Young Australians Alcohol Reporting System (YAARS) Report 2016/17

- Northern Territory Findings

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1. Introduction

The Young Australians' Alcohol Reporting System (YAARS) is a research project that aims to provide insight into the risky drinking patterns of young Australians.

The purpose of the research is twofold. Firstly, the project seeks to investigate event-specific alcohol consumption amongst young high-risk drinkers who are overrepresented in alcohol-related harms, but are underrepresented in general population health surveys. Secondly, YAARS aims to investigate trends in alcohol use among young people over time and thus, as successive years of data accrue, to enable emergent trends and to detect developing patterns of problematic alcohol use and associated harms. This information on patterns of use and related problems will be used to inform policy, prevention and treatment initiatives (1).

In 2016 and 2017, YAARS was conducted in all eight capital cities of Australia. It combined information from existing data sources with interviews and surveys targeting young people aged 14-19 who regularly engaged in risky drinking.

This report documents the Northern Territory component of YAARS.

2. Site background

Population

Darwin is the largest city in the Northern Territory, and according to the 2011 Census the greater Darwin area has a population of 120,586. Of these residents, 6.7% are aged 15-19, and 9.2% identified as Aboriginal and/or Torres Strait Islander (2).

Schooling

Just under eighteen percent of the Greater Darwin area residents attend a secondary school (11.5% government, 2.1% Catholic, 4% other non-Government), 3.8% a technical or further education institution, and 11.7% a university or tertiary institution (2).

In the Northern Territory, it is compulsory for children between the ages of 6 and 17 years to be either: (a) enrolled in a school or school of distance education; (b) complying with special arrangements made under Part 5 of the Education Act (NT); (c) participating in an approved home education program; or (d) participating in an eligible option such as training or employment. (3).

General population youth alcohol and other drug use in 2016

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 more than four standard drinks in a single sitting as increasing the risk of injury arising from that occasion of drinking (4).

The National Drug Strategy Household survey (NDSHS) reported that in 2016, the majority (55.8%) of 14-19 year old Australians did not use alcohol in the past 12 months. However, a fifth (18.0%) of 14-19 year olds drank more than four standard drinks in a single session at least once a month. This risky consumption increases with age – in 2016 it was estimated to occur in less than 1% of 12-15year

olds, 14.6% of 16-17 year olds and 36.9% of 18-19 year olds (Australian Institute of Health and Welfare, 2017). Drinking at even higher levels (11+ standard drinks) at least once a month was estimated at 5.9% for 14-19 year olds; ranging from 4.6% of 16-17 year olds to 12.7% of 18-19 year olds.

A sixth (15.9%) of 14-19 year old Australians were estimated to have used an illicit drug in the past 12 months in 2016. The most common illicit drug used by 14-19 year olds was cannabis (12.2%), followed by pharmaceuticals used for non-medical purposes (3.7%), and ecstasy (3.2%). Data from the 2016 NDSHS was available on a national level at the time of writing this report and jurisdiction-specific data is presented below with the 2013 dataset (5,6).

Alcohol and other drug use in NT

The 2013 National Drug Strategy Household survey (NDSHS) reports that 29.7% of Territorians aged 14 and over were lifetime risky drinkers (18.2% nationally), with 39.7% at least monthly single occasion risky drinkers (26.4% nationally). These prevalence rates are the highest in the nation.

Twenty two percent of Territorians aged 14 and over used an illicit drug in the past 12 months, compared to the national average for of 15%. This level of drug use was the highest in the nation (6).

The Australian School Student Alcohol and Drug (ASSAD) Survey surveyed just over 23,000 school students aged 12 to 17 years in 2014. Across Australia, 14.7% of the 12-17 year old students drank in the last week and 34.0% of these young people drank at risky quantities (5 or more standard drinks in a single occasion (7). No jurisdiction specific data has been published for the Northern Territory.

Youth alcohol use trends across Australia

While in recent years most Australian teenagers have chosen not to drink at all, it seems that those who are continuing to drink, may be drinking in higher quantities (5-8).

As shown in figure 1, half of Australian high school students aged 16-17 drank in the past 7 days in 1984, whereas less than a third had done so in 2014 (7). In contrast, there has been a slight overall increase in the proportion of current drinkers consuming at risky levels (5 or more standard drinks) over time. This latter group may be drinking in higher quantities and contributing to some of the recently elevated rates of alcohol related harm in certain Australian jurisdictions (9). The YAARS project aims to investigate this group of young risky drinkers who are overrepresented in the experience of alcohol-related harms and underrepresented the current general population surveys (1).

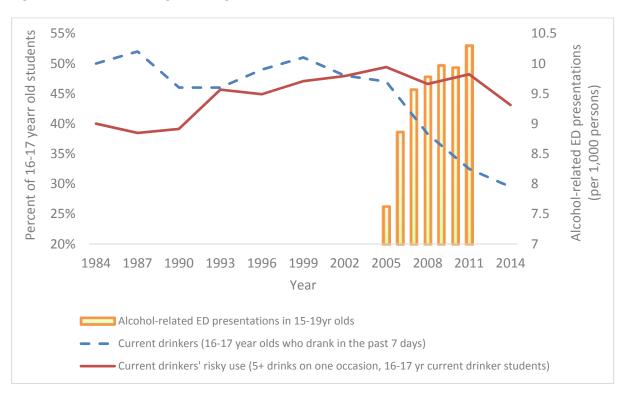


Figure 1. Australian teenage drinking trends 1984 to 2014.

Figure note. Student consumption data from the Australian School Student Alcohol and Drug (ASSAD) Survey. (7). Emergency department data from 2005-06 to 2011-12 includes all Australian jurisdictions excluding Tasmania (9).

Legislative considerations

The legal purchase age for alcohol is 18 in all jurisdictions in Australia (10). The regulation of alcohol availability in the Northern Territory is governed by the Northern Territory of Australia Liquor Act, as in force 1 July 2015 (11). 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 (12). In the case of the Northern Territory, this is covered by Section 106C of the Liquor Act, which specifies it is illegal to supply alcohol to a child (under 18 years of age) unless it is supplied by:

- a parent, step-parent or guardian, or
- an adult who has the parental rights and responsibilities for the child.

However, if the supply of this alcohol is not accompanied by 'responsible supervision', the supplier may still be prosecuted (11).

3. Recruitment

Recruitment for the Darwin face-to-face interviews ran from November 2016 to April 2017.

Materials

To maximise the project's appeal and relevance to the target population, advertising materials were professionally designed. These materials included a poster, postcards, a picture and an animated recruitment video to accompany the Facebook ad, and a banner that was used on the project website, online survey and as the project's Facebook cover.

Recruitment sources

In Darwin, the most popular modes of recruitment for the face to face interviews were snowballing through friends, a poster at the university and social media (see Table 1-2). For self-administered, online surveys, where recruitment occurred throughout the NT, the most popular modes were social media, a poster at the university and snowballing through friends. Note that in the tables the abbreviations 'F2F' and 'Self-administered' have been used to respectively to indicate face to face surveys and self-administered online surveys. 'Both modalities' combines 'F2F' and 'Self-administered' responses.

Table 1. Recruitment sources of Northern Territory participants (both higher and lower risk)

_	Survey modality					
	F2F	Self-	Both			
	F2F	administered	modalities			
Facebook advertisement	19.5%	80.2%	62.0%			
Instagram advertisement	0.0%	2.1%	1.5%			
A poster at university	39.0%	11.5%	19.7%			
A poster in a shop	0.0%	0.0%	0.0%			
A postcard	0.0%	0.0%	0.0%			
Through a friend	51.2%	5.2%	19.0%			
An electronic newsletter	0.0%	2.1%	1.5%			
A service I use (e.g. youth health service)	0.0%	0.0%	0.0%			
Other recruitment method	4.9%	5.2%	5.1%			
Total number	41	96	137			

Table 2. Recruitment sources of Northern Territory participants screened as 'higher risk'

_		Survey modality	у
	F2F	Self- administered	Both modalities
Facebook advertisement	13.3%	83.3%	54.2%
Instagram advertisement	0.0%	0.0%	0.0%
A poster at university	40.0%	14.3%	25.0%
A poster in a shop	0.0%	0.0%	0.0%
A postcard	0.0%	0.0%	0.0%
Through a friend	56.7%	7.1%	27.8%
An electronic newsletter	0.0%	2.4%	1.4%
A service I use (e.g. youth health service)	0.0%	0.0%	0.0%
Other recruitment method	3.3%	0.0%	1.4%
Total	30	42	72

It should be noted that the numbers in Tables 1 and 2 do not reflect total recruitment as in some cases source information was not provided.

Paid Facebook advertisements

Interviewers were briefed that "There are two Facebook ad options. The first is for paid ads that would have appeared in the sidebar or newsfeed. The second Facebook ad option is for the unpaid ads that would have been accessed via a group that the respondent already liked/was subscribed to — such as a university or college page." (YAARS Interviewing Procedure Manual, p.31). Interviewers were encouraged to help respondents distinguish between the two sources (paid and unpaid). However, it is worth noting that respondents may not have been able to distinguish/recall the different types of placements.

Project webpage

The Northern Territory project webpage, http://igce.cdu.edu.au/yaars, included a description of the study, contact details and a link to the self-administered online survey. The Northern Territory Facebook ads were linked to this page.

Word of mouth

Participants were encouraged to recruit their friends for the project. Flyers were provided with the instructions that they could then provide to friends if they were interested in participating.

Posters

A4 project posters with tear away sections listing contact details were posted around the two CDU Darwin campuses and flyers with contact details were left in communal areas.

Other sources

Posters and flyers were also disseminated through:

- Aboriginal Health Service (Danila Dilba)
- Libraries (Darwin, Casuarina, Palmerston)
- Youth services (Headspace, YMCA)
- Sporting clubs

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

The majority of potential respondents made initial contact and were screened via SMSs to the recruitment mobile phone number. However, a substantial proportion also made direct contact with the interviewer who had previously interviewed a friend.

The demographic of 14-15 year old males, and young people identifying as ATSI were generally more difficult to recruit compared to the other groups. Eighteen year olds of both genders were the highest responders.

4. Interviewing

Interviews were conducted over two phases: the first from 01-30 November 2016 and the second from 15 January – 1 April 2017.

Participants were offered one of several meeting locations for the face-to-face interviews. If one of the locations was not convenient for the respondents, an alternate location was arranged. The majority of interviews were conducted in public cafés in the city centre or the suburb adjacent to the university, with a small number conducted in offices on the university campus and in suburban public libraries.

5. YAARS Northern Territory participant sample

A total of 156 14-19 year olds were interviewed or surveyed in the Northern Territory in late 2016 and early 2017: 74 males, 80 females and 2 who did not indicate their gender. Forty-two face-to-face interviews and 114 short online surveys were conducted, and these young people were screened as either the 'top 25% of risky drinkers' or as 'lower risk drinkers' (see Table 3).

The survey eligibility criteria for the heaviest 25% of drinkers by age and gender were based on previous research with young Australians aged 14-19. The criteria were:

- 14-15 year olds who drank 1+ Standard Drinks (SD) in a single session, at least once a month
- 16-17 year olds who drank 5+ SD in a single session, at least twice a month
- 18-19 year old females who drank 7+ SD in a single session, at least twice a month
- 18-19 year old males who drank 9+ SD in a single session, at least twice a month

Young people screened as consuming less than these quantities ('lower risk' participants) provided demographic and past 12 month drinking responses, but will not be described further in this report. This report focuses on the 86 higher risk drinkers (31 who completed a face-to-face interview, and the 55 that completed an online survey), who from this point on, are simply referred to as 'the participants'.

Table 3. Face-to-face interviews and self-administered (online) surveys conducted in the Northern Territory by age, gender and screening status

			F2F			Se	lf-administe	red
Gender	Age	Lower Risk	Top 25%' of risky drinkers	Total interviews	-	Lower Risk	Top 25%' of risky drinkers	Total surveys
	14-15	0	0	0	-	2	2	4
	16-17	3	11	14		11	8	19
Male	18-19	4	8	12		12	13	25
	Total	7	19	26	-	25	23	48
	14-15	0	0	0	-	4	6	10
Famala	16-17	2	2	4		11	11	22
Female	18-19	2	10	12		17	15	32
	Total	4	12	16	-	32	32	64
Not in disease d	16-17	0	0	0	-	2	0	2
Not indicated	Total	0	0	0	-	2	0	2
	14-15	0	0	0	-	6	8	14
Takal	16-17	5	13	18		24	19	43
Total	18-19	6	18	24		29	28	57
	Total	11	31	42	-	59	55	114

Most participants were students (39.5% school, 1.2% TAFE and 26.7% university); most were metropolitan based (88.4%); and very few identified as ATSI (4.7%), in a jurisdiction where 30% of the population are ATSI (see Table 4) (13).

Table 4. Demographic characteristics of the Northern Territory sample screened as eligible 'top 25%' of drinkers

			F2F			Self- inistered	Both r	nodalities
		n	%	_	n	%	n	%
	Male	19	61.3%		23	41.8%	42	48.8%
Gender	Female	12	38.7%		32	58.2%	44	51.2%
	Total	31	100.0%	-	55	100.0%	86	100.0%
	14-15	0	0.0%	-	8	14.5%	8	9.3%
	16-17	13	41.9%		19	34.5%	32	37.2%
Age	18-19	18	58.1%		28	50.9%	46	53.5%
	Total	31	100.0%	-	55	100.0%	86	100.0%
	School student (full time)	11	35.5%	-	23	41.8%	34	39.5%
	TAFE student (full time)	0	0.0%		0	0.0%	0	0.0%
	TAFE student (part time)	1	3.2%		0	0.0%	1	1.2%
	University student (full time)	8	25.8%		15	27.3%	23	26.7%
	University student (part time)	0	0.0%		0	0.0%	0	0.0%
	Trade apprentice (full time)	1	3.2%		4	7.3%	5	5.8%
Occupation	Trade apprentice (part time)	2	6.5%		1	1.8%	3	3.5%
	Employed (casual or part time)	8	25.8%		24	43.6%	32	37.2%
	Employed (full time)	5	16.1%		4	7.3%	9	10.5%
	Unemployed	2	6.5%		0	0.0%	2	2.3%
	Home duties (full time)	0	0.0%		0	0.0%	0	0.0%
	Other	0	0.0%		1	1.8%	1	1.2%
	Total	31	100.0%	_	55	100.0%	86	100.0%
	English only	29	93.5%	-	45	88.2%	74	90.2%
Languages spoken in your home	English and another language(s)	2	6.5%	_	6	11.8%	8	9.8%
your nome	Total	31	100.0%	_	51	100.0%	82	100.0%
Aboriginal	ATSI	2	6.5%		2	3.6%	4	4.7%
and or Torres	Not ATSI	29	93.5%		53	96.4%	82	95.3%
Strait Islander	Total	31	100.0%	_	55	100.0%	86	100.0%
	Greater Capital City area	30	96.8%	_	46	83.6%	76	88.4%
Location	Non-capital city area	1	3.2%		9	16.4%	10	11.6%
	Total	31	100.0%	-	55	100.0%	86	100.0%
	≤\$10	1	3.4%	-	2	3.8%	3	3.7%
	\$10-39	3	10.3%		12	23.1%	15	18.5%
Weekly	\$40-79	9	31.0%		9	17.3%	18	22.2%
budget available	\$80-119	6	20.7%		10	19.2%	16	19.8%
for	\$120-159	3	10.3%		5	9.6%	8	9.9%
recreational	≥ \$160	7	24.1%		11	21.2%	18	22.2%
use	Do not know	0	0.0%		3	5.8%	3	3.7%
	Total	29	100.0%	-	52	100.0%	81	100.0%

Explanatory notes for the main findings section

The data from this project was predominantly quantitative, and was 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 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, and mental health issues are outlined in the national report.

In the following section, age and gender information is compiled in four main categories: Males aged 14 to 17 ('M 14-17'), Males aged 18 to 19 ('M 18-19'), Females aged 14 to 17 ('F 14-17'), and Females aged 18 to 19 ('F 18-19'). There were no Northern Territory participants who identified as transgender and two who preferred not to disclose their gender.

Alcohol quantity was reported as the number of standard drinks consumed, using the beverage-specific response method. Respondents were provided with a visual prompt through a standard drink chart to facilitate recall.

The upper alcohol quantity limit was set at 50 standard drinks. 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 (14). Of note is that there is substantial variation the effect of BAC on an individual depending on factors such as alcohol tolerance, and the period of time the drinking occurred over (e.g. a 'single drinking occasion' may have run for over 24 hours, resulting in a lower BAC) (15).

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.

6. Main findings from the 'last risky drinking session'

These young risky drinkers reported on the last time they 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
- 18-19 year old males on the last time they had 9+ standard drinks

Recall period

Across both the face-to-face and self-administered survey modalities, more than half (57%) reported this last drinking session occurred seven or fewer days prior to completing their survey. The recall period was 14 days or less for 75%, and 28 or fewer days for 87%.

More specifically, most (57%) of the face-to-face sample reported that this last risky drinking session occurred seven or fewer days ago (n=17). More than two thirds (70%) reported it occurred 14 or fewer days ago (n=21), and the great majority (87%) reported it occurred 28 or fewer days ago (n=26). Similarly, 57% of the self-administered survey respondents had their last risky drinking session six or fewer days ago (n=28). Just over three-quarters (78%) reported it occurred 14 or fewer days ago (n=38), and the great majority (90%) reported it occurred 29 or fewer days ago (n=44).

Note that three responses (1 face-to-face and 2 self-administered) with recall periods \geq 100 were excluded.

Drinking locations

Across both survey modalities the most popular drinking location was a friend or acquaintance's home (51%), followed by a nightclub (34%), the respondents' own home (30%) or a bar/pub/hotel (20%). Over eighty percent (82%) of the young people drank at one type of private setting or another (friend's home, own home or car), and over fifty percent (54%) drank at one or more licensed venues, such as a pub or club at the last risky drinking session (see Table 5).

Table 5. Drinking locations at the last risky drinking session by age, gender and survey modality

F2F	Males 14-17	Males 18-19	All males	Females 14-17	Females 18-19	All females	All F2F
Own home	27%	38%	32%	0%	40%	33%	32%
Friend's home	82%	50%	68%	100%	40%	50%	61%
Bar or pub or hotel	0%	13%	5%	0%	50%	42%	19%
Nightclub	0%	63%	26%	0%	80%	67%	42%
Music festival or concert	0%	0%	0%	0%	0%	0%	0%
Sporting event or club	0%	13%	5%	0%	0%	0%	3%
Restaurant	0%	0%	0%	0%	10%	8%	3%
Car	0%	0%	0%	0%	0%	0%	0%
School, TAFE, university	0%	0%	0%	0%	0%	0%	0%
Reception centre or function room	0%	13%	5%	0%	0%	0%	3%
Public or other place	9%	13%	11%	0%	10%	8%	10%
Drank in a private location (a home or car)	100%	88%	95%	100%	80%	83%	90%
Drank in a non-licensed location (home, car, park, beach etc.)	100%	88%	95%	100%	80%	83%	90%
Drank in a licensed venue (bar, pub, club, casino etc.)	0%	63%	26%	0%	80%	67%	42%
Total	11	8	19	2	10	12	31

	Males	Males	All	Females	Females	All	All
Self-administered online survey	14-17	18-19	males	14-17	18-19	females	online
Own home	22%	8%	14%	53%	27%	40%	29%
Friend's home	67%	67%	67%	33%	27%	30%	45%
Bar or pub or hotel	0%	33%	19%	0%	40%	20%	20%
Nightclub	0%	42%	24%	0%	67%	33%	29%
Music festival or concert	11%	8%	10%	0%	0%	0%	4%
Sporting event or club	0%	0%	0%	0%	0%	0%	0%
Restaurant	0%	0%	0%	0%	7%	3%	2%
Car	0%	0%	0%	0%	7%	3%	2%
School, TAFE, university	0%	0%	0%	0%	7%	3%	2%
Reception centre or function room	0%	0%	0%	0%	0%	0%	0%
Public or other place	0%	0%	0%	13%	0%	7%	4%
Drank in a private location (a home or car)	89%	75%	81%	87%	53%	70%	75%
Drank in a non-licensed location (home, car, park, beach etc.)	89%	75%	81%	100%	53%	77%	78%
Drank in a licensed venue (bar, pub, club, casino etc.)	0%	58%	33%	0%	87%	43%	39%
Total	9	12	21	15	15	30	51

	Males	Males	All	Females	Females	All	Both
Both modalities	14-17	18-19	males	14-17	18-19	females	modalities
Own home	25%	20%	23%	47%	32%	38%	30%
Friend's home	75%	60%	68%	41%	32%	36%	51%
Bar or pub or hotel	0%	25%	13%	0%	44%	26%	20%
Nightclub	0%	50%	25%	0%	72%	43%	34%
Music festival or concert	5%	5%	5%	0%	0%	0%	2%
Sporting event or club	0%	5%	3%	0%	0%	0%	1%
Restaurant	0%	0%	0%	0%	8%	5%	2%
Car	0%	0%	0%	0%	4%	2%	1%
School, TAFE, university	0%	0%	0%	0%	4%	2%	1%
Reception centre or function room	0%	5%	3%	0%	0%	0%	1%
Public or other place	5%	5%	5%	12%	4%	7%	6%
Drank in a private location (a home or car)	95%	80%	88%	88%	64%	74%	80%
Drank in a non-licensed location (home, car, park, beach etc.)	95%	80%	88%	100%	64%	79%	83%
Drank in a licensed venue (bar, pub, club, casino etc.)	0%	60%	30%	0%	84%	50%	40%
Total	20	20	40	17	25	42	82

Drinking days and duration

Across both survey modalities, almost three quarters of the drinking sessions were held on Fridays (19%) or Saturdays (54%). The first drink was most commonly consumed in the early evening, between 6 and 8pm (53%), and the last drink between midnight and 3am (62%). The drinking session ran for an average of 6.6 hours (95% CI: 5.8, 7.3).

For face-to-face participants, almost all of the drinking sessions were held on Fridays (10%) or Saturdays (80%). The first drink was most commonly consumed mid evening, between 7 and 8.30pm (63%), and the last drink between midnight and 3am (67%). The mean drinking session duration was 6.5 hours (95% CI: 5.2, 7.8; n=31). For self-administered survey participants, almost two thirds of the drinking sessions were held on Fridays (25%) or Saturdays (39%). The first drink was most commonly consumed in the very early evening, between 6 and 7pm (39%), and the last drink between midnight and 3am (60%). The mean drinking session duration was 6.7 hours (95% CI: 5.7, 7.6; n=49).

Beverage types

The most popular drink types were spirits (83%), beer (44%) and ready to drink beverages 'RTDs' (41%). Females were more likely to report drinking liqueur or cocktails, wine and energy drinks packaged with alcohol than males, although it should be noted that the number of drinkers of the latter beverage, both male and female, was very low. Males were more likely to report drinking beer than females (see Figure 2 and Table 6).

Figure 2. Types of beverages consumed at the last risky drinking session (combined modalities)

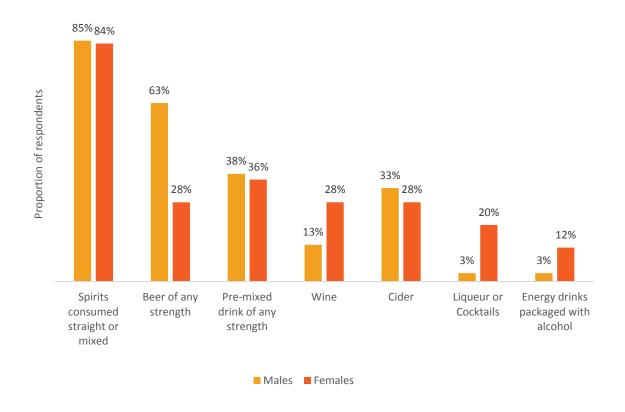


Table 6. Types of beverages consumed at the last risky drinking session

F2F	Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
Spirits consumed straight or mixed	100%	100%	100%	50%	90%	83%	94%
Beer of any strength	55%	63%	58%	0%	10%	8%	39%
RTD of any strength	45%	25%	37%	50%	30%	33%	35%
Wine	9%	0%	5%	0%	40%	33%	16%
Cider	45%	50%	47%	0%	30%	25%	39%
Liqueur or Cocktails	0%	0%	0%	0%	30%	25%	10%
Energy drinks packaged with alcohol	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	20%	17%	6%
Total	11	8	19	2	10	12	31
Self-administered	Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
Spirits consumed straight or mixed	56%	83%	71%	79%	80%	79%	76%
Reer of any strength	000/	E00/	C70/	200/	400/	2.40/	400/

Self-administered	Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
Spirits consumed straight or mixed	56%	83%	71%	79%	80%	79%	76%
Beer of any strength	89%	50%	67%	29%	40%	34%	48%
RTD of any strength	44%	33%	38%	57%	40%	48%	44%
Wine	11%	25%	19%	7%	20%	14%	16%
Cider	11%	25%	19%	29%	27%	28%	24%
Liqueur or Cocktails	0%	8%	5%	14%	13%	14%	10%
Energy drinks packaged with alcohol	0%	8%	5%	0%	20%	10%	8%
Other	0%	0%	0%	0%	0%	0%	0%
Total	9	12	21	14	15	29	50

Both modalities combined	Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
Spirits consumed straight or mixed	80%	90%	85%	75%	84%	80%	83%
Beer of any strength	70%	55%	63%	25%	28%	27%	44%
RTD of any strength	45%	30%	38%	56%	36%	44%	41%
Wine	10%	15%	13%	6%	28%	20%	16%
Cider	30%	35%	33%	25%	28%	27%	30%
Liqueur or Cocktails	0%	5%	3%	13%	20%	17%	10%
Energy drinks packaged with alcohol	0%	5%	3%	0%	12%	7%	5%
Other	0%	0%	0%	0%	8%	5%	2%
Total	20	20	40	16	25	41	81

Pre-drinking

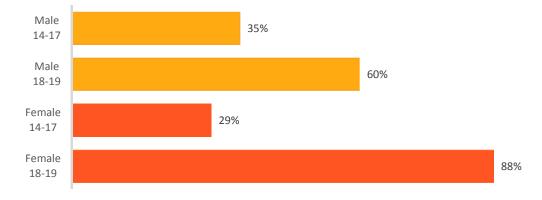
'Pre-drinking', also known as having 'pre's' or 'pre-loading', is consuming alcohol before you 'go out'. For example, you and your friends might drink alcohol at home before going out to a nightclub or a house party where there are more people.

Just over half the survey participants (56%) pre-drank at the last risky drinking session. There were no significant differences in engagement by gender. However, participants aged 18-19 years were more than twice as likely to pre-drink than those aged 14-17 years (76% vs. 32%, X²=14.53, p<.001) (see Table 7 and Figure 3).

Table 7. Pre-drinking at the last risky drinking session

		Male 14-17	Male 18-19	Male	Female 14-17	Female 18-19	Female	Total
	No	64%	13%	42%	100%	10%	25%	35%
F2F	Yes	36%	87%	58%	0%	90%	75%	65%
F2F	Unsure	0%	0%	0%	0%	0%	0%	0%
	Total	11	8	19	2	10	12	31
	No	67%	58%	62%	60%	13%	37%	47%
Self-	Yes	33%	42%	38%	33%	87%	60%	51%
administered	Unsure	0%	0%	0%	7%	0%	3%	2%
	Total	9	12	21	15	15	30	51
	No	65%	40%	53%	65%	12%	33%	43%
Both	Yes	35%	60%	48%	29%	88%	64%	56%
modalities	Unsure	0%	0%	0%	6%	0%	2%	1%
	Total	20	20	40	17	25	42	82

Figure 3. Pre-drinking at the last drinking session



Quantity consumed

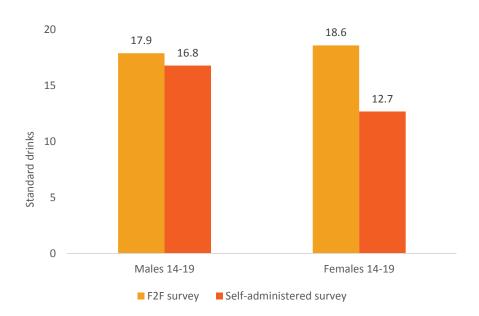
Respondents reported how much alcohol they drank at their last risky drinking session using the beverage specific response method. On average females drank 2.6 fewer drinks than males (14.7 compared to 17.3 drinks) (see Table 8 and Figure 4).

Table 8. Mean alcohol use at the last risky drinking session

							Survey r	modality						
	F2F					9	Self-adm	inistered		Both modalities				
	95% CI for mean						CI for ean		95% CI for mean					
	Mean	LB	UB	n		Mean	LB	UB	n	Mean	LB	UB	n	
Male 14-17	17.8	10	25.6	10		18.8	7.5	30.1	8	18.2	12.4	24.1	18	
Male 18-19	18.1	10	27.8	7		15	5.6	24.4	9	16.4	10.4	22.3	16	
Males 14-19	17.9	12.6	23.3	17		16.8	10.3	23.2	17	17.3	13.4	21.3	34	
Female 14-17	16.4	-54.8	87.5	2		12.5	7.9	17.2	12	13.1	9	17.3	14	
Female 18-19	19.1	12.4	25.7	10		12.9	9.2	16.6	11	15.8	12.2	19.5	21	
Females 14-19	18.6	13	24.2	12		12.7	10	15.5	23	14.7	12.1	17.4	35	
Total	18.2	14.5	21.9	29		14.4	11.4	17.5	40	16	13.7	18.4	69	

Note: responses above 50 standard drinks were excluded from analyses.

Figure 4. Mean alcohol use by gender at the last risky drinking session



The great majority (83%) reported that they usually drank 'a lot less', 'a little less', or 'a similar amount', compared to the last risky drinking session they described in the survey. More specifically, 14% said they usually drank a lot less, 16% usually drank a little less, 53% usually drank a similar amount, 10% usually drank a little more, and 7% usually drank a lot more alcohol (n=70).

Outcomes of alcohol use from last session

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 (16). The 10 most frequently endorsed outcomes experienced in association with the last risky drinking session are presented in Table 9.

Table 9. Outcomes experienced in association with the last risky drinking session

		F2F		Sel	f-administ	ered	Вс	Both modalities			
	Male	Female	All	Male	Female	All	Male	Female	All		
I found it easier to talk to people due to my drinking	53%	50.0%	51.6%	57.1%	72.4%	66.0%	55.0%	65.9%	60.5%		
While drinking, I have said or done embarrassing things	42%	25.0%	35.5%	35.0%	58.6%	49.0%	38.5%	48.8%	43.8%		
I had a hangover (headache, sick stomach) the morning after I had been drinking	47%	66.7%	54.8%	30.0%	50.0%	41.7%	38.5%	55.0%	46.89		
I have felt very sick to my stomach or thrown up after drinking	21%	25.0%	22.6%	40.0%	27.6%	32.7%	30.8%	26.8%	28.8%		
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	16%	8.3%	12.9%	25.0%	24.1%	24.5%	20.5%	19.5%	20.0%		
When drinking, I have done impulsive things I regretted later	21%	8.3%	16.1%	15.0%	13.8%	14.3%	17.9%	12.2%	15.0%		
I've not been able to remember large stretches of time while drinking heavily	26%	16.7%	22.6%	15.0%	17.2%	16.3%	20.5%	17.1%	18.8%		
I have often found it difficult to limit how much I drink	26%	8.3%	19.4%	20.0%	17.2%	18.4%	23.1%	14.6%	18.8%		
I have had less energy or felt tired because of my drinking	11%	16.7%	12.9%	15.8%	31.0%	25.0%	13.2%	26.8%	20.3%		
I have been injured due to my drinking (incl. cuts & bruises)	21%	16.7%	19.4%	15.0%	27.6%	22.4%	17.9%	24.4%	21.3%		
N	19	12	31	20	29	49	39	41	80		

Use of safety strategies while drinking

Use of safety (harm reduction) strategies during the past 12 months was assessed using Martens' Protective Behavioral Strategies Scale (16). These behavioural strategies can limit alcohol-related problems even after controlling for the quantity of alcohol consumed. Table 10 lists the safety strategies 'always' or 'usually' engaged in while drinking by gender and survey administration modality. Across both modalities: females were much more likely than males to stop drinking at a predetermined time (27% compared to 3%); and more likely to know where their drink had been (81% compared to 63%). Males, on the other hand, were more likely than females to drink water while drinking alcohol (60% compared to 43%).

Table 10. Safety strategies usually or always engaged in while drinking in the past 12 months

	F2F			Sel	f-administe	red	Both modalities		
	Male	Female	All	Male	Female	All	Male	Female	All
Subscale 1: Stopping/Limiting Drinking									
Determine not to exceed a set number of drinks	16%	27%	20%	19%	23%	21%	17%	24%	21%
Alternate alcoholic and non-alcoholic drinks	37%	36%	37%	31%	15%	21%	34%	22%	28%
Have a friend let you know when you have had enough to drink	32%	45%	37%	25%	19%	21%	29%	27%	28%
Leave the bar or party at a predetermined time	37%	36%	37%	6%	27%	19%	23%	30%	26%
Stop drinking at a predetermined time	0%	45%	17%	6%	19%	14%	3%	27%	15%
Drink water while drinking alcohol	63%	64%	63%	56%	35%	43%	60%	43%	51%
Put extra ice in your drink	16%	27%	20%	31%	23%	26%	23%	24%	24%
Subscale 2: Manner of Drinking									
Avoid drinking games	5%	18%	10%	6%	12%	10%	6%	14%	10%
Drink shots of spirits (risk behaviour)	89%	36%	70%	50%	69%	62%	71%	59%	65%
Avoid mixing different types of alcohol	16%	45%	27%	25%	27%	26%	20%	32%	26%
Drink slowly, rather than gulp or scull	26%	27%	27%	25%	15%	19%	26%	19%	22%
Avoided trying to "keep up" or out-drink others	32%	36%	33%	31%	19%	24%	31%	24%	28%
Subscale 3: Serious Negative Consequences									
Use a designated driver	79%	82%	80%	81%	81%	81%	80%	81%	81%
Made sure that you go home with a friend	68%	82%	73%	63%	58%	60%	66%	65%	65%
Know where your drink has been at all times	58%	82%	67%	69%	81%	76%	63%	81%	72%
Total	19	11	30	16	26	42	35	37	72

Table note: Response options presented in the survey were: never, rarely, occasionally, sometimes, usually and always. These six options were dichotomised for summary purposes and this table represents individuals who selected usually or always.

7. References

- 1. Lam T, Lenton S, Ogeil R, Burns L, Aiken A, Chikritzhs T, et al. Most recent risky drinking session with Australian teenagers. *Australian and New Zealand Journal of Public Health*. 2017;41(1):105-10.
- 2. Australian Bureau of Statistics. *2011 Census QuickStats Darwin 2013*. Available from: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/7GDAR?opendocument&navpos=220#cultural.
- 3. Department of Education Policy Enrolment 2015. Available from: https://www.nt.gov.au/ data/assets/pdf_file/0003/257943/Enrolment-policy.pdf.
- 4. National Health and Medical Research Council (NHMRC). *Australian guidelines to reduce health risks from drinking alcohol*. Canberra: Commonwealth of Australia. 2009.
- 5. Australian Institute of Health and Welfare. 2017 National Drug Strategy Household Survey (NDSHS) 2016 key findings. Available from: http://www.aihw.gov.au/alcohol-and-other-drugs/data-sources/ndshs-2016/alcohol/.
- 6. Australian Institute of Health and Welfare. 2013 National Drug Strategy Household Survey. Detailed report 2013. Drug statistics series no. 28. Cat. no. PHE 183. Canberra: AIHW.2014.
- 7. White V, Williams T. Australian secondary school students' use of tobacco, alcohol, and over-the-counter and illicit substances in 2014. Victorian Department of Health & The Cancer Council Victoria. 2016.
- 8. Ogeil RP, Gao CX, Rehm J, Gmel G, Lloyd B. Temporal changes in alcohol-related mortality and morbidity in Australia. *Addiction*. 2016;111(4):626-34.
- 9. Lensvelt E, Gilmore W, Gordon E, Hobday M, Liang W, Chikritzhs T. *Trends in estimated alcohol-related emergency department presentations in Australia 2005-06 to 2011-12*. National Drug Research Institute, Curtin University. 2015.
- 10. Trifonoff A, Andrew R, Steenson T, Nicholas R, Roche AM. *Liquor licensing in Australia: An overview*. Adelaide, South Australia: National Centre for Education and Training on Addiction (NCETA), Flinders University. 2011.
- 11. Northern Territory Liquor Act, as at 1 July 2015, Available from: https://www.onlinersa.com.au/rsa/RSA-Online-Training/RSA-Online-NT-Northern-Territory-RSA-Certificate/RSA-Online-Northern-Territory-Reference-Resources/NT-Northern-Territory-Liquor-Actas-at-1-July-2015.
- 12. Roche AM, Steenson T, Andrew R. Alcohol and young people: What the legislation says about access and secondary supply. *Drug and Alcohol Review*. 2013;32(2):124-32.
- 13. Australian Bureau of Statistics. 2011 1362.7 Regional Statistics, Northern Territory, Mar 2011. Available from:

 $\frac{\text{http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/1362.7Feature\%20Article1Mar\%202011?}{opendocument.}$

- 14. Jones AW. The drunkest drinking driver in Sweden: Blood alcohol concentration 0.545 % w/v. *Journal of Studies on Alcohol*. 1999;60(3): 400-406.
- 15. Rubenzer, S. Judging intoxication. *Behavioral Sciences & the Law.* 2011;29(1): 116-137.
- 14. Kahler CW, Strong DR, Read JP. Toward efficient and comprehensive measurement of the alcohol problems continuum in college students: The Brief Young Adult Alcohol Consequences Questionnaire. *Alcoholism: Clinical and Experimental Research*. 2005;29(7):1180-9.
- 15. Martens MP, Ferrier AG, Cimini M. Do protective behavioral strategies mediate the relationship between drinking motives and alcohol use in college students? *Journal of Studies on Alcohol and Drugs*. 2007;68(1):106-14.