# NSW Public Health Bulletin Supplement 

## The health behaviours of

 secondary school students in New South Wales 2002This work is copyright. It may be reproduced in whole or in part, subject to the inclusion of an acknowledgment of the source and no commercial usage or sale.

State Health Publication No: PH040008
ISSN 10347674
suggested citation:
Centre for Epidemiology and Research, NSW Department of Health. The health behaviours of secondary school students in New South Wales 2002. N S W Public Health Bull 2004; 15(S-2).
produced by:
Centre for Epidemiology and Research
Population Health Division
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further copies of this publication can be obtained by contacting:
Better Health Centre Publication Warehouse
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www.health.nsw.gov.au/public-health/phb/phb.html

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## APPENDIX 1

The New South Wales Secondary Schools Students Health Survey 2002

## APPENDIX 2

Method for developing design-based weights for 2002 survey

## 1. FOREWORD

I am pleased to present the report The health behaviours of secondary school students in New South Wales 2002, which is an overview of the main health behaviours of NSW secondary school students.

Information presented in this report is derived from surveys of secondary school students that have been carried out every 3 years between 1984 and 2002. These surveys were jointly managed by the NSW Department of Health and The Cancer Council NSW in 1996, 1999 and 2002. I would like to thank The Cancer Council NSW for its contribution to managing this process and for its outstanding work in promoting healthy behaviours among young people.
I would also especially like to thank students, teachers, and schools for their assistance in carrying out the surveys over the years. This report would not have been possible without their patience and support. I also thank the NSW Department of Education and Training, which gave permission for the surveys to be carried out in NSW government schools, and to the Catholic Education Office and the Association of Independent Schools for their support of the surveys.

Patterns of lifestyle behaviours that affect health are often established in the teenage years. This report provides information on lifestyle behaviours including: substance use, such as smoking and drinking alcohol; sun protection; eating habits; involvement in physical activity; and the important areas of mental wellbeing and injuries.
Families, communities, and government are making substantial efforts to encourage young people to take up healthy lifestyles, as well as working to create environments that better protect them. The information in this report gives us a picture that will guide our efforts to continue to protect and promote the health and wellbeing of young people.

I thank all the individuals and organisations who contributed their time and expertise to assist in the development and conduct of the secondary schools surveys, and to the preparation of this report.


## Greg Stewart

Deputy Director-General Population Health and Chief Health Officer
September 2004

## 2. ACKNOWLEDGEMENTS

## Survey data

We would like to acknowledge the lead role of The Cancer Council NSW in oversighting and managing the NSW component of the Australian School Students' Alcohol and Drugs Survey (ASSAD) over many years, and their assistance in making the historical data available.
The Cancer Council Victoria coordinated the development of the core questionnaires for the national ASSAD surveys and we thank them for their work in the collection, analysis and reporting of the national survey data. Particular thanks go to Jane Hayman and Vicki White who gave generously of their time in providing the historical data used in this report as well as providing advice on interpretation.
We gratefully acknowledge the support of the NSW Department of Education and Training, the Catholic Education Office, and the Association of Independent Schools. We thank the students who participated in the survey, and teachers and schools for their assistance and support.

We would like to acknowledge the contribution of many individuals from the NSW Department of Health and The Cancer Council NSW who assisted with the survey data collection over the years.

## Management of the 2002 survey data collection

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The Cancer Council NSW: Irena Brozek, Kathy Chapman, Dianne O’Connell, Greg Soulos, Anita Tang, and Raoul Walsh.

## 3. EXECUTIVE SUMMARY

In 2002, the NSW Department of Health, in conjunction with The Cancer Council NSW, carried out a survey of the health behaviours of secondary school students as part of the triennial Australian School Students' Alcohol and Drugs (ASSAD) Survey, a national survey of secondary school students that commenced in 1984.

The survey was carried out using a self-administered questionnaire. The questionnaire included questions on: smoking, alcohol, and other drug use; mental health and wellbeing; sun protection behaviours; nutrition and eating patterns; physical activity; and injuries.

The student sample was selected using a two-stage probability sample, with schools selected at the first stage and students selected at the second stage. Analysis was restricted to students aged 12-17 years. The final sample comprised 6180 students, of whom 3780 were from government schools, 1221 were from Catholic schools, and 1179 were from independent schools.

## Smoking, drinking alcohol, and other substance use

The percentage of students who have ever smoked or currently smoke has fallen markedly over the last 20 years. The percentage of students who reported ever smoking fell from 67 per cent in 1984 to 42 per cent in 2002, while the percentage of students who reported recent smoking (smoking in the last week) fell from 22 per cent in 1984 to 13 per cent in 2002. These trends were apparent across all ages and between both sexes. In 2002, 4 per cent of students reported smoking daily in the last week.

In 2002, 30 per cent of students reported being recent drinkers; that is, having an alcoholic drink in the last week. In contrast to smoking, this percentage has not changed substantially since 1984. Males were more likely to report being recent drinkers than females, with 46 per cent of males aged 17 years reporting that they were recent drinkers compared to 32 per cent of females of the same age. Seven per cent of students reported drinking at a level that is considered to be risky or to have a high risk of harm in the short term, while less than 2 per cent reported drinking at a level that is risky or has a high risk of harm in the long term.

In recent years there has been a fall in the percentage of students reporting cannabis use, with 9 per cent of students reporting having used cannabis in the previous 4 weeks in 2002 , compared to 17 per cent in 1996. Reported use of other illicit drugs was uncommon.

## Mental health and wellbeing

Mental health and wellbeing was assessed by estimating the level of psychological distress among students. High levels of psychological distress were reported by 18 per cent of secondary school students in 2002. Of students found to have high levels of psychological distress, 77 per cent reported that it was pervasive; that is, it occurred both at home and at school.

## Sun protection behaviours

There was a fall in the percentage of students who engaged in important sun protection behaviours between 1993 and 2002. The percentage of students who said they would usually or always wear a hat in the middle of the day on a sunny day in summer fell from 49 to 41 per cent over the 10 year period. Similarly, the percentage of students who reported they would usually or always wear maximum protection suncreen fell from 63 to 41 per cent. However, the percentage of students who reported they would usually stay mainly in the shade rose from 22 to 28 per cent.

## Nutrition and eating patterns

Between 1996 and 2002, the percentage of students eating at least 2 serves of fruit per day increased slightly from 65 per cent to 69 per cent, while the percentage eating at least 4 serves of vegetables per day fell slightly from 22 to 18 per cent, and the percentage eating 4 or more serves of bread or cereals per day fell from 55 to 39 per cent. In 2002, 64 per cent of students reported that they usually had something for breakfast, compared to 61 per cent in 1996. In 2002, 11 per cent of students reported that they rarely or never had something to eat for breakfast.

## Physical activity

The majority of students reported doing moderate ( 64 per cent) or vigorous ( 65 per cent) physical activity on 1 to 4 occasions in the previous week. A small proportion (5 per cent) of students reported not doing any moderate or vigorous physical activity. The rate of inactivity in females increased with age from 3 per cent of those aged 12-15 years to 9 per cent of those aged 16-17 years, but did not change substantially with age for males. Ninety per cent of students reported participating in sports, 41 per cent reported walking for transport, and 32 per cent reported walking for pleasure in a normal week.

## Injury

In 2002, 34 per cent of students reported that in the last six months they had hurt themselves or had an injury for which they sought medical attention. This percentage has fallen from 43 per cent in 1996. In 2002, the majority of injuries occurred at a sports facility ( 35 per cent) or at home ( 19 per cent). The sports with the highest percentage of students reporting an injury in the previous 12 months were soccer, basketball, and rugby league.

The majority of students perceived a high level of risk in being a passenger in a vehicle where the driver had been drinking alcohol, and being a passenger in a vehicle where the driver had taken drugs. The majority also thought that there was some level of risk in riding a bicycle without a helmet, playing sports without warming up or stretching, playing contact sport without protective equipment, or riding a skateboard on a roadway, but less than half considered the risk to be high.

## 4. SNAPSHOT OF HEALTH OF SECONDARY SCHOOL STUDENTS

SNAPSHOT OF HEALTH OF SECONDARY SCHOOL STUDENTS, NSW 2002

| Topic | Indicator | Males <br> \% | Females <br> \% | Persons <br> \% |
| :---: | :---: | :---: | :---: | :---: |
| Substance use | Ever smoked | 41.8 | 42.3 | 42.1 |
|  | Recent smoking (in the last week) | 11.6 | 14.9 | 13.3 |
|  | Daily smoking among recent smokers | 34.8 | 31.6 | 33.0 |
|  | Recent drinker (alcoholic drink in the last week) | 31.4 | 28.0 | 29.7 |
|  | Risky or high risk drinking: |  |  |  |
|  | -short tem risk | 6.9 | 6.7 | 6.8 |
|  | -long term risk | 1.5 | 1.9 | 1.6 |
|  | Cannabis use in the last 4 weeks | 10.8 | 8.0 | 9.4 |
| Mental health and wellbeing | High psychological distress | 13.5 | 21.5 | 17.5 |
| Sun protection behaviours | On a sunny day in summer, when outside for an hour or more between 11.00 a.m. and 3.00 p.m., usually or always: |  |  |  |
|  | -wear a hat | 51.8 | 29.5 | 40.6 |
|  | -wear maximum protection sunscreen | 35.0 | 46.3 | 40.7 |
|  | -stay mainly in the shade | 26.8 | 29.4 | 28.1 |
|  | -wear clothes covering most of the body | 25.6 | 13.8 | 19.7 |
|  | -wear sunglasses | 22.6 | 39.1 | 30.8 |
|  | On a sunny day in summer between 11.00 a.m. and 3.00 p.m. how often spend most of the time inside | 27.3 | 24.6 | 26.0 |
|  | Last summer, had sunburn that was sore or tender the next day | 73.6 | 80.0 | 76.8 |
|  | Ever had severe sunburn that has blistered | 31.0 | 34.5 | 32.7 |
|  | Belief that 'you can only get skin cancer if you get burnt often' | 32.8 | 24.5 | 28.6 |
| Nutrition and eating patterns | Fruit: 2 or more serves per day | 67.4 | 70.0 | 68.7 |
|  | Vegetables: 4 or more serves per day | 19.3 | 17.2 | 18.3 |
|  | Bread and cereals: 4 or more serves per day | 43.2 | 34.7 | 38.9 |
|  | Usually has something to eat for breakfast on |  |  |  |
|  | 5 or more days in the week | 70.6 | 57.8 | 64.2 |
| Physical activity | In the previous week: |  |  |  |
|  | -moderate physical activity 1-4 times | 61.4 | 67.1 | 64.2 |
|  | -moderate physical activity 5 or more times | 22.7 | 18.5 | 20.6 |
|  | -vigorous physical activity 1-4 times | 61.1 | 68.9 | 65.0 |
|  | -vigorous physical activity 5 or more times | 28.3 | 15.0 | 21.7 |
|  | In a normal week: |  |  |  |
|  | -participation in sport | 91.7 | 87.7 | 89.7 |
|  | -walk for transport | 37.8 | 44.4 | 41.1 |
|  | -walk for pleasure | 18.8 | 44.2 | 31.5 |
| Injury | Had injury or was hurt in the past 6 months for which sought medical attention | 38.4 | 29.3 | 33.8 |
|  | Perceives risk in the following activities: |  |  |  |
|  | -being a passenger in a vehicle where driver has drunk alchol | 86.7 | 91.5 | 89.2 |
|  | -riding a bicycle without a helmet | 80.7 | 86.7 | 83.7 |
|  | -playing sports without warming up or stretching | 78.9 | 84.1 | 81.5 |
|  | -playing contact sport without protective equipment | 76.6 | 82.2 | 79.4 |
|  | -being a passenger in a vehicle where driver has taken drugs | 75.3 | 80.9 | 78.1 |
|  | -swimming at an unpatrolled beach | 73.2 | 82.1 | 77.6 |
|  | -riding a skateboard on a roadway | 71.8 | 81.2 | 76.5 |

## 5. METHODS

In 2002, the NSW Department of Health and The Cancer Council NSW carried out a survey of the health of secondary school students as part of the triennial Australian School Students' Alcohol and Drug (ASSAD) Survey, a national survey of secondary school students that commenced in 1984.

In its earlier years, the ASSAD Survey questions targeted drug and alcohol use. The topics covered by the Survey have gradually extended to include other issues that are important to the health of adolescents. The NSW survey now includes questions on physical activity and injuries, sun protection behaviours, eating behaviours, and mental health and wellbeing, in addition to smoking, alcohol, and other drug use.
This section describes the methods of data collection for the 2002 Survey, and the methods used for analysis of both 2002 and historical data for this report.

## The 2002 Survey

## Survey instrument

The survey instrument was a self-administered questionnaire, which had a core component and two supplements. The core component was developed by The Cancer Council Victoria in consultation with states and territories and was administered uniformly across Australia. The core questionnaire included demographic items and questions on tobacco, alcohol and other drug use, sun protection behaviours, nutrition, physical activity, and one question on inactivity.

The two supplementary questionnaires were developed in NSW and administered in NSW only. Each student participating in the survey completed the core component and 1 supplementary questionnaire, with 50 per cent of students completing each supplementary questionnaire. Supplementary questionnaires included additional questions on tobacco and alcohol use, nutrition, and physical activity, as well as questions on mental health and wellbeing and injuries. The survey questionnaires are shown in Appendix 1.

## Sample selection

The target population in NSW was all secondary school students in Years 7-12 enrolled in schools in the period October 2002 to May 2003. Year 12 students were not included in the survey until 2003 as they were unavailable for the 2002 survey period (Term 4).
The sample was a stratified two-stage probability sample. Schools were selected at the first stage of sampling and students were selected in schools at the second stage. The 8 Australian states and territories were the major strata, with the minor strata corresponding to the 3 school sectors: government, Catholic, and independent.

Based on the percentage of students in the target population for each state and school sector, the total desired number of sample schools was proportionally allocated. Samples were drawn separately and independently for lower secondary schools (Years 7-10) and upper secondary schools (Years 11-12). The national sample design called for 258 schools in the lower secondary sample and 127 schools in the upper secondary sample. In order to enhance response rates, sampling was restricted to schools that had not been previously selected in random samples obtained for studies conducted by the Australian Research Centre in Sex, Health and Society.

The target population was calculated for the lower secondary sample as the sum of the enrolments for Years $8-10$. As Year 7 is at the primary level in 4 states, it was not included in the population used to draw the school sample. For the upper secondary sample, the target population was the sum of enrolments for Years 11 and 12. Schools for the sample were selected with a probability proportional to the size of the target population in the school. If a school had a number of different campuses, the target population was determined by using the sum of enrolments of all the campuses. Thus, if a multi-campus school was selected as a sample school, each campus would need to be surveyed.

The sampling procedure excluded small schools for logistical convenience. A school was considered 'small' if the number of enrolments in Years 8 to 10 was less than 100 for a lower secondary school or if the number of enrolments in Years 11 to 12 was fewer than 100 for an upper secondary school. Language schools were also excluded from the sampling frame.

Where possible, 2 potential replacement schools were selected for each school in the sample. Schools from the same school sector as the sample school and with the closest postcode were used as replacement schools.

In NSW, booster schools were included for the Hunter and Central Sydney Area Health Services. Initially, 93 lower secondary (Years 7-10), 31 upper secondary (Years 1112), and 30 booster schools were invited to participate. Selection of upper and lower parts of a school was carried out independently and so a school might be selected in both lower and upper groupings.

The target student sample was 80 students at each of the upper and lower secondary schools. If year 12 was not able to participate then the target was 60 students at each of the upper secondary schools. Student selection was random within each year group.

Where a school declined participation, a replacement school was approached. The survey period was extended from 2002 to include Term 1 and the beginning of Term 2 of 2003. Towards the end of 2002, a decision was made to
reduce the size of the school sample. The Cancer Council Victoria pooled the remaining schools in the sample and carried out the resampling.

A letter was sent to the parent(s) of the selected students at each participating school, providing information about the survey. The letter included a contact number to telephone if they did not want their child to participate in the survey. Students could also independently choose not to participate in the survey.

In total, 424 schools were approached and 99participated in NSW. School responses are shown in Table 1. Schools that did not agree to participate in the survey reported the main reasons as: selection and consent procedures too onerous; concern about providing student lists for selection in view of privacy guidelines; already committed to other research studies; other intra-school demands including major events, examinations, etc.; no teacher available to coordinate; and dropping out due to lack of follow up by the data collection agency.

A total of 6441 students returned questionnaires. Sixtyfour records were excluded for the following reasons: age and sex data missing ( $n=12$ ), records where 50 per cent or more questions missing across core and supplementary questionnaires ( $n=50$ ), and data entry error ( $n=2$ ).

In this report, analysis was restricted to students aged 1217 years. A further 145 students were excluded because they fell outside this age range, leaving 6232 records to be weighted for estimation purposes. The method of weighting is described in Appendix 2. Fifty-two records were excluded as they had insufficient information to be able to generate a weight for the record. There were therefore 6180 records with weights for students in the 12-17 year age range that were available for analysis. The number of records from the supplementary questionnaires that were available for analysis were: Supplementary A, 3506; Supplementary B, 2639.

The Clinical Epidemiology and Biostatistics Unit at the Royal Children's Hospital in Melbourne carried out the

## TABLE 1

SCHOOL RESPONSES FOR ASSAD SURVEY BY SCHOOL SECTOR AND LEVEL, NSW, 2002

|  |  | Government |  | Catholic |  | Independent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Selected No. | Responded No. | Selected No. | Responded No. | Selected No. | Responded No. |
| Lower | Initial main sample | 60 |  | 20 |  | 14 |  |
|  | Main sample after pooling | 49 | 45 | 16 | 14 | 11 | 12 |
|  | Booster sample | 11 | 7 | 2 | 0 | 2 | 1 |
|  | Total lower | 60 | 52 | 18 | 14 | 13 | 13 |
| Upper | Initial main sample | 18 | 8 |  |  | 6 |  |
|  | Main sample after pooling | 15 | 9 | 6 | 3 | 5 | 4 |
|  | Booster sample | 4 | 1 | 2 | 1 | 2 | 2 |
|  | Total upper | 19 | 10 | 8 | 4 | 7 | 6 |

Note: 'Selected' refers to schools including their individual replacement schools. 'Responded' refers to those schools where either the initial or one of the replacement schools responded.

## TABLE 2

FINAL ASSAD SURVEY SAMPLE BY SCHOOL SECTOR, SEX AND AGE, NSW, 2002

| School sector | Sex | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} 12 \\ \text { No. } \end{array}$ | $\begin{gathered} 13 \\ \text { No. } \end{gathered}$ | $\begin{aligned} & 14 \\ & \text { No. } \end{aligned}$ | $\begin{array}{r} 15 \\ \text { No. } \end{array}$ | $\begin{array}{r} 16 \\ \text { No. } \end{array}$ | $\begin{gathered} 17 \\ \text { No. } \end{gathered}$ | Total No. |
| Government | Males | 274 | 443 | 465 | 428 | 204 | 104 | 1918 |
|  | Females | 285 | 425 | 404 | 405 | 231 | 112 | 1862 |
|  | Total | 559 | 868 | 869 | 833 | 435 | 216 | 3780 |
| Catholic | Males | 120 | 194 | 178 | 177 | 105 | 44 | 818 |
|  | Females | 44 | 78 | 67 | 62 | 87 | 65 | 403 |
|  | Total | 164 | 272 | 245 | 239 | 192 | 109 | 1221 |
| Independent | Males | 72 | 127 | 137 | 125 | 73 | 68 | 602 |
|  | Females | 74 | 118 | 101 | 94 | 110 | 80 | 577 |
|  | Total | 146 | 245 | 238 | 219 | 183 | 148 | 1179 |
| Total | Males | 466 | 764 | 780 | 730 | 382 | 216 | 3338 |
|  | Females | 403 | 621 | 572 | 561 | 428 | 257 | 2842 |
|  | Total | 869 | 1385 | 1352 | 1291 | 810 | 473 | 6180 |

first stage of sampling (school selection). ACNielson was contracted to conduct the survey in schools and carried out the second stage of sampling (student selection).

## Characteristics of final sample

The distribution of the final sample by school sector, sex and age is shown in Table 2. Of the 6180 student records in the final sample, 61 per cent were from government schools, 20 per cent from Catholic schools, and 19 per cent from independent schools. The actual distribution of students by school sector in 2002 was: government, 64 per cent; Catholic, 23 per cent; and independent, 13 per cent.

The sex distribution of the final sample was 54 per cent male and 46 per cent female. Seventy-nine per cent of the sample was aged $12-15$ years and 21 per cent were aged 16-17 years. Five per cent of respondents reported that they were of Aboriginal or Torres Strait Islander descent.
The main language spoken at home among respondents in the final sample was English ( 81 per cent), followed by English and another language ( 15 per cent), and another language only ( 3 per cent). Among respondents who spoke a language other than English at home, the most common languages were: Arabic languages such as Lebanese, Persian, Farsi, and Dari (17 per cent); Chinese languages
( 16 per cent); Vietnamese ( 7 per cent); Spanish ( 5 per cent); Indian languages ( 5 per cent); and Italian ( 5 per cent).

## Administration of questionnaire and compilation of data

ACNielson managed the contact with schools, administered the questionnaire, carried out data entry, data cleaning including range and logical checks, and calculated weights for the dataset. The Cancer Council Victoria carried out further range and logical checks on the final dataset, to ensure consistency with previous years of survey data, and provided a clean dataset to the NSW Department of Health.

## Weights

Sample weights are used in analyses to adjust for differences between the final sample target student population. Differences can be caused, for example, by differences in the probability of selection among schools or students, or by non-response at the school or student level. A weight is applied to each student record in the sample to reflect the number of students in the target population represented by that student.

Post stratification weights, which took into account age, sex, and school sector, were provided by ACNielson.

## TABLE 3

RECENT ALCOHOL DRINKING BY SEX, AGE AND WEIGHTING PROCEDURE USED, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Sex | Age (years) | Design-based weight |  |  | Post-stratification weight only |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% | LL 95\% CI | UL 95\% CI | \% | LL 95\% CI | UL 95\% CI |
| Males | 12 | 13.8 | 10.9 | 16.8 | 14.7 | 11.1 | 18.2 |
|  | 13 | 23.4 | 20.5 | 26.4 | 23.6 | 20.4 | 26.7 |
|  | 14 | 28.9 | 24.7 | 33.2 | 28.7 | 25.4 | 32.1 |
|  | 15 | 37.4 | 32.2 | 42.6 | 35.9 | 32.3 | 39.5 |
|  | 16 | 43.7 | 37.1 | 50.2 | 42.1 | 36.8 | 47.4 |
|  | 17 | 45.9 | 37.7 | 54.2 | 45.6 | 37.6 | 53.6 |
|  | All ages | 31.4 | 28.3 | 34.5 | 31.7 | 29.9 | 33.6 |
| Females | 12 | 12.5 | 8.8 | 16.3 | 12.9 | 9.3 | 16.4 |
|  | 13 | 17.7 | 13.6 | 21.9 | 16.2 | 13.1 | 19.2 |
|  | 14 | 28.6 | 23.6 | 33.5 | 27.6 | 23.6 | 31.6 |
|  | 15 | 42.8 | 37.8 | 47.8 | 40.6 | 36.0 | 45.1 |
|  | 16 | 35.3 | 30.4 | 40.2 | 36.2 | 31.0 | 41.4 |
|  | 17 | 32.1 | 21.5 | 42.6 | 33.5 | 25.8 | 41.2 |
|  | All ages | 28.0 | 25.1 | 30.8 | 28.0 | 26.0 | 29.9 |
| Persons | 12 | 13.2 | 10.8 | 15.6 | 13.7 | 11.2 | 16.2 |
|  | 13 | 20.6 | 18.1 | 23.1 | 19.4 | 17.2 | 21.6 |
|  | 14 | 28.8 | 25.4 | 32.1 | 28.1 | 25.5 | 30.8 |
|  | 15 | 40.1 | 36.2 | 44.0 | 38.4 | 35.4 | 41.3 |
|  | 16 | 39.4 | 35.1 | 43.7 | 39.0 | 35.3 | 42.7 |
|  | 17 | 38.7 | 29.9 | 47.6 | 39.5 | 33.9 | 45.0 |
|  | All ages | 29.7 | 27.2 | 32.2 | 29.7 | 28.4 | 31.0 |

Note: 'Design-based' weights were derived as described in Appendix 2. 'Post-stratification' weights were limited to calibration of the dataset to the age, sex and school sector distribution of students in 2002, information on which was provided by the Australian Bureau of Statistics. Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown.

However, given the additional complexity of the 2002 survey in terms of the addition of booster schools and the re-sampling that followed pooling of the school sample midway through the data collection period, a separate project was undertaken to develop weights that would account for differences in selection probabilities as well as adjusting for non-response at the school and student level. The method for developing these weights is described in Appendix 2.

Results obtained from an analysis using these final (design-based) weights versus ACNielson's poststratification weights are shown in Table 3, using current alcohol consumption as an example. There was little difference in the estimates found, indicating that the selfweighting design of the survey was preserved despite the pooling and resampling of schools that occurred after the survey commenced.

## Report preparation

## Source of data

Data for NSW for 1984 to 1999 were provided by The Cancer Council Victoria, with the permission of The Cancer Council New South Wales. Data for 2002 were obtained as described above.

## Data analysis

Data were analysed using SAS version 8.02. ${ }^{1}$ The SURVEYMEANS procedure was used to calculate estimates and standard errors that took into account
stratification and clustering in the sample design. Weighted analyses were carried out. For 2002, the weights developed as described in Appendix 2 were used. For years prior to 2002, weights supplied by The Cancer Council Victoria were used.

For the analysis of the section on physical activity, extreme values of time spent in sports, walking for transport, and walking for pleasure in a normal week were truncated to 40 hours.

Socioeconomic groups in this report were constructed using the Index of Relative Socio-Economic Disadvantage (IRSD), which is one of the Australia Bureau of Statistics' socioeconomic indices for areas (SEIFA). ${ }^{2}$ Postcodes of residence were assigned an IRSD score calculated by ABS from the 2001 Census data. Postcodes were sorted by IRSD score and assigned to quintiles, each containing as close as possible to one-fifth of the population of NSW. This file containing postcode and quintile information was matched with the Survey data by postcode. Descriptive analyses were carried out with quintiles ranked from least disadvantaged to most disadvantaged.

## References

1. SAS Institute. The SAS System for Windows version 8.02. Cary, NC: SAS Institute, 2003.
2. Australian Bureau of Statistics. Census of Population and Housing: Socio-Economic Indexes for Areas, Australia 2001. Catalogue no. 2039.0. Canberra: ABS, 2003.

## 6. SUBSTANCE USE

### 6.1 Smoking

Tobacco smoking is the leading preventable cause of morbidity and premature mortality, particularly from cardiovascular disease; cancers of the lung, larynx, and mouth; and chronic obstructive pulmonary disease. Smoking also contributes to risk of sudden infant death syndrome (SIDS) and low birthweight. ${ }^{1,2}$ Tobacco smoking is estimated to kill approximately half of all its long-term users. ${ }^{3}$

Most people who become long-term smokers start smoking in their teenage years, and early uptake is associated with heavier smoking and greater difficulty in quitting. ${ }^{4}$ Young people's experimentation with tobacco use has previously been considered by many to be a normal part of adolescence. Also, it has been assumed that moderate daily use of tobacco over an extended period of time is a prerequisite for nicotine dependence. However, recent research with tobacco users who were 12 and 13 years of age suggests that short duration and low frequency of tobacco use can precipitate dependence. ${ }^{5}$ Symptoms of nicotine dependence commonly develop rapidly after the onset of intermittent smoking. There is some evidence that girls may be at risk of developing symptoms of dependence more rapidly than boys.
This chapter describes long-term trends and recent patterns of smoking among secondary school students including: frequency of smoking, source of cigarettes, places where students smoke, smokers' attempts to quit, and students perceptions of smoking.

## Trends in smoking

The percentage of students who reported having ever smoked fell from 67 per cent in 1984 to 42 per cent in 2002 (Table 4). This fall was seen across all ages (Figure 1). For example, among those aged 12 years the percentage of students who reported ever smoking fell from 51 per cent in 1984 to 20 per cent in 2002 and for students aged 17 years from 78 per cent to 61 per cent. This fall was also seen in both male and female students. The greatest falls occurred among younger students.
There was also a dramatic fall in the overall percentage of students who reported having ever smoked from 56 to 41 per cent between 1996 and 1999. Between 1999 and 2002, the overall percentage of students who reported having ever smoked remained fairly stable. However, there was some variation within age groups with a rise in the percentage of students who had ever smoked among males aged 15-17 years and females aged 12 years.
'Recent' smoking refers to smoking on at least 1 day in the week prior to the survey. The percentage of recent smokers fell from 22 per cent in 1984 to 13 per cent in 2002 (Table 5). As with 'ever' smoking, the trend was apparent across all ages and both sexes (Figure 2). Between 1999 and 2002 there was a substantial decrease in recent smoking from 18 to 13 per cent, which was observed in both sexes and across all age groups except females aged 12 years.

## FIGURE 1

EVER SMOKED BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 1984-2002

Males


Females
Per cent


## TABLE 4

EVER SMOKED BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 1984-2002

| Sex | Age (years) | Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1984 \\ \% \end{gathered}$ | $\begin{gathered} 1987 \\ \% \end{gathered}$ | $\begin{gathered} 1990 \\ \% \end{gathered}$ | $\begin{gathered} 1993 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| Males | 12 | 55.9 | 42.8 | 34.1 | 38.9 | 38.5 | 22.3 | 20.0 |
|  | 13 | 62.4 | 56.6 | 47.0 | 48.0 | 47.6 | 28.2 | 28.5 |
|  | 14 | 69.8 | 62.0 | 53.8 | 55.5 | 58.8 | 41.5 | 40.5 |
|  | 15 | 73.7 | 72.8 | 64.9 | 62.2 | 63.7 | 45.9 | 50.1 |
|  | 16 | 76.4 | 75.3 | 67.7 | 72.5 | 68.2 | 49.6 | 53.9 |
|  | 17 | 80.2 | 73.1 | 72.5 | 71.3 | 75.5 | 58.8 | 65.6 |
|  | All ages | 67.4 | 61.8 | 55.1 | 56.6 | 57.0 | 39.1 | 41.8 |
| Females | 12 | 45.0 | 34.6 | 27.5 | 35.9 | 29.6 | 15.2 | 20.8 |
|  | 13 | 63.8 | 52.4 | 43.0 | 40.8 | 42.4 | 30.6 | 26.1 |
|  | 14 | 71.1 | 64.7 | 55.3 | 58.0 | 56.0 | 44.6 | 43.8 |
|  | 15 | 80.2 | 72.7 | 67.4 | 67.6 | 68.1 | 54.4 | 53.9 |
|  | 16 | 77.2 | 77.4 | 71.8 | 68.4 | 71.5 | 61.2 | 56.6 |
|  | 17 | 76.8 | 74.4 | 74.6 | 76.9 | 72.7 | 62.3 | 56.9 |
|  | All ages | 66.7 | 60.6 | 55.2 | 56.8 | 55.1 | 43.5 | 42.3 |
| Persons | 12 | 50.6 | 38.8 | 30.9 | 37.4 | 34.2 | 18.9 | 20.4 |
|  | 13 | 63.1 | 54.5 | 45.0 | 44.5 | 45.1 | 29.4 | 27.3 |
|  | 14 | 70.5 | 64.1 | 54.5 | 56.7 | 57.4 | 43.0 | 42.1 |
|  | 15 | 76.9 | 72.7 | 66.1 | 64.9 | 65.8 | 50.1 | 52.0 |
|  | 16 | 76.8 | 76.4 | 69.8 | 70.5 | 69.9 | 55.6 | 55.3 |
|  | 17 | 78.4 | 73.8 | 73.6 | 74.3 | 74.0 | 60.6 | 61.1 |
|  | All ages | 67.0 | 61.2 | 55.2 | 56.7 | 56.0 | 41.3 | 42.1 |

Note: Estimates are based on the following numbers of respondents: 1984, 4931; 1987, 4871; 1990, 5174; 1993, 4823; 1996: 10,026; 1999, 7348; 2002, 6180.


## TABLE 5

RECENT SMOKING BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 1984-2002

| Sex | Age (years) | Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1984 \\ \% \end{gathered}$ | $\begin{gathered} 1987 \\ \% \end{gathered}$ | $\begin{gathered} 1990 \\ \% \end{gathered}$ | $\begin{gathered} 1993 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| Males | 12 | 7.1 | 3.1 | 4.7 | 8.4 | 8.0 | 5.1 | 3.1 |
|  | 13 | 14.1 | 10.8 | 9.4 | 11.9 | 12.6 | 10.1 | 5.1 |
|  | 14 | 25.9 | 12.9 | 12.6 | 19.4 | 19.6 | 16.1 | 10.2 |
|  | 15 | 30.2 | 24.4 | 20.9 | 23.8 | 23.0 | 21.1 | 14.9 |
|  | 16 | 27.9 | 27.4 | 26.1 | 24.9 | 27.0 | 26.1 | 17.8 |
|  | 17 | 28.4 | 22.8 | 20.4 | 26.5 | 27.2 | 29.3 | 22.8 |
|  | All ages | 20.5 | 15.9 | 14.9 | 18.4 | 18.6 | 16.7 | 11.6 |
| Females | 12 | 7.1 | 4.3 | 4.5 | 8.4 | 5.8 | 4.9 | 6.2 |
|  | 13 | 19.4 | 9.9 | 10.5 | 15.4 | 12.3 | 9.8 | 6.2 |
|  | 14 | 28.4 | 20.8 | 16.3 | 19.8 | 20.6 | 20.0 | 14.6 |
|  | 15 | 36.7 | 26.9 | 26.7 | 29.2 | 29.6 | 24.3 | 18.2 |
|  | 16 | 33.8 | 27.7 | 26.5 | 22.3 | 30.0 | 27.5 | 22.2 |
|  | 17 | 30.1 | 25.3 | 28.5 | 34.1 | 31.4 | 29.7 | 25.6 |
|  | All ages | 24.1 | 18.0 | 18.1 | 20.9 | 20.6 | 18.6 | 14.9 |
| Persons | 12 | 7.1 | 3.6 | 4.6 | 8.4 | 6.9 | 5.0 | 4.7 |
|  | 13 | 16.7 | 10.4 | 9.9 | 13.6 | 12.4 | 10.0 | 5.6 |
|  | 14 | 27.1 | 19.1 | 14.4 | 19.6 | 20.1 | 18.0 | 12.4 |
|  | 15 | 33.4 | 25.6 | 23.7 | 26.4 | 26.2 | 22.7 | 16.5 |
|  | 16 | 30.8 | 27.5 | 26.3 | 23.6 | 28.5 | 26.8 | 20.0 |
|  | 17 | 29.3 | 24.1 | 24.6 | 30.6 | 29.4 | 29.5 | 24.3 |
|  | All ages | 22.3 | 17.0 | 16.5 | 19.6 | 19.6 | 17.7 | 13.3 |

Note: Recent smoking: smoking on at least 1 day in the week prior to the survey. Estimates are based on the following numbers of respondents: 1984, 4931; 1987, 4871; 1990, 5174; 1993, 4823; 1996, 10,026; 1999, 7348; 2002, 6180.

Smoking prevalence 2002
In 2002, most students identified themselves as nonsmokers ( 80 per cent: males 82 per cent; females 78 per cent). A minority of students identified themselves as occasional smokers ( 7 per cent), ex-smokers ( 5 per cent) light smokers ( 4 per cent), and heavy smokers (3 per cent), with similar percentages of males and females reported for each group.

Fifty-seven per cent of students reported that they had never smoked cigarettes, and 42 per cent reported that they had ever smoked cigarettes. Twenty-seven per cent reported smoking in the previous 12 months, 16 per cent in the last 4 weeks, and 13 per cent in the last 7 days (Table 6).

As expected, the rate of recent smoking was higher for older students compared to younger students. Among males the percentage of recent smokers increased from 3 per cent of students aged 12 years to 23 per cent of students aged 17 years. Among females recent smoking increased from 6 per cent of females aged 12 years to 26 per cent of females aged 17 years. Similarly the percentage of students who had smoked in the 12 months prior to the survey was higher among older students.

The rate of recent smoking was fairly evenly distributed among socioeconomic groups, as measured by the ABS Index of Relative Socio-Economic Disadvantage (Figure 3).

## TABLE 6

CIGARETTE SMOKING BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Sex | Previous cigarette smoking | $\begin{aligned} & 12 \\ & \% \end{aligned}$ | $\begin{aligned} & 13 \\ & \% \end{aligned}$ | Age <br> 14 <br> \% | $\begin{aligned} & 15 \\ & \% \end{aligned}$ | $\begin{aligned} & 16 \\ & \% \end{aligned}$ | $\begin{aligned} & 17 \\ & \% \end{aligned}$ | All ages \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | Never smoked | 78.0 | 70.2 | 57.6 | 49.1 | 45.5 | 33.3 | 56.8 |
|  | Ever smoked | 20.0 | 28.5 | 40.5 | 50.1 | 53.9 | 65.6 | 41.8 |
|  | Smoked cigarettes in the last 12 months | 9.7 | 16.0 | 23.7 | 31.5 | 35.4 | 41.8 | 25.5 |
|  | Smoked cigarettes in the last 4 weeks | 3.3 | 7.2 | 12.4 | 18.6 | 22.3 | 26.3 | 14.3 |
|  | Smoked cigarettes in the last week | 3.1 | 5.1 | 10.2 | 14.9 | 17.8 | 22.8 | 11.6 |
| Females | Never smoked | 76.8 | 73.2 | 55.1 | 45.6 | 42.9 | 43.0 | 56.8 |
|  | Ever smoked | 20.8 | 26.1 | 43.8 | 53.9 | 56.6 | 56.9 | 42.3 |
|  | Smoked cigarettes in the last 12 months | 12.2 | 16.7 | 29.6 | 39.8 | 41.5 | 38.9 | 29.3 |
|  | Smoked cigarettes in the last 4 weeks | 7.2 | 9.0 | 18.2 | 24.0 | 27.1 | 27.3 | 18.3 |
|  | Smoked cigarettes in the last week | 6.2 | 6.2 | 14.6 | 18.2 | 22.2 | 25.6 | 14.9 |
| Persons | Never smoked | 77.4 | 71.7 | 56.4 | 47.4 | 44.2 | 38.3 | 56.8 |
|  | Ever smoked | 20.4 | 27.3 | 42.1 | 52.0 | 55.3 | 61.1 | 42.1 |
|  | Smoked cigarettes in |  |  |  |  |  |  |  |
|  | the last 12 months | 10.9 | 16.3 | 26.6 | 35.6 | 38.5 | 40.3 | 27.4 |
|  | Smoked cigarettes in the last 4 weeks | 5.3 | 8.0 | 15.2 | 21.3 | 24.7 | 26.8 | 16.3 |
|  | Smoked cigarettes in the last week | 4.7 | 5.6 | 12.4 | 16.5 | 20.0 | 24.3 | 13.3 |

## FIGURE 3

RECENT SMOKING BY SOCIOECONOMIC GROUP, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Socioeconomic group classified into quintiles based on the ABS SEIFA Index of Relative Socio-Economic Disadvantage (IRSD). Estimates are based on 6180 respondents.

## FIGURE 4

DAILY SMOKING AMONG RECENT SMOKERS, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Recent smoking: smoking on at least one day in the week prior to the survey. Estimates are based on 740 respondents.

## Number of days per week students smoked

Nine per cent of students smoked on 3 or more days in the previous week, with 4 per cent smoking daily (males, 4 per cent; females, 5 per cent). Expressed as a percentage of recent smokers, 64 per cent (males, 63 per cent; females, 65 per cent) smoked on 3 or more days in the previous week, and 33 per cent (males, 35 per cent; females, 32 per cent) smoked every day. The percentage of recent smokers who smoked daily increased with age, from 16 per cent of those aged 12 years to 41 per cent of those aged 17 years. The highest rates of daily smoking among recent smokers were reported among females aged 16 and 17 years (Figure 4).

## Number of cigarettes smoked

In 2002, the average number of cigarettes smoked in the previous week by recent smokers aged 12-17 years was 24 (males 27; females 22), compared with 27 in 1993 (males 32; females 22). There has been no substantial change in the number of cigarettes smoked in the previous week among recent smokers of either sex between 1993 and 2002. In 2002, the average number of cigarettes
smoked per week increased with increasing age, from 14 cigarettes for those 12 years of age to 33 cigarettes for those 17 years of age (Table 7).

## Source of cigarettes and place of smoking

The percentage of students who reported buying their last cigarette has fallen steadily from 31 per cent in 1996 to 27 per cent in 1999 and 22 per cent in 2002. For males the rate fell from 34 per cent in 1996 and 1999 to 23 per cent in 2002; for females from 28 per cent in 1996 to 22 per cent in 1999 and 21 per cent in 2002.

In 2002, the majority of those aged $12-17$ years who had smoked in the previous week reported that they had not purchased their last cigarette from a retail outlet ( 68 per cent). The most common source for those who did not buy their cigarette was from a friend ( 37 per cent of recent smokers) or from a person they had arranged to buy the cigarette for them (17 per cent). Five per cent of recent smokers reported that they took cigarettes from home without parental permission.

## TABLE 7

NUMBER OF CIGARETTES SMOKED PER WEEK BY RECENT SMOKERS, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Sex | Age | Average number | LL 95\% Cl | UL 95\% CI |
| :---: | :---: | :---: | :---: | :---: |
| Males | 12 | 23.0 | 9.7 | 36.4 |
|  | 13 | 14.6 | 4.8 | 24.3 |
|  | 14 | 25.1 | 16.4 | 33.7 |
|  | 15 | 24.7 | 17.6 | 31.7 |
|  | 16 | 31.1 | 20.2 | 42.1 |
|  | 17 | 30.0 | 20.2 | 39.8 |
|  | All ages | 26.6 | 21.9 | 31.3 |
| Females | 12 | 9.7 | 5.9 | 13.5 |
|  | 13 | 11.4 | 6.5 | 16.4 |
|  | 14 | 12.7 | 8.8 | 16.7 |
|  | 15 | 16.2 | 12.3 | 20.2 |
|  | 16 | 29.3 | 19.6 | 38.9 |
|  | 17 | 34.8 | 19.2 | 50.4 |
|  | All ages | 21.9 | 16.2 | 27.6 |
| Persons | 12 | 14.0 | 8.4 | 19.6 |
|  | 13 | 12.9 | 7.4 | 18.4 |
|  | 14 | 17.9 | 13.8 | 21.9 |
|  | 15 | 20.1 | 16.3 | 23.8 |
|  | 16 | 30.1 | 21.7 | 38.5 |
|  | 17 | 32.6 | 21.6 | 43.6 |
|  | All ages | 24.0 | 19.4 | 28.5 |
| Note: | Recent smoking: smoking on at least one day in the week prior to the survey. Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on 740 respondents. |  |  |  |

In 2002, 22 per cent of recent smokers reported they purchased their last cigarette from a retail outlet (males 23 per cent; females 21 per cent) (Table 8). Students most commonly bought their last cigarette from a petrol station ( 5 per cent of recent smokers), tobacconist ( 4 per cent), supermarket ( 4 per cent) and convenience store ( 3 per cent). This pattern is similar to that reported by students in 1999. Males most commonly purchased their last cigarette from a tobacconist ( 6 per cent) or petrol station ( 5 per cent), while females most commonly purchased their last cigarette from a supermarket ( 5 per cent) or petrol station ( 5 per cent).

Thirteen per cent of all students reported that they had, at some time, tried to buy cigarettes from a shop. This percentage increased with age from 3 per cent of students aged 12 years to 32 per cent of those 17 years of age. Of students who had tried to buy cigarettes from a shop, 37 per cent had never been refused service, 50 per cent had been refused once or twice, and 12 per cent had been refused frequently. The percentage of recent smokers who reported that they had, at some time, tried to buy cigarettes from a shop fell from 57 per cent in 1999 to 52 per cent in 2002. The fall occurred entirely among males ( 65 per cent to 50 per cent), with the rates remaining stable among females ( 52 per cent in 1999 and 53 per cent in 2002).

Thirty-five per cent of students who had tried to buy cigarettes from a shop reported they had never been asked for proof of age, 45 per cent had been asked once or twice, and 19 per cent had been asked frequently. Of those who had tried to buy cigarettes from a shop, 21 per cent had used a friend's identification or a false identification to
purchase cigarettes. Males were more likely than females to report having used a false identification ( 30 per cent versus 11 per cent). Among recent smokers who had tried to buy cigarettes from a shop, 23 per cent reported that they had never been asked for proof of age in 2002, compared to 28 per cent in 1999.

Of students who smoked and bought their last cigarette in the last week, 5 per cent bought from a coin-operated machine. Twenty-two per cent of recent smokers had bought single cigarettes (cigarettes that were not in a full packet) in the previous 4 weeks. The most common source of single cigarettes was from a friend or relative (64 per cent), someone else ( 20 per cent), or a shop ( 11 per cent).

Students were asked where they smoked and more than 1 response was permitted. Of students who smoked, most reported smoking at parties ( 46 per cent), followed by at a friend's home ( 33 per cent), at home ( 28 per cent), and at a beach, park, or recreation area ( 22 per cent).

## Brand of cigarettes and packet size

In 2002, the brands of cigarettes usually smoked by recent smokers were Winfield ( 40 per cent), followed by Peter Jackson (21 per cent), Benson and Hedges (11 per cent), Dunhill ( 9 per cent), and Longbeach ( 8 per cent). Of recent smokers, 44 per cent reported their cigarettes usually came from packets of 20 s , 22 per cent from packets of 15 s , and 15 per cent from packets of 25 s. Students aged 12-13 years reported smoking cigarettes from packets of 15 s more often than students aged $16-17$ years ( 30 per cent versus 19 per cent).

## TABLE 8

## SOURCE OF CIGARETTES AMONG RECENT SMOKERS, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Source of cigarettes | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 12 \\ & \% \end{aligned}$ | $\begin{aligned} & 13 \\ & \% \end{aligned}$ | $\begin{aligned} & 14 \\ & \% \end{aligned}$ | 15 $\%$ | $\begin{aligned} & 16 \\ & \% \end{aligned}$ | $\begin{aligned} & 17 \\ & \% \end{aligned}$ | All ages \% |
| Did not buy cigarettes |  |  |  |  |  |  |  |
| Parents | 1.1 | 2.7 | 4.8 | 6.1 | 3.3 | 0.8 | 3.5 |
| Brother or sister | 2.0 | 2.0 | 4.4 | 5.1 | 3.7 | 1.2 | 3.3 |
| Took from home | 9.4 | 10.6 | 11.8 | 3.5 | 0.5 | 1.5 | 4.7 |
| Friend | 24.8 | 45.1 | 36.1 | 38.4 | 36.9 | 34.9 | 36.6 |
| Got someone to buy it | 15.4 | 11.0 | 20.3 | 21.9 | 12.7 | 15.2 | 16.7 |
| Total: did not buy cigarettes | 56.5 | 74.0 | 80.3 | 79.0 | 58.2 | 55.9 | 67.5 |
| Bought cigarettes |  |  |  |  |  |  |  |
| Hotel-pub-club | 0.0 | 0.0 | 0.3 | 2.3 | 0.9 | 0.0 | 0.8 |
| Supermarket | 0.0 | 0.0 | 1.7 | 2.7 | 5.3 | 6.6 | 3.7 |
| Convenience store | 0.0 | 2.8 | 1.5 | 3.0 | 1.8 | 7.7 | 3.4 |
| Tobacconist | 0.0 | 1.9 | 2.0 | 2.6 | 8.5 | 5.9 | 4.4 |
| Petrol station | 0.0 | 0.0 | 1.2 | 1.9 | 5.6 | 11.7 | 4.7 |
| Total: bought cigarettes | 10.3 | 7.5 | 9.9 | 16.8 | 29.7 | 35.6 | 21.8 |
| Not stated | 33.2 | 18.4 | 9.8 | 4.1 | 12.1 | 8.5 | 10.7 |

Note: Response to question 'Where, or from whom, did you get the last cigarette that you smoked?' among students who smoked a cigarette in the previous week. Small numbers of other sources were reported. Totals include all sources combined. Estimates are based on 740 respondents.

## Smoking cigars

In 2002, 16 per cent of students reported ever smoking even part of a cigar ( 20 per cent of males and 12 per cent of females), compared with 22 per cent in 1999 (males, 27 per cent; females, 18 per cent). In 2002, the prevalence of having ever smoked a cigar increased with age, from 9 per cent of students aged 12 years to 29 per cent of those aged 17 years for males, and from 7 per cent of students aged 12 years to 16 per cent of those aged 17 years for females.

## Smoking beliefs and intentions

In 2002, 85 per cent of all students ( 81 per cent of males and 89 per cent of females) reported that it would be 'fairly hard', 'very hard' or 'impossible' for someone to give up smoking. This compares with 68 per cent of students in 1996 ( 65 per cent of males and 71 per cent of females).
Among recent smokers in 2002, 81 per cent of both males and females reported that it would be 'fairly hard', 'very hard' or 'impossible' for someone to give up smoking. Onethird ( 36 per cent of males, 30 per cent of females) reported that they thought they were addicted to tobacco smoking, and 42 per cent of males and 41 per cent of females reported that they would like to quit smoking. Forty-four per cent of recent smokers said they had tried to quit smoking in the last 12 months. Females were more likely than males to have tried to quit ( 48 per cent versus 40 per cent).

Of recent smokers, 35 per cent of males and 39 per cent of females thought it 'likely', 'very likely' or 'certain' that they would be smoking at the same time next year.

## Cigarette advertising and smoking by celebrities

Two-thirds of all students reported seeing cigarette advertising in the previous 6 months. Thirty-one per cent claimed to have seen advertising in shops or tobacconists,

29 per cent while watching TV coverage of a sports event, and 29 per cent in magazines or newspapers.
Almost half of all students ( 49 per cent; 46 per cent of males and 51 per cent of females) believed that smoking by celebrities encourages young people to take up smoking.

## Purchase of cigarettes over the internet or by phone, fax or mail order

Of recent smokers, 1 per cent reported that they had bought cigarettes over the internet, while less than 1 per cent reported buying cigarettes by phone, fax, or mail order.

## References

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### 6.2 Alcohol

Drinking alcohol in moderation is a widely accepted social behaviour among adults in Australia. While the sale or supply of alcohol to a person under the age of 18 is generally unlawful in NSW and adolescent drinking is not usually encouraged by adults, occasional use of alcohol by adolescents is often condoned.

In the short term, excessive use of alcohol among adolescents can lead to falls, accidents (including motor vehicle accidents), risky sexual behaviour, and violent behaviour. In the longer term, alcohol dependency can lead to loss of control of one's life, while heavy ongoing use of alcohol can lead to damage to the pancreas and liver (cirrhosis), stomach ulcers, cognitive impairment, and an increased risk of some cancers. ${ }^{1,2}$

The NSW Alcohol Summit on Alcohol Abuse 2003 was held to address the range of social issues emergent from alcohol use and misuse including special consideration for young people, in particular, preventing abuse and harm.

This section describes trends in recent drinking and in the risk of harm arising from drinking alcohol. The types of alcohol that students currently consume, where they obtain alcohol and the places where they drink alcohol are also described.

## Recent drinking

In 2002, 69 per cent of students reported drinking in the last year, and 45 per cent reported drinking in the last 4 weeks (Table 9). Students most commonly reported themselves to be 'non-drinkers' ( 50 per cent) followed by 'occasional drinkers' (23 per cent), 'party drinkers' (18 per cent), 'light drinkers' ( 6 per cent) and 'heavy drinkers' (1 per cent).
'Recent' drinking refers to having an alcoholic drink in the last 7 days. In 2002, 30 per cent of secondary school students reported being recent drinkers, a percentage that has not changed substantially since 1984 (Table 10). As expected the percentage of recent drinkers generally increased as the age of students increased (Figure 5), from 13 per cent among students aged 12 years to 39 per cent among students aged 17 years in 2002. Males were more likely to report being recent drinkers than females, with 32 per cent of females aged 17 years reporting that they were recent drinkers compared with 46 per cent of males aged 17 years in 2002. The exception to this was in female students aged 15 years, where the percentage of recent drinkers was higher than in males of the same age ( 43 per cent versus 37 per cent) and higher than females aged 17 years ( 33 per cent).
Recent drinking varied according to socioeconomic group, as measured by the ABS Index of Relative SocioEconomic Disadvantage. Recent drinking was least common among females in the most disadvantaged group and most common among males in the second most disadvantaged group (Figure 6).

## TABLE 9

ALCOHOL DRINKING BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Drinker Category | Sex | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 12 \\ & \% \end{aligned}$ | $\begin{aligned} & 13 \\ & \% \end{aligned}$ | $\begin{aligned} & 14 \\ & \% \end{aligned}$ | $\begin{aligned} & 15 \\ & \% \end{aligned}$ | $\begin{aligned} & 16 \\ & \% \end{aligned}$ | $\begin{aligned} & 17 \\ & \% \end{aligned}$ | All ages \% |
| Never drank | Males | 26.6 | 16.9 | 13.1 | 9.3 | 9.6 | 5.2 | 13.7 |
|  | Females | 27.4 | 19.9 | 11.8 | 9.1 | 10.4 | 9.8 | 14.8 |
|  | Persons | 27.0 | 18.4 | 12.5 | 9.2 | 10.0 | 7.5 | 14.3 |
| Drank in the last year | Males | 46.7 | 59.3 | 70.8 | 80.4 | 82.6 | 89.3 | 70.7 |
|  | Females | 41.8 | 57.1 | 71.2 | 81.6 | 80.9 | 78.3 | 68.1 |
|  | Persons | 44.2 | 58.2 | 71.0 | 81.0 | 81.7 | 83.6 | 69.4 |
| Drank in the last 4 weeks | Males | 22.3 | 35.8 | 43.1 | 54.9 | 61.8 | 69.3 | 46.7 |
|  | Females | 19.8 | 29.4 | 44.0 | 58.1 | 52.0 | 52.9 | 42.3 |
|  | Persons | 21.0 | 32.7 | 43.6 | 56.5 | 56.9 | 60.8 | 44.5 |
| Drank in the last 7 days | Males | 13.8 | 23.4 | 28.9 | 37.4 | 43.7 | 45.9 | 31.4 |
|  | Females | 12.5 | 17.7 | 28.6 | 42.8 | 35.3 | 32.1 | 28.0 |
|  | Persons | 13.2 | 20.6 | 28.8 | 40.1 | 39.4 | 38.7 | 29.7 |
| Note: Estimates are based on 6180 respondents. |  |  |  |  |  |  |  |  |

## FIGURE 5

RECENT DRINKING BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW ,1984-2002

Males


Note: Recent drinking: having an alcoholic drink in the last 7 days.

## TABLE 10

RECENT DRINKING BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 1984-2002

| Sex | Age (years) | Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1984 \\ \% \end{gathered}$ | $\begin{gathered} 1987 \\ \% \end{gathered}$ | $\begin{gathered} 1990 \\ \% \end{gathered}$ | $\begin{gathered} 1993 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| Males | 12 | 21.3 | 13.8 | 9.9 | 12.6 | 16.5 | 15.5 | 13.8 |
|  | 13 | 25.9 | 24.5 | 19.2 | 23.1 | 20.8 | 22.0 | 23.4 |
|  | 14 | 30.0 | 26.0 | 27.0 | 28.8 | 29.6 | 28.5 | 28.9 |
|  | 15 | 41.8 | 47.5 | 37.8 | 36.5 | 36.8 | 38.9 | 37.4 |
|  | 16 | 53.1 | 54.5 | 47.3 | 47.9 | 47.0 | 50.6 | 43.7 |
|  | 17 | 54.9 | 51.8 | 50.8 | 43.9 | 58.6 | 50.5 | 45.9 |
|  | All ages | 33.8 | 34.5 | 30.0 | 30.7 | 32.5 | 32.5 | 31.4 |
| Females | 12 | 9.4 | 10.6 | 7.4 | 10.0 | 9.4 | 10.0 | 12.5 |
|  | 13 | 24.5 | 17.1 | 16.5 | 17.5 | 17.2 | 16.6 | 17.7 |
|  | 14 | 31.4 | 29.5 | 22.2 | 26.5 | 27.2 | 26.3 | 28.6 |
|  | 15 | 47.2 | 43.2 | 28.0 | 35.4 | 35.9 | 34.9 | 42.8 |
|  | 16 | 44.5 | 47.9 | 42.0 | 38.7 | 39.9 | 44.5 | 35.3 |
|  | 17 | 47.3 | 47.6 | 45.4 | 47.0 | 49.5 | 47.4 | 32.1 |
|  | All ages | 30.8 | 30.0 | 25.5 | 28.1 | 28.3 | 28.7 | 28.0 |
| Persons | 12 | 15.5 | 12.3 | 8.7 | 11.3 | 13.0 | 12.9 | 13.2 |
|  | 13 | 25.2 | 20.9 | 17.8 | 20.4 | 19.0 | 19.3 | 20.6 |
|  | 14 | 30.7 | 28.8 | 24.7 | 27.7 | 28.4 | 27.4 | 28.8 |
|  | 15 | 44.4 | 45.4 | 33.0 | 36.0 | 36.4 | 36.9 | 40.1 |
|  | 16 | 48.9 | 51.2 | 44.6 | 43.3 | 43.4 | 47.4 | 39.4 |
|  | 17 | 51.0 | 49.6 | 48.0 | 45.6 | 53.9 | 48.9 | 38.7 |
|  | All ages | 32.3 | 32.1 | 27.8 | 29.4 | 30.4 | 30.6 | 29.7 |

Note: Recent drinking: having an alcoholic drink in the last 7 days. Estimates are based on the following numbers of respondents: 1984, 4931; 1987, 4871; 1990, 5174; 1993, 4823; 1996: 10,026; 1999, 7348; 2002, 6180.

## FIGURE 6

RECENT DRINKING BY SOCIOECONOMIC GROUP, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Recent drinking: having an alcoholic drink in the last 7 days. Estimates are based on 6180 respondents.

## BOX 1

## RISK OF HARM FROM DRINKING ALCOHOL

| Risk of harm-sex | Low risk (standard drinks) | Risky (standard drinks) | High risk (standard drinks) |
| :---: | :---: | :---: | :---: |
| For risk of harm in the short-term: |  |  |  |
| Males |  |  |  |
| On any one day no more than 3 days per week $\quad$ 7-10 |  |  | 11 or more |
|  |  |  |  |
| Females |  |  |  |
| On any one day | Up to 4 | 5-6 | 7 or more |
| no more than 3 days per week |  |  |  |
| For risk of harm in the long-term: |  |  |  |
| Males |  |  |  |
| On an average day | Up to 4 | 5-6 | 7 or more |
| Average weekly level | Up to 28 | 29-42 | 43 or more |
| Females |  |  |  |
| On an average day | Up to 2 | 3-4 | 5 or more |
| Average weekly level | Up to 14 | 15-28 | 29 or more |
| Source: National Health and Medical Research Council. Australian Alcohol Guidelines-Health Risks and Benefits. Canberra: NHMRC, 2001. |  |  |  |

## Risk of harm associated with drinking alcohol

Box 1 describes the levels of drinking alcohol that are considered to be low-risk, risky, or high risk of harm in the short-term and long-term, according to the Australian Alcohol Guidelines. ${ }^{1}$ The Guidelines also recommend that those who drink alcohol have 1 or 2 alcohol-free days per week. Particular recommendations concerning alcohol drinking for young people are shown in Box 2.

In terms of risk of short-term harm, 23 per cent of students in 2002 reported drinking at a low level of risk, 3 per cent reported drinking at a risky level, and 4 per cent at a high risk level (Table 11). In terms of long-term harm, 28 per cent of students reported drinking at a low level of risk, 1 per cent at a risky level, and less than 1 per cent at a high risk level. These percentages have not changed substantially in the last 10 years (Figure 7, Table 11).
Rates of risky and high risk drinking in the short-term were strongly associated with age, with 6 per cent of students aged 17 years drinking at a risky level compared to 0.5 per cent of students aged 12 years, and 6 per cent of students aged 17 years drinking at a high risk level compared to 0.4 per cent of those aged 12 years (Table 12). Rates of drinking at risky or high risk levels were similar for females and males overall, but females aged 14-15 years were more likely to report drinking at high risk levels than males of the same age.

The overall rate of drinking alcohol at a level that is considered to be risky or have a high risk of harm in the long-term was low among students in 2002. As expected, older students were more likely to drink at a level with a high risk of harm compared to younger students. Among
students aged 17 years, males were more likely to drink at a high risk level for long-term harm than females of the same age while females were more likely to drink at a risky level (Table 12).

The Australian Alcohol Guidelines recommend having 1 or 2 alcohol-free days per week to reduce the risk of harm in both the short-term and long-term. In 2002, 97 per cent of students who reported drinking in the previous week reported having at least 1 alcohol-free day, and 96 per cent reported having at least 2 alcohol-free days.

## BOX 2

## ALCOHOL GUIDELINES FOR YOUNG PEOPLE

It is recommended that young people

1. are especially urged not to drink beyond the levels described in Box 1;
2. should not drink at all for at least several hours before undertaking potentially risky activities (for example, driving, swimming, boating);
3. should not mix alcohol with other mood altering drugs;
4. if they choose not to drink, they should be supported in this decision;
5. in settings where alcohol is available to them, should be supervised by adults at all times;
6. should keep any drinking to a minimum;
7. most importantly, should not drink to become intoxicated;
8. to become responsible adult drinkers, a gradual, supervised introduction to alcohol is recommended.

Source: National Health and Medical Research Council. Australian Alcohol Guidelines-Health Risks and Benefits. Canberra: NHMRC, 2001.

TABLE 11
RISK OF HARM FROM RECENT ALCOHOL DRINKING, SECONDARY SCHOOL STUDENTS, NSW, 1984-2002

| Type of risk | Level of risk | Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1984 \\ \% \end{gathered}$ | $\begin{gathered} 1987 \\ \% \end{gathered}$ | $\begin{gathered} 1990 \\ \% \end{gathered}$ | $\begin{gathered} 1993 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| Short-term | No risk | 67.7 | 67.9 | 72.2 | 70.6 | 69.6 | 69.4 | 70.3 |
|  | Low risk | 25.0 | 25.3 | 21.3 | 22.1 | 22.7 | 22.8 | 22.9 |
|  | Risky | 3.1 | 3.8 | 2.8 | 3.4 | 3.8 | 3.6 | 3.3 |
|  | High risk | 4.2 | 3.0 | 3.7 | 3.9 | 3.9 | 4.2 | 3.5 |
| Long-term | No risk | 67.7 | 67.9 | 72.2 | 70.6 | 69.6 | 69.4 | 70.3 |
|  | Low risk | 30.1 | 31.0 | 26.3 | 27.7 | 28.5 | 28.9 | 28.0 |
|  | Risky | 1.2 | 0.9 | 1.1 | 1.4 | 1.4 | 1.0 | 1.2 |
|  | High risk | 1.1 | 0.2 | 0.4 | 0.3 | 0.5 | 0.7 | 0.4 |

Note: Recent drinking: having an alcoholic drink in the last 7 days. Percentages are of all students. No risk: no recent drinking. Estimates are based on the following numbers of respondents: 1984, 4931; 1987, 4871; 1990, 5174; 1993, 4823; 1996: 10,026; 1999, 7348; 2002, 6180.

## FIGURE 7

RISK OF HARM FROM RECENT ALCOHOL DRINKING, SECONDARY SCHOOL STUDENTS, NSW, 1984-

Short-term


Long-term


Note: Recent drinking: having an alcoholic drink in the last 7 days. Percentages are of all students. Estimates are based on 6180 respondents.

| RISK OF HARM FROM RECENT ALCOHOL DRINKING BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 2002 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of risksex | Level of | Age (years) |  |  |  |  |  |  |
|  |  | $12$ | $\begin{aligned} & 13 \\ & \% \end{aligned}$ |  | $15$ | $16$ | $17$ | All ages |
| Short-term risk |  |  |  |  |  |  |  |  |
| Males | No risk | 86.2 | 76.6 | 71.1 | 62.6 | 56.3 | 54.1 | 68.6 |
|  | Low risk | 12.7 | 21.1 | 24.7 | 29.5 | 29.4 | 31.0 | 24.5 |
|  | Risky | 0.6 | 1.5 | 1.8 | 5.2 | 6.5 | 8.0 | 3.7 |
|  | High risk | 0.5 | 0.8 | 2.5 | 2.8 | 7.8 | 6.9 | 3.2 |
| Females | No risk | 87.5 | 82.3 | 71.4 | 57.2 | 64.7 | 67.9 | 72.0 |
|  | Low risk | 11.8 | 16.2 | 23.3 | 30.5 | 23.2 | 22.2 | 21.3 |
|  | Risky | 0.4 | 0.4 | 2.5 | 5.2 | 5.4 | 4.7 | 3.0 |
|  | High risk | 0.3 | 1.1 | 2.8 | 7.0 | 6.6 | 5.1 | 3.7 |
| Persons | No risk | 86.8 | 79.4 | 71.2 | 59.9 | 60.6 | 61.3 | 70.3 |
|  | Low risk | 12.3 | 18.7 | 24.0 | 30.0 | 26.3 | 26.5 | 22.9 |
|  | Risky | 0.5 | 0.9 | 2.2 | 5.2 | 6.0 | 6.3 | 3.3 |
|  | High risk | 0.4 | 1.0 | 2.6 | 4.9 | 7.2 | 6.0 | 3.5 |
| Long-term risk |  |  |  |  |  |  |  |  |
| Males | Norisk | 86.2 | 76.6 | 71.1 | 62.6 | 56.3 | 54.1 | 68.6 |
|  | Low risk | 13.6 | 23.3 | 27.4 | 36.6 | 40.0 | 42.3 | 29.9 |
|  | Risky | 0.0 | 0.2 | 0.7 | 0.7 | 2.7 | 0.8 | 0.8 |
|  | High risk | 0.2 | 0.0 | 0.9 | 0.1 | 1.0 | 2.8 | 0.7 |
| Females | No risk | 87.5 | 82.3 | 71.4 | 57.2 | 64.7 | 67.9 | 72.0 |
|  | Low risk | 12.0 | 16.8 | 27.3 | 40.1 | 32.9 | 28.3 | 26.1 |
|  | Risky | 0.4 | 0.7 | 1.0 | 2.5 | 2.3 | 3.8 | 1.7 |
|  | High risk | 0.1 | 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.2 |
| Persons | No risk | 86.8 | 79.4 | 71.2 | 59.9 | 60.6 | 61.3 | 70.3 |
|  | Low risk | 12.8 | 20.1 | 27.4 | 38.3 | 36.4 | 35.0 | 28.0 |
|  | Risky | 0.2 | 0.4 | 0.8 | 1.6 | 2.5 | 2.4 | 1.2 |
|  | High risk | 0.2 | 0.1 | 0.6 | 0.2 | 0.5 | 1.4 | 0.4 |
| Recent drinking: having an alcoholic drink in the last 7 days. Levels of risk as per Box 1. Percentages are of all students. No risk: no recent drinking. Estimates are based on 6180 respondents. |  |  |  |  |  |  |  |  |

## Having several drinks in a row

Students who had ever had an alcoholic drink were asked how often in the previous 2 weeks they had consumed 5 or more, 7 or more, or 11 or more drinks in a row. Overall, 22 per cent of students reported drinking 5 or more drinks in a row in the previous 2 weeks (Table 13). Eleven per cent of students reported consuming 5 or more drinks in a row on 1 occasion, 4 per cent on two occasions, 4 per cent on 3-6 occasions, and 2 per cent on 7 or more occasions. As expected, the frequency of drinking 5 or more drinks in a row increased with age. Among males, 8 per cent of students aged 12 years had drunk 5 or more drinks in a row compared to 38 per cent of students aged 17 years.

Among females, 6 per cent of students aged 12 years had drunk 5 or more drinks in a row rising to 27 per cent of students aged 17 years.

Fewer students had drunk 7 or more drinks in a row in the previous 2 weeks. Overall, 13 per cent of students ( 15 per cent of males and 10 per cent of females) reported drinking this amount of alcohol. Six per cent had consumed 7 or more drinks in a row on 1 occasion, 3 per cent on 2 occasions, 2 per cent on 3-6 occasions, and 2 per cent on 7 or more occasions. Nine per cent of students reported drinking 11 or more drinks in a row in the previous 2 weeks (data not shown in table).

## TABLE 13

DRINKING SEVERAL DRINKS IN A ROW IN THE PREVIOUS 2 WEEKS BY AGE, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Number of drinks in a row | Frequency | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 | 13 | 14 | 15 | 16 | 17 | All ages |
| 5 or more | Never drank alcohol | 27.0 | 18.4 | 12.5 | 9.2 | 10.0 | 7.5 | 14.3 |
|  | None | 66.0 | 67.9 | 66.0 | 61.5 | 58.4 | 60.0 | 63.6 |
|  | Once | 3.9 | 7.0 | 9.5 | 15.4 | 15.3 | 17.3 | 11.1 |
|  | Twice | 1.2 | 3.0 | 4.4 | 6.4 | 5.7 | 5.4 | 4.3 |
|  | 3-6 times | 1.1 | 1.7 | 3.9 | 4.2 | 5.6 | 4.9 | 3.5 |
|  | 7-9 times | 0.6 | 0.5 | 1.3 | 1.4 | 1.8 | 1.5 | 1.2 |
|  | 10 or more times | 0.2 | 1.6 | 2.5 | 1.9 | 3.1 | 3.3 | 2.1 |
| 7 or more | Never drank alcohol | 27.0 | 18.4 | 12.5 | 9.2 | 10.0 | 7.5 | 14.3 |
|  | None | 69.6 | 75.9 | 76.7 | 72.6 | 68.3 | 71.2 | 72.8 |
|  | Once | 1.8 | 2.1 | 4.2 | 9.9 | 9.2 | 10.0 | 6.0 |
|  | Twice | 0.8 | 1.5 | 2.6 | 4.3 | 5.0 | 4.8 | 3.1 |
|  | 3-6 times | 0.5 | 0.8 | 1.8 | 2.7 | 4.2 | 3.1 | 2.1 |
|  | 7-9 times | 0.1 | 0.2 | 1.1 | 0.8 | 1.7 | 1.6 | 0.9 |
|  | 10 or more times | 0.1 | 1.1 | 1.0 | 0.5 | 1.6 | 1.7 | 1.0 |

Note: Response to question 'Think back over the last two weeks. How many times, if any, have you had the following number of alcoholic drinks on any one occasion when you have been drinking in the last two weeks?'. Percentages are of all students. Estimates are based on 6180 respondents.

## Type of alcohol consumed

Students were asked what alcoholic drink they usually drank. More than 1 type of drink could be reported. Among recent drinkers, the most common alcoholic drinks consumed were premixed drinks (for example, Bacardi Breezer, UDL drinks) ( 37 per cent), followed by spirits ( 35 per cent), ordinary beer ( 28 per cent), wine ( 11 per cent), liqueurs ( 10 per cent), low alcohol beer ( 7 per cent), and champagne or sparkling wine ( 5 per cent).

Males and females showed different preferences for the type of alcohol consumed. Among recent drinkers, more males than females drank ordinary beer ( 42 per cent versus 12 per cent) and low alcohol beer ( 9 per cent versus 5 per cent), while more females than males drank premixed spirits ( 50 per cent versus 26 per cent).

## Sources of alcohol and places where students drink alcohol

In 2002, the majority of students who reported drinking in the previous week did not buy the alcohol they most recently consumed (Table 14). Parents were the most common source of alcohol, with 32 per cent of students reporting that their parents gave them their last drink. The next most common source was from friends. With increasing age, students were more likely to obtain their alcohol from friends or someone else than from their parents.

The places where students reported drinking reflects these sources. Most commonly students who reported drinking in the previous week drank at home ( 34 per cent), followed by parties ( 26 per cent) and at a friend's home (14 per cent). Older students were more likely to drink at a party or at a friend's home, while younger students were more likely to have consumed their last alcoholic drink in their own home (Table 15).
Eight per cent of students indicated that they had bought the alcohol that they had most recently consumed. Buying alcohol increased with age, from 3 per cent of students aged 12 years to 20 per cent of those aged 17 years. Males were also slightly more likely than females to buy alcohol ( 9 per cent versus 6 per cent). Bottle-shops or licensed liquor stores (including supermarkets) were the most common source of alcohol that was bought. These stores were the source of alcohol for 4 per cent of students overall and 12 per cent of students aged 17 years.

In 2002, 12 per cent of students reported that they had, at some time, tried to buy alcohol at a hotel, club, restaurant, nightclub or bottleshop. This percentage has declined from 18 per cent in 1996 and 14 per cent in 1999. In 2002, of students who reported that they had tried to buy alcohol:

- 75 per cent indicated that they had been refused service at some time, compared to 55 per cent in 1999;
- 77 per cent reported that they had been asked for proof of age or identification when they had tried to buy alcohol, compared to 62 per cent in 1999;
- 34 per cent said they had used someone else's identification or a fake identification to enter these premises and or ask for alcohol there, compared to 27 per cent in 1999. Students were asked what type of false identification they used. More than 1 type could be reported. In 2000, the most common types of false identification used were someone else's proof of age card or driver's licence ( 39 per cent), a fake learner's or driver's licence ( 50 per cent), and a fake proof of age card (22 per cent).


## Drinking alcohol and smoking cigarettes

Thirty-one per cent of students who were recent drinkers reported that they had also smoked in the previous 7 days, compared with 13 per cent of all students. The percentage of recent drinkers who reported smoking in the last 7 days increased from 19 per cent of students aged 12 years to 43 per cent of students aged 17 years.
Overall, 9 per cent of students indicated that they were recent drinkers and had also smoked in the previous 7 days ( 10 per cent of females and 9 per cent of males). The percentage of students who reported both drinking alcohol and smoking increased from 2 per cent of students aged 12 years to 17 per cent of students aged 17 years.

Detailed information on cigarette smoking among secondary school students is shown in section 6.1.

## References

1. National Health and Medical Research Council. Australian Alcohol Guidelines-Health Risks and Benefits. Canberra: NHMRC, 2001.
2. Mathers C, Vos T, Stevenson C. The burden of disease and injury in Australia. AIHW Catalogue. no. PHE 17. Canberra: AIHW, 1999.

## TABLE 14

SOURCE OF ALCOHOL AMONG RECENT DRINKERS, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Source of alcohol | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 12 \\ & \% \end{aligned}$ | $\begin{aligned} & 13 \\ & \% \end{aligned}$ | $\begin{aligned} & 14 \\ & \% \end{aligned}$ | $\begin{aligned} & 15 \\ & \% \end{aligned}$ | $\begin{aligned} & 16 \\ & \% \end{aligned}$ | $\begin{aligned} & 17 \\ & \% \end{aligned}$ | All ages \% |
| Did not buy alcohol |  |  |  |  |  |  |  |
| Parents | 47.7 | 42.0 | 33.6 | 26.3 | 29.4 | 27.6 | 32.1 |
| Brother or sister | 7.4 | 9.7 | 6.5 | 5.6 | 4.4 | 8.6 | 6.7 |
| Took from home | 12.7 | 5.0 | 8.0 | 1.8 | 1.1 | 1.6 | 4.0 |
| Friend | 7.6 | 15.3 | 20.7 | 21.9 | 20.3 | 15.4 | 18.4 |
| Someone else | 2.0 | 6.6 | 13.7 | 26.2 | 20.8 | 18.5 | 17.2 |
| Total: did not buy alcohol | 89.7 | 85.6 | 88.0 | 87.3 | 82.2 | 75.6 | 84.4 |
| Bought alcohol |  |  |  |  |  |  |  |
| Hotel-pub-bar-club | 0.0 | 0.6 | 1.0 | 0.6 | 3.5 | 4.9 | 1.9 |
| Bottle-shop-licensed store | 1.1 | 0.0 | 1.0 | 2.4 | 7.3 | 11.7 | 4.3 |
| Dance venue-dance party | 0.0 | 1.2 | 0.9 | 0.0 | 0.0 | 0.0 | 0.3 |
| Total: bought alcohol | 3.2 | 3.8 | 3.4 | 4.0 | 10.9 | 19.8 | 7.8 |
| Not stated | 7.1 | 10.6 | 8.7 | 8.7 | 6.9 | 4.6 | 7.8 |

Note: Response to question 'Where, or from whom, did you get your last alcoholic drink?' among students who had an alcoholic drink in the last 7 days. Small numbers of other sources were reported. Totals include all sources combined. Estimates are based on 1803 respondents.

## TABLE 15

PLACES WHERE RECENT DRINKERS DRINK, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Source of alcohol | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 12 | 13 | 14 | 15 | 16 | 17 | All ages |
|  | \% | \% | \% | \% | \% | \% | \% |
| Home | 52.1 | 41.6 | 38.3 | 26.9 | 28.6 | 30.4 | 33.6 |
| Party | 15.2 | 23.2 | 23.6 | 35.6 | 27.3 | 21.8 | 26.4 |
| Friend's home | 5.4 | 8.9 | 13.8 | 14.6 | 18.1 | 15.6 | 13.9 |
| Other | 17.2 | 10.2 | 12.1 | 12.3 | 12.8 | 14.5 | 12.8 |
| Beach, park or recreation area | 4.0 | 7.0 | 5.3 | 5.1 | 7.8 | 5.5 | 5.9 |
| Not stated | 6.1 | 6.2 | 6.1 | 4.9 | 3.2 | 9.1 | 5.7 |
| Restaurant | 0.0 | 2.8 | 0.8 | 0.6 | 2.2 | 3.2 | 1.6 |

Note: Response to question 'Where did you drink your last alcoholic drink?' among students who had an alcoholic drink in the last 7 days. Estimates are based on 1803 respondents.

### 6.3 Other substance use

The survey collected information on students' use of a variety of substances, shown in Figure 8. Smoking and alcohol were the most common substances reportedly used, other than pain killers. Generally, there has been a decrease in the reported use of substances between 1996 and 2002 (Table 16). The main exception to this is for alcohol, where reported rates of lifetime and recent use have remained stable over the 7 -year period. Smoking and alcohol use are described in detail in sections 6.1 and 6.2 respectively.

The next most common substances reported were inhaled substances, for example sniffing glue, paint, petrol or thinners. In 2002, about 1 in 5 students reported ever inhaling these or similar substances, while 1 in 10 reported inhaling recently (in the previous 4 weeks). While the percentage of students who reported ever using inhaled substances has fallen since 1996, the percentage of students who reported inhaling recently has remained fairly stable.

There was a dramatic fall in the reported use in cannabis over the 7 -year period, with 9 per cent of students reporting having used cannabis in the previous 4 weeks in 2002 compared to 17 per cent in 1996. Among students who reported using cannabis in the last 4 weeks, 85 per cent reported using other substances on the same occasion,
most commonly alcohol ( 63 per cent), tobacco ( 47 per cent), and ecstasy ( 10 per cent).
Use of tranquillisers also fell between 1996 and 2002. Reported use of other drugs such as amphetamines ('speed','uppers','dex'), ecstasy, hallucinogens (LSD, 'acid','trips') was uncommon.

Generally, male and female students reported similar levels of ever using substances (Table 17). Female students were more likely to report ever using pain killers, while male students were more likely to report using cannabis. In terms of recent substance use (in the last 4 weeks), female students reported using pain killers and smoking tobacco more often than male students, who were more likely to report drinking alcohol or using cannabis. While low levels of recent use of amphetamines, ecstasy, hallucinogens, cocaine, steroids or heroin were reported by both sexes, recent use was more often reported by male students than female students.

As expected, the percentage of students who reported using substances increased with age. The only exception to this was for inhaled substances-the proportion of students who reported recently using inhaled substances fell from 16 per cent among students aged 12 years to 5 per cent among students aged 17 years. The same trend was seen for 'ever use' of inhaled substances.

## FIGURE 8

SUBSTANCES USED IN THE LAST 4 WEEKS BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


[^0]
## TABLE 16

SUBSTANCE USE BYYEAR, SECONDARY SCHOOL STUDENTS, NSW, 1996, 1999 AND 2002

| Substance | Ever used |  |  | Used in the last 4 weeks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| Pain killers | 94.3 | 93.0 | 91.4 | 68.5 | 65.3 | 62.8 |
| Alcohol | 85.7 | 85.0 | 84.4 | 44.4 | 45.9 | 44.5 |
| Tobacco | 56.0 | 41.3 | 42.1 | 23.8 | 20.1 | 16.3 |
| Inhalants | 26.7 | 25.6 | 22.5 | 11.5 | 11.3 | 10.5 |
| Cannabis | 33.3 | 25.4 | 21.6 | 17.3 | 11.0 | 9.4 |
| Tranquillisers | 18.9 | 17.2 | 15.7 | 4.5 | 3.3 | 4.0 |
| Amphetamines | 6.6 | 6.5 | 5.5 | 2.5 | 2.6 | 2.0 |
| Ecstasy | 4.1 | 4.0 | 4.5 | 1.8 | 1.6 | 1.9 |
| Hallucinogens | 8.5 | 5.4 | 4.0 | 3.3 | 1.5 | 1.4 |
| Cocaine | 4.0 | 3.3 | 2.8 | 1.6 | 1.2 | 1.0 |
| Steroids | 2.0 | 2.4 | 2.8 | 1.2 | 1.2 | 1.3 |
| Heroin | 4.0 | 3.3 | 2.6 | 1.6 | 1.3 | 1.1 |
| Note: Inhalant use includes sniffing spray cans and substances such as glue, paint, petrol or thinners. Hallucinogens include LSD, 'acid', 'trips', magic mushrooms, datura, and angel's trumpet. Estimates are based on the following numbers of respondents: 1996, 10,026; 1999, 7348; 2002, 6180. |  |  |  |  |  |  |

## TABLE 17

SUBSTANCE USE BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Sex | Substance | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 12 \\ & \% \end{aligned}$ | $\begin{aligned} & 13 \\ & \% \end{aligned}$ | $\begin{aligned} & 14 \\ & \% \end{aligned}$ | $\begin{aligned} & 15 \\ & \% \end{aligned}$ | $\begin{aligned} & 16 \\ & \% \end{aligned}$ | $\begin{aligned} & 17 \\ & \% \end{aligned}$ | All ages \% |
| Ever used |  |  |  |  |  |  |  |  |
| Males | Pain killers | 86.5 | 89.2 | 89.5 | 90.2 | 92.6 | 91.2 | 89.8 |
|  | Alcohol | 71.1 | 81.2 | 86.0 | 89.9 | 89.0 | 90.7 | 84.5 |
|  | Tobacco | 20.0 | 28.5 | 40.5 | 50.1 | 53.9 | 65.6 | 41.8 |
|  | Inhalants | 30.1 | 26.1 | 23.0 | 20.9 | 15.1 | 9.0 | 21.4 |
|  | Cannabis | 7.7 | 12.5 | 22.7 | 29.9 | 33.8 | 43.4 | 23.9 |
|  | Tranquillisers | 13.3 | 15.5 | 14.5 | 16.1 | 12.4 | 21.7 | 15.4 |
|  | Amphetamines | 3.0 | 4.3 | 4.8 | 7.5 | 6.3 | 9.8 | 5.8 |
|  | Ecstasy | 2.3 | 2.7 | 5.7 | 5.3 | 5.8 | 9.8 | 5.0 |
|  | Hallucinogens | 1.3 | 3.6 | 5.9 | 5.5 | 2.9 | 6.4 | 4.3 |
|  | Cocaine | 2.5 | 3.2 | 2.9 | 3.8 | 2.9 | 4.2 | 3.2 |
|  | Steroids | 3.1 | 3.5 | 3.8 | 3.2 | 1.7 | 3.5 | 3.2 |
|  | Heroin | 3.0 | 2.7 | 4.2 | 3.5 | 2.0 | 3.3 | 3.2 |
| Females | Pain killers | 87.6 | 90.4 | 93.0 | 95.4 | 96.1 | 96.1 | 93.0 |
|  | Alcohol | 69.8 | 79.0 | 87.9 | 90.2 | 89.2 | 90.2 | 84.3 |
|  | Tobacco | 20.8 | 26.1 | 43.8 | 53.9 | 56.6 | 56.9 | 42.3 |
|  | Inhalants | 29.4 | 26.8 | 25.6 | 23.0 | 20.0 | 14.1 | 23.6 |
|  | Cannabis | 7.2 | 8.8 | 19.1 | 26.1 | 27.7 | 29.4 | 19.2 |
|  | Tranquillisers | 11.5 | 14.5 | 14.8 | 20.7 | 15.3 | 19.4 | 16.0 |
|  | Amphetamines | 1.8 | 3.2 | 4.1 | 5.9 | 7.2 | 9.6 | 5.1 |
|  | Ecstasy | 0.3 | 3.3 | 4.3 | 4.4 | 5.9 | 6.6 | 4.0 |
|  | Hallucinogens | 1.8 | 2.0 | 2.8 | 5.5 | 6.0 | 5.3 | 3.8 |
|  | Cocaine | 0.3 | 2.8 | 3.9 | 2.0 | 1.6 | 3.9 | 2.4 |
|  | Steroids | 1.8 | 3.8 | 1.9 | 2.3 | 2.6 | 2.3 | 2.5 |
|  | Heroin | 1.0 | 1.8 | 2.4 | 2.6 | 2.1 | 1.9 | 2.0 |
| Persons | Pain killers | 87.1 | 89.8 | 91.2 | 92.8 | 94.4 | 93.7 | 91.4 |
|  | Alcohol | 70.4 | 80.1 | 86.9 | 90.0 | 89.1 | 90.4 | 84.4 |
|  | Tobacco | 20.4 | 27.3 | 42.1 | 52.0 | 55.3 | 61.1 | 42.1 |
|  | Inhalants | 29.7 | 26.4 | 24.3 | 22.0 | 17.6 | 11.6 | 22.5 |
|  | Cannabis | 7.5 | 10.7 | 20.9 | 28.0 | 30.7 | 36.1 | 21.6 |
|  | Tranquillisers | 12.4 | 15.0 | 14.6 | 18.4 | 13.8 | 20.5 | 15.7 |
|  | Amphetamines | 2.4 | 3.8 | 4.5 | 6.8 | 6.8 | 9.7 | 5.5 |
|  | Ecstasy | 1.3 | 3.0 | 5.0 | 4.9 | 5.8 | 8.2 | 4.5 |
|  | Hallucinogens | 1.5 | 2.8 | 4.4 | 5.5 | 4.5 | 5.9 | 4.0 |
|  | Cocaine | 1.4 | 3.0 | 3.4 | 2.9 | 2.3 | 4.0 | 2.8 |
|  | Steroids | 2.4 | 3.7 | 2.9 | 2.7 | 2.1 | 2.9 | 2.8 |
|  | Heroin | 2.0 | 2.3 | 3.3 | 3.1 | 2.0 | 2.6 | 2.6 |

TABLE 17 (continued)
SUBSTANCE USE BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Sex | Substance | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 12 \\ & \% \end{aligned}$ | $\begin{aligned} & 13 \\ & \% \end{aligned}$ | $14$ | $15$ | $16$ | $\begin{aligned} & 17 \\ & \% \end{aligned}$ | All ages \% |
| Used in the last 4 weeks |  |  |  |  |  |  |  |  |
| Males | Pain killers | 49.7 | 54.5 | 53.2 | 60.0 | 59.0 | 51.0 | 54.8 |
|  | Alcohol | 22.3 | 35.8 | 43.1 | 54.9 | 61.8 | 69.3 | 46.7 |
|  | Tobacco | 3.3 | 7.2 | 12.4 | 18.6 | 22.3 | 26.3 | 14.3 |
|  | Inhalants | 18.8 | 12.2 | 10.2 | 9.5 | 3.6 | 4.1 | 10.0 |
|  | Cannabis | 2.7 | 5.5 | 10.6 | 13.6 | 14.6 | 20.9 | 10.8 |
|  | Tranquillisers | 3.7 | 4.6 | 4.0 | 3.2 | 2.8 | 5.4 | 3.9 |
|  | Amphetamines | 1.3 | 2.0 | 2.5 | 3.1 | 2.0 | 4.0 | 2.4 |
|  | Ecstasy | 1.5 | 1.3 | 3.6 | 1.9 | 2.2 | 4.9 | 2.5 |
|  | Hallucinogens | 0.7 | 1.4 | 3.2 | 2.2 | 1.2 | 1.9 | 1.8 |
|  | Cocaine | 1.4 | 1.8 | 1.4 | 2.1 | 0.5 | 1.2 | 1.4 |
|  | Steroids | 1.5 | 1.8 | 1.8 | 2.1 | 0.7 | 2.4 | 1.7 |
|  | Heroin | 1.5 | 1.5 | 2.6 | 1.3 | 0.2 | 1.4 | 1.5 |
| Females | Pain killers | 61.4 | 62.5 | 72.4 | 81.8 | 74.1 | 73.3 | 70.9 |
|  | Alcohol | 19.8 | 29.4 | 44.0 | 58.1 | 52.0 | 52.9 | 42.3 |
|  | Tobacco | 7.2 | 9.0 | 18.2 | 24.0 | 27.1 | 27.3 | 18.3 |
|  | Inhalants | 13.7 | 14.7 | 12.8 | 7.4 | 8.9 | 6.5 | 10.9 |
|  | Cannabis | 2.7 | 3.5 | 9.2 | 11.5 | 12.4 | 9.0 | 8.0 |
|  | Tranquillisers | 2.5 | 3.1 | 4.3 | 4.2 | 4.1 | 6.1 | 4.0 |
|  | Amphetamines | 1.4 | 1.5 | 1.6 | 1.2 | 3.0 | 1.4 | 1.7 |
|  | Ecstasy | 0.1 | 0.7 | 1.0 | 1.5 | 2.9 | 1.6 | 1.2 |
|  | Hallucinogens | 0.0 | 0.7 | 1.3 | 1.6 | 1.8 | 1.0 | 1.0 |
|  | Cocaine | 0.3 | 0.6 | 1.0 | 0.9 | 0.5 | 0.0 | 0.6 |
|  | Steroids | 0.6 | 1.1 | 0.6 | 0.8 | 1.3 | 1.3 | 0.9 |
|  | Heroin | 0.4 | 0.7 | 0.8 | 0.6 | 0.6 | 0.7 | 0.6 |
| Persons | Pain killers | 55.7 | 58.4 | 62.7 | 70.7 | 66.6 | 62.6 | 62.8 |
|  | Alcohol | 21.0 | 32.7 | 43.6 | 56.5 | 56.9 | 60.8 | 44.5 |
|  | Tobacco | 5.3 | 8.0 | 15.2 | 21.3 | 24.7 | 26.8 | 16.3 |
|  | Inhalants | 16.2 | 13.4 | 11.4 | 8.5 | 6.3 | 5.3 | 10.5 |
|  | Cannabis | 2.7 | 4.6 | 9.9 | 12.6 | 13.5 | 14.7 | 9.4 |
|  | Tranquillisers | 3.1 | 3.9 | 4.1 | 3.7 | 3.4 | 5.8 | 4.0 |
|  | Amphetamines | 1.4 | 1.7 | 2.0 | 2.2 | 2.5 | 2.7 | 2.0 |
|  | Ecstasy | 0.8 | 1.0 | 2.3 | 1.7 | 2.5 | 3.2 | 1.9 |
|  | Hallucinogens | 0.4 | 1.0 | 2.3 | 1.9 | 1.5 | 1.4 | 1.4 |
|  | Cocaine | 0.8 | 1.2 | 1.2 | 1.5 | 0.5 | 0.6 | 1.0 |
|  | Steroids | 1.0 | 1.4 | 1.2 | 1.5 | 1.0 | 1.8 | 1.3 |
|  | Heroin | 1.0 | 1.1 | 1.7 | 1.0 | 0.4 | 1.0 | 1.1 |

Note: Inhalant use includes sniffing spray cans and substances such as glue, paint, petrol or thinners. Hallucinogens include LSD, 'acid', trips', magic mushrooms, datura, and angel's trumpet. Estimates are based on 6180 respondents.

## 7. MENTAL HEALTH AND WELLBEING

The aims of the mental health component of the survey were to estimate levels of psychological distress among secondary school students, and for those students who reported signs of psychological distress, to assess whether the distress was pervasive (occurring both at home and at school); its severity; whether these students were talking about it with others; and, if so, whether talking about it was helpful. Some comparative information from the 1996 and 1999 Surveys is also included in this chapter.

## Psychological distress

Psychological distress covers a range of feelings experienced by people who may have identifiable mental health problems such as anxiety or mood disorders, or who may be highly stressed for situational reasons. ${ }^{1,2,3}$ High psychological distress has been shown to be associated with increased rates of substance use and poor school performance. ${ }^{4,5,6}$

Psychological distress in the 2002 Survey was identified by questions that asked if the student had experienced feelings of depression, anxiety, or stress from being in trouble about their behaviour in the last 6 months. Those who had experienced a problem were asked 'how bad' it was for them at the time. A student who responded 'almost more than I can take' to any of the 3 problems was considered to have experienced high psychological distress.

Using this definition high psychological distress was reported by about 1 in 6 ( 18 per cent) secondary school students in 2002, and was reported more commonly among females than males ( 22 per cent versus 14 per cent) (Figure 9 , Table 18).
Of students found to have high psychological distress, 77 per cent reported that it was pervasive (both at home and at school), while 14 per cent reported problems only at home and 10 per cent reported problems only at school.

FIGURE 9
PROBLEMS CAUSING HIGH PSYCHOLOGICAL DISTRESS INTHE PAST 6 MONTHS BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996, 1999 AND 2002


Note: Students who responded 'almost more than I can take' to the 3 questions: 'When you were feeling unhappy, sad or depressed-nervous, stressed or under pressure-in trouble because of your behaviour, how bad was it for you?' High psychological distress: response of 'almost more than I can take' to one or more of the above questions. Estimates are based on the following numbers of respondents: 1996, 4847; 1999, 3651; 2002, 3506.

Females were more likely than males to report problems that were pervasive ( 81 per cent versus 71 per cent respectively). Males were more likely than females to report problems only at school ( 15 per cent versus 6 per cent), while 14 per cent of males and 13 per cent of females reported problems only at home.

These results are comparable with previous Australian studies that used other methods for measuring
psychological distress in young people. The National Survey of Mental Health and Wellbeing (1998) found that 19 per cent of young people aged $12-17$ years (males 16 per cent; females 22 per cent) had 'mental health problems' as identified by the Achenbach Child Behaviour Checklist Youth Self-Report. ${ }^{7}$ In the Western Australian Child Health Survey 1993, 21 per cent of young people aged 12-16 years reported they thought they had an emotional or behavioural problem in the last 6 months. ${ }^{8}$

## TABLE 18

PROBLEMS CAUSING HIGH PSYCHOLOGICAL DISTRESS INTHE PAST 6 MONTHS BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996, 1999 AND 2002

| Year | Problem | Sex | \% | LL 95\% CI | UL 95\% CI |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | Unhappy, sad, depressed | Males | 8.0 | 6.6 | 9.3 |
|  |  | Females | 13.9 | 12.6 | 15.3 |
|  |  | Persons | 11.1 | 10.1 | 12.2 |
|  | Nervous, stressed, under pressure | Males | 6.1 | 4.7 | 7.5 |
|  |  | Females | 8.2 | 7.0 | 9.5 |
|  |  | Persons | 7.2 | 6.3 | 8.2 |
|  | In trouble because of behaviour | Males | 3.8 | 2.8 | 4.8 |
|  |  | Females | 3.1 | 2.3 | 4.0 |
|  |  | Persons | 3.4 | 2.8 | 4.1 |
|  | High psychological distress | Males | 13.9 | 12.0 | 15.8 |
|  | (At least 1 of above 3 problems) | Females | 18.3 | 16.7 | 20.0 |
|  |  | Persons | 16.3 | 14.9 | 17.6 |
| 1999 | Unhappy, sad, depressed | Males | 7.9 | 6.4 | 9.4 |
|  |  | Females | 15.3 | 13.4 | 17.2 |
|  |  | Persons | 12.0 | 10.7 | 13.4 |
|  | Nervous, stressed, under pressure | Males | 7.1 | 5.7 | 8.5 |
|  |  | Females | 10.3 | 8.8 | 11.8 |
|  |  | Persons | 8.9 | 7.8 | 10.0 |
|  | In trouble because of behaviour | Males | 3.9 | 2.9 | 5.0 |
|  |  | Females | 4.2 | 3.2 | 5.2 |
|  |  | Persons | 4.1 | 3.3 | 4.9 |
|  |  | Males | 13.5 | 11.7 | 15.2 |
|  | (At least 1 of above 3 problems) | Females | 20.5 | 18.3 | 22.7 |
|  |  | Persons | 17.4 | 15.7 | 19.0 |
| 2002 | Unhappy, sad, depressed | Males | 8.2 | 6.7 | 9.7 |
|  |  | Females | 16.5 | 14.4 | 18.6 |
|  |  | Persons | 12.3 | 10.9 | 13.8 |
|  | Nervous, stressed, under pressure | Males | 6.4 | 4.9 | 7.9 |
|  |  | Females | 9.1 | 7.3 | 11.0 |
|  |  | Persons | 7.8 | 6.6 | 8.9 |
|  | In trouble because of behaviour | Males | 3.0 | 2.1 | 3.8 |
|  |  | Females | 4.6 | 3.2 | 5.9 |
|  |  | Persons | 3.8 | 3.0 | 4.6 |
|  |  | Males | 13.5 | 11.3 | 15.6 |
|  | (At least 1 of above 3 problems) | Females | 21.5 | 19.0 | 24.0 |
|  |  | Persons | 17.5 | 15.7 | 19.3 |

Note: Students who responded 'almost more than I can take' to the 3 questions: 'When you were feeling unhappy, sad or depressed-nervous, stressed or under pressure-in trouble because of your behaviour, how bad was it for you?' High psychological distress: response of 'almost more than I can take' to one or more of the above questions. Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on the following numbers of respondents: 1996, 4847; 1999, 3651; 2002, 3506.

## Components of psychological distress

## Unhappiness, sadness, or depression

In 2002, an estimated 12 per cent of students (males 8 per cent; females 17 per cent) experienced high psychological distress because they felt unhappy, sad or depressed (almost more than they could take) in the previous 6 months. Of these, 79 per cent (males 73 per cent; females 83 per cent) reported feeling unhappy, sad or depressed both at home and at school. Only 63 per cent of students with high psychological distress for this reason talked to someone, mainly friends and family. Of those, 47 per cent reported that talking to someone was 'quite helpful' or 'very helpful'.

## Nervousness, being stressed, or under pressure

An estimated 8 per cent of students (males 6 per cent; females 9 per cent) experienced high psychological distress because they felt nervous, stressed or under pressure (almost more than they could take) in the previous 6 months. Seventy-five per cent of these students (males 68 per cent; females 79 per cent) reported feeling nervous, stressed or under pressure both at home and at school. Only 59 per cent of students with high psychological distress for this reason talked to someone, mainly friends and family, of whom 30 per cent found talking to someone 'quite helpful' or 'very helpful'.

## Being in trouble because of behaviour

Four per cent of students (males 3 per cent; females 5 per cent) experienced high psychological distress because they were in trouble because of their behaviour (almost more than they could take) in the previous 6 months. Of these, 46 per cent (males 50 per cent; females 43 per cent) reported being in trouble both at home and at school. A greater proportion of males than females reported being in trouble only at school (males 35 per cent; females 10 per cent), whereas a greater proportion of females than males reported being in trouble only at home (females 47 per cent; males 15 per cent). Seventy per cent of those with high psychological distress for this reason talked to someone, mostly friends. Only 30 per cent found that talking was 'quite helpful' or 'very helpful'.

## Concurrent problems

Students often reported experiencing high psychological distress for more than 1 reason. Figure 10 shows the overlap in responses. Almost 1 per cent of students reported problems at a level of 'more than I can take' in all 3 components, while a further 5 per cent reported problems in 2 components.

## Psychological distress and vulnerability

Students who experience distressing problems at a level they describe as 'almost more than I can take' are, by their own account, near the end of their own coping resources. They are likely to be at greater risk of mental ill-health if there is no relief from this experience either at home or at

## FIGURE 10

CONCURRENT PROBLEMS INTHE PAST 6 MONTHS, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Students who responded 'almost more than I can take' to the 3 questions: 'When you were feeling unhappy, sad or depressed-nervous, stressed or under pressure-in trouble because of your behaviour, how bad was it for you?' as a percentage of all students.
Estimates are based on 3506 respondents.
school. Talking about problems may help to relieve distress, or may lead to contact with services that can assist the young person. In 2002, 7 per cent of students experienced high psychological distress at both home and school and either talked to no-one or talked to someone but found it 'not at all helpful'. These are a particularly vulnerable group of young people.

## Study problems affecting school performance

The 2002 Survey also asked questions about distress when experiencing study problems. An estimated 4 per cent of students (males 3 per cent; females 4 per cent) experienced high psychological distress because they had study problems that affected their school performance. These results are similar to those of the 1996 ASSAD survey (5 per cent males; 4 per cent females). Of these, two-thirds ( 69 per cent) reported experiencing problems both at home and at school (males 67 per cent; females 71 per cent). Males were more likely than females to report experiencing study problems at school only ( 15 per cent versus 7 per cent), while females were more likely than males to report experiencing study problems only at home ( 22 per cent versus 18 per cent). Over 50 per cent talked to someone, mostly family and friends. Talking to someone was reported as 'quite helpful' or 'very helpful' by 44 per cent of students.

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## 8. SUN PROTECTION

## FIGURE 11

SUN PROTECTION BEHAVIOURS BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996, 1999, AND 2002


Note: Students who responded 'usually' or 'always' to the following questions: 'Thinking about sunny days in summer, when you are outside for an hour or more between 11.00 a.m. and 3.00 p.m., how often would you: wear a hat, wear maximum protection sunscreen, stay mainly in the shade?' Maximum protection sunscreen includes SPF30+ for 2002, both SPF15+ and SPF30+ for 1999, and SPF15+ only for 1996. Estimates are based on the following numbers of respondents: 1996, 10,026; 1999, 7348; 2002, 6180.

Some sun exposure is beneficial to health; for example, by helping the body to produce vitamin D , which is essential for healthy bones. However, excessive sun exposure can lead to sunburn in the short-term and to melanoma and other skin cancers in the long-term. Australia has one of the highest rates of melanoma in the world, and the incidence of new cases of melanoma continues to rise. The majority of new cancers that are diagnosed in Australia are non-melanoma skin cancers. ${ }^{1}$ Exposure to ultraviolet radiation from the sun in childhood and adolescence has been identified as a strong factor in the risk of developing melanoma and other skin cancers. ${ }^{2}$ Protection from the sun, particularly earlier in life, is the most effective way of preventing skin cancer.

In this survey, students were asked about their usual behaviour on a sunny day in summer, including: how often they wear a hat, type of hat most often worn, sunscreen use, use of clothing for sun protection, wearing sunglasses,
staying mainly in the shade, and spending time indoors. Students were also asked about their skin type, whether they liked to get a suntan, and sunburn experience including severe sunburn with blistering. Beliefs about skin cancer were also explored.

## Sun protective behaviour

## Hats

The percentage of students reporting that they usually or always wear a hat when outside on a sunny day in summer decreased substantially from 49 per cent in 1993 to 41 per cent in 2002 (Table 19). Males were more much more likely than females to report wearing a hat ( 52 per cent versus 30 per cent in 2002) (Figure 11).

With increasing age, both males and females were less likely to report usually-always wearing a hat. In 2002,

24 per cent of females aged 17 years indicated that they wore a hat, compared to 43 per cent of females aged 12 years. For males, the rate decreased from 63 per cent of students aged 12 years to 40 per cent of those aged 17 years.

In 2002, a cap was the type of hat most often worn by male ( 59 per cent), and female ( 26 per cent) students. A sun visor was the next most common type of hat worn by female students ( 18 per cent). With increasing age, both males and females were less likely to report wearing the recommended wide-brimmed hat. For females, the rate decreased from 12 per cent of students aged 12 years to 7 per cent of those aged 17 years. For males, the rate decreased from 9 per cent of students aged 12 years to 4 per cent of those aged 17 years.

## Sunscreen

The percentage of students reporting that they usually or always wear maximum protection sunscreen when outside on a sunny day in summer decreased substantially from 63 per cent in 1993 to 41 per cent in 2002 (Table 19).

When asked about the sun protection factor of the sunscreen usually used when outside on a sunny day in summer, 13 per cent of males and 9 per cent of females reported not using sunscreen in 2002, while over 60 per cent of both male and female students reported using a sunscreen with a sun protection factor (SPF) of 30+. The percentage of students using sunscreen with SPF30+ decreased with increasing age, from 69 per cent of those aged 12 years to 58 per cent of those aged 17 years. Females were more likely than males to report using SPF15+ (13 per cent versus 8 per cent).

Only 35 per cent of male students and 46 per cent of female students reported usually or always wearing maximum protection sunscreen (SPF 30+) when outside for an hour or more on a sunny day in summer (Figure 11). With increasing age, students were more likely to report not using sunscreen, and were less likely to report usually or always wearing maximum protection sunscreen.

## Shade and staying indoors

In 2002, 26 per cent of students reported usually or always spending most time inside on a sunny day in summer between 11.00 a.m. and 3.00 p.m., a rise from 18 per cent in 1993 (Table 19). This change in behaviour was most marked among older students.
The percentage of students reporting that they usually or always stay in the shade when outside on a sunny day in summer was 28 per cent in 2002 compared to 30 per cent in 1996. In 2002, 29 per cent of female students and 27 per cent of male students reported usually or always staying mainly in the shade when outside on a sunny day in summer (Figure 11). Older students (aged 16-17 years) were more likely than younger students (aged 12-15 years) to stay mainly in the shade (Table 19).

## Clothing

The percentage of students reporting that they usually or always wear clothes covering most of the body when outside on a sunny day in summer fell slightly from 23 per cent in 1993 to 20 per cent in 2002 (Table 19).
In 2002, female students were less likely than male students ( 14 per cent versus 26 per cent) to report usually or always wearing clothes covering most of the body when outside on a sunny day in summer. Female students reported deliberately wearing less or briefer clothing-so as to get some sun on their skin-more often than males (31 per cent versus 17 per cent), with the highest rate reported among females aged 15 years ( 40 per cent).

## Sunglasses

The percentage of students reporting that they usually or always wear sunglasses when outside on a sunny day in summer fell from 41 per cent in 1993 to 31 per cent in 2002 (Table 19).

In 2002, female students were more likely than male students to report usually or always wearing sunglasses ( 39 per cent versus 23 per cent), as were older students (aged 16-17 years) compared to younger students (aged 12-15 years).

## TABLE 19

SUN PROTECTION BEHAVIOURS BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 1993-2002

|  | Males |  |  |  | Females |  |  |  | Persons |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Age } \\ & \text { (years) } \end{aligned}$ | $\begin{array}{r} 1993 \\ \% \end{array}$ | $\begin{array}{r} 1996 \\ \% \end{array}$ | $\begin{array}{r} 1999 \\ \% \end{array}$ | $\begin{array}{r} 2002 \\ \% \end{array}$ | $\begin{array}{r} 1993 \\ \% \end{array}$ | $\begin{array}{r} 1996 \\ \% \end{array}$ | $\begin{array}{r} 1999 \\ \% \end{array}$ | $\begin{array}{r} 2002 \\ \% \end{array}$ | $\begin{array}{r} 1993 \\ \% \end{array}$ | $\begin{array}{r} 1996 \\ \% \end{array}$ | $\begin{array}{r} 1999 \\ \% \end{array}$ | $\begin{array}{r} 2002 \\ \% \end{array}$ |
| Wear a hat |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 74.8 | 70.4 | 69.8 | 63.1 | 46.6 | 52.0 | 42.8 | 43.3 | 61.1 | 61.4 | 56.8 | 53.0 |
| 13 | 66.2 | 66.7 | 64.6 | 54.8 | 36.1 | 41.3 | 35.9 | 34.9 | 51.5 | 54.3 | 50.5 | 45.0 |
| 14 | 60.6 | 61.7 | 59.4 | 51.2 | 28.5 | 34.1 | 27.8 | 28.6 | 44.8 | 48.3 | 43.8 | 40.1 |
| 15 | 57.2 | 64.3 | 52.9 | 49.3 | 35.3 | 31.8 | 25.9 | 22.6 | 46.5 | 48.5 | 39.5 | 36.1 |
| 16 | 59.3 | 57.6 | 49.7 | 49.7 | 26.8 | 29.4 | 26.6 | 21.8 | 43.0 | 43.4 | 37.7 | 35.7 |
| 17 | 55.5 | 58.2 | 46.9 | 40.3 | 34.6 | 29.7 | 33.6 | 24.2 | 44.2 | 43.3 | 40.0 | 32.0 |
| All ages | 62.9 | 63.8 | 58.4 | 51.8 | 34.8 | 37.1 | 32.0 | 29.5 | 49.0 | 50.6 | 45.2 | 40.6 |
| Wear maximum protection sunscreen |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 62.6 | 54.5 | 51.5 | 44.3 | 77.9 | 75.3 | 64.1 | 53.5 | 70.0 | 64.6 | 57.5 | 49.0 |
| 13 | 56.1 | 52.1 | 49.5 | 40.1 | 74.1 | 71.5 | 64.8 | 53.0 | 64.9 | 61.6 | 57.0 | 46.4 |
| 14 | 52.3 | 45.4 | 45.0 | 36.6 | 71.2 | 67.4 | 55.1 | 47.5 | 61.6 | 56.1 | 50.0 | 42.0 |
| 15 | 49.6 | 46.2 | 39.0 | 34.0 | 69.6 | 66.5 | 55.5 | 39.0 | 59.4 | 56.1 | 47.2 | 36.5 |
| 16 | 51.2 | 43.6 | 41.7 | 29.2 | 67.8 | 68.0 | 59.3 | 43.6 | 59.5 | 55.9 | 50.8 | 36.4 |
| 17 | 46.7 | 46.3 | 40.5 | 21.3 | 66.7 | 69.1 | 55.0 | 39.7 | 57.5 | 58.2 | 48.1 | 30.8 |
| All ages | 53.6 | 48.4 | 45.1 | 35.0 | 71.5 | 69.8 | 59.3 | 46.3 | 62.5 | 58.9 | 52.2 | 40.7 |
| Stay mainly in shade |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 29.9 | 30.5 | 41.8 | 27.4 | 27.9 | 37.8 | 41.5 | 32.5 | 28.9 | 34.1 | 41.7 | 30.0 |
| 13 | 25.9 | 29.5 | 34.2 | 26.0 | 22.7 | 35.8 | 35.4 | 27.7 | 24.3 | 32.6 | 34.8 | 26.8 |
| 14 | 17.9 | 26.6 | 29.2 | 25.3 | 21.0 | 31.7 | 30.7 | 24.2 | 19.4 | 29.1 | 29.9 | 24.8 |
| 15 | 16.9 | 25.9 | 32.0 | 22.9 | 25.0 | 27.1 | 28.2 | 24.3 | 20.9 | 26.5 | 30.1 | 23.6 |
| 16 | 12.7 | 25.9 | 30.8 | 30.5 | 24.6 | 32.0 | 30.0 | 30.8 | 18.7 | 28.9 | 30.4 | 30.6 |
| 17 | 14.6 | 25.6 | 27.4 | 30.8 | 21.5 | 35.0 | 32.4 | 40.8 | 18.3 | 30.5 | 30.0 | 36.0 |
| All ages | 20.3 | 27.5 | 33.1 | 26.8 | 23.9 | 33.2 | 33.1 | 29.4 | 22.1 | 30.4 | 33.1 | 28.1 |
| Wear clothes covering most of the body |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 27.9 | 30.5 | 29.4 | 34.6 | 23.8 | 22.1 | 19.9 | 19.0 | 25.9 | 26.4 | 24.8 | 26.7 |
| 13 | 27.0 | 29.5 | 29.8 | 26.0 | 21.3 | 19.4 | 16.8 | 17.3 | 24.3 | 24.6 | 23.5 | 21.8 |
| 14 | 28.6 | 26.8 | 25.4 | 25.8 | 19.9 | 18.9 | 16.5 | 11.3 | 24.3 | 22.9 | 21.0 | 18.7 |
| 15 | 27.7 | 24.8 | 24.5 | 22.4 | 17.4 | 18.7 | 13.4 | 9.0 | 22.7 | 21.8 | 19.0 | 15.8 |
| 16 | 21.1 | 25.2 | 21.3 | 26.0 | 18.7 | 17.1 | 12.3 | 10.4 | 19.9 | 21.1 | 16.7 | 18.2 |
| 17 | 20.1 | 25.8 | 23.9 | 17.7 | 19.3 | 18.6 | 13.5 | 16.3 | 19.6 | 22.1 | 18.5 | 17.0 |
| All ages | 25.9 | 27.3 | 26.0 | 25.6 | 20.1 | 19.2 | 15.5 | 13.8 | 23.0 | 23.3 | 20.8 | 19.7 |
| Wear sunglasses |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 27.4 | 25.3 | 17.8 | 19.8 | 39.6 | 32.2 | 37.9 | 35.4 | 33.3 | 28.7 | 27.5 | 27.7 |
| 13 | 22.7 | 23.5 | 20.6 | 21.2 | 44.8 | 37.1 | 34.7 | 34.4 | 33.5 | 30.1 | 27.5 | 27.7 |
| 14 | 25.8 | 24.6 | 24.1 | 18.7 | 52.2 | 40.3 | 36.7 | 39.1 | 38.8 | 32.2 | 30.3 | 28.7 |
| 15 | 27.6 | 28.7 | 24.4 | 24.1 | 58.0 | 47.3 | 39.9 | 38.7 | 42.4 | 37.8 | 32.1 | 31.3 |
| 16 | 35.1 | 33.3 | 32.1 | 26.5 | 61.7 | 51.4 | 48.1 | 42.2 | 48.4 | 42.4 | 40.4 | 34.4 |
| 17 | 37.7 | 38.9 | 29.3 | 27.3 | 68.0 | 59.7 | 52.1 | 47.1 | 54.0 | 49.7 | 41.2 | 37.6 |
| All ages | 28.6 | 28.1 | 24.2 | 22.6 | 53.2 | 43.5 | 40.8 | 39.1 | 40.8 | 35.7 | 32.5 | 30.8 |
| Spend most of the time inside |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 22.7 | 20.6 | 31.4 | 30.4 | 21.8 | 17.7 | 23.8 | 25.7 | 22.3 | 19.2 | 27.8 | 28.0 |
| 13 | 20.9 | 18.1 | 23.9 | 25.1 | 17.1 | 19.1 | 20.5 | 23.1 | 19.1 | 18.6 | 22.2 | 24.1 |
| 14 | 18.7 | 17.7 | 23.7 | 25.2 | 18.4 | 17.8 | 18.1 | 20.2 | 18.5 | 17.7 | 20.9 | 22.8 |
| 15 | 17.5 | 16.1 | 22.7 | 26.2 | 16.0 | 15.1 | 17.7 | 20.3 | 16.8 | 15.6 | 20.2 | 23.3 |
| 16 | 10.6 | 17.1 | 21.1 | 25.7 | 18.3 | 20.1 | 17.6 | 26.4 | 14.4 | 18.6 | 19.3 | 26.0 |
| 17 | 15.7 | 16.2 | 26.2 | 33.8 | 17.6 | 19.1 | 24.0 | 35.6 | 16.8 | 17.7 | 25.0 | 34.7 |
| All ages | 18.1 | 17.8 | 24.7 | 27.3 | 18.2 | 18.1 | 20.0 | 24.6 | 18.2 | 17.9 | 22.4 | 26.0 |

Note: Students who responded 'usually' or 'always' to the following questions: 'Thinking about sunny days in summer, when you are outside for an hour or more between 11.00 a.m. and 3.00 p.m., how often would you: wear a hat, wear maximum protection sunscreen, stay mainly in the shade, wear clothes covering most of your body, wear sunglasses?', and 'Thinking about sunny days in summer between 11.00 a.m. and 3.00 p.m. how often would you spend most of the time inside?' Maximum protection sunscreen includes SPF30+ for 2002, both SPF15+ and SPF30+ for 1999, and SPF15+ only for 1996. Estimates are based on the following numbers of respondents: 1993, 4823; 1996, 10,026; 1999, 7348; 2002, 6180.

## TABLE 20

## SUNTAN PREFERENCE BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Sex | Suntan preference | Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 12 \\ \% \end{gathered}$ | $\begin{gathered} 13 \\ \% \end{gathered}$ | $\begin{gathered} 14 \\ \% \end{gathered}$ | $\begin{array}{r} 15 \\ \% \end{array}$ | $\begin{gathered} 16 \\ \% \end{gathered}$ | $\begin{gathered} 17 \\ \% \end{gathered}$ | All ages \% |
| Males | No | 32.2 | 29.2 | 25.3 | 26.3 | 25.3 | 26.6 | 27.5 |
|  | Yes, a light tan | 29.0 | 30.4 | 33.5 | 24.6 | 29.2 | 27.2 | 29.1 |
|  | Yes, a moderate tan | 28.0 | 29.1 | 29.9 | 33.6 | 35.0 | 35.8 | 31.6 |
|  | Yes, a dark tan | 4.5 | 4.7 | 6.5 | 9.5 | 5.4 | 5.2 | 6.1 |
|  | Yes, a very dark tan | 1.8 | 2.8 | 2.5 | 3.8 | 3.9 | 3.7 | 3.0 |
|  | Not stated | 4.5 | 3.9 | 2.3 | 2.3 | 1.3 | 1.4 | 2.7 |
| Females | No | 20.7 | 17.2 | 11.3 | 11.6 | 18.7 | 22.4 | 16.6 |
|  | Yes, a light tan | 33.8 | 29.0 | 24.3 | 24.5 | 30.5 | 29.3 | 28.4 |
|  | Yes, a moderate tan | 32.2 | 33.7 | 44.0 | 41.1 | 32.0 | 34.2 | 36.5 |
|  | Yes, a dark tan | 8.5 | 15.4 | 15.8 | 17.9 | 15.2 | 11.4 | 14.3 |
|  | Yes, a very dark tan | 2.6 | 3.0 | 3.4 | 3.9 | 1.7 | 2.4 | 2.9 |
|  | Not stated | 2.2 | 1.7 | 1.2 | 0.9 | 1.9 | 0.2 | 1.4 |
| Persons | No | 26.3 | 23.3 | 18.4 | 19.0 | 22.0 | 24.4 | 22.0 |
|  | Yes, a light tan | 31.5 | 29.7 | 29.0 | 24.6 | 29.9 | 28.3 | 28.7 |
|  | Yes, a moderate tan | 30.2 | 31.3 | 36.8 | 37.3 | 33.5 | 35.0 | 34.1 |
|  | Yes, a dark tan | 6.5 | 9.9 | 11.1 | 13.7 | 10.3 | 8.4 | 10.2 |
|  | Yes, a very dark tan | 2.2 | 2.9 | 2.9 | 3.8 | 2.8 | 3.1 | 3.0 |
|  | Not stated | 3.3 | 2.8 | 1.7 | 1.6 | 1.6 | 0.8 | 2.0 |

## TABLE 21

SUNBURN OVERTHE LAST SUMMER BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 1993-2002

| Sex | $\begin{aligned} & \text { Age } \\ & \text { (years) } \end{aligned}$ | $\begin{gathered} 1993 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 12 | 66.0 | 65.8 | 73.6 | 68.6 |
|  | 13 | 71.2 | 70.2 | 79.2 | 74.1 |
|  | 14 | 67.7 | 68.6 | 80.1 | 77.5 |
|  | 15 | 71.9 | 72.5 | 77.2 | 75.0 |
|  | 16 | 73.5 | 74.6 | 77.0 | 72.7 |
|  | 17 | 76.9 | 74.3 | 79.3 | 71.7 |
|  | All ages | 70.7 | 70.6 | 77.6 | 73.6 |
| Females | 12 | 65.7 | 65.1 | 76.0 | 80.6 |
|  | 13 | 69.8 | 69.8 | 80.7 | 78.9 |
|  | 14 | 72.3 | 73.3 | 83.3 | 84.6 |
|  | 15 | 78.4 | 76.7 | 81.5 | 85.8 |
|  | 16 | 76.8 | 77.2 | 82.6 | 75.4 |
|  | 17 | 72.8 | 76.6 | 83.6 | 71.8 |
|  | All ages | 72.5 | 72.8 | 81.2 | 80.0 |
| Persons | 12 | 65.9 | 65.5 | 74.8 | 74.7 |
|  | 13 | 70.5 | 70.0 | 79.9 | 76.4 |
|  | 14 | 70.0 | 70.9 | 81.7 | 81.0 |
|  | 15 | 75.1 | 74.5 | 79.3 | 80.4 |
|  | 16 | 75.2 | 75.9 | 79.9 | 74.0 |
|  | 17 | 74.7 | 75.5 | 81.6 | 71.7 |
|  | All ages | 71.6 | 71.7 | 79.4 | 76.8 |
| Note: | Students who responded 'yes' to the question: 'Over the last summer, did you get sunburn that was sore or tender the next day?' Estimates are based on the following numbers of respondents: 1993, 4823; 1996, 10,026; 1999, 7348; 2002, 6180. |  |  |  |  |

FIGURE 12
SUNBURN OVER THE LAST SUMMER BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Estimates are based on 6180 respondents.

## Suntan preference, sunburn experience and skin type

The percentage of students who reported that they didn't like to get a suntan increased from 15 per cent in 1993 to 20 per cent in 1996, and 23 per cent in 1999. In 2002, 22 per cent of students reported that they didn't like to get a suntan, with males more likely than females to indicate this preference ( 28 per cent versus 17 per cent).

A light tan was preferred by 29 per cent of males and 28 per cent of females, while a moderate tan was preferred by 32 per cent and 37 per cent of males and females respectively. The pattern of student preference for a moderate tan, followed by a light tan and then no tan is unchanged from 1996 and 1999. Of females, those aged 14 and 15 years were more likely than females of other ages to report liking moderate, dark, and very dark tans (Table 20).

Seventy-seven per cent of all students reported being sunburnt during the previous summer, compared with 72 per cent in 1996 (Table 21). The rate was higher for females ( 80 per cent) than males ( 74 per cent). Females also reported being sunburnt more often that males (Figure 12). In females, rates of sunburn were highest in the 14 and 15 year age groups ( 85 and 86 per cent, respectively).

There was some variation in sunburn experience by socioeconomic group. Students were grouped into quintiles by ABS Index of Relative Socio-Economic Disadvantage score. The percentage of students who reported being sunburnt during the previous summer rose from 80 per cent in the least disadvantaged quintile of students to 85 per cent in the second most disadvantaged quintile, but was lowest in the most disadvantaged quintile ( 77 per cent).

In 2002, one-third of all students ( 35 per cent of females, 31 per cent of males) reported having severe sunburn with blistering in their lifetime, compared with 36 per cent in 1993 (Table 22). In 2002, the percentage of students who reported having this sort of severe sunburn increased from 27 per cent in students aged 12 years to 33 per cent in students aged 17 years.

In 2002, 31 per cent of all students ( 34 per cent of males, 28 per cent of females) reported that their skin would 'just burn or go red' when exposed to strong sunshine for 30 minutes at the beginning of summer, while 36 per cent ( 29 per cent of males, 42 per cent of females) reported that their skin would 'burn or go red first, then tan afterwards', and 27 per cent ( 27 per cent of males, 26 per cent of females) reported that they would 'just tan'.

## TABLE 22

SEVERE SUNBURN IN LIFETIME BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 1993-2002

| Sex | Age (years) | $\begin{gathered} 1993 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 12 | 31.3 | 32.2 | 22.8 | 23.6 |
|  | 13 | 34.0 | 33.8 | 25.4 | 31.7 |
|  | 14 | 31.4 | 34.1 | 30.1 | 30.1 |
|  | 15 | 40.3 | 38.8 | 35.3 | 33.1 |
|  | 16 | 39.9 | 40.7 | 33.6 | 34.2 |
|  | 17 | 42.3 | 40.0 | 33.6 | 33.2 |
|  | All ages | 36.0 | 36.1 | 29.6 | 31.0 |
| Females | 12 | 29.7 | 29.8 | 26.8 | 29.3 |
|  | 13 | 30.6 | 31.5 | 28.7 | 30.0 |
|  | 14 | 36.8 | 34.2 | 32.8 | 37.4 |
|  | 15 | 37.9 | 36.1 | 32.9 | 39.3 |
|  | 16 | 39.1 | 41.2 | 35.1 | 38.4 |
|  | 17 | 39.5 | 43.1 | 40.9 | 32.2 |
|  | All ages | 35.4 | 35.4 | 32.3 | 34.5 |
| Persons | 12 | 30.5 | 31.1 | 24.7 | 26.5 |
|  | 13 | 32.4 | 32.7 | 27.0 | 30.9 |
|  | 14 | 34.0 | 34.1 | 31.4 | 33.7 |
|  | 15 | 39.1 | 37.5 | 34.1 | 36.2 |
|  | 16 | 39.5 | 41.0 | 34.4 | 36.3 |
|  | 17 | 40.8 | 41.6 | 37.4 | 32.7 |
|  | All ages | 35.7 | 35.8 | 30.9 | 32.7 |
| Note: | Students who responded 'yes' to the question: 'Have you ever had severe sunburn which has blistered?'. Estimates are based on the following numbers of respondents: 1993, 4823; 1996, 10,026; 1999, 7348; 2002, 6180. |  |  |  |  |

## Beliefs about skin cancer

In 2002, 33 per cent of males and 25 per cent of females reported that 'you only get skin cancer if you get burnt often', compared with 24 per cent of males and 18 per cent of females in 1993 (Table 23). With increasing age a greater proportion of both males and females knew that it is possible to get skin cancer without getting burnt often (Figure 13).

As in the 1999 survey, 92 per cent of all students in 2002 believed that most skin cancer is caused by ultraviolet radiation from the sun. There was little difference between males and females or between ages.

## References:

1. Australian Institute of Health and Welfare. Australia's Health 2002. Canberra: AIHW, 2002.
2. Hill D, Dixon H. Promoting sun protection in children: Rationale and challenges. Health Education and Behaviour 1999; 26: 409-417.

FIGURE 13
BELIEF THAT 'YOU ONLY GET SKIN CANCER IF YOU GET BURNT OFTEN' BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 1993-2002


Note: Students who responded 'true' to the statement 'You only get skin cancer if you get burnt often'.

## TABLE 23

BELIEF THAT 'YOU ONLY GET SKIN CANCER IF YOU GET BURNT OFTEN' BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 1993-2002

| Sex | Age (years) | $\begin{gathered} 1993 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ \% \end{gathered}$ | $\begin{gathered} 1999 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 12 | 28.1 | 32.5 | 47.8 | 45.1 |
|  | 13 | 32.0 | 29.6 | 39.5 | 39.8 |
|  | 14 | 25.7 | 23.9 | 36.3 | 37.4 |
|  | 15 | 20.7 | 19.6 | 27.6 | 26.8 |
|  | 16 | 18.8 | 16.2 | 24.5 | 22.5 |
|  | 17 | 14.2 | 13.8 | 17.2 | 20.8 |
|  | All ages | 24.1 | 23.6 | 33.7 | 32.8 |
| Females | 12 | 23.5 | 22.7 | 39.4 | 34.4 |
|  | 13 | 25.5 | 20.8 | 33.2 | 35.2 |
|  | 14 | 16.5 | 16.9 | 27.4 | 25.5 |
|  | 15 | 14.6 | 12.6 | 21.5 | 22.3 |
|  | 16 | 12.3 | 8.6 | 16.0 | 13.8 |
|  | 17 | 10.0 | 4.8 | 12.4 | 10.9 |
|  | All ages | 17.5 | 15.2 | 25.9 | 24.5 |
| Persons | 12 | 25.8 | 27.7 | 43.8 | 39.7 |
|  | 13 | 28.8 | 25.3 | 36.4 | 37.5 |
|  | 14 | 21.2 | 20.5 | 31.9 | 31.5 |
|  | 15 | 17.7 | 16.2 | 24.6 | 24.6 |
|  | 16 | 15.6 | 12.4 | 20.1 | 18.1 |
|  | 17 | 11.9 | 9.1 | 14.7 | 15.7 |
|  | All ages | 20.8 | 19.4 | 29.8 | 28.6 |

Note: Students who responded 'true' to the statement: 'You only get skin cancer if you get burnt often' Estimates are based on the following numbers of respondents: 1993, 4823; 1996, 10,026; 1999, 7348; 2002, 6180.

## 9. NUTRITION AND EATING PATTERNS

## FIGURE 14

FRUIT AND VEGETABLE CONSUMPTION BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

Fruit: 2 or more serves per day


Vegetables: 4 or more serves per day


Note: Serve of vegetables: $1 / 2$ cup of cooked vegetables or 1 cup of salad vegetables. Serve of fruit: 1 medium piece, 2 small pieces or 1 cup of diced. Estimates are based on 6180 respondents.

Good nutrition is a major factor affecting not only an individual's growth and development but also general physical and mental health and quality of life. ${ }^{1}$

Poor nutrition is a well-established risk factor for development of chronic and life-threatening diseases such as cardiovascular disease (including coronary heart disease and stroke), some cancers, and type 2 diabetes.

Excess energy intake (relative to energy expenditure; for example, through physical activity level) is stored as body fat. Of great concern is the fact that the rate of overweight and obesity in Australian children has almost doubled and the level of obesity has tripled between 1985 and 1995. ${ }^{2}$ Children and adolescents who are obese are more likely to have poorer health in adult life. ${ }^{3}$

Establishing healthy eating habits in childhood and adolescence is an important basis for both short- and longterm health. A healthy diet for children and adolescents is defined by nutrition guidelines established by the National Health and Medical Research Council. ${ }^{4}$ These guidelines advise that children and adolescents should consume: sufficient nutritious foods to grow and develop normally (in combination with physical activity); a variety of healthy foods; plenty of vegetables, legumes, fruits and cereals (such as breads, rice, pasta and noodles); lean meat, fish, poultry or alternatives; reduced fat dairy foods (but full fat for children under 2 years), limited saturated fat; low salt foods; moderate total fat and sugars; and no alcohol. The Australian Guide to Healthy Eating defines appropriate quantities of foods for different age groups. ${ }^{5}$

## Fruit and vegetables

The recommended daily consumption for adolescents is 3 serves of fruit and 4 serves of vegetables or legumes. ${ }^{5}$ Adequate fruit and vegetable intake protects against coronary heart disease, hypertension, stoke, diabetes mellitus, and many forms of cancer, and may aid weight control. Fruit and vegetables are important sources of antioxidants, fibre, and folate.

The percentage of students eating at least 2 serves of fruit per day increased slightly from 65 per cent to 69 per cent between 1996 and 2002 (Table 24). In 2002, students most commonly reported eating $2-3$ serves of fruit per day (44 per cent), followed by 1 serve or less per day reported by 28 per cent, $4-5$ serves per day ( 17 per cent), or 6 serves or more per day ( 7 per cent). One per cent of students indicated that they did not eat fruit.

The percentage of students eating at least 4 serves of vegetables per day fell slightly from 22 to 18 per cent between 1996 and 2002. In 2002, 47 per cent of students reported eating $2-3$ serves of vegetables per day, 30 per cent reported eating 1 serve or less per day, and eating 4-5 serves or 6 serves or more per day were least commonly reported ( 13 per cent and 5 per cent respectively). Three per cent of students reported they did not eat vegetables.

In 2002, there were no substantial differences in fruit and vegetable intake between males and females, or younger students (aged 12-15 years) compared to older students (aged 16-17 years) (Figure 14).

Fruit and vegetable consumption was examined using the Index of Relative Socio-Economic Disadvantage, which is one of the Australia Bureau of Statistics' socioeconomic indices for areas (SEIFA) (see Methods section). Figure 15 shows that fruit and vegetable consumption was similar between the most disadvantaged and least disadvantaged areas in NSW.

## Bread and cereals

It is recommended that adolescents should eat at least 5 serves of bread and cereals daily. ${ }^{5}$ Between 1996 and 2002, the percentage of students eating 4 or more serves of bread or cereals per day decreased from 55 to 39 per cent. In 2002, 13 per cent of students reported eating 1 serve or less of bread and cereals per day, 45 per cent ate $2-3$ serves per day, 27 per cent reported eating $4-5$ serves per day, and 12 per cent reported eating 6 or more serves per day. Two per cent of students indicated that they did not eat bread or cereals.

FIGURE 15

## FRUIT AND VEGETABLE CONSUMPTION BY SOCIOECONOMIC GROUP, SECONDARY SCHOOL STUDENTS, NSW, 2002

Fruit: 2 or more serves per day


Note: Serve of vegetables: $1 / 2$ cup of cooked vegetables or 1 cup of salad vegetables. Serve of fruit: 1 medium piece, 2 small pieces or 1 cup of diced. Socioeconomic group classified into quintiles based on the ABS SEIFA Index of Relative Socioeconomic Disadvantage (IRSD). Estimates are based on 6180 respondents.

## TABLE 24

FRUIT, VEGETABLE AND BREAD AND CEREAL CONSUMPTION BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996, 1999 AND 2002

| Sex | Age (years) | \% | $\begin{gathered} 1996 \\ \text { LL } \\ 95 \% \text { CI } \end{gathered}$ | $\begin{gathered} \text { UL } \\ 95 \% ~ C I ~ \end{gathered}$ | \% | $\begin{gathered} 1999 \\ \text { LL } \\ 95 \% \mathrm{Cl} \end{gathered}$ | $\begin{gathered} \text { UL } \\ 95 \% ~ C I \end{gathered}$ | \% | $\begin{gathered} 2002 \\ \text { LL } \\ 95 \% \mathrm{Cl} \end{gathered}$ | $\begin{gathered} \text { UL } \\ 95 \% \mathrm{Cl} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fruit: 2 or more serves per day |  |  |  |  |  |  |  |  |  |  |
| Males | 12-15 | 63.9 | 60.7 | 67.1 | 63.7 | 60.5 | 66.8 | 68.9 | 66.4 | 71.3 |
|  | 16-17 | 55.6 | 49.7 | 61.5 | 49.2 | 43.8 | 54.6 | 63.6 | 58.1 | 69.2 |
|  | All ages | 61.7 | 58.9 | 64.5 | 59.8 | 56.8 | 62.8 | 67.4 | 65.0 | 69.8 |
| Females | 12-15 | 70.0 | 67.4 | 72.5 | 69.6 | 67.3 | 71.9 | 70.4 | 68.0 | 72.8 |
|  | 16-17 | 62.6 | 58.3 | 67.0 | 64.3 | 59.9 | 68.7 | 68.9 | 63.3 | 74.6 |
|  | All ages | 68.1 | 65.8 | 70.5 | 68.3 | 66.3 | 70.3 | 70.0 | 67.6 | 72.3 |
| Persons | 12-15 | 67.2 | 65.0 | 69.3 | 67.0 | 65.0 | 69.0 | 69.6 | 67.7 | 71.5 |
|  | 16-17 | 59.3 | 56.3 | 62.3 | 57.2 | 53.3 | 61.2 | 66.3 | 61.6 | 71.1 |
|  | All ages | 65.1 | 63.3 | 66.9 | 64.5 | 62.6 | 66.4 | 68.7 | 66.8 | 70.6 |
| Vegetables: 4 or more serves per day |  |  |  |  |  |  |  |  |  |  |
| Males | 12-15 | 24.8 | 22.6 | 27.0 | 19.0 | 16.1 | 21.9 | 20.2 | 17.6 | 22.8 |
|  | 16-17 | 19.1 | 15.2 | 22.9 | 17.8 | 13.6 | 22.0 | 16.9 | 12.7 | 21.2 |
|  | All ages | 23.3 | 21.4 | 25.1 | 18.7 | 16.2 | 21.1 | 19.3 | 17.1 | 21.5 |
| Females | 12-15 | 20.9 | 18.9 | 23.0 | 20.2 | 17.5 | 22.8 | 17.0 | 14.7 | 19.3 |
|  | 16-17 | 17.4 | 13.3 | 21.5 | 20.6 | 16.2 | 25.0 | 17.8 | 14.4 | 21.3 |
|  | All ages | 20.1 | 18.1 | 22.0 | 20.3 | 18.0 | 22.5 | 17.2 | 15.3 | 19.1 |
| Persons | 12-15 years | 22.7 | 21.2 | 24.2 | 19.6 | 17.7 | 21.6 | 18.6 | 16.8 | 20.4 |
|  | 16-17 | 18.2 | 15.1 | 21.3 | 19.3 | 16.4 | 22.2 | 17.4 | 14.3 | 20.5 |
|  | All ages | 21.6 | 20.2 | 22.9 | 19.6 | 18.0 | 21.2 | 18.3 | 16.7 | 19.8 |
| Bread and cereals: 4 or more serves per day |  |  |  |  |  |  |  |  |  |  |
| Males | 12-15 | 61.0 | 58.5 | 63.4 | 60.7 | 57.3 | 64.2 | 41.1 | 38.9 | 43.2 |
|  | 16-17 | 60.4 | 54.1 | 66.7 | 68.3 | 63.0 | 73.6 | 48.8 | 43.9 | 53.6 |
|  | All ages | 60.8 | 58.4 | 63.2 | 62.8 | 59.8 | 65.7 | 43.2 | 40.9 | 45.4 |
| Females | 12-15 | 49.3 | 45.8 | 52.8 | 48.2 | 45.0 | 51.5 | 32.5 | 29.7 | 35.2 |
|  | 16-17 | 51.4 | 46.0 | 56.7 | 50.6 | 44.9 | 56.3 | 40.3 | 33.7 | 47.0 |
|  | All ages | 49.8 | 46.8 | 52.9 | 48.8 | 46.0 | 51.7 | 34.7 | 31.8 | 37.6 |
| Persons | 12-15 | 54.7 | 52.6 | 56.9 | 53.7 | 51.3 | 56.1 | 36.8 | 34.8 | 38.8 |
|  | 16-1 | 55.7 | 51.4 | 60.0 | 58.9 | 54.3 | 63.5 | 44.4 | 40.1 | 48.8 |
|  | All ages | 55.0 | 53.0 | 57.0 | 55.0 | 52.9 | 57.1 | 38.9 | 36.9 | 40.9 |

Note: Serve of vegetables: $1 / 2$ cup cooked vegetables or 1 cup salad vegetables. Serve of fruit: 1 medium piece or 2 small pieces or 1 cup diced. Serve of bread-cereals: 1 slice bread, $1 / 2$ bread roll, $1 / 2$ cup breakfast cereal or $1 / 2$ cup pasta, rice or noodles. Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on the following numbers of respondents: 1996, 4847; 1999, 3651; 2002, 6180.

## Milk consumption

It is recommended that adolescents consume 750 mls of milk daily or equivalent serves of other high calcium foods. ${ }^{4}$ Reduced fat varieties should be chosen where possible as milk products provide $30-40$ per cent of their saturated fat intake. ${ }^{5}$

Students were asked what type of milk they usually drink. In 2002, 51 per cent of students reported that they usually drink whole milk (including flavoured milk, full cream milk, evaporated, or sweetened condensed milk), while 22 per cent reported usually drinking reduced fat milk (1 to 2 per cent fat) and 9 per cent reported usually drinking low fat or skim milk (less than 1 per cent fat). The remaining students did not indicate whether they drink milk or not, or did not know what type of milk they drink. Females were more likely than males to drink either reduced fat, low fat or skim milk ( 34 per cent versus 27 per cent). The percentage of students who reported usually drinking whole milk has remained stable between 1996 and 2002 ( 52 per cent versus 51 per cent).

## Breakfast

Students who skip breakfast have a poorer nutritional intake than those who eat breakfast. ${ }^{6}$ The percentage of students who reported rarely or never having something to eat for breakfast fell from 16 per cent in 1996 to 11 per cent in 2002. Conversely, in 2002, 64 per cent of students usually had something to eat for breakfast on 5 or more days in the week, compared to 61 per cent in 1996. One in nine ( 11 per cent) students rarely or never had anything to eat for breakfast, falling from 1 in 6 ( 16 per cent) students in 1996. In 2002, females were more likely than males to report rarely or never having something to eat for breakfast (15 versus 8 per cent) (Figure 16, Table 25).

There was also an association between skipping breakfast and socioeconomic group. Students were grouped into quintiles by the Index of Relative Socio-Economic Disadvantage. Students in the most disadvantaged quintile were more likely to report rarely or never having anything to eat for breakfast compared to the least disadvantaged quintile ( 16 per cent versus 8 per cent).

FIGURE 16
HOW OFTEN HAS SOMETHING TO EAT FOR BREAKFAST BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


TABLE 25
HOW OFTEN HAS SOMETHING TO EAT FOR BREAKFAST BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996, 1999 AND 2002

| How often has something to eat for breakfast | Sex | \% | $\begin{gathered} 1996 \\ \text { LL } \\ 95 \% \mathrm{Cl} \end{gathered}$ | $\begin{gathered} \text { UL } \\ 95 \% ~ C I ~ \end{gathered}$ | \% | $\begin{gathered} 1999 \\ \text { LL } \\ 95 \% \mathrm{CI} \end{gathered}$ | $\begin{gathered} \text { UL } \\ 95 \% ~ C I ~ \end{gathered}$ | \% | $\begin{gathered} 2002 \\ \text { LL } \\ 95 \% \mathrm{CI} \end{gathered}$ | $\begin{gathered} \text { UL } \\ 95 \% \mathrm{CI} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rarely/Never | Males | 11.4 | 9.7 | 13.1 | 8.5 | 7.0 | 10.0 | 7.9 | 6.1 | 9.6 |
|  | Females | 19.3 | 16.9 | 21.6 | 17.5 | 15.4 | 19.5 | 14.9 | 12.5 | 17.4 |
|  | Persons | 15.6 | 14.0 | 17.1 | 13.5 | 12.1 | 14.9 | 11.4 | 9.7 | 13.1 |
| 1-2 days | Males | 9.3 | 6.5 | 12.1 | 10.9 | 9.1 | 12.7 | 7.7 | 6.0 | 9.5 |
|  | Females | 12.1 | 10.5 | 13.7 | 13.5 | 11.8 | 15.2 | 11.0 | 8.6 | 13.3 |
|  | Persons | 10.8 | 9.3 | 12.4 | 12.4 | 11.1 | 13.6 | 9.4 | 7.9 | 10.8 |
| 3-4 days | Males | 9.2 | 7.7 | 10.7 | 10.7 | 9.3 | 12.2 | 8.3 | 6.9 | 9.8 |
|  | Females | 11.5 | 10.0 | 13.0 | 13.3 | 11.5 | 15.1 | 12.6 | 10.5 | 14.7 |
|  | Persons | 10.4 | 9.4 | 11.5 | 12.2 | 11.0 | 13.3 | 10.5 | 9.1 | 11.8 |
| 5 or more days | Males | 67.6 | 63.6 | 71.6 | 64.5 | 61.9 | 67.2 | 70.6 | 67.1 | 74.0 |
|  | Females | 55.4 | 52.0 | 58.7 | 53.1 | 49.6 | 56.6 | 57.8 | 53.8 | 61.8 |
|  | Persons | 61.1 | 58.4 | 63.8 | 58.2 | 55.8 | 60.6 | 64.2 | 61.1 | 67.3 |
| Not stated | Males | 2.5 | 1.8 | 3.2 | 5.3 | 4.1 | 6.5 | 5.5 | 3.7 | 7.2 |
|  | Females | 1.8 | 1.2 | 2.4 | 2.6 | 1.9 | 3.3 | 3.7 | 2.1 | 5.3 |
|  | Persons | 2.1 | 1.6 | 2.6 | 3.8 | 3.0 | 4.6 | 4.6 | 3.4 | 5.8 |

Note: Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on the following numbers of respondents: 1996, 4847; 1999, 3651; 2002, 2639.

## FIGURE 17

MEALS BOUGHT FROM FAST FOOD OUTLETS IN THE PAST WEEK, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Response to question 'In the past week, how may times have you eaten meals that were bought from fast food outlets like McDonalds, Hungry Jacks, Pizza Hut, Kentucky Fried Chicken (KFC), Red Rooster, Burger King, hamburger shops, and fish and chip shops?' Estimates are based on 2639 respondents.

## Take away food

Take away foods are typically higher in fat, sugar, and salt than foods prepared at home. In 2002, 73 per cent of students reported having eaten a meal bought from a fast food outlet in the previous week. Males were more likely to eat meals of take away food than females, and also had meals of take away food more often than females (Figure 17, Table 26). The pattern of consumption of meals of take away food has not changed substantially from 1999.

## Perception of weight

A previous survey of NSW school students found about 80 per cent of Year 8 and 10 boys were acceptable weight, and one-fifth were overweight or obese (as determined by Body Mass Index). ${ }^{7}$ Similar results were found for female students.
Information on students' weight was not collected in the current survey. However, students were asked how they perceived their weight. Two-thirds of students thought they were about the right weight, 9 per cent thought they were too thin, and 21 per cent thought they were too fat (Table 27). One quarter of females considered themselves too fat compared to 17 per cent of males. Forty-three per cent of students were trying to lose weight (females, 55 per cent; males, 31 per cent). Eleven per cent of students were trying to gain weight, and 44 per cent
were trying to stay the same weight or were not doing anything about their weight (Table 27).

## References

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7. Booth M, Baur L, and Denney-Wilson E. Australian standard definition of child-adolescent overweight and obesity. Canberra: Commonwealth Department of Health and Ageing, 2001 (Unpublished).

## TABLE 26

MEALS BOUGHT FROM FAST FOOD OUTLETS IN THE PAST WEEK BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1999 AND 2002

| Frequency | Sex | 1999 |  |  | 2002 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% | LL 95\% CI | UL 95\% CI | \% | LL 95\% CI | UL 95\% CI |
| None | Males | 19.2 | 16.5 | 21.8 | 19.9 | 16.9 | 22.9 |
|  | Females | 22.8 | 20.3 | 25.3 | 25.9 | 22.3 | 29.6 |
|  | Persons | 21.2 | 19.1 | 23.2 | 22.9 | 20.1 | 25.8 |
| Once | Males | 36.8 | 34.1 | 39.6 | 34.5 | 31.8 | 37.2 |
|  | Females | 38.6 | 36.2 | 41.1 | 36.8 | 33.3 | 40.3 |
|  | Persons | 37.8 | 36.0 | 39.7 | 35.7 | 33.3 | 38.1 |
| 2-3 times | Males | 30.8 | 28.2 | 33.3 | 30.7 | 27.1 | 34.3 |
|  | Females | 28.4 | 25.8 | 31.0 | 27.1 | 23.8 | 30.3 |
|  | Persons | 29.4 | 27.4 | 31.5 | 28.9 | 26.3 | 31.5 |
| 4 or more times | Males | 9.7 | 8.1 | 11.2 | 10.1 | 8.2 | 12.0 |
|  | Females | 8.4 | 6.8 | 10.0 | 7.6 | 5.0 | 10.2 |
|  | Persons | 8.9 | 7.8 | 10.1 | 8.8 | 7.2 | 10.5 |
| Total: 1 or more times | Males | 77.2 | 74.5 | 80.0 | 75.3 | 71.7 | 78.9 |
|  | Females | 75.4 | 72.9 | 77.8 | 71.5 | 67.8 | 75.1 |
|  | Persons | 76.2 | 74.2 | 78.2 | 73.4 | 70.4 | 76.4 |
| Not stated | Males | 3.6 | 2.4 | 4.7 | 4.8 | 3.1 | 6.4 |
|  | Females | 1.8 | 1.2 | 2.4 | 2.6 | 1.5 | 3.7 |
|  | Persons | 2.6 | 1.9 | 3.3 | 3.7 | 2.6 | 4.8 |

Note: Response to question in the past week, how may times have you eaten meals that were bought from fast food outlets like McDonalds, Hungry Jacks, Pizza Hut, Kentucky Fried Chicken (KFC), Red Rooster, Burger King, hamburger shops, and fish and chip shops?' Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on the following numbers of respondents: 1999, 3651; 2002, 2639.

## TABLE 27

PERCEPTION OF WEIGHT, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Perception of weight | Sex | Age (years) | \% | LL 95\% CI | UL 95\% Cl |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Too thin | Males | 12-15 | 10.0 | 8.5 | 11.5 |
|  |  | 16-17 | 16.6 | 12.5 | 20.8 |
|  |  | All ages | 11.8 | 10.1 | 13.5 |
|  | Females | 12-15 | 6.2 | 4.3 | 8.2 |
|  |  | 16-17 | 3.3 | 0.0 | 6.7 |
|  |  | All ages | 5.4 | 3.6 | 7.2 |
|  | Persons | 12-15 | 8.1 | 6.8 | 9.5 |
|  |  | 16-17 | 9.8 | 6.0 | 13.7 |
|  |  | All ages | 8.6 | 7.2 | 10.1 |
| About the right weight | Males | 12-15 | 68.1 | 64.8 | 71.3 |
|  |  | 16-17 | 65.1 | 56.9 | 73.4 |
|  |  | All ages | 67.3 | 63.9 | 70.6 |
|  | Females | 12-15 | 67.7 | 64.0 | 71.5 |
|  |  | 16-17 | 67.1 | 58.9 | 75.2 |
|  |  | All ages | 67.5 | 64.1 | 71.0 |
|  | Persons | 12-15 | 67.9 | 65.5 | 70.3 |
|  |  | 16-17 | 66.1 | 59.7 | 72.5 |
|  |  | All ages | 67.4 | 65.0 | 69.8 |
| Too fat | Males | 12-15 | 17.4 | 14.6 | 20.1 |
|  |  | 16-17 | 16.2 | 10.3 | 22.2 |
|  |  | All ages | 17.0 | 14.5 | 19.6 |
|  | Females | 12-15 | 23.3 | 20.0 | 26.6 |
|  |  | 16-17 | 28.7 | 21.8 | 35.7 |
|  |  | All ages | 24.9 | 21.8 | 27.9 |
|  | Persons | 12-15 | 20.3 | 18.3 | 22.3 |
|  |  | 16-17 | 22.6 | 17.8 | 27.4 |
|  |  | All ages | 20.9 | 19.0 | 22.9 |

Note: Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on 2639 respondents.

## 10. PHYSICAL ACTIVITY

It is increasingly difficult for children and adolescents to participate in a physically active lifestyle. Factors such as an increase in sedentary recreation activities, such as watching television and videos and playing computer games, coupled with a culture of driving children to school and other activities instead of walking or cycling, have all contributed to creating an environment that encourages more sedentary pursuits. ${ }^{1}$

Australian recommendations for levels of physical activity in young people are currently being developed by the Commonwealth Department of Health and Ageing. While these guidelines are yet to be finalised, it is likely that children and adolescents will be advised to participate in at least 60 minutes of moderate-intensity physical activity every day. A number of guidelines established in other countries support this approach. For example, the Health Education Authority in England has recently reviewed the evidence on health-enhancing physical activity for young people and has concluded that all young people should participate in physical activity of at least moderate intensity for 1 hour per day, with those who currently do little activity commencing at half an hour a day. ${ }^{2}$ Canadian Guidelines for children and younger adolescents also support 60 minutes per day as an appropriate amount. ${ }^{3}$ Many recommendations also encourage young people to minimise the time spent in sedentary activities and to participate in some vigorous physical activity for additional health benefits.

It has been estimated that 20-25 per cent of Australian children are not sufficiently physically active and are at risk of becoming inactive adults. ${ }^{4}$ Regular physical activity throughout life reduces the risk of developing cardiovascular diseases (especially coronary heart disease) and non-insulin-dependent diabetes, and reduces the risks of heart disease and stroke, by helping to control body weight, blood pressure, and blood lipid levels. ${ }^{5}$ Lack of physical activity is also a risk factor for colon and breast cancer. ${ }^{6}$ Young people who are physically active are therefore establishing a habit that will help them to have a healthy lifestyle in adulthood that will also reduce their risks of developing these diseases later in life.

This chapter describes students' reported levels of physical activity and their usual sedentary behaviour. Students were asked how often they did moderate and vigorous physical activity; how much time they spent, on average, doing homework, watching television or videos and using the computer; and how much time was spent playing sports, games, or other physical activities. In terms of sedentary activities, the survey included questions on the average
time spent watching television, videos, or DVDs; using computers for entertainment; and using computers for study or school work on weekdays and weekends.

It should be noted that the questions in this survey were developed prior to the finalisation of a recommendation for 'adequate' physical activity levels in adolescents. As such, the information presented here cannot be used to describe the percentage of young people participating in adequate levels of physical activity.

## Level of physical activity

The majority of students reported doing moderate or vigorous physical activity on 1 to 4 occasions in the previous week (Figure 18, Table 28). About 1 in 5 students reported doing moderate physical activity at least 5 times in the previous week, and 22 per cent reported doing vigorous physical activity at least 5 times in the previous week. One-third ( 33 per cent) of students reported doing either moderate or vigorous physical activity at least 5 times in the previous week: 39 per cent of males and 28 per cent of females (data not shown in table).

While similar percentages of males and females reported doing some level of moderate physical activity in the previous week ( 84 per cent and 86 per cent respectively), males reported doing this level of activity 5 or more times in the previous week more commonly than females (23 versus 19 per cent). Males also reported doing some level of vigorous physical activity in the previous week and doing vigorous activity 5 or more times in the previous week more commonly than females ( 89 per cent versus 84 per cent; and 28 versus 15 per cent respectively).

Levels of physical activity among males aged 16-17 years were similar to those for males aged $12-15$ years. Younger female students reported higher rates of vigorous physical activity than older females: 9 per cent of students aged 12-15 years reported not doing any vigorous activity during the week increasing to 28 per cent of those aged 16-17 years. Also, 17 per cent of females aged 12-15 years reported doing vigorous physical activity 5 or more times in the previous week compared to 11 per cent of females aged 16-17 years (Table 28).

A small proportion of students reported not doing any moderate or vigorous activity ( 5 per cent of both males and females). The rate of inactivity in females increased with age from 3 per cent for those aged 12-15 years to 9 per cent for those aged 16-17 years, but did not change substantially with age for males ( 5 per cent of those aged $12-15$ years and 4 per cent for those aged 16-17 years).

FIGURE 18
MODERATE OR VIGOROUS PHYSICAL ACTIVITY IN THE LAST WEEK, SECONDARY SCHOOL STUDENTS, NSW, 2002.



Note: Vigorous physical activity was defined as doing 'an activity for at least 30 minutes that made you sweat and breathe hard (for example: basketball, netball, soccer, football, running, fast bike riding, fast dancing, aerobics)'. Moderate physical activity was defined as doing 'an activity for at least 30 minutes that did not make you sweat or breathe hard (for example: slow bike riding, swimming, pushing a lawnmower, mopping floors, brisk walking)'. Percentages do not add to 100 per cent as 'not stated' responses are not shown. Estimates are based on 6180 respondents.

## TABLE 28

MODERATE OR VIGOROUS PHYSICAL ACTIVITY INTHE LAST WEEK BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Physical Frequeactivity level | Sex-age (years) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} 12-15 \\ \% \end{gathered}$ | $\begin{gathered} 16-17 \\ \% \end{gathered}$ | All ages \% | 12-15 | $\begin{gathered} 16-17 \\ \% \end{gathered}$ | All ages \% | 12-15 | $\begin{gathered} 16-17 \\ \% \end{gathered}$ | All ages \% |
| Moderate physical activity |  |  |  |  |  |  |  |  |  |
| None | 13.7 | 13.3 | 13.6 | 11.4 | 15.3 | 12.5 | 12.6 | 14.3 | 13.0 |
| 1-4 times | 61.7 | 60.6 | 61.4 | 68.7 | 63.0 | 67.1 | 65.2 | 61.8 | 64.2 |
| 5 or more times | 21.8 | 25.2 | 22.7 | 17.6 | 20.6 | 18.5 | 19.7 | 22.9 | 20.6 |
| Not stated | 2.8 | 0.9 | 2.3 | 2.2 | 1.1 | 1.9 | 2.5 | 1.0 | 2.1 |
| Vigorous physical activity |  |  |  |  |  |  |  |  |  |
| None | 8.4 | 9.8 | 8.8 | 9.1 | 28.0 | 14.4 | 8.7 | 19.1 | 11.6 |
| 1-4 times | 61.7 | 59.6 | 61.1 | 72.4 | 60.2 | 68.9 | 67.0 | 59.9 | 65.0 |
| 5 or more times | 27.7 | 30.0 | 28.3 | 16.6 | 10.9 | 15.0 | 22.2 | 20.3 | 21.7 |
| Not stated | 2.2 | 0.6 | 1.8 | 1.9 | 0.9 | 1.7 | 2.1 | 0.8 | 1.7 |

Note: Vigorous physical activity was defined as doing 'an activity for at least 30 minutes that made you sweat and breathe hard (for example: basketball, netball, soccer, football, running, fast bike riding, fast dancing, aerobics)'. Moderate physical activity was defined as doing 'an activity for at least 30 minutes that did not make you sweat or breathe hard (for example: slow bike riding, swimming, pushing a lawnmower, mopping floors, brisk walking)'. Estimates are based on 6180 respondents.

## FIGURE 19

PARTICIPATION IN SPORTS, WALKING FOR TRANSPORT AND WALKING FOR PLEASURE BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Students who reported doing the above activities in a normal week (including Saturdays and Sundays) during the current school term. Doing a sport includes training. Estimates are based on 2639 respondents.


Note: Students who reported usually doing the above activities in a normal week (including Saturdays and Sundays) during the current school term. Doing a sport includes training. Estimates are based on 2639 respondents.

## Participation in sports and other activities

Overall, 93 per cent of students reported usually participating in at least 1 of the following activities: sports, walking for transport, or walking for pleasure (Figure 19, Table 29). Males reported marginally higher participation in sports than females ( 92 per cent for males compared with 88 per cent for females), while females reported walking for transport more commonly than males (44 per cent versus 38 per cent), and walking for pleasure ( 44 per cent versus 19 per cent).

Table 29 shows the participation rate and average time spent in each category of physical activity in a normal week during the current school term. Participation in sport increased with age for males from 87 per cent of students aged 12 years to 94 per cent of students aged 17 years, and decreased with age for females from 93 per cent of students aged 12 years to 71 per cent of students aged 17 years.

The percentage of students who reported walking for transport in a normal week increased with age for both males and females. Among males aged 17 years, 50 per cent reported walking for transport in a normal week compared to 28 per cent of males aged 12 years. Similarly,

50 per cent of females aged 17 years reported walking for transport in a normal week compared to 35 per cent of females aged 12 years. The percentage of students who reported walking for pleasure in a normal week did not change substantially with age in males, but increased with age in females ( 50 per cent aged 17 years versus 37 per cent aged 12 years).
On average, students spent 10 hours per week in sports, 1 hour per week in walking for transport, 0.7 hour per week in walking for pleasure and 11 hours per week in total. Males reported spending more time playing sport than females at all ages. While males spent about the same time playing sport at all ages, females aged 15 years and over spent less time playing sport than younger females.

Figure 20 shows the 20 sports, games or activities that were most frequently reported by the students. Both males and females commonly reported activities such as swimming, jogging, bushwalking, and athletics. Sports and activities that were more frequently reported by males than females were soccer, cycling, basketball, cricket, rugby league, touch football, surfing, skateboarding, boxing, and mountain biking. Females more commonly reported activities such as dancing, netball, and aerobics.

## FIGURE 20

TOP 20 SPORTS AND ACTIVITIES PLAYED IN A NORMAL WEEK DURING SCHOOL TERM BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: The figure shows the 20 sports most commonly played for both sexes combined, stratified by sex. The time spent doing a sport or game includes the time spent in training. Estimates are based on 2639 respondents.

## Time spent doing sedentary activities

About half (51 per cent) of all students reported doing an average of 1 hour or less of homework on an average school day, about one quarter reported doing 2 hours per day and 12 per cent reported doing 3 hours or more per day. Females reported spending more time doing homework than males, and students aged 16 to 17 years reported doing more homework than younger students (Figure 21, Table 30).

The vast majority of students (91 per cent) reported watching television or videos on an average school day, with 27 per cent watching for 1 hour or less and 34 per cent watching for 3 hours or more. Males watched more television and videos than females, particularly older males.

Over three-quarters (79 per cent) of students reported using the internet or playing computer games on an average school day. One in 5 ( 22 per cent) reported using the internet or playing computer games for 3 or more hours on an average school day. Males reported using the internet or playing computer games more commonly than females and, when they did, spent more time doing so: 26 per cent of male students reported using the internet or playing computer games for 3 hours or more compared to 17 per cent of female students.

Students' reported sedentary behaviour during school days and on weekends are shown in Table 31. Watching television, videos, and DVDs was more common on the weekend than during the week and the amount of time spent also increased on the weekend. Overall, 37 per cent of students watched an average of 3 or more hours of television, videos or DVDs per day during school days and this percentage increased to 49 per cent on weekends.

A similar weekend increase was found for using computers for entertainment or to play video games. The proportion of males who spent an average of 3 hours on the computer for entertainment purposes increased from 24 per cent during school days to 35 per cent on weekends. An increase was also seen for females ( 16 per cent during school days and 22 per cent on weekends). A higher
percentage of males than females reported spending more time (average of 3 hours or more) using computers for entertainment or to play video games during school days ( 24 per cent of males compared with 16 per cent of females). Almost a quarter of females ( 24 per cent) reported not using computers for entertainment at all during school days.
Overall, more students reported using a computer for study or school work on school days compared to weekends (79 per cent versus 66 per cent) (Table 31). Among students aged 16-17 years, males spent a similar amount of time on school days and weekends using a computer for study or school work, whereas more females spent more time using the computer for this purpose on weekends. Nine per cent of female students aged 16-17 years reported using the computer for study on an average of 3 hours or more on school days and this proportion increased by more than half during the weekends ( 21 per cent).

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## FIGURE 21

TIME SPENT DOING HOMEWORK, WATCHING TV OR VIDEOS, AND USING THE INTERNET OR PLAYING COMPUTER GAMES BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


## TABLE 30

TIME SPENT DOING HOMEWORK, WATCHING TELEVISION OR VIDEOS, AND USING THE INTERNET OR PLAYING COMPUTER GAMES BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Activity Time spent | Sex-age (years) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males |  |  | Females |  |  | Persons |  |  |
|  | 12-15 | 16-17 | All ages | 12-15 | 16-17 | All ages | 12-15 | $16-17$ | All ages |
| Homework |  |  |  |  |  |  |  |  |  |
| None | 9.7 | 9.0 | 9.5 | 6.7 | 4.0 | 5.9 | 8.2 | 6.4 | 7.7 |
| 1 hour or less | 54.7 | 48.1 | 52.9 | 55.4 | 33.5 | 49.2 | 55.0 | 40.7 | 51.0 |
| 2 hours | 23.2 | 24.5 | 23.6 | 25.6 | 35.4 | 28.4 | 24.4 | 30.1 | 26.0 |
| 3 hours or more | 8.9 | 17.0 | 11.1 | 9.0 | 25.4 | 13.6 | 8.9 | 21.3 | 12.4 |
| Not stated | 3.5 | 1.4 | 2.9 | 3.3 | 1.7 | 2.9 | 3.4 | 1.5 | 2.9 |
| TV-videos |  |  |  |  |  |  |  |  |  |
| None | 5.1 | 4.2 | 4.9 | 5.7 | 6.8 | 6.0 | 5.4 | 5.6 | 5.5 |
| 1 hour or less | 24.9 | 25.8 | 25.1 | 27.8 | 31.7 | 28.9 | 26.3 | 28.8 | 27.0 |
| 2 hours | 31.4 | 30.7 | 31.2 | 29.9 | 29.5 | 29.8 | 30.7 | 30.1 | 30.5 |
| 3 hours or more | 34.5 | 37.6 | 35.4 | 33.4 | 30.2 | 32.5 | 34.0 | 33.8 | 33.9 |
| Not stated | 4.0 | 1.8 | 3.4 | 3.1 | 1.8 | 2.7 | 3.6 | 1.8 | 3.1 |
| Internet-computer games |  |  |  |  |  |  |  |  |  |
| None | 14.1 | 13.6 | 14.0 | 21.9 | 25.8 | 23.0 | 18.0 | 19.8 | 18.5 |
| 1 hour or less | 35.4 | 33.7 | 34.9 | 40.6 | 37.1 | 39.6 | 38.0 | 35.4 | 37.3 |
| 2 hours | 21.9 | 21.6 | 21.8 | 17.7 | 16.5 | 17.4 | 19.8 | 19.0 | 19.6 |
| 3 hours or more | 25.0 | 29.6 | 26.3 | 16.5 | 18.6 | 17.1 | 20.8 | 24.0 | 21.7 |
| Not stated | 3.6 | 1.5 | 3.0 | 3.3 | 2.1 | 3.0 | 3.4 | 1.8 | 3.0 |
| Note: Estimates are based on 6180 respondents. |  |  |  |  |  |  |  |  |  |

## TABLE 31

TIME SPENT WATCHING TELEVISION, VIDEOS OR DVDS, USING COMPUTERS FOR ENTERTAINMENT, AND USING COMPUTERS FOR SCHOOLWORK OR STUDY ON SCHOOL DAYS AND WEEKENDS BY SEX AND AGE, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Activity Day of | Time spent | Males |  |  | Sex-age (years) |  |  | Persons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 12-15 \\ \% \end{gathered}$ | $\begin{gathered} 16-17 \\ \% \end{gathered}$ | All ages \% | $\begin{gathered} 12-15 \\ \% \end{gathered}$ | $\begin{gathered} 16-17 \\ \% \end{gathered}$ | All ages \% | $\begin{gathered} 12-15 \\ \% \end{gathered}$ | $\begin{gathered} 16-17 \\ \% \end{gathered}$ | All ages \% |
| TV, videos or DVDs |  |  |  |  |  |  |  |  |  |  |
| Monday to Friday | None | 6.7 | 4.5 | 6.1 | 4.7 | 5.0 | 4.7 | 5.7 | 4.7 | 5.4 |
|  | 1 hour or less | 21.6 | 25.5 | 22.7 | 24.7 | 26.0 | 25.1 | 23.2 | 25.7 | 23.9 |
|  | 2 hours | 26.3 | 30.1 | 27.3 | 27.8 | 31.4 | 28.8 | 27.0 | 30.8 | 28.1 |
|  | 3 hours or more | 36.0 | 36.7 | 36.2 | 37.9 | 35.4 | 37.1 | 36.9 | 36.0 | 36.7 |
|  | Not stated | 9.4 | 3.1 | 7.7 | 5.0 | 2.3 | 4.2 | 7.2 | 2.7 | 6.0 |
| Saturday and Sunday | None | 2.8 | 3.8 | 3.1 | 4.1 | 2.2 | 3.6 | 3.5 | 3.0 | 3.3 |
|  | 1 hour or less | 11.9 | 11.9 | 11.9 | 14.9 | 20.7 | 16.6 | 13.4 | 16.4 | 14.2 |
|  | 2 hours | 22.1 | 20.9 | 21.8 | 23.7 | 21.5 | 23.1 | 22.9 | 21.2 | 22.4 |
|  | 3 hours or more | 48.1 | 53.9 | 49.6 | 46.4 | 52.4 | 48.1 | 47.2 | 53.1 | 48.9 |
|  | Not stated | 15.1 | 9.5 | 13.6 | 10.8 | 3.1 | 8.7 | 13.0 | 6.3 | 11.1 |
| Computers for entertainment or to play video games |  |  |  |  |  |  |  |  |  |  |
| Monday to Friday | None | 15.0 | 13.9 | 14.7 | 22.8 | 27.9 | 24.2 | 18.9 | 21.0 | 19.5 |
|  | 1 hour or less | 32.6 | 38.3 | 34.2 | 39.1 | 39.1 | 39.1 | 35.9 | 38.7 | 36.6 |
|  | 2 hours | 18.6 | 22.1 | 19.5 | 16.7 | 18.2 | 17.1 | 17.6 | 20.1 | 18.3 |
|  | 3 hours or more | 24.0 | 23.2 | 23.8 | 16.9 | 13.3 | 15.9 | 20.5 | 18.1 | 19.8 |
|  | Not stated | 9.8 | 2.5 | 7.8 | 4.5 | 1.6 | 3.6 | 7.2 | 2.0 | 5.7 |
| Saturday and Sunday | None | 9.4 | 11.2 | 9.9 | 20.9 | 23.8 | 21.8 | 15.1 | 17.7 | 15.8 |
|  | 1 hour or less | 21.8 | 23.7 | 22.3 | 30.8 | 31.9 | 31.1 | 26.3 | 27.9 | 26.7 |
|  | 2 hours | 19.2 | 17.6 | 18.7 | 17.0 | 16.7 | 16.9 | 18.1 | 17.1 | 17.8 |
|  | 3 hours or more | 34.9 | 36.6 | 35.4 | 22.2 | 23.0 | 22.4 | 28.6 | 29.7 | 28.9 |
|  | Not stated | 14.8 | 10.9 | 13.7 | 9.1 | 4.5 | 7.8 | 11.9 | 7.7 | 10.8 |
| Computers for study or school work |  |  |  |  |  |  |  |  |  |  |
| Monday to Friday | None | 16.9 | 14.0 | 16.1 | 15.4 | 9.6 | 13.7 | 16.1 | 11.7 | 14.9 |
|  | 1 hour or less | 44.7 | 48.3 | 45.7 | 49.1 | 53.0 | 50.2 | 46.9 | 50.7 | 47.9 |
|  | 2 hours | 16.8 | 20.8 | 17.9 | 21.1 | 26.8 | 22.7 | 18.9 | 23.8 | 20.3 |
|  | 3 hours or more | 11.5 | 14.8 | 12.4 | 9.4 | 9.1 | 9.3 | 10.5 | 11.9 | 10.9 |
|  | Not stated | 10.0 | 2.1 | 7.9 | 5.1 | 1.6 | 4.1 | 7.6 | 1.9 | 6.0 |
| Saturday and Sunday | , None | 26.3 | 17.4 | 23.9 | 25.3 | 18.7 | 23.4 | 25.8 | 18.1 | 23.7 |
|  | 1 hour or less | 33.9 | 35.3 | 34.3 | 36.1 | 38.6 | 36.8 | 35.0 | 37.0 | 35.5 |
|  | 2 hours | 14.0 | 21.5 | 16.0 | 18.0 | 19.5 | 18.4 | 16.0 | 20.5 | 17.2 |
|  | 3 hours or more | 11.3 | 15.1 | 12.4 | 10.7 | 20.5 | 13.4 | 11.0 | 17.8 | 12.9 |
|  | Not stated | 14.5 | 10.6 | 13.4 | 9.9 | 2.8 | 7.9 | 12.2 | 6.6 | 10.7 |
| Note: Estimates are based on 2639 respondents. |  |  |  |  |  |  |  |  |  |  |

## 11. INJURY

## FIGURE 22

## STUDENTS WHO HAD AN INJURY OR WERE HURT INTHE PAST 6 MONTHS BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002



Note: Students who responded 'yes' to the question: 'In the past 6 months have you hurt yourself or had an injury for which you had to see a doctor, physiotherapist or another health professional?' Estimates are based on 2639 respondents.

Injuries are common in young people. In 2001, the Australian Bureau of Statistics National Health Survey found that 18 per cent of young people aged 12-24 years in Australia had experienced some sort of injury in the previous 4 weeks. ${ }^{1}$ Injury is also the leading cause of hospitalisation and death among young people in Australia. While there is extensive information on injuries that are serious enough to result in hospitalisation or death in young people, ${ }^{1,2,3}$ there is little information on injuries that are less severe but may occur more commonly.

This chapter describes secondary school students' responses to questions about injury that were asked in the supplementary questions of the NSW 2002 school survey. The survey included questions on: how often injuries occur; the type of injury suffered; places where injuries occurred; the type of activities that were being undertaken when the injury occurred; and perception of risk. Sporting injuries are explored in some detail. This chapter also includes comparative information from previous secondary school student surveys, where available.

Overall, there was a higher percentage of males ( 38 per cent) than females ( 29 per cent) who had an injury requiring medical attention; that is, for which they saw a doctor, physiotherapist, or another health professional (Figure 22, Table 32). This pattern was seen across all age groups, with the highest rate of injuries reported by males aged 17 years ( 48 per cent). There was a decrease in the reported percentage of injuries for both males and females and for all ages between 1996 and 2002.
In 2002, of students who reported an injury requiring medical attention, the most common place where the injury occurred was at a sports facility (Figure 23). The next most common places of injury occurrence were the home (males 15 per cent; females 24 per cent) and at school ( 21 per cent for both sexes). These results are not surprising in that the places where injuries were reported to commonly occur are places where young people spend most of their time. The overall pattern of place of injury was similar in 2002 to that reported in 1996, with the exception of injuries at sports facilities among females, which were

TABLE 32
STUDENTS WHO HAD AN INJURY OR WERE HURT INTHE PAST 6 MONTHS BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996 AND 2002

| Sex | Age (years) | Per cent | $\begin{gathered} 1996 \\ \text { LL } 95 \% \end{gathered}$ | UL 95\% CI | Per cent | $\begin{gathered} 2002 \\ \text { LL } 95 \% \end{gathered}$ | UL 95\% CI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 12 | 47.4 | 40.8 | 54.0 | 31.9 | 25.0 | 38.8 |
|  | 13 | 50.6 | 44.9 | 56.4 | 38.7 | 33.1 | 44.3 |
|  | 14 | 47.4 | 41.7 | 53.1 | 35.5 | 27.7 | 43.2 |
|  | 15 | 47.2 | 41.0 | 53.5 | 41.2 | 35.5 | 47.0 |
|  | 16 | 41.6 | 34.9 | 48.3 | 36.6 | 25.9 | 47.3 |
|  | 17 | 44.2 | 36.4 | 51.9 | 48.1 | 31.9 | 64.2 |
|  | All ages | 46.7 | 43.9 | 49.5 | 38.4 | 34.3 | 42.5 |
| Females | 12 | 38.5 | 33.5 | 43.5 | 25.1 | 17.1 | 33.0 |
|  | 13 | 42.8 | 37.9 | 47.7 | 27.9 | 22.2 | 33.6 |
|  | 14 | 37.0 | 32.7 | 41.4 | 30.8 | 23.1 | 38.5 |
|  | 15 | 41.3 | 36.3 | 46.2 | 35.7 | 27.6 | 43.9 |
|  | 16 | 38.7 | 31.3 | 46.2 | 29.5 | 21.2 | 37.9 |
|  | 17 | 37.3 | 31.2 | 43.5 | 24.9 | 16.2 | 33.7 |
|  | All ages | 39.6 | 37.5 | 41.7 | 29.3 | 25.4 | 33.1 |
| Persons | 12 | 42.7 | 38.7 | 46.7 | 28.4 | 23.5 | 33.4 |
|  | 13 | 46.3 | 42.5 | 50.2 | 33.4 | 29.3 | 37.5 |
|  | 14 | 41.9 | 38.1 | 45.7 | 33.1 | 27.6 | 38.7 |
|  | 15 | 44.0 | 40.0 | 48.1 | 38.5 | 33.8 | 43.2 |
|  | 16 | 40.0 | 34.1 | 46.0 | 33.1 | 25.7 | 40.4 |
|  | 17 | 40.8 | 36.3 | 45.4 | 36.1 | 25.4 | 46.8 |
|  | All ages | 42.9 | 41.1 | 44.8 | 33.8 | 31.0 | 36.6 |

Note: Students who responded 'yes' to the question: 'In the past 6 months have you hurt yourself or had an injury for which you had to see a doctor, physiotherapist or another health professional?' Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on the following numbers of respondents: 1996, 3651; 2002, 2639.

## FIGURE 23

PLACE OF MOST RECENT INJURY BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996 AND 2002


Note: Responses to the question: 'Where were you when the most recent injury requiring medical attention happened?'.
N/A: place of employment was not available as a response category in the 1996 survey.
Estimates are based on the following numbers of respondents: 1996, 2105; 2002, 923.
substantially lower in 2002 compared to 1996 (30 per cent versus 40 per cent).
The percentage of students aged 16-17 years who reported being injured at a sports facility fell from 49 per cent in 1996 to 36 per cent in 2002 (Table 33). This decrease was more evident among males than females.
Students were also asked what they were doing when the most recent injury requiring medical attention occurred.

Possible responses included one or more of the following: school activity (including school sport); sport (playing or training, excludes school sport); leisure or play; working for money; and doing any other activity. Most injuries occurred when students were playing or training at sport, excluding school sport (males 51 per cent; females 47 per cent), followed by leisure or play ( 18 per cent of both both males and females (Figure 24, Table 34).

TABLE 33
PLACE OF MOST RECENT INJURY BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 1996 AND 2002

| Sex | Year-Age (years) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Place of injury | $\begin{gathered} 12-15 \\ \% \end{gathered}$ | $\begin{gathered} 1996 \\ 16-17 \\ \% \end{gathered}$ | All ages \% | $\begin{gathered} 12-15 \\ \% \end{gathered}$ | $\begin{gathered} 2002 \\ 16-17 \\ \% \end{gathered}$ | All ages \% |
| Males | School | 20.9 | 11.3 | 18.6 | 17.5 | 28.9 | 20.9 |
|  | Home | 21.3 | 12.8 | 19.2 | 16.8 | 12.0 | 15.4 |
|  | Sports facility | 36.3 | 54.6 | 40.7 | 39.0 | 37.1 | 38.5 |
|  | Street or road | 8.7 | 5.9 | 8.0 | 6.8 | 7.6 | 7.0 |
|  | Shopping or leisure | 0.6 | 0.5 | 0.6 | 2.2 | - | 1.5 |
|  | Workplace | N/A | N/A | N/A | 1.7 | 3.2 | 2.1 |
|  | Other | 10.5 | 12.3 | 10.9 | 11.7 | 6.1 | 10.0 |
|  | Not stated | 1.7 | 2.6 | 1.9 | 4.4 | 5.1 | 4.6 |
| Females | School | 20.4 | 9.9 | 17.8 | 22.0 | 17.1 | 20.7 |
|  | Home | 25.7 | 19.7 | 24.2 | 24.2 | 24.0 | 24.1 |
|  | Sports facility | 39.0 | 43.2 | 40.0 | 28.6 | 34.9 | 30.3 |
|  | Street or road | 3.0 | 6.8 | 3.9 | 3.6 | 2.0 | 3.2 |
|  | Shopping or leisure | 1.0 | 0.2 | 0.8 | 1.1 | 1.0 | 1.1 |
|  | Workplace | N/A | N/A | N/A | 0.9 | 6.5 | 2.4 |
|  | Other | 9.4 | 19.2 | 11.8 | 14.0 | 8.9 | 12.7 |
|  | Not stated | 1.4 | 1.1 | 1.3 | 5.5 | 5.6 | 5.6 |
| Persons | School | 20.7 | 10.6 | 18.2 | 19.5 | 24.1 | 20.8 |
|  | Home | 23.5 | 16.2 | 21.7 | 20.1 | 16.9 | 19.2 |
|  | Sports facility | 37.6 | 49.0 | 40.4 | 34.4 | 36.2 | 34.9 |
|  | Street or road | 5.9 | 6.4 | 6.0 | 5.4 | 5.3 | 5.4 |
|  | Shopping or leisure | 0.8 | 0.4 | 0.7 | 1.7 | 0.4 | 1.3 |
|  | Workplace | N/A | N/A | N/A | 1.3 | 4.6 | 2.3 |
|  | Other | 10.0 | 15.7 | 11.4 | 12.7 | 7.2 | 11.1 |
|  | Not stated | 1.5 | 1.9 | 1.6 | 4.9 | 5.3 | 5.0 |

Note: Responses to the question: 'Where were you when the most recent injury requiring medical attention happened?'.
N/A: place of employment was not available as a response category in the 1996 survey.
Estimates are based on the following numbers of respondents: 1996, 2105; 2002, 923.

FIGURE 24
TYPE OF ACTIVITY WHEN MOST RECENT INJURY OCCURRED BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


Note: Responses to the following question: 'What were you doing when the most recent injury requiring you to seek attention from a health professional occurred?' Multiple responses permitted. Percentages do not add to 100 per cent as 'not stated' responses not shown. Estimates are based on 923 respondents.

## TABLE 34

TYPE OF ACTIVITY WHEN MOST RECENT INJURY OCCURRED BY AGE AND SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002


Injuries were most frequently reported for sports that are commonly played by young people. The 10 sports with the highest percentage of students reporting an injury in the past 12 months were: soccer, basketball, rugby league, netball, cricket, cycling, athletics, dancing, rugby union, and skateboarding (Table 35). There are notable sex differences: 16 per cent of injuries that were reported by females occurred while playing netball compared to 1 per cent of injuries reported by males for that sport. Similarly, 12 per cent of females reported injuries that occurred while dancing compared to 1 per cent of males in this category. Males reported injuries more commonly than females for soccer ( 20 per cent versus 9 per cent respectively), rugby league ( 14 per cent versus 2 per cent); cricket ( 11 per cent versus 2 per cent); rugby union ( 8 per cent versus 1 per cent), and skateboarding ( 7 per cent versus 2 per cent).

When injured, most students reported the type of injury as a joint injury (males 26 per cent; females 19 per cent), muscle strain or bruises (males 47 per cent; females 45 per cent), and cuts (males 31 per cent; females 24 per cent). More males than females reported being knocked out or having a head injury ( 10 per cent versus 5 per cent). This probably reflects a predominance of football and other contact-collision sports among males. In addition, a higher proportion of males than females reported having broken bones or teeth ( 11 per cent versus 6 per cent).

Of students who reported being injured while skateboarding, 61 per cent reported joint injuries. Of students who reported being injured while participating in other sports, joint injuries were also commonly reported: participating in touch football ( 51 per cent); rugby union ( 47 per cent); Australian rules football (44 per cent); baseball ( 44 per cent); mountain biking ( 44 per cent); volleyball (43 per cent); rugby league (43 per cent);
squash (42 per cent); dancing (42 per cent); boxing (41 per cent); golf ( 41 per cent); ice-skating ( 40 per cent); tennis ( 40 per cent); and surfing ( 40 per cent). Being knocked out or having a head injury was reported by 36 per cent of students who were injured while playing rugby union; and for other sports the percentages were: squash ( 35 per cent); rugby league ( 26 per cent); when working out in gym ( 25 per cent); rowing ( 27 per cent); sailing (43 per cent); snow-skiing ( 40 per cent); skateboarding ( 25 per cent); and snowboarding ( 28 per cent). Students who had broken bones or teeth were commonly injured when participating in: boxing ( 21 per cent); rugby union ( 25 per cent); snowboarding ( 26 per cent); sailing ( 23 per cent); and triathlon ( 29 per cent).

Students were asked to rate the level of risk involved in the following activities: riding a bicycle without a helmet, playing sports without warming up or stretching, swimming at an unpatrolled beach, being a passenger in a vehicle where the driver had been drinking alcohol, playing a contact sport without protective equipment (for example, mouthguards and shin pads), riding a skateboard on a roadway, and being a passenger in a vehicle where the driver had been taking drugs. The majority of students thought there were risks involved in each of these activities (Figure 25, Table 36).
In 2002, the majority of students perceived a high level of risk in being a passenger in a vehicle where the driver had been drinking alcohol ( 82 per cent), and being a passenger in a vehicle where the driver had taken drugs (72 per cent). However, a small percentage of students considered that there was no risk in being a passenger in a vehicle where the driver had been drinking alcohol (6 per cent), and being a passenger in a vehicle where the driver had taken drugs ( 6 per cent).

## TABLE 35

TOP 10 SPORTS, GAMES OR ACTIVITIES ASSOCIATED WITH INJURIES IN THE PAST 12 MONTHS BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 2002

| Sport or activity | \% | $\begin{gathered} \text { Males } \\ \text { LL95\%CI } \end{gathered}$ | UL95\%CI | \% | Females LL95\%CI | UL95\%CI | \% | Persons LL95\%CI | UL95\%CI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Soccer | 20.0 | 17.7 | 22.2 | 9.2 | 7.5 | 11.0 | 14.6 | 12.9 | 16.4 |
| Basketball | 9.9 | 7.8 | 11.9 | 7.8 | 6.0 | 9.7 | 8.8 | 7.4 | 10.3 |
| Rugby league | 13.8 | 11.4 | 16.2 | 2.0 | 0.8 | 3.1 | 7.9 | 6.2 | 9.5 |
| Netball | 0.8 | 0.3 | 1.4 | 15.9 | 12.4 | 19.5 | 8.4 | 6.4 | 10.3 |
| Cricket | 11.3 | 8.8 | 13.8 | 2.1 | 1.0 | 3.1 | 6.7 | 5.1 | 8.3 |
| Cycling | 7.3 | 5.9 | 8.8 | 3.6 | 2.4 | 4.8 | 5.5 | 4.6 | 6.4 |
| Athletics | 4.6 | 3.2 | 6.0 | 5.9 | 4.3 | 7.5 | 5.2 | 4.2 | 6.3 |
| Dancing | 1.0 | 0.4 | 1.6 | 11.7 | 9.3 | 14.0 | 6.3 | 4.8 | 7.8 |
| Rugby union | 8.0 | 5.9 | 10.1 | 0.7 | 0.1 | 1.2 | 4.3 | 3.1 | 5.6 |
| Skateboarding | 7.4 | 5.8 | 9.0 | 1.8 | 1.0 | 2.6 | 4.6 | 3.6 | 5.6 |

Note: Upper and lower limits of the 95 per cent confidence interval (LL/UL 95\% CI) for the point estimate are shown. Estimates are based on 2639 respondents.

## FIGURE 25

PERCEIVED RISK INVOLVED IN SELECTED ACTIVITIES BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1999 AND 2002


Note: Responses the following question: 'What is the risk to you in the following activities?'. Perceived risk: 'a little risk' and 'high level of risk' combined. Note: Estimates are based on 2639 respondents.

The majority of students (78 per cent) thought that there was some level of risk in swimming at an unpatrolled beach, but only about half ( 53 per cent) considered the risk to be high. The majority of students also thought that there was some level of risk in riding a bicycle without a helmet ( 84 per cent), playing sports without warming up or stretching ( 82 per cent), playing contact sport without protective equipment ( 79 per cent), or riding a skateboard on a roadway ( 77 per cent), but less than half considered the risk to be high.

For all activities females consistently reported a high level of risk more commonly than males, particularly for swimming at an unpatrolled beach ( 61 per cent versus 46 per cent) and for riding a skateboard on a roadway ( 54 per cent versus 36 per cent). More than half of all students (males 54 per cent; females 64 per cent) perceived some level of risk in all 7 activities. A small proportion of students reported that they thought there was no risk in any of the activities (males 3 per cent; females 1 per cent).

Compared to 1999, in 2002 students reported lower levels of overall perceived risk for several activities including: being a passenger in a vehicle where the driver had taken drugs, swimming at an unpatrolled beach, playing contact sport without protective equipment, playing sports without warming up or stretching, and riding a skateboard on a roadway.

## References

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2. Population Health Division. The health of the people of NSW: Report of the Chief Health Officer 2002. Sydney: NSW Department of Health, 2002.
3. Helps Y, Cripps R, Harrison J. Hospital separations due to injury and poisoning, Australia 1999-00. Injury Research and Statistics Series Number 15. AIHW Catalogue no. INJCAT 48. Adelaide: AIHW, 2004.

## TABLE 36

LEVEL OF RISK FOR SELECTED ACTIVITIES BY SEX, SECONDARY SCHOOL STUDENTS, NSW, 1999 AND 2002

| Activity | Level of risk | Males \% | $\begin{gathered} 1999 \\ \text { Females } \\ \% \end{gathered}$ | $\begin{gathered} \text { Persons } \\ \% \end{gathered}$ | Males \% | $\begin{gathered} 2002 \\ \text { Females } \\ \% \end{gathered}$ | $\begin{gathered} \text { Persons } \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Passenger in vehicle where driver has drunk alcohol | No risk | 4.8 | 4.4 | 4.6 | 8.1 | 3.9 | 6.0 |
|  | A little risk | 6.5 | 3.5 | 4.8 | 8.6 | 5.0 | 6.8 |
|  | High level of risk | 81.8 | 87.2 | 84.8 | 78.1 | 86.5 | 82.4 |
|  | Perceived risk | 88.3 | 90.7 | 89.6 | 86.7 | 91.5 | 89.2 |
|  | Don't know | 3.2 | 2.5 | 2.8 | 5.2 | 4.6 | 4.9 |
|  | Not stated | 3.7 | 2.4 | 3.0 | - | - | - |
| Riding a bicycle without helmet | No risk | 13.1 | 9.1 | 10.8 | 16.5 | 9.8 | 13.1 |
|  | A little risk | 38.0 | 33.3 | 35.4 | 37.7 | 31.5 | 34.5 |
|  | High level of risk | 42.7 | 52.1 | 47.9 | 43.1 | 55.1 | 49.2 |
|  | Perceived risk | 80.8 | 85.4 | 83.3 | 80.7 | 86.7 | 83.7 |
|  | Don't know | 3.1 | 4.0 | 3.6 | 2.8 | 3.5 | 3.2 |
|  | Not stated | 3.1 | 1.5 | 2.2 | - | - | - |
| Playing sports without warming up or stretching | No risk | 7.7 | 5.7 | 6.6 | 7.4 | 5.3 | 6.4 |
|  | A little risk | 53.4 | 55.8 | 54.8 | 44.8 | 46.0 | 45.4 |
|  | High level of risk | 31.7 | 33.5 | 32.7 | 34.0 | 38.1 | 36.1 |
|  | Perceived risk | 85.2 | 89.3 | 87.5 | 78.9 | 84.1 | 81.5 |
|  | Don't know | 3.1 | 2.7 | 2.8 | 2.6 | 2.8 | 2.7 |
|  | Not stated | 4.1 | 2.3 | 3.1 | 11.1 | 7.8 | 9.5 |
| Playing contact sport without protective equipment | No risk | 7.3 | 5.0 | 6.0 | 8.6 | 5.4 | 7.0 |
|  | A little risk | 49.9 | 46.1 | 47.8 | 41.9 | 39.3 | 40.6 |
|  | High level of risk | 35.3 | 43.4 | 39.8 | 34.7 | 43.0 | 38.8 |
|  | Perceived risk | 85.3 | 89.5 | 87.6 | 76.6 | 82.2 | 79.4 |
|  | Don't know | 2.9 | 3.6 | 3.3 | 3.1 | 4.4 | 3.7 |
|  | Not stated | 4.5 | 1.8 | 3.0 | 11.7 | 8.0 | 9.9 |
| Passenger in vehicle where driver has taken drugs | No risk | 6.0 | 5.4 | 5.6 | 7.8 | 4.2 | 6.0 |
|  | A little risk | 6.4 | 5.3 | 5.8 | 6.8 | 6.2 | 6.5 |
|  | High level of risk | 76.4 | 82.5 | 79.8 | 68.5 | 74.7 | 71.6 |
|  | Perceived risk | 82.8 | 87.8 | 85.6 | 75.3 | 80.9 | 78.1 |
|  | Don't know | 5.7 | 4.3 | 4.9 | 5.7 | 6.4 | 6.1 |
|  | Not stated | 5.4 | 2.5 | 3.8 | 11.2 | 8.5 | 9.8 |
| Swimming at an unpatrolled beach | No risk | 9.4 | 5.5 | 7.2 | 10.6 | 5.4 | 8.0 |
|  | A little risk | 33.1 | 27.5 | 30.0 | 27.3 | 21.2 | 24.2 |
|  | High level of risk | 49.6 | 61.4 | 56.2 | 46.0 | 60.9 | 53.4 |
|  | Perceived risk | 82.7 | 88.9 | 86.1 | 73.2 | 82.1 | 77.6 |
|  | Don't know | 3.5 | 3.7 | 3.6 | 4.1 | 4.1 | 4.1 |
|  | Not stated | 4.5 | 1.9 | 3.0 | 12.0 | 8.4 | 10.2 |
| Riding a skateboard on a roadway | No risk | 13.8 | 6.7 | 9.8 | 10.7 | 5.2 | 8.0 |
|  | A little risk | 38.8 | 31.3 | 34.6 | 36.3 | 26.8 | 31.5 |
|  | High level of risk | 38.0 | 54.6 | 47.3 | 35.6 | 54.4 | 45.0 |
|  | Perceived risk | 76.8 | 86.0 | 81.9 | 71.8 | 81.2 | 76.5 |
|  | Don't know | 5.5 | 5.2 | 5.3 | 5.9 | 5.5 | 5.7 |
|  | Not stated | 4.0 | 2.2 | 3.0 | 11.6 | 8.0 | 9.8 |

Note: Responses to the following question: 'What is the risk to you in the following activities?'. Perceived risk: 'a little risk' and 'high level of risk' combined. Estimates are based on 2639 respondents.

## APPENDIX 1：THE NEW SOUTH WALES SECONDARY SCHOOLS STUDENTS HEALTH SURVEY 2002

1．（a）What suburb or town do you live in？
（b）What is the postcode of your address？
2．What year level are you in？
1口 Year7
2■ Year 8
3口 Year 9
4 Year 10
5 Year 11
$6 \square$ Year 12
3．How old are you now？
$10 \square 10$
11ロ 11
$12 \square 12$
13口 13
$14 \square 14$
$15 \square 15$
16 16
17 17
18 18
19］ 19 and over
4．What sex are you？
$1 \square$ Male
$2 \square$ Female
5．What is your date of birth？
＿＿$/$ $\qquad$ ／ 19 $\qquad$
6．During a normal week，how much money do you have available to spend on yourself？（for example，from pocket money，part－time job）．
$1 \square$ None
$2 \square$ Less than $\$ 10$
3口 \＄11－\＄20
4 $\square$ 21－\＄40
5 $\square$ \＄41－\＄60
6 $\square$ \＄61－\＄80
7 Over \＄80
7．At school work，do you consider yourself：
1 A lot above average？
$2 \square$ Above average？
3 Average？
4 $\square$ Below average？
$5 \square$ A lot below average？
8．（a）Were you at school on the last school day？
1■ Yes Go to Question 9
$2 \square$ No Go to Question 8（b）
（b）If No：Why were you away？
1■ You were ill or had some other health problem
$2 \square$ Study day or other school related activities
3口 Family reasons
$4 \square$ Other（specify）
9．Are you of Aboriginal or Torres Strait Islander descent？
1ロ No
$2 \square$ Yes，Aboriginal descent
$3 \square$ Yes，Torres Strait Islander descent
$4 \square$ Yes，both Aboriginal and Torres Strait Islander descent
10．What is the main language spoken at home？
Tick only 1 box．
1■ English
$2 \square$ Another language only Specify which language．
$3 \square$ English and another language Specify the other language．
11．At the present time，do you consider yourself：
1口 A heavy smoker？
$2 \square$ A light smoker？
$3 \square$ An occasional smoker？
4 An ex－smoker？
5 A non－smoker？
12．Have you ever smoked even part of a cigarette？
1ロ No
$2 \square$ Yes，just a few puffs
$3 \square$ Yes，I have smoked fewer than 10 cigarettes in my life
$4 \square$ Yes，I have smoked more than 10 but fewer than 100 cigarettes in my life
5 Yes，I have smoked more than 100 cigarettes in my life
13．Have you smoked cigarettes in the last 12 months？
$1 \square$ Yes
2口 No

14．Have you smoked cigarettes in the last 4 weeks？
$1 \square$ Yes
$2 \square$ No
15．This question is about the number of cigarettes you had during the last 7 days，including yesterday．

Put a tick near yesterday．Then in the space provided， write the number of cigarettes you had yesterday．If you didn＇t smoke any cigarettes，put in＇ 0 ＇．Start filling in the spaces beginning with yesterday，and follow the arrows．

Answer for every day of the week．
Write in the circle the number of cigarettes you smoked each day．

Put＇ 0 ＇for each day you didn＇t drink smoke any cigarettes．


16．Do you think you will be smoking cigarettes this time next year？
1］Certain not to be smoking
$2 \square$ Very unlikely to be smoking
3口 Unlikely to be smoking
4 Can＇t decide how likely
5■ Likely to be smoking
$6 \square$ Very likely to be smoking
7口 Certain to be smoking
17．Have you ever smoked even part of a cigar？
1口 No
$2 \square$ Yes，a few puffs but not as much as 1 cigar
$3 \square$ Yes，I have smoked at least 1 cigar in my life

Questions 18， 19 and 20 are only for those who have smoked a cigarette in the past week．
If you have not smoked a cigarette in the past week，go to Question 21.
18．（a）What brand of cigarettes do you usually smoke？
Tick the box near the brand you usually smoke．If that brand is not listed here，tick the box next to＇Other＇ and write the name of the brand in the space provided．

01ロ Alpine
02 Benson \＆Hedges
03 Dunhill
04 Escort
05 Fortune
16 Freedom
06 Holiday
07 Horizon
$08 \square$ Longbeach
09 Marlboro
$10 \square$ Peter Jackson
11 $\square$ Sterling
12 Stradbroke
13 $\square$ Vogue
$14 \square$ Wills Super Mild
15 Winfield
＊＊$\square$ Other
You should have ticked only 1 box．
（b）Do the cigarettes you usually smoke come from packets of ．．．？
1ロ 20s？
$2 \square$ 25s？
$3 \square$ 30s？
4 35s？
5 40s？
$6 \square$ 50s？

19．（a）Where，or from whom，did you get the last cigarette that you smoked？
Fill in the space beside＇Other＇if you can＇t find your answer．
Tick only 1 box．

I didn＇t buy it ．．．
01 My parent（s）gave it to me
02 $\square$ My brother or sister gave it to me
03 I took it from home without my parent（s） permission
$04 \square$ Friends gave it to me
05 I got someone to buy it for me
＊＊Other（specify） $\qquad$
OR I bought it ．．．
51］At a hotel，pub or club
$52 \square$ At a supermarket
53 At a newsagency
$54 \square$ At a milk bar or delicatessen
55 At a convenience store（for example，Food Plus， 711，Night Owl，727）
56 At a tobacconist－tobacco shop
$57 \square$ At a take－away food shop
58 At a petrol station
59］Through the Internet
＊＊$\square$ Other（specify） $\qquad$
You should have ticked only 1 box．
（b）If you bought your last cigarette，was it from a coin－operated（vending）machine？
1口 Yes
2a No
You should have ticked only 1 box．
20．（a）Sometimes people break open a packet of cigarettes and sell single cigarettes．In the last 4 weeks，have you bought cigarettes that were not in a full packet（for example，buying one or more cigarette（s）at a time）？
1■ Yes Go to Question 20（b）
$2 \square$ No Go to Question 21
（b）Thinking of the last time you bought cigarettes that were not in a full packet，who did you buy the cigarette（s）from？
1 I bought the cigarette（s）at a shop
$2 \square$ I bought the cigarette（s）from a friend or relative
$3 \square$ I bought the cigarette（s）from someone else
21．At the present time，do you consider yourself：
1］A non－drinker？
$2 \square$ An occasional drinker？
$3 \square$ A light drinker？
4 A party drinker？
5■ A heavy drinker？
22．Have you ever had even part of an alcoholic drink？
$1 \square$ No
$2 \square$ Yes，just a few sips
3口 Yes，I have had fewer than 10 alcoholic drinks in my life
$4 \square$ Yes，I have had more than 10 alcoholic drinks in my life
23．Have you had an alcoholic drink in the last 12 months？
1ロ Yes
2 $\square$ No
24．Have you had an alcoholic drink in the last 4 weeks？
$1 \square$ Yes
$2 \square$ No
25. This question is about the number of alcoholic drinks you had during the last 7 days, including yesterday. Put a tick near yesterday. Then in the space provided, write the number of alcoholic drinks you had yesterday. If you didn't have any alcoholic drinks, put in ' 0 '. Start filling in the spaces beginning with yesterday, and follow the arrows.

Answer for every day of the week. Write in the circle the number of alcoholic drinks you had each day. Put ' 0 ' for each day you didn't drink any alcoholic drinks.

Questions 26, 27, 28 and 29 are for anyone who has had an alcoholic drink. If you have never had an alcoholic drink, go to Question 30.
26. What alcoholic drink do you usually have?

Tick the box near the drink you usually have. If that drink is not listed here, tick the box next to 'Other'
 and write the name of the drink in the space provided.

```
01\square Ordinary beer
02\square Low alcohol beer
03\square Wine
04\square Wine Cooler (for example, West Coast Coolers)
05\square Champagne or sparkling wine (for example, Spumante, Passion Pop)
06\square Alcoholic Apple Cider (for example, Strongbow)
07\square Alcoholic Sodas (for example, Two Dogs)
08 Premixed spirits (for example, Bacardi Breezer, Lemon Ruski, UDL Drinks, Sub Zero)
09\square Spirits (for example, rum, brandy, whisky, gin, vodka)
10\square Liqueurs (for example, Tia Maria, Kahlua, Midori, etc)
**\square Other
You should have ticked only one box.
```

27. Where, or from whom, did you get your last alcoholic drink?

Fill in the space beside 'Other' if you can't find your answer. Tick only 1 box

I didn't buy it ....
$01 \square$ My parent(s) gave it to me
$02 \square$ My brother or sister gave it to me
03 I I took it from home without my parent(s) permission
$04 \square$ Friends gave it to me
05 I I got someone to buy it for me
** $\square$ Other (specify) $\qquad$

OR I bought it ....
51 At a hotel, pub, bar, tavern, RSL Club
$52 \square$ At a licensed-liquor store or supermarket
$53 \square$ At a walk-in bottle-shop, pub or hotel
$54 \square$ At a drive-in bottle-shop
55 At a restaurant
$56 \square$ At a dance venue-dance party
57 At a nightclub
58 At a sporting event
$59 \square$ At a sports club (for example, surfing, football)
$60 \square$ Through the Internet
$61 \square$ By phone, fax, mail order
** Other (specify) $\qquad$

You should have ticked only 1 box.
28. Where did you drink your last alcoholic drink?

Fill in the space beside 'Other' if you can't find your answer.
Tick only 1 box.
I drank it ...
01 At a beach, park or recreation area
$02 \square$ At a hotel, pub, bar, tavern or RSL club
$03 \square$ At a dance venue-dance party
04 At a nightclub
$05 \square$ At a party
06 At a restaurant
07 At a sporting event
$08 \square$ At a sports club (for example, Leagues, surfing, football)
09 On school grounds during school hours
$10 \square$ On school grounds after hours
11ロ At my home
12 At my friend's home
13 In a car
** $\square$ Other
You should have ticked only 1 box.
29. Think back over the last 2 weeks. How many times, if any, have you had the following number of alcoholic drinks on any one occasion when you have been drinking in the last 2 weeks?

|  | None | Once | Twice | $3-6$ <br> times | $7-9$ <br> times | 10 or more <br> times |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| (i) $\quad 11$ or more drinks in a row | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |
| (ii) 7 or more drinks in a row | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |
| (iii) 5 or more drinks in a row | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |

The next questions are for everyone and are about other things you might use. For each substance, tick the box which shows how many times you have used the substance during the specified time period. There should only be 1 tick for each line of boxes.
30. How many times, if ever, have you used or taken pain killers-analgesics such as 'Disprin', 'Panadol', 'Aspro', for any reason:

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (ii) In the last 4 weeks? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iii) In the last year? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iv) In your lifetime? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |

31. How many times, if ever, have you used or taken sleeping tablets, tranquillisers or sedatives, such as 'Rohies', 'Rohypnol', 'Barbs', 'Valium' or 'Serepax', other than for medical reasons:

| None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (ii) In the last 4 weeks? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iii) In the last year? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iv) In your lifetime? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |

32. (a) How many times, if ever, have you smoked or used marijuana-cannabis (grass, hash, dope, weed, mull, yarndi, ganga, pot, a bong, a joint):

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) $\quad$ In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (ii) $\quad$ In the last 4 weeks? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iii) In the last year? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iv) In your lifetime? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |

If you have not used marijuana-cannabis in the last year, go to Question 33.
(b) In the last year, did you use any other substance or substances on the same occasion that you used marijuana-cannabis?

Tick all that apply.
$01 \square$ I did not use any other substance on the same occasion
$02 \square$ Ecstasy (XTC, E, MDMA, ecci, X)
$03 \square$ Amphetamines (for example, speed, uppers, goey, MDA, Dex, Dexies, Dexamphetamines, ox blood)
$04 \square$ Hallucinogens (for example, LSD, acid, trips, Magic Mushrooms)
05 Painkillers-analgesics
06 Sedatives-tranquillisers-sleeping tablets
07 Alcohol
08 Tobacco
** $\square$ Other (what substance?) $\qquad$
You should have ticked all that apply.
(c) When you use cannabis (marijuana) do you usually:

Tick only 1 box
$1 \square$ Smoke it as a joint (reefer, spliff)?
$2 \square$ Smoke it from a 'bong' or a 'pipe'?
$3 \square$ Eat it (for example, in hash cookies)?
$4 \square$ Other (specify) $\qquad$
You should have ticked only 1 box.
(d) Do you usually use cannabis (marijuana) by yourself or with others?

1- By myself
$2 \square$ With others
$3 \square$ By myself and with others about equally often
(e) Where did you last use cannabis?

Fill in the space beside 'Other' if you can't find your answer
I used it ...
$01 \square$ At a hotel, bar, tavern, or RSL Club
$02 \square$ At a dance venue, dance party, rave
03 At a nightclub
$04 \square$ At a party
05 At my home
06 At my friend's home
$07 \square$ At a sporting club (for example, leagues, surfing, football)
08 At the beach
09 In a park
10 In a car
$11 \square$ On school grounds during school time
$12 \square$ On school grounds after hours
** Other $\qquad$
You should have ticked only 1 box.
33. How many times, if ever, have you used or taken steroids, 'Muscle', 'roids' or 'gear' without a doctor's prescription in an attempt to make you better at sport, to increase muscle size or to improve your general appearance:

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) | In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |

34. How many times, if ever, have you deliberately sniffed (inhaled) from spray cans or sniffed things like glue, paint, petrol or thinners in order to get high or for the way it makes you feel:

This does not include sniffing 'white-out', liquid paper, textas or pens.

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) | In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |

35. (a) How many times, if ever, have you used or taken amphetamines (for example, speed, uppers, MDA, 'goey', 'Dex', 'Dexies', Dexamphetamine, 'ox blood') other than for medical reasons:

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| (i) | In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |

(b) In the last year, did you use any other substance or substances on the same occasion that you used amphetamines (for example, speed, uppers, goey, MDA, Dex, Dexies, Dexamphetamine, ox blood etc)?

Tick all that apply.
$01 \square$ I did not use any other substance $06 \square$ Sedatives/tranquillisers/sleeping tablets on the same occasion
$02 \square$ Ecstasy (XTC, E, MDMA, ecci, X) 07 Alcohol
$03 \square$ Marijuana-cannabis 08 Tobacco
$04 \square$ Hallucinogens (for example, LSD, acid, $* * \square$ Other (what substance?) $\qquad$ trips, Magic Mushrooms)
05 Painkillers-analgesics
You should have ticked all that apply
36. (a) How many times, if ever, have you used or taken 'ecstasy' or 'XTC' (E, MDMA, Ecci, X, bickies):

| None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| y in the last year, go to Question 37. |  |  |  |  |  |  |

If you have not used ecstasy in the last year, go to Question 37.
(b) In the last year, did you use any other substance or substances on the same occasion that you used ecstasy (E, XTC)?

Tick all that apply.
$01 \square$ I did not use any other substance on the same occasion
02 $\square$ Marijuana-cannabis
$03 \square$ Amphetamines (for example, speed, uppers, goey, MDA, Dex, Dexies, Dexamphetamines, ox blood)
$04 \square$ Hallucinogens (for example, LSD, acid, trips, Magic Mushrooms)
05] Painkillers-analgesics
06] Sedatives-tranquillisers-sleeping tablets
07 Alcohol
08 Tobacco
** $\square$ Other (what substance?)
You should have ticked all that apply.
37. How many times, if ever, have you used or taken cocaine:

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) $\quad$ In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (ii) In the last 4 weeks? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iii) In the last year? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iv) In your lifetime? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |

38. How many times, if ever, have you used or taken heroin (smack, horse, skag, hammer, H), or other opiates (narcotics) such as methadone, morphine or pethidine other than for medical reasons:

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) $\quad$ In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (ii) In the last 4 weeks? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iii) In the last year? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iv) In your lifetime? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |

39. (a) How many times, if ever, have you used or taken hallucinogens (for example, LSD, 'acid', 'trips', Magic Mushrooms, Datura, Angel's Trumpet):

|  | None | Once or <br> twice | $3-5$ <br> times | $6-9$ <br> times | $10-19$ <br> times | $20-39$ <br> times | 40 or more <br> times |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) $\quad$ In the last week? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (ii) In the last 4 weeks? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iii) In the last year? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |
| (iv) In your lifetime? | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ | $7 \square$ |

If you have not used hallucinogens in the last year, go to Question 40.
(b) In the last year, what forms of hallucinogens did you use?

Tick all that apply.
1口 Tabs
$2 \square$ Liquids
3口 Magic Mushrooms
4 Datura-Angel's Trumpet
$5 \square$ Other (please write in) $\qquad$
（c）In the last year，did you use any other substance or substances on the same occasion that you used hallucinogens（for example，LSD，＇acid＇，Magic Mushrooms）？

Tick all that apply．
$01 \square$ I did not use any other substance on the same occasion
$02 \square$ Ecstasy（XTC，E，MDMA，ecci，X，bickies）
$03 \square$ Amphetamines（for example，speed，uppers，goey，MDA，Dex，Dexies，Dexamphetamines，ox blood）
04 $\square$ Marijuana－cannabis
05 Painkillers－analgesics
06 Sedatives－tranquillisers－sleeping tablets
07 Alcohol
08］Tobacco
09 Other（what substance？）
You should have ticked all that apply．
These questions are for everyone．
40．During 2001 （last year），did you have any lessons or parts of lessons at school that were about smoking？
1■ No，not even part of a lesson
$2 \square$ Yes，part of a lesson
$3 \square$ Yes， 1 lesson
$4 \square$ Yes，more than 1 lesson
41．During 2001 （last year），did you have any lessons or parts of lessons at school that were about drinking？
1－No，not even part of a lesson
$2 \square$ Yes，part of a lesson
3口 Yes， 1 lesson
$4 \square$ Yes，more than 1 lesson
42．During 2001 （last year），did you have any lessons or parts of lessons at school that were about illicit drugs such as marijuana，ecstasy，heroin，amphetamines，hallucinogens，cocaine？

1 $\square$ No，not even part of a lesson
$2 \square$ Yes，part of a lesson
$3 \square$ Yes， 1 lesson
$4 \square$ Yes，more than 1 lesson
Remember，last year was 2001.
The next few questions are about some other topics．
43．You only get skin cancer if you get burnt often．
1口 True
2 False
44．Most skin cancer is caused by ultraviolet radiation（UVR）from the sun．
$1 \square$ True
2口 False
45．During 2001 （that is last year），did you have any lessons or parts of lessons at school that were about skin cancer or protection from the sun？

1－No，not even part of a lesson
$2 \square$ Yes，part of a lesson
3■ Yes， 1 lesson
$4 \square$ Yes，more than 1 lesson
46．Over the last summer，did you get sunburn that was sore or tender the next day？
1］Yes，just once
$2 \square$ Yes， 2 or 3 times
$3 \square$ Yes， 4 or more times
$4 \square$ No，not at all

47．（a）Have you ever had severe sunburn，which has blistered？
1■ Yes $\quad$ Go to Question 47（b）
$2 \square$ No $\quad$ Go to Question 48
（b）If yes，how long ago was the last time you were you severely sunburnt？
1］Last summer
2■ 1 to 2 years ago
3口 More than 2 years ago
48．What type of hat do you most often wear on a sunny day in summer？
1 $\square$ Wide brimmed hat
2 $\square$ Narrow brimmed hat
3口 Legionnaire hat
$4 \square$ Cap
5 $\square$ Sun－visor
$6 \square$ Other（what kind？）
7 $\square$ None
49．What is the SPF（Sun Protection Factor）of the sunscreen you usually use on a sunny day in summer？
1］I don＇t use sunscreen
$2 \square$ SPF 12 or lower
3口 SPF 15
4 $\mathrm{CPF} 30+$
5■ Can＇t remember－don＇t know
50．Suppose your skin was exposed to strong sunshine at the beginning of summer with no protection at all．If you stayed in the sun for 30 minutes，would your skin：
$1 \square$ Just burn or go red
$2 \square$ Burn or go red first，then tan afterwards
3口 Just tan
$4 \square$ Nothing would happen because I was born with dark skin
51．Do you like to get a suntan？

| $1 \square$ | No |
| :--- | :--- |
| $2 \square$ | Yes，a light tan |
| $3 \square$ | Yes，a moderate tan |
| $4 \square$ | Yes，a dark tan |
| $5 \square$ | Yes，a very dark tan |

52．Thinking about sunny days in summer，when you are outside for an hour or more between $11.00 \mathrm{a} . \mathrm{m}$ ．and 3.00 p．m．，how often would you：

|  | Never | Rarely | Sometimes | Usually | Always |
| :--- | :--- | :---: | :---: | :---: | :---: |
| （i） | Wear a hat？ | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ |

Thinking about sunny days in summer between 11.00 a．m．and 3.00 p．m．：
（vii）How often would you spend most of the time inside？
$1 \square \quad 2 \square \quad 3 \square$
4口
$5 \square$

The next few questions are about food you might have eaten．
53．How many serves of vegetables do you usually eat each day？（A serve is equal to $1 / 2$ cup of cooked vegetables or 1 cup of salad vegetables）

1ロ 1 serve or less
2■ 2－3 serves
3口 4－5 serves
4 6 serves or more
$5 \square$ I do not eat vegetables
54．How many serves of fruit do you usually eat each day？（A serve is equal to 1 medium piece or 2 small pieces of fruit or 1 cup of diced pieces of fruit）

1口 1 serve or less
2■ 2－3 serves
3口 4－5 serves
$4 \square 6$ serves or more
5 I do not eat fruit
55．How many serves of bread and／or cereal do you usually eat each day？
（A serve is 1 slice of bread， $1 / 2$ bread roll， $1 / 2$ cup breakfast cereal，or $1 / 2$ cup pasta，rice，or noodles）
1口 1 serve or less
2■ 2－3 serves
3口 4－5 serves
$4 \square 6$ serves or more
$5 \square$ I do not eat bread or cereals
The next few questions are about some activities you might have done in the last week．
56．How many times in the last week did you：

None Once $\quad$ Twice \begin{tabular}{c}
3 <br>
times

$\quad$

4 <br>
times

$\quad$

5 <br>
times

 

6 or more <br>
times
\end{tabular}

（i）do any vigorous physical activity for at least 30 minutes that made you sweat and breathe hard？ （for example basketball，netball，soccer， football，running，fast bike riding， $\begin{array}{llllllll}\text { fast dancing，aerobics）} & 1 \square & 2 \square & 3 \square & 4 \square & 5 \square & 6 \square & 7 \square\end{array}$
（ii）do any moderate physical activity for at least 30 minutes that did not make you sweat or breathe hard？ （for example，slow bike riding， swimming，pushing a lawnmower， mopping floors，brisk walking）
$1 \square \quad 2 \square$
（iii）participate in organised sports activities？（for example，playing on sports teams，orafter school training sessions）

57．On an average school day，about how many hours a day do you do the following when you are not at school：

|  | None | 1 hour <br> or less | 2 <br> hours | 3 <br> hours | 4 <br> hours | or more <br> hours |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| （i）homework | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |
| （ii）watching TV－videos | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |
| （iii）using Internet－playing computer games？ <br> （Don’t include computer use for homework） | $1 \square$ | $2 \square$ | $3 \square$ | $4 \square$ | $5 \square$ | $6 \square$ |

Thank you very much for your help．

## Supplementary A

These questions are to find out what students, like yourself, feel and do about a range of health behaviours, including smoking, buying cigarettes and alcohol, and about you and about your general wellbeing.

## SECTION A

The following questions are about smoking cigarettes

1. How hard do you think it would be for someone to give up smoking?

Tick 1 box only.

| 1 | $\square$ | Impossible |
| :--- | :--- | :--- |
| 2 | $\square$ | Very hard |
| 3 | $\square$ | Fairly hard |
| 4 | $\square$ | Not too hard |
| 5 | $\square$ | Easy |

2. Where do you smoke?

You may tick more than one box.

| $01 \quad$ | I don't smoke at all <br> Go to Question 7 |
| :--- | :--- |

$02 \square$ At the beach, park or recreation area
$03 \square$ At parties
$04 \square$ At home
$05 \square$ At my friend's home(s)
06 At school
$07 \quad$ Travelling to or from school
$08 \quad$ At work
$09 \quad$ In hotels, pubs or clubs
$10 \square$ In shopping areas
$98 \quad$ Other (please specify) $\qquad$
3. Do you think you are addicted to tobacco smoking?

| 1 | $\square$ | Yes |
| :--- | :--- | :--- |
| 2 | $\square$ | No |
| 3 | $\square$ | I am not sure |

4. Would you like to quit smoking?

| 1 | $\square$ | Yes |
| :--- | :--- | :--- |
| 2 | $\square$ | No |
| 3 | $\square$ | I am not sure |

5. Have you tried to quit smoking in the last 12 months?
$1 \square \quad$ Yes have tried to give up $\qquad$ times
$2 \quad$ I smoke but have not tried to quit in the last 12 months Go to Question 7
6. The last time you tried to quit, how long had you quit for?

| 1 | $\square$ | Less than a day |
| :--- | :--- | :--- |
| 2 | $\square$ | 1 to 2 days |
| 3 | $\square$ | 2 to 6 days |
| 4 | $\square$ | Between 1 week and 1 month |
| 5 | $\square$ | Between 1 month and 3 months |
| 6 | $\square$ | More than 3 months |

7. Have you seen any cigarette advertising in the last 6 months?

You may tick more than 1 box.

| 1 | $\square$ | No |
| :--- | :--- | :--- |
| 2 | $\square$ | Yes, in magazines or newspapers |
| 3 | $\square$ | Yes, on the internet |
| 4 | $\square$ | Yes, in shops or tobacconists |
| 5 | $\square$ | Yes, on billboards |
| 6 | $\square$ | Yes, at a sports event |
| 7 | $\square$ | Yes, while watching TV coverage of a sports event |

8. Do you think smoking by celebrities (eg. movie stars, TV personalities, models, sports stars) encourages young people to take up smoking?

| 1 | $\square$ | Yes |
| :--- | :--- | :--- |
| 2 | $\square$ | No |
| 3 | $\square$ | Not sure |

## SECTION B

The following questions are about buying cigarettes
9. Have you ever tried to buy cigarettes from a shop?
$1 \square$ No
Go to Section C, Question 14
2


Go to Question 10
10. Has a shopkeeper ever refused you service when you tried to buy cigarettes?

Tick 1 box only.

| 1 | $\square$ | No |
| :--- | :--- | :--- |
| 2 | $\square$ | Yes, once or twice |
| 3 | $\square$ | Yes, frequently |

11. Has a shopkeeper ever asked you for proof of your age or identification (ID) when you tried to buy cigarettes?

| 1 | $\square$ | No |
| :--- | :--- | :--- |
| 2 | $\square$ | Yes, once or twice |
| 3 | $\square$ | Yes, frequently |

12. Have you ever used a friend's identification (ID) or a fake identification (ID) to purchase cigarettes?

| 1 | $\square$ | No |
| :--- | :--- | :--- |
| 2 | $\square$ | Yes, once or twice |
| 3 | $\square$ | Yes, frequently |

13. Have you ever bought cigarettes over the Internet or by phone, fax or mail order?

You may tick more than 1 box.

| 1 | $\square$ | No |
| :--- | :--- | :--- |
| 2 | $\square$ | Yes, over the Internet |
| 3 | $\square$ | Yes, by phone, fax or mail order |

## SECTION C

The following questions are about buying alcohol.
14. Have you ever tried to buy alcohol at a hotel, pub, club, restaurant, nightclub or bottleshop?

```
1 No
        Go to Section D, Question 20
2
    \(\square\) Yes
        Go to Question 15
```

15. How often have you been refused service in a hotel, club, pub, restaurant, nightclub or bottleshop?

| Please tick 1 box in each line. | Never | $1-4$ times | 5 or more times |
| :--- | :---: | :---: | :---: |
| Hotel, pub or club | $1 \square$ | $2 \square$ | $3 \square$ |
| Restaurant | $1 \square$ | $2 \square$ | $3 \square$ |
| Nightclub or dance venue | $1 \square$ | $2 \square$ | $3 \square$ |
| Bottleshop | $1 \square$ | $2 \square$ | $3 \square$ |

16. How often have you been asked for proof of your age or identification (ID) when entering and/or asking for alcohol at a hotel, pub, club, restaurant, nightclub or bottleshop?

| Please tick 1 box in each line. | Never | $1-4$ times | 5 or more times |
| :--- | :---: | :---: | :---: |
| Hotel, pub or club | $1 \square$ | $2 \square$ | $3 \square$ |
| Restaurant | $1 \square$ | $2 \square$ | $3 \square$ |
| Nightclub or dance venue | $1 \square$ | $2 \square$ | $3 \square$ |
| Bottleshop | $1 \square$ | $2 \square$ | $3 \square$ |

17. How often have you used someone else's identification (ID) or fake identification (ID) to enter and or ask for alcohol at a hotel, club, restaurant, nightclub or bottleshop?

1

- Never

Go to Section D, Question 20
$2 \square \quad$ Yes, once or twice
$3 \square$ Yes, frequently
18. If you have used someone else's identification (ID) or fake identification (ID), what type of document was it?

You may tick more than 1 box.
$1 \square$ Someone else's proof of age card or driver's license
$2 \square$ A fake proof of age card
$3 \square$ A fake learner's or driver's license
$4 \square$ A stolen proof of age card
$5 \square$ A stolen learner's or driver's license
$8 \square$ Other document (please specify) $\qquad$
19. Have you ever bought alcohol over the Internet or by phone, fax or mail order?

You may tick more than 1 box.

| 1 | $\square$ | No |
| :--- | :--- | :--- |
| 2 | $\square$ | Yes, over the Internet |
| 3 | $\square$ |  |$\quad$ Yes, by phone, fax or mail order

## SECTION D

The following questions are about feeling unhappy, sad or depressed.
20. During the last 6 months, was there a time when you felt unhappy, sad, or depressed?

Please tick 1 box only.


Please go to Section E
$2 \square \quad$ Yes, at home and at school
$3 \square \quad$ Yes, but only at home
$4 \square \quad$ Yes, but only at school
21. When you were feeling unhappy, sad or depressed, how bad was it for you?

Please tick 1 box only.

| 1 | $\square$ | Almost more than I can take |
| :--- | :--- | :--- |
| 2 | $\square$ | Quite bad |
| 3 | $\square$ | Worse than usual |
| 4 | $\square$ | About usual |

22. When you were feeling unhappy, sad or depressed, who did you talk to about it?

You may tick more than 1 box.

| 1 | $\square$ | No one <br> 1 |
| :--- | :--- | :--- |
| 2 | $\square$ | Please go to Section $E$ |
| 2 | $\square$ | My family |
| 3 | $\square$ | My friend(s) |
| 4 | $\square$ | Teachers or school counsellors |
| 5 | $\square$ | Doctors or other health professionals |
| 6 | $\square$ | Religious advisors or groups |
| 7 | $\square$ | Helpline/ Internet etc |
| 8 | $\square$ | Other person or group (Please describe) |

$\qquad$
23. If you talked to someone about feeling unhappy, sad or depressed, how helpful were they?

Tick 1 box only.

| 1 | $\square$ | Not at all helpful |
| :--- | :--- | :--- |
| 2 | $\square$ | Somewhat helpful |
| 3 | $\square$ | Quite helpful |
| 4 | $\square$ | Very helpful |

## SECTION E

The following questions are about feeling nervous, stressed, or under pressure.
24. During the last 6 months, was there a time when you felt nervous, stressed, or under pressure?

Tick 1 box only.

| 1 | $\square$ | No |
| :--- | :--- | :--- |
|  |  | Please go to Section $F$ |
| 2 | $\square$ | Yes, at home and at school |
| 3 | $\square$ | Yes, but only at home |
| 4 | $\square$ | Yes, but only at school |

25. When you were feeling nervous, stressed, or under pressure, how bad was it for you?

Tick 1 box only.

| 1 | $\square$ | Almost more than I can take |
| :--- | :--- | :--- |
| 2 | $\square$ | Quite bad |
| 3 | $\square$ | Worse than usual |
| 4 | $\square$ | About usual |

26. When you were feeling nervous, stressed, or under pressure, who did you talk to about it?

You may tick more than 1 box.
$1 \square$ No one
Please go to Section F
$2 \square$ My family
$3 \square \quad$ My friend(s)
$4 \square$ Teachers or school counsellors
$5 \square$ Doctors or other health professionals
$6 \square$ Religious advisors or groups
$7 \quad$ Helpline-Internet etc
$8 \square \quad$ Other person or group (Please describe) $\qquad$
27. If you talked to someone about feeling nervous, stressed, or under pressure, how helpful were they?

Tick 1 box only.

| 1 | $\square$ | Not at all helpful |
| :--- | :--- | :--- |
| 2 | $\square$ | Somewhat helpful |
| 3 | $\square$ | Quite helpful |
| 4 | $\square$ | Very helpful |

## SECTION F

The following questions are about being in trouble because of your behaviour.
28. During the last 6 months, was there a time when you were in trouble because of your behaviour?

Tick 1 box only.

| 1 | $\square$ | No |
| :--- | :--- | :--- |
|  |  | Go to Section $G$ |
| 2 | $\square$ | Yes, at home and at school |
| 3 | $\square$ | Yes, but only at home |
| 4 | $\square$ | Yes, but only at school |

29. When you were in trouble because of your behaviour, how bad was it for you?

Tick 1 box only.

| 1 | $\square$ | Almost more than I can take |
| :--- | :--- | :--- |
| 2 | $\square$ | Quite bad |
| 3 | $\square$ | Worse than usual |
| 4 | $\square$ | About usual |

30. When you were in trouble because of your behaviour, who did you talk to about it?

You may tick more than 1 box.

| 1 | $\square$ | No one <br> Please go to Section $G$ |
| :--- | :--- | :--- |
| 2 | $\square$ | My family |
| 3 | $\square$ | My friend(s) |
| 4 | $\square$ | Teachers or school counsellors |
| 5 | $\square$ | Doctors or other health professionals |
| 6 | $\square$ | Religious advisors or groups |
| 7 | $\square$ | Helpline-Internet, etc. |
| 8 | $\square$ | Other person or group (Please describe) |

$\qquad$
31. If you talked to someone about being in trouble because of your behaviour, how helpful were they?

Tick 1 box only.

| 1 | $\square$ | Not at all helpful |
| :--- | :--- | :--- |
| 2 | $\square$ | Somewhat helpful |
| 3 | $\square$ | Quite helpful |
| 4 | $\square$ | Very helpful |

## SECTION G

The following questions are about study problems that affect your school performance.
32. During the last 6 months, was there a time when you had problems studying at home or school that affected your performance in school tests and other work?

Tick 1 box only.

| 1 | $\square$ | No |
| :--- | :--- | :--- |
|  | $\square$ | Completed-No further questions |
| 2 | $\square$ | Yes, at home and at school |
| 3 | $\square$ | Yes, but only at home |
| 4 | $\square$ | Yes, but only at school |

33. When you were having those study problems, how bad was it for you?

Tick 1 box only.

| 1 | $\square$ | Almost more than I can take |
| :--- | :--- | :--- |
| 2 | $\square$ | Quite bad |
| 3 | $\square$ | Worse than usual |
| 4 | $\square$ | About usual |

34. When you were having those study problems, who did you talk to about it?

You may tick more than 1 box.
$1 \square$ No one
Completed-No further questions
$2 \square$ My family
$3 \square \quad$ My friend(s)
$4 \square$ Teachers or school counsellors
5 Doctors or other health professionals
$6 \square$ Religious advisors or groups
$7 \square$ Helpline-Internet, etc.
$8 \quad$ Other person or group (Please describe) $\qquad$
35. If you talked to someone about having those study problems, how helpful were they?

Tick 1 box only.

| 1 | $\square$ | Not at all helpful |
| :--- | :--- | :--- |
| 2 | $\square$ | Somewhat helpful |
| 3 | $\square$ | Quite helpful |
| 4 | $\square$ | Very helpful |

Thank you very much for your help. You have completed the survey.

## Supplementary B

## SECTIONA

The following questions are about nutrition

1. How many days per week do you usually have something to eat for breakfast?

Tick 1 box only.
1 Rarely or never
$2 \square 1-2$ days
$3 \square$ 3-4 days
45 or more days
9 I don't know
2. What type of milk do you usually have?

Tick 1 box only.
1 Whole milk (including flavoured milk and full-cream soy milk)
$2 \square$ Reduced fat milk (for example, Lite White, Farmer's Best, Hi-Lite, So Good Lite, Oak and reduced fat flavoured milk)
$3 \square$ Skim milk (including Shape)
4 Evaporated or sweetened condensed milk
5 None of the above
9 I don't know
3. In the past week, how many times have you eaten meals that were bought from fast food outlets like McDonalds, Hungry Jacks, Pizza Hut, Kentucky Fried Chicken (KFC), Red Rooster, Burger King, hamburger shops and fish and chip shops?

```
Tick I box only.
    1] None
2\square Once
3\square 2-3 times
4\square 4-5 times
5 6 times or more
9 I don't know
```

4. Do you think of yourself as being too thin, about the right weight, or too fat?
$1 \square$ Too thin (underweight)
2 About the right weight
3 Too fat (overweight)
5. Which of the following are you trying to do about your weight?

Tick 1 box only.
1 Lose weight
2
3 Gain weight
4 I $\quad$ I am the same weight trying to do anything about my weight

## SECTION B

The following questions are about physical activity. The next question is about the types of activities that you do.
6. Please think about a normal week during this school term (including Saturdays and Sundays). In the table below, please tick the sports, games or other physical activities you usually do, and for each of the ticked items write in the total amount of time you spend doing them each week. The time spent doing a sport or game includes the time you spend training.

If you do not spend time on sports, games or other physical activities then please tick the last item on the list over the page.

For example：The total amount of time you spend doing this activity in a normal week．

| $0 \times \square$ | Basketball | hours＿＿＿minutes |
| :--- | :--- | :--- | :--- |
| $0 \times \square$ | Walking for transport | hours＿＿minutes |

The total amount of time you spend doing this activity in a normal week．

| 01］ | Aerobics | hours | minutes |
| :---: | :---: | :---: | :---: |
| $02 \square$ | Athletics | hours | minutes |
| 03口 | Australian Rules Football | hours | minutes |
| 04］ | Baseball | hours | minutes |
| 05口 | Basketball | hours | minutes |
| 06口 | Boxing | hours | minutes |
| 07］ | Bushwalking | hours | minutes |
| 08］ | Cricket | hours | minutes |
| 09］ | Cycling | hours | minutes |
| $10 \square$ | Dancing | hours | minutes |
| 110 | Golf | hours | minutes |
| 12口 | Gymnastics | hours | minutes |
| 13口 | Gym－weights workout | hours | minutes |
| 14］ | Handball | hours | minutes |
| 15口 | Hockey | hours | minutes |
| 16口 | Horseriding | hours | minutes |
| 17］ | Iceskating | hours | minutes |
| 18］ | Jogging | hours | minutes |
| $19 \square$ | Martial Arts（Judo etc．） | hours | minutes |
| $20 \square$ | Mountain biking | hours | minutes |
| 21］ | Netball | hours | minutes |
| $22 \square$ | Rollerblading | hours | minutes |
| 23口 | Rowing | hours | minutes |
| 24］ | Rugby League | hours | minutes |
| 25口 | Rugby Union | hours | minutes |
| 26口 | Sailing（board－dinghy） | hours | minutes |
| 270 | Skateboarding | hours | minutes |
| 28］ | Snow skiing | hours | minutes |
| $29 \square$ | Snowboarding | hours | minutes |
| $30 \square$ | Soccer | hours | minutes |
| $31 \square$ | Softball | hours | minutes |
| $32 \square$ | Squash | hours | minutes |
| $33 \square$ | Surfing | hours | minutes |
| 34］ | Swimming | hours | minutes |
| 35］ | Tennis | hours | minutes |
| 36口 | Touch football | hours | minutes |
| $37 \square$ | Triathlon | hours | minutes |
| $38 \square$ | Volleyball | hours | minutes |
| $39 \square$ | Walking for transport | hours | minutes |
| 40］ | Walking for pleasure | hours | minutes |

If you do other sports，games or physical acticities please write them in the spaces below
41］Any other sport
$\qquad$
$\qquad$ minutes
42．Any other sport
43口 Any other sport
$\qquad$
$\qquad$ hours $\qquad$ minutes
$\qquad$ hours $\qquad$ minutes
44 I do not spend any time on sports，games or physical actitivities．
7. During the school term, how many hours a day on average do you usually watch TV, videos or DVDs?
a) On Monday to Friday

Tick 1 box only.
$1 \square$ Not at all
2 1 hour or less a day
$3 \square 2$ hours a day
4 3 hours a day
54 hours a day
65 hours or more a day
b) On Saturday and Sunday

Tick 1 box only.
1 Not at all
$2 \square 1$ hour or less a day
$3 \square 2$ hours a day
4 hours a day
54 hours a day
65 hours or more a day
8. During the school term, how many hours a day on average do you usually use computers for entertainment or to play video games (for example. surfing the net, Playstations, Nintendos)?
a) On Monday to Friday

Tick 1 box only.
1 Not at all
$2 \square 1$ hour or less a day
$3 \square 2$ hours a day
4 3 hours a day
5 - 4 hours a day
$6 \square 5$ hours or more a day
b) On Saturday and Sunday

Tick 1 box only.
1 Not at all
$2 \square 1$ hour or less a day
$3 \square 2$ hours a day
4 hours a day
54 hours a day
65 hours or more a day
9. During the school term, how many hours a day on average do you usually use computers for study or school work?
a) On Monday to Friday

Tick 1 box only.
1 Not at all
$2 \square 1$ hour or less a day
$3 \square 2$ hours a day
$4 \square 3$ hours a day
54 hours a day
$6 \square 5$ hours or more a day
b) On Saturday and Sunday

Tick 1 box only.
1 Not at all
$2 \square 1$ hour or less a day
$3 \square 2$ hours a day
4 - 3 hours a day

5 4 hours a day
65 hours or more a day

## SECTION C

The following questions are about injury
10. In the past 6 months have you hurt yourself or had an injury for which you had to see a doctor, physiotherapist or another health professional?

```
1.\square No
        Go to Question 13
2\square Yes
        Go to Question 11
```

11. Where were you when the most recent injury requiring medical attention happened?

1] At school
2 At home
$3 \square$ At a sports facility
4 On a street or road
5 At a place for shopping or leisure
6 At a place of employment
8 Any other type of place (please specify) $\qquad$
12. What were you doing when the most recent injury requiring you to seek attention from a health professional occurred?

You may tick more than 1 box.
$1 \square$ School activity (including school sport)
2 Sport (playing or training; excludes school sport)
$3 \square$ Leisure or play
4 Working for money
5 Doing any other activity
13. In the last 12 months have you been injured participating in any of the following sports, games or physical activities, either organised or non-organised?

Put a tick against all the sports you were injured in.

| 10 | No injuries |  |
| :--- | :--- | :--- |
| $02 \square$ | Aerobics |  |
| $03 \square$ | Athletics |  |
| $04 \square$ | Australian Rules Football |  |
| $05 \square$ | Baseball |  |
| $06 \square$ | Basketball |  |
| $07 \square$ | Boxing |  |
| $08 \square$ | Bushwalking |  |
| $09 \square$ | Cricket |  |
| $10 \square$ | Cycling |  |
| $11 \square$ | Dancing |  |
| $12 \square$ | Golf |  |
| $13 \square$ | Gymnastics |  |
| $14 \square$ | Gym-weights workout |  |
| $15 \square$ | Handball |  |
| $16 \square$ | Hockey |  |
| $17 \square$ | Horseriding |  |
| $18 \square$ | Iceskating |  |
| $19 \square$ | Jogging | continued overleaf |
| $20 \square$ | Martial arts |  |
| $21 \square$ | Mountain biking |  |
| $22 \square$ | Netball |  |


| $23 \square$ | Rollerblading |
| :--- | :--- |
| 24 | Rowing |
| $25 \square$ | Rugby League |
| $26 \square$ | Rugby Union |
| $27 \square$ | Sailing |
| $28 \square$ | Skateboarding |
| $29 \square$ | Snow Skiing |
| $30 \square$ | Snowboarding |
| $31 \square$ | Soccer |
| $32 \square$ | Softball |
| 33 | Squash |
| 34 | Surfing |
| 35 | Swimming |
| $36 \square$ | Tennis |
| 37 | Touch football |
| $38 \square$ | Triathlon |
| $39 \square$ | Volleyball |
| $40 \square$ | Walking for transport |
| $41 \square$ | Walking for pleasure |
| $98 \square$ | Any other activity（Please specify） |

14．What types of injuries did you have when you were injured in these sports in the past 12 months？
Tick all those you experienced．
1 Joint injury
$2 \square$ Muscle strain or bruise
3－Cut
$4 \square$ Knocked out or head injury
5 Broken bone or tooth
$8 \square$ Other（please specify） $\qquad$
15．What is the risk to you in the following activities？
For each activity，tick the box which shows the level of risk involved．Please tick 1 box in each line． No risk A little A high Don＇t risk level of risk know
a．Riding a bicycle without a helmet
$2 \square$ 3口 9■
b．Playing a game of sport without warming up or stretching

1口
$2 \square$ 3口 $9 \square$
c．Swimming at an unpatrolled beach$2 \square$
$3 \square$ $9 \square$
d．Being a passenger in a vehicle where the driver had been drinking alcohol
e．Playing a contact sport without protective equipment（for example，mouthguards，shin pads）
$2 \square \quad 3 \square \quad 9 \square$
f．Riding a skateboard on a roadway
g．Being a passenger in a vehicle where the driver had been taking drugs
$1 \square$
$2 \square$
$3 \square$
$9 \square$
Thank you very much for your help．You have completed the survey．

## APPENDIX 2: METHOD FOR DEVELOPING DESIGN-BASED WEIGHTS FOR 2002 SURVEY

Initial school selection was based on strata, of which there were six-upper and lower secondary levels of the three school sectors. Within each stratum schools were initially selected with probability proportional to the total number of students in the relevant years. The initial selection of schools was adjusted in two ways. In Hunter and Central Sydney Areas the sample was boosted to improve the estimates for those areas. In other areas the sample was reduced. There was also substantial non-response at the school level, with replacement schools frequently being approached due to refusal of the first selected school. Essentially the first stage selection probabilities are modified and the corresponding component of the weight should be modified accordingly.

The first stage probability of selection is:

$$
\pi_{j h}=m_{j h} \frac{N_{j h}}{N_{h}}
$$

where $m_{\mathrm{j} \mathrm{h}}$ is a factor reflecting the number of schools selected in the stratum adjusted for each school where necessary for the boosting of the sample in some areas and the reduction of sample in the latter stages of the survey. $\mathrm{N}_{\mathrm{jh}}$ is the number of students at the time of school selection for school j in stratum h , and $\mathrm{N}_{\mathrm{h}}$ is the number of students at the time of school selection in stratum $h$.

If $n_{j h g}$ is the number of students selected in school $j$ in stratum $h$ in year $g$, and $\mathrm{K}_{\mathrm{jhg}}$ is the number of students on the list used to select the sample of students, the probability of selection of a student $i$ in year $g$, conditional on the school being selected, is

$$
\pi_{i \mid j h g}=\frac{n_{j h g}}{K_{j h g}}
$$

The probability of selection of a student is then the product of these two

$$
\pi_{i j h g}=m_{j h} \frac{N_{j h}}{N_{h}} \frac{n_{j h g}}{K_{j h g}} .
$$

The first phase of weighting is accounting for the different chances of selection, which leads to the person selection weight,

$$
w_{i j h g}=\pi_{i j h g}^{-1}=\frac{1}{m_{j h}} \frac{N_{h}}{N_{j h}} \frac{K_{j h g}}{n_{j h g}}
$$

The survey comprised core and two sets of supplementary questions. The selection weight is calculated in the same manner as for the core questions with the achieved sample for the relevant supplement. This leads to weights for supplement A

$$
w_{i j h g A}=\frac{1}{m_{j h}} \frac{N_{h}}{N_{j h}} \frac{K_{j h g}}{n_{j h g A}}
$$

where $n_{j h g \mathrm{~A}}$ is the number of students responding to supplement A. A corresponding weight was calculated for supplement B.

The data were then calibrated to the age and sex distribution of students attending schools with more than 100 students in either upper or lower secondary levels. For government schools, the information was provided by the NSW Department of Education and Training. For independent and catholic schools, the information was provided by Commonwealth Department of Education, Science and Training.

The student population was grouped by age, sex and school sector. These groups are indexed $\mathrm{a} . \mathrm{N}_{\mathrm{a}}$ is the population benchmark of students in group a. The estimate calculated from the selection weights is

$$
\hat{N}_{a}=\sum_{i \in a} w_{i j h g}
$$

leading to the final weight

$$
W_{i j h g}=\frac{N_{a}}{\hat{N}_{a}} w_{i j h g}
$$

As weights for previous years of ASSAD data were presented as scaled weights that sum to the total sample size, the final weights were also scaled:

$$
S W_{i j h g}=\frac{n}{N} W_{i j h g}
$$

where n is the total number of respondents with final weights and N is the sum of their final weights.


[^0]:    Note: Inhalant use includes sniffing spray cans and substances such as glue, paint, petrol or thinners. Hallucinogens include LSD, 'acid', 'trips', magic mushrooms, datura, and angel's trumpet. Estimates are based on 6180 respondents.

