

Youth'07

The Health and Wellbeing
of Secondary School Students in New Zealand



Young People and Alcohol

A report commissioned by the Alcohol Advisory Council of New Zealand

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All photographs in this report are used with the permission of the young people involved.

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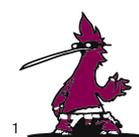
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Note that the tables for this report are available on the Youth2000 website: www.youth2000.ac.nz





Executive summary

This report uses data from the *Youth2000* surveys of young people attending mainstream secondary schools to provide a detailed contemporary profile of attitudes to alcohol, the context and patterns of drinking, adverse effects and concerns regarding drinking among New Zealand youth. The primary focus is on findings from the survey conducted in 2007. Where relevant, these findings are compared to the equivalent data from the previous survey conducted in 2001. Each of the surveys involved random samples of over 9,000 students.

This summary identifies statistically significant findings and, where they are relevant, differences that were not statistically significant are also highlighted. Where factors with multiple categories (such as age groups or ethnic groups) are examined, the statistical test of significance relates to whether there is a significant difference in the percentages across the group as a whole rather than looking at differences of any one category compared to another (eg, NZ European students compared with Pacific students). In this report, italics are sometimes used to emphasise specific aspects of questions (eg, drinking patterns as they relate to *usually*, or *in the past 4 weeks*).

In interpreting the data, it is important to note that the surveys were of secondary school students. The findings are not representative of all New Zealand adolescents, rather only those who attend mainstream secondary schools. It should also be noted that, given the cross-sectional survey design, the data from the 2007 and 2001 surveys each relate to those particular points in time and cannot be used to determine 'cause and effect' relationships.

Students' attitude to drinking, and alcohol use by family and friends

In 2007, just over a third of students (37.4% of males, 33.1% of females) thought it was okay for people their age to drink alcohol regularly, and just under two-thirds (62.9%) reported that their parents drink.

There was significant variation between ethnic groups in responses to these questions. Pacific and Asian students were less likely than other ethnic groups to think it was okay for people their age to drink regularly, and also less likely to report that their parents drink.

Comparing the two surveys, there was a significant decline in the proportion of students who thought it was okay for people their age to drink regularly (from 49.1% in 2001 to 35.4% in 2007) and also in the proportion of students who reported that their parents drink (from 72.2% in 2001 to 62.9% in 2007). However, there was no significant change in the proportion of students reporting that their friends drink alcohol (62.4% in 2001; 64.5% in 2007).

Alcohol use by students¹

In 2007, 71.6% of students reported having ever drunk alcohol, and 60.6% reported that they currently drink.² In both cases these represented significant declines from 2001, when 81.9% of students reported having ever drunk, and 70.1% reported that they currently drink. Similarly, there was a significant decline in the overall proportion of students reporting binge drinking (ie, consuming 5 or more alcoholic drinks in one 4 hour session) in the past 4 weeks (34.4% in 2007; 40.1% in 2001).

At the younger ages (13 or under) more male students (54.1% in 2007) than females (47.0%) had tried alcohol but by age 17 and older there was no difference between the proportions of males and females who reported they had *ever drunk* alcohol (85.9% males, 85.1% females). The proportion of students who *currently drink* was similar among males (60.8% in 2007) and females (60.3% in 2007).

1. The figures noted in this section relate to the patterns of use by all students in the survey, and differs from the next section which is limited to students who are current drinkers.

2. 'Current drinkers' were those who noted they had drunk alcohol at some point in their lives and in a subsequent key indicator, did *not* respond "I don't drink alcohol now".



However, there was significant variation between students from different levels of socio-economic deprivation³ and different ethnic groups. Students from more deprived neighbourhoods were less likely to be current drinkers (high deprivation 56.2%, medium deprivation 61.3%; low deprivation 62.6 %). Asian and Pacific students were less likely than Māori and NZ European students to have ever drunk, or to currently drink.

There were significant differences by sexual attraction: same/both-sex-attracted students were significantly more likely to report having ever drunk alcohol (85.1%) compared with opposite-sex-attracted students (73.8%), and significantly more likely to be current drinkers (74.7%) compared with opposite-sex-attracted students (63.1%).

Frequency, amount and type of alcohol consumed by current drinkers

In 2007, 23.5% of current drinkers had not consumed alcohol in the previous four weeks, while 29.5% had drunk once a week or more often in that time. There was a general trend for the frequency of drinking to increase with age, particularly among males. The overall pattern of frequency of alcohol use did not change significantly between 2001 and 2007.

In 2007, there was significant variation between ethnic groups in the reported frequency of drinking among current drinkers. The findings suggest that Asian current drinkers were more likely than other ethnic groups to report *not* drinking in the previous four weeks, while Māori and Pacific current drinkers were more likely than other ethnic groups to report drinking several times a week or more often.

When asked how much they usually drink, 46.1% of current drinkers in 2007 reported that they usually consume 5 or more alcoholic drinks within a 4 hour session – ie, binge drinking. Included in this group were 17.6% of current drinkers who reported usually consuming 10 or more standard drinks in a session. As another measure of binge drinking, current drinkers were asked how often, in the past 4 weeks, they had drunk 5 or more alcoholic drinks within a 4 hour session: in 2007, 57.0% of current

drinkers reported binge drinking at least once in that time. This proportion was similar that reported in 2001 (57.8%). Thus although binge drinking among students overall had declined since the 2001 survey, the proportion of current drinkers who reported binge drinking in the previous four weeks had remained much the same as in 2001.

In 2007, binge drinking in the previous four weeks was reported significantly more often by males (59.2%) than females (54.5%). Significant variations were also apparent between students of different age, ethnicity and socio-economic status, with current drinkers who were older, those living in socio-economically more deprived neighbourhoods, and those who were Māori or Pacific being more likely to report binge drinking in the previous 4 weeks.

When current drinkers in 2007 were asked what type of alcohol they usually drank, significant differences by gender and age were apparent. Males of all ages reported they usually drink beer, while females were more likely to report that they usually drink ready-made alcoholic drinks, a preference that increased with age. Alcohol preferences also varied significantly between ethnic groups. Pacific and Māori students were more likely than other ethnic groups to report that they usually drink ready-made alcoholic drinks while Asian and NZ European students were more likely to indicate their usual drink was beer.

There were significant differences in the types of alcohol usually consumed by students of different sexual attractions. Same/both-sex-attracted students were more likely to prefer spirits (30.3%) than beer (18.2%), while opposite-sex-attracted students were more likely to prefer beer (35.9%) than spirits (17.1%).

³ Using the NZDep2006 Index (scale 1-10), each student's area of residence was categorised as a neighbourhood of low (1-3), medium (4-7) or high (8-10) socio-economic deprivation.



Sources of alcohol, purchasing and ID checks

When current drinkers were asked where they usually get their alcohol from⁴, the main sources in 2007 were their parents (reported by 54.0%), their friends (53.3%) and getting someone else to buy it for them (35.3%). Sources of alcohol varied significantly between students from different levels of socio-economic deprivation. Students from neighbourhoods of high deprivation were less likely to get alcohol from *parents* or from *home* but more likely to get it from *friends*, *other adults*, or *siblings* than students from low deprivation neighbourhoods were. There was also significant variation between ethnic groups in the usual sources of alcohol. Māori, Asian and NZ European students all reported *friends*, *parents*, and *getting someone else to buy it* as their most common sources. Pacific students were much less likely to report getting alcohol from *parents* and instead reported *friends*, *getting someone else to buy it*, *another adult I know gives it to me*, and *siblings* as their most common sources.

Comparing results from 2001 and 2007, among male current drinkers there was little change in the proportion reporting they *got alcohol from parents* (55.8% in 2001; 52.8% in 2007), but among females the proportion who *got alcohol from parents* increased significantly (from 51.5% in 2001 to 55.3% in 2007). In 2007 significantly lower proportions of students reported *getting alcohol from friends* (2001, 61.9%; 2007, 53.3%), or *given it by other adults* (2001, 24.8%; 2007, 19.7%). There was no change in the proportion reporting they *got it from siblings* (2001, 21.3%; 2007, 22.9%).

Keeping in mind that binge drinkers are a subset of current drinkers, there were some differences in the sources of alcohol reported by the 2 groups: binge drinkers were less likely to report that their *parents give it to them* (42.1% of binge drinkers; 54.0% of all drinkers), but more likely to *get it from friends* (65.8% of binge drinkers; 53.3% of all drinkers) or to *get someone else to buy it for them* (41.5% of binge drinkers; 35.3% of all drinkers).

In 2007 13.6% of current drinkers reported buying their own alcohol. This was significantly lower than in 2001, when 15.1% of current drinkers reported buying their own alcohol. When those who bought their own alcohol were asked where they usually bought it from (and allowed to give more than one response), 67.7% reported usually buying alcohol from a *bottle or liquor store*, and 14.2% from a supermarket. There were some differences between younger and older students: the proportion buying from supermarkets was similar in students aged 14 or less (13.0%) and those aged 15 or more (14.3%), but older students were more likely to buy their alcohol from bottle or liquor stores (43.7% of those aged ≤ 14 , compared with 70.5% of those aged ≥ 15). There were no significant differences between 2001 and 2007 with regard to where students bought their alcohol.

Although it is illegal for vendors to sell alcohol to young people aged less than 18 years, 80% of students who reported buying their own alcohol were aged less than 18. Of all students (regardless of age) who bought alcohol in 2007, over a third (males 38.5%, females 39.7%) reported that they were 'almost never' or 'hardly ever' asked for their ID by vendors. Stated the other way round, 61.1% of students who bought their own alcohol were sometimes asked for their ID in 2007, a significant increase compared to 2001 (44.2%).

Context and reasons for drinking

When asked who they usually drink with (a question where more than one option was allowed), most current drinkers in 2007 reported that they drink with their friends (85.7%), with smaller proportions reporting they drink with their family (52.4%) or with other people (23.2%). Seven percent of students reported that they usually drink by themselves. These findings are broadly similar to those in the 2001 survey.

When asked to indicate the reasons they drink alcohol, most current drinkers in 2007 reported their reasons for drinking as: 'to have fun' (77.4%), 'to enjoy parties' (56.1%), 'to get drunk' (41.0%) or 'to relax' (36.6%), with smaller proportions reporting reasons such as 'to make me feel more confident' (22.3%), 'to forget about things' (21.6%), 'because I'm bored' (21.1%) and 'because my friends do' (21.0%).

⁴ Students could select more than one option (source of alcohol) for this question.



Concerns about drinking and adverse consequences

In the 2007 survey, 10.7% of current drinkers reported being worried “some” or “a lot” about how much alcohol they drank, and 12.3% reported that they had tried to cut down or give up drinking alcohol. These responses varied significantly between different ethnic groups and between students from different levels of socio-economic deprivation, with more students from high deprivation neighbourhoods, and more Māori and Pacific students reporting that they worried about how much they drank, and had tried to cut down or give up drinking alcohol. Comparing the results for 2001 and 2007 there was a significant reduction in the proportion of current drinkers *worried about their drinking* (from 15.8% in 2001 to 10.7% in 2007), but there was no significant change in the percentage who had *tried to cut down or stop drinking* (11.5% in 2001 and 12.3% in 2007).

In a multiple option question about adverse effects experienced within the previous year, current drinkers in 2007 reported several types of harm associated with their drinking. The most common types of harm reported were being injured (reported by 21.7% of current drinkers), doing things that could have resulted in serious trouble (reported by 24.0% of male current drinkers, compared to 15.3% of females), having unsafe sex (14.4%), having their performance at school affected (9.8%), and injuring someone else (8.3%).

In 2007 one in six (16.1%) of current drinkers reported that in the previous year they had been told by their friends or family to cut down their drinking. The proportion reporting this varied significantly between different ages, and between different ethnic groups: more older students, and more Māori and Pacific students had been told by their friends or family to cut down their drinking. A significantly higher proportion of same-sex or both-sex-attracted students (24.2%) than opposite-sex-attracted students (15.5%) reported their friends or family had told them to cut down their drinking.

In 2007 almost a quarter (23.8%) of *all* students⁵ reported that within the previous month they had been a passenger in a car driven by someone who was potentially drunk (ie, had consumed more than 2 drinks in the 2 hours prior to driving). Of the students who were drivers, 11.8% reported that within the previous month they had themselves driven after drinking at least some alcohol and 8.1% that they had driven after consuming more than 2 drinks in the 2 hours prior to driving. There were no equivalent questions in the 2001 survey.

5 This finding relates to all students, not just those who responded they were current drinkers.



Conclusions and recommendations

In summary, the data from these nationally representative surveys reveal that from 2001 to 2007 there were significant declines in both the proportion of secondary school students who considered it okay for people their age to drink regularly, and the proportion who were current drinkers. However, the proportion of current drinkers who reported binge drinking within the previous 4 weeks rose from 48.8% in 2001 to 57.0% in 2007. While the reasons for drinking were often portrayed in positive terms (eg, to have fun, to enjoy parties), many students reported adverse consequences due to their drinking, ranging from injuries, unsafe sex, and getting into serious trouble. At least 1 in 10 of the students who drank were concerned about their own drinking and had attempted to cut down or stop drinking, with these insights being reported more often by Māori and Pacific students, and those from socio-economically more deprived neighbourhoods. Almost a quarter of all students surveyed indicated that they had been exposed to the risks of drink driving within the previous 4 weeks.

The relation between alcohol use and health outcomes is complex and multi-dimensional at any age. However, the findings of this report indicate the need for proactive public health policy to limit the harm and adverse health effects that are evident for significant proportions of young New Zealanders.

Approaches that reduce the likelihood of excessive drinking and minimise potential harm require urgent consideration. Babor et al., (2010) draw on a wide body of research evidence on which to base policy recommendations. Environmental measures that have particular relevance in this context include:

1. Increasing the tax and minimum purchase price of alcohol.
2. Restricting the sale, advertising and marketing of alcohol to young people.
3. Limiting numbers of outlets and opening hours.
4. Strengthening drink driving legislation, and increasing safe and accessible transport options for young people.
5. Ensuring that developmentally appropriate, effective and accessible programmes and services are available that can assist young people who have concerns about their drinking or are at risk of, or have experienced alcohol-related harm.

This report identifies important inequities in the risks and burden of alcohol-related harm, issues that are likely to be exaggerated in more socio-economically deprived and marginalised youth who were not represented in the surveys. Factors that protect against or increase the risk of alcohol-related harm in socio-economically disadvantaged neighbourhoods, rangatahi Māori, young Pacific people, same- or both-sex-attracted young people, and other groups for whom there is limited data (eg, young people who are not at school, and those of immigrant minority or refugee communities) are key areas that future research, programmes and evaluations should consider.

It is vital that wider policies and community or individually-based strategies reduce both the extent and the inequities in the experience of alcohol-related harm among young people in Aotearoa/New Zealand.





Introduction

Alcohol consumption has significant health, social, and economic costs for our communities. This report presents findings from *Youth'07: The National Survey of the Health and Wellbeing of New Zealand Secondary School Students* on the prevalence of alcohol consumption, patterns of use, behaviours around alcohol use, and attitudes towards alcohol among secondary school students in New Zealand. In particular, the report presents prevalence data in the following domains:

1. Attitudes about alcohol
2. Drinking experience
3. Drinking patterns
4. Alcohol acquisition (including for binge drinking)
5. Drinking company
6. Concerns about drinking
7. Reasons why students drink
8. Adverse effects of alcohol use
9. Alcohol and driving

Findings are primarily based on data from the Youth'07 survey, with some comparisons with comparable data from the previous 2001 survey.

The background to the Youth'07 Survey

The Youth2000 project was initiated in 1997 by the Adolescent Health Research Group (AHRG) of The University of Auckland with the aim of providing accurate and contemporary profiles of the health and wellbeing of New Zealand's young people, to inform policy and decision making that can improve their prospects.

The first national health and wellbeing survey of secondary school students was completed in 2001 and the second survey (Youth'07) in 2007. The results of these two surveys have been presented and published extensively and reports are available on the Youth2000 website (www.youth2000.ac.nz). The two sets of national survey data allow some analysis of changes in student health and wellbeing between 2001 and 2007. As well as the large surveys in mainstream schools, surveys have also been conducted in other settings including Alternative Education centres (Clark et al., 2010), Teen Parent Units (Johnson & Denny, 2007), and Wharekura (Herd et al., 2010).



Methodology

The Youth'07 Survey

Youth'07 was a cross-sectional, anonymous, self-report survey of a representative sample of secondary school students who completed a 622-item questionnaire. The use of computer technology allowed for branching in the questionnaire, so that in each section if the participant's answer to an initial screening question indicated that they had no experience of that particular behaviour or issue, then they were asked no further questions on it, but skipped directly to the next topic. Participants were thus only questioned more deeply about behaviours or issues they reported having experience with. In order to enable comparisons across time, the 2007 survey used a similar approach to the 2001 survey with regard to the sampling and recruitment of schools and students, and retained the format and wording of many of the questions.

How was the survey conducted?

An important aim of the national surveys of secondary school students was to provide information that is representative of most young people growing up in New Zealand. In order to achieve this, 115 secondary schools were randomly selected from schools with 50 or more students in years 9 to 13. Ninety-six (83.5%) of the 115 schools selected agreed to take part in the survey. In each of these schools a random selection of 18% of the students were invited to complete the survey. Of the total of 12,355 students selected in this way, 9,107 (74%) completed the survey. This represents 3.4% of the total New Zealand secondary school roll.

Of the participating schools, the majority were state-funded, co-educational and large schools. Only 13 schools declined to participate and a further 6 schools withdrew during 2007. Of the non-participating schools: 14/19 (74%) were in Auckland, Wellington, or Hamilton; 11/19 (58%) were state schools; 13/19 (68%) were co-educational; and 17/19 (89%) were large schools.

The reasons that individual students did not take part in the survey included not being at school on the day of the survey, being unavailable during the time the survey was conducted, or changing their minds about taking part in the survey. The survey did not include young people who were no longer in school.

Ethical procedures

The survey was approved by The University of Auckland Human Subject Ethics Committee. The principal of each participating school gave written consent on behalf of the School Board of Trustees. Information on the survey was sent home to parents a few weeks before the day of the survey, and a student participant information brochure was given to each student a week prior to the survey. Students and their families were able to ask questions about the survey, and they understood that their participation was voluntary. Students were also assured – and all precautions have been taken to ensure – that information collected from participating students would remain anonymous and confidential.

Students were divided into groups of up to 100 students to administer the survey in separate sessions. On the day of the survey, each group was brought to the survey venue and the students were each given a random anonymous code number to log in to an internet tablet used to enter their responses to the survey. The consent process was then outlined to the students and they were able to ask questions about the survey. At the beginning of the survey, students were able to consent or decline to participate in the survey. Students were also able to withdraw from the survey at any time during the administration of the survey.

Survey methods

The survey questionnaire was presented and completed using internet tablets. These hand-held computers enabled the questions to be presented in audio-visual form: they were displayed on the internet tablet's screen and at the same time an audio of them was played through headphones. Students were able to choose English or Te Reo Māori as the preferred language for the survey. No keyboard data entry was required: questions were answered by touching the appropriate box on the screen with a stylus. Students were able to choose not to answer any question or section of the survey.

Before sensitive sections of the questionnaire, reminders were given that involvement in the survey was voluntary and that answers would remain confidential and anonymous. For questions thought to be potentially upsetting for students, 'safety messages' were added providing advice and contact details of people to talk to (including the people administering the questionnaire) should the



student wish to do so. Questionnaire responses were automatically transmitted by a Wi-Fi web server to a laptop database. Files were then directly imported into statistical software and collated for analysis.

Translation of the survey into Te Reo Māori

The entire survey was translated into Te Reo Māori by a translator certified by the Māori Language Commission. Back-translating was carried out by a second translator. The version in Te Reo Māori was used both for the computer text version of the survey as well as recorded by Te Reo Māori speakers for the audio version heard through earphones. Students who selected this language option could therefore both read and hear the questions in Te Reo Māori, just as those who selected the English language option could read and hear them in English. The Te Reo Māori language survey was pilot tested by two groups of Māori secondary school students who matched the profile of Māori students taking the survey in their mix of ability in Te Reo Māori, age, and gender. The students also commented on the suitability of the questions for Māori students as with the cognitive testing carried out with the English language survey.

Comparisons between the 2001 survey and the 2007 survey

Overall, 9,567 students in 2001 and 9,107 students in 2007 completed the survey. The response rates among schools and among students were remarkably similar between the two surveys. In 2001, 86% of invited schools and 75% of invited students took part, compared to 84% of invited schools and 74% of invited students in 2007.

Participating students were very similar by age and year of schooling between the 2001 and 2007 surveys. However, there were differences with respect to the proportion of male and female students. In 2001 there were fewer male students than female students (46% vs. 54%). In 2007 these proportions were reversed, with more male students than female students (54% vs. 46%).

To allow for comparisons between 2001 and 2007, the Youth'07 survey followed a similar methodology to the 2001 survey with the same sampling of schools, sampling of students and use of technology to enhance accuracy of reporting, and used similar or identical questions and response items within the

survey questionnaire. Some of the questions used changed slightly between the two surveys - these changes are explained in the Youth'07 Technical Report (Adolescent Health Research Group, 2008 - available from www.youth2000.ac.nz).

How to use this report

This report provides descriptive information about secondary school students' experiences with alcohol. Most of the data are presented by gender, age, ethnicity, deprivation status and sexual attraction where appropriate. The results for each of these sub-groups are given as percentage prevalences except where the sub-group contains too few students for precision in the estimation of a percentage.

Frequency tables indicating the distributions for each of the alcohol variables investigated are presented in full on the Youth2000 website: www.youth2000.ac.nz. The tables provide the figures for the total population as well as broken down by gender, age, socio-economic deprivation and sexual attraction. Where relevant, information relating to ethnic groups is also explored and presented, guided by the Adolescent Health Research Group's principles for ethnic-specific analyses.

Statistical analyses and terms

The detailed tables on the website provide the numbers, percentages and, where relevant, confidence intervals relating to the measures discussed in the report.

The 'N' values in the tables refer to the number of students who answered that particular question. The 'n' value with each response to the question refers to the number of students who gave that specific response.

The percentage (%) refers to the proportion of students who reported a particular behaviour. This can be regarded as an estimate of the true proportion in the population of all students. The confidence interval (CI) indicates the precision of this estimate by providing an interval in which we are relatively sure the true value lies. In this report, we report 95% confidence intervals. They are adjusted for the study design but not for the other variables included in the regression models.

Logistic regression was used to investigate differences between groups in one factor, while allowing for variation in other factors including age, gender, ethnicity, sexual attraction, New Zealand deprivation index score, and two other measures



of deprivation (moving home frequently and family worrying about food). The interaction between gender and age was also investigated to see if the way the factor of interest changes with age differs between males and females.

Logistic regressions have also been used to compare the results from the two surveys (referred to in the tables as 'waves' of data). These regression models included age and gender. The interaction between gender and data wave was also tested to see if any changes between the two years were different for males and females.

Where differences between groups have been found to be statistically significant, these are reported in the text. Conversely, where a result is not reported, it can be assumed that no significant difference was found. In some instances where the lack of statistical significance has particular relevance we highlight that in the text.

Where factors with multiple categories (such as age groups, ethnic groups, or different levels of socio-economic deprivation) are examined, the statistical test of significance relates to whether there is a significant difference in the percentages across the group as a whole (ie, whether they are *not all the same*), rather than looking at differences of any one category compared to another (eg, NZ European students compared with Pacific students).

Some statistically significant differences are reported with a p-value (p), which is the probability that the difference observed between two groups of students in the survey could have occurred by chance if the factor of interest was in fact the same in both those groups in the wider population of students. The p-values quoted in this report are from the logistic regressions and take into account the other variables specified in the regression model. Where significant interactions were found their p-values are reported in the text and the interaction is described graphically and in the text.

It is important to recognise that the approach in this report is to present a profile of alcohol use and related issues among young people attending secondary schools in New Zealand. The analyses presented do not relate to specific research hypotheses that would require taking other factors into account.

Socio-demographic information

NZ Deprivation Index decile

NZDep2006 is an updated version of earlier indices of neighbourhood socio-economic deprivation in New Zealand (Salmond et al., 2007). This index combines information from nine items in the 2006 census which reflect different dimensions of deprivation. The NZDep2006 Index scores are classified in deciles from 1 to 10. Accordingly, neighbourhoods classified as decile 1 represent areas with the *lowest* level of deprivation and those classified as decile 10 represent areas with the *highest* level of deprivation. For the purposes of this report, students are grouped into three bands, according to whether they live in a neighbourhood of low (deciles 1-3), medium (deciles 4-7) or high (deciles 8-10) level of socio-economic deprivation.

Individual socio-economic status

In our regression models, we included two individual self-report items (results from survey questions) which reflect levels of family adversity. These survey questions were:

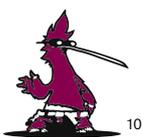
Do your parents, or the people who act as your parents, ever worry about not having enough money to buy food?

and

In the past year, how many times have you moved homes?

Ethnic groups

Students in both the 2007 and 2001 surveys were asked to identify which ethnic group they belonged to, and were able to indicate more than one. In the 2007 survey, almost 40% of students identified with more than one ethnic group. For the purpose of ensuring mutually exclusive groups in the models for analysis, we used the Ministry of Health's prioritisation protocol to assign students who indicated more than one ethnicity to one of the following five major ethnic groupings: Māori, NZ European, Pacific Island, Asian, or Other (Ministry of Health, 2004).



It is important to note that some of these groups are highly heterogeneous with regard to countries of origin, ethnic, cultural, and other affiliations. For example, there are many different Pacific communities within the 'Pacific' group. Chinese, Indian and other communities from the highly populated Asian region are recorded as one common 'Asian' group. The group defined as 'Other' comprises a highly heterogeneous group from many continents, including parts of Europe. More nuanced approaches to these analyses are presented in the Māori, Pacific and Asian reports from the Youth'07 survey that are available for downloading from the Youth2000 website (www.youth2000.ac.nz).

It is important to be aware that, as with other demographic characteristics, what may appear as ethnic differences in the overall profiles presented may be accounted for by other confounding factors that were not considered in this report or were not measured in the survey. Users of these data are therefore cautioned against attributing the differences observed to ethnicity per se.

Sexual attraction

In the Youth'07 questionnaire, all students were asked the question "Which are you sexually attracted to...?" and could choose from the response options: *the opposite sex, the same sex, both sexes, not sure, or neither*. In this report, we compare the findings relating to two groups of students: those attracted to the opposite sex (given as 'opposite-sex-attracted') and those attracted to the same or both sexes (given as 'same/both-sex-attracted').

Limitations of the study

The results represent the characteristics and behaviours only of students who attend mainstream schools in New Zealand. The survey did not include young people who had left secondary school. This issue particularly affects the data in older age groups, as young people are legally entitled to leave school from age 16. Young people still at school may differ from those who have left. Nor does the survey include those young people who were absent from school on the day of the survey, or those in alternative education settings.

The design of this survey allows generalisation to other secondary school students, but not to the New Zealand adolescent population at large. It should also be noted that the data from this cross-sectional

survey relate to one specific point in time, which means that although we can show associations between different behaviours or factors we cannot determine cause and effect relationships between them.

Definitions of key terms used in this report

1. Current drinkers: students who continue to drink (at the time of the survey), beyond their first experiences with alcohol.
2. Standard alcoholic drink: one small glass of wine, one can or stubbie, one ready-made alcoholic drink (eg, rum and coke) or one nip of spirits.
3. Drinking session: within four hours.
4. Binge drinking: having five or more standard alcoholic drinks in one session (within 4 hours).
5. Potentially drunk driver: one who has drunk more than two glasses of alcohol in the two hours before driving.



Demographic characteristics

In total, 9,107 students completed the Youth'07 survey. The characteristics of participating students⁶ and comparable statistics for all secondary school students in eligible schools are presented below. The study sample is broadly representative of secondary school students throughout New Zealand, but girls are slightly under-represented in the sample because proportionately fewer girls' schools than other schools were recruited (Adolescent Health Research Group, 2007).

Variable	All Eligible Schools		Surveyed Schools	
	Number of Students	Percent	Number of Students	Percent
Gender				
Male	134,937	50.7	4911	54.0
Female	131,343	49.3	4187	46.0
Age (years)				
Under 13	654	0.2	65	0.7
13	48,321	18.1	1795	19.7
14	59,465	22.3	2101	23.1
15	58,370	21.9	1973	21.7
16	51,114	19.2	1743	19.2
17 or older	48,356	18.2	1423	15.6

Just over half the participants were NZ European (52.8%), with Māori the second largest group (18.7%), followed by Asian (12.4%), and Pacific Island students (10.2%). Students of other ethnic groups comprised 5.8% of the sample, and the ethnicity was not known for 0.2%.

	Number	Percent
Prioritised Ethnicity		
NZ European	4797	52.8
Māori	1702	18.7
Asian	1126	12.4
Pacific Island	924	10.2
Other	531	5.8
Unknown	20	0.2
NZ Deprivation Index		
Low (1-3)	3218	35.4
Medium (4-7)	3397	37.3
High (8-10)	2250	24.7

On the measure of socio-economic deprivation used in the survey, the NZ Deprivation Index, the students were spread relatively evenly across the socio-economic spectrum. About a third of the students fell into the medium deprivation category (37.3%), with about a quarter in the high deprivation category (24.7%), and the remainder (35.4%) in the low deprivation category.

⁶ Given missing responses for some categories, the total numbers can vary.





Research findings

A summary of the research findings is given here, with full results in tables on the Youth2000 website (www.youth2000.ac.nz).

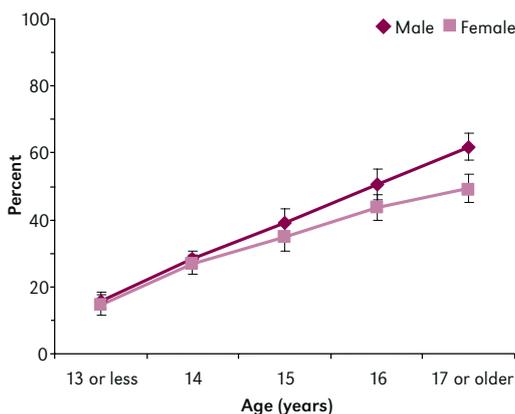
Students' attitude to drinking, and alcohol use by parents and friends

Students' attitude to regular drinking

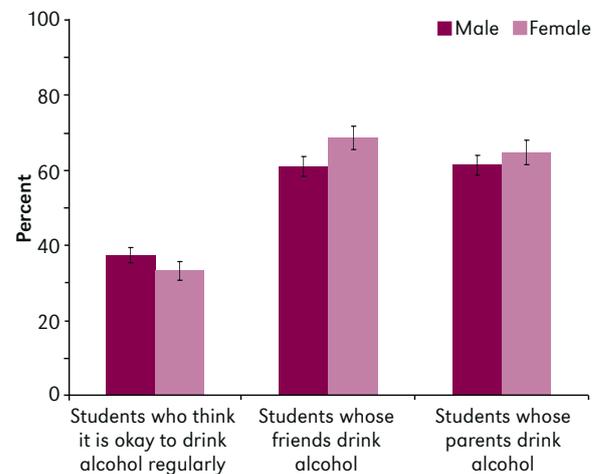
Students were asked whether they thought it was 'okay' for people their own age to drink alcohol regularly, and whether their friends or parents drank alcohol.

Just over a third of all students said it was *okay for people their age to drink alcohol regularly* (males, 37.4%; females, 33.1%). The proportion responding it was *okay for people their age to drink alcohol regularly* increased with age, with a significant gender by age interaction ($p = 0.01$), indicating that the trend was different for males and females. This can be seen in the graph below. While the approval rates were similar between males and females in the younger age groups, with increasing age progressively more males than females approved, and by age 17 or older, over 10% more males than females said it was *okay for people their age to drink alcohol regularly* (males aged 17 or older, 61.9%; females aged 17 or older, 49.4%).

Students who think it okay to drink alcohol regularly, by age



Attitudes towards alcohol



There was significant variation between ethnic groups in their attitudes on drinking. More Māori (43.5%) and NZ European (36.9%) students reported it was *okay for people their own age to drink alcohol regularly*, with Pacific students (24.7%) least likely to respond it was okay.

Same/both-sex-attracted students were significantly more likely than opposite-sex attracted students to say that it was *okay for people their age to drink alcohol regularly* (opposite-sex-attracted, 36.6%; same/both-sex-attracted, 53.5%).

In 2007, just over a third of all students thought it was *okay for people [their] age to drink alcohol regularly*. This represented a significant reduction compared with the 2001 survey, when almost half responded affirmatively to this question (2001, 49.1%; 2007, 35.4%; $p < 0.0001$).⁷

⁷ There was a slight variation in the wording of the question from 2001 to 2007; however this is unlikely to have affected the outcome.

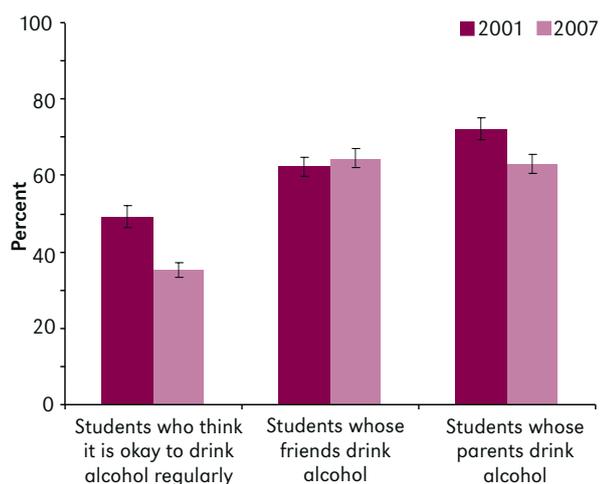


Friends who drink

About two-thirds of all students (64.5%), with significantly more females (68.6%) than males (61.0%), reported that they have *friends who drink alcohol*. As expected, there was a significant increase with age, from only 35.3% of those aged 13 or less, to 85.1% of those 17 or older reporting that they have *friends who drink alcohol*. Significant variation between ethnic groups was also apparent. The pattern of responses indicated that Asian students were least likely to report having *friends who drink* (48.9%) and Māori students most likely to do so (78.2%). Same/both-sex-attracted students were significantly more likely to have friends who drink (80.5%) compared with opposite-sex-attracted students (66.9%).

There was no significant change between 2001 and 2007 in the percentage of students who reported that they have *friends who drink* (2001, 62.4%; 2007, 64.5%; $p=0.31$).

Attitudes towards alcohol, 2001-2007



Parents who drink

Just under two-thirds (62.9%) of all students reported that they had *parents who drink*. The responses to this question did not differ significantly by gender, but differed significantly by age, with a smaller percentage of younger students reporting that their parents drank (13 or less, 53.4%; 17 or older, 67.2%). There was also significant variation between students of different levels of socio-economic deprivation and between students of different ethnic groups. The patterns suggest that students from high deprivation neighbourhoods were less likely to report their parents drank (54.3%) compared with students from medium (64.4%) and low deprivation neighbourhoods (67.0%).

NZ European students were most likely to report that their parents drank (70.3%), and Asian (45.3%) and Pacific (45.4%) students were least likely to do so. Significantly more same/both-sex-attracted students (73.5%) than opposite-sex-attracted students (64.7%) reported that they had *parents who drink*.

There was a significant decrease in the proportion of students who reported that their *parents drink*, from 72.2% in 2001 to 62.9% in 2007 ($p<0.0001$).

Drinking experience

Students were first asked if they had ever drunk alcohol (not counting a few sips). If they answered yes, they were asked how often they had drunk alcohol in the previous 4 weeks. Those who responded 'Not at all - I don't drink alcohol now' were classified as 'non-drinkers'. Those who did not tick this option were classified as 'current drinkers'. Non-drinkers were not asked any further questions about their drinking behaviours. As findings in terms of 'all students' and in terms of 'current drinkers' could both be of interest, we present both, identifying the particular denominator used in the sub-headings of the report.

Ever Drunk Alcohol

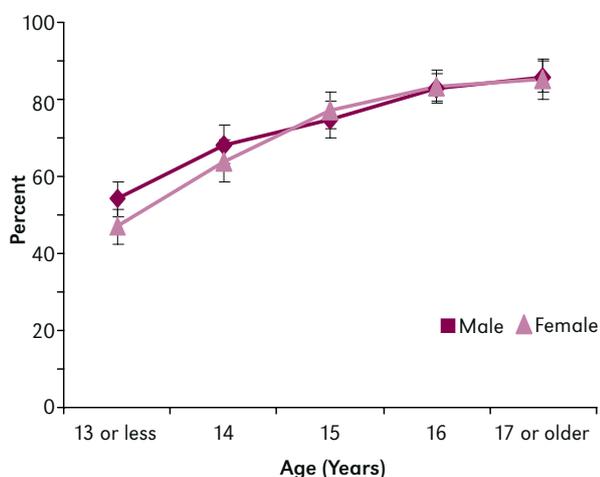
Almost three-quarters (71.6%) of all students surveyed had *ever drunk alcohol* (not counting a few sips). Significant variation was found based on gender, age, ethnicity, and sexual attraction. The proportion of students who had *ever drunk alcohol* increased with age, from 50.8% of those aged 13 or less, to 85.5% of those aged 17 years or older. There was a significant gender by age interaction ($p = 0.017$), indicating that this trend differed between males and females. This can be seen in the



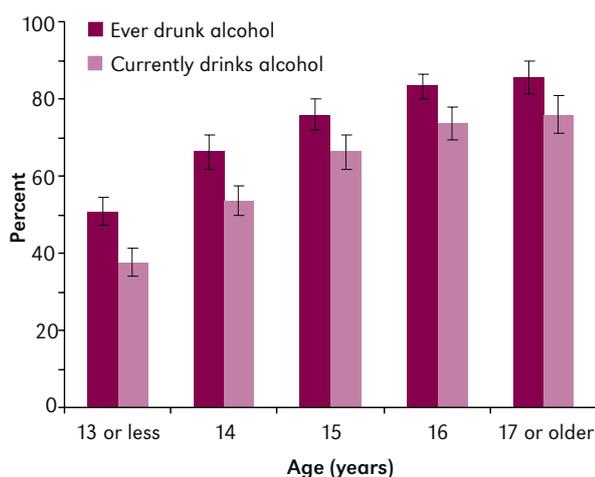
graph below. At age 13 or less 54.1% of males but only 47.0% of females reported having *ever drunk alcohol*, but this gender difference decreased with age, and by age 17 and older there was no difference between the proportions of males and females who reported they had *ever drunk alcohol*.

There was significant variation between ethnic groups. Asian students were least likely to have ever drunk alcohol while NZ European and Māori were most likely to have done so (Māori, 84.7%; Pacific, 60.8%; Asian, 48.7%; NZ European, 74.9%; Other 67.0%). Same/both-sex-attracted students were significantly more likely to report having ever drunk alcohol (85.1%) compared with opposite-sex-attracted students (73.8%).

Students who have ever drunk alcohol, by age



Students' alcohol use, by age

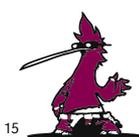
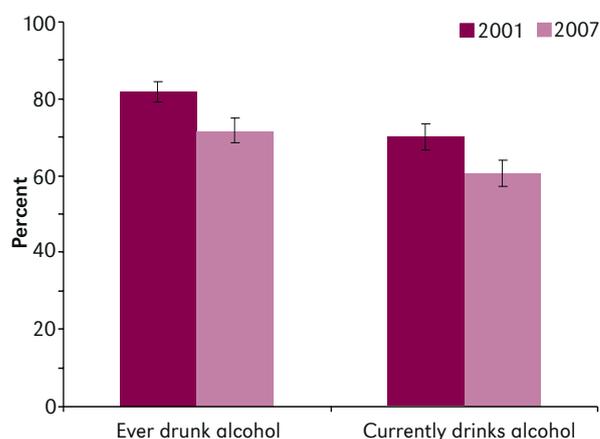


Current drinkers

60.6% of all students surveyed indicated that they currently drink alcohol. There was no significant difference between males (60.8%) and females (60.3%), but there were significant differences associated with age, socio-economic deprivation and ethnicity. The proportion of students who were current drinkers doubled across the age range, from 37.5% at age 13 or less, to 75.9% at age 17 or older. Higher proportions of students in low deprivation neighbourhoods were current drinkers compared with those in higher deprivation neighbourhoods (low, 62.6%; medium, 61.3%; high, 56.2%). Asian and Pacific students were least likely to be current drinkers and Māori and NZ European students most likely to be so (Māori, 73.4%; Pacific, 42.6%; Asian, 35.1%; NZ European, 66.2%; Other, 52.2%). Same/both-sex-attracted students were significantly more likely to be current drinkers (74.7%) compared with opposite-sex-attracted students (63.1%).

There were significant decreases from 2001 to 2007 in both the proportion of students who reported they had ever drunk alcohol (2001, 81.9%; 2007, 71.6%; $p < 0.0001$), and the proportion who reported they were current drinkers (2001, 70.1%; 2007, 60.6%; $p < 0.0001$).

Students' alcohol use, 2001-2007



Drinking patterns among current drinkers

The survey asked those students who were *current drinkers* more detailed questions about their drinking patterns, including the frequency of drinking, the number of drinks consumed per session, the number of binge drinking episodes, the type of alcohol preferred and where it was obtained from.

Frequency of alcohol consumption

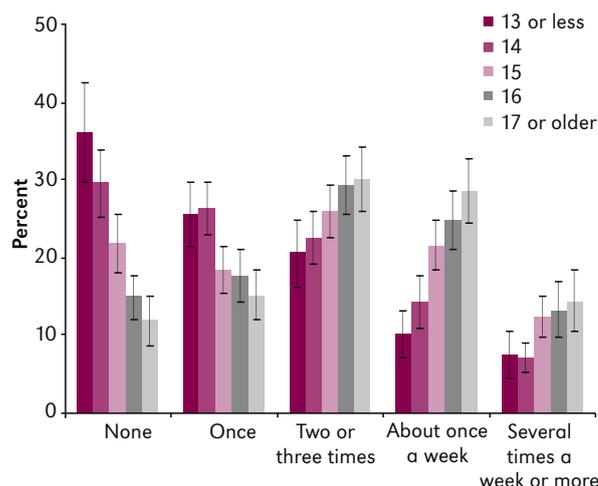
Most current drinkers (76.5%) had drunk *at least once in the previous four weeks*, with 29.5% reporting they had drunk *at least once a week*. There was a general trend for the frequency of drinking to increase with age, with a significant gender by age interaction ($p = 0.0002$), indicating that this trend differed between males and females. At age 13 or less the proportion who had drunk *at least once in the previous four weeks* was no different between males and females, but drinking frequency increased more rapidly with age among males, and by age 17 and over more males than females had drunk *at least once in the previous four weeks*.

Among the group (29.5% of all students) who reported drinking *at least once a week* the pattern of change with age was rather different: at age 13 or less more females than males drank *at least once a week*, but here too drinking frequency increased more rapidly with age among males, and by age 17 and over more males than females drank *at least once a week*.

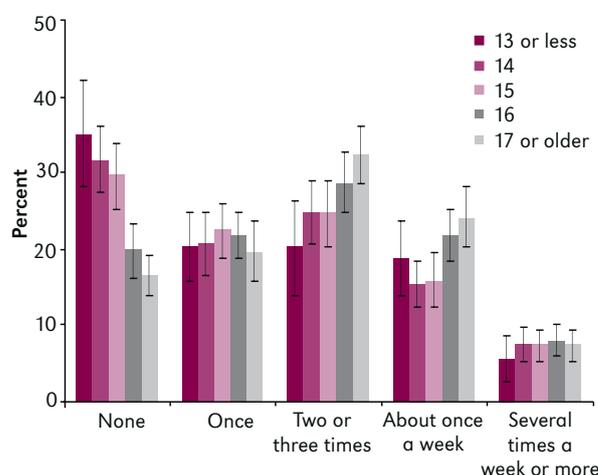
There was little difference in the frequency of drinking between current drinkers from high, medium or low levels of socio-economic deprivation.

However, there was significant variation between ethnic groups in their frequency of drinking. In general, Asian students reported drinking less frequently than other ethnic groups did. Over half of Asian students (56.7%) reported they had drunk *not at all or only once* in the previous four weeks, and they were least likely to report drinking *several times a week or more* (Māori, 12.7%; Pacific, 12.1%; Asian, 5.8%; NZ European, 8.4%; Other, 9.4%).

Frequency of alcohol consumption in the last 4 weeks among current drinkers - males



Frequency of alcohol consumption in the last 4 weeks among current drinkers - females



There was a significant difference also between opposite-sex-attracted and same/both-sex-attracted students in their frequency of drinking. In general, same/both-sex-attracted students reported drinking more frequently than opposite-sex-attracted students did. Thus at the middle of the range of drinking frequency, 71.2% of opposite-sex-attracted compared to 56.4% of same/both-sex-attracted students reported drinking *no more than three times in the previous four weeks*. At the upper end of the range of drinking frequency, 9.0% of opposite-sex-attracted students compared to 18.2% of same/both-sex-attracted students reported drinking *several times a week or more*.

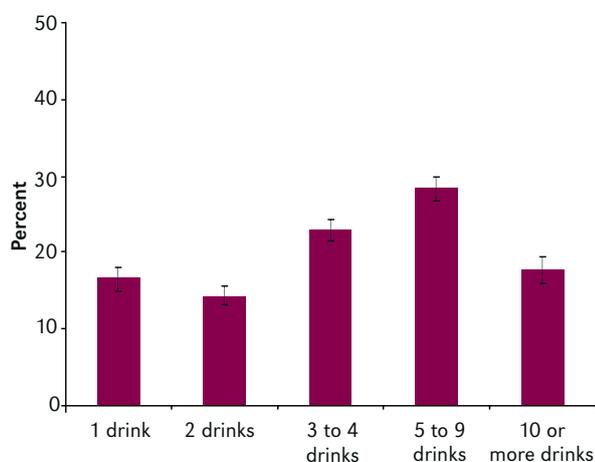
There was no significant change between 2001 and 2007 in the pattern of drinking with regard to the frequency of alcohol consumption ($p=0.30$).



Amount of alcohol consumed per session

Among current drinkers, 53.9% reported usually drinking four or fewer drinks per session, and 46.1% reported usually drinking five or more drinks per session (1 drink, 16.5%; 2 drinks, 14.4%; 3 to 4 drinks, 23%; 5 to 9 drinks, 28.5%; 10 or more drinks, 17.6%). Given that five or more drinks per session is the level defined as binge drinking, this result can be restated that nearly half (46.1%) of all current drinkers were usually binge drinking. Other measures of binge drinking are presented and analysed below.

Amount of alcohol consumed in a usual session among current drinkers



There was a general trend for the amount drinkers consumed per session to increase with age, with a significant gender by age interaction ($p < 0.0001$), indicating that this trend differed between males and females. The difference was particularly at the upper end of the drinking scale – 10 drinks or more per session. Among both male and female drinkers, with increasing age fewer of them drank just 1 or 2 drinks per session, and more of them drank higher amounts of 3 to 9 drinks per session. Among most females, drinking did not increase any further than that – only about 10% of female drinkers said they usually consumed 10 or more drinks per session, and that proportion remained much the same from 13 or under to 17 or older. However, among males, with increasing age more of them drank 10 or more drinks per session (12.7% of males 13 or less, rising to 27.6% of males 17 or older).

Drinking and the pattern of drinking varied in complex ways between students of different levels of socio-economic deprivation. As noted above, students from high deprivation neighbourhoods, were *less* likely to be current drinkers, but those who did drink, drank *equally* often as those from medium

or low deprivation neighbourhoods. However, when they did drink, students from high deprivation neighbourhoods, were *more* likely to drink very heavily. Of the current drinkers from high deprivation neighbourhoods, 25.3% indicated that they usually drank 10 or more drinks per session, compared to 17.4% of current drinkers from medium deprivation neighbourhoods, and 13.4% of those from low deprivation neighbourhoods.

There was significant variation between ethnic groups in the amount of alcohol consumed. In general, Asian students reported drinking less than other ethnic groups did, with about a third (30.8%) of Asian current drinkers reporting that they drank only 1 drink per session (compared to Māori 8.2%, Pacific 12.1%, NZ European 17.8% and Other 23.3%). At the other end of the drinking range, only 7.0% of Asian current drinkers reported drinking 10 or more drinks per session (compared to Māori 30.5%, Pacific 26.5%, NZ European 13.3% and Other 15.3%).

There was no significant change between 2001 and 2007 in the pattern of drinking with regard to the amount of alcohol consumed in a drinking session ($p = 0.18$).

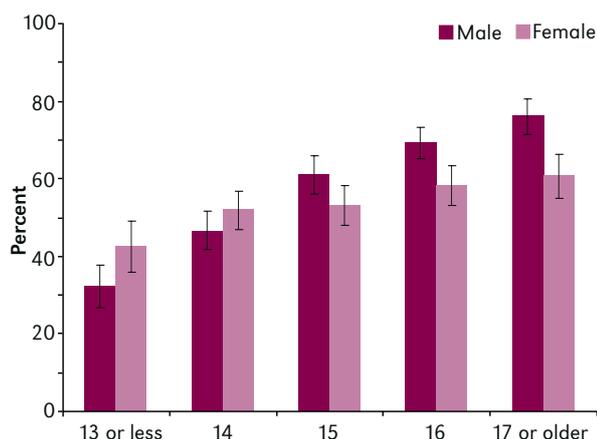
Binge drinking in the previous 4 weeks (among all students)

Students were asked how many times in the previous four weeks they had drunk the equivalent of 5 or more standard alcoholic drinks in one session—within 4 hours. Drinking to this extent is defined as binge drinking. The prevalence of binge drinking is here analysed as a proportion of *all* students. This gives an indication of how widespread binge drinking is in the wider population of students. However, to understand the interplay of different factors that influence drinking behaviour a more tightly focussed analysis is more useful. In the next section the prevalence of binge drinking is analysed again as a proportion of the students who drink.

About a third (34.4%) of all students reported binge drinking within the previous 4 weeks. The proportion reporting binge drinking increased with age, with a significant gender by age interaction ($p < 0.0001$), indicating that this trend differed between males and females. Up to the age of 14 more females than males reported binge drinking (13 years or less: females 14.5% and males 12.8%; 14 years: females 27.4% and males 25.0%). But by age 15 this was reversed, with more males than females reporting binge drinking, and the gap continued to widen with age (15 years: males 39.8% and females 35.4%; 16 years: males 50.5% and females 43.1%; 17 or older: males 58.3% and females 45.6%).



Binge drinking among current drinkers, by age



The proportion reporting binge drinking varied significantly between students of differing levels of social deprivation. Although the differences observed were small, students living in neighbourhoods with higher levels of deprivation were more likely to report binge drinking (low deprivation, 32.4%; medium deprivation 34.8%; high deprivation; 36.3%).

The proportion reporting binge drinking also varied significantly between ethnic groups. Asian students were least likely to report binge drinking and Māori students most likely to do so (Māori, 51.0%; Pacific, 27.0%; Asian, 14.4%; NZ European, 35.6%; Other, 26.2%). Same/both-sex-attracted students were significantly more likely to report binge drinking (47.7%) compared with opposite-sex-attracted students (35.7%).

The proportion of all students reporting binge drinking in the previous four weeks had declined significantly from 40.1% in 2001 to 34.4% in 2007 ($p=0.0004$).

As will be described in the next section, among those students who drink, the proportions who were binge drinking were similar in 2001 and 2007.

Binge drinking within the previous 4 weeks (among current drinkers)

Over half (57.0%) of current drinkers reported binge drinking within the previous four weeks. The proportion reporting binge drinking increased with age, with a significant interaction between age and gender ($p < 0.0001$) indicating that the trend with age differed between males and females. Up to the age of 14 more females than males reported binge drinking (13 years or less: males 32.3% and females 42.6%; 14 years: males 46.7% and females 51.8%). But by age 15 this was reversed, with more males than females reporting binge drinking, and the gap continued to widen with age (15 years: males 61.1%, females 53.0%; 16 years: males 69.3%, females 58.3%; 17 years or older: males 76.1%, females 60.7%).

The proportion reporting binge drinking in the previous four weeks varied significantly between students of differing levels of socio-economic deprivation. Current drinkers living in higher levels of deprivation were more likely to report binge drinking (low deprivation, 52.0%; medium deprivation, 57.3%; high deprivation, 64.9%).

The proportion reporting binge drinking also varied significantly between ethnic groups. Asian students who were current drinkers were least likely to report binge drinking in the previous four weeks and Māori and Pacific students the most likely (Māori, 69.8%; Pacific, 64.1%; Asian, 41.5%; NZ European, 54.0%; Other, 50.5%).

The proportion of current drinkers reporting binge drinking was similar in both surveys, this being 57.8% in 2001 and 57.0% in 2007 ($p = 0.13$).

Thus while the proportions of all students who drank as well as those who had been binge drinking in the previous four weeks had declined from 2001 to 2007, there was no change in the proportions of current drinkers who were binge drinking during the same period.

Type of alcohol consumed

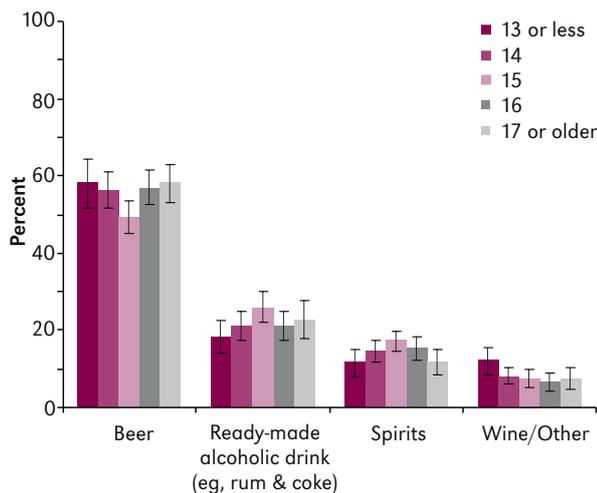
Current drinkers were asked about the type of alcoholic drink they usually drank. Overall, drinkers most commonly reported that their usual drink was beer (35.2% of current drinkers) or ready-made alcoholic drinks⁸ (34.0%), compared with spirits (17.7%), or wine or other drinks (13.2%).

⁸ Ready-made drinks are commonly referred to as 'ready-to-drink' or RTDs. This term will be used interchangeably with ready-made drinks.

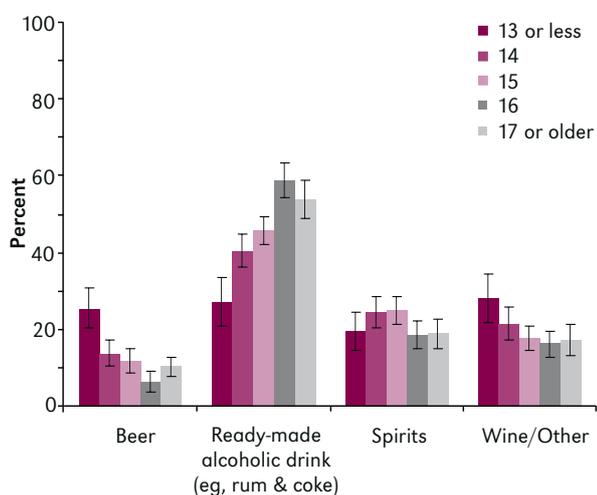


There was a significant gender by age interaction in alcohol preference ($p < 0.0001$), meaning that the age-related pattern of preferences differed significantly between males and females. Among males the pattern of preference did not change much with age: about half the males at all ages usually drank beer, about 20% usually drank ready-made drinks, with lower proportions preferring spirits or wine or other drinks. Among females there were changes with age: at the youngest age of 13 or less there was no clear preference (similar proportions reported they usually drank beer, ready-made drinks, spirits, and wine or other drinks), but with increasing age females turned away from beer and, to a lesser extent, from wine, and more and more usually drank ready-made alcoholic drinks (eg, pre-mixed rum and coke). At all ages there was a relatively constant proportion of about 20% of females who preferred spirits.

Type of alcohol usually consumed among current drinkers, males

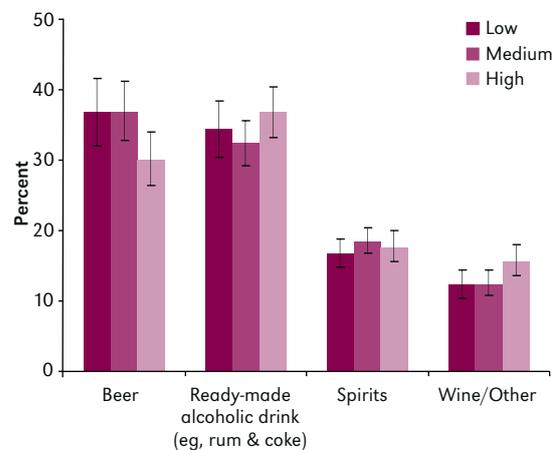


Type of alcohol usually consumed among current drinkers, females



There was no statistically significant variation in the types of alcohol preferred across different levels of neighbourhood deprivation. However, there was significant variation between ethnic groups. Among all ethnic groups beer and RTDs were the drinks usually preferred but Māori and Pacific students more commonly preferred RTDs (reported as the usual drink by 38.3% of Māori and 41.9% of Pacific students), while Asian and NZ European students more commonly preferred beer (reported by 34.5% of Asian and 38.4% of NZ European students).

Type of alcohol usually consumed among current drinkers of different levels of socio-economic deprivation



There was significant variation in the types of alcohol preferred by students of different sexual attraction. More same/both sex-attracted students (30.3%) than opposite-sex-attracted students (17.1%) preferred spirits, but fewer same/both-sex-attracted students (18.2%) than opposite-sex-attracted students (35.9%) preferred beer.

In the 2001 survey, students were not asked about the type of alcohol they consumed, so no comparisons can be made with the 2007 results.



Alcohol acquisition

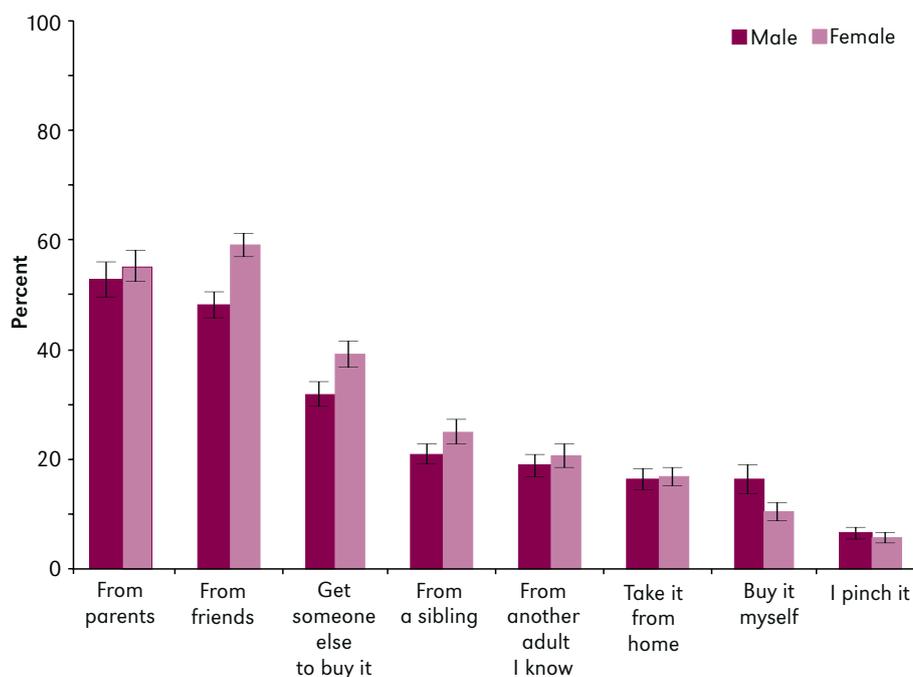
Questions about alcohol acquisition included: where current drinkers obtained alcohol, where binge drinkers obtained alcohol and, for those who bought alcohol, where they bought it and whether or not they were asked for their ID when they did so.

Sources of alcohol

Students who were current drinkers were asked ‘When you drink alcohol how do you usually get it?’ and were allowed to give more than one response. The main sources reported were: *my parents give it to me* (reported by 54.0%) or *friends give it to me* (53.3%). Other sources where students got alcohol without paying for it were: *my brothers or sisters give it to me* (22.9%) or *another adult I know gives it to me* (19.7%). Many current drinkers bought their alcohol: 35.3% reported that *I get someone else to buy it for me*, and 13.6% that *I buy it myself*. Another 16.7% reported that *I take it from home*, and 6.2% that *I pinch it*⁹.

Significant gender differences were noted for several reported sources of alcohol. Females were significantly more likely than males to obtain alcohol from other people: *friends* (males, 48.2%; females, 59.2%), *siblings* (males, 21.0%; females, 25.0%), and *getting someone else to buy it for them* (males, 31.9%; females, 39.2%). Males were significantly more likely than females to *buy it themselves* (males, 16.4%; females, 10.5%).

Sources of alcohol among students who currently drink, male and female



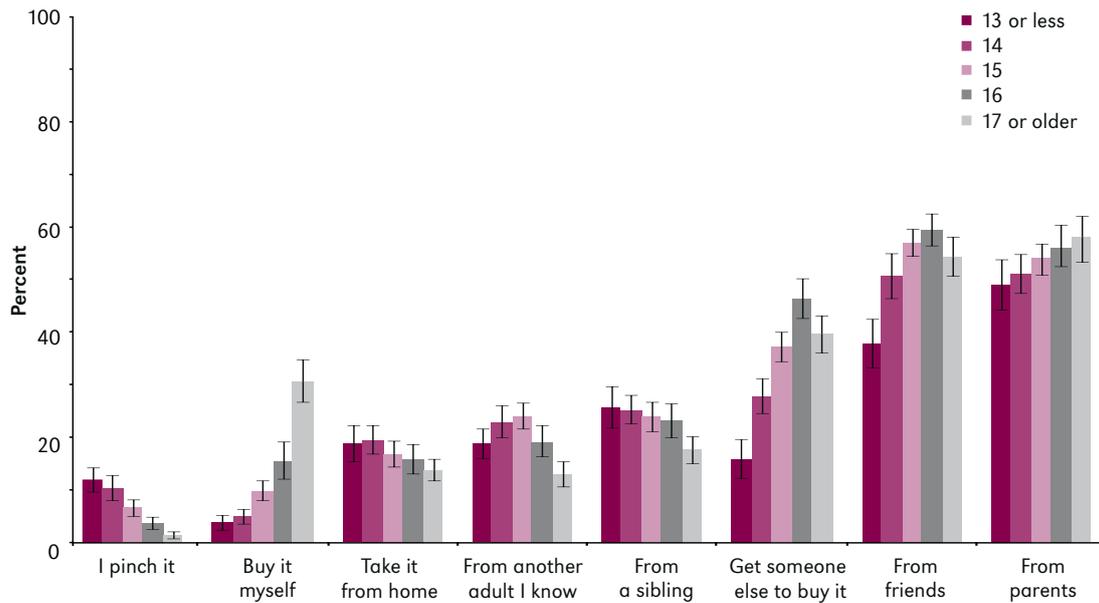
Sources of alcohol changed significantly with age. *Friends* were an increasingly common source of alcohol as students got older (13 or less, 37.8%, 14 years, 50.5%; 15 years, 56.9%; 16 years, 59.4%; 17 or older, 54.2%). *Buying it themselves* was much more common among older students (13 or less, 3.7%; 17 or older 30.6%). About twice as many older students as younger students reported *getting someone else to buy alcohol for them* (13 or less, 15.8%; 16 years, 46.3%; 17 or older, 39.5%). More younger than older students reported *pinching* alcohol (13 or less, 11.8%; 16 years, 3.5%).

Most students who bought alcohol for themselves were older (eg, 13 or less, 3.7%; 17 or older, 30.6%). Under current licensing law in New Zealand it is illegal to sell alcohol to young people aged less than 18 years old. In this survey, 80% of the students who reported they bought their own alcohol were aged less than 18.

⁹ Students were not asked where they pinched the alcohol from.

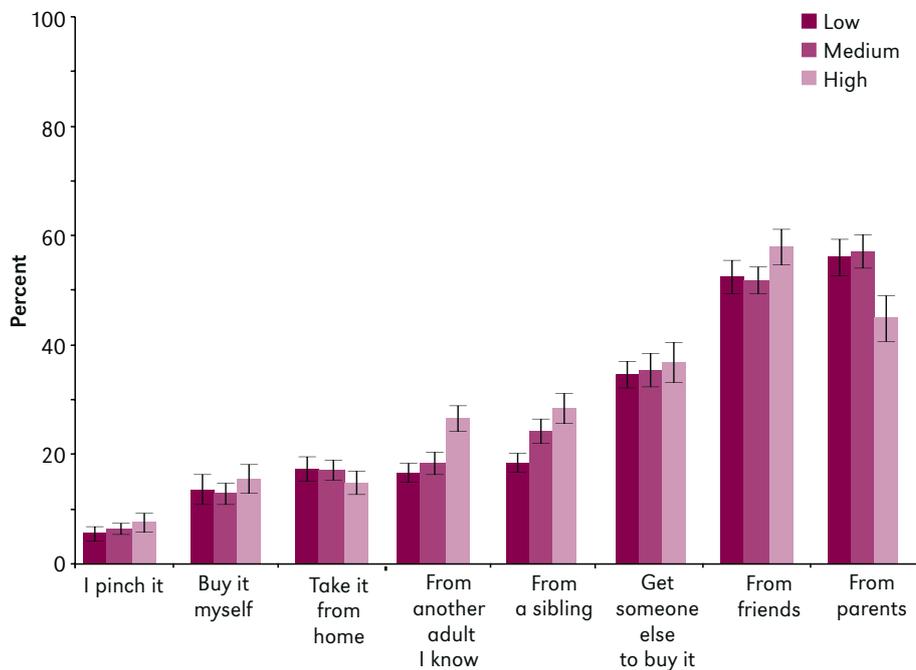


Sources of alcohol among students who currently drink, by age



Sources of alcohol varied significantly between students from different levels of socio-economic deprivation. Students from neighbourhoods of high deprivation were less likely to get alcohol from *parents* or from *home* but more likely to get it from *friends*, *other adults*, or *siblings* than students from low deprivation neighbourhoods were.

Sources of alcohol among current drinkers of different levels of socio-economic deprivation



There was significant variation between ethnic groups in the usual sources of alcohol. Looking at the sources most commonly reported, Māori, Asian and NZ European students all reported *friends*, *parents*, and *getting someone else to buy it* as their most common sources. Pacific students were much less likely to report getting alcohol from *parents* and instead reported *friends*, *getting someone else to buy it*, *another adult I know gives it to me*, and *siblings* as their most common sources.

Same/both-sex-attracted students were significantly more likely than their opposite-sex attracted peers to *take alcohol from home*, or to *get someone else to buy it for them*.



The question was changed slightly between 2001 and 2007 but not enough to preclude comparing the results. In 2007 significantly lower proportions of students reported *buying alcohol themselves* (2001, 15.1%; 2007, 13.6%; $p=0.001$), *getting alcohol from friends* (2001, 61.9%; 2007, 53.3%; $p<0.0001$), or being *given it by other adults* (2001, 24.8%; 2007, 19.7%; $p<0.0001$). There was no change in the proportion reporting they *got it from siblings* (2001, 21.3%; 2007, 22.9%; $p=0.056$). The proportion who *got alcohol from parents* showed a statistically significant wave (year of survey) by gender interaction, indicating that the changes between 2001 and 2007 were different in males and females. Among males, there was little change in the proportion reporting they *got alcohol from parents* (2001, 55.8%; 2007 52.8%), while among females the proportion getting alcohol from parents increased significantly (2001, 51.5%; 2007, 55.3%).

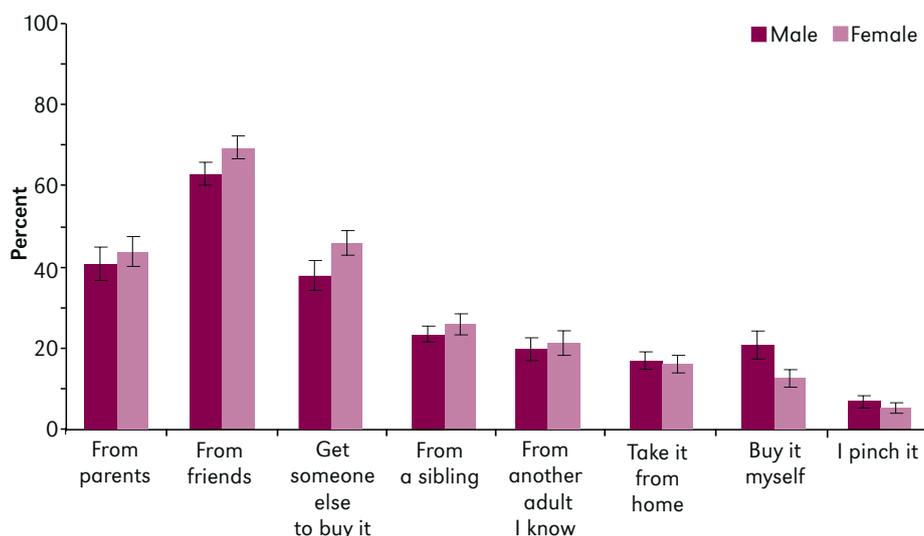
Binge drinkers' sources of alcohol

Students who were binge drinkers were asked where they usually got their alcohol for a binge drinking session. The most commonly reported source of alcohol for binge drinking was getting it *from friends* (65.8%). Other sources, in descending order, were *parents giving it to them* (42.1%), *getting someone else to buy it for them* (41.5%), *getting it from siblings* (24.6%), *getting it from another adult* (20.5%), *buying it themselves* (17.1%), *getting it from home* (16.6%), and *pinching it* (6.1%).

There are some differences in binge drinkers' sources from those for current drinkers in general as reported above: binge drinkers were less likely to have *parents give it to them* (42.1% of binge drinkers; 54.0% of all drinkers), but more likely to *get it from friends* (65.8% of binge drinkers; 53.3% of all drinkers) or to *get someone else to buy it for them* (41.5% of binge drinkers; 35.3% of all drinkers).

The gender differences in sources of alcohol for binge drinking were similar to those for all drinking as reported above. Males were significantly more likely than females to *buy alcohol themselves* for binge drinking (males, 20.7%; females, 12.6%) and slightly more likely to *pinch it* (males, 6.9%; females, 5.1%). On the other hand, females were significantly more likely than males to get alcohol for binge drinking *from friends* (females 69.5%; males, 62.9%) or *get someone else to buy it for them* (females 46.0%; males 37.8%).

Sources of alcohol for binge drinking among binge drinkers – male and female



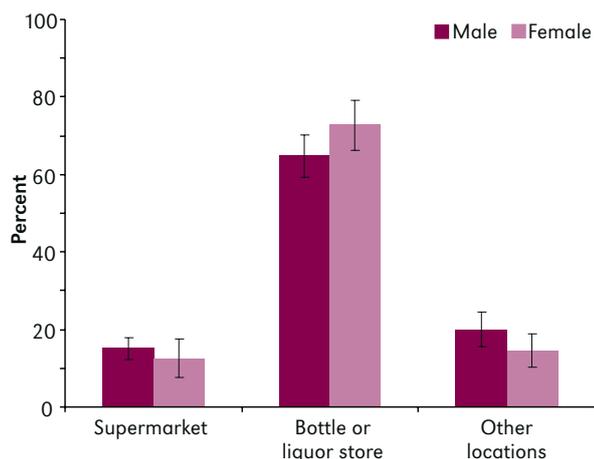
Binge drinkers were not asked where they obtained their alcohol in 2001, so no comparisons can be made with the 2007 results.



Where students bought alcohol

When the 13.6% of current drinkers who bought their own alcohol were asked where they usually bought their alcohol from (and allowed to give more than one response), 67.7% reported usually buying it from a *bottle or liquor store*, 14.2% from a *supermarket*, and 18.1% from *other* licensed or unlicensed outlets. There were no significant differences between males and females in where they bought alcohol.

Students who buy alcohol – where they buy it from (male and female)



There were significant differences in buying patterns between younger (14 and under) and older (15 and over) students. Older students were more likely to buy their alcohol at a *bottle or liquor store* (14 and under, 43.7%; 15 and older, 70.5%) whereas younger students were more likely to do so at *other* licensed or unlicensed outlets (14 and under 43.3%, 15 and older 15.2%).

There was no change from 2001 to 2007 in where students bought their alcohol ($p=0.31$). In both surveys, two thirds of students buying their own alcohol purchased it from bottle or liquor stores (2001, 67.3%; 2007, 67.7%).

Not asked for ID

Students who had bought alcohol were asked if they were ever asked to show an ID when they went to buy it. The proportion who reported being asked “almost never” or “hardly ever” are given here (as *hardly ever asked for an ID*). It must be noted that only 664 students bought their own alcohol and answered this question, so some of the numbers here are rather small and the results are correspondingly less precise.

Over a third (38.9%) of the students who bought alcohol reported that they were *hardly ever asked for an ID* by the vendor. There was no difference between the proportions of males (38.5%) and females (39.7%) who were *hardly ever asked for an ID*.

There was an unexpected pattern in the variation with age. Almost two-thirds (62.0%) of students aged 14 or less who bought their alcohol were *hardly ever asked for ID*, while only a third (36.2%) of those aged 15 or older were *hardly ever asked for ID*. This suggests that younger students were *less* likely than older students to be asked for ID when they bought alcohol. However, the numbers of younger students who reported buying alcohol were very small, and the results are of correspondingly lower reliability.

There was no significant difference in the proportion *hardly ever asked for ID* between students from neighbourhoods of high, medium or low levels of socio-economic deprivation.

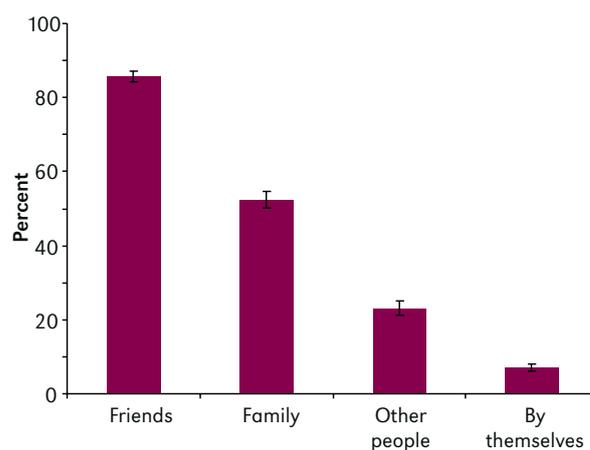
Students were less likely to be *hardly ever asked for ID* in 2007 than in 2001 (2001, 55.8%; 2007, 38.9%; $p < 0.0001$). Stated the other way round, students were more often asked for ID in 2007 than in 2001.

Drinking company

Students who were current drinkers were asked who they usually drank with, and could choose as many as they wished among the possible responses: friends, family, other people, or by themselves.

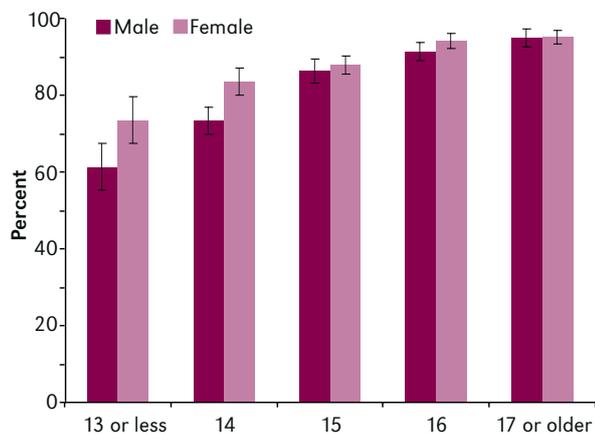
The majority of current drinkers (85.7%) indicated they usually drank *with friends*. About half (52.4%) usually drank *with family*, 23.2% usually drank *with other people*, and 7.0% usually drank *by themselves*.

Who current drinkers usually drink with

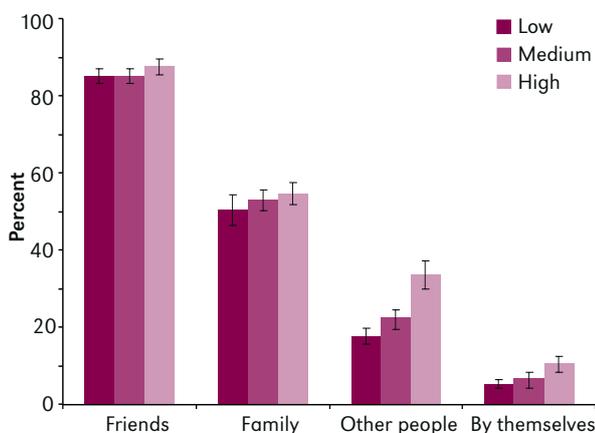


Who students usually drank with varied significantly between students of different ages, genders, levels of neighbourhood deprivation, ethnicities, and sexual attractions. The proportion drinking *with friends* increased with age, and showed a significant age by gender interaction ($p = 0.0062$), meaning that the changes with age were different in males and females. Among younger students, females were more likely than males to drink *with friends*, but as the students got older the proportions who drank *with friends* increased and became more similar in males and females (age 13 and under: males, 61.4%, females 73.4 %; age 14: males 73.3%, females 83.7%; age 15: males 86.4%, females 87.8%; age 16: males 91.4%, females 94.1%; age 17 and older: males 94.9%, females 95.2%).

Percentage of current drinkers who drink with friends, by age



Who students usually drink with - among current drinkers of different levels of socio-economic deprivation



The patterns of who students usually drank with varied significantly between the different levels of deprivation. In neighbourhoods of high levels of deprivation, students who were current drinkers were more likely to usually drink with *other people* (ie, other than family or friends) (high deprivation, 33.5%; medium, 22.5%; low 17.5%), and also more likely to usually drink *by themselves* (high deprivation, 10.4%; medium, 6.7%; low, 5.2%).

The patterns of who students usually drank with varied significantly between ethnic groups. Although more than three-quarters of all students who were current drinkers reported drinking *with friends*, Asian students were less likely to do so than other ethnic groups (Māori, 89.9%; Pacific, 89.0%; Asian, 78.4%; NZ European, 84.6%; Other, 85.9%). Māori students were more likely than other ethnic groups to report usually drinking *with family*, (Māori, 59.5%; Pacific, 51.0%; Asian, 43.6%; NZ European, 51.8%; Other, 42.7%), while Pacific students were more likely than other ethnic groups to report drinking *with others* (Māori, 32.4%; Pacific, 40.1%; Asian, 19.1%; NZ European, 18.4%; Other, 23.0%). Although the numbers were relatively small, Asian and Pacific students were more likely than other ethnic groups to report drinking *by themselves* (Māori, 8.8%; Pacific, 11.3%; Asian, 12.9%; NZ European, 5.1%).

Same/both-sex-attracted students were less likely to report drinking *with family* than opposite-sex-attracted students (opposite-sex-attracted, 53.2%; same/both, 36.6%), and much more likely to report drinking *by themselves* (opposite, 6.0%; same/both-sex-attracted, 18.8%).

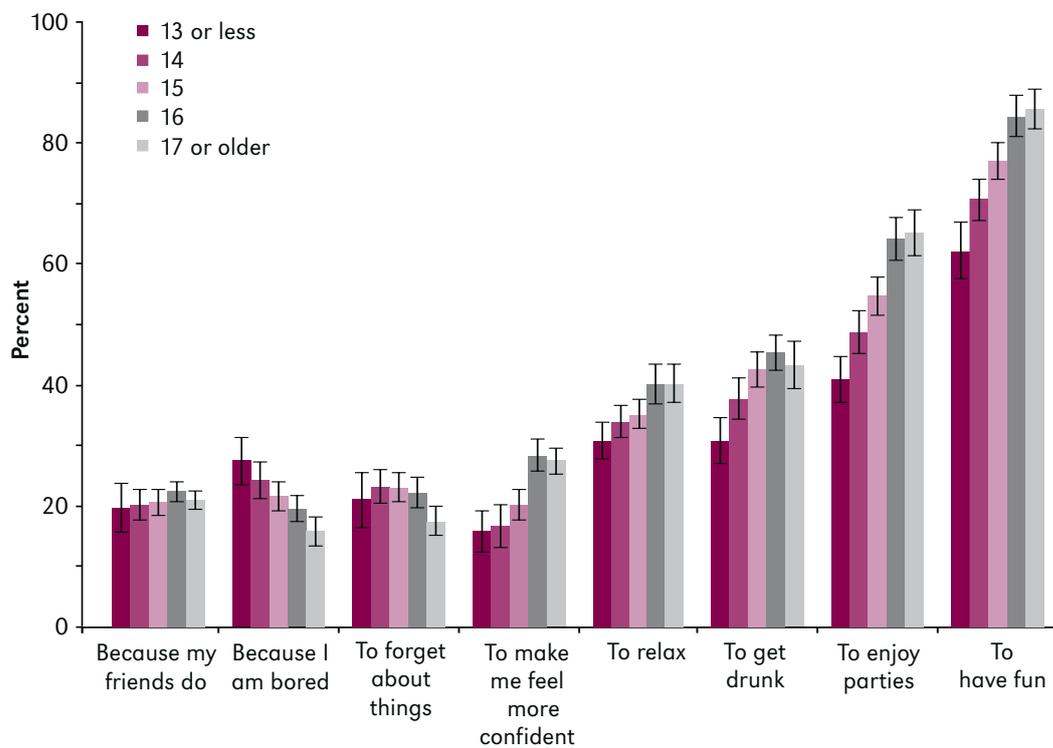
Compared with 2001, some significant differences were noted in responses to this question in 2007. A slightly higher proportion of current drinkers in 2007 usually drank *with family* (2001, 48.5%; 2007, 52.4%; $p=0.0016$) while a slightly lower proportion usually drank *with friends* (2001, 88.0%; 2007, 86.0%; $p=0.005$) or with *others* (2001, 29.9%; 2007, 23.2%; $p<0.0001$). There was no significant change in the proportion who usually drank *by themselves* (2001, 7.7%; 2007, 7.0%; $p=0.43$).



Reasons why students drink

Students who were current drinkers were asked “Why do you choose to drink alcohol?” and could indicate as many as they wished of nine responses.¹⁰ Over three quarters (77.4%) indicated that they drank *to have fun*. Other common responses were *to enjoy parties* (56.1%), *to get drunk* (41.0%), and *to relax* (36.6%). The proportions of current drinkers indicating each of these reasons increased significantly with age. The opposite trend occurred among the 21.1% of current drinkers who indicated they drank *because they were bored*: the proportion here decreased significantly with age (from 27.4% at age 13 or less, to 15.8% at 17 or older). Significantly more females (80.4%) than males (74.8%) said they drank *to have fun*, but significantly more males (41.6%) than females (30.9%) said they drank *to relax*, while there was no difference between males and females in the proportions who said they drank *to enjoy parties*, *to get drunk* or *because they were bored*. As this question was different in 2001 the responses in the two surveys could not be compared.

Why students choose to drink alcohol - among current drinkers, by age



¹⁰ The graph and tables of results do not include the response, ‘none of these [reasons]’.



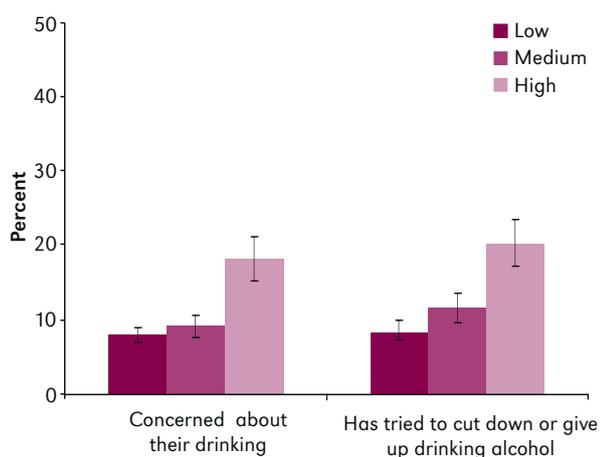
Concerns about drinking

Two questions about drinking concerns were asked. Students who were current drinkers were asked whether they were *worried about how much alcohol they drank*, and if they had ever *tried to cut down or stop drinking*. Of the current drinkers, 10.7% reported being worried “some” or “a lot” about their own drinking, and 12.3% had made an effort to cut down or give up drinking.

There was no significant variation between age groups in the proportions of current drinkers *worried about their drinking*. However, there was significant variation between age groups in the proportion of current drinkers who had *tried to cut down or stop drinking*. This proportion was highest (16.7%) among students aged 13 or less, fell in students aged 14 to 16 (14 years, 10.6%; 15 years, 10.5%; 16 years, 11.8%) but rose again in students 17 years or older (14.1%).

The proportions of current drinkers who were *worried about their drinking*, or had *tried to cut down or stop drinking* varied significantly between students living in neighbourhoods of different levels of deprivation. Current drinkers living in high deprivation neighbourhoods were more likely to report being *worried about their drinking* (low deprivation, 7.9%; medium deprivation, 9.1%; high deprivation, 18.1%), and also more likely to have *tried to cut down or stop drinking* (low deprivation, 8.4%; medium deprivation, 11.7%; high deprivation, 20.2%).

Alcohol concerns among current drinkers of different levels of socio-economic deprivation



There was significant variation between ethnic groups in the proportions of current drinkers *worried about their drinking* and *trying to cut down or stop drinking*. The patterns of responses to these questions suggested that NZ European and Other students were least likely to report being *worried about their drinking* while Pacific students were most likely to be worried (Māori, 15.6%; Pacific, 23.4%; Asian, 14.6%; NZ European, 7.2%; Other, 7.7%). Similarly, NZ European students were least likely to have *tried to cut down or stop drinking* while Pacific students were most likely to have tried to do so (Māori, 18.2%; Pacific, 28.2%; Asian, 14.0%; NZ European, 8.2%; Other, 12.0%).

Comparing the results for 2001 and 2007 there was a significant reduction in the proportion of current drinkers *worried about their drinking* (2001, 15.8%; 2007, 10.7%; $p < 0.0001$), but there was no change in the percentage who had *tried to cut down or stop drinking* (2001, 11.5%; 2007, 12.3%; $p = 0.41$).

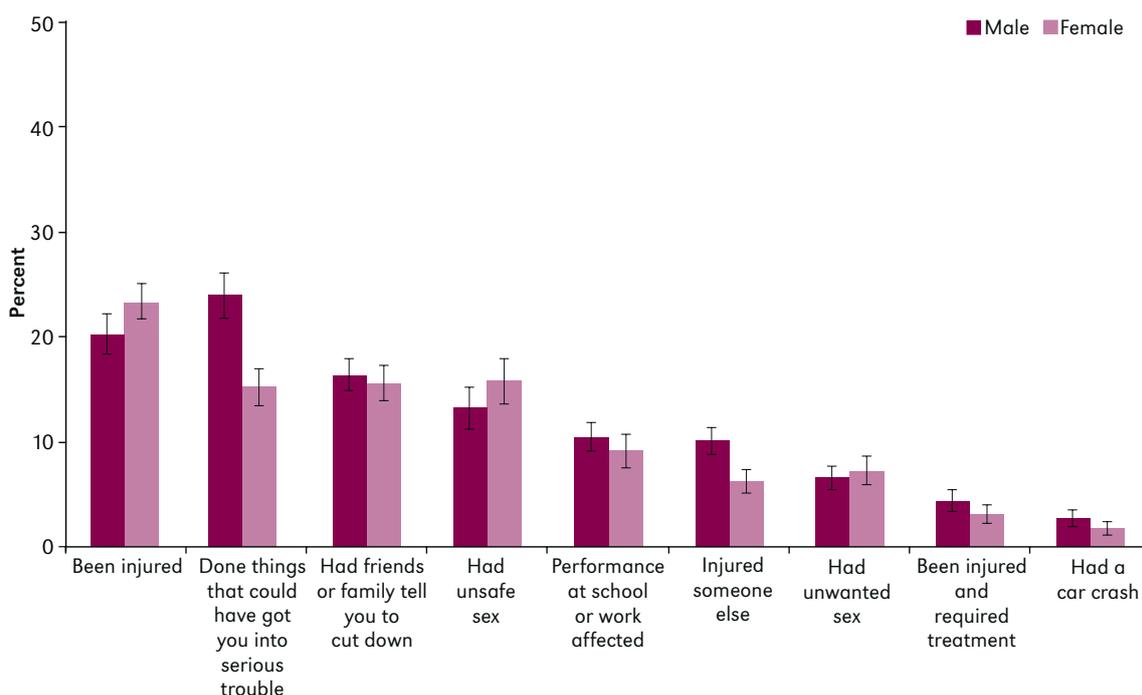


Adverse effects of alcohol use

Students who were current drinkers were asked to indicate how many times in the previous year they had experienced any of a range of adverse effects after drinking or associated with their drinking. They were able to select more than one response option.

Overall, the most common adverse effect associated with drinking was *being injured* (reported by 21.7% of current drinkers). *Doing things that could have resulted in serious trouble* was the second most common adverse effect (reported by 19.9%), followed by *being asked by friends/family to cut down drinking* (16.1%), *having unsafe sex* (ie, without a condom) (reported by 14.4%), and *having school or work performance affected* (9.8%). *Having a car crash after drinking* was reported by 2.2% of current drinkers.

Adverse effects of alcohol use among current drinkers - male and female

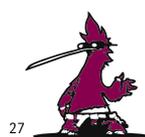


There were significant gender differences in the reported rates of some adverse events. In particular, males were significantly more likely to report they had *done things that could have resulted in serious trouble* (males, 24.0%; females, 15.3%), had *injured someone else* (males 10.1%, females 6.3%) or *had a car crash* (males 2.7%, females 1.7%).

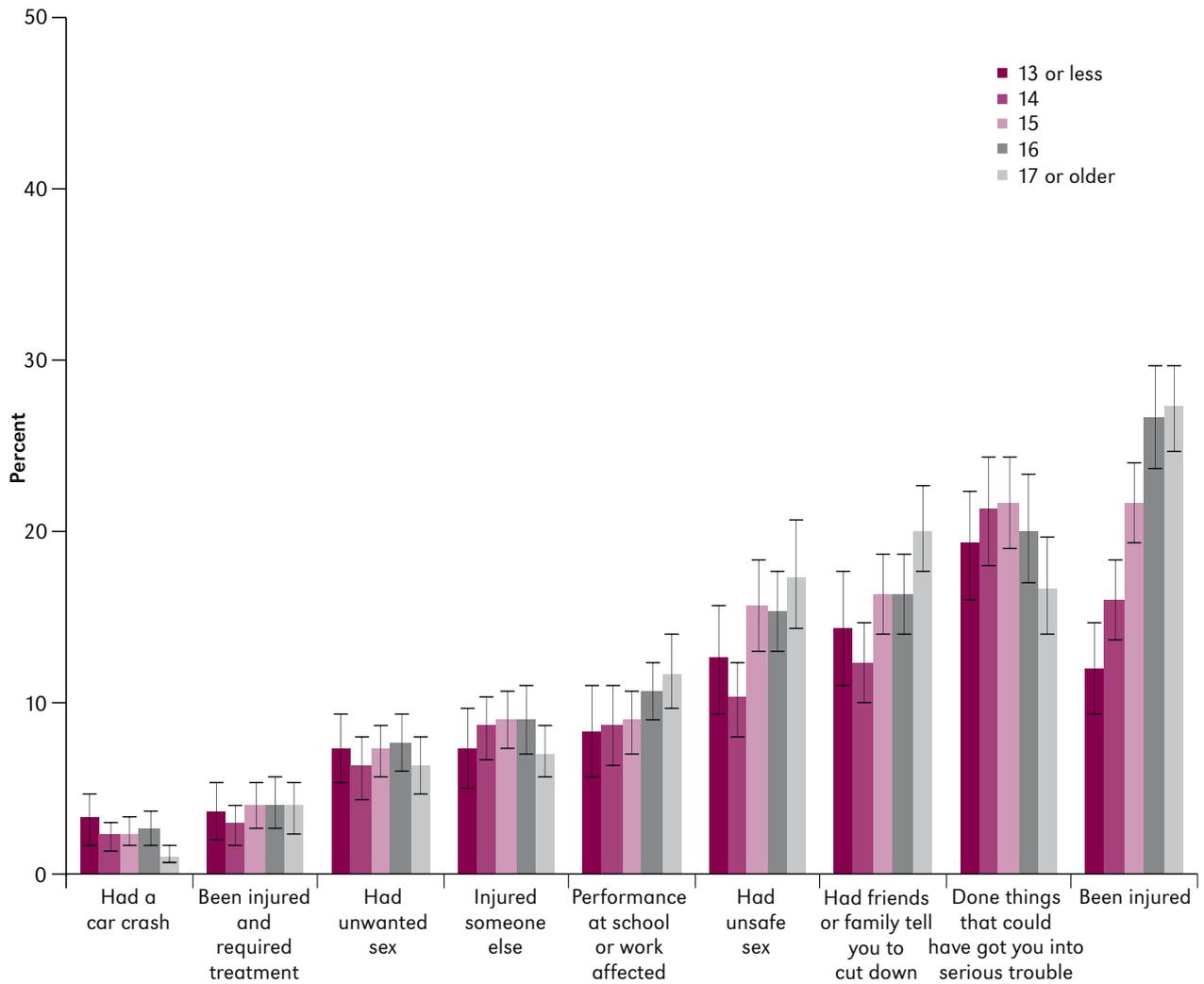
Statistically significant variation between ages was also noted, with more older students reporting *being injured* after drinking, *having friends or family tell them to cut down*, *having unsafe sex*, and *having performance at school or work affected*.

There were significant associations between the level of deprivation current drinkers lived in and the proportions who reported *having unwanted sex after drinking* (low deprivation, 5.3%; medium deprivation, 6.6%; high deprivation, 10.0%) and *injuring someone else* (low deprivation, 5.6%; medium deprivation, 8.4%; high deprivation, 12.7%).

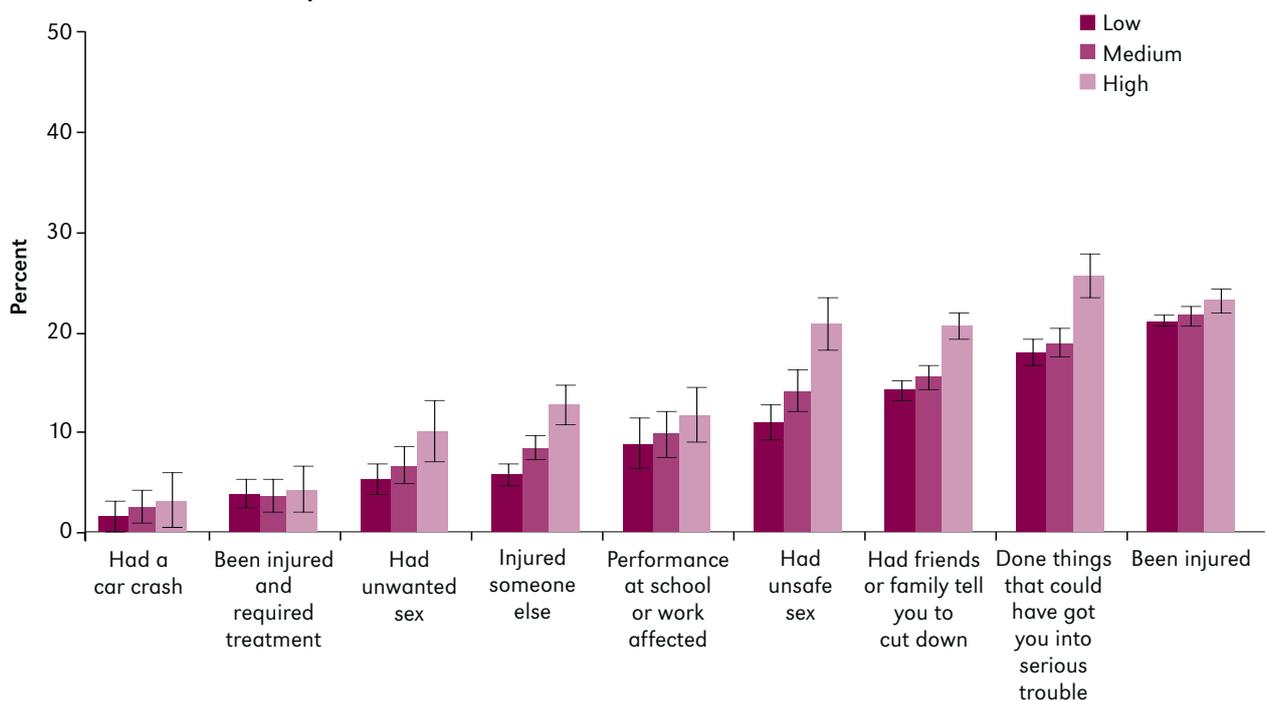
There was significant variation between ethnic groups in the proportions of current drinkers reporting some of the problems related to drinking. Generally higher proportions of Māori and Pacific students reported *having friends or family tell you to cut down* (Māori, 24.0%; Pacific, 24.1%; Asian, 11.2%; NZ European, 13.3%), *having your performance at school or work affected*, (Māori, 14.1%; Pacific, 16.4%; Asian, 6.4%; NZ European, 8.3%) *having unsafe sex*, (Māori, 25.6%; Pacific, 26.6%; Asian, 5.1%; NZ European, 10.6%) *doing things that could have got you into serious trouble*, (Māori, 28.3%; Pacific, 27.4%; Asian, 11.0%; NZ European, 17.5%; Other, 15.7%) and *being injured* (Māori, 27.1%; Pacific, 23.5%; Asian, 10.1; NZ European 21.1%; Other, 19.4%).



Adverse effects of alcohol use among current drinkers, by age



Adverse effects of alcohol use among current drinkers of different levels of socio-economic deprivation



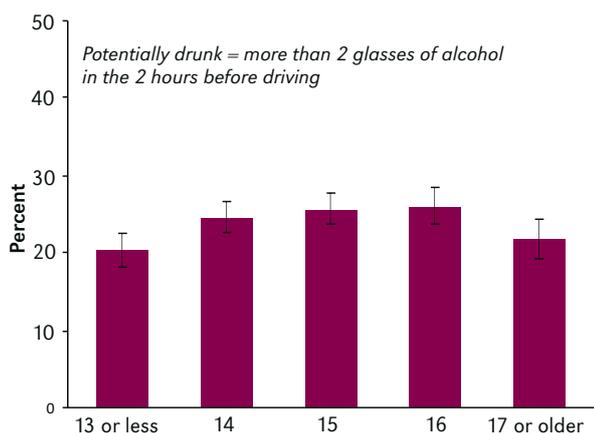
There were also significant differences between same/both-sex-attracted and opposite-sex-attracted students in the proportions of current drinkers reporting some of the problems related to drinking. Same/both-sex-attracted students were significantly more likely than opposite-sex attracted students to report *having friends or family tell you to cut down* (same/both-sex-attracted 24.2%; opposite-sex-attracted 15.5%); *having your performance at school or work affected* (same/both-sex-attracted 17.1%; opposite-sex-attracted 9.5%); *having unsafe sex* (same/both-sex-attracted 28.1%; opposite-sex-attracted 13.8%); *having unwanted sex* (same/both-sex-attracted 15.5%; opposite-sex-attracted 6.4%); and *being injured* (same/both-sex-attracted 29.0%; opposite-sex-attracted 21.6%).

This question was different in the 2001 survey and thus no direct comparisons can be made between 2001 and 2007 results.

Alcohol and driving

All students were asked if, within the month before the survey, they had been *riding in a car with a driver who was potentially drunk* (ie, a driver who had drunk more than 2 glasses of alcohol in the 2 hours before driving). Students who were drivers (ie, they had ever driven a car on a public road) were also asked if they had *driven after drinking*.

Students who had been riding in a car driven by someone who was potentially drunk, by age

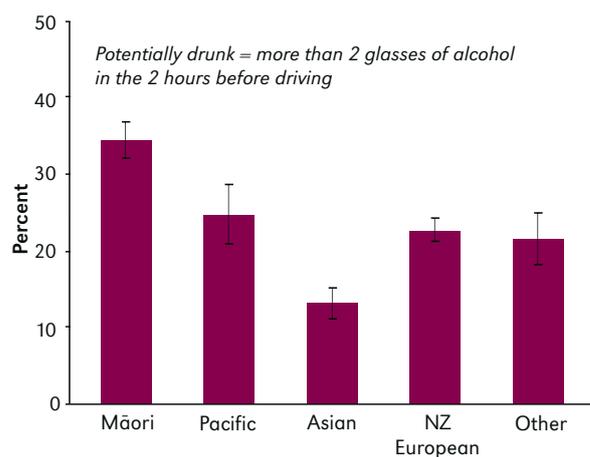


Riding with a potentially drunk driver

Overall, 23.8% of all students reported that within the previous month they had been *riding in a car with a driver who was potentially drunk*. No significant differences were found between males and females.

There was, however, significant variation with age: the proportion of students *riding in a car with a driver who was potentially drunk* increased up to age 16 and then decreased at age 17 or older (13 or less, 20.4%; 14 years, 24.6%; 15 years, 25.6%; 16 years, 26.0%; 17 or older, 21.9%). The proportion of students *riding in a car with a driver who was potentially drunk* did not vary significantly between students from different levels of socio-economic deprivation (low, 22.6%; medium, 22.9%; high, 26.2%).

Students who had been riding in a car driven by someone who was potentially drunk, by ethnic groups



The proportion of students *riding in a car with a driver who was potentially drunk* varied significantly between ethnic groups. The pattern of responses indicated that Asian students were least likely to report this risk behaviour while Māori students were most likely to do so (Māori, 34.4%; Pacific, 24.6%; Asian, 13.3%; NZ European, 22.7%; Other, 21.7%).

Same/both-sex-attracted students were significantly more likely than opposite-sex attracted students to report *riding in a car with a driver who was potentially drunk* (opposite sex, 23.9%; same/both-sex, 30.7%)

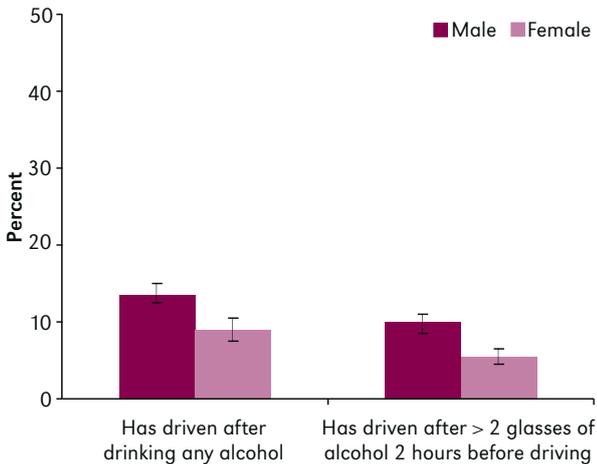
The proportion of students who reported *riding in a car with a driver who was potentially drunk* decreased significantly from 29.2% in 2001 to 23.8% in 2007 ($p < 0.0001$).



Driving after drinking

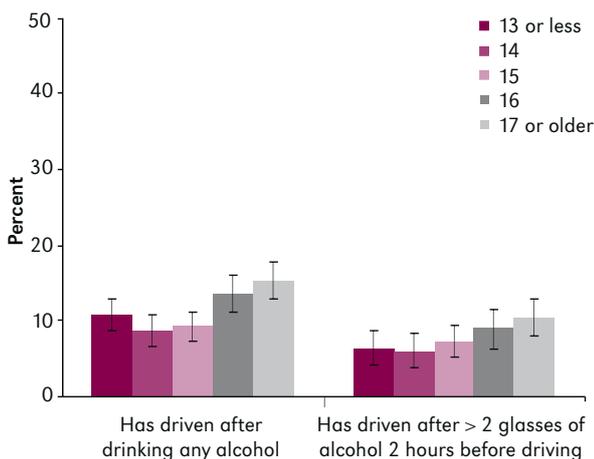
Overall, 11.8% of young drivers (ie, students who had ever driven on a public road) reported that within the previous month they had *driven after drinking*, and 8.1% that within the previous month they had *driven when potentially drunk* (after consuming more than 2 glasses of alcohol in the 2 hours prior to driving).

Students who drink and drive - male and female



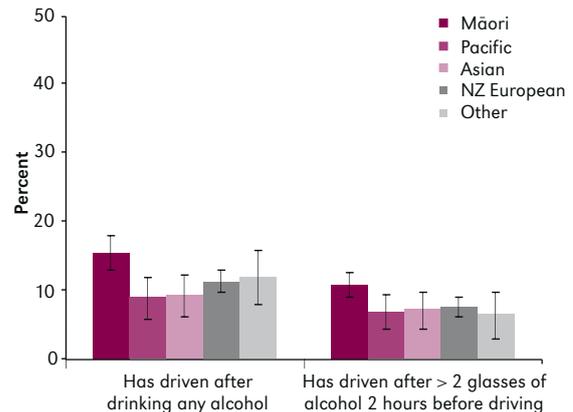
There were significant differences between males and females: 13.6% of males compared to 9.1% of females reported *driving after drinking*, and 9.8% of males compared to 5.4% of females reported *driving when potentially drunk*.

Students who drink and drive, at different ages



There was statistically significant variation with age both in the proportion who reported *driving after drinking*, and in the proportion who reported *driving when potentially drunk*. More older than younger students reported *driving after drinking* (13 or less, 10.8%; 14 years, 8.6%; 15 years, 9.3%; 16 years, 13.6%; 17 or older, 15.3%) and similarly more older than younger students reported *driving when potentially drunk* (13 or less, 6.3%; 14 years, 6.0%; 15 years, 7.3%; 16 years, 9.0%; 17 or older 10.6%).

Students who drink and drive - different ethnic groups



No significant differences in alcohol related driving behaviours were found between students of different levels of deprivation.

There was significant variation between ethnic groups in the proportion of students reporting *driving after drinking*, but no significant variation between ethnic groups in the smaller proportions reporting *driving when potentially drunk*. Pacific students were least likely to report *driving after drinking* (Māori, 15.4%; Pacific, 8.9%; Asian, 9.2%; NZ European, 11.3%). Proportions who reported *driving when potentially drunk* were: Māori, 10.6%; Pacific, 6.9%; Asian, 7.1%; NZ European, 7.7%.

The proportion of students reporting *driving after drinking* was not significantly different between same/both-sex-attracted (18.8%) and opposite-sex-attracted students (11.4%), but the proportion reporting *driving when potentially drunk* was significantly higher among same/both-sex-attracted (17.6%) than opposite-sex-attracted students (7.7%).

As the response options to questions relating to driving were different in the 2001 and 2007 surveys, no comparisons between them could be made.





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