

1998 National Drug Strategy Household Survey

First results

The Australian Institute of Health and Welfare is an independent health and welfare statistics and information agency. The Institute's mission is to inform community discussion and decision making through national leadership in the development and provision of authoritative and timely information on the health and welfare of Australians.

DRUG STATISTICS SERIES

1998 National Drug Strategy Household Survey

First results

August 1999

Australian Institute of Health and Welfare
Canberra

AIHW cat. no. PHE 15

© Australian Institute of Health and Welfare 1999

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced without prior written permission from the Australian Institute of Health and Welfare. Requests and enquiries concerning reproduction and rights should be directed to the Head, Communication and Public Affairs, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601.

This publication is part of the Australian Institute of Health and Welfare's Drug Statistics Series. A complete list of the Institute's publications is available from the Publications Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601, or via the Institute's web site (<http://www.aihw.gov.au>).

ISSN 1442-7230

ISBN 1 74024 005 7

Suggested citation

Australian Institute of Health and Welfare 1999. 1998 National Drug Strategy Household Survey: First results. AIHW cat. no. PHE 15. Canberra: AIHW (Drug Statistics Series).

Australian Institute of Health and Welfare

Board Chair
Professor Janice Reid

Director
Dr Richard Madden

Any enquiries about or comments on this publication should be directed to:

Mark Cooper-Stanbury
Australian Institute of Health and Welfare
GPO Box 570
Canberra ACT 2601

Phone: (02) 6289 7027

Published by Australian Institute of Health and Welfare

Printed by National Capital Printing

Foreword

This report of provisional results from the 1998 National Drug Strategy Household Survey is the first report of a new drugs statistics series for the Australian Institute of Health and Welfare. This report follows the release of selected highlights in March 1999, with the main survey report—subtitled *Correlates of Drug Use*—to be published later in the year. Two further reports will follow, covering drug-related mental and physical health, and detailed State and Territory results.

The Institute managed the conduct of the Survey on behalf of the Commonwealth Department of Health and Aged Care, and custody of the survey data set will rest with the Institute and be protected by the *Australian Institute of Health and Welfare Act 1987*. Access to a public-use data set is being made available through the Social Science Data Archives at the Australian National University, with access to the Institute's data set possible following consideration of research proposals by the Institute's Ethics Committee.

Release of these results within 12 months of the completion of fieldwork represents a substantial contribution to research and debate on the drug-related knowledge, attitudes and behaviours of Australians.

I am pleased that the Institute has been able to assist this important survey on a topic of high policy concern to all governments and the community. Difficult issues on questionnaire design, ethics approval, analysis and release had to be settled practically and quickly.

I want to pay particular tribute to Paul Williams, one of the small Institute team outposted to the Population Health Division, Department of Health and Aged Care, who led the survey management team under the supervision of Mark Cooper-Stanbury, and to the Department's officers who worked closely with them in all phases of the survey.

The participation of over 10,000 Australians in a survey which invited admissions of possibly illegal activities is very much appreciated.

Richard Madden
Director
Australian Institute of Health and Welfare
August 1999

Contents

- List of tables.....ix
- Summary.....xi
- Acknowledgmentsxiii
- Abbreviations and symbols.....xiv
- 1 Introduction.....1
 - The National Drug Strategy1
 - Drug-related harm1
 - About the 1998 survey1
 - Comparisons with 1995 results2
 - About this report.....2
- 2 Overview – the status of drug use in 19984
 - Lifetime use of drugs4
 - Drugs recently used (in the last 12 months).....5
 - Age of initiation – lifetime use6
 - Preferred drugs.....6
 - Drugs thought to be associated with a drug ‘problem’7
 - Acceptability of drug use.....8
 - Support for the legalisation of illicit drugs.....9
 - Nominal distribution of a drugs budget9
 - Support for increased penalties for the sale or supply of illicit drugs10
- 3 Consumption patterns12
 - Tobacco.....12
 - Alcohol.....16
 - Illicit drugs.....19
- 4 Community support for drug-related policy31
 - Introduction.....31
 - Tobacco.....31
 - Alcohol.....32
 - Illicit drugs.....33
- 5 Drug-related activities34
 - Perpetrators of drug-related harm.....34
 - Victims of drug-related harm.....35
- 6 Explanatory notes.....39
 - Introduction.....39

Methodology	39
Response rates	41
Estimation procedures	42
Reliability of estimates	43
Definitions.....	44
Comparability with the 1995 survey.....	45
Appendix 1: Membership of survey committees.....	47
Appendix 2: Standard errors and relative standard errors.....	48
Appendix 3: Population estimates	50
Appendix 4: Survey-related materials.....	51
Appendix 5: The questionnaire	53

List of tables

Table 2.1: Summary of drug use: proportion of the population aged 14 years and over, and mean age of initiation, Australia, 1995, 1998 5

Table 2.2: Preferred drugs of choice, proportion of the population aged 14 years and over, by sex, Australia, 1998..... 6

Table 2.3: Proportion of the population aged 14 years and over who associate specific drugs with a drug ‘problem’, by sex, Australia, 1995, 1998..... 7

Table 2.4: Proportion of the population aged 14 years and over who find regular drug use by adults acceptable, by drug, Australia, 1995, 1998 8

Table 2.5: Proportion of the population aged 14 years and over who support the personal use of selected drugs being made legal, by sex, Australia, 1995, 1998..... 9

Table 2.6: Preferred distribution of a hypothetical \$100 for reducing drug use, selected drugs, Australia, 1995, 1998 10

Table 2.7: Support for increased penalties for the sale or supply of selected illicit drugs, proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998..... 11

Table 3.1: Tobacco smoking status: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998 12

Table 3.2: Tobacco smoking status: proportion of the population aged 14 years and over, by age and sex, Australia, 1998..... 13

Table 3.3: Tobacco: number of tobacco smokers, by status, by age and sex, Australia, 1998 14

Table 3.4: Recent tobacco smokers: number of cigarettes, by smoking status, by age and sex, Australia, 1998..... 15

Table 3.5: Alcohol drinking status: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998 16

Table 3.6: Proportion of the population who are recent alcohol drinkers aged 14 years and over, by drinking status, by age and sex, Australia, 1998 17

Table 3.7: Alcohol consumption: numbers of recent alcohol drinkers, by drinking status, by age and sex, Australia, 1998..... 17

Table 3.8: Quantity of alcohol consumed by frequency of consumption, proportion of recent alcohol drinkers aged 14 years and over, by sex, Australia, 1998... 18

Table 3.9: Use of any illicit drug: proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998 19

Table 3.10: Any illicit drug: number of recent users, by age and sex, Australia, 1998..... 21

Table 3.11: Use of marijuana/cannabis: proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998..... 22

Table 3.12: Marijuana/cannabis: number of recent users, by age and sex, Australia, 1998..... 23

Table 3.13: Use of heroin: proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998	24
Table 3.14: Heroin: number of recent users, by age and by sex, Australia, 1998.....	25
Table 3.15: Use of injecting drugs: proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998	26
Table 3.16: Injecting drug use: number of recent users, by age and by sex, Australia, 1998	27
Table 3.17: Injecting drug use: first and recent illicit drugs injected, proportion of the population aged 14 years and over, by sex, Australia, 1998	28
Table 3.18: Source of first and recent supply of illicit drugs, by drug, Australia, 1998 ...	29
Table 3.19: Persons under 18 years: first and recent suppliers of tobacco and alcohol, by sex, Australia, 1998.....	30
Table 4.1: Support for tobacco measures: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998.....	31
Table 4.2: Support for alcohol measures: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998.....	32
Table 4.3: Support for heroin measures: proportion of the population aged 14 years and over, by sex, Australia, 1998	33
Table 5.1: Activities undertaken while under the influence of alcohol or other drugs in the past 12 months, by sex, Australia, 1995, 1998	34
Table 5.2: Proportion of the population aged 14 years and over who have been victims of alcohol or other drug-related incidents, by sex, Australia, 1995, 1998	35
Table 5.3: Number of victims of alcohol-related incidents, by age and sex, Australia, 1998	37
Table 5.4: Most serious injury sustained as a result of alcohol or other drug-related incidents, by sex, Australia, 1998	37
Table 5.5: Number of persons sustaining injuries as a result of alcohol or other drug-related incidents, by age, Australia, 1998.....	38
Table 6.1: Comparison of sample and State/Territory population distributions.....	40
Table 6.2: Comparison of the sample and estimated population distributions.....	41
Table 6.3: Response characteristics, 1998 (by sample) and 1995	41
Table 6.4: Comparison of weighted sample to population estimates distributions	42
Table A2.1: Standard errors (SE) and relative standard errors (RSE) relating to Australian totals, and males and females	48
Table A2.2: Standard errors (SE) and relative standard errors (RSE) relating to age groups.....	49
Table A3.1: Population estimates, by age and sex, Australia, 1998.....	50

Summary

The 1998 National Drug Strategy Household Survey

Between June and September 1998, 10,030 Australians aged 14 years and older participated in the National Drug Strategy Household Survey. This was the sixth survey in a series which commenced in 1985, but was the first to be managed by the Australian Institute of Health and Welfare. Respondents were asked about their knowledge of drugs, their attitudes towards drugs, their drug consumption histories and related behaviours.

General findings

Compared with 1995, there appears to be slightly higher use in 1998 across all illicit drugs groups included in the survey, both in terms of lifetime use (that is, used at any time in one's life) and recent use (used in the last 12 months). Such consistent changes in lifetime and recent use of tobacco and alcohol were not evident.

Young females accounted for a large part of the overall increases in use of illicit substances (notably marijuana/cannabis), and it appears that for some substances female use is now on a par with use by males.

Tobacco

Tobacco was primarily associated with a drug 'problem' by fewer than one in twenty Australians; two in every five approved of the regular use of tobacco by adults, and four in every five persons approved of measures designed to reduce the harms associated with tobacco use. Two-thirds of Australians had tried tobacco at some time in their lives, and fewer than one in four were recent smokers.

One in seven persons indicated that tobacco was their first drug of choice, and the proportion recently smoking daily or most days declined by two percentage points between 1995 and 1998 to 22%. The average age at which smokers took up tobacco increased from 15.6 to 15.8 years in the same period. Under-age smokers (that is, persons aged under 18, to whom it is illegal to sell tobacco products) were likely to have been introduced to smoking by friends and acquaintances. Subsequently, two out of every five under-age smokers obtained their cigarettes from retail outlets.

Of persons aged 40–49 years who had ever smoked, 60% no longer did so.

Alcohol

About one in every seven Australians primarily associated alcohol with a drug 'problem'; three in every five approved of the regular use of alcohol by adults, and three in every five persons approved of measures designed to reduce the harms associated with alcohol use. Nine out of every ten Australians had tried alcohol at some time in their lives and three-quarters recently consumed alcohol.

Two in every five persons nominated alcohol as their first drug of choice and the proportion drinking regularly increased from 44% to 49% between 1995 and 1998. One in four persons

consumed alcohol daily or on most days in a week, and two in five consumed less often than weekly. Under-age alcohol drinkers (that is persons aged under 18, to whom it is illegal to sell alcohol) were likely to have been introduced to drinking by relatives. Subsequently, almost one in every five under-age drinkers obtained their alcohol from retail outlets.

One in six persons admitted to driving a motor vehicle, one in ten verbally abused someone, and one in fifty persons physically abused someone while under the influence of alcohol. Three in every ten persons had been verbally abused and one in every sixteen had been physically abused by someone who had been affected by alcohol.

Illicit drugs

More than three in every four Australians primarily associated an illicit drug with a drug 'problem'; one in four approved the regular use of marijuana by adults, and fewer than one in twenty persons approved the regular use of each of the other illicit drugs included in the survey. Almost one in every two Australians had used an illicit drug at some time in their lives and over one in five had used illicit drugs in the previous 12 months. One in every two persons supported measures designed to reduce harm associated with illicit drug use.

Around one in fourteen persons nominated any illicit drug as their first drug of choice, with one in eighteen nominating cannabis/marijuana as first choice. The average age at which new users first tried illicit drugs declined slightly from 16.8 years in 1995 to 16.6 years in 1998. Four in every five illicit drug users were introduced to illicit drugs by friends and acquaintances. Subsequently, most illicit drug users continued to obtain their illicit drugs from friends and acquaintances. One in sixteen persons drove a motor vehicle, one in fifty verbally abused someone, and one in two hundred physically abused someone while under the influence of illicit drugs. One in ten persons were verbally abused and one in forty were physically abused by someone affected by illicit drugs.

Acknowledgments

The 1998 National Drug Strategy Household Survey was a complex undertaking which required the valued input of many individuals and organisations. The assistance of the following is particularly appreciated.

The Commonwealth Department of Health and Family Services (now the Department of Health and Aged Care) Policy Reference Group and The Survey Technical Advisory Committee (refer to Appendix 1), were the main steering committees.

From the Department of Health and Aged Care:

Malcolm Wares

Cheryl Wilson

Roger Hughes

From The Roy Morgan Research Centre:

Bruce Packard

Tory Watson

Peter Grant

Sergey Dorofeev

From Hermes Presica Ltd:

Stephen Holmes

Anoop Dhankor

From Qualitative Evaluation and Design:

Roger Jones

From the Australian Institute of Health and Welfare:

Paul Williams

Amber Summerill

Mark Cooper-Stanbury

Karl Higgins

Funding

Funding for the project was provided principally by the Commonwealth Department of Health and Aged Care (formerly the Department of Health and Family Services).

Additional funds were provided by the Health Department of New South Wales, the Queensland Department of Health, the Victorian Department of Human Services, the Department of Community and Health Services Tasmania, and the ACT Department of Health and Community Care.

Abbreviations and symbols

Abbreviations

AIHW	Australian Institute of Health and Welfare
CURF	Confidentialised unit record file
DHFS	Department of Health and Family Services
NCADA	National Campaign Against Drug Abuse
NDS	National Drug Strategy
SE	Standard error
RSE	Relative standard error

Symbols

–	nil or rounded to zero
..	not applicable
n.a.	not available
m	million

1 Introduction

The National Drug Strategy

The National Drug Strategy (NDS) is a comprehensive, integrated approach to the harmful use of licit and illicit drugs and other substances. The NDS is managed under the direction of the Ministerial Council on Drug Strategy (MCDS) which brings together Commonwealth, State and Territory Ministers responsible for health and law enforcement to collectively determine national policies and programs designed to reduce the harm caused by drugs to individuals, families and communities in Australia (MCDS 1998).

The Strategy aims to improve health, social and economic outcomes by preventing the uptake of harmful drug use and reducing the harmful effects of licit and illicit drugs in Australian society. Both licit and illicit drugs are the focus of Australia's harm-minimisation strategy. Harm minimisation includes preventing anticipated harm as well as reducing actual harm. Harm minimisation is therefore consistent with a comprehensive approach to drug-related harm, involving a balance between demand-reduction, supply-reduction and harm-reduction strategies.

Drug-related harm

The Institute estimates that in 1997 over 22,000 deaths and more than a quarter of a million hospital episodes were drug-related. The licit drugs (tobacco and alcohol) accounted for over 96% of the drug-related deaths and hospitalisations. The estimated direct health care cost of drug dependence and harmful use in Australia in 1992 was \$1.0 billion; \$833 million for tobacco; \$145 million for alcohol; and \$43 million for illicit drugs (Collins & Lapsley 1996). More recently, the Institute estimates that in 1993-94 the direct health system cost of the management of substance abuse disorders was \$274 million (this does not include the cost of managing other conditions attributable to the use of tobacco, alcohol and illicit drugs).

About the 1998 survey

The 1998 National Drug Strategy Household Survey was the most comprehensive survey concerning licit and illicit drug use ever undertaken in Australia. It gathered information from over 10,000 persons aged 14 years and over. The sample was based on households, therefore homeless and institutionalised persons were not included in the survey (consistent with the approach in previous years).

The survey comprised questions on drug-related knowledge, awareness, attitudes, use and behaviours. It was the sixth survey conducted under the auspices of the NDS. Previous surveys were conducted in 1985, 1988, 1991, 1993 and 1995. An Indigenous (urban) supplement survey was conducted in 1994. The data collected in these surveys contribute to the development of policies for Australia's response to drug issues.

Comparisons with 1995 results

This survey introduced a number of methodological enhancements that could potentially affect comparison with previous survey results. A discussion of the main differences between the 1995 and 1998 surveys is in chapter 6. One of these changes (cross-validation between lifetime and recent use) may have systematically produced marginally higher prevalence estimates than if the 1995 methodology was used. However, the Technical Advisory Committee considered that the slight loss of comparison with 1995 was more than compensated for by the increase in the reliability of 1998 estimates.

Notwithstanding, most of the differences in prevalence estimates between 1995 and 1998 are real differences (within usual statistical tolerance limits).

The results are also consistent with an expectation that overall prevalences will be higher due to the experience of age cohorts that have been successively more exposed to the substantial increases in acceptability of and access to recreational drugs that began in the late 1960s. As these higher-prevalence cohorts are added to the sample, and cohorts with lower experience are removed (due to death corresponding with older age), then the overall prevalence of lifetime use will increase. The reversal of this trend will occur only if there is a radical reduction in the prevalences among younger cohorts introduced into subsequent survey samples.

About this report

Data presented in this report are based on estimates derived from responses weighted to the Australian population aged 14 years and over. Unless otherwise specified, the base for all estimates is the number of respondents who answered the relevant question(s) in the survey instrument. All results in this report are provisional, pending finalisation of sample weightings. This is expected to result in minimal changes to the estimates presented in this report.

In the 1995 survey report, some tables included a 'Don't know/not stated' response category. Where these types of response are compared with 1998, the 1995 results were recalculated to be comparable with the 1998 analysis. Missing cases were excluded and responses were rebased to 100%.

The report contains chapters on summary measures, patterns of consumption, drug-related harm and policy support. A background chapter (Explanatory notes) and estimates of sampling errors (Appendix 2) are also provided. A copy of the survey instrument is provided in Appendix 5. In most instances, the proportions reporting use and knowledge of and attitudes about drugs, or drug-related behaviours, are presented first. These are followed by estimates of the population for the same measures. Prevalences and population estimates are provided for information, regardless of their levels of statistical reliability. For a number of the measures of low prevalence behaviours (e.g. use of injecting drugs), resultant estimates are more likely to be statistically unreliable than the same measures of high prevalence behaviours (e.g. alcohol consumption).

Readers are reminded, therefore, that in interpreting results, reference should always be made to the tables of standard and relative standard errors (Appendix 2). Results subject to relative standard errors of between 25% and 50% should be considered with caution and those with relative standard errors greater than 50% should be considered as unreliable for most practical purposes.

2 Overview—the status of drug use in 1998

The drugs most preferred, approved of, and used most by Australians were the licit drugs: tobacco and alcohol. Overwhelmingly, the use of illicit drugs was not approved of and increased penalties for the sale and supply of these drugs were supported. Most Australians did not want illicit drugs legalised and illicit drugs were more likely than licit drugs to be associated with the concept of a drug ‘problem’.

Lifetime use of drugs

In 1998 the drugs most commonly tried in the Australian community were tobacco and alcohol (Table 2.1). With the exception of marijuana/cannabis, the proportion of the population that had used illicit drugs at some time in their life, although increasing slightly over rates in 1995, was relatively low.

- Almost two-thirds (65%) of Australians aged 14 years and older in 1998 had tried smoking **tobacco**, which shows no difference from 1995 (65%).
- Nine out of every ten (90%) persons had tried **alcohol** in 1998. This was an increase of 2 percentage points over rates in 1995 (88%).
- **Marijuana/cannabis** had been tried by two in every five Australians aged 14 years or older in 1998, an increase of 8 percentage points over rates in 1995.
- The proportions ever using **tranquillisers/sleeping pills** for non-medical purposes doubled from 3% in 1995 to 6% in 1998.
- The lifetime use of **ecstasy** (or other designer drugs) also doubled in 1998 (5%), compared with 1995 (2%).
- Lifetime use of **amphetamines** increased by over 50%, from slightly less than 6% in 1995 to just under 9% in 1998.
- The lifetime use of other illicit drugs, including **heroin and cocaine** also increased between 1995 and 1998, but at lower levels.
- The proportion of Australians aged 14 years or older that had ever **injected illicit drugs** almost doubled between 1995 and 1998.

Table 2.1: Summary of drug use: proportion of the population aged 14 years and over, and mean age of initiation, Australia, 1995, 1998

Drug/behaviour	Lifetime use		Recent use ^(a)		Mean age of initiation	
	1995	1998	1995	1998	1995	1998
	(per cent)				(years)	
Tobacco	64.8	65.4	27.1	26.4	15.6	15.7
Alcohol	87.8	89.6	78.3	80.7	17.3	17.1
Illicits						
Marijuana/cannabis	31.1	39.3	13.2	17.9	19.1	18.7
Analgesics ^(b)	12.3	11.4	3.5	5.2	19.0	19.7
Tranquillisers ^(b)	3.2	6.2	0.6	3.0	23.8	23.4
Steroids ^(b)	0.6	0.8	0.2	0.2	18.7	21.6
Barbiturates ^(b)	1.2	1.6	0.2	0.2	18.2	19.7
Inhalants	2.4	3.9	0.4	0.8	16.1	17.5
Heroin	1.4	2.2	0.4	0.7	20.6	21.5
Methadone ^(c)	^(d)	0.5	^(d)	0.2	^(d)	21.6
Amphetamines ^(b)	5.8	8.7	2.1	3.6	20.2	19.9
Cocaine	3.4	4.3	1.0	1.4	21.1	22.3
Hallucinogens	5.5	10.0	1.8	3.0	19.1	18.8
Ecstasy, designer drugs	2.4	4.7	0.9	2.4	22.7	22.7
Injected illegal drugs	1.3	2.1	0.6	0.7	^(d)	20.7
<i>Any illicit</i>	39.3	46.0	17.0	22.0	18.9	18.8
None of the above	8.1	6.7	17.8	14.2

(a) Used in the last 12 months.

(b) For non-medical purposes.

(c) Non-maintenance.

(d) Not asked in 1995.

Drugs recently used (in the last 12 months)

Between 1995 and 1998, proportions of persons recently (in the last 12 months) using tobacco decreased slightly, using alcohol increased slightly, and increased for most illicit drugs.

- Between 1995 (27%) and 1998 (26%) there was a slight decline in the proportions of persons recently **smoking**.
- The proportion of the population recently using **alcohol** increased from 78% in 1995 to 81% by 1998.
- Slightly fewer than one in five (18%) persons aged 14 years and over consumed **marijuana/cannabis** in the 12 months prior to the survey, compared with 13% in 1995.
- The proportions of persons using common **pharmaceuticals** for non-medical purposes in the 12 months prior to the survey increased, from less than 4% in 1995 to over 5% in 1998 (**analgesics**); and from less than 1% to 3% for **tranquillisers**.
- The use of **amphetamines** and **ecstasy** (or other designer drugs) almost doubled from 2% to just under 4%, and from 1% to over 2% respectively, between 1995 and 1998;
- **Hallucinogen** use increased from 2% in 1995 to 3% in 1998.
- Recent use of **heroin** and/or **cocaine** also increased between 1995 and 1998.

Age of initiation—lifetime use

The mean ages at which Australians first used drugs remained stable for most drugs between 1995 and 1998. Exceptions included:

- **steroids**, where the mean age at which persons first used the drug increased from 19 to 22 years;
- **inhalants**, where the mean age of first use increased from 16 to 18 years; and
- **heroin** and **cocaine**, where age at first use also increased.

The mean age of first use is affected by a number of factors including the increased opportunities to try a drug as persons age (older persons have had more life years than younger persons in which to try); the availability and popularity of the drug at different times; and population momentum.

Population momentum refers to the movement of age cohorts with previous exposure rates into older age groups. Their contribution to the mean age of first use tends to dilute and disguise the ages at which new users enter the population which uses drugs. If the older cohorts are excluded from the analyses, the mean ages for new users between 1995 and 1998 are approximately 1 to 2 years below those indicated for all users, and for alcohol and illicit substances, but do not differ substantially for tobacco.

Preferred drugs

In 1998 respondents to the survey were asked what their favourite or preferred drug was and, if it was not available, what their second choice was. Most Australians aged 14 years and over preferred alcohol or tobacco to illicit drugs, or no drugs at all, with females more likely than males to show a preference for no drugs at all (Table 2.2).

Table 2.2: Preferred drugs of choice, proportion of the population aged 14 years and over, by sex, Australia, 1998

Drug	Males		Females		Persons	
	First choice	Second choice	First choice	Second choice	First choice	Second choice
	(per cent)					
Tobacco	14.6	9.9	17.5	9.2	16.1	9.6
Alcohol	50.8	19.2	37.1	17.9	43.8	18.6
Marijuana/cannabis	5.5	8.7	3.1	6.9	4.3	7.9
Steroids ^(a)	0.1	0.2	–	–	–	0.1
Inhalants	–	0.1	–	–	–	–
Heroin	0.3	0.2	–	0.2	0.2	0.2
Methadone ^(b)	–	0.1	–	–	–	0.1
Other opiates	0.1	–	–	0.1	–	0.1
Amphetamines ^(a)	0.2	1.0	0.2	0.6	0.2	0.8
Cocaine	0.1	0.5	0.2	0.4	0.1	0.5
Hallucinogens	0.3	0.6	0.1	0.5	0.2	0.6
Ecstasy	0.7	0.6	0.5	0.3	0.6	0.4
Benzodiazepines ^(a)	–	0.1	–	0.1	–	0.1
None	27.3	58.7	41.3	63.8	34.4	61.1

(a) For non-medical purposes.

(b) Non maintenance.

- In 1998 **alcohol** was the first preference drug for over two in every five (44%) persons, and second choice of almost a further one in five (19%). Males (51%) were more likely than females (37%) to nominate alcohol as their first preference.
- The drug nominated as first preference most often after alcohol was **tobacco**, with approximately one in six (16%) Australians aged 14 years or older indicating it as a first preference, with females (18%) more likely than males (15%) preferring tobacco.
- Just over one-third (34%) of all persons preferred **no drug** at all as first preference, and almost two-thirds (61%), had no preference beyond their primary choice. Females were more likely than males to prefer no drugs.
- **Marijuana/cannabis** was the first drug of choice for 4%. A further 8% nominated marijuana/cannabis as their second drug of choice, with males more likely than females to indicate these preferences.
- Less than 1% of Australians nominated **other drugs** as either first or second preferences and for most drugs, they did so at rates of less than 0.5%.

Drugs thought to be associated with a drug ‘problem’

Respondents were asked to name the drug they thought of when people talked about a drug ‘problem’. Between 1995 and 1998 there was a major shift in public perceptions of which drugs were primarily associated with a drug ‘problem’. In 1998 heroin was nominated first by the greatest proportion of people (37%) overtaking marijuana/cannabis (21%) (Table 2.3).

Table 2.3: Proportion of the population aged 14 years and over who associate specific drugs with a drug ‘problem’, by sex, Australia, 1995, 1998

Drug first nominated	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Tobacco	4.4	4.3	4.9	4.0	4.6	4.2
Alcohol	14.6	14.9	12.0	13.3	13.3	14.1
Marijuana/cannabis	30.7	20.7	30.0	21.3	30.4	21.0
Pain killers/analgesics	0.9	0.4	1.4	0.5	1.1	0.4
Tranquillisers/sleeping pills	1.0	0.5	1.9	0.9	1.4	0.7
Steroids	0.1	0.4	–	0.3	0.1	0.3
Barbiturates	0.4	0.2	0.6	0.2	0.5	0.2
Inhalants	0.1	0.2	0.2	0.3	0.2	0.3
Heroin	28.2	37.5	28.3	37.2	28.2	37.4
Amphetamines	3.1	13.2	3.8	12.6	3.5	12.9
Cocaine	6.5	3.9	6.0	4.0	6.2	3.9
Naturally occurring hallucinogens	–	0.4	0.1	0.3	–	0.3
LSD/synthetic hallucinogens	0.8	0.5	1.0	1.7	0.9	1.1
Ecstasy/designer drugs	–	1.1	0.2	1.3	0.1	1.2
Tea/coffee/caffeine	0.2	0.3	0.3	0.3	0.2	0.3
Drugs other than listed	6.4	1.1	7.8	1.1	7.1	1.1
None/can't think of any	2.4	0.5	1.7	0.8	2.0	0.6

Note: In 1995 the question was open-ended; in 1998 as a fixed list.

Of the drugs 'first thought of' as associated with a drug problem:

- **Heroin** was nominated by over one in three (37%) persons in 1998, an increase of 9 percentage points over the rate in 1995 (28%).
- The proportion of respondents first nominating **amphetamines** tripled from 4% to 13% in the same period, with males and females approximately equal in their perceptions in 1998.
- In contrast, **marijuana/cannabis** was nominated first by 21% of respondents in 1998, 9 percentage points lower than in 1995 (30%). The decrease was consistent for both males and females.
- **Cocaine** was perceived to be the first drug associated with a drug 'problem' by fewer persons in 1998 (4%) than in 1995 (6%). There were no differences between males and females.
- **Other drugs** were perceived as primarily associated with a drug 'problem' by similar proportions in 1998 as in 1995.

Acceptability of drug use

In 1998 the licit drugs – tobacco and alcohol – were considered the most acceptable for regular use by adults by two out of five and three out of five Australians, respectively (Table 2.4). With the exception of marijuana/cannabis, fewer than one in ten Australians aged 14 years or older in 1998 thought that regular use by adults of illicit drugs was acceptable.

Table 2.4: Proportion of the population aged 14 years and over who find regular drug use by adults acceptable, by drug, Australia, 1995, 1998

Drug	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Tobacco	40.6	41.8	38.3	38.6	39.5	40.2
Alcohol	63.5	67.7	47.5	55.1	55.4	61.3
Marijuana/cannabis	28.8	30.4	18.6	20.9	23.6	25.6
Pain killers/analgesics ^(a)	7.4	10.3	5.3	8.8	6.4	9.5
Tranquillisers/sleeping pills ^(a)	4.2	7.2	2.5	3.8	3.3	5.5
Steroids ^(a)	2.3	3.9	0.8	0.9	1.5	2.4
Barbiturates ^(a)	2.1	2.7	1.6	0.7	1.8	1.6
Inhalants	0.9	1.7	0.8	0.3	0.8	1.0
Heroin	2.5	2.8	1.5	0.8	2.0	1.8
Methadone ^(b)	(c)	2.8	(c)	0.8	(c)	1.8
Amphetamines	2.6	4.7	1.4	1.7	2.0	3.1
Cocaine	2.1	3.8	1.1	1.1	1.6	2.4
Naturally occurring hallucinogens	4.6	6.4	2.3	2.2	3.5	4.3
LSD/synthetic hallucinogens	3.2	4.4	1.2	1.5	2.1	2.9
Ecstasy/designer drugs	3.1	5.1	1.1	1.5	2.1	3.3

(a) Non-medical use.

(b) Non-maintenance.

(c) Not asked in 1995.

- Regular use of **alcohol** by adults was considered acceptable by almost two-thirds (61%) of Australians aged 14 years or older in 1998, an increase of 6 percentage points compared with 1995 (55%). Females were less likely than males in both 1995 and 1998 to consider the regular use of alcohol to be acceptable.
- Regular use of **tobacco** by adults was considered acceptable by the same proportion of persons in 1998 (40%) as in 1995 (40%). Similar proportions of males and females considered such use acceptable.
- More than one in four (26%) Australians aged 14 years or older considered the regular use of **marijuana/cannabis** was acceptable in 1998, an increase of 2 percentage points over 1995 (24%). Males were more likely than females, in both 1995 and 1998, to consider the regular use of marijuana/cannabis by adults acceptable.
- Proportions of fewer than one in ten persons, for most drugs much less so, thought the regular use of **other drugs** by adults was acceptable.

Support for the legalisation of illicit drugs

Between 1995 and 1998, support for the legalisation of illicit drugs remained stable, or (very) marginally increased (Table 2.5).

Table 2.5: Proportion of the population aged 14 years and over who support the personal use of selected drugs being made legal, by sex, Australia, 1995, 1998

Drug	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Marijuana/cannabis	30.1	33.7	27.0	25.6	28.5	29.6
Heroin	5.9	8.4	5.6	6.3	5.8	7.3
Amphetamines/ speed	4.2	6.8	4.4	4.8	4.3	5.7
Cocaine	4.4	6.9	4.9	5.1	4.7	6.0

- The legalisation of **marijuana/cannabis** was supported by fewer than one-third of Australians in both 1995 (29%) and 1998 (30%). Males (34%) were more likely than females (26%) to support legalisation.
- Support for the legalisation of **heroin, cocaine** and **amphetamines** increased by between 1 and 2 percentage points between 1995 and 1998, but the levels remained at fewer than one in ten Australians supporting legalisation.

Nominal distribution of a drugs budget

Respondents were asked how they would distribute \$100 to be spent on education, law enforcement and treatment for each of a selected list of drugs (Table 2.6).

Table 2.6: Preferred distribution of a hypothetical \$100 for reducing drug use, selected drugs, Australia, 1995, 1998

Reduction measure	Alcohol		Tobacco		Marijuana/ cannabis		Amphetamines		Heroin/ cocaine	
	1995	1998	1995	1998	1995	1998	1995	1998	1995	1998
	(\$)									
Education	42.20	43.70	51.30	50.20	45.80	45.50	38.60	38.50	35.90	35.50
Treatment	28.40	30.70	29.70	30.40	24.10	25.10	22.80	24.40	23.80	24.90
Law enforcement	29.40	25.60	19.00	19.40	30.20	29.30	38.70	37.10	40.30	39.60

In 1998:

- For tobacco (\$50) and, to a lesser extent, marijuana/cannabis (\$46) and alcohol (\$44), the amount nominated to be spent on education exceeded amounts for both treatment and law enforcement.
- For heroin/cocaine, law enforcement (\$40) attracted the largest component of the \$100 budget, ahead of education (\$36).
- Treatment attracted one-quarter of the \$100 budget for each of the illicit drugs for which a budget distribution was asked, ranking behind education and law enforcement.
- For the licit drugs alcohol and tobacco, almost one-third of the budget was allocated to treatment, ahead of law enforcement.

Between 1995 and 1998:

- The proportion of \$100 preferred to be spent on **education** decreased from \$51.30 in 1995 to \$50.20 in 1998 for tobacco; and from \$35.90 to \$35.50 for heroin/cocaine, and increased from \$42.20 to \$43.70 for alcohol.
- The proportion of \$100 preferred to be spent on **treatment** increased from \$28.40 in 1995 to \$30.70 in 1998 for alcohol; from \$22.80 to \$24.40 for amphetamines; from \$23.80 to \$24.90 for heroin/cocaine; and remained relatively stable for tobacco.
- The proportion of \$100 preferred to be spent on **law enforcement** decreased from \$29.40 in 1995 to \$25.60 in 1998 for alcohol; from \$30.20 to \$29.30 for marijuana/cannabis; and from \$38.70 to \$37.10 for amphetamines.

Support for increased penalties for the sale or supply of illicit drugs

In 1998 respondents were asked to consider to what extent they would support or oppose increased penalties for the sale or supply of a selected group of illicit drugs.

Between 1995 and 1998, there was a decline in the level of support for increased penalties for the sale or supply of illicit drugs (Table 2.7). However, the vast majority of Australians still supported increased penalties in 1998.

Table 2.7: Support^(a) for increased penalties for the sale or supply of selected illicit drugs, proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998

Drug	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Marijuana/cannabis	59.9	55.2	64.9	62.9	62.5	59.1
Heroin	86.0	84.6	88.0	85.4	87.0	85.1
Amphetamines	85.2	81.7	87.8	83.7	86.5	82.7
Cocaine	85.0	83.0	88.0	84.6	86.5	83.8

(a) Support or strongly support.

- Support for increased penalties for the sale or supply of **marijuana/ cannabis** declined from 63% to 59% of Australians between 1995 and 1998. Fewer males (55%) than females (63%) in 1998 supported increased penalties.
- Increased penalties for the sale or supply of **heroin** was supported by 85% of Australians aged 14 years or older in 1998, a decline of 2 percentage points over the level in 1995. There was no difference in levels of support between males and females.
- The sale or supply of **amphetamines** attracted 83% support for increased penalties in 1998, compared with 87% in 1995. Females (84%) were more likely than males (82%) to support increased penalties.
- Support for increased penalties for the supply or sale of **cocaine** declined from 87% in 1995 to 84% in 1998. Females (85%) were more likely than males (83%) to support increased penalties.

3 Consumption patterns

Tobacco

Tobacco is associated with over four in every five drug-related deaths and almost three in every five drug-related hospital episodes. The Institute estimates that tobacco was associated with over 18,000 deaths in 1997 and almost 150,000 hospitalisations. The most frequently occurring tobacco-related conditions were cancers (e.g. lung, oesophageal), ischaemic heart disease and chronic obstructive pulmonary disease. Males are more than twice as likely as females to be hospitalised for, or die from, tobacco-related causes.

Smoking status

The proportion of Australians who were recent (regular and occasional) smokers was similar in both 1995 (27%) and 1998 (26%) (Table 3.1).

Table 3.1: Tobacco smoking status: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998

Smoking status	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Regular ^(a)	25.9	24.6	21.8	20.2	23.8	22.4
Occasional ^(b)	3.7	4.3	3.0	3.7	3.4	4.0
Ex-smokers	40.1	43.0	35.2	36.3	37.6	39.6
Never smoked	30.3	28.1	39.9	39.7	35.2	34.1

(a) Regular: smokes daily/most days.

(b) Occasional: smokes less often than daily/most days.

- The proportion of Australian regular smokers aged 14 years or older declined from 24% in 1995 to 22% in 1998. Males (25%) were more likely than females (20%) to smoke regularly.
- The proportion of occasional smokers increased from 3% in 1995 to 4% in 1998. There were only slight differences in rates of occasional smoking between males and females in 1998.
- The proportion of ex-smokers rose slightly between 1995 (38%) and 1998 (40%), and there was a slight decrease (in this period) in the proportion of persons who had never smoked.

Ages of smokers

In 1998 the age group which had the highest proportion of recent smokers was 20–29 years, and the age group with the lowest proportion was 60 years or older (Table 3.2).

Rates of smoking by younger females were similar to rates in younger males in 1998, further evidence of the apparent sustainability of a trend established in the last decade.

Table 3.2: Tobacco smoking status: proportion of the population aged 14 years and over, by age and sex, Australia, 1998

Smoking status	Age group						All ages
	14–19	20–29	30–39	40–49	50–59	60+	
(per cent)							
Males							
Regular ^(a)	15.8	32.5	28.3	28.7	21.8	14.9	24.6
Occasional ^(b)	8.2	8.0	3.8	1.6	3.0	2.0	4.3
Ex-smokers	27.5	29.0	40.7	44.2	54.4	61.3	43.0
Never smoked	48.6	30.4	27.3	25.5	20.8	21.7	28.1
Females							
Regular ^(a)	16.2	30.2	24.8	22.4	14.8	9.6	20.2
Occasional ^(b)	9.4	6.6	3.6	2.6	2.0	0.3	3.7
Ex-smokers	29.4	31.3	40.4	36.3	43.0	36.2	36.3
Never smoked	45.1	32.0	31.2	38.7	40.2	53.8	39.7
Persons							
Regular ^(a)	16.0	31.4	26.5	25.5	18.2	12.1	22.4
Occasional ^(b)	8.8	7.3	3.7	2.1	2.5	1.1	4.0
Ex-smokers	28.4	30.1	40.6	40.1	48.5	47.9	39.6
Never smoked	46.8	31.2	29.3	32.3	30.8	38.9	34.1

(a) Regular: smokes daily/most days.

(b) Occasional: smokes less often than daily/most days.

- One in four teenagers smoked in 1998, with slightly fewer than one in six (16%) being regular smokers and slightly fewer than one in ten (9%) being occasional smokers. About half (47%) of all teenagers had never smoked.
- Recent smoking rates peaked at 20–29 years, with similar proportions of males (33%) and females (30%) being regular smokers. Less than a third (31%) of persons in this age group had never smoked.
- From ages 30 years and older, males were less likely than females to have never smoked. Fewer than one in four (22%) males aged 60 years or older had never smoked, compared with more than half of females (54%) who had never smoked.

Population estimates of the number of smokers

It is estimated that in 1998 approximately 4 million Australians aged 14 years or older were smokers (Table 3.3).

Table 3.3: Tobacco: number of tobacco smokers, by status, by age and sex, Australia, 1998

Smoking status	Age group						All ages
	14–19	20–29	30–39	40–49	50–59	60+	
Males							
Regular ^(a)	128,100	475,200	418,400	391,400	204,100	195,900	1,813,000
Occasional ^(b)	66,500	117,200	55,500	21,700	27,700	26,300	315,000
Ex-smokers	222,900	424,000	602,100	602,400	508,700	805,100	3,165,100
Never smoked	394,500	444,200	403,400	348,500	194,400	285,300	2,070,200
Females							
Regular ^(a)	129,800	437,500	384,600	319,400	146,900	145,000	1,563,300
Occasional ^(b)	75,700	95,000	55,900	37,000	19,400	5,200	288,200
Ex-smokers	236,000	453,600	627,700	517,300	425,300	546,400	2,806,200
Never smoked	362,300	464,000	484,600	551,600	397,700	812,400	3,072,700
Persons							
Regular ^(a)	257,900	912,700	803,000	710,800	351,000	340,900	3,376,400
Occasional ^(b)	142,100	212,100	111,400	58,700	47,200	31,600	603,200
Ex-smokers	458,900	877,500	1,229,800	1,119,700	934,000	1,351,500	5,971,400
Never smoked	756,800	908,200	888,000	900,100	592,100	1,097,700	5,142,900

(a) Regular: smokes daily/most days.

(b) Occasional: smokes less often than daily/most days.

Note: 'All ages' and 'Persons' may not add up to sum of components due to rounding.

- Over three million Australians were regular smokers in 1998, with a further 603,000 occasional smokers. There were more males (1.8m) than females (1.6m) who were regular smokers.
- Approximately 400,000 teenagers smoked in 1998. There were just over 10,000 more females (205,500) than males (194,600) who smoked.
- The number of ex-smokers (6.0m) and persons who had never smoked (5.1m) exceeded the number of recent smokers in 1998. More females than males had never smoked.

Number of cigarettes smoked

The likelihood of recent smokers smoking less than weekly or smoking more than 20 cigarettes per day was age-related (Table 3.4). Generally, the quantities of cigarettes smoked by female smokers exceeded those of male smokers.

Table 3.4: Recent^(a) tobacco smokers: number of cigarettes, by smoking status, by age and sex, Australia, 1998

Age group	Smoking status							Mean per week
	Less than weekly	Recent occasional			Recent regular			
		1–10 week	11–30 week	31+ week	1–10 day	11–20 day	> 20 day	
Males								
	(per cent)							(number)
14–19	21.9	7.3	5.8	1.1	31.5	20.3	12.1	60
20–29	8.2	9.7	2.1	0.9	30.4	30.7	18.1	81
30–39	7.0	2.0	1.5	1.7	18.6	33.1	36.0	113
40–49	0.6	0.7	4.2	0.3	8.7	49.3	36.1	132
50–59	8.4	1.9	2.4	–	25.0	29.5	32.8	107
60+	4.8	5.4	0.1	2.0	31.3	27.6	28.9	107
All ages	7.4	4.7	2.5	1.0	23.3	33.3	27.8	101
Females								
	(per cent)							(number)
14–19	23.9	12.1	2.8	–	27.4	23.3	10.5	57
20–29	10.2	6.8	0.8	0.7	28.2	34.8	18.5	86
30–39	8.5	3.8	0.9	–	23.3	37.0	26.5	99
40–49	5.7	1.9	0.8	2.7	20.1	27.5	41.3	126
50–59	1.6	9.7	0.6	0.8	27.4	20.8	39.2	113
60+	–	0.3	2.4	–	16.3	32.3	48.6	128
All ages	8.8	5.4	1.2	0.8	24.3	31.2	28.2	100
Persons								
	(per cent)							(number)
14–19	22.9	9.7	4.3	0.5	29.4	21.8	11.3	59
20–29	9.2	8.3	1.5	0.8	29.3	32.6	18.3	83
30–39	7.7	2.8	1.2	0.9	20.8	35.0	31.5	106
40–49	3.0	1.3	2.6	1.5	14.1	39.0	38.6	129
50–59	5.6	5.1	1.7	0.3	26.0	25.9	35.5	109
60+	2.8	3.3	1.1	1.2	25.2	29.5	36.9	115
All ages	8.1	5.1	1.9	0.9	23.8	32.3	28.0	101

(a) Used in the last 12 months.

Note: Base equals all recent smokers.

- The majority of recent smokers smoked 11 or more cigarettes per day, with more than a third of **older smokers** smoking in excess of 20 cigarettes a day.
- One in five (22%) **teenage smokers** smoked between 11 and 20 cigarettes per day, with more females (23%) than males (20%) in the age group smoking at this rate. The mean number of cigarettes smoked per week by teenage males was 60, slightly more than the number for teenage female smokers (57).
- The mean number of cigarettes smoked per week peaked at 129 for smokers aged 40–49 years. Male smokers in this age group smoked, on average, six cigarettes more (132) per week than did females (126).
- Female smokers aged 50 years and older, however, smoked more than their male counterparts. On average, 50–59 year old female smokers smoked six cigarettes per week more, and females aged 60 years or older 21 cigarettes more than male smokers in these age groups.

Alcohol

Alcohol is second only to tobacco in drug-related deaths and hospitalisations. The Institute estimates that in 1997 there were almost 4,000 alcohol-related deaths and just under 100,000 hospital episodes. Principal among alcohol-related causes of deaths and hospital episodes were cirrhosis of the liver, strokes and motor vehicle accidents.

Alcohol drinking status

Between 1995 and 1998 the proportion of Australians who consumed alcohol increased slightly from 78% to 81% (Table 3.5). In the same period there was an increase in the proportion drinking regularly.

Table 3.5: Alcohol drinking status: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998

Drinking status	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Regular ^(a)	55.1	59.1	33.3	38.5	44.0	48.6
Occasional ^(b)	28.2	25.2	40.3	38.7	34.3	32.1
Ex-drinker	8.1	8.7	10.7	10.9	9.5	9.8
Never a full glass of alcohol	8.6	7.0	15.6	11.8	12.2	9.5

(a) Regular: consumes alcohol on at least one day per week.

(b) Occasional: consumes alcohol less often than one day per week.

- The proportion of Australians aged 14 years or older who consumed alcohol on a regular basis increased from 44% in 1995 to 49% in 1998. Males (59%) were more likely than females (39%) to drink regularly.
- The proportion of the population who consumed alcohol on an occasional basis decreased from 34% in 1995 to 32% in 1998. Females (39%) were more likely than males (25%) to drink occasionally.
- The proportions of ex-drinkers remained stable at around 10% between 1995 and 1998.
- The proportion of the population who had never consumed a full glass of alcohol declined from 12% to 10%.

Ages of alcohol drinkers

Between the ages of 20 and 59 years, approximately one in every two persons in 1998 was a regular drinker (Table 3.6).

Table 3.6: Proportion of the population who are recent^(a) alcohol drinkers aged 14 years and over, by drinking status^{(b)(c)}, by age and sex, Australia, 1998

Age group	Males		Females		Persons	
	Regular	Occasional	Regular	Occasional	Regular	Occasional
	(per cent)					
14–19	32.9	37.4	27.1	43.6	30.0	40.5
20–29	63.1	25.8	40.4	44.1	51.9	34.8
30–39	65.0	24.1	44.1	40.6	54.4	32.5
40–49	62.5	23.3	42.7	39.1	52.2	31.5
50–59	61.6	25.4	37.1	41.6	49.1	33.7
60+	58.6	20.3	33.8	26.4	45.7	23.4
All ages	59.1	25.2	38.5	38.7	48.6	32.1

(a) Consumed in the last 12 months.

(b) Regular: consumes alcohol on at least 1 day per week

(c) Occasional: consumes alcohol less often than 1 day per week.

Note: Base equals all recent drinkers.

- Over two-thirds of teenagers were recent drinkers, with three in every ten (30%) being regular drinkers and four in every ten (41%) being occasional drinkers. Male teenagers (33%) were more likely than female teenagers (27%) to be regular drinkers.
- From age 20 onwards, most drinkers in 1998 were regular drinkers. Males were, on average, more than 50% more likely than females in corresponding age groups to be regular drinkers.

Population estimates of the number of alcohol drinkers

It is estimated that in 1998 over 12 million Australians age 14 years or over consumed alcohol in the last 12 months (Table 3.7).

Table 3.7: Alcohol consumption: numbers of recent^(a) alcohol drinkers, by drinking status^{(b)(c)}, by age and sex, Australia, 1998

Age group	Males		Females		Persons	
	Regular	Occasional	Regular	Occasional	Regular	Occasional
14–19	264,300	300,400	217,500	350,100	481,900	650,500
20–29	929,300	380,400	580,100	633,100	1,509,400	1,013,500
30–39	984,600	365,300	687,100	633,200	1,671,700	998,500
40–49	837,100	311,600	619,300	567,400	1,456,400	879,000
50–59	571,400	235,900	360,800	404,100	932,200	639,900
60+	796,100	275,900	491,600	383,900	1,287,600	659,800
All ages	4,382,900	1,869,500	2,956,300	2,971,900	7,339,200	4,841,400

(a) Consumed in the last 12 months.

(b) Regular: consumes alcohol on at least 1 day per week.

(c) Occasional: consumes alcohol less often than 1 day per week.

Note: 'All ages' and 'Persons' may not add up to sum of components due to rounding.

- In 1998 7.3 million Australians were recent regular drinkers and a further 4.8 million Australians were recent occasional drinkers.
- It is estimated that over 1 million teenagers consumed alcohol in 1998. More than 480,000 teenagers were regular drinkers and over 650,000 were occasional drinkers.

- Slightly more female than male teenagers consumed alcohol in 1998, although there were more male teenagers (264,000) than female teenagers (218,000) who were regular drinkers.
- With the exception of the youngest and oldest age groups, the numbers of female regular and occasional drinkers were generally similar. Male drinkers, however, were more likely to be regular than occasional drinkers.

Consumption patterns

In 1998 almost half of all recent drinkers usually consumed 1–2 standard drinks on an occasion when they drank (Table 3.8).

Table 3.8: Quantity of alcohol consumed by frequency of consumption, proportion of recent alcohol drinkers aged 14 years and over, by sex, Australia, 1998

Frequency	Quantity (standard drinks)				Total
	1–2	3–4	5–6	7+	
(per cent)					
Males					
Every day	4.5	5.3	2.8	1.9	14.5
4–6 days/week	4.6	5.8	3.2	2.8	16.4
2–3 days/week	6.4	7.3	3.6	5.7	22.9
1 day/week	3.4	6.0	3.1	4.1	16.6
Less often	17.3	6.5	2.5	3.4	29.7
Total	36.1	30.9	15.1	17.9	100.0
Females					
Every day	3.6	1.8	0.8	0.2	6.4
4–6 days/week	6.0	3.3	0.4	0.3	10.1
2–3 days/week	8.6	4.4	1.3	2.0	16.3
1 day/week	8.6	4.3	2.5	2.4	17.8
Less often	35.4	8.3	3.5	2.2	49.4
Total	62.3	22.2	8.5	7.0	100.0
Persons					
Every day	4.1	3.6	1.8	1.1	10.6
4–6 days/week	5.3	4.6	1.9	1.6	13.3
2–3 days/week	7.5	5.9	2.5	3.9	19.7
1 day/week	5.9	5.2	2.8	3.3	17.2
Less often	26.0	7.4	3.0	2.8	39.2
Total	48.8	26.7	11.9	12.6	100.0

Note: Base equals recent alcohol drinkers.

- Recent male drinkers (14.5%) were more likely to consume alcohol every day than females (6.4%).
- Almost two-thirds of males (64%) consumed three or more drinks on a day that they consumed alcohol, compared with two in five females (38%).
- Approximately 18% of males consumed seven or more standard drinks on any one occasion compared with 7% of females.

Illicit drugs

The Institute estimates that, in 1997, 831 persons died and there were over 11,000 hospitalisations from illicit drug-related causes. Although apparently small in numbers relative to deaths and hospitalisations due to tobacco and alcohol, illicit drug-related morbidity and mortality usually affects the young, resulting in relatively more life years debilitated or lost.

Any illicit

Between 1995 and 1998 the proportion of the population aged 14 years and over who had ever used an illicit drug increased from 39% to 46% (Table 3.9).

Table 3.9: Use of any illicit drug: proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998

Age	Lifetime use		Recent use ^(a)	
	1995	1998	1995	1998
(per cent)				
Males				
14–19	50.3	50.6	37.9	38.3
20–29	71.1	71.2	46.1	47.1
30–39	61.4	63.4	24.7	27.5
40–49	39.8	60.9	12.0	22.1
50–59	31.0	28.4	3.5	7.2
60+	12.0	12.3	1.8	5.2
All ages	45.2	49.4	21.1	25.0
Females				
14–19	33.5	51.6	25.0	37.1
20–29	60.2	63.8	27.4	33.5
30–39	50.9	59.3	13.6	20.4
40–49	25.7	38.3	7.9	10.1
50–59	18.9	27.2	3.9	13.4
60+	8.7	14.5	3.7	6.3
All ages	33.6	42.7	12.9	19.1
Persons				
14–19	42.7	51.1	32.0	37.7
20–29	65.6	67.5	36.8	40.3
30–39	55.9	61.3	18.9	23.9
40–49	33.1	49.2	10.0	15.9
50–59	24.7	27.8	3.7	10.4
60+	10.2	13.5	2.9	5.8
All ages	39.3	46.0	17.0	22.0

(a) Consumed in the last 12 months.

Illicit drugs can include illegal drugs (such as marijuana/cannabis), prescription drugs when used for illicit purposes (such as tranquillisers) and other substances (such as naturally occurring hallucinogens and inhalants).

The increase in overall prevalence rates in 1998 is partly explained by younger females matching their male counterparts in rates of usage between 1995 and 1998 and by the cohort

first exposed to increased acceptability and availability of illicit drugs moving into the 40–49-year age group.

Lifetime illicit drug use

- Increases in illicit drug use were generally consistent across all age groups, with the exception of the 40–49-year age group, where proportions increased from 33% in 1995 to 49% in 1998.
- Between 1995 and 1998, the proportion of teenagers that had ever used illicit drugs increased only slightly for males, but increased by 18 percentage points from 34% to 52% for females.
- The age group which has the highest proportion ever using illicit drugs was 20–29 years in both 1995 (66%) and in 1998 (68%).

Recent illicit drug use

Between 1995 and 1998 there was an almost 30% increase in the proportion of the population who recently used illicit drugs, from 17% to 22%.

- Increases in recent illicit drug use were generally consistent for all age groups and between males and females.
- The proportion of teenagers recently using illicit drugs increased from 32% in 1995 to 38% in 1998.
- The age group with the highest proportion of recent illicit drug users was 20–29 years in both 1995 (37%) and 1998 (40%).
- The age group with the highest increase in recent illicit drug use between 1995 and 1998 was 50–59 years. In 1995 less than 4% were recent illicit drug users. By 1998 recent illicit drug use had increased to 10% in this group.

When comparing lifetime with recent usage, approximately 50% of males and 60% of females who had used illicit drugs at some time in their life no longer consumed illicit drugs.

In the 1998 survey, non-maintenance methadone was included for the first time in the list of illicit drugs measured. Additionally, more information was provided to 1998 respondents on the meaning of the term ‘non-medical use’ of common pharmaceuticals (refer also to chapter 6). It is possible that these changes contributed to the increases observed between 1995 and 1998. Further analysis on the possible impact of these changes on the 1998 results is presently being undertaken.

Population estimates of the number of recent illicit drug users

It is estimated that in 1998 there were over 3 million recent illicit drug users aged 14 years or older in Australia (Table 3.10).

Table 3.10: Any illicit drug: number of recent^(a) users, by age and sex, Australia, 1998

Age group	Males	Females	Persons
14–19	312,500	299,000	611,400
20–29	689,600	484,500	1,174,100
30–39	412,900	318,700	731,600
40–49	295,900	144,600	440,600
50–59	66,100	131,800	197,900
60+	69,900	93,300	163,300
All ages	1,846,900	1,471,900	3,318,900

(a) Used in the last 12 months.

(b) Any illicit drug.

Note: 'All ages' and 'Persons' may not add up to sum of components due to rounding.

- There were more male (1.8m) recent illicit drug users in 1998 than female illicit drug users (1.5m).
- Over half a million teenagers were recent illicit drug users in 1998, with about 14,000 more males than females.
- The age group with the highest numbers of recent illicit drug users was the 20–29-year group, with over 200,000 more males (690,000) than females (485,000) recently using.
- Perhaps surprisingly, there were over 160,000 persons aged 60 years or older who were recent illicit drug users in 1998, with more females than males in this age group using illicit drugs (refer to definitions of illicit drugs in chapter 6).

Marijuana/cannabis use

Almost two in every five Australians aged 14 years or older have used marijuana/ cannabis at some time in their lives (Table 3.11).

Table 3.11: Use of marijuana/cannabis: proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998

Age group	Lifetime use		Recent use ^(a)	
	1995	1998	1995	1998
(per cent)				
Males				
14–19	44.7	44.5	35.9	35.0
20–29	65.7	67.9	43.7	43.7
30–39	58.8	59.9	19.0	24.1
40–49	32.4	54.1	8.0	16.6
50–59	15.2	20.8	1.9	5.6
60+	1.9	3.7	–	1.1
All ages	37.7	43.7	18.0	21.3
Females				
14–19	24.4	44.8	20.1	34.2
20–29	53.7	59.2	23.4	29.3
30–39	43.4	53.8	8.2	16.3
40–49	14.2	30.0	2.2	6.3
50–59	5.2	15.3	1.2	7.6
60+	0.9	4.3	0.5	1.2
All ages	24.4	35.1	8.6	14.7
Persons				
14–19	35.5	44.6	28.7	34.6
20–29	59.8	63.6	33.5	36.5
30–39	50.7	56.8	13.4	20.2
40–49	23.7	41.6	5.2	11.3
50–59	10.0	18.0	1.5	6.6
60+	1.4	4.0	0.3	1.1
All ages	31.1	39.3	13.2	17.9

(a) Used in the last 12 months.

Lifetime use of marijuana/cannabis

Between 1995 and 1998, the lifetime use of marijuana/ cannabis increased from 31% of the population aged 14 years or older to 39%.

- Males (44%) were more likely than females (35%) to have ever used marijuana by 1998. For both males and females, proportions ever using increased between 1995 and 1998.
- Increases in proportions ever using between 1995 and 1998 across all age groups, and for both sexes, were generally consistent, with the exception of the age group 40–49 years and females aged 14–19 years, for which increases were much larger.
- The proportion of persons aged 40–49 years ever using marijuana/ cannabis increased by over 75% between 1995 (24%) to 1998 (42%). Males (54%) in this age group in 1998 were much more likely than females (30%) to have ever used.

- The proportion of teenagers ever using marijuana/cannabis increased from 36% in 1995 to 45% in 1998.

Recent marijuana/cannabis users

Between 1995 and 1998, the proportion of recent marijuana/cannabis users increased by 5 percentage points, from 13% to 18% of the population.

- The proportion of teenagers recently using marijuana/cannabis increased from 29% in 1995 to 35% in 1998.
- The proportion of female teenagers recently using marijuana/cannabis increased from 20% in 1995 to 34% in 1998, catching up with rates of their male counterparts.
- The highest proportional changes in recent usage between 1995 and 1998, however, occurred in age groups 40 years and older.

When comparing lifetime and recent rates of usage, approximately 50% of males and 60% of females who had used marijuana/cannabis at some time in their life were no longer using in 1998.

Estimates of the number of recent marijuana/cannabis users

In 1998 it is estimated that there were over 2.7 million Australians aged 14 years or older who were recent marijuana/cannabis users (Table 3.12).

Table 3.12: Marijuana/cannabis: number of recent^(a) users, by age and sex, Australia, 1998

Age group	Males	Females	Persons
14–19	287,700	279,500	567,200
20–29	635,100	420,900	1,056,000
30–39	359,800	251,500	611,300
40–49	222,000	90,000	312,000
50–59	51,600	76,000	127,600
60+	14,300	17,300	31,600
All ages	1,570,500	1,135,100	2,705,600

(a) Used in the last 12 months.

Note: 'All ages' and 'Persons' may not add up to sum of components due to rounding.

- There were over half a million teenagers who used marijuana/cannabis in 1998. Slightly more male teenagers (288,000) than female teenagers (280,000) were recent marijuana/cannabis users.
- The age group with most marijuana/cannabis users was 20–29 years, with over one million recent users.
- Between the ages of 20 and 49 years, the number of males who used marijuana/cannabis outnumbered females who used in corresponding age groups.

Heroin

The proportion of Australians aged 14 years or older who had ever tried heroin increased by over 50%, from 1.4% in 1995 to 2.2% in 1998 (Table 3.13).

Table 3.13: Use of heroin: proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998

Age group	Lifetime use		Recent use ^(a)	
	1995	1998	1995	1998
(per cent)				
Males				
14–19	0.4	1.0	0.4	0.5
20–29	3.6	6.2	2.2	2.9
30–39	4.1	4.0	0.4	0.7
40+	0.9	1.6	–	0.4
All ages	2.0	2.9	0.5	1.0
Females				
14–19	0.9	2.3	0.9	1.4
20–29	2.0	3.2	0.5	1.3
30–39	0.6	2.1	0.2	0.3
40+	0.5	0.4	–	0.1
All ages	0.8	1.5	0.2	0.5
Persons				
14–19	0.6	1.7	0.6	1.0
20–29	2.8	4.7	1.4	2.1
30–39	2.2	3.0	0.3	0.5
40+	0.7	1.0	–	0.3
All ages	1.4	2.2	0.4	0.7

(a) Used in the last 12 months.

The relatively low rates of heroin usage revealed in this survey render most stratified analyses statistically unreliable (see notes in chapter 6).

Lifetime heroin use

- Between 1995 and 1998 there were increases in the proportions of persons who had ever used heroin across all age groups.
- The proportion of teenagers aged 14–19 years ever using heroin increased from 0.6% in 1995 to 1.7% by 1998.
- The age groups which had the highest proportions of persons ever using heroin in both 1995 and 1998 were the 20–29 years and 30–39 years groups. In these age groups, males were more likely than females to have ever used.

Recent heroin users

- Between 1995 and 1998 the proportion of the population recently using heroin increased from 0.4% to 0.7%. Males (1%) were twice as likely as females (0.5%) to be recent users.
- The proportion of teenagers recently using heroin increased from 0.6% in 1995 to 1% in 1998.

- The age group with the highest proportion of recent heroin users was 20–29 years in both 1995 (1.4%) and 1998 (2.1%).

When comparing lifetime and recent use of heroin, approximately 70% of both males and females who had used heroin at some time in their life were no longer using in 1998.

Estimates of the number of recent heroin users

It is estimated that in 1998 there were over 100,000 recent heroin users (Table 3.14).

Table 3.14: Heroin: number of recent^(a) users, by age and by sex, Australia, 1998

Sub group	Number
Age group	
14–19	15,500
20–29	60,500
30–39	16,600
40+	19,900
All ages	112,600
Sex	
Males	73,500
Females	39,100
Persons	112,600

(a) Used in the last 12 months.

Note: 'All ages' and 'Persons' may not add up to sum of components due to rounding.

- There were almost twice as many male (74,000) as female (39,000) heroin users in 1998.
- In 1998 it is estimated that there were approximately 15,500 teenage heroin users.
- The age group with most heroin users was 20–29 years, with 61,000 users.

Injecting drug use

Between 1995 and 1998 the proportion of the population aged 14 years or older who had ever injected illicit drugs increased from 1.3% to 2.1% (Table 3.15).

Table 3.15: Use of injecting drugs^(a); proportion of the population aged 14 years and over, by age and sex, Australia, 1995, 1998

Age group	Lifetime use		Recent use ^(b)	
	1995	1998	1995	1998
(per cent)				
Males				
14–19	2.1	0.7	1.1	0.3
20–29	5.9	6.5	2.8	3.0
30–39	3.2	4.1	0.6	0.9
40+	0.2	3.2	–	0.4
All ages	2.0	2.8	0.7	1.0
Females				
14–19	1.0	2.5	0.9	1.2
20–29	1.3	2.9	0.7	1.1
30–39	0.8	1.7	–	0.3
40+	0.4	0.3	0.3	< 0.1 ^(c)
All ages	0.7	1.3	0.4	0.4
Persons				
14–19	1.6	1.6	1.0	0.7
20–29	3.6	4.7	1.8	2.1
30–39	1.9	2.9	0.3	0.6
40+	0.3	0.8	0.2	0.2
All ages	1.3	2.1	0.6	0.7

(a) Any illicit drug injected.

(b) Used in the last 12 months.

(c) Estimate subject to extreme sampling variability.

The relatively low rates of injecting revealed in this survey render most stratified analyses statistically unreliable.

Lifetime injecting

- The proportion of the population who reported injecting at some time in their life increased from 1.3% to 2.1%
- The proportion of teenagers ever injecting illicit drugs remained stable at 1.6% between 1995 and 1998.
- Proportions of persons in the age groups 20–29 years and 30–39 years who had injected at some time in their life increased from 3.6% to 4.7%, and from 1.9% to 3.0% respectively, between 1995 and 1998.
- Males (2.8%) were more than twice as likely as females (1.3%) to have injected in 1998.

Recent injecting drug users

- The proportions of the population aged 14 years or older recently injecting illicit drugs were similar in 1995 (0.6%) and 1998 (0.7%).
- Males (1%) were more likely than females (0.4%) to be injecting drug users in 1998.

When comparing lifetime injecting with recent injecting, approximately 70% of persons who had injected at some time in their life were no longer injecting in 1998.

Estimates of the number of recent injecting drug users

It is estimated that in 1998 there were close to 110,000 injecting drug users in Australia (Table 3.16).

Table 3.16: Injecting drug use: number of recent^(a) users, by age and by sex, Australia, 1998

Sub-group	Number
Age group	
14–19	12,100
20–29	60,400
30–39	18,300
40+	17,100
All ages	107,800
Sex	
Males	76,700
Females	31,100
Persons	107,800

(a) Used in the last 12 months.

Note: 'All ages' and 'Persons' may not add up to sum of components due to rounding.

- There were over twice as many male (76,700) as female (31,100) injecting drug users in 1998.
- Approximately 12,000 teenagers were injecting drug users.
- The age group with the highest number of injecting drug users was 20–29 years, with 60,000 injecting users.

The relatively large increases in the proportions of persons ever injecting illicitly, without comparable increases in the recently using population, plus the stability or improvements in the proportions subsequently giving up, appear to support propositions that there was an increase in the availability of these drugs between 1995 and 1998, and that increasing numbers of persons in this period had a 'taste', but did not proceed into habitual use.

Illicit drugs injected

Overwhelmingly, the first drug injected was amphetamines, followed by heroin (Table 3.17).

Table 3.17: Injecting drug use: first and recent^(a) illicit drugs injected, proportion of the population aged 14 years and over, by sex, Australia, 1998

Drug	First injected ^(b)			Recently injected ^(c)		
	Males	Females	Persons	Males	Females	Persons
	(per cent)					
Heroin	33.4	42.8	36.3	55.0	41.3	51.0
Methadone	1.7	–	1.2	10.1	–	7.2
Other opiates	3.3	0.6	2.4	5.6	–	4.0
Amphetamines	54.3	43.9	51.0	66.7	77.0	69.6
Cocaine	1.6	2.8	2.0	7.6	23.1	12.0
Hallucinogens	0.1	–	–	5.5	–	3.9
Ecstasy	1.1	–	0.8	6.9	2.4	5.6
Benzodiazepines	–	–	–	5.5	–	3.9
Steroids	3.9	–	2.7	8.4	–	6.0
Other	0.5	9.9	3.5	3.8	7.2	4.8

(a) Used in the last 12 months.

(b) Base equals respondents who have ever injected.

(c) Base equals respondents who have injected in the last 12 months.

First drug injected

- Over half (51%) of all persons aged 14 years or older who had injected illicit drugs, first injected amphetamines. Males (54%) who had injected illicit drugs were more likely than females (44%) to have injected amphetamines as their first drug.
- Heroin (36%) was the next most frequent first illicit drug injected. Females (43%) who had ever injected were more likely than males (33%) to have injected heroin as their first drug.

Recent drugs injected

- Recent injecting drug users in 1998 were likely to be injecting more than one drug.
- The most common drug injected was amphetamines (70%), with very little difference between male and female injecting drug users in their likelihood to inject this drug.
- The second most common drug injected in 1998 was heroin, with 51% of injecting drug users injecting this drug. Male (55%) injecting drug users were more likely than female injecting drug users (41%) to inject heroin.
- Cocaine was injected by 12% of injecting drug users in 1998, with female (23%) injecting drug users more likely than male (8%) injecting drug users to inject this drug.

Source of supply

Illicit drugs were almost always first sourced from friends and acquaintances, with little movement away from initial sources, during the course of drug use (Table 3.18).

Table 3.18: Source of first and recent supply of illicit drugs, by drug, Australia, 1998

Drug	Friend or acquaintance		Relative		Spouse or partner		Street dealer		Other	
	First ^(a)	Now ^(b)	First	Now	First	Now	First	Now	First	Now
	(per cent)									
Marijuana/cannabis	88.6	85.6	5.7	2.3	2.3	2.2	2.0	5.2	1.4	4.7
Analgesics ^(c)	30.6	12.4	25.4	10.2	6.1	6.0	1.5	4.2	36.4 ^(d)	67.2 ^(d)
Tranquillisers ^(c)	48.5	25.6	11.2	5.5	6.5	7.1	0.6	0.5	33.2 ^(d)	61.2 ^(d)
Steroids ^(c)	70.8	84.1	3.9	–	–	–	1.2	0.0	24.0 ^(d)	15.9 ^(d)
Barbiturates ^(c)	81.8	31.3	3.9	7.1	0.8	–	6.9	10.6	6.6 ^(d)	51.0 ^(d)
Inhalants	72.6	48.6	4.5	1.8	1.3	–	2.1	1.2	19.5	48.4
Heroin	83.4	72.0	2.6	0.2	4.3	–	9.3	25.1	0.5	2.7
Methadone ^(e)	64.7	62.0	2.9	–	–	–	6.0	10.8	26.4 ^(f)	27.2 ^(f)
Amphetamines ^(c)	87.7	79.8	3.3	3.2	2.1	1.0	4.4	12.4	2.4	3.6
Cocaine	87.6	89.6	1.1	0.7	1.9	–	7.8	7.9	1.6	1.8
Natural hallucinogens	67.5	57.8	1.6	0.4	1.3	–	4.3	3.9	25.2 ^(g)	37.9 ^(g)
LSD	88.9	83.3	1.3	0.4	1.2	0.2	6.7	15.0	1.8	1.0
Ecstasy, designer drugs	86.0	87.8	5.4	0.5	1.8	1.0	6.8	9.8	–	0.8

(a) Base equals respondents ever used.

(b) Base equals respondents using in the last 12 months.

(c) Non-medical use.

(d) Includes doctor's script.

(e) Non-maintenance.

(f) Includes stolen/doctor's script.

(g) Includes from fields.

Note: Base of first supplier equals respondents ever used; base of recent supplier equals respondents using in last 12 months.

Illicit drug suppliers

Overwhelmingly, the first suppliers of illicit drugs were friends and acquaintances.

- Nearly nine out of every ten illicit drug users first obtained **marijuana/cannabis** (89%), **heroin** (83%), **amphetamines** (88%), **cocaine** (88%), **LSD** (89%), and **ecstasy** (86%) from friends and acquaintances.
- **Steroids** were first sourced from friends and acquaintances by 71% of illicit drug users, **inhalants** by 73%, and **methadone** by 65% of drug users.

Exceptions to the predominance of friends and acquaintances were the common pharmaceuticals, where their availability by prescription was an apparent alternative first source.

Recent suppliers of illicit drugs

Friends and acquaintances remained the primary source for most illicit drugs. Exceptions were:

- **heroin**, where only 9% was first obtained from a street dealer, compared with 25% of recent supplies;

- **amphetamines**, where only 4% was first obtained from street dealers, compared with 12% of recent supplies;
- **LSD** where only 7% was first obtained from street dealers, compared with 15% of recent supplies; and
- **methadone**, where the increase in use of street dealers was from 6% to 11% between first and recent supplies.

Sourcing common pharmaceuticals for recent illicit purposes moved away from friends and relatives to purchasing 'over the counter' or from prescriptions.

Suppliers of cigarettes and alcohol to persons aged under 18 years

Friends and acquaintances were most likely to be the source of first supply of cigarettes, whereas relatives were more likely to introduce alcohol to under-age teenagers (Table 3.19).

Table 3.19: Persons under 18 years: first and recent suppliers of tobacco and alcohol, by sex, Australia, 1998

Substance/supplier	Males		Females		Persons	
	First	Now	First	Now	First	Now
Tobacco	(per cent)					
Friend/acquaintance	73.3	37.7	81.7	20.1	78.0	27.3
Relative	14.5	19.7	8.9	8.2	11.3	12.9
Spouse/partner	–	–	0.2	5.8	0.1	3.4
Retailer	4.3	40.5	1.0	62.7	2.4	53.5
Other	8.0	2.1	8.2	3.2	8.1	2.8
Alcohol						
Friend/acquaintance	36.7	39.7	51.6	46.8	44.1	43.4
Relative	58.5	33.7	44.1	28.0	51.3	30.7
Spouse/partner	–	1.6	0.4	2.7	0.2	2.2
Retailer	0.5	16.8	0.4	18.0	0.5	17.4
Other	4.3	8.1	3.5	4.5	3.9	6.2

Note: Base equals smokers and drinkers aged 14–17.

- Between first and recent use (and despite still being under-age), there was a shift in the proportions obtaining tobacco from friends (78%) to purchasing it from retailers (54%) for recent supplies. Under-age female smokers were more likely (63%) than male under-age smokers (41%) to obtain tobacco products from retailers for recent supplies.
- A similar but smaller trend towards purchasing alcohol from retailers for recent supplies was also observed. Whereas only 0.5% of first supplies of alcohol were obtained directly from a retailer, approximately one in six (17%) under-age drinkers subsequently obtained their recent alcohol from retailers.

4 Community support for drug-related policy

Introduction

Survey respondents were asked to indicate how strongly they would support or oppose specific policies, using a five-point scale (strongly support, support, neither support nor oppose, oppose, and strongly oppose). There was no opportunity for individuals to respond 'Don't know enough about this' except for the question regarding the 'Tough on Drugs' illicit drugs policy. For the purposes of this chapter, responses of 'support' or 'strongly support' are taken as support.

For tobacco and alcohol, the questions were in the context of reducing the problems associated with their use; for heroin there was no reference to the *reduction* of problems associated with its use.

Tobacco

Between 1995 and 1998, there were inconsistent movements in public support for measures to reduce the harms associated with tobacco (Table 4.1).

Table 4.1: Support for tobacco measures: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998

Measure	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Stricter enforcement of law against selling to minors	91.5	88.2	94.8	91.8	93.2	90.0
Banning tobacco advertising at sporting events	48.6	57.1	57.2	65.6	53.0	61.5
Banning smoking in the workplace	71.8	76.2	84.0	83.6	78.0	80.0
Banning smoking in shopping centres	73.6	80.5	78.3	84.8	76.0	82.7
Banning smoking in restaurants	72.5	77.4	75.3	77.1	73.9	77.2
Banning smoking in pubs/clubs	40.9	47.9	47.2	52.0	44.1	50.0
Increase tax on tobacco products to pay for health messages	63.1	58.2	68.6	65.0	65.9	61.7
Increase tax on tobacco products to contribute to treatment costs	66.8	64.1	69.1	68.1	67.9	66.1
Increase tax on tobacco products to discourage smoking	57.2	56.8	61.8	63.7	59.6	60.4

- There is continued high support for enforcement of laws against selling tobacco products to minors, with around 90% of the population supporting this measure.
- There was an increase in support for banning tobacco advertising at sporting events, from 53% in 1995 to 62% in 1998.
- There were increases in the levels of support for banning smoking in public places, with the least support among these measures related to pubs/clubs.

Alcohol

Support generally declined between 1995 and 1998 for possible measures to reduce the harms associated with alcohol (Table 4.2).

Table 4.2: Support for alcohol measures: proportion of the population aged 14 years and over, by sex, Australia, 1995, 1998

Measure	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
	(per cent)					
Increasing the price of alcohol	25.6	19.4	40.8	33.4	33.3	26.6
Reducing the number of outlets	24.9	27.4	42.1	40.9	33.6	34.3
Reducing trading hours	31.1	29.9	46.2	39.8	38.7	35.0
Raising the legal drinking age	44.4	35.6	55.0	46.6	49.7	41.2
Increasing the number of alcohol-free events	63.1	59.9	76.9	73.0	70.1	66.6
Increasing the number of alcohol-free dry zones	67.8	63.9	75.9	73.1	71.9	68.6
Stricter enforcement of law against serving minors	86.7	82.3	94.0	90.0	90.4	86.2
Serving only low-alcohol beverages at sporting events	64.9	64.3	79.5	77.7	72.3	71.1
Limiting TV advertising until after 9.30 p.m.	64.7	66.0	80.7	79.1	72.8	72.7
Banning alcohol sponsorship of sporting events	30.4	36.6	45.3	52.7	38.0	44.8
More severe penalties for drunk drivers	85.0	84.5	94.1	93.1	89.6	88.9

- Between 1995 and 1998 the level of support for 'Banning alcohol sponsorship of sporting events' increased by 7 percentage points to 45%.
- Support for 'Limiting television advertising of alcohol products until after 9.30 p.m.' and 'Reducing the number of outlets that sell alcohol' remained stable at about 73% and 34% respectively.
- For all other measures, support declined between 1995 and 1998.
- The intervention with the lowest level of support in 1998 was 'Increasing the price of alcohol', at 27%.
- The intervention with the highest level of support in 1998 was 'More severe penalties for drunk drivers', at 89%.

Illicit drugs

The survey included questions on support for measures for the problems associated with heroin use, support for legalisation of personal use of selected substances (see chapter 2), and support for the 'Tough on Drugs' approach. Note that these measures were not explained in detail to survey respondents.

Table 4.3: Support for heroin measures: proportion of the population aged 14 years and over, by sex, Australia, 1998

Measure	Males	Females (per cent)	Persons
Free needle/syringe exchanges	46.3	53.7	50.1
Methadone maintenance programs	56.5	58.5	57.5
Treatment with drugs other than methadone	53.9	54.1	54.0
Regulated injecting rooms	32.3	34.0	33.2
Rapid detoxification therapy	61.1	58.9	60.0

- More than half of survey respondents supported treatment programs for heroin users, including rapid detoxification therapy (60%), methadone maintenance programs (58%) and treatment with drugs other than methadone (54%).
- Similarly, half of survey respondents supported free needle/syringe exchanges, and one-third supported regulated injecting rooms (or 'shooting galleries').

In the context of all illicit drugs, a 'Tough on Drugs' policy (not otherwise explained to respondents) was supported by 44% of persons. However, 46% of persons responded that they did not know enough about the policy to indicate support or otherwise.

5 Drug-related activities

Perpetrators of drug-related harm

Survey respondents were asked how many times in the past 12 months they undertook specific activities while under the influence of alcohol or other drugs. (Table 5.1).

Table 5.1: Activities undertaken while under the influence of alcohol or other drugs in the past 12 months, by sex, Australia, 1995, 1998

Influence and activity	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
Alcohol	(per cent)					
Drove a motor vehicle	14.3	23.8	6.6	11.4	10.3	17.5
Operated hazardous machinery	2.3	1.6	0.3	0.1	1.2	0.8
Verbally abused someone	11.1	12.8	5.0	6.2	8.0	9.4
Physically abused someone	4.0	3.1	0.9	0.9	2.4	2.0
Caused damage to property	3.8	4.5	1.4	0.9	2.6	2.7
Stole property	1.3	1.6	0.2	0.3	0.9	1.0
Created a public disturbance or nuisance	6.7	6.6	3.2	2.6	5.0	4.5
Other drugs						
Drove a motor vehicle	(a)	8.3	(a)	4.0	(a)	6.1
Operated hazardous machinery	(a)	1.3	(a)	0.1	(a)	0.7
Verbally abused someone	(a)	2.5	(a)	1.2	(a)	1.8
Physically abused someone	(a)	0.8	(a)	0.2	(a)	0.5
Caused damage to property	(a)	1.1	(a)	0.2	(a)	0.6
Stole property	(a)	0.7	(a)	0.1	(a)	0.4
Created a public disturbance or nuisance	(a)	1.4	(a)	0.6	(a)	1.0

(a) Not asked in 1995.

Note: Base equals all users of alcohol and other drugs.

Alcohol-related activities

- Between 1995 and 1998 the proportion of the population aged 14 years or older who **drove a motor vehicle while under the influence of alcohol** increased from 10% to 18%. Males (24%) were more than twice as likely as females (11%) to drive while under the influence.
- The proportion of the population who **operated hazardous machinery** declined from 1.2% in 1995 to 0.8% in 1998.
- Slightly fewer than one in ten (9%) persons **verbally abused someone** while under the influence of alcohol in 1998, compared with 8% in 1995. Males (13%) in 1998 were more than twice as likely as females (6%) to verbally abuse someone while under the influence of alcohol.
- The proportion of the population that **physically abused someone** while under the influence of alcohol declined only slightly from 2.4% in 1995 to 2.0% in 1998.

- Proportions committing **property crime** (damage/steal) remained stable between 1995 and 1998.

Drugs other than alcohol

Relative to the rates of alcohol-related activities, the prevalence of other selected behaviours while under the influence of drugs other than alcohol was much lower.

- The activity most likely to be undertaken while under the influence of drugs other than alcohol in 1998 was driving a motor vehicle (6%). Males (8%) were twice as likely as females (4%) to drive while under the influence.
- Less than 2% of persons verbally abused someone, less than 1% physically abused someone, caused damage to property, or stole property, while under the influence of drugs other than alcohol.

Victims of drug-related harm

Australians were more than twice as likely to be victims of alcohol-related incidents, than to be victims of incidents related to other drugs (Table 5.2).

Table 5.2: Proportion of the population aged 14 years and over who have been victims of alcohol or other drug-related incidents, by sex, Australia, 1995, 1998

Influence and activity	Males		Females		Persons	
	1995	1998	1995	1998	1995	1998
Alcohol	(per cent)					
Verbal abuse	39.0	32.1	29.1	26.0	34.0	29.0
Physical abuse	11.7	7.5	6.0	4.9	8.8	6.2
Put in fear	19.8	14.0	23.9	17.6	21.9	15.8
Property damaged	17.4	8.9	9.2	7.7	13.3	8.3
Property stolen	6.2	4.3	4.2	3.3	5.2	3.8
Other drugs						
Verbal abuse	(a)	11.9	(a)	8.6	(a)	10.2
Physical abuse	(a)	2.9	(a)	1.9	(a)	2.4
Put in fear	(a)	6.3	(a)	8.4	(a)	7.4
Property damaged	(a)	3.3	(a)	3.0	(a)	3.1
Property stolen	(a)	3.8	(a)	3.0	(a)	3.4

(a) Not asked in 1995.

Alcohol-related incidents

- The proportion of persons aged 14 years or older who were victims of alcohol-related verbal abuse decreased from 34% in 1995 to 29% in 1998. Males (32%) were more likely than females (26%) in 1998 to be victims of alcohol-related verbal abuse.
- The proportion subjected to alcohol-related physical abuse dropped from 9% in 1995 to 6% in 1998. Males were more likely than females to be victims of alcohol-related physical abuse.
- The likelihood of being put in fear, or having property damaged or stolen, decreased between 1995 and 1998.

Victims of incidents related to drugs other than alcohol

Compared with alcohol-related incidents, Australians were less than half as likely to be victims of incidents related to other drugs.

- In 1998, approximately one in ten (10%) Australians aged 14 years or over were victims of verbal abuse from a person affected by drugs other than alcohol.
- Slightly fewer than one in 13 people (7%) were 'put in fear' in an incident related to drugs other than alcohol.
- Rates of physical abuse (2%) and property damage (3%) were half the corresponding alcohol-related incident.
- Approximately the same proportion of persons reported property theft resulting from drugs other than alcohol as for alcohol (3%).

Estimates of the number of victims of alcohol-related incidents

It is estimated that in the 12 months preceding the survey there were over four million victims of alcohol-related verbal abuse and over one million Australians had property damaged in alcohol-related incidents (Table 5.3).

- There were 4.4m victims of alcohol-related verbal abuse, 1.3m victims of alcohol-related property damage, more than 900,000 victims of alcohol-related physical assaults, and almost 600,000 victims of alcohol-related property theft in the 12 months preceding the 1998 survey.
- With few exceptions, more males were victims of alcohol-related incidents than were females.
- More females than males in the age group 60 years and older experienced alcohol-related verbal abuse or had property stolen or damaged.
- The age group with the most victims was 20-29 years of age.

Table 5.3: Number of victims of alcohol-related incidents, by age and sex, Australia, 1998

Incident	Age group						All ages
	14–19	20–29	30–39	40–49	50–59	60+	
Males							
Verbal abuse	292,200	762,000	545,600	464,100	250,900	67,400	2,382,400
Physical abuse	105,100	228,400	100,100	59,100	53,200	7,700	553,700
Put in fear	164,100	345,600	247,400	170,600	66,600	34,200	1,028,400
Property damage	99,500	225,700	161,800	73,800	65,100	32,200	658,200
Property stolen	67,000	87,100	64,900	46,700	32,700	15,500	313,800
Females							
Verbal abuse	279,800	630,800	440,400	348,500	180,000	121,000	2,000,500
Physical abuse	54,600	148,000	58,800	90,800	22,900	5,500	380,500
Put in fear	227,600	461,100	301,800	209,700	88,200	73,600	1,362,100
Property damage	82,600	203,000	124,000	111,500	28,000	43,600	592,700
Property stolen	47,200	104,700	34,100	14,700	12,200	42,100	255,000
Persons							
Verbal abuse	572,000	1,336,700	932,400	790,100	461,900	207,800	4,382,900
Physical abuse	159,700	376,500	158,800	150,000	76,100	13,200	934,300
Put in fear	391,700	806,700	549,200	380,300	154,800	107,800	2,390,500
Property damage	182,100	428,700	285,800	185,300	93,100	75,900	1,250,800
Property stolen	114,200	191,700	99,000	61,400	44,900	57,500	568,900

Note: 'All ages' and 'Persons' may not add up to sum of components due to rounding.

Injuries resulting from drug-related incidents

Approximately 7% of all Australians suffered an injury (non-self-inflicted) as a result of an alcohol or other drug-related incident in the 12 months preceding the 1998 survey (Table 5.4).

Table 5.4: Most serious injury sustained as a result of alcohol or other drug-related incidents, by sex, Australia, 1998

Injury	Males	Females		Persons
		(per cent)		
Total injured	8.3	5.7	7.0	
Bruising, abrasions	68.1	69.6	68.8	
Burns, not involving hospital admission	–	0.5	0.3	
Minor lacerations	14.9	12.7	13.8	
Lacerations requiring suturing, but not hospital admission	2.5	2.0	2.2	
Fractures not requiring hospital admission	5.4	12.0	8.6	
Sufficiently serious to require hospital admission	9.1	3.3	6.3	

Note: Base of total injured equals all respondents, base of injury breakdown equals total physically injured.

- The most frequent serious injuries sustained as a result of alcohol or other drug-related incidents were bruises and minor abrasions (69%). Males who had been injured (68%) were slightly less likely than females (70%) who had been injured to sustain bruises or abrasions.
- Females who had been injured were more likely than males who had been injured to sustain fractures (12%).

- Males who had sustained injuries as a result of an alcohol or other drug-related incident were more likely than females to have required hospitalisation as a consequence of the injury.

Estimates of the number of victims of alcohol or other drug-related incidents

It is estimated that 425,000 persons aged 14 years or over were injured as a result of alcohol or other drug-related incidents in the 12 months preceding the 1998 survey (Table 5.5).

Table 5.5: Number of persons sustaining injuries as a result of alcohol or other drug-related incidents, by age, Australia, 1998

Injury	Age group						All ages
	14–19	20–29	30–39	40–49	50–59	60+	
Bruising, abrasions	46,000	133,400	55,300	36,800	11,300	9,900	292,600
Burns, not involving hospital admission	1,100	–	–	–	–	–	1,100
Minor lacerations	11,900	24,100	3,900	8,800	9,400	600	58,800
Lacerations requiring suturing, but not hospital admission	2,900	3,700	2,800	–	–	–	9,400
Fractures not requiring hospital admission	1,700	18,400	12,700	3,300	500	–	36,600
Sufficiently serious to require hospital admission	5,600	6,400	3,800	7,200	3,700	–	26,600
Total persons injured	69,200	186,000	78,500	56,100	24,900	10,500	425,100

- The most frequent injuries sustained as a result of alcohol or other drug-related incidents were bruises and abrasions. In 1998, it is estimated that just under 300,000 persons aged 14 years or older sustained injuries of this type. Most victims (133,000) were aged 20–29 years.
- Comparatively few persons sustained burns (1,100) as a result of alcohol or other drug-related incidents.
- Over 26,600 persons sustained injuries so severe that they required hospitalisation.

6 Explanatory notes

Introduction

The 1998 National Drug Strategy Household Survey was the sixth in a series which commenced in 1985. In October 1997 the Australian Institute of Health and Welfare (AIHW) was commissioned by the Commonwealth Department of Health and Family Services to manage the 1998 survey. The Institute was supported in this task by a Departmental Policy Reference Group and a Technical Advisory Committee. The Roy Morgan Research Centre was selected by competitive tender in February 1998 to conduct the survey, and Hermes Precisa Pty Ltd was contracted to scan the completed questionnaires. Quantitative Evaluation and Design was subsequently engaged to independently evaluate the derivation of population weights and design effects.

The survey was conducted between June and September 1998, with over 90% of data collected in July and August 1998.

Scope

The estimates for 1998 contained in this publication are based on information obtained from persons aged 14 years and over from the populations of all States and Territories.

Methodology

Households were selected by a multistage, stratified area, random-quota sample. Minimum sample sizes sufficient to return reliable strata estimates were allocated to States and Territories and the remainder of the available quota was distributed proportional to population. At the invitation of the Survey Technical Advisory Committee, the health authorities in the States of New South Wales, Victoria, Queensland, Tasmania and the Australian Capital Territory funded additional interviews supplementary to those allocated.

Survey design

The survey employed a split sample design which incorporated random household selection from a national sample of 8,357 private dwellings and a mixture of random and targeted respondent selection.

- Sample 1. National random selection of households, where a person aged 14 years or over was randomly selected by next birth-date. Data were collected from personal interviews and self-completion booklets for the more sensitive issues. The number of respondents who completed the survey from this sample was 4,012.

- Sample 2. Same household as in Sample 1. The youngest person aged 14 years or older other than the Sample 1 respondent was selected. Data were collected by self-completion booklets. Where a questionnaire was completed subsequent to the Sample 1 interview, one attempt was made to personally collect the questionnaire. If still incomplete, the respondent was provided with a reply-paid pre-addressed envelope. The number of respondents who completed the survey from this sample was 1,983.
- Sample 3. Capital cities only. From a random selection of households, a person aged 14 to 39 years of age was randomly selected by next birth-date. Data were collected by self-completion booklets. Questionnaires were left for completion and interviewers returned 2 days later for their collection. Where a questionnaire was not completed by this time, the respondent was provided with a reply-paid pre-addressed envelope. The number of respondents who completed the survey from this sample was 4,035.

Persons aged 14 and 15 years completed the survey with the consent of a parent or guardian. The combination of split sampling, oversampling of the lesser populated States and Territories and the interviews supplementary to quota resulted in a sample which was not proportional to the State/Territory distribution of the Australian population aged 14 years and over.

Table 6.1: Comparison of sample and State/Territory population distributions

	NSW	Vic	Qld	SA	WA	Tas	ACT	NT
Sample size	1,468	1,483	2,586	831	764	1,031	1,164	703
% of total sample	14.6	14.8	25.8	8.3	7.6	10.3	11.6	7.0
1998 population (%)	33.9	25.0	18.3	8.0	9.7	2.5	1.6	0.9

Queensland, Tasmania, the Australian Capital Territory and the Northern Territory were oversampled and New South Wales, Victoria and Western Australia were undersampled relative to the estimated population aged 14 years and over.

Targeting younger persons to obtain more reliable estimates for the illicit drugs in particular also resulted in a sample which was disproportionate to the estimated age distribution of persons aged 14 years and over.

Table 6.2: Comparison of the sample and estimated population distributions

Age group	Sample distribution			Total (%)	1998 population estimates		
	Male	Female	Total		Male	Female	Total
14–19	7.6	8.2	15.8	5.4	5.1	10.5	
20–29	11.4	14.6	26.0	9.5	9.3	18.8	
30–39	12.9	17.0	29.9	9.6	9.7	19.3	
40–49	4.2	5.6	9.9	9.0	9.0	17.9	
50–59	3.4	4.0	7.4	6.9	6.6	13.5	
60+	5.1	5.9	11.0	9.1	11.0	20.0	
Total	44.6	55.4	100.0	49.4	50.6	100.0	

Females in the survey sample were over-represented, as were persons aged under 35 years. The bias towards youth was not unexpected and was in line with the survey design. The over-representation of females in all age groups was unexpected.

Response rates

When compared with 1995, the 1998 survey achieved a slightly lower but comparable response rate.

Table 6.3: Response characteristics, 1998 (by sample) and 1995

Response	1998 survey samples				Total	1995 survey
	Sample 1	Sample 2	Sample 3	Total sample		
Interviewed/self-completed	4,012	1,983	4,035	10,030	56%	57%
Refused, did not return q'naire	3,034	352	2,576	5,962	33%	30%
Unavailable, sent back q'naire unusable	36	288	788	1,112	6%	5%
Busy, temporary refusal	–	–	–	–	–	2%
No English, incapable	84	49	67	200	1%	3%
Other	189 ^(a)	561 ^(a)	–	750	4%	3%
Total attempts	7,355	3,233	7,466	18,054	100%	100%
Response rate	55%	61%	54%	56%		

(a) Includes cases where completed questionnaire failed edit checks, and where field worker inadequately recorded reason for non-responses.

The experimental survey design, and in particular the procedures adopted for verification of completions, contributed to a lower response rate than might have been expected.

Estimation procedures

Multistage editing and weighting procedures were applied to derive the estimates.

Editing

All open-ended questions were coded manually prior to scanning. Following processing, responses were checked for consistency using cross-validation items within the questionnaire. Resultant transformations were manually completed according to predetermined logic and edit rules. Less than 0.3% (3 in 1,000) of data items were transformed. An audit of the transfer from the questionnaire to the data file was then conducted to confirm the accuracy of responses recorded. Further details on the extent and nature of the transformations will be available in a Technical Appendix to the Survey Confidentialised Unit Record File (CURF).

Weighting

The sample was designed to provide a random sample of households within each geographic stratum. Respondents within each stratum were assigned weights designed to overcome proportional imbalances introduced by the split and supplementary sampling design, and the subsequent lower-than-expected male response rate. Estimates in this publication are based on the weighted combined samples. Further details on the derivation of weights and the nature and extent of non-responses can be found in the Technical Appendix to the Survey CURF.

Table 6.4: Comparison of weighted sample to population estimates distributions

Age group	Weighted sample			1998 population estimates		
	Male	Female	Total	Male	Female	Total
	(per cent)					
14–19	5.4	5.2	10.7	5.4	5.1	10.5
20–29	9.5	9.3	18.8	9.5	9.3	18.8
30–39	9.7	10.1	19.8	9.6	9.7	19.3
40–49	8.9	9.4	18.3	9.0	9.0	17.9
50–59	6.1	6.6	12.7	6.9	6.6	13.5
60+	9.4	10.4	19.8	9.1	11.0	20.0
Total	49.0	51.0	100.0	49.4	50.6	100.0

Because the weighted population distribution in the provisional CURF does not exactly match the 1998 resident population estimates, some population prevalence estimates have been made using adjustment factors. Accordingly, there may be a mismatch between the population prevalence shown and that which would be determined by applying the prevalence rate to the population published in Appendix 3.

Reliability of estimates

Sampling error

As the estimates are based on a sample, they are subject to sampling variability (that is, the extent to which the sample varies from all persons, had a complete census been conducted). Estimates in this publication are assumed to be reliable if the relative standard error (the ratio of the sampling error to the population estimate) is less than 25%. Estimates between 25% and 50% should be interpreted with caution. Estimates over 50% should be considered unreliable for most practical purposes. A table of standard errors and relative standard errors can be found in Appendix 2 and further details on their calculation will be available in a Technical Appendix to the Survey CURF.

Non-sampling error

In addition to sampling errors, the estimates are subject to non-sampling errors. These can arise from errors in transcription of responses, errors in reporting of responses (e.g. failures of respondents' memories), and the unwillingness of respondents to reveal their 'true' responses.

Counter-balancing

The order in which multiple possible answers are presented can sometimes affect the likelihood of responses (the earlier a possible response in a list, the higher the likelihood that it will be selected). To overcome this tendency, possible responses were rotated within questions. There were three rotations in all, which resulted in a total of nine different questionnaires (three per sample) with identical sequencing of questions, but different orders of possible responses within. The copy at Appendix 5 is a Sample 2, Rotation 1 version of the questionnaire.

Limitations of the data

Excluded from sampling were non-private dwellings (hotels, motels, boarding houses, etc.), and institutional settings (hospitals, nursing homes, other clinical settings such as drug and alcohol rehabilitation centres, prisons, military establishments, and university halls of residence). Accordingly, homeless persons were also excluded. With the exception of Tasmania, non-mainland islands were also excluded.

Illicit drug users, by definition, are committing illegal acts. They are in part marginalised and difficult to reach. Accordingly, estimates of illicit drug use and related behaviours are likely to be underestimates of actual prevalences.

Definitions

Definitions used in previous waves of the survey were retained for 1998, with one exception. In the present survey, greater assistance was provided to respondents on what was meant by 'non-medical use'.

Recent smoker

A recent smoker was a person who smoked tobacco daily (Question G8) or who smoked tobacco at least occasionally in the past 12 months (Question G15).

Recent regular smoker

A recent regular smoker was a recent smoker who consumed cigarettes at least daily (Question G8) or most days in the past 12 months (Question G15).

Recent occasional smoker

A recent occasional smoker was a recent smoker who consumed cigarettes less than daily or most days in the past 12 months (Question G15).

Recent drinker

A recent drinker was a person who consumed alcohol in the last 12 months.

Recent regular drinker

A recent regular drinker was a recent drinker who consumed alcohol at least weekly in the past 12 months (Question H7).

Recent occasional drinker

A recent occasional drinker was a recent drinker who consumed alcohol less than weekly in the past 12 months.

Non-medical drug use

The definition used in the survey questionnaire and for this publication is:

1. either alone or with other drugs in order to induce or enhance a drug experience;
2. for performance (e.g. athletic) enhancement; or
3. for cosmetic (e.g. body shaping) purposes.

In 1995, 'non-medical use' was undefined in the questionnaire.

Illicit drugs

Illegal drugs, drugs and volatile substances used illicitly, and pharmaceuticals used for non-medical purposes.

Painkillers/analgesics*

Tranquillisers/sleeping pills*

Steroids*

Barbiturates*

Amphetamines*

Marijuana/cannabis

Heroin

Methadone**

Cocaine

LSD/synthetic hallucinogens

Ecstasy and other designer drugs

(Any) injected*

* for non-medical purposes

** non-maintenance program

Recent illicit drug use (all and any substances)

Use within the previous 12 months.

Comparability with the 1995 survey

The 1998 survey varies from the 1995 (and earlier) NDS Household Surveys in several respects.

- All respondents in 1995 were interviewed, and self-completed the more sensitive sections of the questionnaire. In 1998, only Sample 1 (see 'Survey design' above) completed questionnaires in the same way. Samples 2 and 3 in 1998 self-completed the entire questionnaire.
- Due to the data collection methods related to the split sample, questions retained from the 1995 survey which relied upon the use of show-cards were presented as fixed lists in Samples 2 and 3.
- A small number of questions which were open-ended in 1995 were changed to forced choice in 1998, and one question which was forced choice in 1995 was changed to open-ended in 1998 (but the same template was retained for coding purposes). Where this occurred, a footnote to the relevant table indicates the circumstances. For further details refer to the Technical Appendix to the CURF.
- Inter-sample reliability tests were conducted to determine the extent and nature of variability of responses which might be attributable to the different collection methods. Results indicated that the different data collection methods did not affect responses.
- In an attempt to enhance the reliability of estimates in the 1998 survey, a small number of missing and contradictory responses were imputed through a rigorous menu of cross-

validation edit and logic checks. For example, if a respondent failed to indicate a lifetime usage response (missing) or answered 'no – never used', but then provided detailed responses to subsequent questions (e.g. used in the last 12 months, how used, where used, source of supply) the missing or contradictory response was recoded as 'yes'. In the 1995 survey, in general, responses were recorded as given, without correction for obvious error. If an 'entry level' question was missing or the response was 'no – never used' in 1995, all subsequent responses in the category were declared missing. The effect of the changes implemented in 1998 is to amplify the size of increases and reduce the size of decreases in estimates between the two surveys by approximately 1-2% of the positive ('yes') lifetime use responses (e.g. a lifetime prevalence estimate of 30% in 1998 possibly includes a 0.3-0.6% recoded component). For lifetime estimates this effect is insubstantial. However, recent usage estimates can include up to 9% of responses which in 1995 would have been declared missing (e.g. a 30% estimate of recent usage in 1995 would have been 32.7%, if the 1998 treatment had been applied and if the level of missing/contradictory responses had been equivalent in that year).

- Data collection in 1998 was conducted between June and September, compared with May and June in 1995.

Interpretation of results

The exclusion of persons from dwellings and institutional settings described in 'Limitations of the data' above, and the difficulty in reaching marginalised persons, are likely to have affected estimates.

It is known from past studies of alcohol and tobacco consumption that respondents tend to underestimate actual consumption levels. There are no equivalent data on the tendencies for under- or over-reporting of actual illicit drug use. Anecdotal data, however, suggest that younger persons may overestimate actual consumption of these drugs.

The methodology of the 1998 Survey was generally comparable to past NDS Household Surveys. The possibility that systematic biases were introduced by the split sampling design in 1998 compared with that used in 1995, and the treatment of missing and contradictory responses discussed above, cannot be dismissed, however.

Appendix 1: Membership of survey committees

Department of Health and Aged Care Policy Reference Group

Member	Policy Section	Substitute
Paul Williams (Chair)	AIHW (outposted)	Mark Cooper-Stanbury
Leilani Pearce	Office of Aboriginal and Torres Strait Islander Health Services (OATSIHS)	John Riley (OATSIHS)
Malcolm Wares	Illicit Drug Strategy Unit	Louise Thom
Megan McNeil	Public Health Education Unit	Joelie Hilhorst
Joy Eshpeter	Evaluation and Research Unit	Deborah Tunnicliff
Elizabeth Clout	Tobacco and Alcohol Section	Audrey Graviou
Michael O'Hara	Mental Health	
Fiona Brooke	HIV/AIDS Section	
Karl Higgins (secretary)	AIHW (outposted)	

Survey Technical Advisory Committee

Member	Organisation	Substitute
Paul Williams (Chair)	AIHW	Mark Cooper-Stanbury
Professor Ian McAllister	Research School of Social Sciences (ANU)	Dr Toni Makkai (Australian Institute of Criminology (AIC))
Maggie Brady	Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS)	John Riley (Office of Aboriginal and Torres Strait Islander Health Services (DHFS))
Paddy Mahony	Australian Bureau of Criminal Intelligence (ABCI)	
Dr Michael Lynsky	National Drug and Alcohol Research Centre	Michael Lodge (DHFS)
Jennifer Taylor	Research and Marketing (DHFS)	Paul Cramer (DHFS)
Karl Higgins (secretary)	AIHW	

Note: Roger Jones (Qualitative Evaluation and Design) attended a number of committee meetings.

Appendix 2: Standard errors and relative standard errors

Table A2.1: Standard errors (SE) and relative standard errors (RSE) relating to Australian totals, and males and females

Population estimate ('000)	Estimates relating to Australia		Estimates relating to sex			
			Male		Female	
	SE ('000)	RSE (%)	SE ('000)	RSE (%)	SE ('000)	RSE (%)
14,000	24	0.2				
12,000	81	0.7				
10,000	102	1.0				
9,000	108	1.2				
8,000	111	1.4				
7,000	112	1.6			23	0.3
6,000	111	1.9	54	0.9	50	0.8
5,000	107	2.2	71	1.4	62	1.3
4,000	101	2.5	78	2.0	67	1.7
3,000	92	3.1	78	2.6	66	2.2
2,000	78	3.9	71	3.6	60	3.0
1,500	69	4.6	65	4.4	55	3.7
1,250	63	5.1	60	4.9	51	4.1
1,000	57	5.8	55	5.6	46	4.7
750	50	6.7	49	6.6	41	5.5
500	41	8.3	41	8.2	34	6.9
400	37	9.3	36	9.2	31	7.8
300	32	10.8	32	10.8	27	9.0
200	26	13.3	26	13.3	22	11.2
100	18	18.9	18	18.9	15	15.9
70	15	22.6	15	22.6	13	19.0
50	13	26.8	13	26.8	11	22.5
30	10	34.6	10	34.7	8	29.1
20	8	42.4	8	42.5	7	35.7
10	5	59.9	6	60.2	5	50.5

Note: Light shading indicates caution in using estimates; darker shading indicates unreliable for most practical purposes.

Table A2.2: Standard errors (SE) and relative standard errors (RSE) relating to age groups

Population estimate ('000)	Estimates relating to Australia							
	14–19		20–39		40–59		60+	
	SE ('000)	RSE (%)	SE ('000)	RSE (%)	SE ('000)	RSE (%)	SE ('000)	RSE (%)
5,000			33	0.7				
4,000			52	1.3	40	1.0		
3,000			58	2.0	69	2.3		
2,000			56	2.8	74	3.7	50	2.5
1,500	2	0.2	52	3.5	71	4.8	54	3.7
1,250	19	1.6	49	4.0	67	5.4	54	4.4
1,000	24	2.5	45	4.6	63	6.3	52	5.2
750	26	3.5	40	5.4	56	7.6	48	6.5
500	24	4.9	33	6.8	47	9.6	41	8.4
400	23	5.8	30	7.7	43	10.8	38	9.6
300	20	7.0	26	8.9	38	12.7	33	11.3
200	17	5.9	22	11.1	31	15.7	28	14.1
100	13	13.0	15	15.8	22	22.5	20	20.3
70	11	15.7	13	18.9	18	27.0	17	24.3
50	9	18.7	11	22.4	15	32.0	14	28.9
30	7	24.3	8	29.0	12	41.4	11	37.4
20	5	29.9	7	35.6	10	50.7	9	45.9
10	4	42.4	5	50.4	7	71.8	6	65.1

Note: Light shading indicates caution in using estimates; darker shading indicates unreliable for most practical purposes.

Appendix 3: Population estimates

Table A3.1: Population estimates, by age and sex, Australia, 1998

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
(number)									
Males									
14–19	268,552	196,245	156,548	82,810	61,384	21,208	15,140	9,048	811,068
20–29	472,689	360,228	267,814	145,946	107,120	31,516	27,455	19,384	1,432,422
30–39	492,292	360,118	263,967	145,385	112,592	33,856	24,237	18,117	1,450,878
40–49	455,097	330,530	250,916	138,078	107,471	34,128	23,282	14,324	1,354,137
50–59	352,493	254,352	194,069	100,681	82,938	26,711	17,028	9,490	1,037,921
60+	479,648	347,803	241,285	119,153	122,582	36,686	15,283	5,453	1,367,964
All ages	2,520,771	1,849,276	1,374,599	732,053	594,087	184,105	122,425	75,816	7,454,390
Females									
14–19	254,881	187,391	148,013	78,332	58,546	20,403	13,921	8,347	769,942
20–29	467,322	354,762	262,920	138,787	102,974	31,532	26,589	17,496	1,402,585
30–39	491,746	366,250	266,024	143,697	112,693	35,541	25,091	16,373	1,457,726
40–49	452,659	336,287	247,974	135,537	108,665	34,370	24,540	12,798	1,353,070
50–59	340,203	251,196	183,930	93,716	83,185	26,007	16,511	7,086	1,001,938
60+	585,311	429,053	279,442	140,118	151,990	45,076	18,331	4,769	1,654,136
All ages	2,592,122	1,924,939	1,388,303	730,187	618,053	192,929	124,983	66,869	7,639,397
Persons									
14–19	523,433	383,636	304,561	161,142	119,930	41,611	29,061	17,395	1,581,010
20–29	940,011	714,990	530,734	284,733	210,094	63,048	54,044	36,880	2,835,007
30–39	984,038	726,368	529,991	289,082	225,285	69,397	49,328	34,490	2,908,604
40–49	907,756	666,817	498,890	273,615	216,136	68,498	47,822	27,122	2,707,207
50–59	692,696	505,548	377,999	194,397	166,123	52,718	33,539	16,576	2,039,859
60+	1,064,959	776,856	520,727	259,271	274,572	81,762	33,614	10,222	3,022,100
All ages	5,112,893	3,774,215	2,762,902	1,462,240	1,212,140	377,034	247,408	142,685	15,093,787

Source: Australian Demographic Statistics, ABS Catalogue No. 3101.0, September quarter 1998.

Appendix 4: Survey-related materials

Related publications

Collins D & Lapsley H 1996. The social costs of drug abuse in Australia in 1998 and 1992. National Drug Strategy Monograph series No. 30.

Higgins K, Cooper-Stanbury M & Williams P (forthcoming). Statistics on drug use in Australia 1998. AIHW Drug Statistics Series. Canberra: AIHW.

Ministerial Council on Drug Strategy (MCDS) 1998. National drug strategic framework 1998–99 to 2002–03, Canberra.

Stevenson C (forthcoming). Mortality and morbidity attributable to alcohol, tobacco and illicit drugs in Australia, 1996. AIHW Drug Statistics Series. Canberra: AIHW.

Planned publications

AIHW Drug Statistics Series [release late 1999]. 1998 National Drug Strategy Household Survey: correlates of drug use. Canberra: AIHW.

AIHW Drug Statistics Series [release late 1999]. 1998 National Drug Strategy Household Survey: drug-related physical and mental health. Canberra: AIHW.

AIHW Drug Statistics Series [release early 2000]. 1998 National Drug Strategy Household Survey: State and Territory results. Canberra: AIHW.

Unpublished statistics

A standard set of cross-tabulations at general, demographic and geographic levels will be available from September 1999 as PDF files on the Institute's web page <http://aihw.gov.au/publications>. All questionnaire items will be represented in this set and will be cross-tabulated by age and sex, by State and Territory, and by capital city, urban and rural geographic identifiers.

Other analyses may be available on request. Provision of data may be subject to an AIHW Health Ethics Committee application and charges may apply. For further information contact the author on (02) 6244 1000; or by e-mail at mark.cooper-stanbury@aihw.gov.au.

Access to the Confidentialised Unit Record Files

A public-use CURF will be available for researchers through the Social Sciences Data Archives at the Australian National University, from September 1999; ssda@anu.edu.com.au.

Data items removed from the master datafile in producing the public-use datafile comprise census collectors district (CCD), statistical local area (SLA), postcode, and dates of data collection. Geographic areas have been aggregated to a minimum of 50,000 persons and the Australian Standard Classification of Occupations (ASCO) code was reduced to two digits.

Application for research access to the master datafile, which contains all of the data items, may be approved subject to the agreement of the Institute's Health Ethics Committee.

Contact the author on (02) 6244 1000; or by e-mail at mark.cooper-stanbury@aihw.gov.au.

Appendix 5: The questionnaire

The questionnaire was not a single document. Three samples were selected, each with equivalent numbers of questions in the same sequence (refer to 'Survey design' above).

Sample 1 comprised face-to-face interviews with a self completion booklet for the more sensitive issues. Consequently, there were two booklets constituting this questionnaire.

Sample 2 respondents (selected from the same household as Sample 1) self-completed the entire questionnaire. An additional data item (relationship to Sample 1 respondent) was collected in this questionnaire and interviewer instructions were replaced with directions appropriate to self-completion.

Sample 3 respondents self-completed the entire questionnaire which was identical to the Sample 2 questionnaire, except the 'relationship to Sample 1' data item was not collected.

Additionally, to obviate the possibility that the order of possible responses within questions might affect the likelihood of selection, response lists were rotated so that blocks of possible answers were presented in equal numbers across all samples. Three rotations were used.

Accordingly, there were nine different questionnaires, all with the same question sequence, but different orders of possible responses within particular questions.