Drug and Alcohol Services South Australia

# **DASSA Statistical Bulletin**

# Number 17 – May 2019<sup>1</sup>

Alcohol and other drug use among South Australian secondary school students: Findings from the South Australian component of the 2017 Australian Secondary Students' Alcohol and Drug (ASSAD) Survey





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### Alcohol and other drug use among South Australian secondary school students: Findings from the South Australian component of the 2017 Australian Secondary Students' Alcohol and Drug (ASSAD) Survey.

### **Background and Methodology**

Every three years, students throughout Australia participate in the Australian Secondary Students' Alcohol and Drug (ASSAD) Survey. In South Australia, the survey is conducted by Cancer Council SA. The ASSAD Survey investigates the use of both licit and illicit substances among students between the ages of 12 and 17 years recruited from South Australian Government, Catholic and Independent schools. The 2017 iteration is the twelfth in the series.

There was a change to the methodology in South Australia in 2014, which has impacted on the sample sizes obtained in 2014 and 2017. As a condition of ethics approval from the Department of Education and Child Development, an active consent procedure was required where only children with a signed parental consent form could participate in the survey. This differs to previous where passive consent was used: all parents were notified of the survey and could opt-out if they did not want their child to participate. Research on what impact this difference in methodology may have on survey results was conducted in Victoria during the 1999 survey and found that active parental consent is likely to lead to underestimates in the prevalence of substance use<sup>2</sup>. Recruitment of research participation requests, scheduling (e.g. curriculum pressure, exams, school events) and staff time. The final South Australian weighted samples<sup>3</sup> for 2014 (*N*=1856) and 2017 (*N*=1342) are substantially smaller than in previous years (e.g. *N*=2875 in 2011 and *N*=2984 in 2008), and results may underestimate the prevalence of alcohol and drug use among secondary students in South Australia. Therefore, results comparing 2014 and 2017 surveys with data from previous iterations should be interpreted with caution.

Data from 2014 and 2017 have been compared for statistical significance using a Chi-square test to assess differences in frequencies of drug use. Due to small numbers, breakdowns by individual ages are unreliable; therefore comparisons have only been made in 2017 between those aged 12-15 years, and those aged 16-17 years, as well as by sex. In addition, use of individual drugs is not reported, with the exception of alcohol, analgesics, tranquillisers, inhalants and cannabis, where sample sizes were large enough to provide reliable estimates<sup>4</sup>. Six illicit drugs<sup>5</sup> have been combined into one category, which measures use of at least one of these.

Previous DASSA Statistical Bulletins have only reported drug and alcohol use over two time periods: 'ever used' and 'used in the last week'. Once again, due to the smaller sample size achieved in 2017, data on use in the last year and in the last month for selected drugs where estimates were reliable have been included. These comparisons are only available in 2014 and 2017.

# Key findings

### Alcohol - Consumption

- Between 2011 and 2014, there were significant decreases in the proportion of students that had ever used alcohol (from 77.5% to 67.4%), or had used in the last week (from 15% to 10.4%). This remained unchanged in 2017 (66.8% reported ever using and 12.3% in the last week).
- The proportion of students that had ever used alcohol and had used in the last week decreased significantly between 2011 and 2014 among both male and female students, but remained unchanged in 2017.

- Decreases in the proportion of students that had ever used alcohol between 2011 and 2014 were statistically significant among students aged 12-15 years (from 72.1% to 59.9%), and 16-17 years (from 89.4% to 83.2%), remaining unchanged in 2017.
- Decreases in the proportion of students that had used alcohol in the last week between 2011 and 2014 were significant among those aged 12-15 years (from 9.3% to 5.2%), remaining unchanged in 2017 (7.4%).
- In 2017, students aged 16-17 years were significantly more likely to report ever using alcohol (78.9% vs. 60.4% of 12-15 year olds), as well as using in the last year (64.2% vs. 34.1%), month (41.5% vs. 15.7%) and week (21.6% vs. 7.4%).
- Almost one-fifth (17.2%) of students consumed more than four standard drinks at least once in a single occasion of drinking within the past two weeks, and 26.8% within the last month. Just over half (51.6%) had done so in the last year, and 57.2% in their lifetime.

### Alcohol – Drinking Behaviour and Attitudes

- The alcoholic drinks usually consumed included regular strength beer (24.3%), followed by premixed spirits (23.4%).
- Male students usually consumed regular strength beer (35.6%); female students usually consumed pre-mixed spirits (35.5%).
- Students aged 12-15 years usually consumed regular strength beer and premixed spirits; students aged 16-17 years usually consumed pre-mixed spirits and regular strength beer.
- Students usually sourced alcohol from their parents (56%) or friends (21.6%).

### Other drugs

- The proportion of students that had ever used at least one illicit drug remained unchanged between 2014 (14%) and 2017 (12.8%).
- There were no significant differences in the proportion of male (12.6%) or female (13.1%) students who had ever used at least one illicit drug in 2017.
- Although illicit drug use has remained relatively unchanged over time, in 2017 those aged 16-17 years were significantly more likely to have ever used at least one (18.2% vs. 9.7% of those aged 12-15 years) or to have used at least one in the last year (17.6% vs. 7.7% of those aged 12-15 years).
- The proportion of students that had ever used cannabis did not change significantly between 2014 (11.2%) and 2017 (10.2%); students aged 16-17 years were significantly more likely to have ever used (17% vs. 6.6% of those aged 12-15 years) or to have used in the last year (16.4% vs. 5.3% of those aged 12-15 years).
- Analgesics were the most commonly used licit drugs in 2017 (95.9% had ever used and 38.8% had used in the previous week).
- Sample sizes were too small to produce reliable estimates of use for drugs such as methamphertamine, ecstasy, hallucinogens and heroin.

### Results

### Alcohol: frequency of use

After a small increase between 1996 and 2002, the proportion of students reporting that they had ever used alcohol has decreased (see Figure 1). Although there were statistically significant decreases between 2008 (85.1%) and 2011 (77.5%), as well as between 2011 and 2014 (67.4%), use remained stable in 2017 (66.8%). Figure 1 also shows that the proportion of students who had used alcohol in the last week decreased significantly between 2008 (23%) and 2011 (15%), and between 2011 and 2014 (10.4%), with no change in 2017 (12.3%). The decreases between 1996 and 2017 of 22 percentage points in ever used alcohol and 19 percentage points in used alcohol in the last week were statistically significant.



### Figure 1: Proportion of secondary school students that had ever used alcohol or used in the last week, 1996-2017

Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

### <u>Sex</u>

Figures 2 and 3 show the proportion of students that had ever used alcohol, and used alcohol in the last week by sex. There were statistically significant decreases in the proportion ever used among both male and female students between 2011 and 2014, from 78.3% to 69.4% for male students and from 76.7% to 65.5% for female students. The proportion of male and female students that had ever used alcohol did not change between 2014 and 2017.



# Figure 2: Proportion of secondary school students that had ever used alcohol by sex, 2011-2017

Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

Despite a significant decrease in the proportion of students that had ever used alcohol between 2011 and 2014, the proportion that had used in the last week did not change significantly: from 15.3% to 10.5% for male students and from 14.8% to 10.2% for female students. Similarly, the proportion that had used in the last week was not significantly different between 2014 and 2017, reported by 13% of male students and 11.3% of female students in 2017.



Figure 3: Proportion of secondary school students that had used alcohol in the last week by sex, 2011-2017

Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

### Age group

Decreases in the proportion of students that had ever used alcohol between 2011 and 2014 were statistically significant among students aged 12-15 years (from 72.1% to 59.9%), and 16-17 years (from 89.4% to 82.8%), with no change between 2014 and 2017 (see Figure 4). Decreases in the proportion of students that had used alcohol in the last week between 2011 and 2014 were only significant among students aged 12-15 years (from 9.3% to 5.2%), remaining stable in 2017 (7.4%; see Figure 5). There was no change in the proportion of students that had used in the last week between 2014 and 2017 among students aged 16-17 years (21.3% vs. 21.6%).

In 2017, students aged 16-17 years were significantly more likely than younger students to have ever used alcohol (78.9% vs. 60.4% of those aged 12-15 years), as well as used alcohol in the last year (64.2% vs. 34.1% of those aged 12-15 years), the last month (41.5% vs. 15.7% of those aged 12-15 years) and the last week (21.6% vs. 7.4%).

Figure 4: Proportion of secondary school students that had ever used alcohol by age group, 2011-2017



Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously



Figure 5: Proportion of secondary school students that had used alcohol in the last week by age group, 2011-2017

Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

### Alcohol: quantity of use

Figure 6 shows that 17.2% of students in 2017 consumed more than four standard drinks at least once in a single occasion of drinking within the past two weeks, and 26.8% within the last month. Just over half (51.2%) had done so in the last year, and 57.2% in their lifetime. There were no statistically significant differences between male and female students, or between 2014 and 2017.

# Figure 6: Proportion of students consuming more than four drinks on one occasion at various frequencies, 2017



### Alcohol: drinking behaviour and attitudes

### Drink preference

Figure 7 shows that the main drink usually consumed by students in 2017 was regular strength beer (24.3%), followed by pre-mixed spirits (23.4%). A further 14.7% usually drank bottled wine or sparkling wine and 13.3% drank cider. The only significant change between 2014 and 2017 was a higher proportion of students in 2017 reporting that their main drink was bottled spirits and liqueurs (13.5% vs. 9.9%).



Figure 7: Main drink usually consumed by secondary school students, 2014 and 2017\*

\* Only includes students who stated that they have had ever used alcohol. Multiple responses by individual students were excluded so this figure shows students' first selection only; data therefore differ slightly from the DASSA Statistical Bulletin analysing the 2014 ASSAD Survey. Significance testing was carried out with each category compared with all others summed. *N*=1245 and *N*=890 reported having consumed alcohol in their lifetime in 2014 and 2017, respectively.

Figure 8 shows drink preferences by sex. In 2017, male students were significantly more likely to usually drink regular strength beer than female students (35.6% vs. 10.7%), as well as bottled spirits (16.5% vs. 10%). Conversely, almost twice the proportion of female students reported that they usually drank bottled/sparkling wine (21.6% vs. 8.8%) and they were significantly more likely to drink pre-mixed spirits (35.5% vs. 13.2%). Female students' drink preferences were most commonly premixed spirits, bottled wine and cider; male students usually drank regular strength beer and bottled spirits.

Drink preferences did not change between 2014 and 2017, with the exception of a significant increase in the proportion of male students reporting that they usually drank bottled spirits and liqueurs (from 6.8% to 16.5%).

#### Figure 8: Main drink usually consumed by secondary school students by sex, 2014 and 2017\*



\* Only includes students who stated that they had ever used alcohol. Multiple responses by individual students were excluded so this figure shows students' first selection only; data therefore differ slightly from the DASSA Statistical Bulletin analysing the 2014 ASSAD Survey. The top five alcoholic drinks are shown here. Significance testing was carried out with each category compared with all others summed.

Figure 9 shows drink preferences by age group. In 2017, students aged 12-15 years were significantly more likely to usually drink regular strength beer than those aged 16-17 years (29.8% vs. 17.9%). Conversely, almost double the proportion of students aged 16-17 years reported that they usually drank pre-mixed spirits (31.5% vs. 16.3%) and bottled spirits (16.8% vs. 10.5%). However, the most common drink preferences for both age groups were pre-mixed spirits and regular strength beer.

Drink preferences did not change between 2014 and 2017 for those aged 12-15 years. For those aged 16-17 years, there was a significant decrease in the proportion reporting that they usually drank regular strength beer (from 25.8% to 17.9%), and an increase in usually drinking pre-mixed spirits (from 24.5% to 31.5%).

# Figure 9: Main drink usually consumed by secondary school students by age group, 2014 and 2017\*



\* Only includes students who stated that they had ever used alcohol. Multiple responses by individual students were excluded so this figure shows students' first selection only; data therefore differ slightly from the DASSA Statistical Bulletin analysing the 2014 ASSAD Survey. The top five alcoholic drinks are shown here. Significance testing was carried out with each category compared with all others summed.

### Source of supply

Figure 10 shows that in 2017, the usual source of students' most recent alcoholic drink was parents (56%) or friends (21.6%). There were no significant differences between male and female students, but there were differences by age group. Students aged 12-15 years were more likely to report that their parents bought them alcohol (64.6% vs. 45.8%), whereas students aged 16-17 years were more likely to report that they were given alcohol by a friend aged either under 18 (13.7% vs. 8%) or over 18 years (17.2% vs. 5.9%).

Around three in five students (61.3%) who reported that someone had purchased their most recent alcoholic drink stated that it was a friend, either over 18 (52.4%) or under 18 (8.9%) years. One-quarter (24.8%) did not specify who purchased the alcohol. The sample size in 2017 (N=42) was too small to enable comparisons with previous years, or by sex and age group.

#### Figure 10: Source of most recent alcoholic drink for secondary school students, 2014 and 2017\*



\* Only includes students who stated that they had ever used alcohol. Multiple responses by individual students were excluded so this figure shows students' first selection only; data therefore differ slightly from the DASSA Statistical Bulletin analysing the 2014 ASSAD Survey. Significance testing was carried out with each category compared with all others summed. N=1245 and N=890 reported having consumed alcohol in their lifetime in 2014 and 2017, respectively.

### Location of last drink

Figure 11 shows that in 2017, the most common place where students last consumed alcohol was at home (35%), at a party (19%) and at a friend or family member's home (11%). Almost one-quarter (23.9%) did not provide a response. There were no significant changes between 2014 and 2017.



Figure 11: Location of last drink consumed by secondary school students, 2014 and 2017\*

% who consumed their last drink at this location

\* Only includes students who stated that they had ever used alcohol. Multiple responses by individual students were excluded so this figure shows students' first selection only; data therefore differ slightly from the DASSA Statistical Bulletin analysing the 2014 ASSAD Survey. Significance testing was carried out with each category compared with all others summed. *N*=1245 and *N*=890 reported having consumed alcohol in their lifetime in 2014 and 2017, respectively.

### Risky behaviour / negative consequences

The incidence of behaviours such as drink-driving and verbal or physical assault after drinking was examined among those who had consumed alcohol in the last 12 months. Note that students could choose multiple responses for this question.

In 2017, 36.6% (*N*=218) of those who had consumed alcohol in the last 12 months reported at least one type of risky or undesirable behaviour (see Figure 12). Just over one-third (36%) reported one behaviour, 38.5% two or three, and 17.6% four or more (the maximum was 10). Of these 218 students, the most common was vomiting (54.6%), doing something you later regretted (46.8%), having a verbal or physical argument (41.7%), and trying cigarettes (33%) and/or drugs (22%).

In 2014, 28.1% (N=223) of those who had consumed alcohol in the last 12 months reported at least one type of risky or undesirable behaviour. Almost half (44.7%) reported one behaviour, 37.6% two or three, and 25.5% four or more (the maximum was 13). The most common was having a verbal or physical argument (57.8%), vomiting (50.2%), and trying cigarettes (39%) and/or drugs (12%). In 2014, there was no option for 'doing something they later regretted' or 'lost money or other items'. A further 22.4% reported having gone to work or school, which no respondents chose in 2017. Due to differences in the options available between surveys, no significance testing was carried out between 2014 and 2017.

Drink-driving was uncommon. Of those who reported risky behaviour after drinking in the last 12 months, 3.1% (*N*=7) in 2014 and 2.3% (*N*=5) in 2017 reported that they had driven while intoxicated.



Figure 12: Risky behaviours after consuming alcohol among secondary school students who had drunk alcohol at least once in the last 12 months, 2014 & 2017

Students were also asked how often, when drinking alcohol, they intended to get intoxicated. Figure 13 shows that in 2017, 60.4% stated that they did not intend to get intoxicated, no change from 2014 (58.8%). Less than 3% stated that they intended to get intoxicated every time they drank.



Figure 13: Intention to get drunk among secondary school students, 2014 & 2017

■2014 ■2017

### Illicit drugs: frequency of use

Due to unreliable estimates, prevalence rates for the majority of illicit drugs could not be reported individually. Rather, data are presented on the proportion of students who had used at least one of six illicit drugs at different frequencies (ever, in the last year or in the last month). Data on use in the last week were not reported due to unreliable estimates.

As was observed with alcohol, Figure 14 shows that illicit drug use has decreased significantly since 1996. In 2017, 12.8% of students reported ever using at least one illicit drug; this was unchanged between 2014 and 2017.



# Figure 14: Proportion of secondary school students that had ever used at least one illcit drug, 1996-2017

Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

# <u>Sex</u>

There was no significant difference in the proportions of male (12.6%) and female (13.1%) students that had ever used at least one illicit drug in 2017 (see Figure 15). There were also no changes between 2014 and 2017: in 2014, 13.5% of female students had ever used at least one illicit drug; 14.6% of male students.

### Figure 15: Proportion of secondary school students that had ever used at least one illicit drug by sex, 2011-2017



Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

#### Age group

Since 2011, the proportion of students aged 12-15 years that had ever used at least one illicit drug has remained stable: 9.8% in 2014 and 9.7% in 2017 (see Figure 16). Among 16-17 year olds, the proportion that had ever used was consistently higher, but decreased significantly between 2011 (29%) and 2017 (18.2%). There were no significant changes between 2014 and 2017 for either age group.

Although illicit drug use has remained relatively stable over time, in 2017 those aged 16-17 years were significantly more likely to have ever used at least one (18.2% vs. 9.7% of those aged 12-15 years) or to have used at least one in the last year (17.6% vs. 7.4% of those aged 12-15 years).



# Figure 16: Proportion of secondary school students that had ever used at least one illicit drug by age group, 2011-2017

Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

### Illicit drugs: cannabis

In 2017, 10.2% of students had ever used cannabis, making it the most commonly used illicit drug. This has remained relatively unchanged since 2008 (see Figure 17).





Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

In 2017, there was no significant difference in the proportions of male and female students that had ever used cannabis (10.4% and 10.1%, respectively), and no significant change between 2014 and 2017 for either sex (see Figure 18).



Figure 18: Proportion of secondary school students that had ever used cannabis by sex, 2011-2017

Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

The proportion of students reporting that they had ever used cannabis did not change between 2014 and 2017 for those aged 12-15 years and 16-17 years (see Figure 19). In 2014, 7% of 12-15 year olds had ever used cannabis; 6.6% in 2017. For 16-17 year old students, 19.6% reported having ever used cannabis in 2014; 17% in 2017.

In 2017, a significantly higher proportion of students aged 16-17 years had ever used cannabis (17% vs. 6.6% of those aged 12-15 years) or had used in the last year (16.4% vs. 5.3% of those aged 12-15 years).

### Figure 19: Proportion of secondary school students that had ever used cannabis by age group, 2011-2017



Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

### Licit drugs

Data on licit drugs are presented in Figures 20 and 21. Analgesics such as paracetamol or ibuprofen were the most widely used drugs. Nearly all students (95.9%) had used these at some time in their life and 38.8% had used them in the week prior to the survey. The proportion of students who had used these drugs generally remained unchanged between 2014 and 2017, with the exception of students aged 16-17 years, where the proportion that had ever used increased significantly from 92.6% to 96.6%, and the proportion that had used these drugs in the last year increased significantly from 88.3% to 95%. In addition, the proportion of male students who used analgesics in the last year increased significantly, from 85.7% in 2014 to 92.1% in 2017.

In 2017 a significantly higher proportion of students aged 16-17 years reported use of analgesics in the last week (44.5% vs. 35.7% of those aged 12-15 years). In addition, a higher proportion of female students reported use of analgesics in the last month (74.8% vs. 61.1% of male students) and in the last week (45.2% vs. 33.1% of male students.

Sedatives had been used at some time (other than for medical reasons) by 15.7% of students in 2017 and 2.5% of students in the last week; unchanged from 2014 (15.1% and 2.4%, respectively). There was a significant increase in the proportion of students aged 16-17 years that had ever used sedatives between 2014 (12.5%) and 2017 (20%), and a significant decrease in the proportion of students aged 12-15 years that had used sedatives in the last year (from 10.2% to 7.1%). However, there were no differences between male and female students.

In 2017, a significantly higher proportion of students aged 16-17 years had used sedatives in the last year (14.7% vs 7.1% of students aged 12-15 years) and a significantly higher proportion of female students had used analgesics in the last month (74.8% vs. 61.1% of male students).

The proportion of students that had used inhalants has also decreased since 1996; there were no differences in the use of these drugs by sex or age group, except for a significant increase in the proportion of students aged 16-17 years that had used inhalants in the last year: from 4.5% in 2014 to 8.5% in 2017.

# Figure 20: Proportion of secondary school students that had ever used selected licit drugs\*, 1996-2017



\* In 2017, the estimate for steroids is based on a sample size of 10 or less and is therefore unreliable. Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously



Figure 21: Proportion of secondary school students that had used selected licit drugs\* in the last week, 1996-2017

\* In 2014 and 2017, the estimate for steroids is based on a sample size of 10 or less and is therefore unreliable. Comparisons between 2014/2017 and earlier data should be made with caution due to the change in methodology described previously

### For more information

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- The Cancer Council, South Australia
- Cancer Council, Victoria
- Catholic Education Office
- Independent Schools Board
- Participating staff & students

<sup>&</sup>lt;sup>1</sup> In 2020, the data custodians identified errors with the weighting variables used in the 2017 dataset, as well as inconsistencies in data cleaning procedures. Revised data were provided and analyses were re-run to test for statistical significance. Only minor differences were observed, which did not change the overall findings. Note that two sets of variables (original and recoded) measuring prevalence were provided in the original dataset. The recoded set was used to produce prevalence estimates for South Australia; findings may therefore differ slightly from those reported elsewhere. Analyses were performed this way to remain consistent with those from previous years. The only exception to this was alcohol, where only one set of estimates was provided.

only exception to this was alcohol, where only one set of estimates was provided. <sup>2</sup> White VM, Hill DJ, Effendi Y. (2004). How does active parental consent influence the findings of drug-use surveys in schools? Evaluation Review; 28(3): 246-260.

<sup>&</sup>lt;sup>3</sup> Cases where age and/or sex were missing were given a weighting of 1, rather than excluding them from the analyses (N=21 in 2014 and N=11 in 2017). Overall data from 2014 may therefore differ from that reported previously (between 0.1 and 0.2 percentage points only).

<sup>&</sup>lt;sup>4</sup> Estimates where the Relative Standard Errors (RSEs) were greater than 25% have been excluded from statistical analyses.

<sup>&</sup>lt;sup>5</sup> 'Illicit drugs' include: cannabis, methamphetamine, ecstasy, cocaine, heroin and hallucinogens.