alcohol they may have used during the last risky drinking session, or at some other time in the past 6 months.

During the most recent risky drinking session:

- A third (36%) used nicotine, either in tobacco (35%) or e-cigarette (4%) form;
- A fifth (19%) used caffeine, either in energy drink (18%) or tablet (3%) form;
- A quarter (25%) used at least one illicit or non-prescribed drug;
- A fifth (19%) used cannabis;
- A twentieth (5%) used ecstasy; and,
- Other types of drugs were less commonly used ( $\leq 2\%$ ; see Table 17).

Rates of other drug use were higher when the reporting period was the past 6 months. Over the past 6 months, 68% had used at least one illicit or non-prescribed drug, most commonly cannabis (59%), ecstasy (26%), or painkillers not used as prescribed (14%;  $n=2915$ ). The majority (63%) had used tobacco ( $n=2907$ ).

In comparison, a sixth (16%) of the NDSHS's general population 14-19 year old Australians were estimated to have used an illicit drug in the *past 12 months* in 2016 (1). The most common illicit drug used by the general population teenagers in the past year was cannabis (12.2%), followed by pharmaceuticals used for non-medical purposes (3.7%), and ecstasy (3.2%). Though the NDSHS and YAARS illicit drug rates cannot be directly compared at this stage (e.g. proportions need to be weighted by respondent age), it still strongly suggests the YAARS sample were consuming illicit drugs at substantially higher rates general population adolescents.

**Table 17. Drugs other than alcohol used during the last risky drinking session**

	F2F			Self-administered			Both modalities		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	%	%	%	%	%	%	%	%	%
Tobacco	45.2	36.1	40.7	34.5	31.7	33.1	37.3	32.5	34.6
E-cigarettes	4.8	1.8	3.4	4.5	3.6	3.9	4.6	3.3	3.8
Energy drinks	15.8	12.8	14.3	20.6	16.9	18.5	19.3	16.2	17.7
Caffeine tablets	2.6	1.4	2.0	3.7	2.4	3.1	3.4	2.3	2.9
Cannabis	28.0	21.3	24.7	20.0	16.2	17.7	22.1	17.0	19.1
Ecstasy	5.8	4.3	5.1	5.4	5.4	5.3	5.5	5.2	5.3
Pain killers (not used as prescribed)	0.6	1.4	1.0	1.1	2.7	2.3	1.0	2.5	2.0
Inhalants	3.2	2.5	2.9	2.5	1.6	1.9	2.7	1.7	2.1
Cocaine	2.6	1.1	1.9	1.5	0.9	1.2	1.8	0.9	1.3
Benzodiazepines or sleeping pills (not used as prescribed)	1.0	0.7	0.8	0.8	1.3	1.2	0.8	1.2	1.1
Dexamphetamine (not used as prescribed)	1.9	0.4	1.2	0.8	0.9	0.9	1.1	0.8	0.9
Hallucinogens	0.3	0.0	0.2	1.1	0.4	0.7	0.9	0.3	0.6
Methamphetamine or amphetamine	0.6	1.1	0.8	0.8	0.1	0.4	0.8	0.3	0.5
Ketamine	0.0	0.4	0.2	0.6	0.4	0.5	0.4	0.4	0.4
Any illicit or non-prescribed drug used at the last risky drinking session	34.1	27.0	30.6	24.9	21.8	23.1	27.3	22.7	24.6
N	310-311	281-282	592-595	868-879	1393-1402	2302-2318	1178-1189	1674-1685	2893-2912

Table note. Sample size presented as a range as there is <1% variation in response rate across items.

### 3.6. Injuries and emergency department use

There are 70,000 emergency department (ED) presentations in Australia each year due to ‘alcohol/other drug abuse’ and alcohol/other drug induced mental health disorders (48). Teenage ED presentations for alcohol-related injuries are typically twice as high as the population average and have been rising in recent years (2).

Most F2F participants (83%) had been injured as a result of their drinking in the past 12 months (see Table 18). An injury was defined within the survey item as “any physical harm to your body” (cuts, bruises, breaks, burns etc.)”, and:

- 30% reported being injured once or twice;
- 20% 3-4 times;
- 17% 5-9 times; and,
- 16% 10 or more times in the past 12 months.

**Table 18. Alcohol-related injuries in the past 12 months**

		Male	Male	Female	Female	Total
		14-17	18-19	14-17	18-19	
		%	%	%	%	%
How many times have you been injured as a result of your drinking in the past 12 months?	None	19.3	20.7	14.6	12.3	16.9
	1-2 times	33.9	32.9	26.5	25.4	29.9
	3-4 times	21.1	18.6	16.6	23.1	19.8
	5-6 times	8.8	14.3	16.6	12.3	12.8
	7-9 times	2.3	2.1	6.0	4.6	3.7
An injury is any physical harm to your body - cuts, bruises, breaks, burns etc.	10+	14.0	11.4	18.5	22.3	16.4
	Total	171	140	151	130	592

*8 out of 10 participants conceded to having sustained an injury as a result of their drinking in the past 12 months.*

Most (93%) had *not* visited the hospital emergency department for an injury acquired due to their drinking in the past 12 months (n=593). The reasons given for the most recent presentation among the 41 (7%) who *had* visited an ED in the past year were:

- Accidental alcohol overdose (37%);
- Accidental injury such as a fall (27%);
- Being in an assault (10%);
- Intentionally hurting themselves (5%); and,
- Due to another reason (22%; see Table 19).

**Table 19. Reason given for the most recent alcohol-related emergency department presentation**

		Male 14-17 n (%)	Male 18-19 n (%)	Female 14-17 n (%)	Female 18-19 n (%)	Total n (%)
When was your most recent alcohol-related emergency department presentation?	Less than a month ago	3 (25%)	2 (25%)	2 (18.2%)	2 (20%)	9 (22%)
	1-6 months ago	8 (66.7%)	2 (25%)	6 (54.5%)	5 (50%)	21 (51.2%)
	7-12 months ago	1 (8.3%)	4 (50%)	3 (27.3%)	3 (30%)	11 (26.8%)
	Total	12	8	11	10	41
In your most recent alcohol-related emergency department presentation, what was the reason for attending?	Accidental alcohol overdose/intoxication/ poisoning	3 (25%)	4 (50%)	3 (27.3%)	5 (50%)	15 (36.6%)
	Other accidental injury (e.g. a fall, being burnt)	3 (25%)	3 (37.5%)	2 (18.2%)	3 (30%)	11 (26.8%)
	Assault (being in a physical altercation/fight)	2 (16.7%)	1 (12.5%)	0	1 (10%)	4 (9.8%)
	Intentionally hurting yourself	0	0	2 (18.2%)	0	2 (4.9%)
	Transport accident (e.g. being hit by a car, falling off motorcycle)	0	0	0	0	0
	Other	4 (33.3%)	0	4 (36.4%)	1 (10%)	9 (22.0%)
Total	12	8	11	10	41	



### 3.7. Potential need for professional help and service provision preferences

The occurrence of substance use disorders involving the harmful use and/or dependence on alcohol and/or other drugs, peaks in late adolescence and early adulthood. The National Survey of Mental Health and Wellbeing estimated 323,500 Australians aged 16-24 years (13% of the age group) reported a substance use disorder in the past 12 months (49). The bulk of the disorders were related to alcohol rather than illicit drug use. The estimated 12 month prevalence for alcohol 'abuse' and alcohol dependence, was estimated at 11% amongst 16-24 year olds (50).

F2F participants completed the full 10-item Alcohol Use Disorders Identification Test (AUDIT; see table 20) (43, 45). The AUDIT scores of the 580 respondents were as following, with the interpretation according to adult guidelines:

- 48% scored 8-15, representing medium levels of alcohol problems (appropriate for simple advice focused on the reduction of hazardous drinking);
- 26% scored 16-19 representing high levels of alcohol problems (suggesting the need for brief counselling and continued monitoring); and,
- 22% scored 20+, strongly suggesting further diagnostic evaluation for alcohol dependence.

Adolescent guidelines for AUDIT scoring are more conservative. For example, using a cut-off score of 4, which has previously been used to represent 'problem drinking' amongst 13-19 year olds (51, 52), all but one YAARS participants screened positive. Similarly, 98% of YAARS participants obtained as score of 7 or greater, used to indicate dependence amongst 16 year olds elsewhere (53).

Three of the items from the AUDIT comprise a dependence subscale. A 'dependence score' can range from 0-12, with scores of 4 or more suggesting the possibility of alcohol dependence. A sixth (15%) of the 593 F2F young people interviewed had AUDIT subscale scores suggestive of dependence according to adult guidelines.

The AUDIT-C scores for participants in both survey modalities were reported in section 3.2.

**Table 20. AUDIT dependence and alcohol-related problems subscales**

How often during the past 12 months have you ...	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	N
Found that you were not able to stop drinking once you had started	48.7%	28.6%	15.5%	5.7%	1.5%	594
Failed to do what was normally expected of you because of drinking	46.6%	35.0%	14.1%	4.0%	0.3%	595
Needed a first drink in the morning to get yourself going after a heavy drinking session	87.9%	8.4%	2.0%	1.0%	0.7%	594
Had a feeling of guilt or remorse after drinking	31.1%	43.9%	17.5%	6.6%	0.8%	594
Been unable to remember what happened the night before because you had been drinking	18.3%	46.4%	27.9%	6.6%	0.8%	595

How often during the past 12 months have you ...	No	Yes, but not in the past 12 months	Yes, during the past 12 months	N
Have you or someone else been injured because of your drinking?	36.7%	5.7%	57.6%	594
Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	68.5%	4.2%	27.3%	594

### Motivation to change drinking patterns

F2F respondents were asked about their motivation to reduce their drinking using the single item ‘Motivation To Stop Scale (MTSS)’. MTSS responses are considered to correspond to attempts to cut down on drinking (54).

Of the 593 respondents:

- 40% did not want to cut down on their drinking;
- 29% thought they *should* cut down, but didn’t really want to;
- 21% wanted to cut down; and,
- 10% *really* wanted to cut down on their drinking (see Table 21).

**Table 21. Motivation to change drinking patterns**

Which of the following best describes you?	M 14-17	M 18-19	F 14-17	F 18-19	All
I REALLY want to cut down on drinking alcohol and intend to in the next month	2.9%	5.0%	3.3%	12.4%	5.6%
I REALLY want to cut down on drinking alcohol and intend to in the next 3 months	2.9%	2.1%	2.0%	4.7%	2.9%
I REALLY want to cut down on drinking alcohol but I don’t know when I will	1.2%	0.7%	2.6%	2.3%	1.7%
I want to cut down on drinking alcohol and hope to soon	7.0%	8.6%	7.9%	8.5%	8.1%
I want to cut down on drinking alcohol but haven’t thought about when	12.9%	10.7%	15.9%	12.4%	13.0%
I think I should cut down on drinking alcohol but don’t really want to	29.8%	27.9%	33.1%	22.5%	28.7%
I don’t want to cut down on drinking alcohol	43.3%	45.0%	35.1%	37.2%	40.1%
Total	171	140	151	129	593

*Almost two thirds (60%) of participants thought they either should cut down, or wanted to cut down on their drinking.*

### *Service preference*

Despite young people having the highest rates of substance use disorders (49), their contact with health professionals in relation to this disorder were the lowest compared to other age groups. For example, only 18% of 16-24 year old females with a substance use disorder sought professional help compared to 52% of 25-44 year olds with a substance use disorder. Similarly, only 7% of males aged 16-24 with a substance use disorder sought help from any mental health service for their substance use in the past 12 months compared to 27% of 25-44 year olds with a substance use disorder (55). Earlier engagement in treatment for alcohol problems is generally associated with superior outcomes (56).

Half of the F2F sample (53%) stated that if they were concerned about their own or someone else's drinking, they would know where to seek professional help (38% did not know and 9% were unsure; n=594).

Participants were asked that if they were concerned about their own or someone else's drinking, how comfortable they would feel about speaking to a health worker through a free and anonymous service. Two thirds (68%) would feel comfortable or very comfortable making contact via a telephone call. In contrast, significantly more, 72%, felt comfortable or very comfortable with an online typing-based chat system (Wilcoxon Signed Ranks Test  $z=-4.41$ ,  $p<.001$ ,  $n=595$ ).

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*Participants were generally comfortable with seeking clinical help for their drinking or someone else's drinking through a free and anonymous service. Online contact with a health worker was preferred over a telephone call.*

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### 3.8. Sleep

Sleep problems including insomnia can contribute to adolescents' impairment within cognitive, emotional and physical domains (57). There appears to be a bidirectional relationship between sleep disturbance and alcohol and other drug use and related problems – e.g. with sleep deprivation adversely affecting capacity to control risky behaviour, and alcohol use disturbing sleep (58-60).

We used the Insomnia Severity Index (ISI), a reliable tool validated for the identification of clinically-relevant insomnia, see Table 22 (61). We also appraised mean night-time sleep time over weekdays and weekends, mean naptime, night shift work and the use of various drugs either as sleep-aids or to stay awake. All sleep-related variables were assessed with the F2F participants with a reference period of the past two weeks prior to interview.

In the past two weeks:

- 39% reported insomnia symptoms suggestive of clinical insomnia according to adolescent ISI criteria (62);
- Using adult ISI criteria, 13% had scores suggestive of clinical insomnia and 33% of subthreshold insomnia;
- 43% worked outside of traditional '9-5' hours; and,
- 72% reported having used a drug to get to sleep or to stay awake in the past 2 weeks:
  - 65% used a stimulant to stay awake; and,
  - 32% had used a depressant drug to get to sleep.

**Table 22. Morin's Insomnia Severity Index**

Please rate the severity of you insomnia (sleeping) problems over the past two weeks:						
	None	Mild	Moderate	Severe	Very severe	Total
Difficulty falling asleep	36.0%	27.6%	23.7%	9.3%	3.4%	594
Difficulty staying asleep	56.9%	21.0%	13.7%	5.9%	2.5%	591
Problems waking up too early and not being able to go back to sleep	53.8%	20.1%	12.3%	10.6%	3.2%	593

How SATISFIED or DISSATISFIED are you with your sleep pattern?					
Very Satisfied	Satisfied	Moderately satisfied	Dissatisfied	Very dissatisfied	Total
8.9%	23.2%	30.4%	29.6%	7.9%	595

How NOTICEABLE to others do you think your sleep problem is in terms of impairing the quality of your life?					
Not at all Noticeable	A Little	Somewhat	Much	Very Much Noticeable	Total
48.5%	27.8%	14.2%	5.3%	4.2%	590

How WORRIED or DISTRESSED are you about your sleep problem?					
Not at all Worried	A Little	Somewhat	Much	Very Much Worried	Total
59.0%	23.1%	13.7%	2.9%	1.4%	592

To what extent do you consider your sleep problem to INTERFERE with your daily functioning?					
Not at all Interfering	A Little	Somewhat	Much	Very Much Interfering	Total
31.5%	32.0%	21.5%	11.5%	3.4%	590

General population adolescents report longer sleep time over weekends versus weekdays in order to catch up on sleep-debt. The mean sleep duration for general population US 15-18 year olds is 7.1h on weekdays and 8.7h on weekends (63). This sample's mean sleep duration was 7.2h on weekdays and 7.0h on weekends, so participants did not appear to be catching up on sleep debt (see Table 23).

**Table 23. Past two week usual sleep duration**

		Weekday (Sun-Thu)	Weekend (Fri & Sat)
		%	%
Usual night sleep duration	≤ 5h	11.8	28.1
	5.5-6.5h	20.2	16.8
	7-8h	49.5	29.1
	> 8h	18.5	25.9
	Mean	7.20h	6.97h
	95% CI for mean	[7.07, 7.33]	[6.78, 7.16]
	N	596	596
		Weekday (Mon-Fri)	Weekend (Sat & Sun)
		%	%
Usual nap duration	None	55.1	62.4
	≤ 1 h	25.2	78.3
	1.5-3.5h	16.0	16.1
	≥ 4h	3.7	5.4
	Mean	0.81	0.82
	95% CI for mean	[0.68, 0.95]	[0.69, 0.96]
	N	596	596

Table note. There was a significant difference between weekdays and weekends in mean night time sleep duration (Wilcoxon signed rank test  $z=-2.44$ ,  $n=594$ ,  $p=.02$ ), but not in mean nap duration (Wilcoxon signed rank test  $z=-0.16$ ,  $n=571$ ,  $p=.87$ ). When usual night sleep and nap duration were summed into 'total sleep time over 24h', there was no significant difference in weekday and weekend durations (weekday mean=7.99, weekend mean=7.77; Wilcoxon signed rank test  $z=-1.73$ ,  $n=594$ ,  $p=.08$ ).

Almost two thirds (65%) reported using a stimulant in the past 2 weeks to stay awake. The mostly commonly reported drugs used to stay awake were coffee/tea (56%), energy drinks (22%), caffeinated soft drinks (21%) and cigarettes (11%;  $n=595$ ).

A fifth (22%) reported having used alcohol in their lifetime to help them get to sleep ( $n=593$ ). A third (32%) had used a depressant drug to help them get to sleep in the past two weeks: 19% had used cannabis, 10% alcohol, 10% prescription medications, and 6% used drugs bought over the counter at the pharmacy (where no prescription was required;  $n=588$ ).

Almost half (43%) worked outside of traditional '9-5' hours (e.g. night or overtime shifts) in the past 2 weeks. A quarter had worked 1-4 days and 18% worked six or more days in the fortnight ( $n=588$ ).

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*More than a third of the participants appeared to have disrupted sleep patterns, and a third used a depressant drug to help them get to sleep in the past fortnight. Interventions to improve sleep quality may have positive flow-on effects in other health areas.*

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### 3.9. Harms experienced due to others' drinking

In the 12 months preceding 2015-16, an estimated 162,400 Australians experienced a physical assault by offender(s) they believed were under the influence of alcohol (64). Forty percent of the deaths due to interpersonal violence in this country, are associated with another person's drinking (65). Only 55% of the most recent physical assault incidents were reported to the police and similarly, not all came to medical attention (64). An estimated 14,000 Australians are hospitalised each year with injuries inflicted by someone who had been drinking (65). Being younger and being a heavier drinker are two risk factors associated with a greater experience of harms due to another person's drinking (65).

Respondents' past 12 month experience of 13 harms as perpetrated by someone who had been drinking included:

- 65% had a party ruined;
- 61% reported they had received unwanted sexual attention;
- 47% had their clothes or other belongings ruined;
- 35% were yelled at, criticised or verbally abused; and,
- 14% were physically hurt (see Table 24).

**Table 24. Harms experienced due to others' drinking in the past 12 months**

In the past 12 months has someone who has been drinking ...	Male			Female			Total		
	Age			Age			Age		
	14-17	18-19	All	14-17	18-19	All	14-17	18-19	All
Ruined a party or social gathering	63.2	62.7	63.0	67.7	65.6	66.7	65.8	64.2	65.1
Ruined your clothes or other belongings	46.4	51.9	48.8	45.3	48.1	46.5	45.5	49.6	47.3
Give you unwanted sexual attention	44.8	49.9	47.0	65.5	77.7	70.8	57.0	66.4	61.0
Turned their back on you, rolled their eyes at you, gave dirty looks, ignoring you or did something else to you that was socially aggressive and designed to hurt you	46.7	55.8	50.6	49.8	52.6	51.1	48.4	53.8	50.7
Made you afraid when you encountered them on the street	29.4	30.8	30.0	40.6	49.1	44.3	36.3	41.7	38.6
Harassed or bothered you at a party or some other private setting	32.7	35.2	33.8	37.5	45.1	40.8	35.6	41.1	38.0
Harassed or bothered you on the street or public place	30.6	43.1	35.9	34.8	52.5	42.5	33.3	48.6	39.9
Left you alone in an unsafe situation	15.8	14.3	15.1	30.0	33.5	31.5	24.1	25.8	24.8
Yell at, criticize or verbally abuse you	34.7	43.4	38.4	32.5	33.0	32.7	33.9	37.3	35.3
Pushed or shoved you	39.7	46.1	42.4	26.0	30.6	28.0	32.0	36.8	34.1
Physically hurt you	18.3	16.2	17.4	11.5	11.1	11.3	14.6	13.1	14.0
Put you in fear	21.0	19.5	20.4	31.7	34.3	32.8	27.7	28.1	27.9
Engage in serious violence that you witnessed	33.7	37.2	35.2	32.1	35.5	33.6	32.7	36.2	34.2
At least one of the 13 harms experienced in the past 12 months	90.0	94.6	91.9	93.3	96.5	94.7	92.1	95.7	93.6
Approximate n	673	496	1168	934	719	1654	1634	1224	2860

Table note. The response options for the 13 harms were 'yes – by someone I know', 'yes – by a stranger', 'no' and 'unsure'. For ease of interpretation, the former two categories have been collapsed into a single 'yes' category. Sample size is an approximation as there was <1% variation in response rate across items.

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*Almost all (94%) participants had experienced a harm due to someone else's drinking in the past 12 months – from very common outcomes such as having their belongings ruined (47%), to more serious harms such as being physically hurt (14%).*

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#### *Being a passenger with a drink driver*

In Australia there are laws governing driving under the influence of alcohol, and these are set and regulated by the relevant state or territory governments. In general, across different jurisdictions, most drivers must stay under a blood alcohol concentration (BAC) of .05% when they are in control of a vehicle. However, lower legal BAC limits are prescribed for certain drivers such as professional drivers (truck, bus or taxi drivers), probationary drivers and learner drivers, and those who have previously committed a drink driving offence (66-69).

Alcohol use by drivers, or 'drink driving', significantly elevates the risk of being responsible for causing a traffic crash (70). For example, a quarter of Victorian (68) and a third of Western Australian (69) fatal car crashes involve drink driving.

Almost half (43%) of the YAARS F2F participants reported being passengers in a car with an alcohol-affected driver in the past 12 months, and more than a third reported this as occurring three or more times in the past 12 months (n=591).

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*43% of participants were passengers in a car with an alcohol affected driver in the past 12 months.*

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### 3.10. Broader behavioural or affective dysregulation

This section presents three assessments of traits that have previously been found to be associated with risky alcohol and other drug use, or related problems. These include:

- Kessler's psychological distress scale (K-6);
- Tangney's self-control scale (B-SC); and,
- Österman and Björkqvist's Brief Physical Punishment Scale (BPPS).

#### *Psychological distress*

Mental health disorders can be classified into three major groups: anxiety disorders, affective disorders (such as depression), and substance use disorders (49). A quarter (26%) of 16-24 year olds in Australia reported a mental health disorder in the past 12 months, a rate higher than any other age group (49). Comorbidity is the co-occurrence of more than one disorder, and is commonplace. For example, 44% of young people with an alcohol dependence have an anxiety disorder and 25% have an affective disorder (71). The specific assessment of commonly comorbid conditions (e.g. emotional wellbeing and alcohol use) can be useful in disentangling the effects of each. The corollary is that more specific identification of the origins of an issue can aid in the treatment of the problem.

The Kessler psychological distress scale assesses the frequency of symptoms of psychological distress, and high scores suggest the presence of a diagnosable mental disorder. The six item scale, the 'K6' was included to assess the comorbidity of mood disorders with alcohol use and sleep disturbance (72). The scale has undergone studies of reliability, validity, tested in a variety of settings. It is used elsewhere in Australian alcohol and other drug research and amongst adolescents (73).

The K6 was administered to the F2F participants, and in the past four weeks they felt the following 'some of the time' to 'all of the time':

- 55% felt restless or fidgety;
- 40% felt nervous;
- 31% felt that everything was an effort;
- 21% felt hopeless;
- 16% felt so depressed that nothing could cheer them; and,
- 15% felt worthless (see Table 25).

These items were summed for a K6 score which could range from 0-24, with higher scores indicating greater distress. Females scored a mean of 6.78 (95% CI [6.23,7.34]; n=283) and males a mean of 5.33 (95% CI [4.87,5.80]; n=311). This gender difference was significant (Mann-Whitney U=35488, z=-3.97, p<.001), and the scores appeared similar to those of general population Australian adolescents (6.15 for females, 5.28 for males) (73).

However, 11% had K6 scores of 13 and above which indicate a probable serious mental illness (74). These K6 scores had a significant, but very weak correlation with participants' last risky drinking session quantities (r=0.11, p=.01, n=594).



**Table 25. Kessler’s psychological distress scale**

During the past four weeks, how often did you feel ...		None of the time to a little of the time	Some of the time	Most of the time to all of the time	Total
Male	Nervous	67.5%	25.2%	7.4%	310
	Hopeless	82.9%	11.0%	6.1%	310
	Restless or fidgety	50.0%	32.6%	17.4%	310
	So depressed that nothing could cheer you up	87.5%	7.1%	5.4%	310
	That everything was an effort	72.9%	17.4%	9.6%	310
	Worthless	86.5%	8.4%	5.2%	310
Female	Nervous	51.1%	31.2%	17.8%	282
	Hopeless	73.4%	16.3%	10.3%	282
	Restless or fidgety	39.4%	30.9%	29.8%	282
	So depressed that nothing could cheer you up	80.9%	14.9%	4.3%	282
	That everything was an effort	64.9%	19.9%	15.3%	282
	Worthless	83.7%	10.3%	6.1%	282
All	Nervous	59.6%	28.1%	12.3%	594
	Hopeless	78.4%	13.5%	8.1%	594
	Restless or fidgety	45.0%	31.6%	23.4%	594
	So depressed that nothing could cheer you up	84.4%	10.8%	4.8%	594
	That everything was an effort	69.0%	18.7%	12.3%	594
	Worthless	85.2%	9.3%	5.6%	594

Table note: participants were presented with five response options: None of the time, A little of the time, Some of the time, Most of the time, and All of the time.

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*1 in 10 participants reported symptoms consistent with high emotional distress and the possibility of having a serious mental distress.*

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## Self-Control

Adolescent risk taking can be conceptualised as a combination of heightened sensitivity to rewards and new sensations, and immature cognitive controls (75). On an individual level, lower self-regulation is associated with problematic alcohol and other drug use as well as sleep disturbance (76-78).

Tangney’s Brief Self Control (B-SC) measure is a validated 13 item scale that is well-cited within social and psychological science research (78, 79) (see Table 26). B-SC scores can range from 13-65 with higher numbers indicating greater control. The mean participant score was 39 (SD=8, n=596) which appeared broadly consistent with the average undergraduate student score of 40 (SD=9) (78). These self-control scores generally increased with age and had a significant, but very weak correlation with participants’ last risky drinking session quantities ( $r=0.12$ ,  $p=.005$ ,  $n=591$ ).

**Table 26. Brief Self Control (B-SC) measure**

Please indicate how much each of the following statements reflects how you typically are	Not at all like me	A little like me	Somewhat like me	Mostly like Me	Very much like me	Total
I am good at resisting temptation	16.3%	25.3%	26.9%	22.2%	9.3%	594
I have a hard time breaking bad habits	14.6%	21.7%	26.6%	24.2%	12.8%	594
I am lazy	16.5%	29.8%	25.9%	18.4%	9.4%	594
I say inappropriate things	22.9%	29.1%	21.7%	15.2%	11.1%	594
I do certain things that are bad for me, if they are fun	8.6%	22.9%	29.5%	26.1%	13.0%	594
I refuse things that are bad for me	12.6%	31.8%	22.9%	26.4%	6.2%	594
I wish I had more self-discipline	18.4%	22.6%	22.4%	22.2%	14.5%	594
People would say that I have iron self-discipline	38.8%	26.8%	19.6%	11.0%	3.9%	593
Pleasure and fun sometimes keep me from getting work done	14.3%	16.8%	25.3%	29.1%	14.5%	594
I have trouble concentrating	14.3%	27.4%	25.6%	20.0%	12.6%	594
I am able to work effectively toward long-term goals	6.1%	15.4%	27.9%	35.1%	15.5%	592
Sometimes I can't stop myself from doing something, even if I know it is wrong	30.3%	27.3%	22.9%	14.6%	4.9%	594
I often act without thinking through all the alternatives	25.1%	29.8%	23.1%	14.6%	7.4%	594

Table note: Mean B-SC scores were 37.58 for 14-15 year olds (SD=8.24; n=88), 38.80 for 16-17 year olds (SD=7.46; n=237) and 39.90 for 18-19 year olds (SD=7.54; n=271).

### Childhood Physical Punishment

This four item Brief Physical Punishment Scale (BPPS) assesses childhood exposure to violence which is a key predictor and confounder of alcohol-related aggressive behaviours (80). It has been validated for use with adolescents.

This scale was shown in both survey modalities and the following proportions reported an adult did the following to them sometimes or more frequently during their childhood:

- 32% slapped;
- 22% hit with an object;
- 17% pulled by their ear; and,
- 11% had their hair pulled (see Table 27).

These childhood physical punishment scores had a significant, but very weak correlation with participants' last risky drinking session quantities ( $r=0.12$ ,  $p<.001$ ,  $n=2876$ ).

**Table 27. Brief Physical Punishment Scale (BPPS)**

When you were a child, did an adult do any of the following things to you?		Never	Seldom	Sometimes	Often	Very often	Total
		%	%	%	%	%	
F2F	Pulled your hair	83.0	7.6	6.2	2.0	1.2	594
	Pulled by your ear	67.2	14.1	13.3	3.5	1.9	594
	Slapped	47.4	23.9	19.1	6.6	3.0	593
	Hit you with an object	64.5	15.8	12.1	5.1	2.5	594
Self-administered	Pulled your hair	79.9	8.2	8.2	2.1	1.5	2262
	Pulled by your ear	68.4	15.4	11.3	3.1	1.8	2265
	Slapped	48.8	19.0	20.7	8.4	3.1	2269
	Hit you with an object	64.2	13.6	14.4	5.2	2.7	2271
Both modalities	Pulled your hair	80.6	8.1	7.8	2.1	1.5	2856
	Pulled by your ear	68.2	15.1	11.7	3.2	1.8	2859
	Slapped	48.5	20.0	20.3	8.0	3.1	2862
	Hit you with an object	64.2	14.0	13.9	5.1	2.7	2865

### 3.11. Protective behaviours

The use of safety (or harm reduction) strategies during the past 12 months was assessed using Martens' Protective Behavioral Strategies Scale (81). These behavioural strategies can limit alcohol-related problems even after controlling for the quantity of alcohol consumed. However, the safety strategies that are associated with the greatest reduction in harm are those that limit the quantity of alcohol consumed (81).

Table 28 lists the safety strategies 'always' or 'usually' engaged in:

- The most common safety strategies cited by respondents were those around avoiding serious negative consequences: 74% knew where their drinks were at all times, and 68% made sure they went home with a friend;
- The most popular strategy around stopping/limiting drinking was to drink water while drinking alcohol (46%); and
- The most popular strategy around manner of drinking was to avoid trying to keep up or out drink others (30%).

**Table 28. Safety strategies used in the past 12 months**

Usually' or 'always' engaged in the following behaviours when using alcohol in the past 12 months	F2F			Self-administered			Both modalities		
	Male	Female	All	Male	Female	All	Male	Female	All
	%	%	%	%	%	%	%	%	%
<i>Subscale 1: Stopping/ Limiting Drinking</i>									
Determine not to exceed a set number of drinks	8.9	13.4	11.0	17.2	18.1	17.7	15.0	17.3	16.3
Alternate alcoholic and non-alcoholic drinks	25.7	27.2	26.5	24.8	22.4	23.5	25.1	23.2	24.1
Have a friend let you know when you have had enough to drink	17.8	27.2	22.4	19.4	25.9	23.6	19.0	26.1	23.3
Leave the bar or party at a predetermined time	24.4	29.7	27.2	22.3	24.0	23.2	22.8	25.0	24.1
Stop drinking at a predetermined time	9.9	11.2	10.8	14.0	12.7	13.1	12.9	12.4	12.6
Drink water while drinking alcohol	52.1	51.1	51.6	46.6	42.9	44.3	48.1	44.3	45.9
Put extra ice in your drink	11.2	9.8	10.5	13.9	14.1	14.2	13.2	13.3	13.4
<i>Subscale 2: Manner of Drinking</i>									
Avoid drinking games	9.6	13.8	11.7	11.2	9.9	10.5	10.8	10.6	10.7
Drink shots of spirits (risk behaviour)	49.5	59.4	54.4	48.6	60.4	56.0	48.8	60.3	55.7
Avoid mixing different types of alcohol	14.2	17.8	15.8	18.6	17.3	18.0	17.4	17.3	17.6
Drink slowly, rather than gulp or scull	18.8	19.6	19.3	17.0	17.3	17.1	17.5	17.7	17.6
Avoided trying to "keep up" or out-drink others	29.7	41.3	35.3	23.4	31.6	28.3	25.1	33.3	29.8
<i>Subscale 3: Serious Negative Consequences</i>									
Use a designated driver	42.9	47.8	45.3	43.8	49.6	47.7	43.5	49.3	47.2
Made sure that you go home with a friend	53.1	78.6	65.4	55.2	75.5	68.1	54.7	76.0	67.5
Know where your drink has been at all times	63.7	76.4	69.7	69.0	79.6	75.6	67.6	79.0	74.4
<b>Total</b>	<b>308</b>	<b>280</b>	<b>590</b>	<b>849</b>	<b>1363</b>	<b>2247</b>	<b>1157</b>	<b>1643</b>	<b>2837</b>

*Respondents engaged in a wide range of harm reduction behaviours; however, they were less likely to use the most efficacious strategies (i.e. those that limited their drinking).*

### 3.12. Licensed venues

Throughout Australia, it is illegal for a minor under the age of 18 to purchase alcohol, or to enter a licensed premises except under certain circumstances (82). Respondents aged 14-17 were under the legal purchase age for alcohol and:

- Half (48%) had previously tried to purchase alcohol from the bottle shop. Of those that had tried, 51% said it took them less than one hour for them to make their most recent bottle shop purchase, and 30% said it took them less than a day (n=1348);
- Most (58%) had never tried to enter a licensed venue such as a pub or club. Of those that had previously attempted, 37% said it was very easy and 29% said it was easy the last time they tried to enter (n=1611); and,
- Almost two thirds (62%) had never tried to purchase an alcoholic beverage from a licensed venue such as a pub or club. Of those that had previously attempted, 40% said it was very easy, and 30% said it was easy the last time they tried to make the purchase (n=1604; see Table 29).

**Table 29. Ease of underage alcohol purchase and access to licensed venues**

The last time you tried, how easy was it for you to buy alcohol from the bottle shop? (item asked of 14-17 year olds only)			
	F2F	Self-admin	Both modalities
Very easy (I could get it within an hour)	25.8%	22.1%	23.0%
Easy (I could get it within a day)	9.9%	14.8%	13.6%
Difficult (It would take me more than a day to get it)	5.6%	5.0%	5.1%
Very difficult (it would take me 3 or more days)	5.0%	2.5%	3.1%
Don't know	0.0%	4.2%	3.2%
N/A (never tried)	53.7%	51.4%	51.9%
<b>Total</b>	<b>322</b>	<b>1026</b>	<b>1348</b>

The last time you tried, how easy was it for you to enter a licensed venue (pub/club)? (item asked of 14-17 year olds only)			
	F2F	Self-admin	Both modalities
Very easy	17.8%	14.2%	14.9%
Easy	15.9%	10.6%	11.7%
Neither easy or difficult	4.1%	8.3%	7.4%
Difficult	3.8%	3.6%	3.6%
Very difficult	5.3%	2.1%	2.7%
Don't know	1.3%	1.9%	1.8%
N/A (never tried)	51.9%	59.3%	57.9%
<b>Total</b>	<b>320</b>	<b>1291</b>	<b>1611</b>

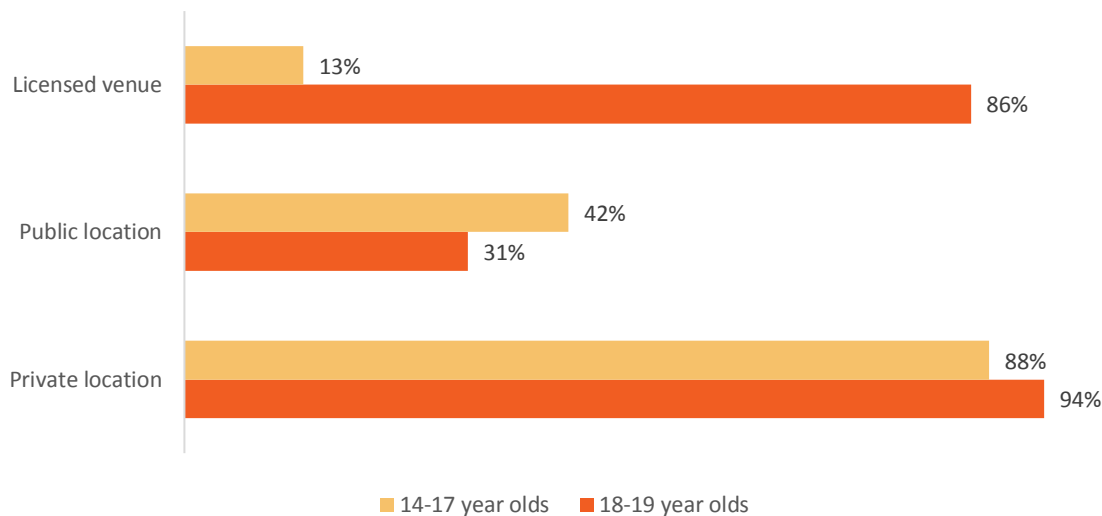
The last time you tried, how easy was it for you to buy an alcoholic drink in a licensed venue (pub/club)? (item asked of 14-17 year olds only)

	F2F	Self-admin	Both modalities
Very easy	16.7%	13.8%	14.4%
Easy	15.1%	10.9%	11.7%
Neither easy or difficult	1.9%	5.7%	4.9%
Difficult	3.1%	3.0%	3.0%
Very difficult	2.5%	2.3%	2.4%
Don't know	0.3%	2.5%	2.1%
N/A (never tried)	60.4%	61.8%	61.5%
Total	318	1286	1604

Respondents of all ages were asked how often they drank alcohol in various locations at least once a month ('monthly'; see Figure 8 and Table 30):

- 90% drank in private locations such as homes;
- Most (86%) 18-19 year old participants drank in licensed venues such as pubs, whereas this was much less common (13%) amongst those under the age of 18; and,
- 37% drank in public locations such as parks and beaches.

**Figure 8. Monthly alcohol consumption in licensed venues, private and public locations**



*Of the 48% of 14-17 year old participants who had previously tried to purchase alcohol from the bottle shop, half said it took them less than one hour for them to make their most recent purchase. Participants of all ages were more likely to engage in monthly drinking in a private location than a licensed venue.*

**Table 30. Frequency of alcohol consumption in licensed venues, private and public locations**

Age	F2F			Self-administered			Both modalities		
	14-17	18-19	14-19	14-17	18-19	14-19	14-17	18-19	14-19
	%	%	%	%	%	%	%	%	%
<b>Licensed venues such as pubs, bars and clubs</b>									
At least once a week	3.8	47.4	23.7	3.6	38.8	18.5	3.7	40.7	19.6
At least once a month	11.0	39.2	23.9	9.2	47.5	25.4	9.5	45.7	25.1
Around once every three months	19.1	9.0	14.5	13.4	10.5	12.2	14.6	10.2	12.7
Once a year or less often	12.5	2.2	7.8	16.9	2.1	10.7	16.1	2.1	10.1
Never	53.6	2.2	30.2	56.8	1.1	33.2	56.2	1.3	32.6
<b>Total</b>	<b>319</b>	<b>268</b>	<b>587</b>	<b>1294</b>	<b>949</b>	<b>2243</b>	<b>1613</b>	<b>1217</b>	<b>2830</b>
<b>Private locations such as homes</b>									
At least once a week	44.1	67.9	54.9	27.9	49.5	37.0	31.1	53.5	40.8
At least once a month	51.6	28.7	41.2	58.0	43.5	51.8	56.7	40.2	49.6
Around once every three months	3.8	1.9	2.9	10.7	6.8	9.0	9.3	5.7	7.7
Once a year or less often	0.6	1.1	0.9	2.0	0.3	1.3	1.7	0.5	1.2
Never	0.0	0.4	0.2	1.4	0.0	0.8	1.1	0.1	0.7
<b>Total</b>	<b>320</b>	<b>268</b>	<b>588</b>	<b>1290</b>	<b>948</b>	<b>2238</b>	<b>1610</b>	<b>1216</b>	<b>2826</b>
<b>Public locations such as parks, beaches and streets</b>									
At least once a week	15.0	7.5	11.6	10.0	6.4	8.5	11.0	6.7	9.1
At least once a month	34.4	28.4	31.6	29.7	23.3	27.0	30.6	24.4	27.9
Around once every three months	24.7	22.0	23.5	26.0	25.6	25.9	25.8	24.8	25.4
Once a year or less often	14.4	19.0	16.5	16.4	25.6	20.3	16.0	24.1	19.5
Never	11.6	23.1	16.8	17.8	19.1	18.4	16.6	20.0	18.0
<b>Total</b>	<b>320</b>	<b>268</b>	<b>588</b>	<b>1286</b>	<b>946</b>	<b>2232</b>	<b>1606</b>	<b>1214</b>	<b>2820</b>

### 3.13. Secondary supply

The legal purchase age for alcohol is 18 in all jurisdictions in Australia (82). All Australian jurisdictions except one (SA) in have 'secondary supply laws' prohibiting the supply of alcohol to an individual under the legal purchase age within a private premise, without permission from the adolescent's parents (83).

Adolescents who are under the legal purchase age commonly obtain their alcohol from their parents, friends and siblings (84, 85). Of 3,400 12-17 year old students who used alcohol in the past 7 days, 38% were supplied with their last drink by their parents, and 49% obtained this drink from their friends or siblings (22% friends supplied, 9% siblings supplied, 19% purchased through a friend or sibling) (14).

Who provides the alcohol can impact upon the quantity and circumstances under which the alcohol is consumed. Adolescents tend to drink more when they are supplied with alcohol through non-parental sources such as friends or siblings, compared to when they are exclusively supplied by their parents (86-88).

As the provision of alcohol through peers and siblings can be associated with heavier drinking episodes, this section reports the frequency and motivation of peer and sibling provision of alcohol to underage drinkers. These items were only presented to F2F interviewees.



### *Underage participants asking for and being provided with alcohol in various contexts*

Participants aged 14-17 were asked whether they had asked for, or were supplied with alcohol by an adult under scenarios varying by:

- Nature of relationship (supplier was an acquaintance, friend, sibling, or stranger);
- Context of supply (supplier was at the same party, or if the alcohol was to be taken to another party the supplier was not attending); and,
- Whether or not money was exchanged as a part of the supply.

The proportion of participants who asked, compared to the proportion that actually received alcohol, was broadly consistent within the same scenarios:

- The most common supply scenario was to receive drinks from a friend at a mutual party (89%);
- Supply was less likely if the supplier was an acquaintance (69%) or if they wanted to take the alcohol to a party that the supplier was not attending (59%); and
- Supply was more common when money was exchanged for the drinks (88%), compared to when provision was simply a gift or favour as a friend (77%; see Table 31).

**Table 31. Underage reports of alcohol supply by adults under various scenarios**

Have you ever asked for, or received alcohol from these people who are 18 years or older? (items only presented to 14-17 year olds)	Asked for		Received	
	%	Total N	%	Total N
Acquaintance to drink at a party you are both going to	65.1%	318	68.8%	320
Friend, to drink at a party you are both going to	88.7%	319	89.1%	320
Friend to take to a party they will not be going to	56.5%	317	59.2%	319
Brother or sister to drink at a party you are both going to	19.9%	287	20.9%	287
Brother or sister to take to a party they will not be going to	38.3%	287	34.8%	287
Your parent(s) to drink at a party or get-together you are attending with them	30.5%	311	33.3%	312
Your parent(s) to drink at a party that you are attending, but they are not	38.3%	313	35.7%	314
Stranger near a bottle shop	25.9%	317	21.4%	313
Friend to drink at a party you are both going to and money was exchanged (e.g. to split the bottle store costs)			88.1%	320
Friend to drink at a party you are both attending and money was not exchanged (e.g. they gave it to you as a favour)			76.6%	320

Table note. The original five response options were: (i) at least once a month, (ii) at least twice a year, (iii) once a year or less often, (iv) never and (v) N/A. Responses were dichotomized into 'any asking/supply' or 'never asked/supplied'. 'N/A' responses were excluded: 33 (10%) 14-17 year olds selected N/A for the items relating to siblings, and <3% selected this for the other items.

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*Participants under the age of 18 reported it was very common to be provided alcohol by others, with supply more common if the supplier was a friend, they were at the same party, and if money was exchanged.*

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### *Older participants' opinions on underage alcohol provision and context of provision*

Participants aged 18-19 estimated the frequency of supplying alcohol to someone aged 16-17 years old under eight scenarios. These scenarios differed according to the:

- Nature of relationship (acquaintance, friend, sibling, or stranger);
- Context of supply (recipient was at the same party, or intended to take the alcohol to another party the supplier was not attending); and,
- Whether or not money was exchanged as a part of the supply.

Alcohol was most commonly provided to a 16-17 year old friend, at a party that both the supplier and recipient were attending (68%). Supply was more common if the recipient was a friend (68% lifetime supply vs. 45% acquaintance or 20% sibling), within the context of a mutual party (68% vs 45% when the alcohol was to be taken to party the supplier was not attending), and when money was exchanged compared to when alcohol was provided as a favour (60% vs 40%; see Table 32).

**Table 32. 18-19 year old respondent reports of supply of alcohol to teens under eight scenarios**

Have you ever provided alcohol to someone aged 16-17 years and is a ... (items only presented to 18-19 year olds)	Provided alcohol	
	%	Total N
Acquaintance to drink at a party you are both going to	44.7%	262
Friend, to drink at a party you are both going to	68.1%	263
Friend, for them to take the alcohol to a party that you won't be going to	44.4%	261
Brother or sister to drink at a party you are both going to	19.5%	221
Brother or sister, for them to take the alcohol to a party that you won't be going to	24.4%	221
Stranger near a bottle shop	4.6%	262
Friend to drink at a party you are both going to, and money was exchanged (e.g. you split the bottle store costs)	60.1%	263
Friend to drink at a party you are both attending and money was not exchanged (e.g. you gave it as a favour)	39.5%	261

Table note. The original five response options were: (i) at least once a month, (ii) at least twice a year, (iii) once a year or less often, (iv) never and (v) N/A. Responses were dichotomized into 'any supply' and 'never supplied'. 'N/A' responses were excluded: 48 (18%) 18-19 year olds selected N/A for the items relating to siblings, and <3% selected this for the other items.

### *Motivations for compliance with secondary supply laws*

Twenty four items explored some of the reasons why 18-19 year olds may have supplied younger peers/why participants did not comply with secondary supply laws. Most items were adapted from Jones et al. (89, 90), to assess the five compliance factors for secondary supply.

Most 18-19 year old participants reported that it was acceptable to provide 16-17 year olds alcohol so long as the recipient was in a safe environment (74% agreed) or was a responsible individual (64%). Though they thought they would get into trouble with the police if they were caught supplying (69%) they thought being caught was highly unlikely (10% agreed police check on secondary supply; see Table 33).

Most (69%) stated they would feel more responsible for the safety of a friend under the age of 18 if they gave them alcohol to drink.

**Table 33. Motivations around secondary supply**

	Agreed or strongly agreed
Thinking specifically of 16-17 year old teenagers, to what degree do you agree ...	
<i>Personal Morality</i>	
It is ok to give alcohol to teenagers as long as they are in a safe environment	74.8%
It is ok to give alcohol to teenagers if you know they are responsible	64.1%
It is ok to give alcohol to teenagers as long as you don't get caught	21.1%
I would never give alcohol to teenagers	11.9%
<i>Perceived Legitimacy</i>	
Our community needs stricter rules against giving alcohol to teenagers	19.3%
People who give alcohol to teenagers should be fined	34.4%
People who give alcohol to teenagers should go to jail	1.1%
The dangers of giving alcohol to teenagers are overrated	20.7%
<i>Procedural Fairness</i>	
The police are not tough enough on people who give alcohol to teenagers	11.5%
The courts are not tough enough on people who give alcohol to teenagers	8.1%
The police are too tough on people who give alcohol to teenagers	16.3%
The courts are too tough on people who give alcohol to teenagers	16.3%
<i>Social Norms</i>	
Most of my friends think it is ok to give alcohol to teenagers	81.4%
Everybody gives alcohol to teenagers if they are in a safe environment	46.1%
Giving alcohol to teenagers is ok because everyone does it	11.2%
My friends would think I was really stupid if I gave alcohol to teenagers	9.3%
<i>Deterrence</i>	
I will get in trouble with the police if I supply alcohol to teenagers	68.5%
If you give alcohol to teenagers it is only a matter of time before you get caught	20.4%
The penalties for giving alcohol to teenagers mean it is not worth the risk	28.9%
There are lots of police checking on the supply of alcohol to teenagers in their area	10.4%
<i>Other related items (not one of the five compliance factors)</i>	
My friends would think I was mean if I didn't give alcohol to a friend under the age of 18	37.4%
My friends would think I was uncool if I didn't give alcohol to a friend under the age of 18	25.6%
My friends would think I was a responsible person if I didn't give alcohol to a friend under the age of 18	41.5%
I would feel more responsible for the safety of a friend under the age of 18 if I gave them alcohol to drink	69.3%
N (18-19 year olds only)	270

## Knowledge of Secondary Supply law

Following the motivations for supply, and frequency of supply items, respondents were presented with the statement “In certain parts of the country, the government says that it is an offence for someone to supply alcohol to a person under the age of 18 without the permission of the young person’s parent or guardian”. Three-quarters believed that such a rule existed in their state or territory (85% of 322 14-17 year olds and 68% of 269 18-19 year olds). Participants were also asked age-relevant questions about what they understood secondary supply to mean (see Table 34).

**Table 34. Knowledge of secondary supply legislation by jurisdiction**

Do you think this rule exists in your state or territory?	Yes	No	Unsure	N
ACT	76.1%	9.9%	14.1%	71
NSW	78.6%	12.6%	8.7%	103
NT	58.1%	16.1%	25.8%	31
QLD	70.3%	20.9%	8.8%	91
SA	77.2%	5.1%	17.7%	79
TAS	84.0%	4.0%	12.0%	50
VIC	82.2%	8.2%	9.6%	73
WA	79.6%	10.8%	9.7%	93
Total	76.8%	11.2%	12.0%	591

The following questions ask you what you think this rule means. Is it an offence ... (items only shown to 14-17 year olds)	Yes (offence)	No (not an offence)	Unsure	N
For your parents to give you alcohol at home?	12.7%	81.4%	5.9%	322
For someone other than your parents or guardian to give you alcohol?	90.1%	5.0%	5.0%	322
For someone over the age of 18 to give you alcohol if they have permission from your parent or guardian to give you the alcohol?	35.9%	53.1%	10.9%	320
For someone over the age of 18 to give you alcohol while you’re drunk if they have permission from your parent or guardian to give you the alcohol?	66.5%	18.6%	14.9%	322

Do you think this rule means it is an offence to give alcohol to someone under the age of 18 ... (items only shown to 18-19 year olds)	Yes (offence)	No (not an offence)	Unsure	N
If their parents or guardian don’t know you	91.4%	4.5%	4.1%	269
If you have permission from their parent or guardian to give the alcohol	40.5%	48.7%	10.8%	269
If you don’t have their parents’ permission, but you don’t let them get drunk	83.3%	8.9%	7.8%	269
If they are drunk already, but you have permission from their parent or guardian to give the alcohol	65.8%	18.2%	16.0%	269

## 4. Conclusions

### *Summary of findings*

This study aimed to complement existing data sources which underrepresent teenagers, especially those who regularly and heavily drink alcohol. We were able to successfully access this young population and examine their broader alcohol purchase and drinking environment. The findings in this report demonstrate that these young drinkers are experiencing substantial levels of harm without necessarily being identified in other statistics such as hospital data.

In late 2016 and early 2017, we recruited 3,465 of the riskiest drinking 14-19 year olds. These teenagers were interviewed and surveyed in all eight Australian jurisdictions. They were in the upper consumption quartile of their age group with half consuming 11+ standard drinks at least once a month. The context of their heavy consumption episodes were assessed with a detailed description of the 'last risky drinking session'. This most recent occasion mostly occurred in the past fortnight and they consumed an average of 15 standard drinks, with almost 9 out of 10 reporting this was typical of what they usually drank. Three quarters chose to consume spirits and they drank for an average of 6.4 hours, most commonly at a friend's home. Less than a fifth of the 14-17 year olds had a 'responsible adult' supervising them for the entire time. A quarter used at least one illicit or non-prescribed drug during this session. More than three-quarters reported a negative outcome as a result of this drinking session, with a fifth being injured, a fifth drinking enough to incur memory loss (blacking out), a sixth doing impulsive things they later regretted, and a third doing or saying embarrassing things. That is, at least once a month, our participants were engaging in high intensity drinking episodes that were more often than not, associated with compromised physical safety, brain function impairment, and social embarrassment.

Further to the outcomes that arose specifically from the most recent drinking session, a series of other impacts of drinking were assessed. In the past 12 months 83% had been injured as a result of their drinking and 7% had attended a hospital emergency department for an alcohol-related injury. Attenuation of these harms were attempted by the majority, with the most popular strategies to stop or limit drinking, being drinking water while drinking alcohol (46%), and leaving the party at a predetermined time (24%).

Three-quarters of participants were identified as having alcohol-related problems at a level where clinical guidelines recommend they would be indicated for interventions such as brief advice, counselling or continued monitoring. A sixth screened positive for signs of dependence suggesting a need for more intensive treatment. Interventions have greater efficacy when delivered before severe dependence and severe problems emerge, and a third of the participants already wanted to cut down on their drinking. This survey appears to have identified a population who are at risk of significant adverse outcomes, a substantial minority of whom are receptive to interventions, and who might otherwise go undetected. Respondents' service delivery preferences suggested that free and anonymous online platforms were appealing, and implementation of such an approach may encourage earlier clinical engagement among young people.

A series of broader health issues were also identified. For example, more than a third displayed symptoms suggestive of clinical insomnia, and as a group, they did not demonstrate the typical adolescent sleep pattern where the weekends were used to catch up on sleep debt. Interestingly, almost three quarters used a drug to get to sleep or to stay awake in the previous two weeks.

Compared to general population experiences, this sample's young age and regular drinking contributed to their vulnerability to harms perpetrated by other drinkers. Half reported that they had their clothes or other belongings ruined by a drinker, a third were yelled at, criticised or verbally abused by a drinker, and one in six were physically hurt by a drinker in the past 12 months. It is relevant to note that 9 out of 10 drank in private locations such as homes at least once a month, and many of the harms occurred in private contexts.

Half the participants aged 17 and younger had ever attempted to purchase alcohol from the liquor store before, and half of their most recent successful attempts took less than one hour for a purchase. It is possible that this acquisition was made through an older friend, as almost 9 in 10 underage participants had received alcohol from a friend and when money was exchanged (e.g. to split the bottle store costs), whereas only a fifth had ever acquired alcohol via a stranger near a bottle shop. One in ten of our 18-19 year old participants would never give alcohol to a 16-17 year old, but three quarters would, so long as the younger teenager was perceived to be in a safe environment. Most of these 18-19 year old participants also reported they would feel more responsible for the safety of a friend under the age of 18 if they gave them alcohol to drink.

### *Strengths and limitations*

A strength of this study is that we recruited and surveyed an otherwise underrepresented population. Our large sample size allowed for comparisons to be made across groups such as gender, age and Australian jurisdictions.

This study contextualised current behaviours through patterns reaching back to the consumption of the first full standard drink. However, much of the surveying was focused on the most recent risky drinking occasion, to describe the circumstances associated with a specific incidence of an alcohol-related harm. This last occasion appeared to be reasonably typical, with the majority reporting it had occurred less than two weeks before, and their alcohol use as a little less/similar/a little more than what they usually drank. These event-specific drinking environment descriptions and estimates of harms were reported in detail unavailable through general population or service-provision (e.g. hospitalisation) sources.

The study used a questionnaire-based methodology to rapidly acquire detailed information from a range of participants. While it was a limitation that it was not feasible to corroborate our large number of participant descriptions with third-party observations or biological sampling, adolescent self-report on alcohol and other drug use is generally regarded as having adequate reliability and validity (91). Self-report also allowed for the assessment of internal states such as fear or embarrassment, not otherwise available through external means. Furthermore, our findings appear broadly consistent with the previous pilot work conducted by this research team (4, 32, 84), as well as the broader literature cited in each results section.

Participants were offered either interviewer-administered interviews or self-administered online surveys. This resulted in some variation across survey modalities, and the group with direct interaction with the research team reported riskier behaviours in certain findings. This administration modality effect was likely the result of a combination of reasons (92). For example, the predominantly telephone-based booking of face-to-face interviews may have resulted in a more intensive screening of drinking patterns; the longer interview schedule may have probed for greater detail to facilitate recall; and, the mere presence of the interviewer may have facilitated disclosure through the building of rapport and the provision of prompts and clarifications. Although the full interview modality resulted in fuller descriptions, the online component allowed for a lower cost inclusion of a broader

sample (e.g. regional participants). Nevertheless, the findings are broadly consistent across both modalities, and these effects can be later controlled for in multifactorial statistical analyses.

The study used non-random, purposive sampling techniques, and is therefore not intended to be representative of general population 14-19 year olds. Our sample is, by definition, a minority subset who engaged in the riskiest drinking behaviours. Traditional random sampling techniques such as random-digit-dialling would be an inefficient and financially prohibitive means to approach such a small proportion of the population (approximately 1% of the Australian population are 14-19 year olds who engaged in risky drinking at least once a month) (1). Earlier comparisons of the YAARS method with age-matched groups recruited using representative sampling techniques yielded broadly similar alcohol consumption patterns, but an underrepresentation of non-capital city based respondents (32).

Lastly, the findings presented in this report are derived from a cross-sectional design. As this report is a 'snapshot' of the sample at a single point in time, it is difficult to definitively draw conclusions about sequences of events. However, we also included a code that allows for multiple surveys completed in the future by the same individual to be linked. Using this self-generated identification code, participants will be able to provide matched data over time while retaining their anonymity. Thus, in future waves of this study, it may be possible to track this sample as they develop through adolescence and into adulthood.

### *Policy and practical implications*

The following key issues were identified:

- (1) The proposed aims and outcomes were achieved, demonstrating an effective methodology to access an under-represented population, which provided information on key drinking issues and outcomes specific to this group. The use of social-media driven recruitment and the mixed methods of both face-to-face interviewing and online surveying allowed for a timely, modest-cost nation-wide data collection strategy. It is feasible to replicate this model on an annual or bi annual basis to provide a continuing trend of core consumption and alcohol-related harm, contribute to evaluations policy changes, and inform policy and other interventions among young risky drinkers.
- (2) Although sampled young people made active attempts to mitigate their alcohol-related harms, they still experienced a substantial burden (according to screening tools which suggest they may be at *risk* of certain types of harm, and their reports of *actual* recent harm) and engaged in risky behaviours that could have an adverse effect on others. These potentially serious consequences occurred more frequently, and were more varied, than the outcomes otherwise captured in general population surveys and hospital presentation data. This suggests that there is a significant group of young people for whom prevention, risk reduction and treatment responses are indicated.
- (3) Unsupervised drinking in non-licensed locations was the norm. The majority (90%) of respondents drank in private locations such as homes, at least once a month, compared to 45% in licensed venues and 37% in public locations. A public key strategy in attenuating alcohol-related harms is the control of alcohol availability (93). These data indicate that regulation of alcohol availability and other risk reduction strategies should cover multiple contexts including those that are not typically supervised by trained licensed venue staff or responsible adults (94). Any responses to prevent and reduce alcohol-related harm among young risky drinkers need to include the development and evaluation of interventions that are implemented in private locations. Almost half of the participants chose their drinks due to

price, and the evidence is strong for price-based interventions (32). Strategies to prevent and reduce risky drinking and associated adverse outcomes among this group will need to consider the role of price mechanisms which operate in both private and licensed drinking environments.

- (4) For 14-17 year olds, alcohol supply through a peer aged 18 or over was the norm. Most (77%) respondents of all ages were aware of secondary supply legislation, but they believed being detected was highly unlikely. As most (69%) of 18-19 year old respondents agreed they would feel more responsible for the safety of a friend under the age of 18 if they gave them alcohol to drink, effective communications and interventions might encourage peer safety as a part of a decision on the provision of alcohol to a younger peer.
- (5) A large proportion of the sample indicated that they believed they would benefit from cutting down their consumption and one in six screened positive for potential dependence. Extensions of YAARS offer an opportunity to test the acceptability of certain intervention options to maximise more engaging, earlier and more effective interventions. Specific strategies to engage those reporting symptoms of alcohol dependence in more intensive interventions are also indicated.
- (6) This project identified other health issues that may be influencing risky alcohol use. These young drinkers demonstrated disrupted sleep patterns and were particularly vulnerable to experiencing harms perpetrated by other drinkers. These issues may serve as an alternative perspective through which to discuss alcohol-related harms and influence decisions to embrace strategies to reduce alcohol-related harm.

The project has demonstrated the feasibility of an approach that could be replicated on an annual or biannual basis to provide a continuing trend of core consumption and harm data. It will also allow identification and exploration of current issues, as they emerge, enabling more informed policy review and implementation. It will also inform the development of more targeted interventions to reduce alcohol-related harm among this vulnerable group of young high-risk drinkers. It is important to note that future iterations of the approach will allow the addition of new and specific modules. For example, if Governments were interested in information to: inform prevention and policy strategies; identify exposure and response to alcohol promotions; or, inform understanding of the experience of specific mental health conditions amongst this group, these modules could be incorporated.



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