Patterns of Drug Use in Australia, 1985–95

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Abbreviations

ETS	Environmental tobacco smoke
LSD	Lysergic acid diethylamide
MDMA	Methylene-dioxymethamphetamine
NCADA	National Campaign Against Drug Use
NDS	National Drug Strategy
PCP	Phencyclidine piperidine

Executive Summary

Tobacco

- While post-war rates of smoking among men have declined, the level of smoking among women has remained stable. The gender gap in smoking now stands at about 5 percent, with 30 percent of men smoking, compared to 25 percent of women.
- The lifetime prevalence of tobacco has declined consistently since 1985, by 16 percent among adult men and 13 percent among adult women. There has also been a decline in prevalence among adolescents, most notably among those aged 14 or 15 years.
- Tobacco consumption among those who smoke 20 or more cigarettes per day has declined by about one-third over the period of the NDS surveys, with mean consumption among current smokers dropping from 18 to 17 cigarettes per day.
- Tobacco use has declined most rapidly among those with no educational qualifications, immigrants, and among those who are married or divorced.
- Among those who are current smokers, the age of initiation into tobacco use has increased since 1991, and is now 14.9 years for boys and 16.4 years for girls.
- Rates of smoking among women show least decline among those who are aged in their 20s and 30s, who are single, hold trade or diploma qualifications and who work in manual occupations.

Alcohol

- More people report that they have tried alcohol and use it regularly than any other substance. However, the proportion of non-drinkers in the community has been steadily rising, from 15 percent in 1988 to about 20 percent in 1995
- By the legal drinking age—18 years—over half of the population has taken alcohol, and this proportion has remained constant since 1991.
- The average age of initiation into alcohol has increased slightly and is now 16.6 years for males and 17.9 for females.
- The proportion of heavy drinkers has declined for both males and females, although the proportions of harmful and hazardous drinking have remained relatively constant, with men somewhat more likely to be in this category than women.

- The frequency of heavy drinking has decreased more significantly among the young than the old. Of those who remain drinkers, greater proportions are drinking more heavily with the intention of getting drunk.
- The proportion of adolescent binge drinkers has declined for both males and females, while the proportion of adolescent female heavy drinkers has increased and the proportion of male heavy drinkers has declined.

Cannabis

- Marijuana remains the most visible illicit drug in Australian society, and the proportions being offered the drug have remained stable. Lifetime prevalence shows an increase over the period, while there has been a slight increase in annual prevalence
- The annual prevalence of marijuana has been increasing among adolescents and among those aged in their 20s.
- The frequency of marijuana use has declined, with weekly use declining by six percentage points since 1988. Women are less frequent users than men. Men who continue to use marijuana into their 40s report frequent use.
- The age of initiation into marijuana use has been declining, particularly for those who report weekly use, and the average age of initiation now stands at just under 17 years.
- Those who use marijuana are more likely to be male, young, and born in Australia/New Zealand or the British Isles. Lifetime and annual prevalence is associated with tertiary education, although annual prevalence shows fewer variations based on education and is highest among the unemployed.
- Among adolescents, lifetime and annual prevalence rates for marijuana have increased over the period of the surveys, with lifetime prevalence standing at 41 percent in 1995, and annual prevalence 31 percent. The frequency of use among adolescents has also increased since 1988.

Heroin

- Being offered heroin—an important measure of availability—has declined consistently over the period of the NDS surveys, particularly among those aged between 14 and 29 years.
- Lifetime prevalence of heroin has remained stable, although lifetime prevalence among 14 to 29 year olds shows some evidence of decline. Use in the previous year has also remained stable.
- Most heroin users report irregular use of the drug; only about one in eight of those who have used the drug report weekly or more frequent use.
- Those who reported heroin use are more likely to be male, aged in their 20s, and to be in the labour force but unemployed. About one in 10 of those currently unemployed said they had been offered heroin, with one in 20 reporting lifetime prevalence.

Psycho-stimulants

- Amphetamines are widely available. The proportion being offered the drug increased between 1991 and 1993, and there is suggestive evidence that the level has been maintained in 1995.
- The lifetime prevalence of amphetamines has also increased since the late 1980s, although use in the previous year has remained constant since 1988.
- Those who report being offered amphetamines or using it are more likely to be men, to be aged in their 20s, and to have a manual job or to be unemployed.
- The availability of cocaine in Australia peaked in 1991, and has declined thereafter; in the 1995 survey only 3 percent reported being offered cocaine in the previous 12 months.
- Lifetime prevalence of cocaine and use in the previous year have remained stable, with 1 percent reporting use in the previous 12 months. Most of those saying that they had used cocaine had used it once or twice and not repeated it.
- Cocaine users are more likely to be men and to be unemployed, and to be aged in their 20s or 30s.
- The proportion of the population being offered hallucinogens has remained stable, although there is some evidence that more young people are being offered the drug. The lifetime rate of use has remained constant at about 7 percent of the population.
- Hallucinogen users are likely to be aged in their 20s or 30s, to be male, and to be unemployed.
- A significant proportion of young people report being offered ecstasy. Since the early 1990s, lifetime prevalence of ecstasy has fluctuated between two and three percent of the population, with one percent using it in the previous 12 months.
- Ecstasy users are most likely to be aged in their 20s and to be unemployed. Comparatively few adolescents report experience of the drug.

Other Drugs

- Measured by the proportion being offered tranquillisers and barbiturates, the availability of tranquillisers has remained stable, while the availability of barbiturates has declined.
- The lifetime prevalence of tranquillisers has remained stable, although annual prevalence has declined. About one-tenth of use is for non-medical purposes. Both the lifetime and annual prevalence of barbiturates has declined; about one quarter of barbiturate use is for non-medical purposes.
- Tranquilliser users are more likely to be female, older and born outside Australia, while the pattern for barbiturate use conforms more closely to the patterns for the major illicit drugs.
- Exposure to inhalants has been relatively stable, although there is some evidence of a slight decline. Lifetime prevalence has varied between two and four percent, while annual prevalence has not exceeded one percent of the population.
- Inhalant use is concentrated among adolescents, those aged in their 20s, and among males.

- Steroid prevalence is low, with lifetime prevalence standing at one percent of the population in 1995. There are comparatively few social structural variations in exposure to or use of steroids.
- About 1 percent of the population say that they have injected with drugs at some stage in their lives, with about half that number injecting during the previous 12 months. Among those who had injected in the previous 12 months, between one in four and one in three said that they had shared needles.
- Those using drugs intravenously are more likely to be male, aged in their 20s, Australian born, and unemployed.

Introduction

The main pre-requisite to effective policy-making is information. This is particularly important in the case of drug use, where information must be available about the impact of current policies on drug use before any policy changes can be contemplated. One of the primary objectives of the regular National Drug Strategy opinion surveys conducted by the Commonwealth since 1985 has been to monitor changes in patterns of licit and illicit drug use in the general population in order to provide an informational basis for policy-making. The surveys have been conducted at two to three year intervals, and in the ten years since 1985, five surveys have been completed. The data from the surveys represent an invaluable resource for monitoring long-term trends in patterns of drug use in Australia for the population as a whole.

This report examines trends in drug use in Australia since 1985 using the National Drug Strategy surveys. The report focuses particularly on tobacco, alcohol and marijuana, the drugs that are most widely used across the community, but it also examines heroin, the psycho-stimulants (amphetamines, cocaine, hallucinogens and ecstasy) and other drugs such as tranquillisers, inhalants, and steroids. One innovative aspect of the report is the pooling of the five samples, resulting in a total of over 15,000 respondents. This enables us, for the first time, to examine the social correlates of the drug use behaviours that are followed by very small proportions of the general population, such as the consumption of hallucinogens, the abuse of steroids and intravenous drug use.

The presentation of the results is broadly descriptive, with graphs being used for ease of interpretation wherever possible. We have generally avoided presenting results that examine public opinion towards drugs or drug policies, which is the subject of a parallel monograph. Adolescents are presented separately in the analyses where their inclusion is appropriate. Full details of the surveys and of the data analysis are provided in the Appendix. A number of individuals provided assistance in the preparation of the report. We are grateful to them all. Peter Vuksa and Mal Gibson of the Department of Health and Family Services, provided encouragement and advice at all stages of the project. Roger Jones and Sue Mertz of the Social Science Data Archive at the Australian National University provided the survey data and answered many queries about the 1995 survey.

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SECTION 1

Tobacco

Despite the health advances of recent years, smoking remains the major preventable cause of premature death in all advanced industrial societies. In Australia, smoking accounts for more than seven out of every 10 deaths attributable to drug use. The annual economic costs—in terms of lost years of life, loss of income and medical and related costs—has been estimated at around two percent of gross national product (Collins and Lapsley, 1991). In line with its costs to society, tobacco use has been the subject of considerable research, in Australia as well as overseas. But while the epidemiology of tobacco use is now well researched, its socio-economic causes and consequences are much harder to identify. It is these aspects of smoking that the NDS surveys are particularly well suited to addressing.

Smoking has been declining among the populations of most advanced industrial societies, while at the same time rates of smoking in Eastern Europe, Russia and Asia have been increasing. Nevertheless, the declines in the rates of smoking have not been uniform across the major social groups in Australian society. For example, it remains unclear why post-war levels of smoking have remained high among women, or why they have increased among younger women. It is also unclear why fewer immigrant Asians living in Australia smoke than Asians born here. This section uses the 1985 to 1995 NDS surveys to examine patterns of tobacco smoking in Australian society, and the extent to which there have been changes in smoking among social groups.

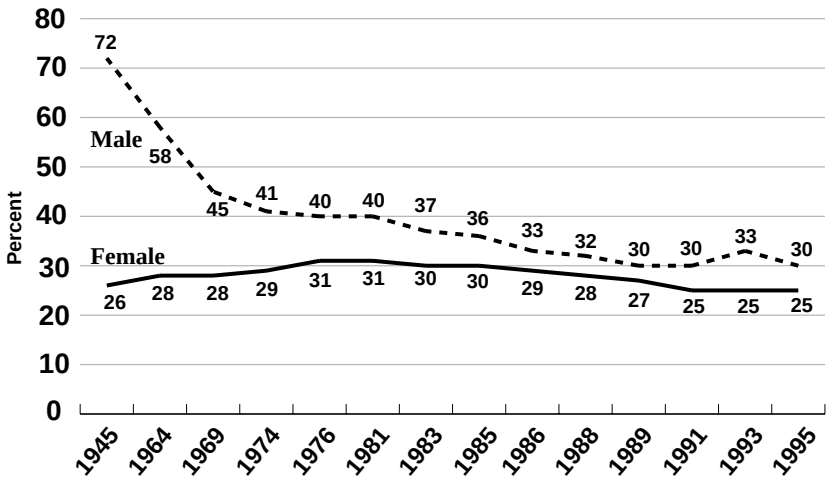
1.1 Trends in Prevalence

To place changes in the patterns of smoking in Australia over the past 10 years within a longer-term perspective, Figure 1.1 shows the rates of smoking for adult men and women separately since 1945.[1] The results confirm that there has been a consistent decline in smoking among men, from 72 percent in 1945 to less than half that figure in 1986. Since 1986, the figures show that the proportion of male and female smokers has declined slightly. For males there has been a drop of three percentage points, for women a drop of four percentage points. However, the long-term trend for women has been once of increasing use in the post World War period until the early 1980s while men have shown a consistent decline over this same period. In 1945, 26 percent of females smoked, compared to between 30 and 31 percent in the late 1970s and early 1980s. Since this peak in use, the proportion of women smokers appears to have declined gradually, by an average of about one

1 The estimates are generally for respondents aged 16 years or more. The main exception is the NDS 1993 estimates, which are for those aged 20 years and over, for the reasons noted in the Appendix.

percent per year. The most recent survey data that are available, the 1995 NDS survey, show that 25 percent of adult women smoke, which is the lowest proportion since 1945.

Figure 1.1: Trends in Tobacco Use, 1945–95[a]



a Age groups used for estimates vary slightly; most estimates are aged 16 years or more.

Sources: 1945–83 (McAllister, Moore and Makkai, 1990: 73); 1985, 1988, 1991, 1993, 1995 NDS Surveys; 1986 (Hill, 1987); 1989 (Hill, White and Gray, 1991).

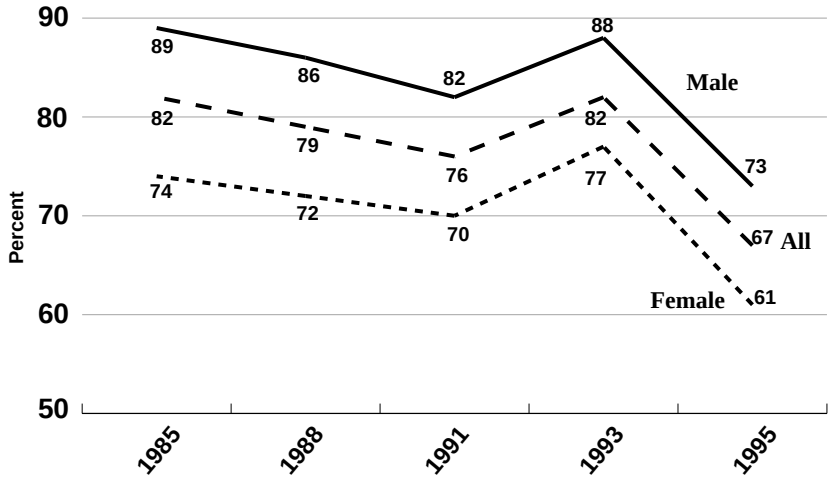
These figures indicate that, judged over almost half a century, the proportion of women smokers has changed little, certainly in comparison with their male counterparts. The net result is a declining gender gap in smoking. In 1945, 46 percent more men than women smoked; by 1986 this gap had diminished, to four percent, and then it increased slightly, to five percent, in 1995. The declining incidence of smoking is therefore having the effect of reducing the historically large gender gap in smoking, since there has been little or no overall decline in rates of smoking among women in the post-war years.

The NDS surveys have measured tobacco use in two ways. The first is by way of lifetime prevalence—that is, the proportion that reported having tried tobacco at least once in their lives. This measure is useful in making comparisons with the prevalence rates of other drugs across the population, mainly the illicit ones. The second measure is current consumption. This enables us to derive a measure of those who are current smokers, as well as to quantify actual levels of consumption among those who report being current smokers. The consumption measure is available in all of the NDS surveys except for 1993, when only a current smoking category can be estimated.[2]

2 The 1988 survey asked frequency of use in a standard format which was asked of all drugs and designed to derive a measure to be used for comparisons between drugs. In practice, this means that it is possible to identify those who are not current smokers, those who are current smokers but who do not smoke daily, and those who smoke daily. It is not possible to estimate levels of consumption among daily smokers.

The lifetime prevalence of tobacco has been declining since 1985, with the exception of 1993 when there was an increase amongst men and women (Figure 1.2). In 1985, 82 percent of the survey respondents reporting having used tobacco at least once in their lives; by 1995, this had declined by 15 percent, to just 67 percent. The largest decline is among men, down by 16 percent, while prevalence has declined among women by 13 percent. Over the period, the conversion rates—the proportion of those who try tobacco who end up as current smokers—has declined slightly. In 1985, just less than 38 out of every 100 persons who tried tobacco became smokers; in 1995, the comparable figure was just under 36 per every 100.

Figure 1.2: Trends in the Lifetime Prevalence of Tobacco Use by Gender, 1985–95[a]

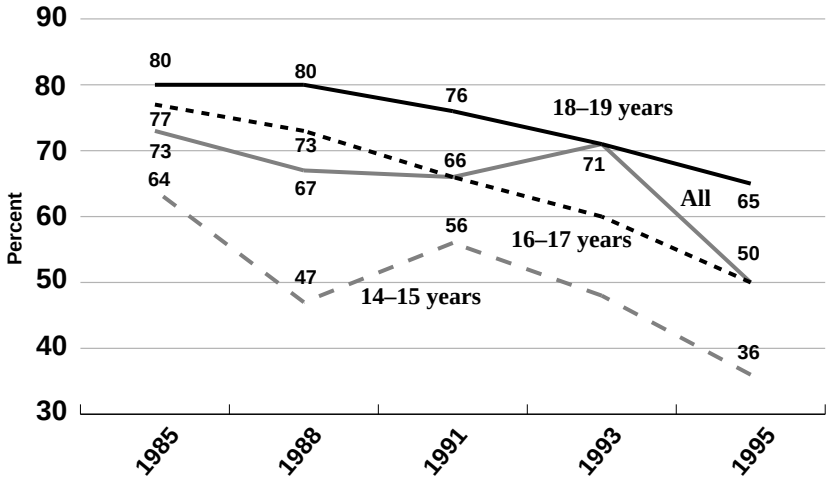


a Estimates are for respondents aged 20 years or over.
Sources: 1985–95 NDS Surveys.

All of the NDS surveys have included a sub-sample of 14 to 19 year old adolescents, which enables us to examine patterns of drug use among this specific and important age group. In the 1985, 1988 and 1991 surveys, this group was over-sampled in the overall survey sample; in the two most recent surveys, the larger total sample size has made such over-sampling of this group unnecessary. The results in Figure 1.3 shows a similar decline in lifetime prevalence of tobacco among adolescents. Among the group as a whole, lifetime prevalence has declined consistently in each survey, from 73 percent in 1985, to 50 percent in 1995. Nevertheless, this overall trend masks important variations among particular age groups. While the decline has been less among those aged 18 or 19 years—notably in the late 1980s and early 1990s—the youngest age groups show a different pattern. After a decline between 1985 and 1988, prevalence increased significantly, only to decline once again in 1995. This most recent, substantial, decline is also found among those aged 16 or 17 years.

Explanations for the substantially greater decline in prevalence among young adolescents are speculative, but it may be that recent legislative changes to restrict both advertising and availability account for the changes. Restrictions on the tobacco sponsorship of sport may have reduced the visibility and attractiveness of smoking to young people, as previous studies have suggested (Armstrong et al, 1990; Dobson, Woodward and Leeder, 1992). Similarly, restrictions on the availability of smaller packet sizes, first introduced in South Australia in 1986 and subsequently introduced in all of the others states and territories, were designed to reduce adolescent access to cigarettes (Chapman, 1992). Once again, this may have contributed to the significant declines in prevalence observed in Figure 1.3.

Figure 1.3: Trends in the Lifetime Prevalence of Tobacco Use Among Adolescents, 1985–95[a]



a Estimates are for adolescents in the age categories shown.
Sources: 1985–95 NDS Surveys, unweighted data.

1.2 Trends in Consumption

Although health advancement programs are usually designed to reduce the proportion of smokers in the population, a secondary goal is to reduce the rates of consumption among those who are unable or unwilling to quit the habit. While the first goal has met with some success over the past 10 years, there have been only modest changes in the levels of consumption among those who are current smokers. Table 1.1 shows the detailed levels of tobacco consumption in four of the five NDS surveys; the exception is 1988, where the standard consumption measure was not used. Infrequent smokers—those who do not smoke daily—have remained stable over the period, numbering two percent of the population in both 1985 and 1995. Those in the lowest three categories of daily smokers—smoking up to 15 cigarettes per day—have also remained relatively constant, and any variations are within the range of sampling error.

Table 1.1: Tobacco Use and Consumption, 1985–95[a]

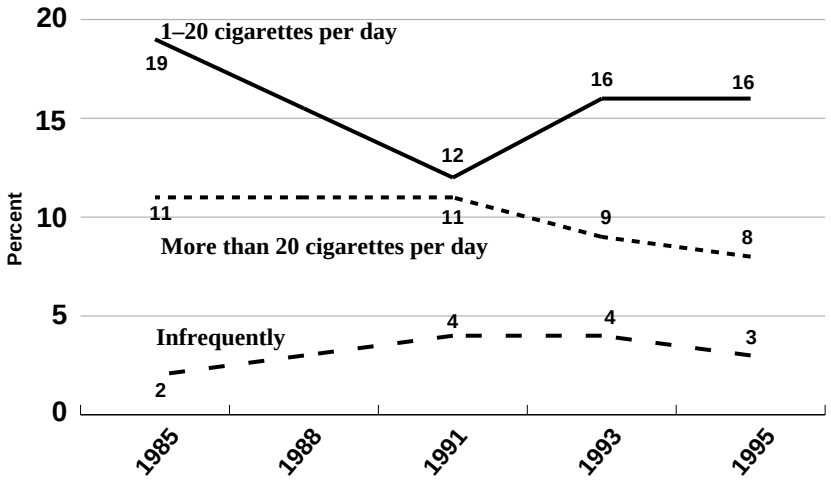
	1985	1988	1991	1993	1995	Change 1985–95
Never smoked	30		28	27	33	+3
Ex-smoker						
<100	15	62	23	21	16	+1
>100	22		22	23	23	+1
Current:						
<once a week	1	5	2	2	2	+1
At least once week	1	4	2	2	2	+1
Daily consumption						
1–5	3		1	3	3	0
6–10	3		3	4	4	+1
11–15	5		4	4	5	0
16–20	8	30	4	5	5	-3
21–25	6		5	4	4	-2
25–30	3		4	3	3	0
>30	3		3	3	1	-2
Total	**100**	**100**	**100**	**100**	**100**	
(N)	**(2,402)**	**(2,006)**	**(2,420)**	**(3,079)**	**(3,215)**	

a Estimates are for respondents aged 20 years or more. The questions were: (1985) 'Please look through all of the statements on this card. Which statement best describes you?' (1988) 'When did you last use tobacco, cigarettes?' (1991) 'Please look through the statement below. Which one statement best describes your use of tobacco/cigarettes?' (1993) 'Which one statement describes your use of cigarettes/tobacco?' (1995) 'Please read through all of the statements below, and then tick the one statement which best describes your current use of tobacco/cigarettes'

Sources: 1985–95 NDS Surveys.

To the extent that there has been a decline in tobacco consumption, it has been most marked among those in the higher categories of consumption. In 1985, eight percent of the population smoked 16 to 20 cigarettes per day; in 1995, the same figure was five percent. The proportion smoking more than 30 cigarettes per day has similarly declined, from three percent to one percent, over the same period. The extent of the change can be evaluated by separating those who smoke 20 or more cigarettes per day from those who smoke between one and 20 per day (Figure 1.4). In 1985, 11 percent of the adult population fell into the heaviest smoking category, a figure that declined to nine percent in 1993, and to eight percent in 1995. In other words, heavy smokers have declined by about one-third during the period of the NDS surveys. The overall effect has been to reduce the mean consumption of cigarettes per day among current smokers from 18.0 in 1985, to 17.0 in 1995.

Figure 1.4: Levels of Tobacco Use, 1985–95[a]



a Estimates are for respondents aged 20 years or more. Infrequent is defined as less than one cigarette per day, the remaining categories as shown in the table. See footnote to Table 1.1 for question wordings. Consumption was unavailable in the 1988 survey.
Sources: 1985–95 NDS Surveys.

There are modest gender variations in these trends, but more substantial age effects (Table 1.2). Among those smoking between 1 and 20 cigarettes per day, the rate of decline among men has been twice the rate of decline among women—four percent as against two percent. In the heaviest smoking category, the differential rate is also two percent, although again the decline is greater among men than among women. In terms of age, the largest declines in smoking are among those aged in their 20s, in the heaviest smoking category and those aged over 40 in the moderate consumption category. In 1985, 14 percent of 20 to 29 year olds smoked more than 20 cigarettes per day; in 1995, this had declined to nine percent. For those aged 40 to 59 years there were 17 percent who consumed between 1 and 20 cigarettes a day in 1985 declining to 12 percent in 1995. There are smaller declines among those aged in their 30s and in their 60s or older in the heaviest consumption category. The smallest decline is found among those aged in their 40s and 50s.

Table 1.2: Levels of Tobacco Use by Gender and Age, 1985–95[a]

	(Percent)				
	1985	1991	1993	1995	Change 1985–95
Gender					
Infrequent					
Male	2	5	4	3	+1
Female	2	3	4	3	+1
1–20 cigarettes per day					
Male	20	12	17	16	-4
Female	18	11	15	16	-2
More than 20 cigarettes per day					
Male	14	14	12	10	-4
Female	8	9	7	6	-2
Age					
Infrequent					
20–29 years	5	7	8	5	0
30–39 years	3	5	3	4	0
40–59 years	1	3	(3)	2	+1
60 or more years	1	2	(2)	1	0
1–20 cigarettes per day					
20–29 years	27	18	24	25	-2
30–39 years	17	15	19	18	+1
40–59 years	17	9	(14)	12	-5
60 or more years	14	6	(8)	11	-3
More than 20 cigarettes per day					
20–29 years	14	14	10	9	-5
30–39 years	13	15	13	10	-3
40–59 years	11	13	(11)	11	0
60 or more years	5	4	(5)	2	-3

a Estimates are for respondents aged 20 years or more. Infrequent is defined as less than one cigarette per day, the remaining categories as shown in the table. See Table 1.1 for question wordings. Consumption was unavailable in the 1988 survey. Age categories in parentheses for 1993 were 40–54 and 55 or more.

Sources: 1985, 1991–1995 NDS Surveys.

1.3 The Changing Social Profile of Smokers

A variety of social characteristics have emerged as important in shaping cigarette use. There is consistent evidence that adult smokers are more likely to come from lower socio-economic backgrounds, whether measured by educational attainment or by occupational status (Macfarlane and Jamrozik, 1993; Hill, White and Gray, 1991). Moreover, smokers from lower socio-economic backgrounds are more likely to purchase cigarettes in larger packet sizes, resulting in higher rates of consumption (Hill, White and Gray, 1991). Conversely, it is those in higher occupational status groups, smokers as well as non-smokers, who are more likely to favour restrictions on public smoking, such as in restaurants and cafes and in other public places (McAllister, 1994). Other social factors that have been observed to be important are birthplace, with those born in Asian countries being less likely to smoke than others (Hill, White and Gray, 1988) and Aboriginality.

The influence of four factors on current smoking—education, marital status, birthplace and social status—are shown in Table 1.3.[3] In terms of education, the largest decline in smoking is among those who have no qualifications: in 1985, 33 of this group were smokers, compared to 27 percent in 1995. There is comparatively little decline among those with tertiary or with trade or diploma qualifications with the latter showing a slight increase. Although education is still an important determinant of who does or does smoke, the significant decline in smoking among those with no qualifications means that the traditional gap between those with tertiary qualifications and those with no qualifications is now much reduced. Indeed, in 1995, the largest gap is between the tertiary qualified and those possessing a trade or diploma qualification.

Marital status may influence the decision to smoke in various ways, since it shapes social interactions and a range of other factors. Table 1.3 shows that consistently the highest rates of smoking are found among the divorced and separated, ranging from a substantial 54 percent in 1985, to 46 percent in 1991. Indeed, in each of the surveys, the divorced are almost twice as likely to be smokers than the married. Those who are single (and never married) have the second highest level of smoking, averaging 37 percent across the five surveys, followed by the married (with an average of 26 percent) and finally the widowed (17 percent). There has been a decline in smoking in three of the four groups, with the exception of the single respondents. In the case of the divorced, for example, smoking has declined by eight percentage points, albeit remaining at a level which is substantially greater than the rate for the population as a whole.

3 Indigenous Australians are included in the Australian/New Zealand category as there are too few aborigines in each of the NDS surveys for separate reliable analysis.

Table 1.3: The Social Characteristics of Current Smokers, 1985–95[a]

	(Percent current smokers)					
	1985	1988	1991	1993	1995	Change 1985–95
Education						
Tertiary	23	20	20	25	22	-1
Trade, diploma	29	31	26	28	31	+2
No qualifications	33	32	29	30	27	-6
Marital status						
Single	39	33	38	44	39	0
Married	30	32	24	23	25	-5
Divorced	54	52	40	47	46	-8
Widowed	22	22	14	17	19	-3
Birthplace						
English speaking						
Australia, New Zealand	31	30	27	30	30	-1
British Isles	37	31	26	27	25	-12
Non-English speaking						
Europe	37	33	27	29	18	-19
Asia	38	32	10	19	8	-30
Social status						
Labour force						
Non-manual	31	31	24	30	24	-5
Manual	43	32	39	35	39	-4
Unemployed	50	32	44	55	51	-1
Non-labour force						
Home duties	25	32	22	24	24	-1
Retired	23	32	14	17	21	-2

a Estimates are for respondents aged 20 years or more. See Appendix for definitions of variables.
Sources: 1985–1995 NDS Surveys.

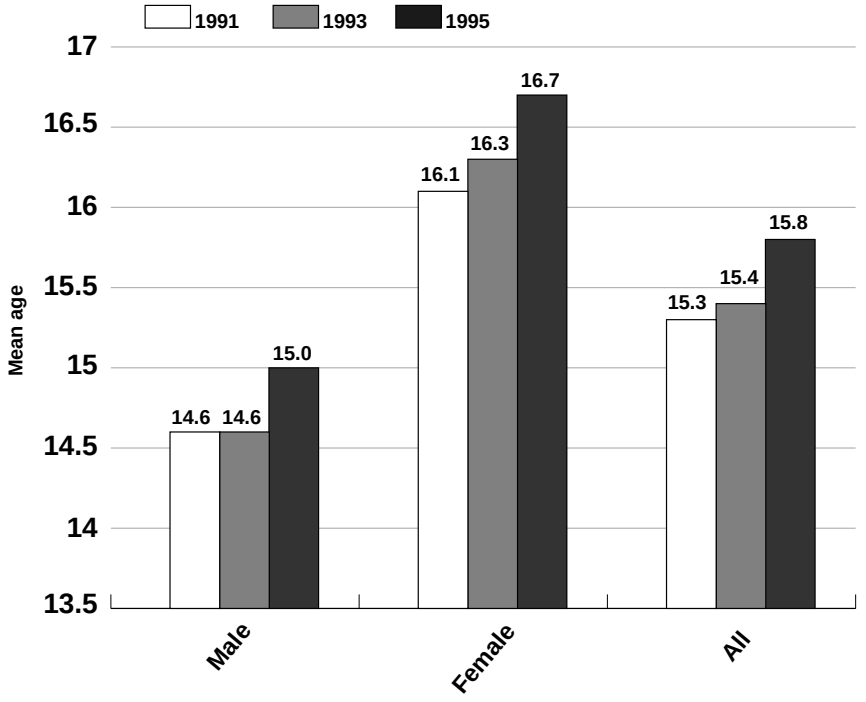
The variations in smoking among the four birthplace groups defined in Table 1.3 are also substantial. Although the comparatively small numbers of respondents in each of the two non-English speaking groups means that caution should be exercised before drawing firm conclusions from the results,[4] the consistency of the findings suggest major differences—and major changes—in rates of smoking among these groups. Smoking among those born in the British Isles, was higher than the Australian born in 1985, but is now lower than the Australian

4 The small numbers in the overseas born necessitated the comparatively broad birthplace groups. In each case, the numbers were usually more than 100, with the lowest being Asians in the 1993 survey, when the sample size dropped to 51.

born. Over the 10 year period of the surveys, smoking among the British has declined by 12 percentage points, compared to a decline of just one percent among the Australian born. Among those born in mainland Europe, smoking has declined by 19 percentage points, and among Asians, by 30 percentage points. This may be a reflection of changes in patterns of Asian immigration, rather than a change in the smoking behaviour of the birthplace group as such.

The final part of Table 1.3 examines the influence of social status, in this case differentiated by labour force status. Within those active in the labour force, non-manual workers have traditionally had lower rates of smoking than either manual workers or the unemployed. Rates of smoking amongst the employed population continue to decline. This may be due to the widespread practice of banning smoking in the workplace. In contrast those who are not in paid work show much lower declines in smoking levels over the past 10 years. However, the overall level of smoking amongst the retired and those in home duties is lower than for those in employment. The unemployed have, in most cases, double the number of current smokers in comparison to the retirees and those in home duties.

Figure 1.5: Mean Age of Initiation into Tobacco Use, 1991–95[a]



a Estimates are for respondents aged 20 years or more. The question was: 'What age [1993: How old] were you when you smoked your first full cigarette?'

Sources: 1991–1995 NDS Surveys.

The final social factor to impact on smoking that is examined here is age of initiation. Age of initiation is a major influence in shaping not just smoking, but almost all other forms of drug use as well. The younger the age at which a person starts to use a drug, the greater the likelihood that he or she will consume more of it, over a longer period. This is particularly the case with tobacco, which is less subject to the life cycle effects that help to shape the use of illicit drugs such as marijuana or heroin. The 1991, 1993 and 1995 NDS surveys asked respondents who were or had been smokers the age at which they recalled first smoking a full cigarette. Although experimentation occurs at comparatively young ages—sometimes as young as seven—smoking the first full cigarette occurs at the age of about 15 years (Oei and Burton, 1990) (Figure 1.5). In the short period between the three surveys, the age of initiation has increased, by about six months. The age of initiation for girls is generally about 18 months older than for boys.

1.4 Women and Smoking

A major health concern in recent years has been to explain the comparatively high rates of smoking among women, at least compared to men. While Figure 1.1 showed that smoking among men has declined by more than half in the post-war years, rates of smoking among women have remained either stable or, at best, shown a slight decline. A variety of explanations have been advanced for this, ranging from the changing role of women in the labour force, to shifts in values and aspirations. The problem in evaluating the importance of the various potential influences is that the factors that influence smoking rates are multi-causal, and it is clear that the magnitude of these influences vary between social groups (Chapman, 1993). Moreover, there is some evidence that men and women smoke for essentially the same reasons; in cases where there were significant gender differences, they are often attributable to gender-related differences in attitudes, expectations and behaviours (Clarke et al, 1993). Work focused on young women and smoking has centred on the construction of social identity and the role that smoking plays in that construction (Banwell and Young, 1993; Wearing, Wearing and Kelly, 1994). The most recent work suggests that power relations, social control and poverty are important factors associated with female smoking rates (Graham, 1993; Greaves, 1996).

Between 1985 and 1995, Table 1.4 shows that the proportion of smokers among women declined by three percent, from 28 percent in 1985 to 25 percent in 1995. By contrast, the rate of smoking among men declined during the same period by seven percent.[5] In 1995 the highest rates of smoking among women are found among those aged in their 20s (43 percent), those who have never married (40 percent), the divorced (44 percent) and women employed in manual occupations (38 percent). The lowest rates are found among older and widowed women. Age is, of course, highly correlated with marital status, and other research has indicated that the predominant influence is, in fact, the age of the person (Jones, 1994).

If we examine the changes that have taken places in rates of smoking among the various groups (Table 1.4, final column), then the smallest declines in the rates of smoking are found among women aged in their 20s, who are single, and who work in manual occupations. The rates of smoking have actually increased amongst women in their thirties and those with trade or diploma qualifications. These are all factors that point to the changing role of women in society, and to the values and attitudes which surround that changing role.

5 See Table 1.3. Current smokers combine ‘infrequent’, 1–20 per day and more than 20 per day smokers.

Table 1.4: The Social Characteristics of Current Women Smokers, 1985–95[a]

	(Percent current smokers)					
	1985	1988	1991	1993	1995	Change 1985–95
Current smokers	28	28	23	25	25	-3
Age						
20–29 years	44	41	36	41	43	-1
30–39 years	28	30	32	28	30	+2
40–59 years	24	26	19	23	21	-3
60+ years	14	15	9	12	13	-5
Education						
Tertiary	26	24	22	24	20	-6
Trade, diploma	19	26	18	26	25	+6
No qualifications	30	29	24	24	27	-3
Marital status						
Single	41	35	29	40	40	-1
Married	24	26	20	20	22	-2
Divorced	52	38	41	43	44	-8
Widowed	21	21	13	15	15	-6
Social status						
Labour force						
Non-manual	29	31	24	30	24	-5
Manual	39	29	34	34	38	-1
Unemployed	44	*	39	30	*	*
Non-labour force						
Home duties	24	26	21	22	24	0
Retired	23	22	11	11	21	-2

a Estimates are for respondents aged 20 years or more. See Appendix for definitions of variables. An asterisk denotes too few cases for reliable estimation.

Sources: 1985–1995 NDS Surveys.

SECTION 2

Alcohol

Although more people die prematurely from tobacco-related diseases than from alcohol abuse, many health officials believe that alcohol is a more important and intractable problem. Epidemiologists and public health experts have traditionally tended to under-estimate the harm caused by alcohol as they have defined alcohol-related problems in terms of alcohol dependence (Asvall, 1994). Deaths directly attributable to alcohol, such as cirrhosis of the liver and drink driving, are easy to quantify; the more difficult problems associated with alcohol use, such as domestic violence, child abuse, general problems of disorder, and work-related accidents, low productivity and days lost are less easily measured. However, there has been a growing realisation that alcohol is an important factor in both public health and social disorder (Makkai, 1993).

Although there are problems in estimating the costs associated with drug abuse, studies do provide an indication of the public policy implications of unregulated drug markets. Collins and Lapsley (1992), for example, have estimated that the costs associated with alcohol abuse in 1988 exceeded $3 billion. The alcohol industry is, however, a major business; it employs many people directly and indirectly and is a significant lobby group in the public health debate over alcohol and its regulation. Governments therefore find themselves in a difficult position in determining policy. On the one hand, they have to consider the wider economic benefits of the alcohol industry, including direct revenue to government via excises and taxes; on the other hand, they must accommodate public health demands for strict control and regulation.

2.1 Trends in Prevalence

Alcohol is the most widely used drug in Australia. It is the drug most people are likely to have been offered; it is the drug they are most likely to have tried; and it is the drug that they are most likely to consume on a regular basis. Its use is endemic in our society; our cultural norms and values ensure its continuing acceptance and use across a wide range of social groups; and exposure to the drug occurs at a relatively young age. Table 2.1 examines the percentage of people who report ever having tried alcohol and the age at when they first tried it.

Table 2.1: Lifetime Prevalence of Alcohol and Age of Initiation[a]

	(Percent)				
	1985	**1988**	**1991**	**1993**	**1995**
Never tried alcohol [b]	6	5	6	4	—
(N)	(2,402)	(2,008)	(2,420)	(3,072)	
Never tried a full glass of alcohol				11	13
				(2,940)	(3,381)
Tried when age[c]:					
Under 10 years old			3	8	2
10 or 11 years			2	4	3
12 or 13 years			7	8	6
14 or 15 years			17	18	18
16 or 17 years			29	27	27
18 or 19 years			22	18	22
20 years or older			20	17	23
(N)			(2,270)	(2,608)	(2,959)

a Estimates are for respondents aged 20 years or more.

b In all years respondents were asked whether they had ever tried alcohol. In 1993 and 1995 an additional question asked if they had ever had a full glass of alcohol. In the data file released in 1995 only a summary measure of the two questions was released. As a result it was not possible to compute the proportion that indicated they had never tried alcohol.

c The questions were as follows: (1991) 'What age were you when you first had a whole drink of alcohol (sips and tastes don't count)?' (1993) 'What age were you when you first had an alcoholic drink?' (1995) 'About how old were you when you had your first full glass of alcohol. In 1991 and 1993 fixed response categories as shown above were provided. In 1995 the respondents were asked to provide their age. The 1995 data have been collapsed into the categories for the previous years for comparative purposes.

Sources: 1985–95 NDS Surveys.

The lifetime prevalence of alcohol is relatively stable, although there appears to have been a slight decline in 1993. Overall, the vast majority of respondents have tried alcohol at some time in their lives. However, there are problems in examining all of the alcohol questions across the five surveys because of changes in question wordings and the filters used. In the 1993 NDS survey the standard 'have you ever tried alcohol' question was supplemented with a second question which asked whether the respondent had tried a full glass of alcohol. If the response to the first was 'no' then they were excluded from any further alcohol questions. This means that the lifetime prevalence measure can be estimated from 1985 to 1993, but further questions on last use and consumption are based on different groups.[6]

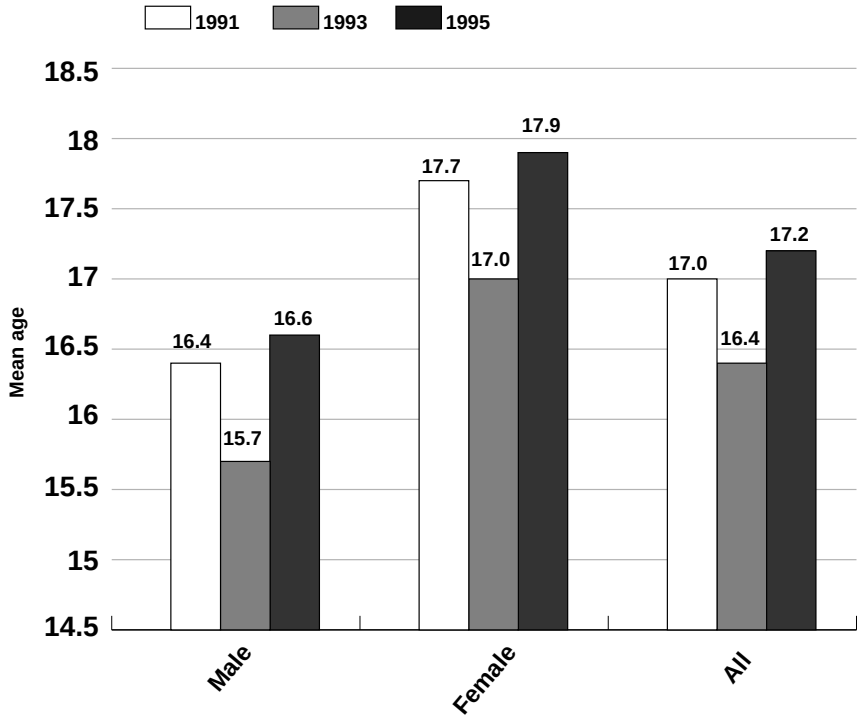
Respondents were asked the age at which they had first tried alcohol in 1991 and 1993. In 1995, they were asked the age at which they had first consumed an alcoholic drink if they reported having tried a full glass of alcohol. The distributions are similar for each year. The 1993 data suggest that slightly more respondents reporting trying alcohol at a younger age. However, the 1991 and 1995 question specifically referred to a 'whole drink' or 'full drink' whereas in 1993

6 Prior to 1993 these questions included those respondents who had drunk alcohol but not a whole glass. A similar procedure occurred in 1995 but the data released by the market research company contained a combined measure of the two questions (instead of the original two questions). As a result we are unable to estimate a lifetime prevalence measure that is strictly comparable with the previous survey years.

just an 'alcoholic drink' was stipulated. The data from Table 2.1 show that a big jump occurs between the ages of 12–13 years and 14–15 years. By 16 years of age more than a quarter of the sample reported that they had tried alcohol; by the legal age at which people can purchase alcohol for consumption, over half had already tried it.

Males are more likely to have tried licit and illicit substances and they are more likely to consume these substances more frequently and in larger quantities than females. The previous chapter showed that women were about 18 months older than males when they first tried tobacco. Figure 2.1 suggests that the age difference is also about 18 months for the first use of alcohol with the average age for males being around 16 years and for females being 17.5 years. The data indicate that respondents are on average more likely to experiment with tobacco, then alcohol; the following chapters show that the age of initiation with illicit drugs is older again.

Figure 2.1: Mean Age of Initiation into Alcohol Use, 1991–95[a]



a Estimates are for respondents aged 20 years or more. See Table 2.1 for question wordings.
Sources: 1991–1995 NDS Surveys.

Respondents were asked to indicate when they last had an alcoholic drink. The percentage that reported having used alcohol either on the day of the interview or on the previous day has been declining consistently. In 1988, Table 2.2 indicates that 44 percent of respondents who had tried

alcohol reported that they had had an alcoholic drink either today or yesterday; by 1995, 38 percent reported this behaviour. A further quarter reported that they had had a drink in the past week. Between 68 and 72 percent of respondents reported having had an alcoholic drink in the past seven days. Around one in ten respondents had not consumed an alcoholic drink in the past 12 months. If this group is combined with those who have never tried a full glass of alcohol, in 1995 we can estimate that about one-fifth of respondents are non-drinkers. This represents an increase from 1988 when the proportion of non-drinkers was 15 percent.

Females and older respondents are less likely to have consumed alcohol in the recent past. This pattern has remained consistent across the survey years. Table 2.3 indicates that around a half of all males who had tried alcohol report that they had had a drink within the last day as compared to around one third of women. The proportions who have drunk alcohol in the past two to seven days are almost the same for males and females, while females are more likely than males to report drinking more than a week ago. The overall decline in recent drinking is not gender specific; from 1988 to 1995 there is a five percentage point decline for females and a six percentage point decline for males in drinking alcohol either on the day of the interview or on the previous day.

Table 2.2: Time of Last Alcoholic Drink[a]

	(Percent)			
	1988	**1991**	**1993**	**1995**
Today/yesterday	44	45	42	38
2–7 days ago	24	27	29	27
More than 1 week ago, less than a year ago	21	18	20	27
More than a year ago	10	10	9	9
(N)	**(1,901)**	**(2,276)**	**(2,602)**	**(2,934)**

a Estimates are for respondents aged 20 years or more and are based on those who had ever tried alcohol in 1988 and 1991 and those who had tried a full glass of alcohol in 1993 and 1995. The questions were as follows. (1988) 'When did you last drink alcohol?' (1991, 1993, 1995) 'When did you last have an alcoholic drink of any kind?'

Sources: 1988–1995 NDS Surveys.

The decline in recent drinking does seem to be related to age. The proportion of those aged under forty years who had drunk alcohol on the day of the interview or on the previous day has declined since 1988. For example, in 1988, 42 percent of 20 to 29 year olds and 45 percent of 30 to 39 year olds reported drinking alcohol either on the day of the interview or on the previous day. By 1995, the proportion of the same age groups reporting this behaviour had declined by five percent for those aged 20 to 29 years and by 11 percent for those aged 30 to 39 years. These declines are particularly important given that it is the younger age groups who are most likely to report drinking in the recent past.

Table 2.3: Time of Last Alcoholic Drink by Gender and Age[a]

	(Percent)				
	1988	1991	1993	1995	Change 1988–95
Gender					
Today/yesterday					
Female	33	36	33	28	-5
Male	54	54	50	48	-6
2–7 days ago					
Female	25	28	30	29	+4
Male	24	27	28	25	+1
More than 1 week ago, less than a year ago					
Female	30	23	27	33	+3
Male	13	12	14	21	+8
More than a year ago					
Female	13	13	10	11	-2
Male	8	8	8	7	-1
Age					
Today/yesterday					
20–29 years	42	43	34	33	-5
30–39 years	45	47	43	34	-11
40–59 years	46	47	(47)	43	-3
60 or more years	42	42	(43)	41	-1
2–7 days ago					
20–29 years	29	30	33	33	+4
30–39 years	28	28	32	29	+1
40–59 years	22	26	(26)	26	+4
60 or more years	19	25	(26)	19	0
More than 1 week ago, less than a year ago					
20–29 years	22	20	27	31	+9
30–39 years	22	18	20	28	+6
40–59 years	21	16	(17)	25	+4
60 or more years	22	17	(18)	25	+3
More than a year ago					
20–29 years	7	6	7	4	-3
30–39 years	6	7	6	10	+4
40–59 years	12	11	(9)	7	-5
60 or more years	17	17	(13)	15	-2

a Estimates are for respondents aged 20 years or more and those who have ever tried alcohol in 1988 and 1991 and those who have tried a full glass of alcohol in 1993 and 1995. See Table 2.2 for question wordings. Age categories in parentheses for 1993 were 40–54 and 55 or more.

Sources: 1988–95 NDS Surveys.

2.2 Trends in Consumption

To determine how often people consumed alcohol, since 1988 the survey respondents have been asked how often they had consumed an alcoholic drink of any kind. The respondents who reported that they had not consumed any alcohol within the previous 12 months were automatically excluded from the 'how often do you drink' question. In Table 2.4 the data have been grouped into six categories to ensure comparability with all years. By necessity, the final category includes those who drink less often than once a month, those who no longer use and those who have never drunk alcohol. The results suggest that just under half of the population regularly drink alcohol on at least one day of the week. In 1995, 47 percent reported this frequency of drinking with 10 percent reported that they drank alcohol on every day of the week and another nine percent four to six days a week.

Table 2.4: Frequency of Alcohol Consumption[a]

	(Percent)			
	1988	**1991**	**1993**	**1995**
Every day	10	11	9	10
4–6 days a week	10	10	9	9
2–3 days a week	18	18	18	14
one day a week	16	15	13	14
1–3 days a month	14	15	15	17
Less often/no longer use/non-drinker	33	32	37	37
(N)	**(2,016)**	**(2,425)**	**(3,116)**	**(3,381)**

a Estimates are for respondents aged 20 years or more. The questions and codes were as follows. (1988) 'How often do you or did you drink alcohol? Daily, 4–6 times a week, 2–3 times a week, once a week, 2–3 times a month, once a month, every 1–2 months, 3–4 times a year, once or twice a year, less often/no longer use. (1991, 1993, 1995) 'How often do you have an alcoholic drink of any kind? Every day, 4–6 days a week, 2–3 days a week, one day a week, 2–3 days a month, one day a month, less often, no longer use.'

Sources: 1988–95 NDS Surveys.

There are age and gender variations in how frequently the respondents say that they drink alcohol. Women report drinking less often than males, as do the elderly. Table 2.5 examines the gender differences in the frequency of drinking. The results show that in 1995 some 37 percent of males as compared to 19 percent of females reported that they drank alcohol on four to seven days a week. There has been a decline in the frequency of drinking among males—more men drink only one to three days per month now than in 1988, largely at the expense of those who reported drinking one to three days per week. There is also change in drinking patterns among women. Women who drink frequently—about four to seven days per week—have declined slightly from 21 percent in 1988 to 19 percent in 1995 and those who drink moderately, one to three days per week, declined from 50 to 46 percent. The data suggest that the group that is at most risk— those who drink frequently—are not the group who are modifying their behaviour.

Table 2.5: Frequency of Drinking by Gender, 1988–95[a]

	(Percent)				
	1988	1991	1993	1995	Change 1988–95
Male					
4–7 days per week	36	33	33	37	+1
1–3 days per week	50	51	49	42	-8
1–3 days per month	14	15	18	21	+7
Female					
4–7 days per week	21	25	20	19	-2
1–3 days per week	50	45	50	46	-4
1–3 days per month	29	30	30	35	+6

a Estimates are for respondents aged 20 years or more who have drunk alcohol in the past month. See Table 2.4 for question wording.

Sources: 1988–1995 NDS Surveys.

Table 2.6 shows the frequency with which different age groups report drinking alcohol. The most substantial change in the patterns of drinking emerge among the younger age groups. These groups report drinking much less frequently over the past decade. Among those aged in their 30s, for example, there is a nine percentage point decline in the proportion drinking on four to seven days per week, and a similar increase in the proportion drinking between one and three days per month. Without data collected on the same individuals (ie. a panel study) it is impossible to isolate the reasons for the changes in the patterns, but as with the declines in drinking among women, a greater awareness of the health effects of alcohol use is one explanation.

There is a strong relationship between when people last reported drinking alcohol and how often they drink. Those who drank on the day of the interview or on the previous day said that they drank more frequently than those whose last drink was more than a week ago. Pooling the data across the survey years, we find that of those who drank either on the day of the interview or on the previous day, 47 percent reported that they drank alcohol on four to seven days a week. This compares with 2 percent of those who had their last drink more than a week ago. Similarly, 8 percent of those who drank on the interview day or on the previous day reported that they drank alcohol one to three days a month while 81 percent of those who last drank more than a week ago reported drinking one to three days a month.

Table 2.6: Frequency of Consumption by Age, 1988–95[a]

	(Percent)				
	1988	1991	1993	1995	Change 1988–1995
4–7 days a week					
20–29 years	19	18	13	17	-2
30–39 years	25	30	22	16	-9
40–59 years	38	35	(34)	38	0
60 or more years	37	36	(42)	45	8
1–3 days a week					
20–29 years	58	56	54	54	-4
30–39 years	52	49	55	53	+1
40–59 years	43	46	(47)	37	-6
60 or more years	47	45	(42)	33	-14
1–3 days a month					
20–29 years	23	26	34	30	+7
30–39 years	23	21	23	32	+9
40–59 years	19	20	(20)	26	+7
60 or more years	16	20	(16)	22	+6
(N)		**(1,348)**	**(1,642)**	**(1,961)**	**(2,122)**

a Estimates are for respondents aged 20 years or more that had drunk alcohol in the past month. See Table 2.4 for question wording. Age categories in parentheses for 1993 were 40–54 and 55 or more.

Sources: 1988–95 NDS Surveys.

To quantify the extent of weekly heavy drinking, the female respondents were asked how often they drank two or more drinks in a day and male respondents were asked how often they drank four or more drinks in a day. The results show that males are more likely to report that they drink heavily more often than females (Table 2.7). For example, in the 1995 survey 5 percent of females and 13 percent of males said that they drank heavily four to seven days a week. At the other extreme, 26 percent of males and 40 percent of females reported that heavy drinking occurred less often than one to three times a month. There does appear to be a decline in female frequent heavy drinking. In 1991 almost one in every 10 women reported that they drank heavily on four to seven days a week; by 1995 this had dropped to five percent. The same figures for males are 14 percent in 1991 and 13 percent in 1995.

Table 2.7: Frequency of Heavy Drinking by Gender, 1991–1995[a]

	(Percent)					
	1991		1993		1995	
	Female	Male	Female	Male	Female	Male
Every day	4	7	2	5	1*	4
4–6 days a week	5	7	3	6	4	9
2–3 days a week	12	21	12	15	6	12
One day a week	17	18	14	17	18	22
1–3 days a month	30	24	29	28	31	28
Less often	33	23	40	28	40	26
(N)	**(752)**	**(906)**	**(855)**	**(1,028)**	**(858)**	**(1,005)**

a Estimates are for respondents aged 20 years or more. The question was as follows. 'In the past 12 months, how often do you had more than [females, 2 drinks; males, 4 drinks] in a day? Every day, 4–6 days a week, 2–3 days a week, one day a week, 2–3 days a month, one day a month, less often, never'.

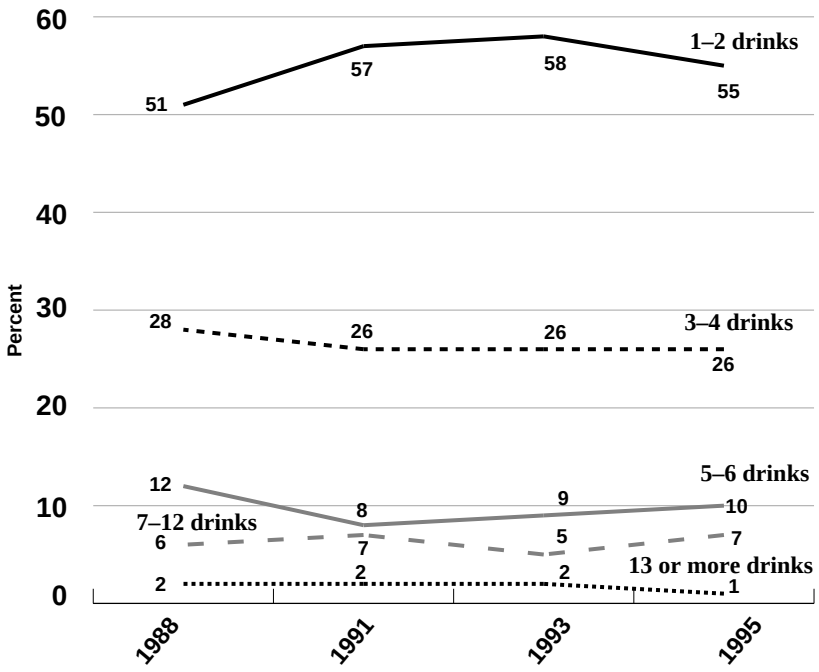
* Less than 10 cases.

Sources: 1991–1995 NDS Surveys.

Respondents were also asked the number of drinks they consumed on a usual drinking day. Figure 2.2 shows that the number of drinks consumed on a usual drinking day has remained stable. Just over half of the respondents reported that they drank only one or two drinks on a usual day and another quarter reported drinking between three and four drinks. However, the recommended drinking levels differ for females and males. When this is taken into account, 67 percent in 1988, 74 percent in 1991, 75 percent in 1993 and 72 percent in 1995 reported that they regularly consumed more than the recommended daily intake of alcohol for females and males.

In addition to the number of drinks consumed on a usual drinking day, the respondents were asked how many drinks they had consumed on the last occasion they drank heavily. Table 2.8 shows the number of drinks consumed on the last heavy drinking day for females and males. There has been little change since 1991 in the number of drinks that heavy drinkers said they consumed on the last occasion. Very heavy drinking is much more common among males than females. In 1995, for example, 24 percent of men reported that they drank nine or more drinks on their last heavy drinking occasion, compared to 4 percent of women. The data indicate that when women exceed the recommended levels, around three-quarters of them restrict this excess to one or two drinks as compared to around half of men.

Figure 2.2: Number of Drinks Consumed on a Usual Drinking Day, 1988–95[a]



a Estimates are for respondents aged 20 years or more.
Sources: 1988–95 NDS Surveys.

Table 2.8: Number of Drinks Consumed on Last Heavy Drinking Occasion, 1991–95[a]

	(Percent)					
	1991		1993		1995	
	Female	Male	Female	Male	Female	Male
13+ drinks	2	10	1	9	1	8
9–12 drinks	3	15	2	12	3	16
7–8 drinks	4	26	6	25	7	25
5–6 drinks	13	50	16	54	19	51
3–4 drinks	78		75		70	
(N)	**(732)**	**(522)**	**(767)**	**(990)**	**(971)**	**(803)**

a Estimates are for respondents aged 20 years or more that reported drinking 8 to 12 drinks in one or more sessions in the previous two weeks.
Sources: 1991–95 NDS Surveys.

Table 2.9: Heavy Drinking and Intention to get Drunk by Gender, 1993–1995[a]

	(Percent)			
	1993		1995	
	Female	Male	Female	Male
Heavy drinking in previous fortnight (percent yes)	33	29	41	36
(N)	(148)	(487)	(120)	(277)
Intention to get drunk (percent yes)	42	49	56	52
(N)	(46)	(139)	(49)	(99)

a Estimates are for respondents aged 20 years or more and are restricted to those who are heavy consumers. See text for details. The questions were as follows. 'In the last 2 weeks, have you ever had [females: 8 or more drinks; males: 12 or more drinks]?' 'On any of these occasions did you intend to get drunk?' The second question was only asked of those who said yes to the first question.

Sources: 1993, 1995 NDS Surveys.

The 1993 and 1995 NDS surveys further investigated very heavy drinking by asking men if in the last two weeks they had consumed 12 or more drinks and women if they had consumed 8 or more drinks. Both were asked that if on any of these occasions they intended to get drunk. The initial question was restricted to those respondents who in 1993 indicated that they had consumed five or more drinks in at least one session in the last two weeks. In 1995 the question was restricted to males who reported drinking seven or more drinks and females drinking 5 or more drinks in one session in the previous week. In both of the survey years, women were more likely to report one or more very heavy drinking session compared to men (Table 2.9). The data suggest that a greater proportion of respondents in 1995 than in 1993 were very heavy drinkers. Similarly, the proportion, both male and female, whose intention is to get drunk, has increased. Yet the overall picture from the earlier tables is one of declining frequent and heavy consumption. This suggests that those respondents who remain heavy drinkers consume much more and are more committed to this behaviour.

In addition to being asked about drinking patterns, respondents in the 1991, 1993 and 1995 surveys were asked about their beverage preferences. Unfortunately, the question wording changed in 1995 so we can only compare the 1991 and 1993 responses.[7] There was little change in main beverage preference between 1991 and 1993 (Table 2.10). The most popular beverage was wine with 35 percent of drinkers identifying it is as their usual drink in 1993. This was followed by 28 percent who indicated regular beer, 17 percent low alcohol beer, and 17 percent who chose spirits. The gender breakdown indicates noticeable differences in preferences, with women preferring wine and spirits and men preferring beer, either regular or low alcohol.

7 In the previous years the respondents were restricted to one response when asked their beverage preference whereas in 1995 respondents were asked what beverage they usually drank in a multiple response format.

Table 2.10: Beverage Preferences by Age and Gender, 1991–93[a]

		(Percent)						
		Age				Gender		
		20–29	30–39	40–59	60+	Female	Male	Total
1991								
	Wine	18	41	44	43	55	21	37
	Regular beer	40	28	21	24	9	45	28
	Low alcohol beer	4	15	18	18	8	19	14
	Spirits	36	14	12	13	23	14	18
	Other	*	*	4	3	5	1	3
	(N)	(455)	(489)	(683)	(403)	(982)	(1049)	(2,030)
1993								
	Wine	19	39	43	39	54	19	35
	Regular beer	41	29	21	22	9	45	28
	Low alcohol beer	6	15	22	23	9	24	17
	Spirits	31	15	11	13	25	11	17
	Other	3	2	2	3	4	1	3
	(N)	(554)	(577)	(623)	(563)	(1,085)	(1,232)	(2,317)

a Estimates are for respondents aged 20 years or more. * Denotes too few cases for reliable estimation.
Sources: 1988–1995 NDS Surveys.

There are also age variations. A greater proportion of respondents in their 20s prefer spirits than in the older age groups while a greater proportion of the latter prefer low alcohol beer than those in their twenties. It would appear that the older age group has been more likely to embrace low alcohol beer and suggests the need for strategies to target the beverage preferences of younger consumers. Those aged 30 and older exhibit similar preferences. Wines are preferred by around four in 10, followed by regular beer and then low alcohol beer; spirits are the least preferred of all of the beverages. However beer, whether it is regular or low alcohol, is the most favourite beverage of all the age groups.

2.3 Types of Drinkers

In order to classify individual patterns of alcohol use, the NDS surveys have included two questions on how often the respondents drank alcohol and how much they consumed on a usual drinking day. From this we can identify five drinking types, although more detailed patterns can be developed (see Jones, 1993). The five categories are defined as harmful/hazardous, binge drinking, heavy drinking, moderate drinking and non-drinkers. Table 2.11 shows the breakdown of drinking patterns by gender for each survey.

Table 2.11: Types of Drinkers by Gender, 1988–1995[a]

	(Percent)							
	1988		1991		1993		1995	
	Female	Male	Female	Male	Female	Male	Female	Male
Harmful/hazardous drinking	6	7	6	6	4	4	4	6
Binge drinking	6	4	4	3	4	4	6	4
Heavy drinking	15	14	13	11	11	10	11	11
Moderate drinking	51	62	54	66	50	63	52	61
Non-drinker	22	12	23	14	31	19	27	17
(N)	(1019)	(997)	(1,227)	(1,198)	(1,582)	(1,534)	(1,734)	(1,646)

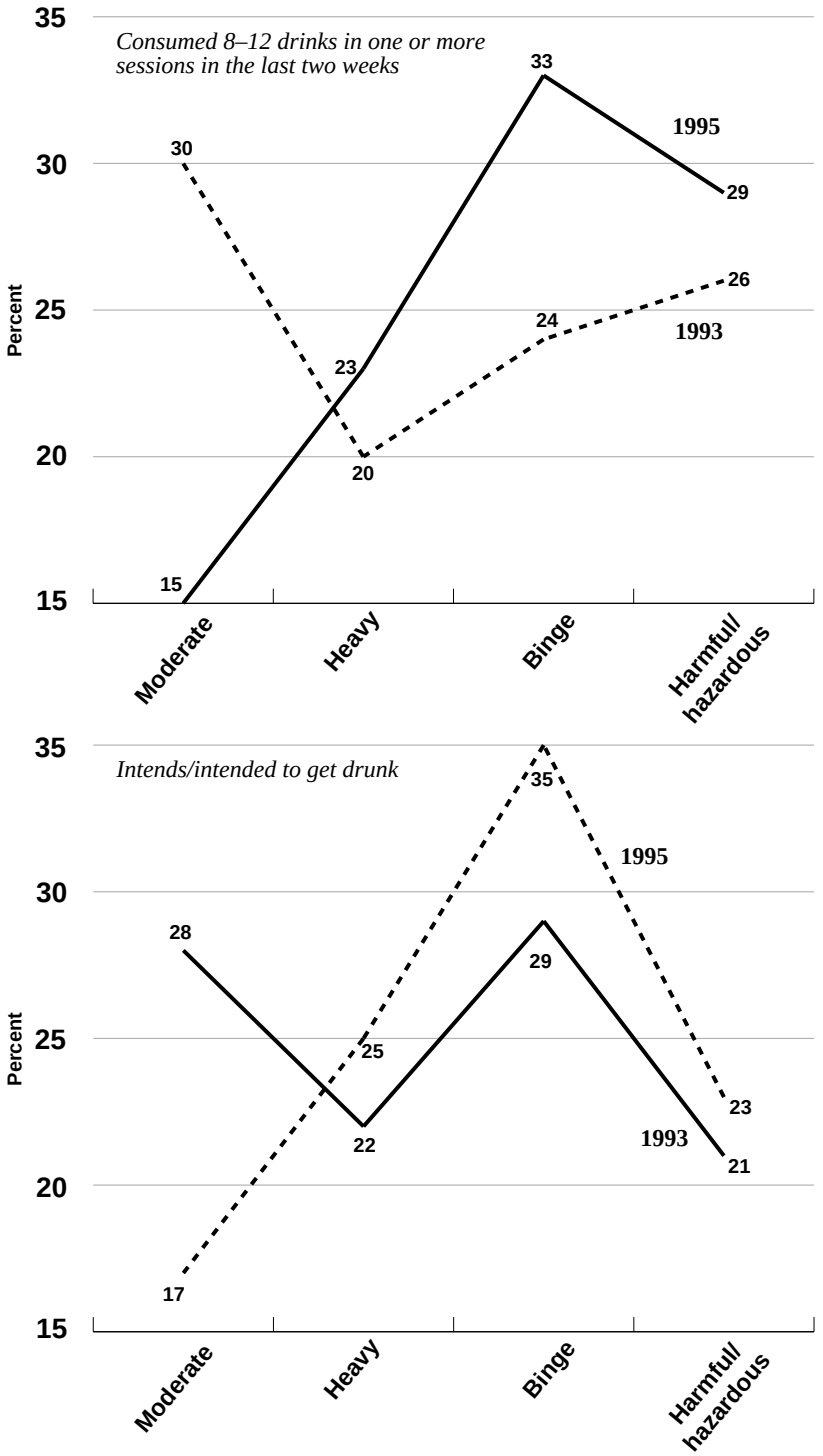
a Estimates are for respondents aged 20 years or more. See text for details of categories.
Sources: 1988–95 NDS Surveys.

Drinkers in the harmful/hazardous group regularly consume alcohol heavily or very heavily. For men, this includes those who consume five or more drinks on seven days a week, or seven or more drinks on four to six days a week, or more than 12 drinks on two to three days a week. For women, the category includes those who consume three or more drinks at least four days a week, or five or more drinks on two to three days a week, or more than six drinks twice a week or more often. Among men, binge drinkers are defined as those who drink more than seven drinks but once a week at most; for females, it is those who drink more than five drinks but once a week at most. Heavy drinking is defined for males as usually drinking five or more drinks and for females as usually drinking three or more drinks. Moderate drinkers are those who drink lesser amounts than those defined above. Non drinkers include those who have never tried alcohol as well as those who no longer drink.

There is no significant gender gap in the levels of heavy to harmful/hazardous drinking. However, a gender gap does appear among moderate and non-drinkers. Males are more likely to be moderate drinkers while a greater proportion of females than males indicate they are non-drinkers. The data indicate that over time the level of heavy drinking has declined while the level of abstinence has increased.

The 1993 and 1995 NDS surveys included measures of binge drinking and the intention to get drunk. Figure 2.3 disaggregates these behaviours by their usual drinking patterns. Very heavy drinking sessions or binge drinking still occurs among moderate drinkers although the data suggest a significant decline between 1993 and 1995. There has been relatively little change among heavy drinkers in terms of binge drinking. Those whose usual pattern is one of binge drinking are the largest group to report that they had had a very heavy drinking session in the previous two weeks in 1995. Similarly, the intention to get drunk is not restricted to binge or harmful/hazardous drinkers. Among those who intended to get drunk, 28 percent in 1993 were moderate drinkers, a figure that declined to 17 percent in 1995. The intention to get drunk is however associated with regular drinking patterns. By 1995 few moderate drinkers reported that their intention was to get drunk on their last heavy drinking session while 35 percent of those who are classified as binge drinkers did report such intentions.

Figure 2.3: Drinking Patterns Among Heavy Drinkers, 1993 and 95[a]



a Estimates are for respondents aged 20 years or more.
Sources: 1993, 1995 NDS Surveys.

2.4 The Social Profile of Two Drinking Types

Using the classification of drinkers above, Table 2.12 examines the social profile of non-drinkers and harmful/hazardous drinkers from 1988 to 1995. There has been an increase in the proportion of people who report that they have either never consumed alcohol or who are currently no longer using alcohol across all the different social groupings. At the other extreme, the proportions that report harmful/hazardous drinking patterns have declined slightly. In terms of age, older respondents are more likely to report that they are non-drinkers and less likely to report harmful/hazardous drinking patterns. The differences between young and old have become more

Table 2.12: Social Characteristics of Two Drinking Types[a]

	(Percent)									
	Non-drinkers					Harmful/hazardous drinkers				
	1988	1991	1993	1993	Change 1988–95	1988	1991	1993	1993	Change 1988–95
Age										
20–29 years	15	12	20	16	+1	6	7	4	6	0
30–39 years	10	12	18	21	+11	6	6	4	2	-4
40–59 years	18	18	25	20	+2	9	6	4	7	-2
60+ years	27	30	35	35	+8	5	5	5	4	-1
Education										
No qualification	21	21	29	27	+7	8	6	5	5	-3
Trade/diploma	13	17	21	16	+3	5	7	4	5	0
Tertiary	8	12	17	15	+7	4	4	3	4	0
Social status										
Labour force										
Non-manual	9	10	16	13	+4	6	5	4	5	-1
Manual	16	13	22	17	+1	4	4	3	6	+2
Unemployed	14	12	21	28	+14	12	16	7	9	-3
Non-Labour Force										
Home duties	27	29	35	31	+4	7	8	3	2	-5
Retired	22	30	33	35	+13	8	5	7	5	-3
Marital status										
Single	14	12	19	15	+1	5	8	6	7	+2
Married/de facto	16	18	24	23	+7	7	5	3	5	-2
Divorced	17	16	23	18	+1	6	13	7	6	0
Widowed	33	43	48	46	+13	4	6	5	3	-1
Birthplace										
Australia/ New Zealand	17	16	23	20	+3	7	6	4	6	-1
British Isles	19	17	26	22	+3	6	7	7	4	-2
NES Europe	16	26	29	30	+14	*	*	*	*	
Asia	24	39	47	35	+11	*	*	*	*	

a Estimates are for respondents aged 20 years or more. An asterisk denotes too few cases for reliable estimation.
Sources: 1988–1995 NDS Surveys.

pronounced during the decade, particularly with regard to non-drinking. Tertiary educated respondents are less likely to be non-drinkers than those without any post-secondary qualifications, but they are less likely to report harmful or hazardous drinking patterns. This finding is consistent with patterns of illicit drug use where the more educated exhibit higher levels of experimentation but lower levels of regular use.

Those not in the labour force are more likely to report being non-drinkers than either manual or non-manual workers. This could be due to a range of factors, notably opportunity and financial factors. The unemployed consistently report the highest levels of harmful/hazardous drinking. Those who are married and widowed are more likely to be non-drinkers and less likely to report harmful/hazardous drinking patterns. Although any examination of the drinking patterns of non-English speaking immigrants is problematic because of the comparatively small sample sizes, the data suggest that these groups are much more likely to exhibit higher levels of abstainers than the two English speaking groups.

2.5 Adolescent Drinking Patterns

Adolescents represent a particular risk group for alcohol. Although the legal drinking age is 18 years, there is widespread underage drinking and alcohol abuse among the young is often viewed as an important rite of passage. Table 2.13 applies the different drinking profiles defined in the previous section to adolescents. In line with the adult sample, since 1988 there has been a consistent rise in the proportions who report that they are a non-drinker. There has also been a slight decline in the harmful/hazardous and binge drinking patterns. For the former, the decline started in 1991 and for the latter, the decline is apparent since 1988. The proportion who are usually binge drinkers, as defined here, is much higher than for the adult population. In 1995, 12 percent of adolescents were classified as binge drinkers as compared to 5 percent of the adult sample. Similarly, binge drinking in the previous two weeks is also higher among adolescents than adults. Around 7 percent of all adolescents reported that they intended to become intoxicated when they had a heavy session in the previous two weeks.

The pattern of usual drinking shows distinct age variations, as the first part of Table 2.14 demonstrates. As age increases so too does the proportion of drinkers, together with an increase in heavy and binge drinkers. From 1988 to 1995 there does appear to have been a drop in the proportions of binge drinkers, particularly among those aged 14 to 15 years. The increase in non-drinkers, which has been observed in both the adult and adolescent samples, is more marked between 1991 and 1995 than between 1988 and 1991. The increase in non-drinkers occurs regardless of age. The legal age at which individuals can purchase alcohol is 18 years of age. These data indicate that a majority of 16 and 17 year olds consume alcohol with around one quarter of them being classified as regular heavy drinkers. About one third of 14 to 15 year olds report that they have tried alcohol and around one in three is classified as a moderate drinker. The data would suggest that the real change in drinking patterns does not occur around the legal age but two years earlier, at about 15 to 16 years.

Table 2.13: Drinking Profile of Adolescents[a]

	(Percent)				
	1988	1991	1993	1995	Change 1988–95
Drinking pattern					
Harmful/hazardous drinking	4	6	3	3	-1
Binge drinking	16	12	13	12	-4
Heavy drinking	19	19	15	19	0
Moderate drinking	34	36	32	29	-5
Non-drinker	27	28	38	36	+9
(n)	(612)	(579)	(531)	(335)	(350)
Intention to get drunk in the past 2 weeks					
Yes — all adolescents	—	—	6	7	+1
Yes – usually drink alcohol one day a week or more often	—	—	12	14	+2
Yes— drunk 8–12 drinks in one session in past 2 weeks	—	—	84	72	-6

a Estimates are for respondents aged 14 to 19 years only.
Sources: 1988–95 NDS Surveys, unweighted data.

Drinking patterns also vary between young adolescent males and females. The second part of Table 2.14 shows that adolescent women are more likely than males to report binge drinking as their usual drinking pattern. This has been a consistent pattern since 1988. In addition, there has been a growing gender gap in heavy drinking, with women being more likely to report this pattern than males. The net effect is that by 1995 some 15 percent of males were classified as heavy drinkers compared to 26 percent of females. Young males are more likely to be classified as moderate drinkers than young females. This would suggest that there is a gender gap among adolescents in both alcohol and tobacco use, with young women reporting the most hazardous patterns of use.

Table 2.14: Drinking Patterns Among Adolescents by Age and Gender, 1988–1995[a]

		(Percent)				
		Age			Gender	
		14–15 years	16–17 years	18–19 years	Male	Female
1988						
	Harmful/hazardous drinker	*	*	8	*	6
	Binge drinker	10	19	20	13	20
	Heavy drinker	10	20	27	19	19
	Moderate drinker	33	34	36	41	26
	Non-drinker	47	24	9	25	29
	(N)	(190)	(205)	(184)	(310)	(269)
1991						
	Harmful/hazardous drinker	*	*	11	*	9
	Binge drinker	6	15	15	10	15
	Heavy drinker	11	18	27	19	19
	Moderate drinker	37	33	38	42	29
	Non-drinker	45	29	10	27	28
	(N)	(172)	(175)	(184)	(269)	(262)
1993						
	Harmful/hazardous drinker	-	-	-	*	*
	Binge drinker	-	-	-	12	13
	Heavy drinker	-	-	-	12	17
	Moderate drinker	-	-	-	42	23
	Non-drinker	-	-	-	33	42
	(N)				(151)	(184)
1995						
	Harmful/hazardous drinker	*	*	*	*	*
	Binge drinker	*	13	16	10	16
	Heavy drinker	9	23	27	15	26
	Moderate drinker	26	30	32	37	20
	Non-drinker	58	32	19	36	36
	(N)	(118)	(119)	(113)	(201)	(149)

a Estimates are for respondents aged 14 to 19 years only. An asterisk denotes too few cases for reliable estimation. Age breakdowns are unavailable in the 1993 survey.

Sources: 1988–95 NDS Surveys, unweighted data.

Table 2.15: Adolescent Beverage Preferences, 1991–1993[a]

	(Percent)					
	1991		1993		Total	
	Females	Males	Females	Males	1991	1993
Wine	24	9	26	12	16	20
Regular beer	17	47	17	54	32	35
Low alcohol beer	5	7	*	*	6	7
Spirits	45	31	42	22	38	32
Other	9	7	9	*	8	6
(N)	(209)	(208)	(99)	(106)	(417)	(205)

a Estimates are for respondents aged 14 to 19 years only. An asterisk denotes too few cases for reliable estimation.
Sources: 1993, 1995 NDS Surveys, unweighted data.

Adolescent beverage preferences changed little between 1991 and 1993 (Table 2.15). Although this is the same pattern as for the adult sample, adolescent preferences do differ in that they are less likely to indicate wine as their preferred beverage and a much higher proportion indicate spirits. Around one third of adolescents prefer spirits and another one third prefer regular beer; very few prefer low alcohol beer. In line with the adults, gender preferences vary: females are more likely to prefer wine while males are more likely to prefer regular beer. In keeping with adult females, adolescent females are more likely to prefer spirits than are adolescent males: 42 percent of adolescent females in 1993 said that they preferred spirits; this contrasts with 25 percent of adult females.

SECTION 3

Cannabis

Cannabis remains the most popular illegal drug in almost every advanced industrial society, particularly among young people (Makkai and McAllister, 1997). Although largely unheard of by mainstream society until the 1960s, cannabis use escalated rapidly among young university students and then moved out into the wider society. By 1995 three in every 10 Australians reported that they had tried the drug at some stage in their lives. In 1993 just under half of the people surveyed indicated that they had been offered the drug and 15 percent said that they would use it if offered by a trusted friend. The levels of use increase among young people. In the 1995 NDS survey 48 percent of adolescents aged 14 to 19 year olds reported that they had been offered the drug, 41 percent said that they had tried it and in 1993 26 percent would try it if offered by a close friend.

As a result of its widespread use across the population, marijuana occupies an ambiguous legal position. Although, its possession and use is a criminal offence in all Australian jurisdictions, in the ACT and South Australia, police have discretion to issue fines or to commence formal court proceedings. When a fine is issued no criminal conviction is recorded if the fine is paid. Successive governments have rejected calls for its legalisation, partly because its long-term health effects remain unclear, partly because of its association with other illicit drug use, and partly because of uncertainty about the social impact of such a radical move. But it is clear that differing laws between jurisdictions have had relatively little effect on the prevalence of marijuana. In Australia, more liberal laws in South Australia and the ACT compared to the other states have had little impact on prevalence (MacDonald et al, 1994; Makkai and McAllister, 1997); internationally, there is little association between legal rules and patterns of use (Rueband, 1995).

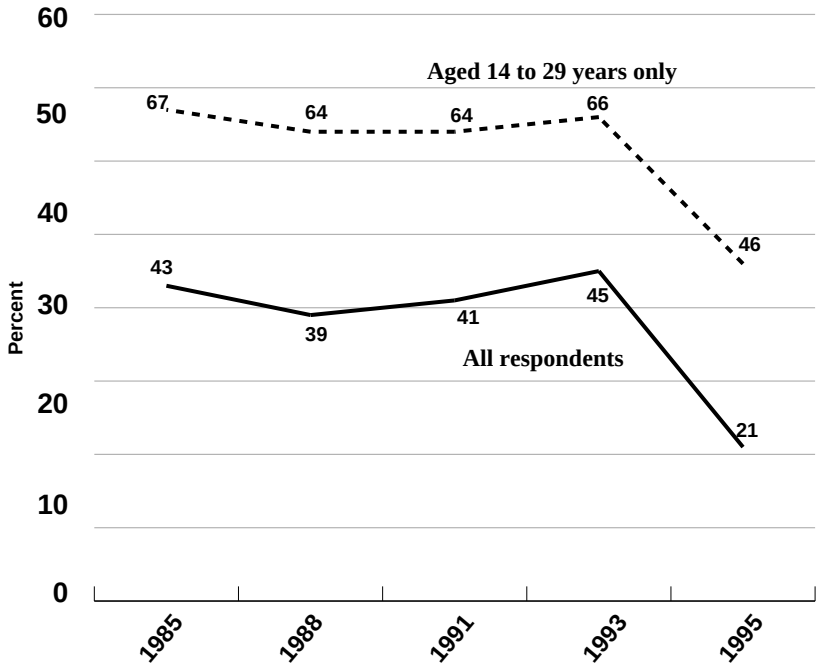
3.1 Trends in Prevalence

There are a variety of ways to measure prevalence and each provides a different perspective on the same activity. It is important to bring all these indicators together in order to provide a more complete picture of marijuana use. The 1985 to 1995 NDS surveys asked whether or not the respondent had been offered the drug in question.[8] However, in 1995 the question was altered to reflect being offered the drug in the previous year, which obviously produced a substantial drop

8 An additional question concerning use of the drug if it was offered by a trusted friend, which was asked between 1985 and 1993, was dropped in 1995.

in the estimates. Nevertheless, the question remains an important indicator of the availability of a drug across the population. Figure 3.1 shows the proportions that have been offered marijuana over the last decade. The results suggest that marijuana has continued to remain visible within the community. In 1985, 43 percent of respondents said that they had been offered marijuana at some time and this proportion remained constant through the late 1980s and early 1990s. In 1995, when the question referred to being offered the drug in the previous year, 21 percent gave a positive response.

Figure 3.1: Trends in Exposure to Marijuana, 1985–95[a]

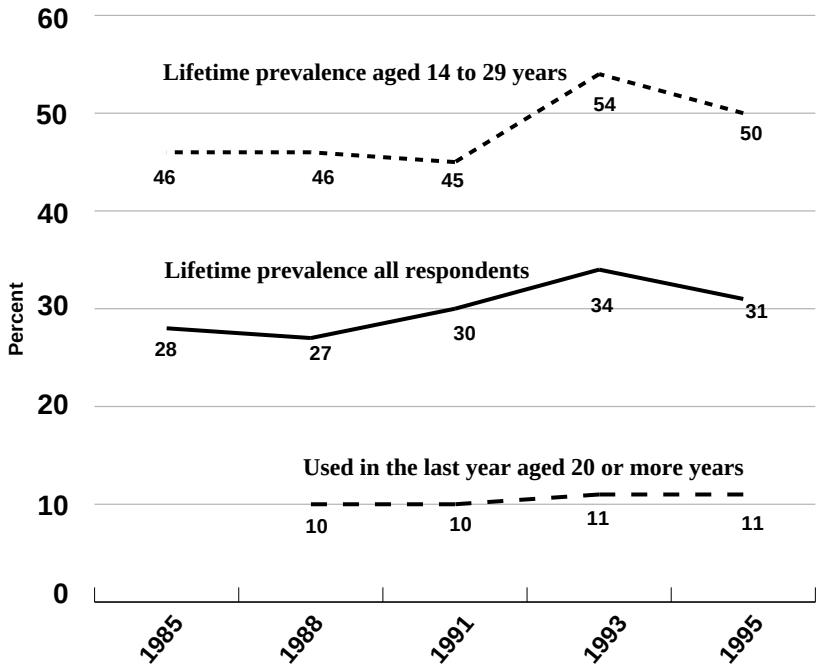


a The questions were as follows. (1985) 'Have you ever been offered marijuana?' (1988, 1991, 1993) 'Have you ever been offered any of the following ... marijuana'; (1995) 'In the past 12 months, have you been offered or had the opportunity to use any of the following ... marijuana?'

Sources: 1985–95 NDS Surveys.

Among the 14 to 29 year old respondents, the rate of exposure to marijuana includes a majority of the respondents, the only illicit drug for which this is the case, and the rate remained stable between 1985 and 1993. In 1985, for example, 67 percent said that they had been offered marijuana; in 1993, the figure was just one percent lower, at 66 percent. In 1995, when the question changed, 46 percent of this age group said that they had been offered the drug. Exposure to marijuana is, therefore, both widespread and stable, with little or no discernible change over the ten-year period of the NDS surveys.

Figure 3.2: Trends in the Prevalence of Marijuana, 1985–95[a]



a The questions were as follows. Lifetime prevalence: 'Have you ever tried marijuana/hash [1995: marijuana or cannabis products]?' Annual prevalence: (1988, 1991) 'When did you last use marijuana?' (1993, 1995) 'Have you used marijuana in the past 12 months?'

Sources: 1985–95 NDS Surveys.

Lifetime prevalence provides us with an indication of the extent to which people have ever come into contact with the drug, whether they are prepared to try it and the extent to which the drug may have been used by a variety of people in the past even though they are currently not using it. The survey respondents were also asked if they had used the drug in the previous 12 months, giving a measure of annual prevalence. The lifetime prevalence of marijuana remained stable during the 1980s and early 1990s, at between 27 and 30 percent of the total adult population. Since 1991 there is some suggestion of an increase in prevalence: in 1993, 34 percent reported using the drug, a figure that declined to 31 percent in 1995. Whether this represents a significant change in patterns of use is unclear. There is some suggestion that marijuana use is on the increase again. This has certainly been the case in the United States (Makkai and McAllister, 1997)

Table 3.1: Annual Prevalence of Marijuana by Age, 1988–95[a]

	(Percent)				
	1988	1991	1993	1995	Change 1988–95
All respondents					
14–19	23	24	22	28	+5
20–29	28	28	32	33	+5
30–39	12	13	12	13	+1
40–59	4	3	4b	4	0
60 years or more	*	*	*b	*	*
(N)	(2255)	(2,853)	(3,500)	(3,849)	
Lifetime prevalence only					
14–19	79	73	62	80	+1
20–29	51	51	51	55	+4
30–39	31	26	25	26	-5
40–59	24	19	16b	20	-4
60 years or more	*	*	*b	*	*
(N)	(605)	(851)	(1,183)	(1,182)	

a For question wordings, see Figure 3.2. An asterisk denotes too few cases (n = <10) for reliable estimation.
b Age group differs in 1993: 40 to 54 and 55 or more.
Sources: 1988–1995 NDS Surveys.

Among the 14 to 29 year olds, prevalence was similarly stable during the late 1980s and early 1990s, only to rise to 54 percent in 1993, declining again to 50 percent in 1995. In contrast to lifetime prevalence, annual prevalence—use in the 12 months prior to the survey—has remained stable since 1988, the first year in which the question was asked in the NDS surveys, at slightly more than one in 10 of the adult population. In 1995, a total of 11 percent of those aged 20 years or over reported having used marijuana during the previous 12 months.

The results have already demonstrated the importance of age in determining exposure to and use of marijuana. Table 3.1 investigates this further by analysing the extent to which annual prevalence varies for different age groups. In the first part of the table, the data are presented as a proportion of the total sample and in the second part, as a proportion of those who had ever tried the drug. The results show that marijuana use is closely associated with age and this relationship has been constant since 1988. Older respondents are far less likely to have used marijuana in the past 12 months than younger respondents. In 1995, for example, 28 percent of all respondents aged 14 to 19 years had used marijuana in the past 12 months compared to four percent of respondents aged in their 40s or 50s. The estimates also suggest that the annual prevalence of the drug is increasing among adolescents and young adults.

Comparing use in the past 12 months for the total sample with those who report lifetime prevalence produces a significant difference. When we consider the total sample, it is those aged 20 to 29 years that are most likely to report annual prevalence, followed by those aged 14 to 19 years.

However, when we focus just on those who have ever tried the drug, it is adolescents who are the group most likely to have used marijuana in the past year followed by the 20 to 29 year olds. This suggests that for adolescents a sizeable proportion of use in the past 12 months is equivalent to the lifetime prevalence measure. For example, in the 1995 survey 80 percent of 14 to 19 year olds who had ever used marijuana, also used it in the last 12 months whereas 55 percent of 20 to 29 year olds who had ever used marijuana, also used it in the last 12 months.

On the total sample, very few people aged 40 years or more have used marijuana in the recent past and it is a rare event for those in the oldest age groups. Very few people in this age group have ever tried marijuana and of this small group virtually none reported having used the drug in the past 12 months. Although the percent of those who have tried marijuana is not large among those aged in their 40s or 50s, there is still a substantial minority who have used it in the past 12 months. In 1988, 24 percent had used in the past 12 months, while in 1995 20 percent reported that they had used in the past 12 months.

3.2 Trends in Consumption

Use in the recent past is a relatively common experience for the young, indicating that the drug is relatively easy to obtain. Around one quarter of all those aged 29 years or under have used marijuana in the past 12 months and this increases to over half for those reporting lifetime prevalence. Although respondents report that they have used marijuana in the recent past this does not indicate the frequency with which they take the drug. Table 3.2 estimates the frequency with which the survey respondents reported that they used marijuana, as a percentage of those who said they had used it in the previous 12 months.

Table 3.2: Marijuana Consumption, 1988–95[a]

	(Percent)				
	1988	**1991**	**1993**	**1995**	**Change 1988–95**
Once a week or more	43	39	33	37	-6
Once a month	17	18	18	17	0
Several times a month	10	6	19	20	+10
Few times a year	30	37	31	26	-4
(N)	(213)	(315)	(390)	(390)	

a The question was: 'How often do you [1988, 1991: or did you] use marijuana/hash?' The response categories varied across the surveys, and have been collapsed in the four categories above. Responses are for those who report using marijuana in the past 12 months.

Sources: 1988–1995 NDS Surveys.

The data suggest that since 1988 the frequency of frequent marijuana use has declined. In 1988, 43 percent of those who reported using marijuana in the previous 12 months said that they used the drug weekly or more; in 1995, the same estimate was 37 percent. The declining numbers of those who use marijuana weekly has been matched by an increase in the numbers of less frequent users, notably those who said that they used marijuana several times a month. There has been a ten-percentage point increase in this category from 1988 to 1995.

In addition to age variations, there are also significant gender variations in the patterns of marijuana consumption, and both age and gender interact in important ways to shape consumption. Because the sample sizes are comparatively small when we examine these groups, we have used the pooled 1988 to 1995 surveys. The data in Table 3.3 show that older women use marijuana less frequently than their younger counterparts. For example, 38 percent of women aged in their 30s said they used marijuana just a few times a year or less, compared to one quarter of female adolescents. By contrast, the frequency of use increases with age among men: 36 percent of adolescents male said they used marijuana weekly, compared to 47 percent of men aged 40 years or over. It would seem that men who continue to use marijuana into middle age are more committed to frequent use.

Table 3.3: Frequency of Marijuana Use by Gender and Age[a]

	(Percent)				
	14–19	**20–29**	**30–39**	**40–59**	**60 or more**
Males					
Once a week or more	36	41	41	47	*
Once, several times a month	38	35	24	15	*
Few times a year	27	24	35	38	*
(N)	(199)	(413)	(180)	(73)	(3)
Females					
Once a week or more	29	34	33	*	*
Once, several times a month	46	27	29	37	*
Few times a year	25	39	38	48	*
(N)	(112)	(199)	(95)	(27)	(5)

a See Table 3.2 for question wording. The response categories have been collapsed. The two oldest age categories in the 1993 survey are 40 to 54 and 55 or more. ' An asterisk denotes too few cases (n = <10) for reliable estimation. Responses are for those who report using marijuana in the past 12 months.

Sources: 1988–1995 NDS Surveys, merged file.

3.3 Age of Initiation

The age at which people start using a drug is important for two reasons. First, it provides a marker for the age at which drug education should begin. Drug education that commences prior to initiation may be counter productive, by stimulating experimentation. Equally, if education programs begin after use has commenced, they will be much less effective. The second reason for examining age of initiation is that those who start using a drug at a young age usually report heavier and more extended use later in life. Respondents in the 1993 and 1995 surveys were asked when they had first tried marijuana. Table 3.4 indicates the ages at which individuals first reported that they tried marijuana for three groups: those reporting lifetime prevalence; those reporting annual prevalence; and those who said they used marijuana at least once a week.

Among the adult sample, a sizeable proportion of those who had ever tried marijuana first tried it at a relatively young age. In 1993, 14 percent reported they had tried it at age 15 years or less; this

estimate increased to 18 percent in 1995. Over half of the respondents had tried marijuana by the age of 18 years in both 1993 and 1995. The data show, however, that there is another group who first try marijuana relatively late in life: 13 percent in 1993 and 11 percent in 1995 reported that they were aged 26 years or older when they were initiated into its use. Overall, among those with lifetime prevalence of marijuana, the mean age of initiation is about 19 years of age.

Table 3.4: Age of Initiation for Marijuana[a]

	(Percent)					
	1993			1995		
	Ever tried	Used past 12 months	Use weekly or more	Ever tried	Used past 12 months	Use weekly or more
15 or less	14	24	37	18	28	38
16 years	13	20	16	11	16	22
17 years	14	13	15	13	15	13
18 years	12	14	12	17	14	11
19 years	10	5	*	7	3	*
20 years	10	8	*	10	8	*
21–25 years	15	10	*	12	9	*
26–35 years	9	5	*	6	5	*
35 + years	4	*	*	5	3	*
Mean age	19.4	18	17.5	19.1	18.1	16.8
Median age	18	17	16	18	17	16
(N)	(1023)	(350)	(120)	(1007)	(365)	(121)

a The question was: 'About how old were you the first time you tried marijuana?' An asterisk denotes too few cases (n = <10) for reliable estimation. Estimates are for respondents aged 20 years or more.

Sources: 1993, 1995 NDS Surveys.

As predicted, those who have used marijuana recently and use it frequently are more likely to have commenced use at a younger age. This pattern is consistent in both 1993 and 1995. For example, in 1995 nearly three quarters of those who had used marijuana in the past 12 months said that they first tried the drug at 18 years of age or younger. Of those who used it weekly or more often, 84 percent reported that they first tried the substance when they were 18 years or younger. These relationships are also shown by the declines in the average and median ages of initiation as the frequency of use increases. In 1995 the mean age of initiation for those who had tried marijuana is 19.1. This declines by one year for those who had used marijuana in the past 12 months and by a further 1.3 years for those who used it weekly or more often.

3.4 The Social Profile of Marijuana Users

People who have used marijuana at some point in their lives and who have used it in the previous year are more likely to be concentrated in particular socio-economic groups. Table 3.5 shows that they

are more likely to be male, although not to the degree that is found with some of the other illicit drugs. They are very substantially more likely to be young, particularly aged in their 20s in the case of lifetime prevalence. All three of the indicators show that exposure and use is more likely to take place among the Australia/New Zealand born, or among immigrants from Britain or Ireland; the rate of lifetime prevalence is halved among immigrants from non-English speaking countries and most notably among Asian immigrants. This may be a reflection of other social factors which are associated with being an immigrant, rather than to cultural differences as such, but it does accord with the lower rates of smoking among Asian immigrants, which is the most common means of ingesting marijuana.

Table 3.5: Social Characteristics of Marijuana Users[a]

	(Percent)		
	Offered	**Lifetime prevalence**	**Annual prevalence**
All	37	30	10
Gender			
Male	43	37	13
Female	31	24	7
Age			
14–19	49	33	20
20–29	69	58	24
30–39	51	47	10
40–59	22	19	3
60+	7	2	0.4
Birthplace			
Australia/New Zealand	39	32	11
British Isles	40	35	11
NES Europe	23	17	3
Asia	21	18	6
Education			
Tertiary	47	40	12
Trade, diploma	41	36	11
No qualifications	32	26	9
Social status			
Labour force			
Non-manual	45	38	11
Manual	49	43	14
Unemployed	55	49	23
Non-labour force			
Home duties	24	20	4
Retired	9	5	1

a See Appendix for definitions of variables and composition of the merged file. Estimates for annual prevalence are based on the 1988–95 surveys only. Education measure excludes those who are still in school.

Sources: 1985–1995 NDS Surveys, merged file.

Unlike most of the other illicit drugs, there is a strong association between education and marijuana use. Those with a tertiary education are significantly more likely than others to have been offered marijuana and to have used it at some point in their lives, although there are few educational variations based on annual prevalence. For example, some 40 percent of those with a tertiary education report lifetime prevalence, compared to 26 percent of those with no educational qualifications. Whatever the association between marijuana and tertiary education, however, it is the unemployed who show the highest rates of use. Half of those who were currently unemployed in the surveys report lifetime prevalence of marijuana, while almost one in every four say that they had used marijuana in the previous 12 months.

3.5 Adolescent Marijuana Use

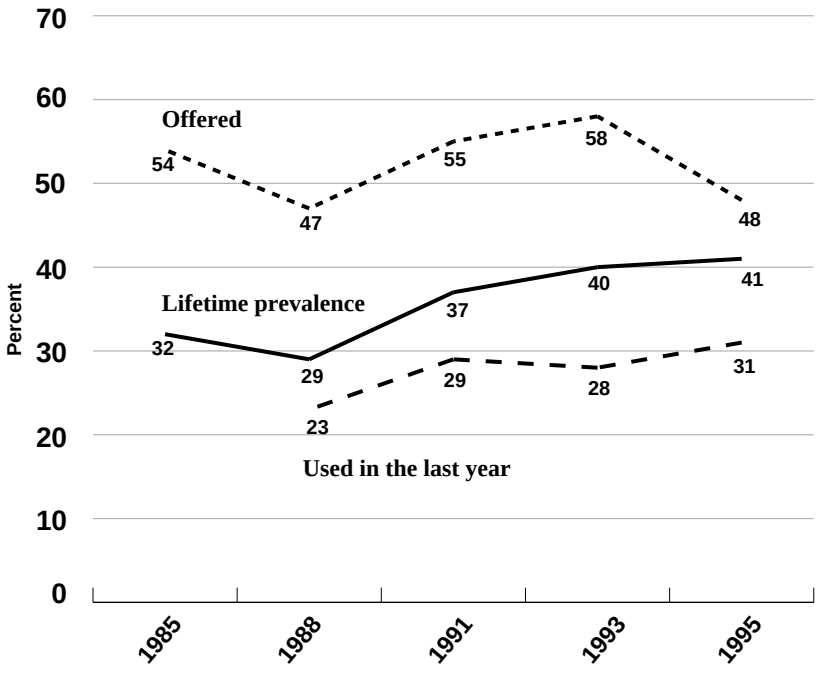
Since marijuana is usually regarded as a 'route of entry' to other forms of illicit drug, there is particular concern about adolescents who, as we have seen, display high levels of exposure to and use of marijuana. There has been a significant increase in the proportion of adolescents aged 14 to 19 years reporting that they have tried marijuana over the past decade (Figure 3.3). In 1985, 32 percent indicated they had tried the drug and this had increased to 41 percent by 1995. Although few report use in the previous 12 months, the estimates show an upward trend: between 1988 and 1995 the proportion of adolescents reporting annual prevalence of marijuana has increased by eight percent. In 1995, three in every 10 adolescents said that they had used marijuana in the previous 12 months—a substantial figure.

Similarly, the proportions of adolescents who say that they have been offered marijuana increased between 1985 and 1993, with the exception of 1988, when there was a decline of seven percentage points, from 54 to 47 percent. In 1995, when the question changed to reflect being offered marijuana in the previous year, 48 percent gave a positive response. The increases in lifetime and annual prevalence are greater than the increase for being offered suggesting an increasing take-up rate. For example, for every 100 adolescents offered marijuana in 1985, we can estimate that about 59 would have taken it; in 1993, the same take-up rate was 69 in every 100. [9]

Further confirmation of the increasing use of marijuana among adolescents emerges in the trends in consumption among those who have used the drug in the past 12 months. Although the numbers on which the estimates are based are relatively small and firm conclusions should therefore be treated with caution, there has been an increase in the proportion that uses marijuana on a regular basis. In 1988, 27 percent reported that they used the drug at least once a week or more, a figure that increased to 33 percent in 1995. However, the largest increase is among those who use monthly but less than weekly: the size of this group has grown from 27 percent in 1988 to 41 percent in 1995, with the largest increase of 12 percentage points occurring between the 1991 and 1993 surveys.

9 The 1985 estimate is based on 32/54 = .59, and the 1993 estimate, 40/58 = .69.

Figure 3.3: Trends in Adolescent Exposure to and Use of Marijuana, 1985–95[a]



a The questions were as follows. (1985) 'Have you ever been offered marijuana?' (1988, 1991, 1993) 'Have you ever been offered any of the following ... marijuana'; (1995) 'In the past 12 months, have you been offered or had the opportunity to use any of the following ... marijuana?'

Sources: 1985–95 NDS Surveys.

Table 3.6: Frequency of Marijuana Use Among Adolescents, 1988–95

	(Percent)				
	1988	1991	1993	1995	Change 1988–95
Once a week or more	27	33	30	33	+6
Once, several times a month	27	31	43	41	+14
Few times, once a year	46	36	27	26	-20
(N)	(134)	(152)	(88)	(103)	(103)

Sources: 1985–95 NDS Surveys.

SECTION 4

Heroin

Although the health effects of heroin use across the society—at least in terms of mortality and morbidity—are far outweighed by alcohol and tobacco use, the stereotypical image of heroin addiction and its social consequences remains at the heart of popular views of drug abuse. In each of the five NDS surveys, the largest group of respondents mentioned heroin as being what they perceive to be the core of 'the drug problem'.[10] Although the importation of heroin has been illegal since 1953,[11] it remains widely available. Harsher laws against trafficking introduced across most of the states in the 1980s have had relatively little impact on levels of availability, as is indicated by the comparatively small variations in the street price of the drug (Chesher, 1990). In addition to stricter enforcement, major resources have been committed to the treatment and rehabilitation of heroin addicts, notably through the methadone maintenance programs that are available in most of the states and territories.

4.1 Trends in Prevalence

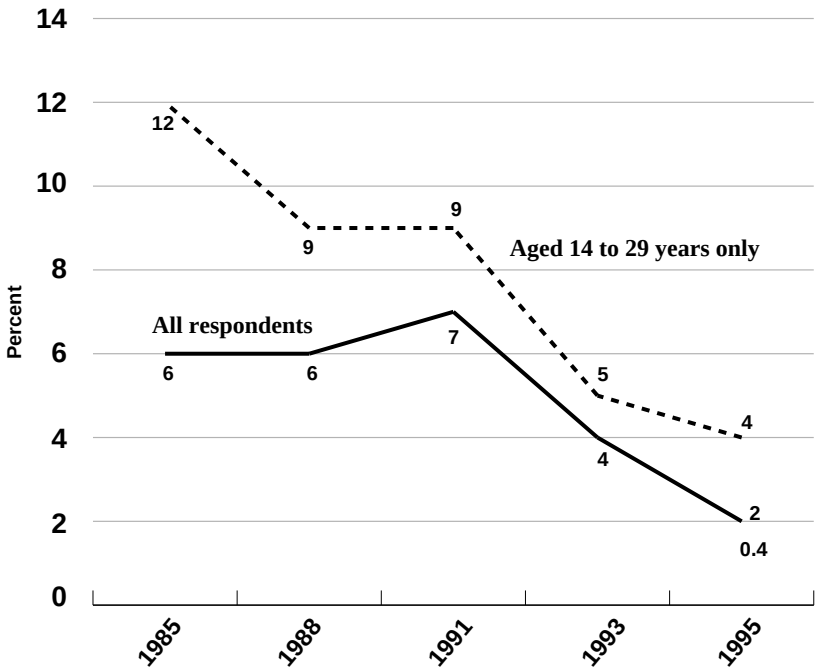
While large-scale national opinion surveys are particularly useful in tracking public attitudes towards drug policies or in identifying the users of popular drugs, such as alcohol, tobacco and marijuana, they are less effective in identifying small groups of drug users. There are three problems involved in analysing such small groups, of which heroin users are one. The first problem concerns the sample, where at least a proportion of regular drug users work erratically or not at all, change their addresses regularly, and are frequently not at home. Such groups may well be under-represented in any opinion survey that randomly samples respondents in their own home, although the precise degree of under-representation is always difficult to estimate. A second potential problem is concealment, so that even when respondents are identified and selected for interview, they may be unwilling to admit to an illegal activity which carries with it substantial legal penalties. This problem has been reduced by the use of the sealed envelope method for the drug use questions in all of the surveys conducted since 1988.[12]

10 Although those mentioning heroin remain the largest group, the proportion has been declining consistently since 1985.

11 The blanket ban on the importation of heroin was relaxed in 1974 to allow for the importation of small quantities for research.

12 See Appendix for details. The 1988 survey contained both a face-to-face section for the drug use questions as well as a sealed self-completion section. The surveys conducted from 1991 have used only the sealed self-completion section for these questions.

Figure 4.1: Trends in Exposure to Heroin, 1985–95[a]



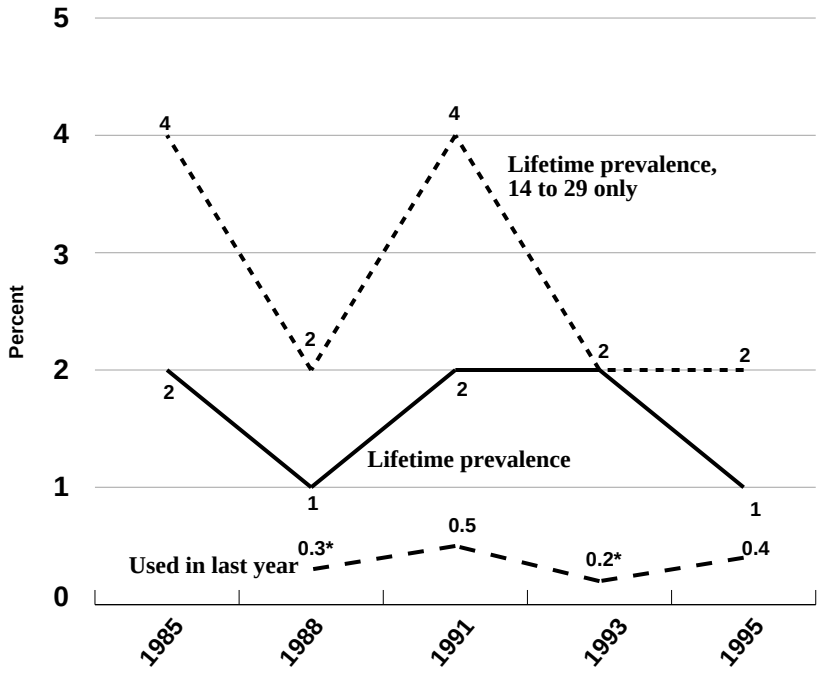
a See Figure 3.1 for question wordings.
Sources: 1985–95 NDS Surveys.

The third and perhaps most difficult problem is the small numbers who admit to illegal drug use. Since all groups within the society have an equal probability of being sampled, the groups in which illicit drug use is concentrated—predominantly (but not exclusively) young males—are relatively small as a proportion of the total sample. One means of overcoming this problem, which is used in section 4.3, is to combine users in all five of the NDS surveys to create a single, statistically more viable sample for more reliable analysis. This in itself creates problems, most importantly in the inability to track trends over time and in the assumption that there are few changes in patterns of use over the period of the surveys. Nevertheless, it is a practical solution to the problem of small sample size, and in the sections that follow, we examine the social bases of illicit drug use using this method.[13]

Figure 4.1 shows that the availability of heroin, at least measured by the question on whether or not the respondents reported being offered the drug, has declined in recent years. Across the general population, the proportion reporting having being offered heroin remained stable at between six and seven percent between 1985 and 1991; in 1993, the last year for which the question was directly comparable with previous years, it declined to four percent. In 1995, when the question related to being offered heroin in the previous year, two percent gave a positive response. The trend among those aged 14 to 29 years, among whom illicit drug use is concentrated, shows

13 See Appendix for details.

Figure 4.2: Trends in the Prevalence of Heroin, 1985–95[a]



a See Figure 4.2 for question wordings. An asterisk denotes too few cases (n = <10) for reliable estimation.
Sources: 1985–95 NDS Surveys.

a clearly declining trend. In 1985, 12 percent reported having been offered heroin; this declined to nine percent in both 1988 and 1991, only to decline to five percent in 1993. In 1995, four percent of this age group said that they had been offered heroin in the previous 12 months.

Once again, reaching firm conclusions about trends in the lifetime prevalence of heroin use is complicated by changes in question wording across the NDS surveys. In all five of the surveys a lifetime prevalence question was asked, with the surveys conducted from 1988 including a further question concerning use in the previous 12 months. In 1995 the question about use in the previous year explicitly asked about non-medical use of the drug. In the case of heroin this creates few difficulties, since virtually all heroin use would have been for non-medical reasons. In the case of others drugs (such as tranquillisers and barbiturates, which are examined in the sections that follow), a significant amount of use would have taken place under medical supervision.

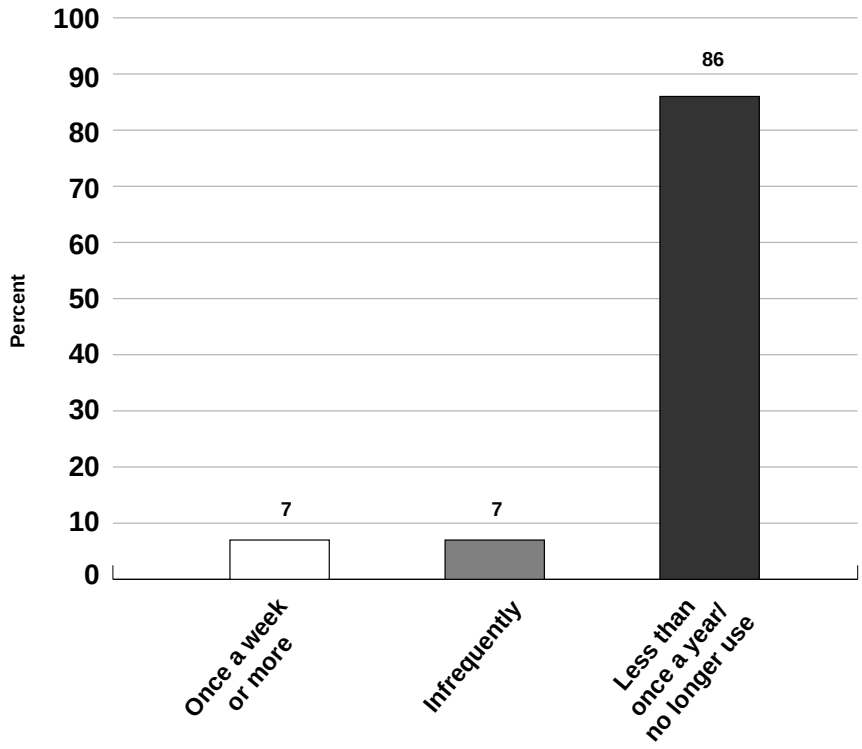
Across the population as a whole, between one and two percent report having used heroin at some stage in their lives.[14] The small numbers involved make reliable conclusions difficult, but the consistency of the results suggests that use is probably comparatively stable over the period of the surveys. The very small numbers who said that they had used heroin in the previous year also appear to be stable: the highest figure is 0.5 percent in 1991. Among the 14 to 29 year olds,

14 In this figure and in those that follow, percentages of 0.5 or more are rounded to one; figures less than 0.5 are estimated to one decimal place.

lifetime prevalence stands at about twice the level for the population as a whole, with the exception of 1993, when the figure is the same for this group and for the population as a whole. Overall, then, we may conclude that the lifetime prevalence of heroin has remained relatively unchanged over the ten year period of the NDS surveys.

The popular of image of heroin is of a heavily addictive drug which forces regular use on those who succumb to its effects. The survey evidence portrays a different picture. Although once again the numbers are small and suggest caution in their interpretation,[15] Figure 4.3 shows that among those who reported lifetime prevalence of heroin, those who use (or used) heroin frequently—once a week or more—is just under one in 10 of all users. By far the largest group of users—86 percent—are those who said that they used the drug less than once a year. While heroin in undoubtedly highly addictive for a small group of users, the survey evidence suggests that there is a much larger proportion of recreational users in the general population, who will use the drug infrequently, without becoming addicted.

Figure 4.3: Frequency of Heroin Use[a]



a Estimates are for all those who reported lifetime prevalence of heroin in the 1988–95 NDS surveys (n = 202). See Table 3.2 for question wordings. The response codes have been collapsed.

Sources: 1988–95 NDS Surveys, merged file.

15 The combined file of the 1985 to 1995 respondents has five categories for frequency of use. Because of the small numbers of heroin users, the three intermediate categories (once a month, every few months, once or twice a year) have been collapsed into a single category of 'infrequent/occasional.'

4.2 The Social Profile of Heroin Users

The difficulties in obtaining a sufficiently large random sample of heroin users means that there is little objective evidence concerning their social characteristics. Mainly anecdotal evidence, as well as data from crime statistics, suggests that users are more likely to be men, to be unemployed and to be predominantly those in the younger age groups. The combined file based on the five NDS surveys enables us to look at these factors more objectively, since it provides sufficient respondents for a more reliable analysis of these characteristics than would otherwise be the case if the data from a single survey were used. Table 4.1 shows breakdowns for those who reported having been offered heroin and those who reported lifetime prevalence of the drug; there were too few respondents who said that they had tried the drug in the previous 12 months (n = 43) for reliable estimates to be made.

Those who report being offered and having tried heroin are more likely to be male, and aged in their 20s. Almost one in 10 of those in this age group reported being offered the drug, compared to just three percent of those aged in their 40s or 50s. Just under one in 20 adolescents said that they had been offered heroin, though only one percent said that they had actually tried it. There are some variations by birthplace and education—with being offered and having tried heroin being concentrated among the Australian born and among those with some educational qualifications. However, there is a more significant link between unemployment and heroin, confirming the popular image of the heroin addict. More than one in 10 of the unemployed reported having been offered heroin, while five percent said that they had tried the drug. This contrasts with a lifetime prevalence rate of just one percent among those employed in non-manual occupations.

Although heroin is perhaps the most visible of the illicit drugs, use across the population remains low and the majority of those who report having used heroin say that use is infrequent. Over the period of the NDS surveys, while use has remained stable—insofar as we can make reliable estimates from the survey samples—availability, indicated by the proportion being offered the drug, has declined. It is most notable that this decline is greatest among adolescents and those aged in their 20s. Whether this marks a real decline in the amount of heroin available on the streets, or that dealers are less likely to offer heroin widely because of increased penalties for supplying it, remains unclear. Also more recent reports suggest that heroin is becoming more popular across a range of social groupings.

Table 4.1: Social Characteristics of Heroin Users[a]

	(Percent)	
	Offered	**Lifetime prevalence**
All	5	2
Gender		
Male	6	2
Female	4	1
Age		
14–19	4	1
20–29	10	4
30–39	6	2
40–59	3	1
60+	2	*
Birthplace		
Australia/New Zealand	5	2
British Isles	5	1
NES Europe	4	1
Asia	4	*
Education		
Tertiary	4	2
Trade, diploma	6	2
No qualifications	5	1
Social status		
Labour force		
Non-manual	5	1
Manual	6	3
Unemployed	11	5
Non-labour force		
Home duties	3	1
Retired	2	1

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation.

Sources: 1985–1995 NDS Surveys, merged file.

SECTION 5

Psycho-stimulants

5.1 Amphetamines

Amphetamines were used extensively in the 1960s and 1970s for the treatment of depression, but widespread abuse and diversion resulted in their reclassification as Schedule 8 drugs. They are now rarely prescribed for medical use and there are restrictions on the periods for which they may be prescribed without health department authority. Amphetamines are manufactured illegally and have been widely available since the early 1980s on the illicit drug market under the street names of 'speed' and 'uppers.' The drug is addictive, and tolerance to its effects among frequent users is common. Although death from amphetamine abuse is rare, it usually occurs among intravenous users as a result of burst blood vessels in the brain, heart failure or high fever.

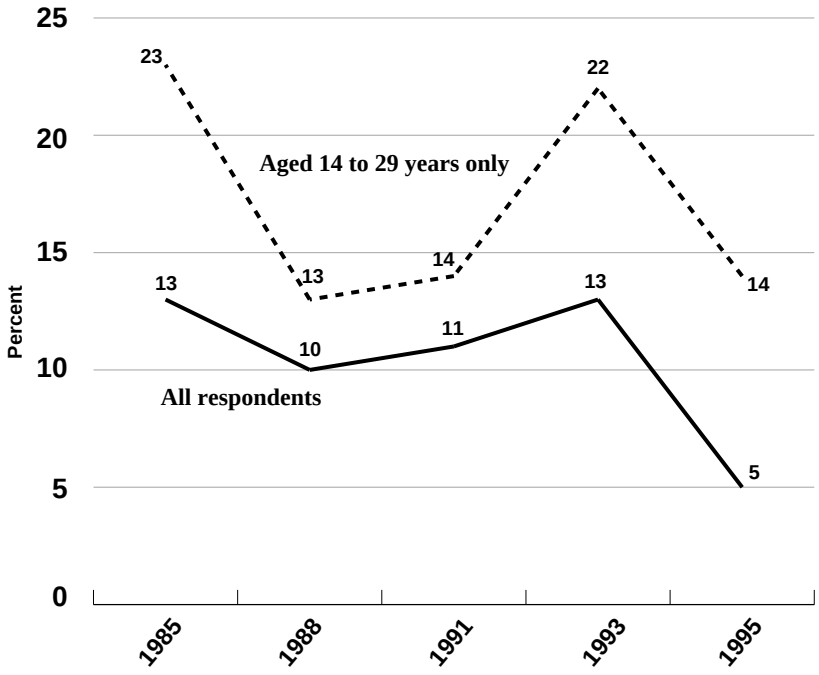
The third and perhaps most difficult problem is the small numbers who admit to illegal drug use. Since all groups within the society have an equal probability of being sampled, the groups in which illicit drug use is concentrated—predominantly (but not exclusively) young males and those engaged in criminal activities—are relatively small as a proportion of the total sample. One means of overcoming this problem, which is used in section 4.3, is to combine users in all five of the NDS surveys to create a single, statistically more viable sample for more reliable analysis[16]. This in itself creates problems, most importantly in the inability to track trends overtime and in the assumption that there are few changes in patterns of use over the period of the surveys. Nevertheless, it is a practical solution to the problem of small sample size, and in the sections that follow, we examine the social bases of illicit drug use using this method.[17]

Figure 5.1 shows that about one in 10 of the population had been offered amphetamines at some point in their lives, ranging from 13 percent in 1985 and 1993, to 10 percent in 1988. In 1995, when the question referred to use in the previous 12 months, the proportion reporting being offered the drug declined to one in 20—still a significant proportion. Among the 14 to 29 year olds, at two timepoints—1985 and 1993—the proportion saying they had been offered amphetamines stood at almost one in four. Some 14 percent said they had been offered the drug in the previous year, the same proportion who in 1985 and 1993 reported being offered the drug during their lifetime. The results suggest, then, that amphetamines may have become more widely available since the late 1980s.

16 To determine the extent of drug use amongst those engaged in criminal activity a different methodology is required as US research has shown that around 50 percent of this group under-report their drug use habits. The US Arrestee Drug Abuse Monitoring (ADAM) program is an example of an alternative methodology.

17 See Appendix for details

Figure 5.1: Trends in Exposure to Amphetamines, 1985–95[a]

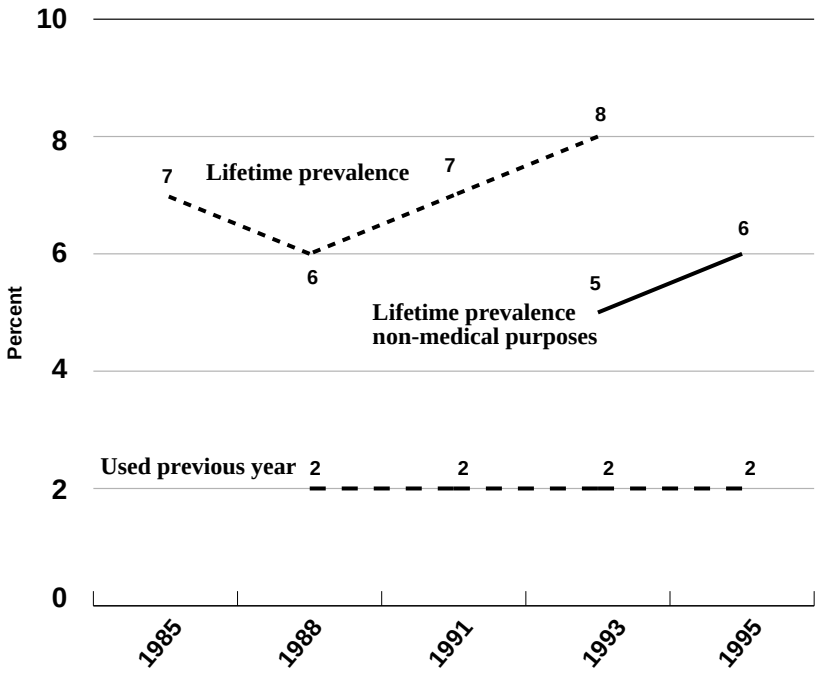


a For question wordings, see Figure 3.1.
Sources: 1985–95 NDS Surveys.

The apparently increasing availability of amphetamines is supported by Figure 5.2, which shows the estimates for lifetime prevalence. Since 1988, lifetime prevalence has increased by two percentage points, to eight percent of the population in 1993; in that year, one in 20 also reported using the drug for non-medical purposes. If we assume that the same approximate ratio of total users to non-medical users applied in 1995 as in 1993, then lifetime prevalence in 1995 would stand at just under 10 percent of the population. During the post-1988 period, use in the previous 12 months has remained constant, at two percent of the population.

Most users report taking amphetamines very infrequently: 59 percent of this group said that they has used it less than once a year or that they no longer used the drug. However, 14 percent of users said that they took amphetamines several times a month or more. Among the 14 to 29 year olds who said that they had used amphetamines, frequency of use is slightly higher, though by far the largest group (48 percent) remains those in the most infrequent use category. Overall, the survey estimates point to the easy and increasing availability of amphetamines across the population, and to increasing use with significant numbers using the drug on a regular basis.

Figure 5.2: Trends in the Prevalence of Amphetamines, 1985–95[a]

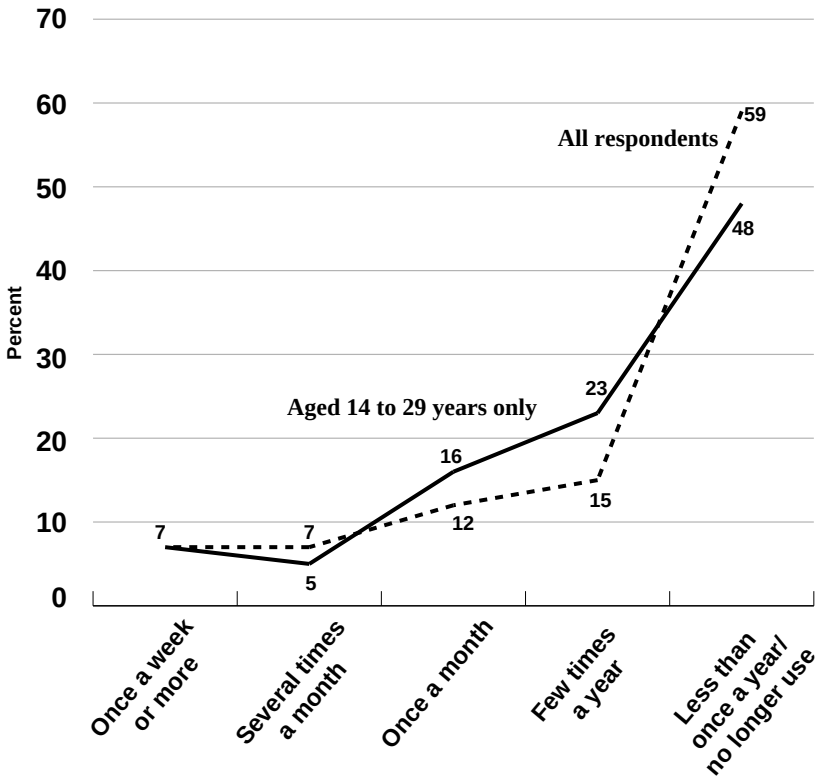


a The questions were as follows. Lifetime prevalence: (1985–93) 'Have you ever tried amphetamines?' (1993, 1995) 'Have you ever used [1995: tried] amphetamines for non-medical purposes?' Annual prevalence (1988, 1991): 'When did you last use amphetamines?' (1993, 1995): 'Have you ever used amphetamines in the past 12 months for non-medical purposes?'

Sources: 1985–95 NDS Surveys.

In terms of the social characteristics that are associated with being offered or using amphetamines, the surveys suggest that use is most likely to be associated with men, to those aged in their 20s, and to manual workers and the unemployed (Table 5.1). Seven percent of men reported having used amphetamines, three percent during the previous year. A total of 16 percent of those aged in their 20s have used the drug, seven percent of them in the previous year. However, it is also notable that use also extends to those aged in their 30s: eight percent reported lifetime prevalence of the drug, though substantially fewer had used it in the previous year, suggesting that they had been users during the 1980s, but had now quit the habit. Although there are comparatively few variations in terms of education, users are slightly more likely to possess a tertiary qualification.

Figure 5.3: Frequency of Amphetamine Use[a]



a The questions were as follows. (1988, 1991) 'How often did you or do you use amphetamines?' (1993, 1995) 'How often do you use amphetamines for non-medical purposes?'

Sources: 1988–95 NDS Surveys, merged file.

Table 5.1: Social Characteristics of Amphetamine Users[a]

	(Percent)		
	Offered	Lifetime prevalence	Annual prevalence
All	10	6	2
Gender			
Male	12	7	3
Female	8	4	1
Age			
14–19	10	3	3
20–29	22	16	7
30–39	13	8	1
40–59	5	2	0.3
60+	3	*	*
Birthplace			
Australia/New Zealand	11	6	2
British Isles	10	4	1
NES Europe	7	*	*
Asia	5	*	*
Education			
Tertiary	14	9	3
Trade, diploma	12	6	2
No qualifications	9	5	2
Social status			
Labour force			
Non-manual	12	7	2
Manual	14	9	3
Unemployed	21	12	7
Non-labour force			
Home duties	6	2	1
Retired	4	1	*

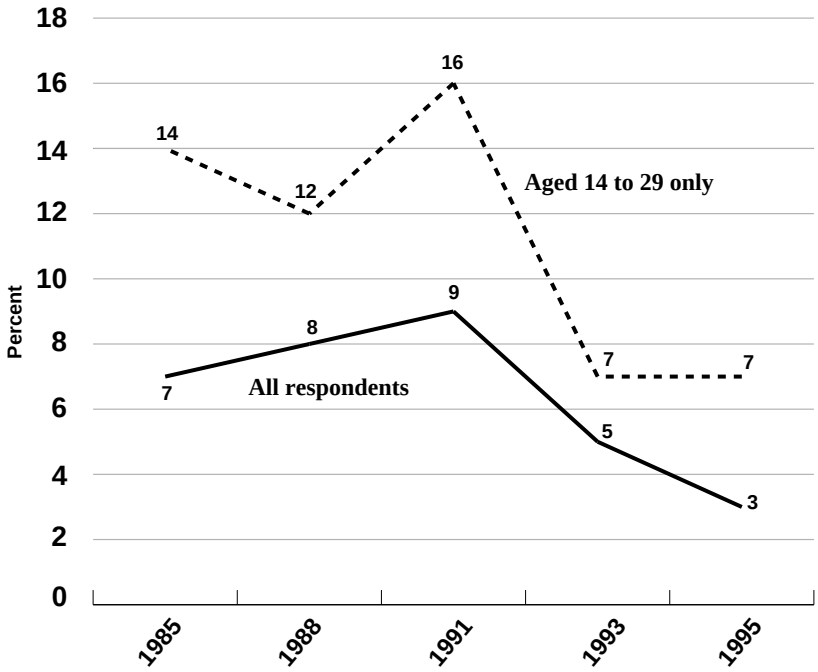
a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation. Estimates for lifetime prevalence are for non-medical use only and tried in the past 12 month are based on the 1988–95 surveys.

Sources: 1985–1995 NDS Surveys, merged file.

5.2 Cocaine

Although cocaine has been abused for some considerable time, it did not emerge as a popular recreational drug until the 1970s, when it was imported into the United States and consumed in a cheap, highly potent form known as crack cocaine. Use of crack cocaine spiralled during the 1970s and early 1980s, peaking towards the end of that decade, and it now appears to be in decline. In Australia, trends in the United States were followed closely and it was assumed that cocaine would also become a major problem here. This anticipated rise in use did not occur, though the drug is still widely used. The failure of cocaine to gain a substantial foothold in the Australian illicit drug market appears to have been the result of a number of factors. These factors include its poor image; the lack of inner-city problems, at least on the scale of the United States; and the relatively high street cost of the drug, which in turn is linked to intervention by government agencies to prevent its importation (McAllister, Moore and Makkai, 1990).

Figure 5.4: Trends in Exposure to Cocaine, 1985–95[a]

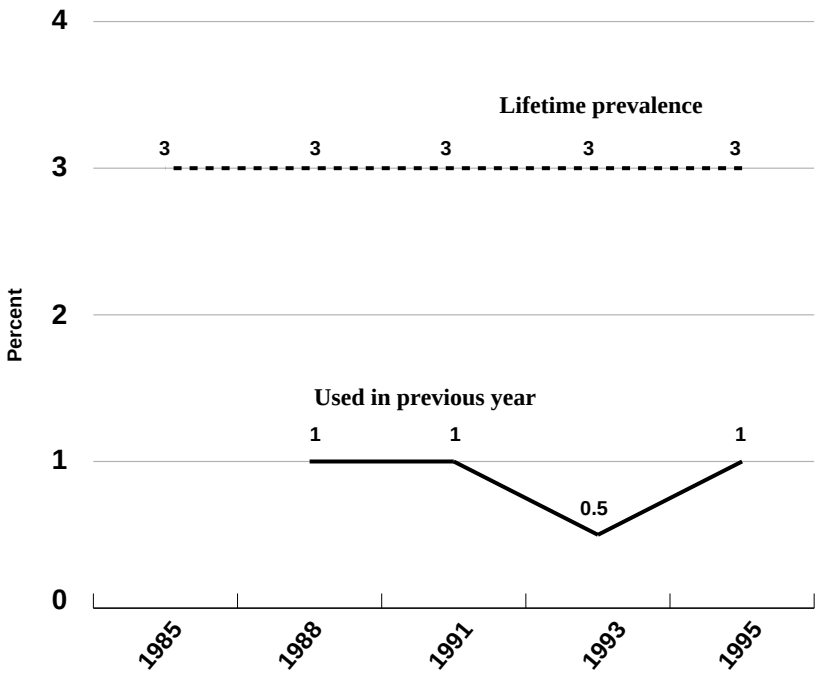


a For question wordings, see Figure 4.1.
Sources: 1985–95 NDS Surveys.

The availability of cocaine in Australia appears to have declined, as in the United States, at least if being offered the drug is taken as an indicator (Figure 5.4). The proportion being offered the drug peaked at nine percent in 1991, only to decline to five percent in 1993, and to three percent in 1995. Although the estimate for 1995 is based on a question about being offered cocaine the previous year, it is in line with the decline that started in the early 1990s. Among those in the 14

to 29 year age group, the estimates are consistently higher across the decade than those for the population as a whole. At the beginning and end of the decade estimates for the 14 to 29 year age group are more than twice the general population figure. Nevertheless, the figures point to a general decline in the availability of cocaine in Australia, following a peak in 1991.

Figure 5.5: Trends in the Prevalence of Cocaine, 1985–95[a]

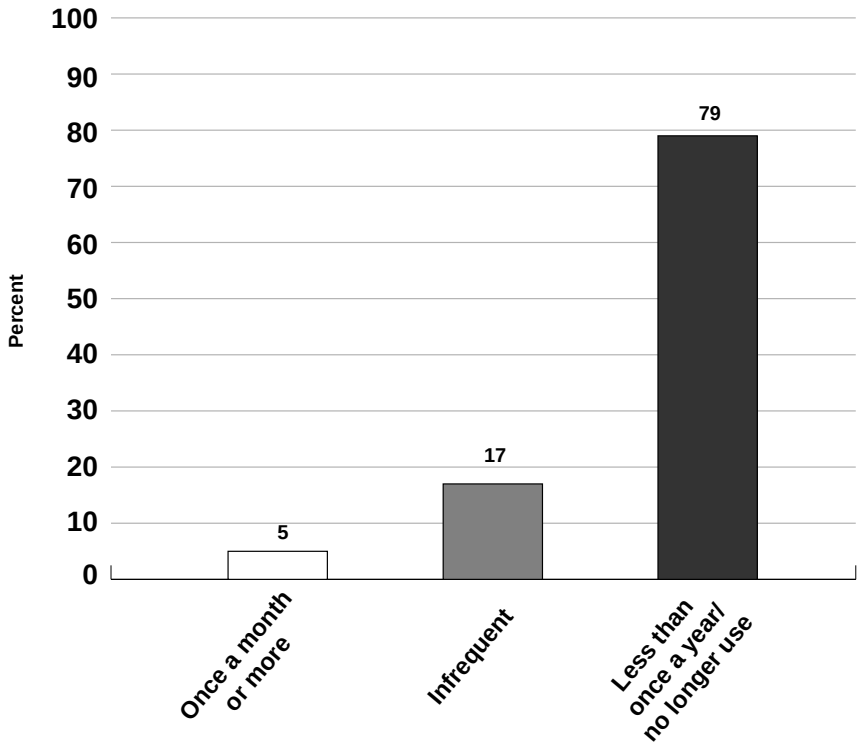


a For question wordings, see Figure 4.2.
Sources: 1985–95 NDS Surveys.

Whatever the declining trend in availability, the lifetime prevalence estimates suggest a remarkable stability in the proportions who report having used the drug, either during the course of their lifetime or in the previous 12 months (Figure 5.5). In 1985, 3 percent said that they had used cocaine; that figure has remained constant in every survey conducted since then. The proportions reporting having used the drug in the previous 12 months are also constant, at one percent. The trends in use in Figure 5.5 would therefore suggest a stable proportion of users within the population.

The estimates for the frequency of cocaine use (Figure 5.6) show that just over three-quarters of those who had ever tried the drug used either less than once a year or were no longer users—suggesting that they have most likely tried it once and not repeated the experience. However, there is a significant minority—17 percent—who say that they have used the drug several times a year, with a further one in twenty reporting use about once or twice every month. A total of three percent say that they use the drug at least weekly.

Figure 5.6: Frequency of Cocaine Use[a]



a Estimates are for all those who reported lifetime prevalence of cocaine in the 1988–95 NDS surveys (n = 375). The questions were: (1988, 1991, 1993) 'How often {1988, 1991: did you or] do you use cocaine/crack?' (1995) 'How often do you use cocaine for non-medical purposes?' The response codes have been collapsed.

Sources: 1988–95 NDS Surveys, merged file.

The comparative expense of cocaine in Australia, at least compared to other illicit drugs, would suggest that use is most likely to be found among slightly older respondents, in employment, and perhaps employed in non-manual occupations. The results in Table 5.2 show some support for these predictions: although prevalence is highest among those aged in their 20s, there is also a significant group of users (5 percent) among those aged in their 30s. The unemployed remain the social status group most likely to have been offered and to have tried cocaine, but there are also significant proportions of these groups among those who are employed in manual and non-manual jobs, in about equal proportions. As with most of the illicit drugs, use is about twice as likely to occur among men than among women.

Table 5.2: Social Characteristics of Cocaine Users[a]

	(Percent)		
	Offered	Lifetime prevalence	Annual prevalence
All	6	3	1
Gender			
Male	8	4	1
Female	5	2	1
Age			
14–19	7	2	1
20–29	14	8	3
30–39	7	5	1
40–59	3	1	*
60+	2	1	*
Birthplace			
Australia/New Zealand	6	3	1
British Isles	6	3	*
NES Europe	4	1	*
Asia	5	*	*
Education			
Tertiary	9	5	1
Trade, diploma	7	4	1
No qualifications	6	2	1
Social status			
Labour force			
Non-manual	7	4	1
Manual	8	4	1
Unemployed	14	8	3
Non-labour force			
Home duties	3	2	*
Retired	3	1	*

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation. Estimates for tried in the past 12 months are based on the 1988–95 surveys only.

Sources: 1985–1995 NDS Surveys, merged file.

5.3 Hallucinogens

Hallucinogens cover a variety of substances, some of them naturally occurring, which affect the mind, altering thoughts and perceptions. The effects of hallucinogens often include stronger colours and the distortion of vision and hearing, although true hallucinations are rare. Emotional reactions may include increased self-awareness and mystical or ecstatic experiences. In the 1960s the most potent and well-known hallucinogen, lysergic acid diethylamide (LSD), was popularised by academic and literary figures. The use of LSD became popular in the 1970s and was re-launched in the late 1980s with the rise of 'acid house parties' in Britain and Europe.

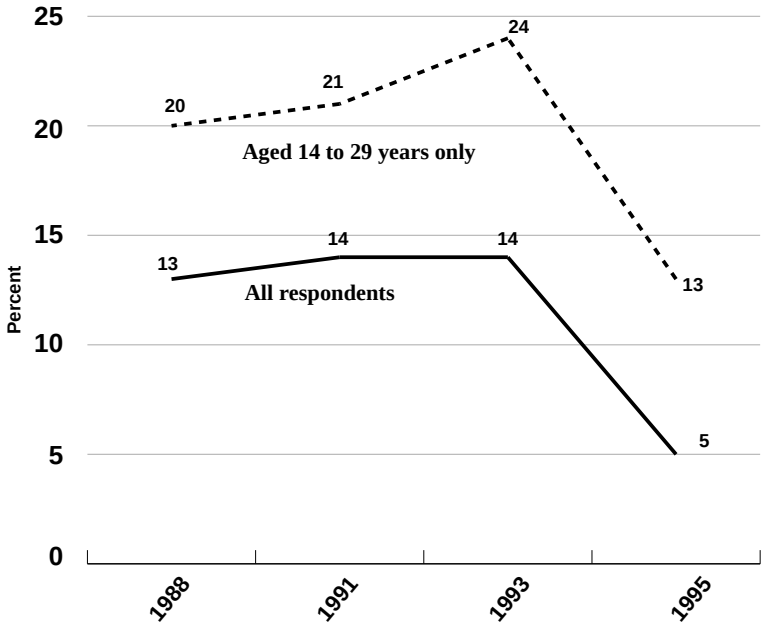
Death from hallucinogen use is rare but psychological disturbances occur frequently, including depression, paranoia or psychosis, all of which may be triggered by 'flashbacks.' Because very small amounts of the drug are needed to produce a 'trip', controlling the dose is difficult, and the effects may be much stronger than anticipated by the user. In recent years, phencyclidine piperidine (PCP), a less potent version of LSD, has become popular. Naturally occurring hallucinogens, mainly in the form of mushrooms, have been popular for sometime, although the extent of their use has always been difficult to gauge. Until 1995, the NDS surveys asked about hallucinogens in general; in the 1995 survey, separate questions were asked about LSD and 'naturally occurring hallucinogens'.

The proportion who report having been offered hallucinogens since 1985 has remained constant, at between 13 and 14 percent of the population (Figure 5.7). In 1995, when the question changed to reflect being offered the drug in the previous 12 months, the proportion dropped to one in 20. However, among those aged between 14 and 29 years, there is some evidence that the availability of the drug has been increasing. In 1993, a substantial 24 percent of this age group reported that they had been offered hallucinogens. In 1995, 13 percent said that they had been offered it during the previous 12 months, three times the rate among the population as a whole. The proportions being offered naturally occurring hallucinogens appear to be much smaller than for LSD. In 1995, two percent said they had been offered naturally occurring hallucinogens in the previous 12 months[18].

Figure 5.8 shows that lifetime prevalence has remained constant over the period of the surveys, with the partial exception of 1995 when the rate dropped by one percentage point, to six percent. In 1995 the lifetime prevalence rate for naturally occurring hallucinogens was four percent. The figures for use in the previous 12 months also display comparative stability, fluctuating between one and two percent. Once again, recent use of naturally occurring hallucinogens is lower, at 0.5 percent of the population. Overall, then, the survey evidence would suggest that while hallucinogens have become more common in Australia, the rate of use has remained constant since 1985. Hallucinogen use is very much associated with LSD; only four percent of the population report lifetime prevalence of naturally occurring hallucinogens, such as magic mushrooms, and recent use of these substances is only about a quarter of the rate for LSD.

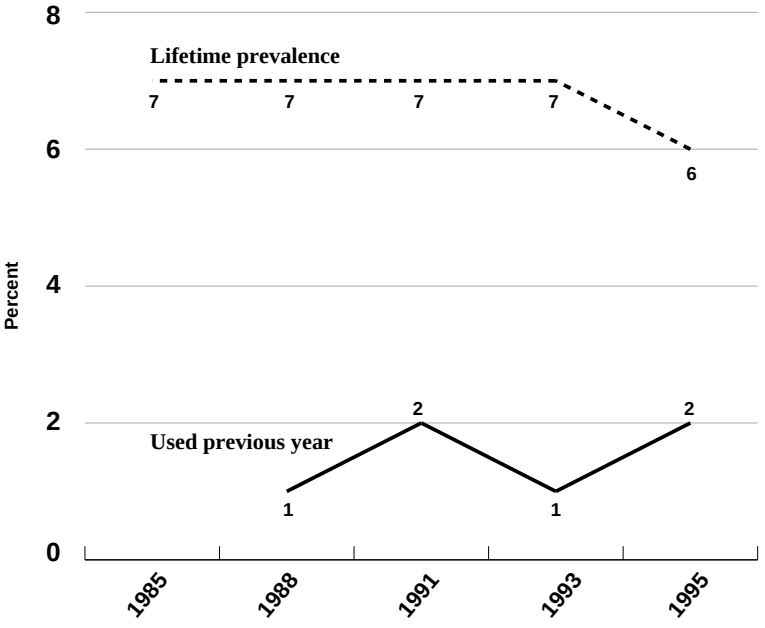
18 A separate question on naturally occurring hallucinogens was asked for the first time in 1995.

Figure 5.7: Trends in Exposure to Hallucinogens, 1985–95[a]



a For question wordings, see Figure 3.1.
Sources: 1985–95 NDS Surveys.

Figure 5.8: Trends in the Prevalence of Hallucinogens, 1985–95[a]



a For question wordings, see Figure 3.2.
Sources: 1985–95 NDS Surveys.

Table 5.3: Social Characteristics of Hallucinogen Users[a]

	(Percent)		
	Offered	**Lifetime prevalence**	**Annual prevalence**
All	11	7	2
Gender			
Male	14	9	2
Female	9	5	1
Age			
14–19	16	6	4
20–29	24	16	5
30–39	15	10	1
40–59	5	2	*
60+	2	*	*
Birthplace			
Australia/New Zealand	12	8	2
British Isles	13	8	*
NES Europe	6	3	*
Asia	5	2	*
Education			
Tertiary	16	10	2
Trade, diploma	13	8	2
No qualifications	9	6	1
Social status			
Labour force			
Non-manual	14	8	2
Manual	16	10	2
Unemployed	20	16	4
Non-labour force			
Home duties	6	4	0.3
Retired	3	1	*

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation. Estimates for annual prevalence are based on the 1988–95 surveys only.

Sources: 1985–1995 NDS Surveys, merged file.

Among those who report lifetime prevalence of LSD, nearly seven out of every 10 say that they used the drug more than a year ago, or that they no longer use it. A further 17 percent said that they had used it a few times a year. Only 14 percent say that they have used it several times a

month or more, with half of them reporting monthly or more frequent use. This confirms the image of hallucinogens as a drug that is used mainly for recreational proposes, usually in the company of others, and often in large-scale social situations such as parties.

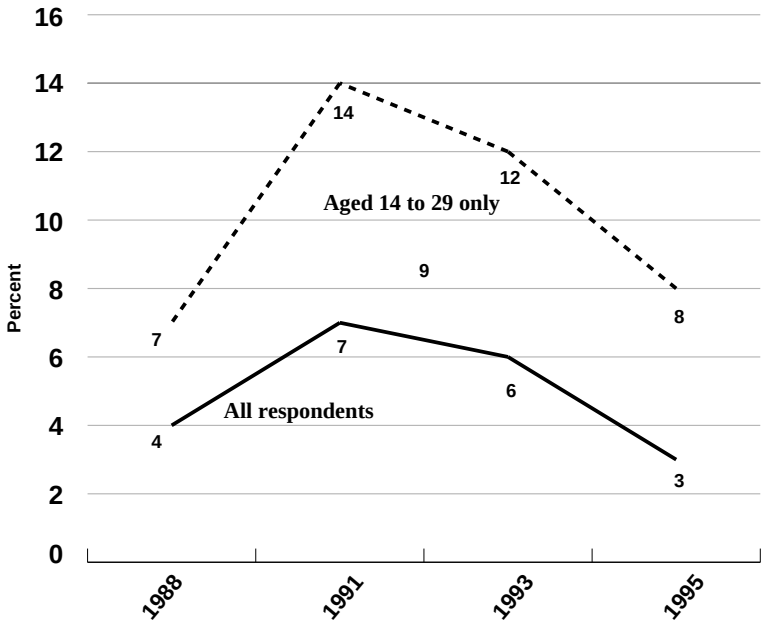
Those who have been offered hallucinogens or who have used them are more likely to be male than female, and to be aged under 40 years. Unlike most of the other illicit drugs, there is a significant group aged in their 30s who say that they have tried the drug—indeed more than the proportion of adolescents—a pattern which is obviously a legacy of the popularity of LSD during the 1970s. Use is also more likely to occur among those who have been born in Australia or the British Isles, and among those in the labour force—particularly the unemployed. Indeed, the rate of recent use among the unemployed is twice the comparable rate for those employed in non-manual occupations. Contrary to the popular image of LSD, there is little evidence that hallucinogen use, at least in Australia, is restricted to certain youth subcultures.

5.4 Designer Drugs/Ecstasy

Designer drugs, the most widely known of which is ecstasy or methylene-dioxymethamphetamine, usually referred to as MDMA, are substances derived from existing illegal drugs to produce analogues. These synthetic drugs can be several hundred times stronger than the drugs they are designed to imitate, with consequently more harmful physical and psychological effects. Although designer drugs have only recently become important sources of illicit drug abuse, many were synthesised some years ago. For example, a patent application for the production of MDMA was filed in 1914 and it was used in the United States as an aid to psychotherapy in the 1970s. MDMA was not made illegal in the United States until 1985, and it became popular in Britain in the late 1980s after its association with free dance parties conducted in disused buildings. Most designer drugs have effects which are similar to the use of amphetamines or cocaine, including hallucinations, anxiety, and paranoia.

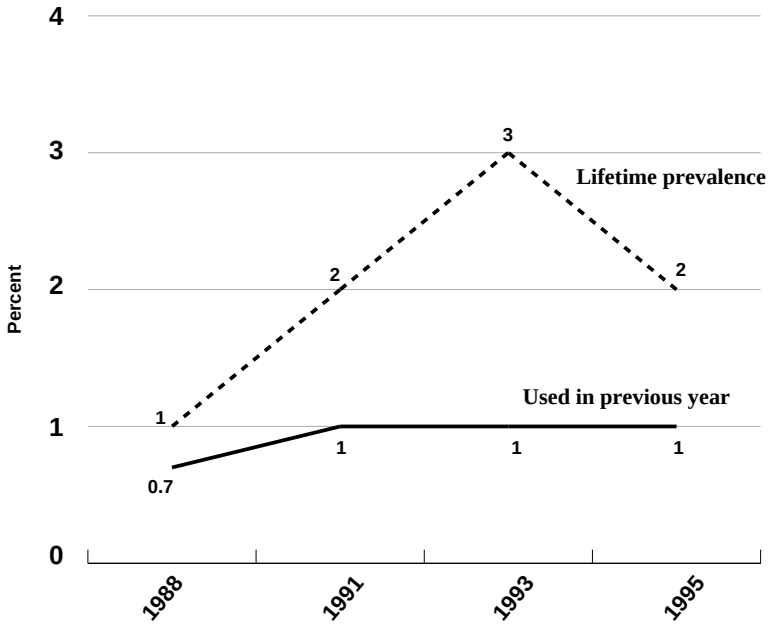
Ecstasy was first included in the 1988 NDS survey when four percent of the population reported having been offered the drug at some stage in their lives. This figure climbed to seven percent in 1991, falling to three percent in 1995, when the question referred to being offered the drug in the previous 12 months (Figure 5.9). However, among those aged 14 to 29 years, the proportion being offered ecstasy exceeded one in 10 in both 1991 and 1993, declining to eight percent in 1995. This comparatively modest drop in the most recent NDS survey—when the question referred to the previous 12 months rather than a lifetime—is partly a consequence of the recent popularity of ecstasy. If someone had been offered the drug, it is more likely to have been in the previous year. But these results also provide some suggestive evidence concerning the widespread availability of ecstasy.

Figure 5.9: Trends in Exposure to Ecstasy, 1988–95[a]



a For question wordings, see Figure 3.1.
Sources: 1988–95 NDS Surveys.

Figure 5.10: Trends in the Prevalence of Ecstasy, 1988–95[a]



a For question wordings, see Figure 3.2.
Sources: 1988–95 NDS Surveys.

Table 5.4: Social Characteristics of Ecstasy Users[a]

	(Percent)		
	Offered	Lifetime prevalence	Annual prevalence
All	5	2	1
Gender			
Male	6	3	2
Female	4	2	1
Age			
14–19	7	2	1
20–29	13	8	3
30–39	4	2	1
40–59	2	1	1
60+	1	*	*
Birthplace			
Australia/New Zealand	5	3	1
British Isles	3	2	*
NES Europe	3	1	*
Asia	3	*	*
Education			
Tertiary	7	4	2
Trade, diploma	5	3	1
No qualifications	4	2	1
Social status			
Labour force			
Non-manual	6	3	1
Manual	7	4	1
Unemployed	9	6	3
Non-labour force			
Home duties	2	1	*
Retired	2	1	*

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation.

Sources: 1988–1995 NDS Surveys, merged file.

In line with the growing availability of ecstasy, at least measured by the proportion being offered the drug, lifetime prevalence has also increased (Figure 5.10). In 1988, one percent reported lifetime prevalence of ecstasy, the same proportion that reported use in the previous year. Since then, lifetime prevalence has increased, stabilising at two to three percent. Use in the previous year has remained constant at one percent of the population. In line with the comparative newness of ecstasy, only about half of those who reported using it had done so longer than a year ago. Among the remainder, most said that they had used it once or twice a year.

Although those who have been offered ecstasy or who have used it are more likely to be men, when compared to other illicit drugs, the gender differences are more modest (Table 5.4). For example, 3 percent of men report lifetime prevalence of ecstasy, but so do 2 percent of women. Those with most experience of the drug are aged in their 20s, with comparatively few adolescents reporting lifetime or annual prevalence. Once again, the unemployed emerge as having the most contact with the drug. There are comparatively few birthplace or educational variations in exposure to or prevalence of the drug.

SECTION 6

Other Drugs

6.1 Tranquillisers

The general term 'tranquillisers' covers two major types of drugs, tranquillisers and barbiturates. Barbiturate sleeping pills were widely abused in the 1970s and 1980s for their intoxicating effects, often in conjunction with alcohol, and as a consequence are now rarely prescribed. Barbiturates bought on the street originate from medical sources and are usually imported or sold by users who possess prescriptions; they are normally swallowed as pills, although they are sometimes injected. Tranquillisers were first introduced in the 1960s and are used, like barbiturates, to help control anxiety and tension and to aid sleep. Benzodiazepines are the most commonly prescribed of these drugs, which include the well known Valium and Temazepam. Because they are seen to be much safer they have come to replace barbiturates for most medical purposes. These drugs are usually swallowed, although some abusers inject, but this is usually only with Temazepam.

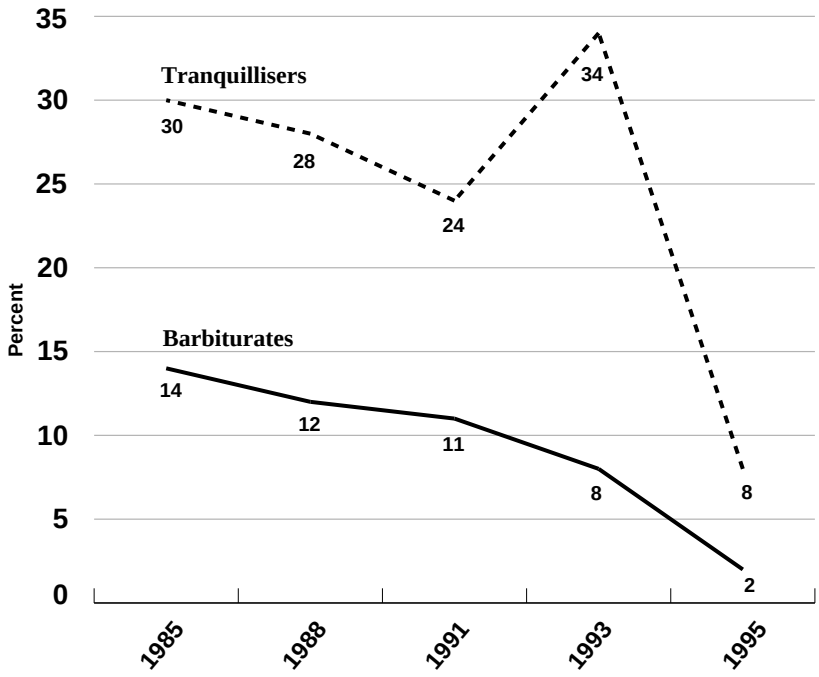
Around one in every three of the NDS respondents report having been offered tranquillisers at some stage in their lives, compared to slightly less than half that number who have been offered barbiturates (Figure 6.1). In the 1995 survey, when the question referred to being offered the drugs in the previous 12 months, eight percent said that they had been offered tranquillisers and two percent barbiturates. The availability of tranquillisers appears to be stable, while the availability of barbiturates has experienced a decline, from 14 percent in 1985 to eight percent in 1993.[19]

Since the various types of tranquillisers have been used both as legally prescribed drugs and in an illicit context, separating out the two types of use presents difficulties. In the 1985 to 1991 surveys, the prevalence questions were asked just of tranquillisers and barbiturates; there was no attempt to distinguish between medical (ie licit) and non-medical (ie illicit) use. In 1993, the distinction was introduced between medical and non-medical use of these drugs and both questions were asked of tranquillisers and barbiturates. In 1995, the question about non-medical use only was used. The 1993 survey, which asked about medical and non-medical use, is therefore an important benchmark to enable us to discern trends across the 10 year period of the surveys.

19 For ease of interpretation, and because these drugs for the most part are more applicable to the general population, we do not present separate estimates for the 14 to 29 year old respondents, as in other graphs. The estimates for being offered the two drugs for this 14 to 29 year old groups are as follows:

	(Percent)				
	1985	1988	1991	1993	1995
Tranquillisers	23	24	16	21	6
Barbiturates	18	13	11	7	3

Figure 6.1: Trends in Exposure to Tranquillisers, 1985–95[a]

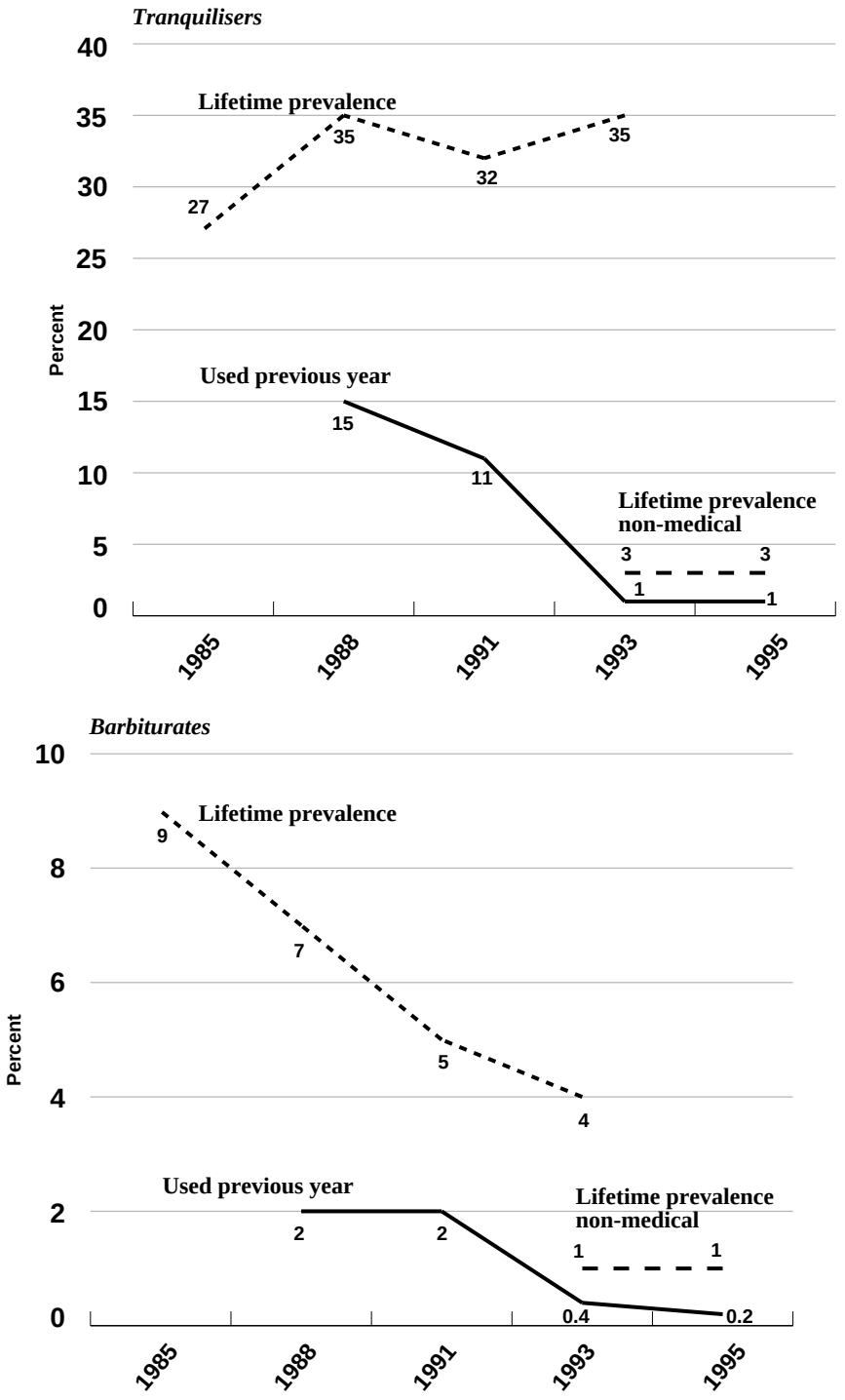


a For question wordings, see Figure 3.1.
Sources: 1985–95 NDS Surveys.

Figure 6.2 shows that the lifetime prevalence of tranquillisers has remained reasonably stable, after an increase between 1985 and 1988; in 1993, just over one in three of the population had taken tranquillisers at some stage in their lives. By contrast, use in the previous year has been declining steadily, down from 15 percent in 1988 to one percent in the two most recent surveys. This rapid decline is undoubtedly due to the greater reluctance of medical practitioners to prescribe the drugs, and to doubts surrounding the health effects on long-term users. The question concerning non-medical use of tranquillisers shows that three percent of the population has abused them.

The lifetime prevalence of barbiturates has been declining steadily since 1985, when it stood at nine percent of the population. In 1993, just under half that number said that they had tried the drug. Use in the previous year has also declined, with just 0.2 percent of the population saying that they had used barbiturates during the previous 12 months. Non-medical use of barbiturates stands at one percent of the population. In other words, about one quarter of the lifetime prevalence of barbiturates is as a result of illicit use, a substantially higher rate of diversion than occurs for tranquillisers, and a reflection of the reluctance of medical practitioners to prescribe the drug and of its consequent scarcity.

Figure 6.2: Trends in the Prevalence of Tranquillisers, 1985–95[a]



a For question wordings, see Figure 3.2.
Sources: 1988–95 NDS Surveys.

Unlike the illicit drugs, tranquilliser use is more likely to occur among women, among older people and among non-English speaking immigrants. The lifetime prevalence of tranquillisers is also more likely to take place among those who are not in the labour force, although the unemployed also show a high level of annual prevalence. The pattern for barbiturates, by contrast, conforms more closely to the pattern for the major illicit drugs, with prevalence concentrated among the unemployed. Nevertheless, prevalence rates remain high among the older respondents, undoubtedly reflecting use of the drug for medical purposes sometime in the past, when medical practitioners more frequently prescribed it. It is also notable that many immigrants report exposure to and use of the drug.

Table 6.1: Social Characteristics of Tranquilliser Users[a]

	(Percent)					
	Tranquillisers			Barbiturates		
	Offered	Lifetime prevalence	Annual prevalence	Offered	Lifetime prevalence	Annual prevalence
All	24	3	6	9	1	1
Gender						
Male	21	3	5	9	2	1
Female	27	3	6	9	1	1
Age						
14–19	8	2	3	6	*	1
20–29	23	6	5	13	3	1
30–39	27	4	3	10	2	*
40–59	27	3	6	8	1	1
60+	27	1	9	8	0.0	1
Birthplace						
Australia/New Zealand	24	3	5	9	1	1
British Isles	27	3	6	10	2	*
NES Europe	26	4	8	10	*	*
Asia	16	*	*	4	*	*
Education						
Tertiary	29	4	5	11	2	1
Trade, diploma	25	3	5	10	2	1
No qualifications	25	3	6	8	1	1
Social status						
Labour force						
Non-manual	27	4	5	9	2	1
Manual	22	3	5	10	2	1
Unemployed	24	4	6	13	*	2
Non-labour force						
Home duties	28	2	7	8	0.6	1
Retired	26	2	8	9	0.3	1

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation. Life time prevalence is for non-medical use only. Annual prevalence estimates are for 1988 to 1995.

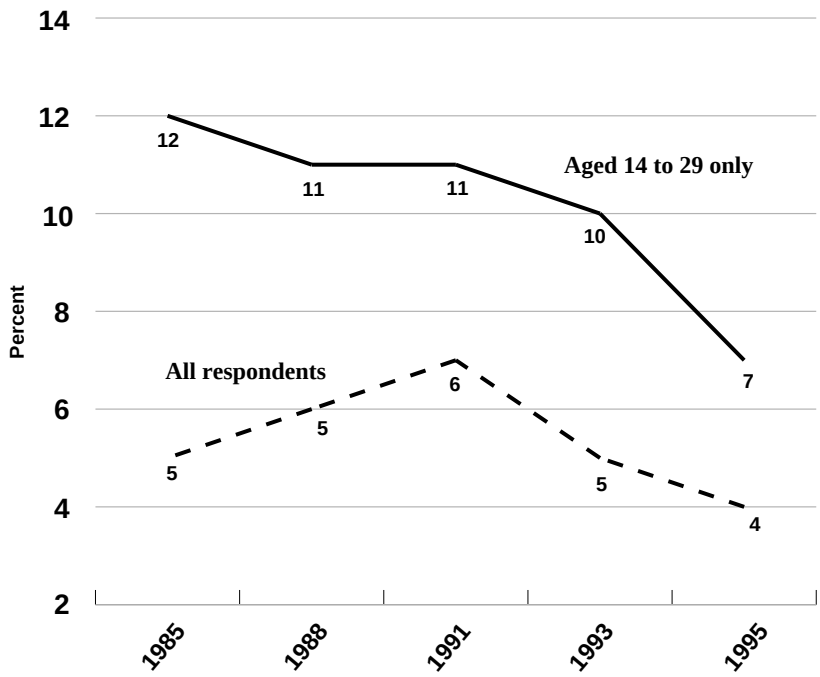
Sources: 1985–1995 NDS Surveys, merged file.

6.2 Inhalants

Inhalant misuse first emerged in the 1950s in the form of petrol sniffing, followed in the 1960s by adhesive sniffing. Inhalant misuse is generally associated with children and younger adolescents, who use products that are readily accessible around the home. Some carbon-based substances produce effects similar to alcohol or anaesthetics when inhaled, through solvent vapours being absorbed through the lungs and rapidly reaching the brain. Repeated or deep inhalation of solvent fumes can result in disorientation, loss of control and finally unconsciousness. Some users strengthen the effect by sniffing from inside a plastic bag placed over the head, an extremely dangerous method which risks unconsciousness.

The proportion of the population who report being exposed to inhalants appears to be relatively stable. Figure 6.3 shows that between 1985 and 1993, between five and seven percent of the population said that they had been offered inhalants at some point in their lives, with 1991 representing the peak year. However, a still substantial four percent in 1995 reported having been offered inhalants during the previous 12 months. Among the young, exposure to inhalants runs at about twice the rate for the population as a whole, with the estimates pointing to a slow decline from a peak of 12 percent in 1985.

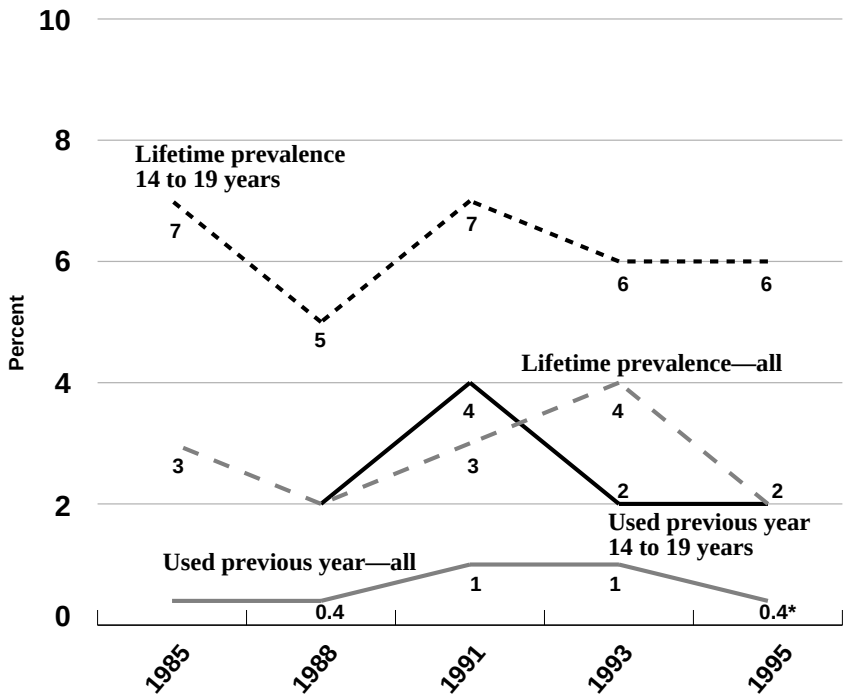
Figure 6.3: Trends in Exposure to Inhalants, 1985–95[a]



a For question wordings, see Figure 3.1.
Sources: 1985–95 NDS Surveys.

The lifetime prevalence of inhalants shows that between two and four percent have used them at some point in their lives, with 1993 registering the highest level among the five surveys (Figure 6.4). Use in the previous year does not exceed one percent of the population, and in 1995 it stood at just 0.4 percent. Prevalence is, of course, substantially higher among adolescents, the major group at risk from inhalant misuse. Over the period of the surveys, lifetime prevalence among adolescents has averaged six percent, with 1985 and 1991 representing peaks of seven percent. In the most recent survey six percent of adolescents reported they had tried inhalants. Adolescent use in the previous year peaked at four percent in 1991, declining to just under two percent in both 1993 and 1995.

Figure 6.4: Trends in the Prevalence of Inhalants, 1985–95[a]



a For question wordings, see Figure 3.2. * Less than 10 cases
Sources: 1985–95 NDS Surveys.

About three-quarters of those who report prevalence of inhalants say that they have used it longer than a year ago or no longer use it. However, the second largest groups—nine percent—say that they use inhalants weekly or more. Among adolescent users, nine percent report weekly or more frequent use, and a further 12 percent report monthly or more frequent use.[19]

19 The estimates are as follows.

	(Percent)				
	Once week or more	Several times month	Once month	Few times year	Less once year/ no longer use
All respondents	10	8	4	5	73
Adolescents	9	12	5	5	70

Table 6.2: Social Characteristics of Inhalant Users[a]

	(Percent)		
	Offered	Lifetime prevalence	Annual prevalence
All	5	3	1
Gender			
Male	6	4	1
Female	4	2	0.4
Age			
14–19	10	6	2
20–29	10	7	1
30–39	4	3	*
40–59	3	1	*
60+	2	*	*
Birthplace			
Australia	6	3	1
British Isles	5	2	*
NES Europe	4	2	*
Asia	3	1	*
Education			
Tertiary	7	4	1
Trade, diploma	5	3	1
No qualifications	4	2	1
Social status			
Labour force			
Non-manual	5	3	0.4
Manual	8	4	1
Unemployed	11	8	1
Non-labour force			
Home duties	2	1	*
Retired	3	1	*

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation. Annual prevalence estimates are for 1988 to 1995 only.

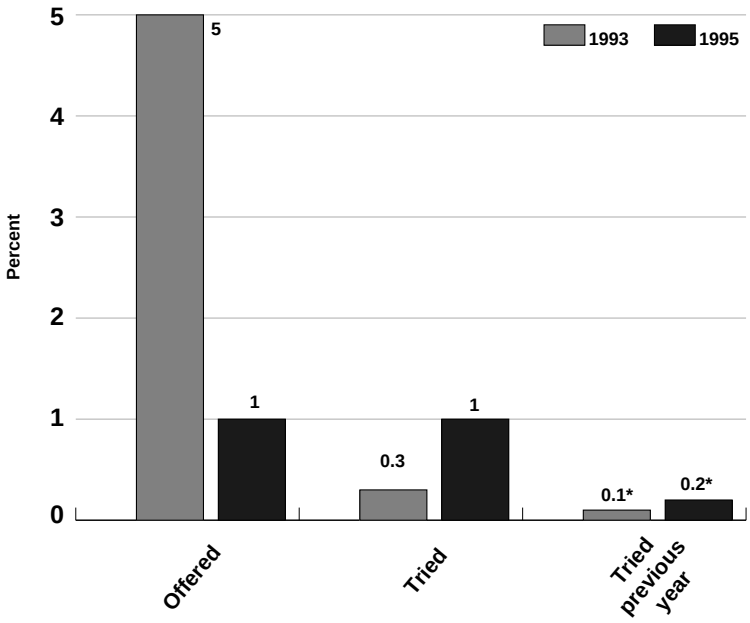
Sources: 1985–1995 NDS Surveys, merged file.

Exposure to and prevalence of inhalants are strongly related to age, as we would expect (Table 6.2). About one in ten adolescents report being offered inhalants, while six percent have used them. However, some seven percent of those aged in their 20s also report trying inhalants, presumably when they were much younger. Use is also more likely to occur among males, and among those who are currently unemployed. Those with tertiary qualifications are more likely to report they have been offered and tried inhalants. However use in the past year is similar across the different educational backgrounds.

6.3 Steroids

Steroids are synthetic substances related to the male hormone testosterone. They were originally developed for clinical use, to counter inflammation after injury or surgery, and to increase tissue mass and size among hormone-deficient children and in post-injury or post-surgery cases. Steroid abuse is a relatively recent occurrence. The drug has two effects, with androgenic steroids causing the body to become more male and anabolic steroids causing increased tissue building. Most people who use steroids seek the tissue building effect and so use steroids with higher anabolic than androgenic properties. Traditionally, steroids have been used by those involved in competitive sports, notably body builders, where the drug is used to increase muscle size during regular weight training. A number of different steroids (and other substances) are often used at the same time; this is known as 'stacking'. Steroids can be taken orally or by injection.

Figure 6.5: Trends in Exposure to and Prevalence of Steroids, 1993–95[a]



a For question wordings for exposure, see Figure 3.1. The lifetime prevalence question was 'Have you ever used [1995: tried] steroids for non-medical purposes?' Annual prevalence: 'Have you used [1995: tried] steroids for non-medical purposes in the past 12 months?' * Number of cases is less than ten.

Sources: 1993, 1995 NDS Surveys.

Steroids were first included in the 1993 NDS survey, when five percent of the population reported having been offered them at some stage, a figure which declined to one percent in 1995, when the question was changed to refer to the previous 12 months (Figure 6.5). In 1993, three percent said that they had tried steroids at some point in their lives, but a follow-up question concerning the non-medical use of steroids shows that only a small proportion of this group—0.3 percent of the population—had done so illicitly. In 1995, the lifetime prevalence of non-medical use of steroids was

estimated at one percent of the population. In both surveys, negligible proportions of the population said they had used steroids during the previous year and these estimates are not included in Table 6.3.[20]

Exposure to and use of steroids shows remarkably few social structural variations across the population (Table 6.3). Women are equally as likely to be have been offered steroids as men, and to have used them, as are the various age, educational and employment groups. Perhaps the only variation across the population which is of significance is birthplace, with immigrants from Britain or Ireland being more likely to have been offered steroids, and to have used them at some point in their lives, compared both to other immigrants and to the Australian born.

Table 6.3: Social Characteristics of Steroid Usersa

	(Percent)	
	Offered	**Lifetime prevalence**
All	3	1
Gender		
Male	4	1
Female	2	0.3
Age		
14–19	2	1
20–29	4	1
30–39	4	0.2
40–59	2	0.3
60+	2	0
Birthplace		
Australia	3	1
British Isles	3	0.4
NES Europe	*	*
Asia	*	*
Education		
Tertiary	3	1
Trade, diploma	3	1
No qualifications	3	1
Social status		
Labour force		
Non-manual	2	1
Manual	3	*
Unemployed	6	*
Non-labour force		
Home duties	2	*
Retired	2	*

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation. Estimates are based on the 1993 and 1995 surveys. Life time prevalence is for non-medical use only.

Sources: 1993, 1995 NDS Surveys, merged file.

20 There were also insufficient numbers of users during the previous year to analyse frequency of steroid use

6.4 Injecting Drug Use

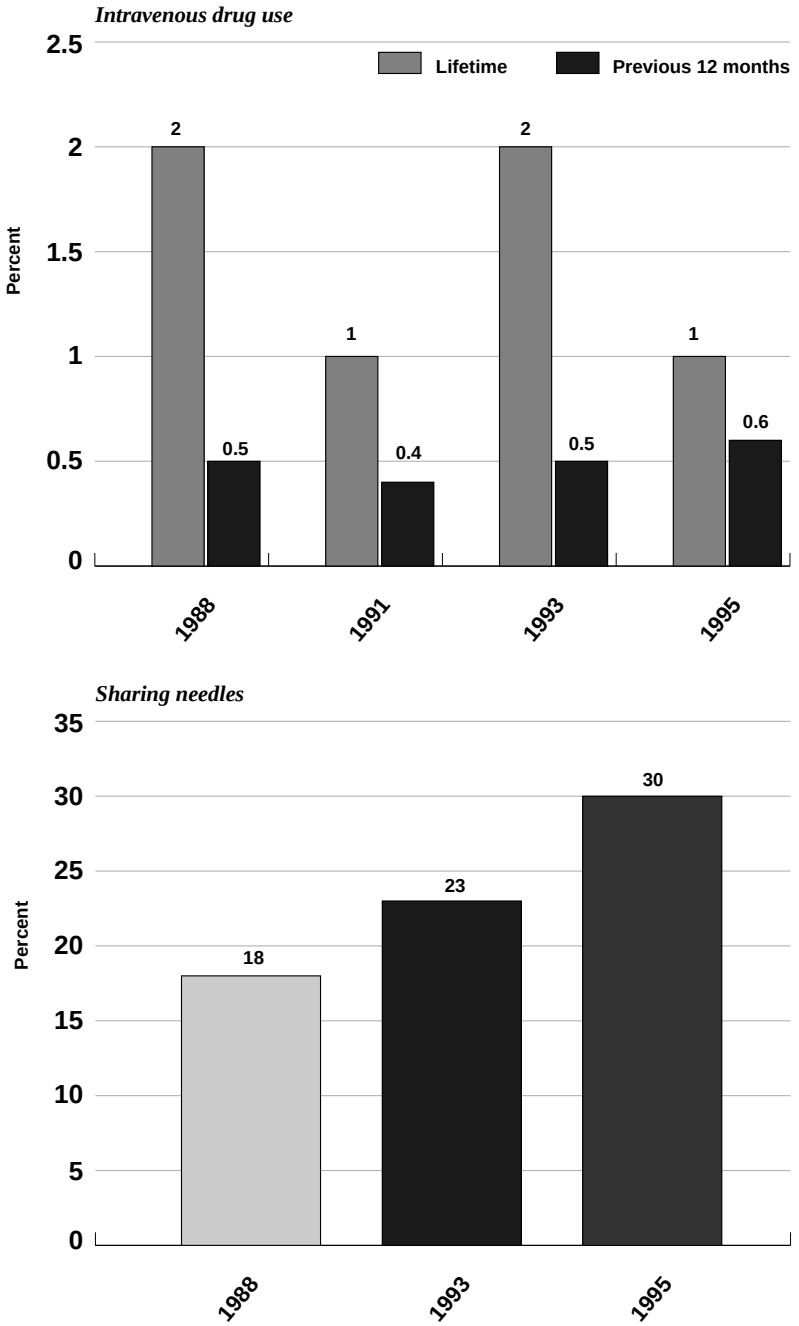
Most drugs can be administered intravenously, although injecting drug use is most commonly associated with heroin. Injecting a drug, rather than administering it orally, has the effect of placing the substance directly into the bloodstream, thereby increasing the speed with which it takes effect, as well as enhancing the effects of the drug. However, the AIDS epidemic has increased the risk of contracting the disease through needle sharing among addicts and users, prior to the mid-1980s a relatively common practice. In response to the problem, many jurisdictions have introduced needle exchange programs to encourage users to inject only with clean needles.

A question about the injection of drugs was first included in the 1988 NDS survey, and was repeated in the 1991, 1993 and 1995 surveys. Figure 6.6 shows that two percent of the population said that they had injected a drug at some point in their lives in 1988 and 1993. This figure has dropped back again to one percent in the most recent survey. Although the numbers involved are small and any conclusions are necessarily tentative, there appears to be stability in the proportions saying that they injected with drugs in the 12 months prior to each of the three surveys. In 1995 about half of those reporting injecting at some stage in their lives said that they had injected in the 12 months prior to the survey.

The NDS surveys in 1988, 1993 and 1995 also asked questions concerning the sharing of needles. The proportions saying that they had shared a needle at some point (as a proportion of those who had injected in the previous 12 months) has been increasing. In 1988, 18 percent reported sharing a needle in the previous year, compared to 23 percent in 1993 and 30 percent in 1995. However, since the numbers are very small (n = 36), it is difficult to draw any firm conclusions about trends.

The NDS surveys also contain information on the drugs that are most likely to be injected. The survey asked those who had injected in the previous 12 months which drugs they had used. Although again the numbers are small, the results show that almost half had used amphetamines, while 28 percent had injected heroin. The remainder had injected cocaine, barbiturates, tranquillisers and a range of lesser-used drugs.

Figure 6.6: Trends in Intravenous Drug Use, 1988–95[a]



a The questions were as follows. Lifetime: (1988, 1991) 'Have you injected yourself with illegal drugs—ever?' (1993, 1995) 'Have you ever injected yourself with illegal drugs?' Annual: (1988–95) 'Have you injected yourself with illegal drugs in the past 12 months? Needle-sharing: (1988) 'Do other people use your fits or do you use theirs—or is it a bit of both?' (1993–95) 'Have you ever shared [1995: a needle] needles?'

Sources: 1988–95 NDS Surveys.

Table 6.4: Social Characteristics of Intravenous Drug Users[a]

	(Percent) Injected
All	2
Gender	
Male	2
Female	1
Age	
14–19	2
20–29	4
30–39	2
40–59	1
60+	*
Birthplace	
Australia	2
British Isles	2
NES Europe	*
Asia	*
Education	
Tertiary	2
Trade, diploma	2
No qualifications	2
Social status	
Labour force	
Non-manual	1
Manual	2
Unemployed	5
Non-labour force	
Home duties	1
Retired	0.2
(N)	(12,315)

a See Appendix for definitions of variables and composition of the merged file. An asterisk denotes too few cases (n = <10) for reliable estimation.

Sources: 1988–1995 NDS Surveys, merged file.

Intravenous drug users are more likely to be male than female, to be aged in their 20s, and to be Australian born (Table 6.4). While there are no educational variations, they are more likely to be unemployed or, to a much lesser extent, working in a manual occupation. By contrast, only one percent of white collar workers said that they had injected drugs. Because of the small sample size for those who said that they had injected in the previous 12 months, they are not analysed in the table.

Appendix

The NDS Surveys

The five NDS surveys conducted between 1985 and 1995 were all national samples, conducted by personal interview. They do, however, differ in their sample coverage and general methodology. The 1985 survey used a quota sampling technique, while the remaining surveys used random samples. The first three surveys were samples of urban centres with populations of 5,000 or more, while the 1993 and 1995 surveys were stratified by Census Collectors' Districts. The 1985, 1988 and 1991 surveys incorporated over-samples of 14 to 19 year olds; over-samples of adolescents were not required in the 1993 and 1995 surveys to achieve an adequate number of respondents because of the already large sample size (Ns = 3,500 and 3,850, respectively). Weights are used in all of the surveys to adjust the sample to the national population. In each survey, the weighted number of respondents has been adjusted to the true number of respondents.

Table A: The 1985–95 NDS Surveys

Year	Data collection	Fieldwork	Sample coverage	Sample size	Interview technique
1985	Reark Research	Nov–Dec	Quota sample, urban population centres of 5,000+, aged 14+	2,791	Personal interview
1988	Australian Market Research	Mar–Apr	Random sample, urban population centres of 5,000+, aged 14+	2,255	Personal interview, sealed self-completion booklet
1991	Australian Market Research	Mar–May	Random sample, urban population centres of 5,000+, aged 14+	2,850	Personal interview, sealed self-completion booklet
1993	AGB McNair	Mar–Apr	Random sample, population aged 14+	3,500	Personal interview, sealed self-completion booklet
1995	AGB McNair	May–Jun	Random sample, population aged 14+	3,850	Personal interview, sealed self-completion booklet

The 1985 survey relied solely on a personal interview technique, while the other four surveys all used a sealed self-completion booklet to collect the more sensitive drug use questions. The 1988 survey collected these data both by personal interview and using the sealed booklet, enabling an

experiment to be conducted comparing the two sets of estimates (Porritt, 1990; Makkai and McAllister, 1992). The sealed booklet method was found to produce more reliable estimates on drug use and has been used exclusively in all the surveys conducted since 1991.

The results are presented for adults aged 20 years or more and, occasionally, for adolescents, who are defined as respondents aged 14 to 19 years. A definition of adults as those aged 18 years or more would have been preferable, but this group could not be defined consistently in all five of the surveys. The problem is the 1993 NDS survey, which coded only one general 14 to 19 year age category, making it impossible to identify those aged 18 or 19 years. For consistency across the surveys, therefore, we define adults as those aged 20 years or more. This causes slight variations in the reported percentages when the results are compared with those given in other publications which use a different definition of adult.

Data Analysis

Question wordings and response codes differ slightly across the surveys, and these are noted below each table and figure. In the questions relating to particular drugs, there are variations in the descriptors used in each of the surveys, which may influence the level of response. The detailed descriptions are shown in Table B.

In general, we have endeavoured to match the response codes between the surveys as consistently as possible, although in some cases there are minor variations. One particular problem concerns age, and in addition to the inability to disaggregate the 14 to 19 year old adolescents in the 1993 survey, the older age categories vary. To minimise inconsistencies between the surveys as far as is possible, we have used 14 to 19, 20 to 29, 30 to 39, 40 to 59, and 60 or more as the age categories. However, in the 1993 survey only, the last two age categories refer to 50 to 54, and to 55 or more, respectively.

To examine the social profile of illicit drug users a merged file of all of the respondents in the 1985 to 1995 surveys (N = 15,246) was created. This has the advantage of enabling us to examine the social correlates of drug use among comparatively small population groups, such as heroin users or intravenous drug users, which would be impossible if we relied on a single survey. The disadvantage is that we are unable to trace trends. In combining the files, there has been no attempt to equalise the numbers of respondents in each of the five surveys. It was considered that any further reweighting of the survey data might have introduced new errors into the estimates which would have outweighed the benefits of equalising the contribution of each survey to the pooled file.

Table B: Drug Descriptors Provided in the NDS Surveys

	Description of Drug				
	1985	**1988**	**1991**	**1993**	**1995**
Marijuana	Marijuana	Marijuana, hash	Marijuana, hash	Marijuana, hash	Marijuana, cannabis products, grass, dope, pot, weed, mull, hash, skunk
Heroin	Heroin	Heroin	Heroin	Heroin	Heroin, hammer, smack, skag, rock
Amphetamines	Amphetamines, speed	Amphetamines, speed, uppers	Amphetamines, speed, uppers	Amphetamines, speed, uppers, ritalin, ox blood	Amphetamines, speed, goey, uppers, ox blood, MDA, eve
Cocaine	Cocaine	Cocaine, crack	Cocaine, crack	Cocaine, crack	Cocaine, coke, crack, blow, charlie
Hallucinogens	Hallucinogens, LSD, magic mushrooms, trips	Hallucinogens, LSD, magic mushrooms, trips	Hallucinogens, LSD, magic mushrooms, trips	Hallucinogens, LSD, magic mushrooms, trips	LSD, acid trips
Naturally occurring hallucinogens	—	—	—	—	Magic mushrooms, datura, angel's trumpet.
Designer drugs	—	Designer drugs, ecstasy	Ecstasy, designer drugs	Ecstasy, designer drugs	Ecstasy, designer drugs, XTC, E, MDMA, ecci, adam
Tranquillisers	Tranquillisers	Tranquillisers, valium, serapax, sleeping pills	Tranquillisers, valium, serapax, sleeping pills	Tranquillisers, sleeping pills, valium, serapax	Tranquillisers, sleeping pills, valium, serapax
Barbiturates	Barbiturates	Barbiturates	Barbiturates	Barbiturates, barbs	Barbiturates, barbs, downers, reds, purple hearts
Inhalants	Glue, petrol, solvent, rush to sniff	Inhalants, glue, petrol, solvent, rush	Inhalants, glue, petrol, solvent, rush	Inhalants, glue, petrol, solvent, rush	Inhalants, glue, petrol, solvent, rush
Steroids	—	—	—	Steroids	Steroids

Five variables were chosen for analysis in the combined file: gender, age, birthplace, education and social status. Marital status is also included in the analyses for tobacco and alcohol, but since illicit drug is strongly correlated with age, which is also associated with marital status, it was excluded in the analyses of the illicit drugs. Five age categories are used—14 to 19, 20 to 29, 30 to 39, 40 to 59 and 60 or more—with the caveats about the 1993 survey noted above. Birthplace is based on four groups: the Australian born (including those born in New Zealand); those born in the British Isles (England, Scotland, Wales, Northern Ireland or the Irish Republic); those born in a non-English speaking European country (principally Denmark, Finland, Sweden, Germany, France, Netherlands, Switzerland, Austria, Belgium, Italy, Greece, Spain, Yugoslavia, Czechoslovakia, Romania, Hungary, Poland, Russia, Portugal, Malta, Gibraltar, Latvia, Lithuania); and those born in Asia (principally Vietnam, Hong Kong, Singapore, Malaysia,

Philippines, Indonesia, Thailand, Burma, Timor, India, Sri Lanka, Nepal, Bangladesh, Pakistan, Japan, Korea, China, Taiwan). This excludes a small number of individuals born in the Pacific Islands, parts of the Middle East, Africa and North and South America.

Education is divided into three categories: tertiary qualifications, which is primarily a degree or a postgraduate qualification; a trade certificate, a diploma or some other tertiary qualification other than a university degree; and no formal qualifications. Finally, social status is divided into two broad categories, separating out those who are in or out of the workforce. Of those in the workforce, we distinguish between those employed in non-manual occupations, those in manual occupations, and those were unemployed at the time of the survey. Of those outside the workforce, we identify those involved in home duties and those who were retired.

The tables usually provide the numbers of respondents on which the estimates are based; these numbers may vary slightly within a table due to missing values for specific variables. Percentages are round to the nearest whole number, with .5 being rounded up. When an estimate falls below 0.5, we have given the figure to one decimal place. As a general rule, the tables exclude estimates based on less than 10 cases, since this is insufficient to provide a reliable estimate; in these cases an asterisk is shown instead. In the case of figures, an estimate based on less than 10 respondents is still shown in the figure, but the figure is asterisked to show that it is potentially unreliable.

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