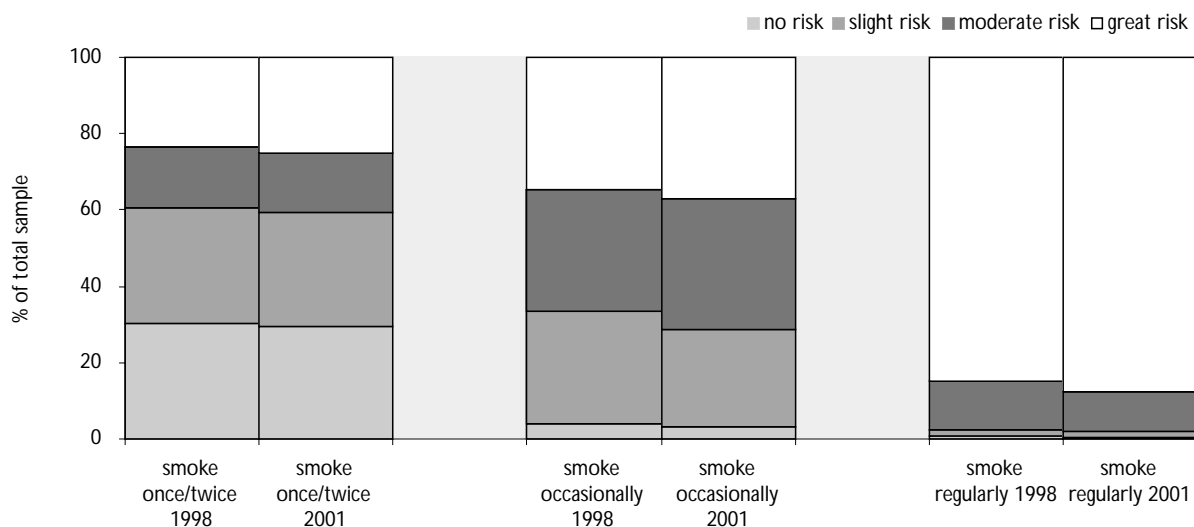




## Perceptions of tobacco use

All respondents were asked to what extent they thought people risk harming themselves through various levels of tobacco use. Figure 2.4 shows increased perception of risk of harm from higher levels of use. There was some strengthening in perceptions of risk of harm from occasional and regular smoking between 1998 and 2001. For example, there was an increase in the number of respondents who thought occasional smoking was a 'moderate risk', from 32% in 1998 to 34% in 2001, and this was largely due to a growing perception among women (from 33% to 37%). A trend was also found towards increased numbers who thought there was a 'great risk' from occasional smoking, from 35% in 1998 to 37% in 2001, and this reflected a trend for men (from 33% to 37%). In the case of regular smoking, the number of respondents who thought this level of smoking was of great risk increased from 85% to 88%, and this was due to an increase among men (from 82% to 85%) and a trend for women (from 89% to 91%). A trend increase in the number of 15-17 year olds who thought regular smoking was a great risk was found (82% in 1998, 88% in 2001), and this was largely due to a trend increase among women aged 15-17 years (from 85% to 93%).

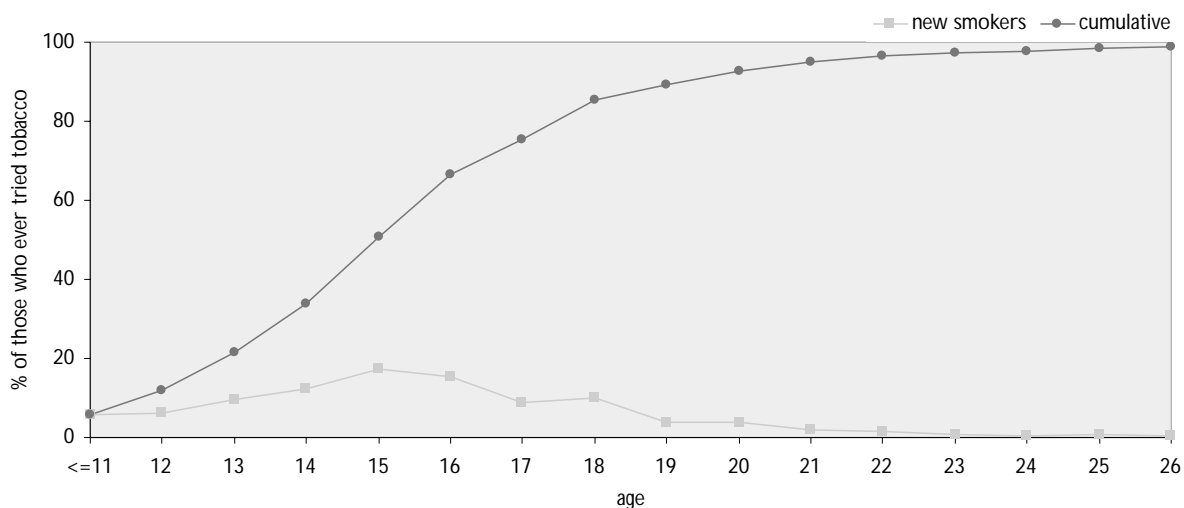
Figure 2.4 Perceived risk of using tobacco, 1998 & 2001



### Age at first use

The age at which people reported they first started smoking ('regular use') is illustrated in Figure 2.5. This is a new question for 2001. Figure 2.5 shows that by age 15, 51% of those who had ever tried tobacco had started smoking. The sharpest increases occurred at ages 14, 15, 16 years, with 12%, 17%, and 16% reporting starting smoking at these ages respectively.

Figure 2.5 Age at which tobacco was first used, 2001





### 3. CANNABIS

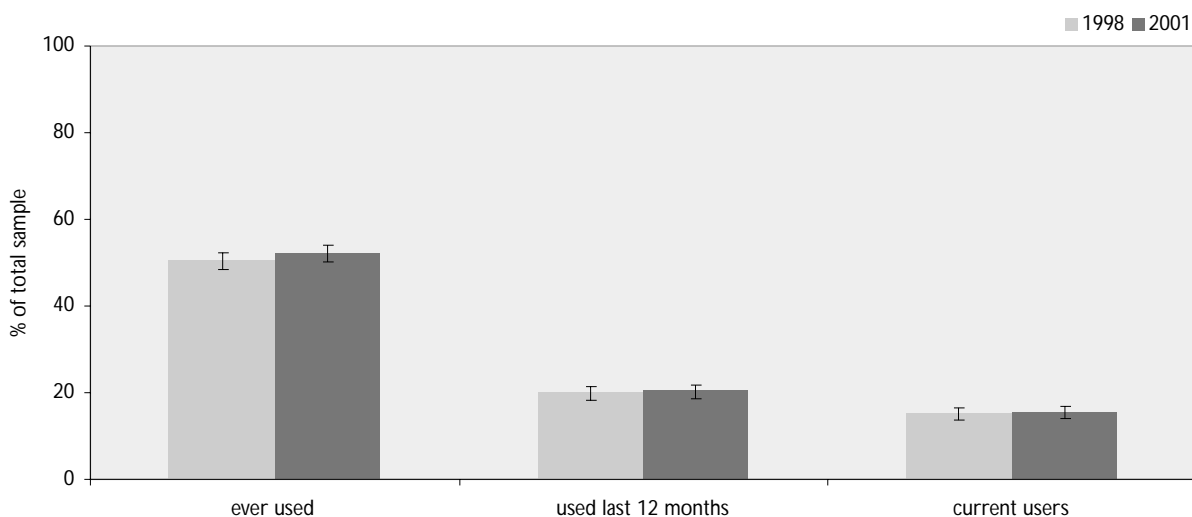
The 1998 and 2001 drug surveys examined the use of marijuana, hashish, hash oil and skunk. Skunk, along with other types of dwarf marijuana, is often grown indoors using hydroponic horticultural techniques. Skunk is generally more potent than marijuana from standard size plants.

#### MARIJUANA

##### Ever tried, last year and current use

Marijuana is the third most popular drug used in New Zealand, after alcohol and tobacco. Figure 3.1 shows the changes in ever having tried marijuana, last year use, and current use, from 1998 to 2001. A current marijuana user was one who had used marijuana in the last 12 months and said they had not stopped using the drug. There was no significant change in any of these measures between the two survey periods.

**Figure 3.1** Proportion reporting ever having tried marijuana, last 12 months and current marijuana use, 1998 & 2001



The proportion of the sample that had ever tried marijuana did not change significantly, remaining stable at 50% in 1998 and 52% in 2001. The proportion that had used marijuana in the last 12 months remained the same at 20% for 1998 and 2001. The percentage of current marijuana users also remained the same at 15%.

Proportionally more men than women had ever tried marijuana, although there was a trend towards increased use by women (Figure 3.2 and 3.3). The proportion of women reporting ever having tried marijuana increased from 44% in 1998 to 48% in 2001. Among men, there was no change in ever used, remaining the same at 56% for both survey periods.

Figure 3.2 Proportion of men reporting ever trying marijuana by age group, 1998 & 2001

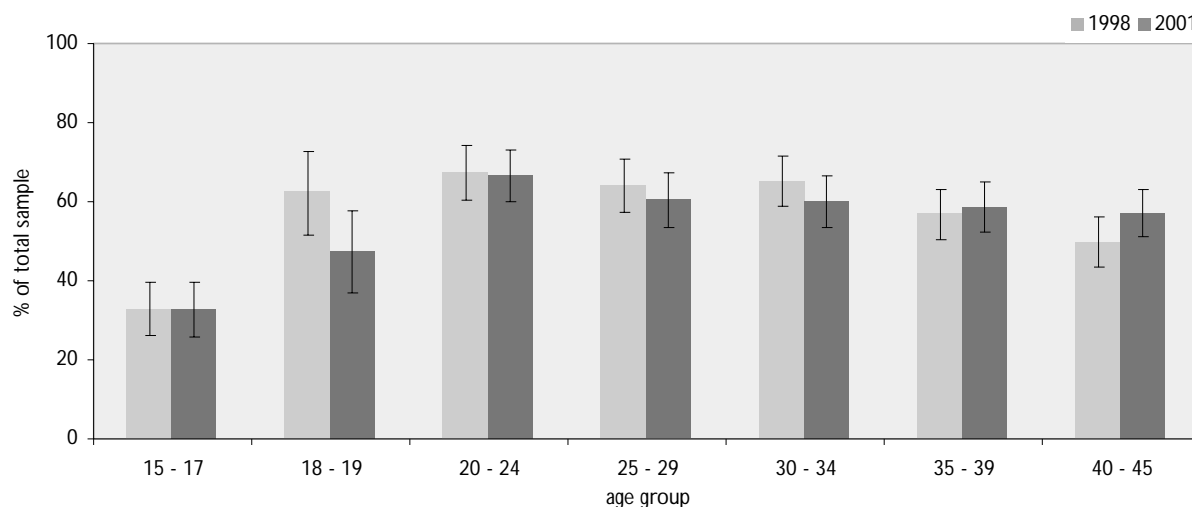
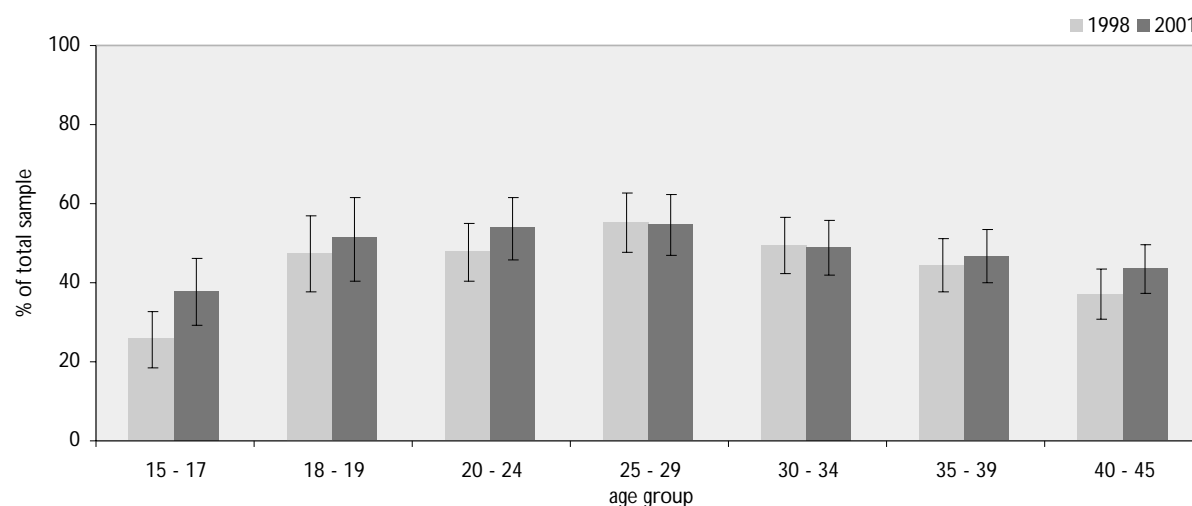


Figure 3.3 Proportion of women reporting ever trying marijuana by age group, 1998 & 2001



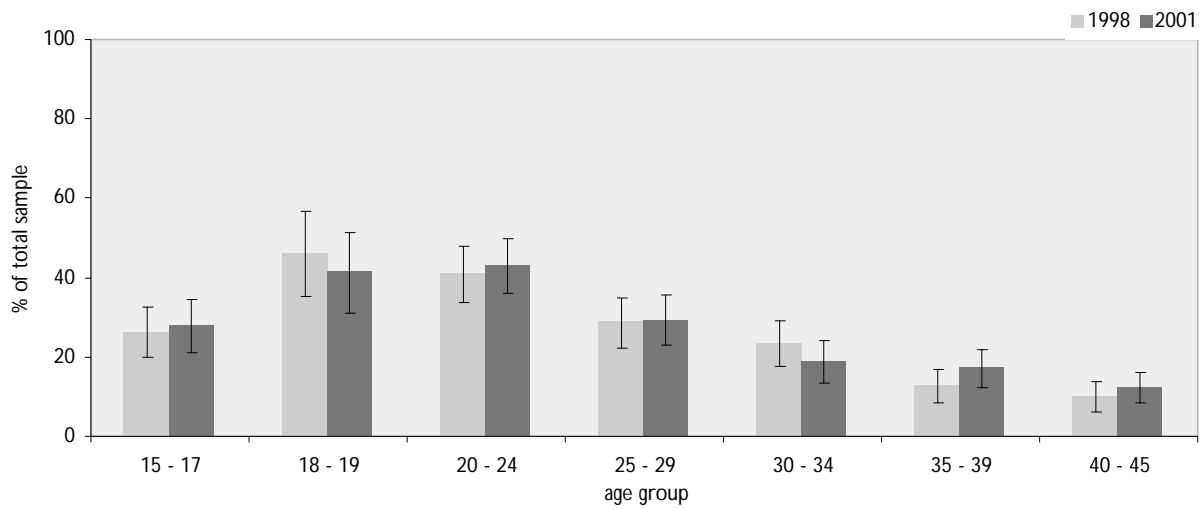
There was an increase in the number of women aged 15-17 years old that had ever tried marijuana from 26% in 1998 to 38% in 2001. There was also an increase in the proportion of 40-45 year olds (men and women combined) who had ever tried marijuana from 44% in 1998 to 50% in 2001. The higher levels of use in the older age group may in part reflect a cohort effect. In 1998, those in the 40-45 year old age group were among those least likely to have tried marijuana and some of these people would have fallen outside the age range of the survey by 2001.

There was a trend of more young women aged 15-17 years using marijuana in the last year (from 20% to 30%) (Figure 3.5) and reporting current use (from 10% to 18%).

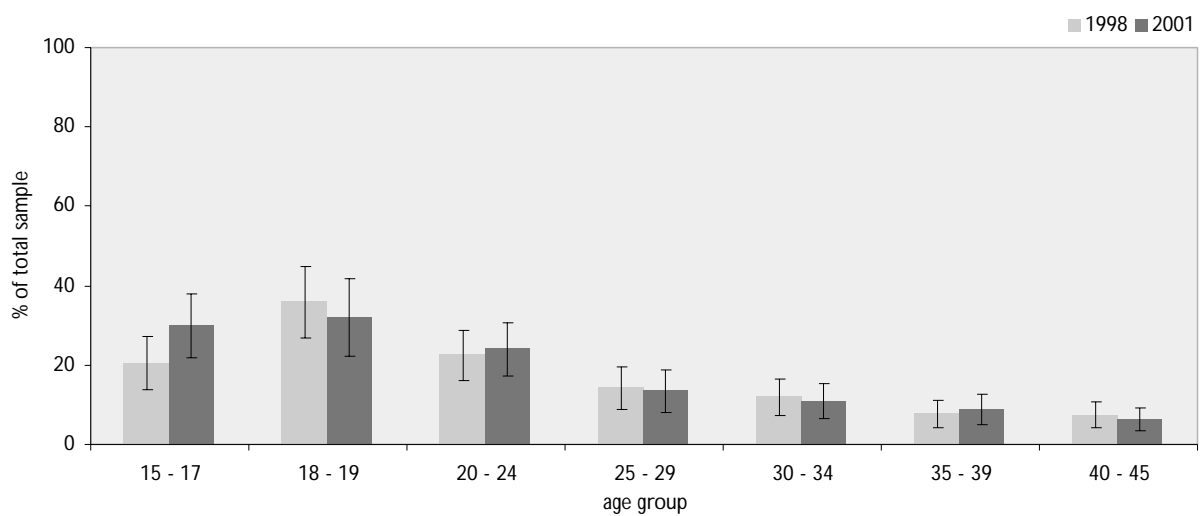
There was no change in the last month use of marijuana, remaining stable at 10% in 1998 and 11% in 2001. There was an increase in the proportion of 15-17 year olds who had used marijuana in the last month, from 10% in 1998 to 15% in 2001, and again this was mainly due to an increase among women aged 15-17 (from 6% to 15%).



**Figure 3.4** Proportion of men reporting using marijuana in the last 12 months by age group, 1998 & 2001



**Figure 3.5** Proportion of women reporting using marijuana in the last 12 months by age group, 1998 & 2001



### Frequency of use

Those who had ever tried marijuana were asked how often they had used the drug in the last year, and also in the last month. Frequency of use in the last year did not change significantly for either men or women. In each survey, of those who had used marijuana in the last year, about half of the men and half of the women had done so less often than once per month on average (Figure 3.6 and 3.7). Women tended to smoke marijuana on fewer occasions than men, in both the 1998 and the 2001 surveys.

Figure 3.6 Frequency of marijuana use by men in the last 12 months, 1998 & 2001

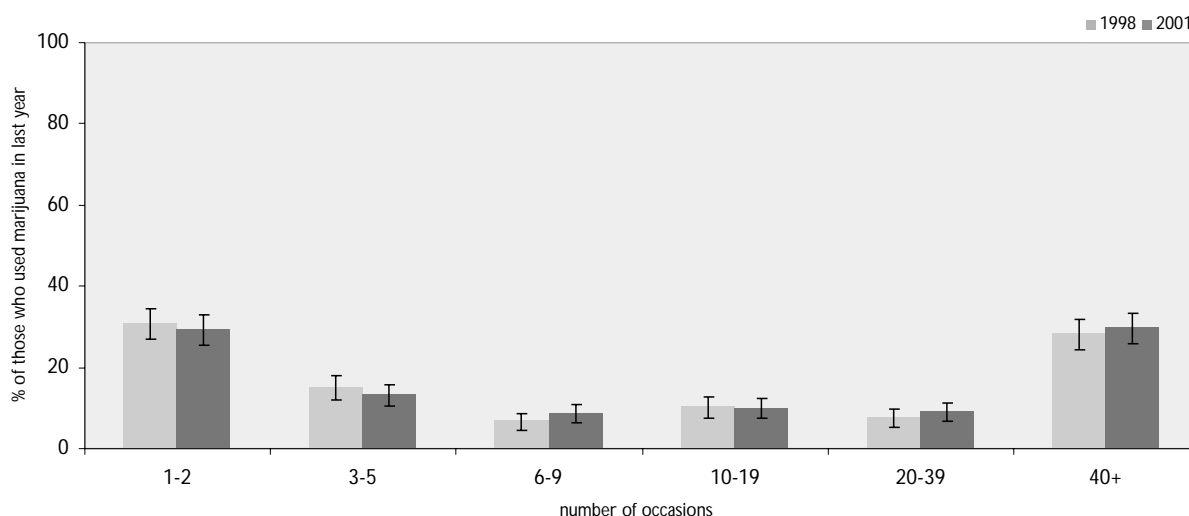
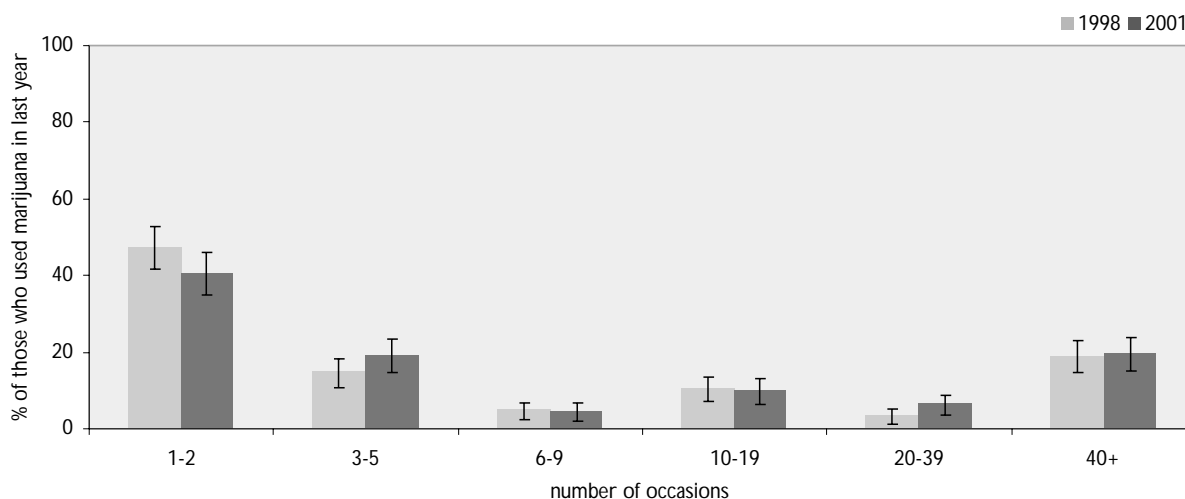


Figure 3.7 Frequency of marijuana use by women in the last 12 months, 1998 & 2001



There was evidence of increased frequency of use by young people. There was an increase in the proportion of 18-19 years olds who used marijuana 20-39 times in the last year, from 5% in 1998 to 19% in 2001, and this reflected an increase for men aged 18-19 years (from 6% to 25%).



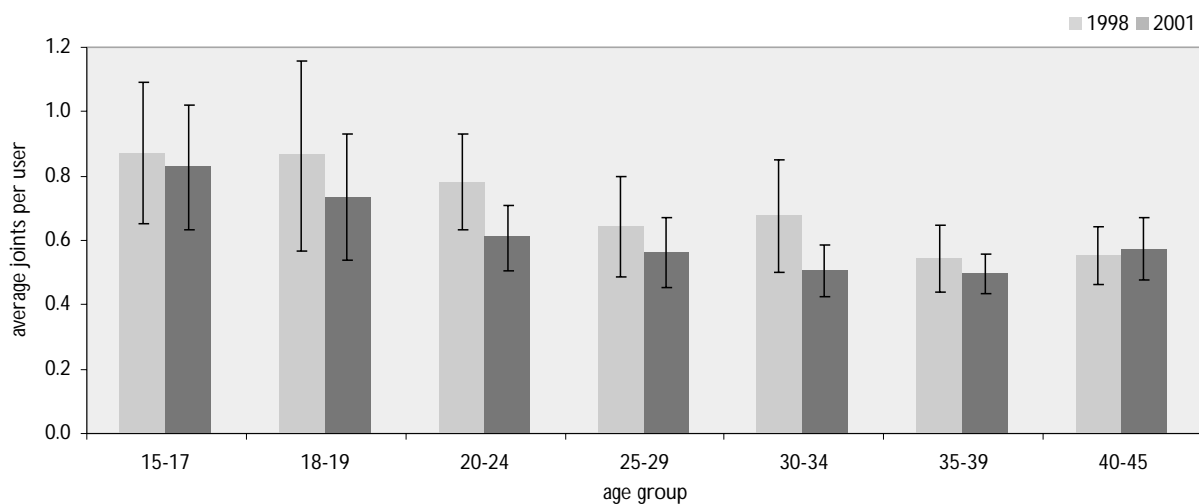
## Frequent marijuana use

A frequent marijuana user is defined here as one who smoked marijuana on 10 or more occasions in the last month. In 1998, 3% of respondents were frequent marijuana users. There was a trend to an increase in the frequent use of marijuana for the whole sample in 2001 (to 4%). There was an increase in the frequent use of marijuana by those aged 15-17 years, from 1% in 1998 to 4% in 2001, and this reflected use by women aged 15-17 years (from 0% to 4%).

## Level of use

The average number of joints smoked per person on a typical occasion by last year marijuana users decreased from 0.73 joints in 1998 to 0.63 joints in 2001. The average number of joints smoked by men decreased from 0.81 joints in 1998 to 0.63 joints in 2001. Women smoked 0.61 joints in 1998 and this remained the same in 2001. The highest average number of joints smoked by age group was found in the 15-17 year olds in both 1998 (0.87 joints) and 2001 (0.83 joints).

**Figure 3.8** Average number of joints smoked per user on a typical occasion by age group, 1998 & 2001

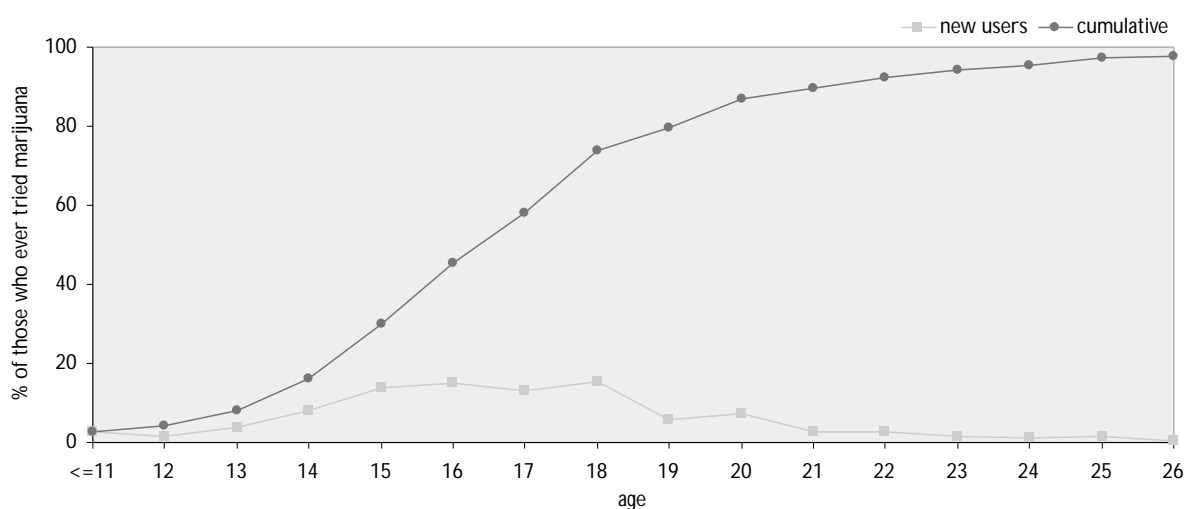


## Age at first use

The age at which people reported they first used marijuana in 2001 is illustrated in figure 3.9. There were no significant changes in the age of first use of marijuana between the surveys.

In 2001, by age 15 years, 30% of those who had ever tried marijuana had started using it. The sharpest increases occurred at ages 15, 16, 17, and 18 years old, with 14%, 15%, 13% and 16% reporting first starting using marijuana at these ages respectively.

Figure 3.9 Age at which marijuana was first used, 2001



### Changes in marijuana use

Those who had ever tried marijuana were asked whether their use had changed compared to a year ago. No changes were found in the responses to this question between the two surveys. Both the 1998 and 2001 surveys found that at least two-thirds of people who had ever tried marijuana had stopped using the drug (69% in 1998 and 2001). The proportion of the sample that said they were using less marijuana than a year ago remained the same, at 13% in 1998, and 12% in 2001. Thirteen percent in both surveys said they were using the same as a year ago, and 5% in 1998 and 6% in 2001 said they were using more.

### Reasons for stopping or using less

Those who had tried marijuana were asked why they had changed their use. Responses were coded according to a set of categories developed in an earlier survey of drug use.<sup>8</sup> Additional categories were developed where necessary.

Table 3.1 lists the unprompted reasons given by people for stopping or using less marijuana in 1998 and 2001. The most frequently cited reason in both surveys was not liking it. Women were more likely than men to mention not liking the drug as a reason for stopping or limiting use. In 1998, the next most common reasons were mental health, no longer fun, physical health, and new friends/social scene. In 2001, the next most common reasons were just experimenting, physical health, mental health, and no longer fun. Significant changes were found for not liking it; physical health; just experimenting; fear of the law; lack of energy; saw bad effects in others; social pressure; don't smoke; effects wore off; fear of addiction; job related; and other reasons. For women, there was an increase in those who cited family responsibility and kids (from 5% in 1998 to 10% in 2001) as a reason for stopping or limiting use. For men, there were increases for saw bad effects in others (3% to 6%), job related (4% to 6%), and lack of energy (3% to 5%).

<sup>8</sup> Black, S., Casswell, S. (1993). *Drugs in New Zealand: A Survey 1990*. Alcohol & Public Health Research Unit: University of Auckland.





<b>Table 3.1 Reasons for limiting or stopping use of marijuana</b>	<b>1998</b>	<b>2001</b>
	<b>%</b>	<b>%</b>
Didn't like it	12	36
Mental health	11	13
No longer fun / Got boring	11	9
Physical health	11	19
New friends / New social scene	9	9
Family responsibility / Kids	6	8
Too expensive	5	6
Just experimenting	4	21
Fear of law / Police	4	8
Lack of energy / Motivation	3	5
Saw bad effects in others	3	6
Social pressure	3	4
Job related	2	5
Availability	2	3
No time / Too busy	2	2
Don't smoke	2	5
Religious reasons	1	1
Effects wore off	1	2
Rather drink alcohol	1	2
Fear of addiction	1	2
Pregnant	1	1
Parents' pressure	1	1
Don't earn enough	1	1
Other reasons	3	19

(Percentages of those who reported stopping or using less marijuana – more than one reason could be given by individual respondents: n=2221, 1998; n=2324, 2001)

### Reasons for using more marijuana

Those who indicated they were using more marijuana than a year ago (5% in 1998, and 6% in 2001) were asked why they were using more. The responses are summarised in Table 3.2.

The most frequently cited unprompted reasons for using more marijuana were its availability; enjoyment of the effects; to escape from problems; new friends; and social pressure.

There were no overall changes in reasons for using more from 1998 to 2001. However, for men, there was an increase in those who mentioned enjoyment of the effects as a reason to use more (from 24% in 1998 to 36% in 2001), and a decrease in men who cited availability as a reason to use more (from 24% to 6%).

<i>Table 3.2 Reasons for using more marijuana</i>	1998	2001
	%	%
Availability / Easier to get	46	33
Liked the effect / It's fun	24	36
Escape problems	20	19
New friends	18	15
Social pressure	16	17
Need more to get same effect	5	2
Can afford more / Earn more	3	5
Religious reasons	1	0
Other reasons	13	12

(Percentages are of people who reported using more – each respondent could give more than one reason:  
n=146, 1998; n=166, 2001)

### Reasons for not using marijuana

People who had never tried marijuana (50% in 1998 and 48% in 2001) were asked what reasons kept them from using the drug (Table 3.3).

The single most frequently cited reason in both surveys for not using marijuana was not liking it or feeling no need to do so, mentioned by more than half of respondents. Health related reasons were the next most popular, followed by risk of being caught by the authorities, and not in a respondents social scene. Significant changes in reasons for not using marijuana were found for not liking it and health related effects. For men, there were decreases for health related effects (from 40% to 36%). For women, there were increases for not liking it (from 52% to 59%).

<i>Table 3.3 Reasons for never using marijuana</i>	1998	2001
	%	%
Just don't like it / No need	52	56
Health related	40	36
Risk of being caught / Law / Police	15	16
Not in social scene	12	12
Fear of addiction	7	8
Too expensive	4	4
Don't like smell	4	5
Availability	4	3
Family related	3	4
Family responsibility / Kids	3	2
Social pressure	2	2
Parental pressure	2	3
Job related	2	3
No time / Too busy	1	1
Other	18	17

(Percentages of those people who had never tried marijuana – each respondent could give more than one reason:  
n=2716, 1998; n=2637, 2001)



### **Opportunity to use marijuana**

People who had never tried marijuana were asked if they had had the opportunity to use the drug in the last 12 months. There were no significant changes over the two surveys: 27% of this group had the opportunity to use marijuana in 1998, 28% in 2001.

## **OTHER TYPES OF CANNABIS: HASHISH, HASH OIL AND SKUNK**

### **Ever having tried and last year use**

People who had ever tried marijuana were asked if they had also tried hashish, hash oil and skunk. The proportion of respondents who had ever tried hashish did not change, remaining at 12% for 1998 and 2001. The proportion that had used hashish in the last year also remained the same at 2% in both survey periods. The proportion of the sample that had tried hash oil did not change between the two surveys, remaining at 14%, as did last year use (5% in 1998 and 2001). There was also no change in current use of hashish (2% both years) or current use of hash oil (4% both years).

### **Frequency of use**

There were no changes in the frequency of hashish use in the last year. In 2001, 8% had used hashish on three or more occasions in the last year, 11% had used it 1-2 times and 81% had not used in the last year.

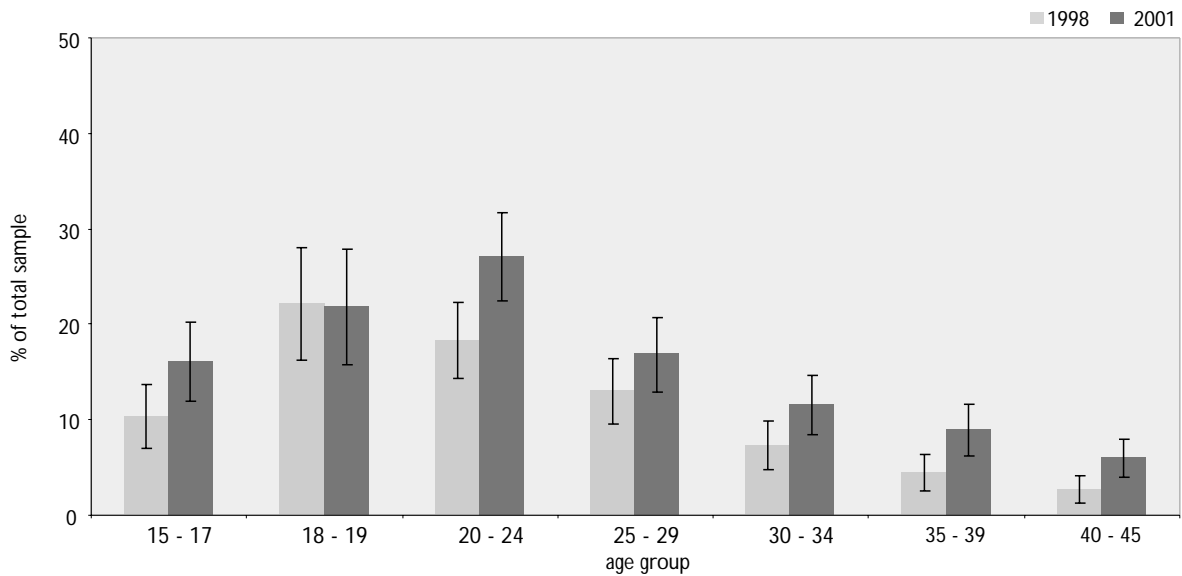
### **More frequent hashish and hash oil use**

The proportion of the sample that used hashish and hash oil on 10 or more occasions in the previous month was very low in each survey, and there were no changes between the two surveys. In 1998, 0.06% had used hashish on 10 or more occasions in the past month. In 2001, no one reported this level of use. Hash oil was used on 10 or more occasions in the previous month in 1998 by 0.15%. In the 2001 survey, the figure was 0.13%.

### **Skunk**

The use of skunk (a more potent form of marijuana) increased in 2001 compared to 1998. There was an increase in the proportion of the sample that had ever tried skunk from 10% in 1998 to 14% in 2001. Reflecting the relatively recent emergence of hydroponic cannabis cultivation in New Zealand, increases in ever tried skunk were found over a number of age cohorts, including 15-17 year olds (10% in 1998 to 16% in 2001), 20-24 year olds (18% to 27%), 30-34 year olds (7% to 12%), 35-39 year olds (4% to 9%), and 40-45 year olds (3% to 6%) (Figure 3.10).

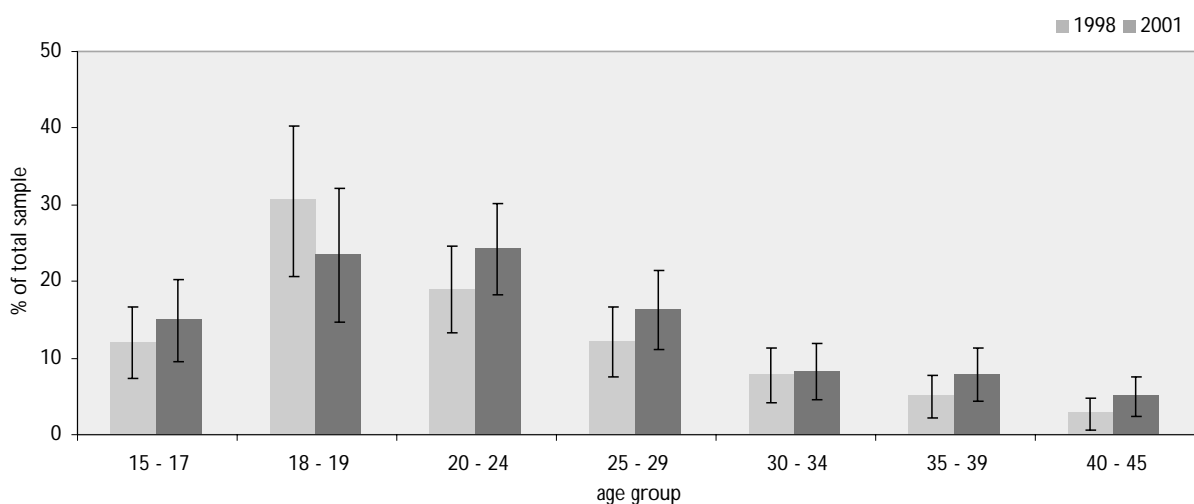
**Figure 3.10** Proportion ever having tried skunk by age group, 1998 & 2001



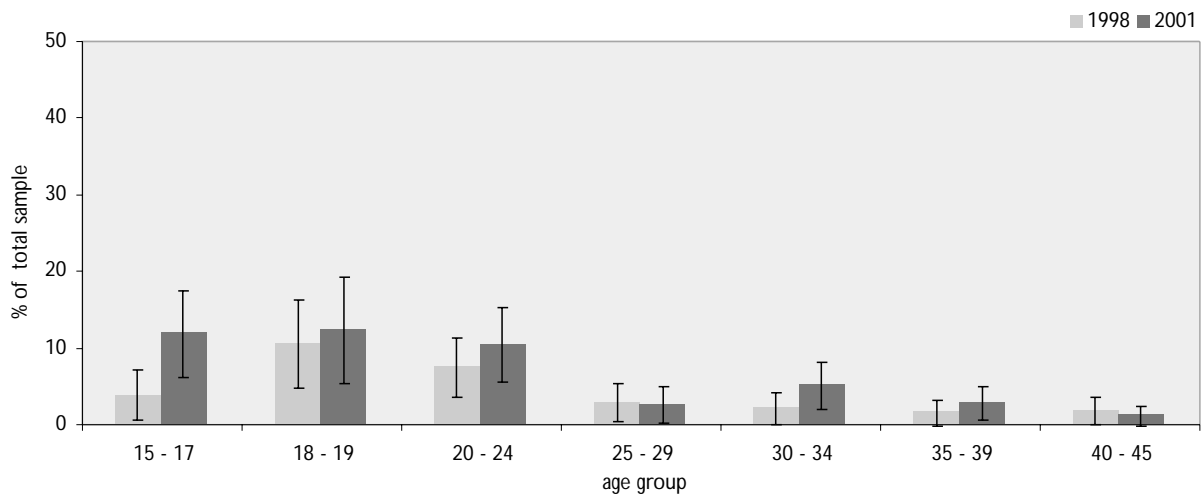
More of the sample had used skunk in the last year, increasing from 7% in 1998 to 9% in 2001. This was particularly so for 15-17 year olds, increasing from 8% in 1998 to 14% in 2001, reflecting an increase by women aged 15-17 years (from 4% to 12%) (Figure 3.11 and 3.12).

There were also increases in the current use of skunk from 6% in 1998 to 8% in 2001. Again, this reflected an increase in current use of skunk for women aged 15-17 years old from 3% in 1998 to 10% in 2001.

**Figure 3.11** Proportion of men reporting using skunk in the last 12 months by age group, 1998 & 2001



**Figure 3.12** Proportion of women reporting using skunk in the last 12 months by age group, 1998 & 2001



### Frequent skunk use

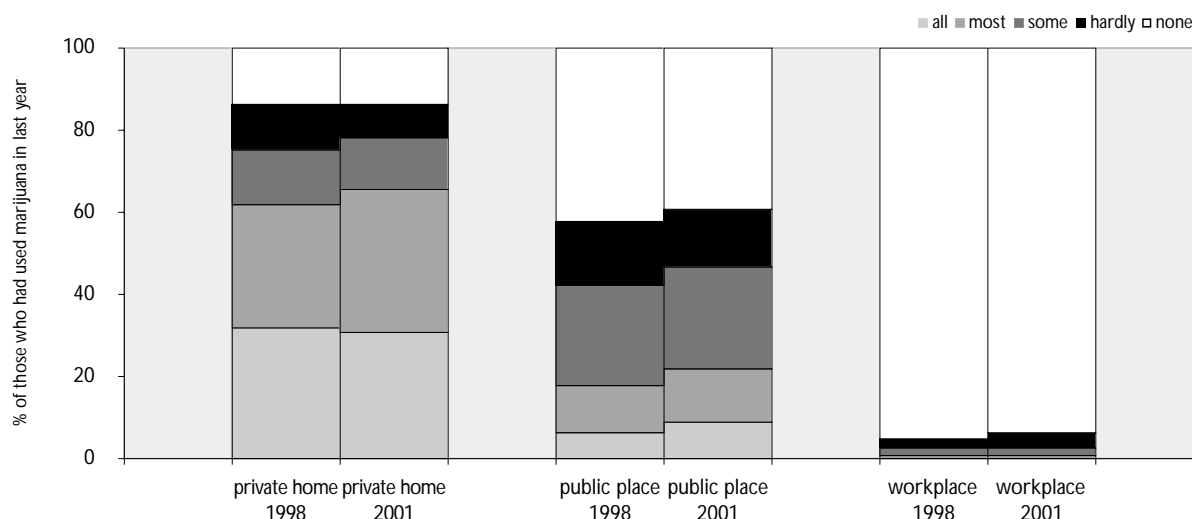
The proportion of the sample that used skunk 10 or more times in the last month increased from 1% in 1998 to 2% in 2001. There were increases in this frequent use for men (from 1.4% to 3.1%), young people aged 15-17 years old (from 0.3% to 3.0%), and men aged 15-17 years old (from 0.5% to 3.6%).

## 4. CONTEXT OF MARIJUANA USE

### Location of marijuana use

People who had used marijuana in the last year were asked how much of their marijuana use took place in private homes, public places and workplaces. In 2001, as in 1998, private homes were the main location for marijuana use, followed by public places, with most of the marijuana users reporting no use at work (Figure 4.1). There were no changes in the location of marijuana use between the two survey periods, although there was a trend toward an increased proportion of those that used in the last year using all their marijuana in a public place, from 6% in 1998 to 9% in 2001. There was also a decrease in the proportion of 15-17 year olds who never used marijuana at work, down from 99% in 1998 to 92% in 2001. Among men aged 15-17 years the decline was more pronounced (from 99.6% in 1998 to 89.3% in 2001).

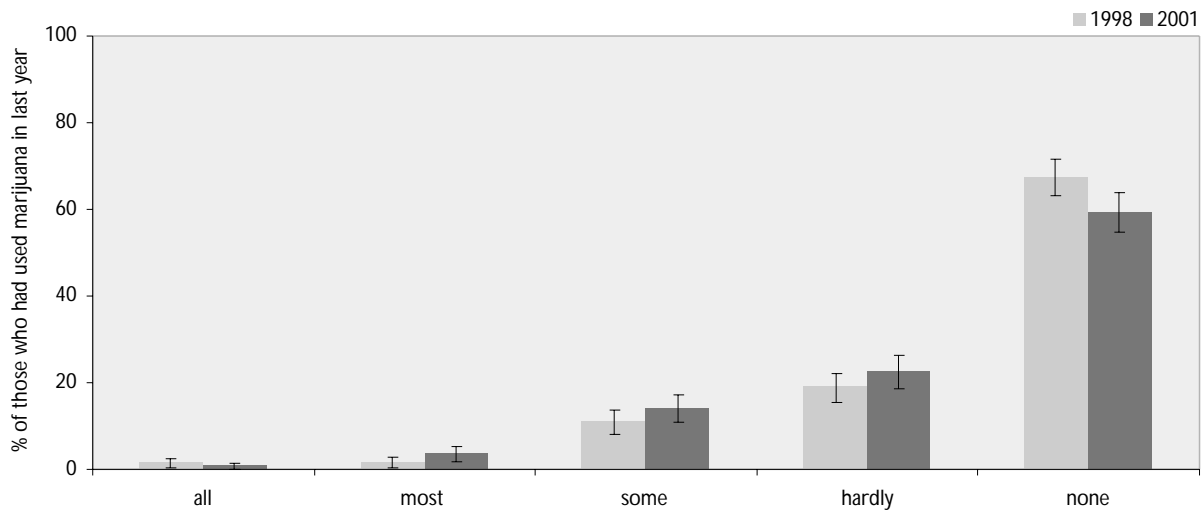
Figure 4.1 Percentage of marijuana use in different places, 1998 & 2001



### Driving and marijuana

People who had used marijuana in the last year were asked how much of their driving they do while under the influence of marijuana. Although responses indicate this was fairly rare, there was evidence of more people driving under the influence of marijuana, particularly young people (Figure 4.2). There was a fall in the number of people who never drove under the influence of marijuana, down from 67% in 1998 to 59% in 2001, and this reflected fewer of those aged 15-17 years saying they never drove under the influence of marijuana, from 84% in 1998 to 65% in 2001. Among men aged 15-17 years there was a decrease from 82% in 1998 to 61% in 2001. There were increases in the number of young people aged 15-17 years old doing 'some' of their driving under the influence of marijuana, increasing from 5% in 1998 to 16% in 2001, and again this was reflected in a change for men aged 15-17 years (from 6% to 22%).

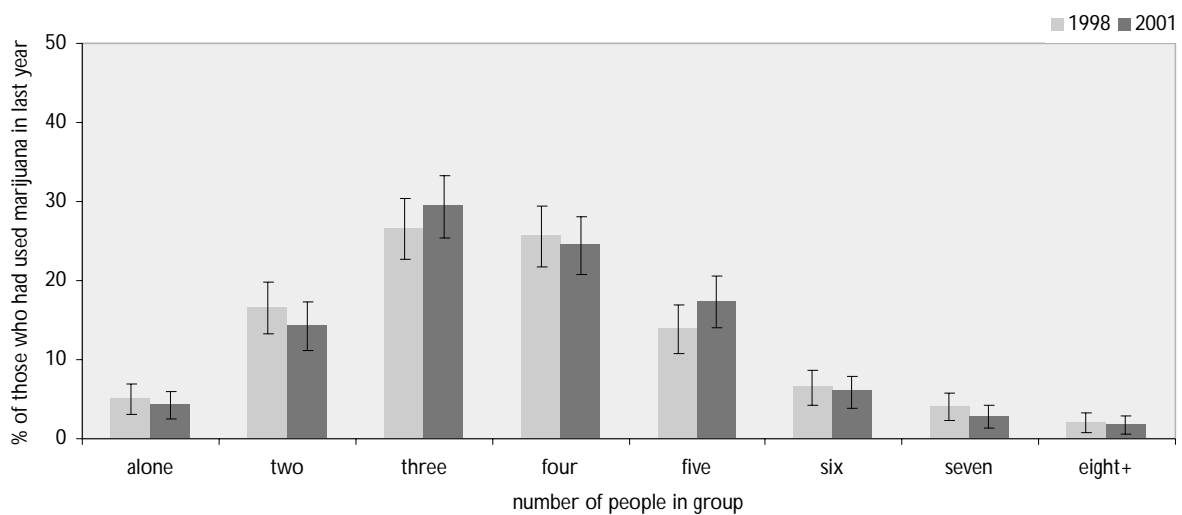
**Figure 4.2 Reports of driving done under influence of marijuana, 1998 & 2001**



### Sharing marijuana

Those who had used marijuana in the last year were asked how many people they would normally share a joint with. Figure 4.3 shows that nearly all marijuana use takes place in groups of two or more. There were no significant changes in the group sizes reported between the surveys. In 2001, 4% smoked alone, 14% shared with one other, 29% with two others, 24% with three others, 17% with four others, 6% with five others, 3% with six others, and 2% with seven others.

**Figure 4.3 Group size on typical occasion of marijuana use, 1998 & 2001**

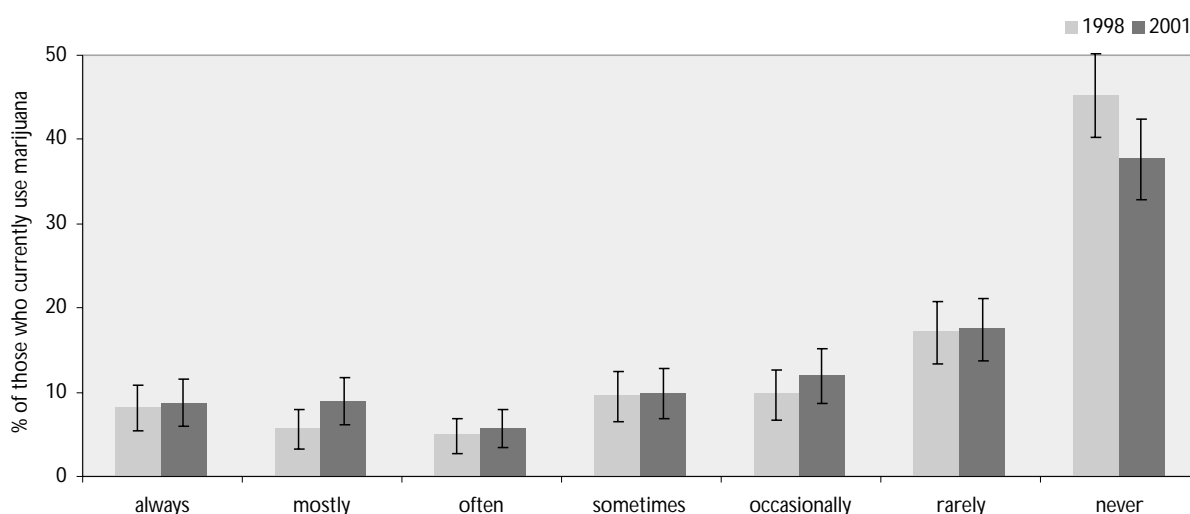


## 5. MARIJUANA SUPPLY

The surveys looked at efforts people made to ensure a supply of marijuana was on hand for when they wanted it, and also their sources of supply. Figure 5.1 details how often current marijuana users (those who used marijuana in the last year and had not stopped) said they tried to keep a supply on hand for when they wanted it.

In both surveys, current marijuana users most commonly reported 'never' keeping a supply on hand, although over half kept a supply on at least rare occasions. There was some evidence of more current users keeping marijuana on hand. There was a trend of more 15-17 year olds 'always' keeping a supply of marijuana on hand, up from 1% in 1998 to 8% in 2001. There was an increase in the proportion of men 'mostly' keeping marijuana on hand, up from 4% in 1998 to 10% in 2001. This increase in 'mostly' keeping marijuana on hand was evident by trends for 15-17 year olds (from 4% to 16%) and men aged 15-17 years old (from 3% to 18%). There was a corresponding decrease in current users who 'never' kept marijuana on hand, from 45% to 38%. Trends of fewer current users 'never' keeping marijuana on hand were found for men (from 41% to 34%), 15-17 year olds (from 42% to 26%) and women aged 15-17 years (from 52% to 25%).

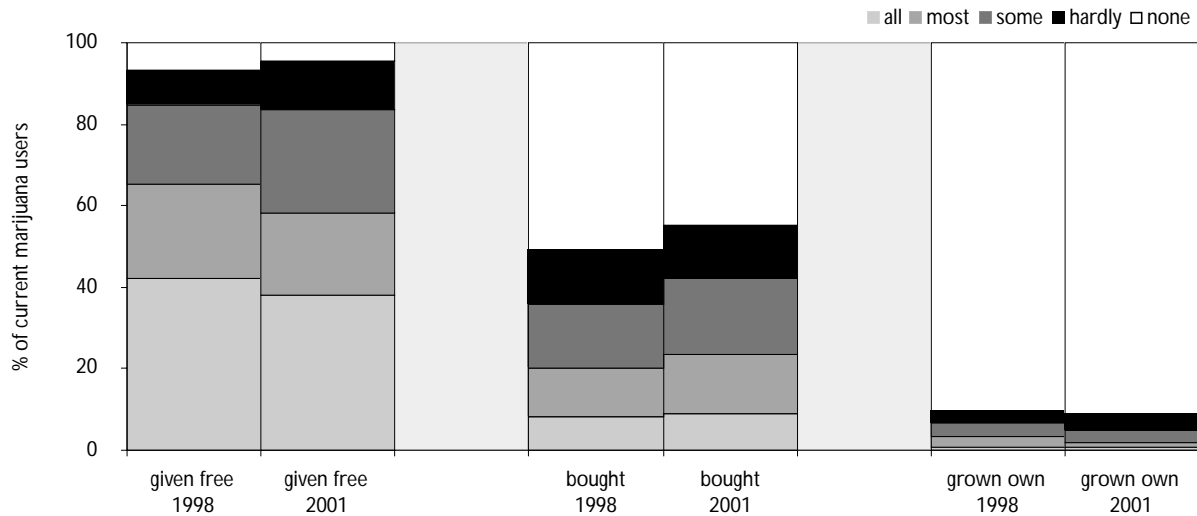
Figure 5.1 Reported efforts to keep a supply of marijuana on hand, 1998 & 2001



In separate questions, current users were asked how much of their marijuana was given to them for free, how much was bought, and how much they grew themselves (Figure 5.2). There was an increase in the proportion of current users that received 'some' of their marijuana for free, from 19% in 1998 to 26% in 2001. There was a trend of less current users 'never' buying marijuana, down from 51% in 1998 to 45% in 2001. An increase in the proportion of 15-17 year olds that bought 'most' of their marijuana was found, increasing from 7% in 1998 to 23% in 2001, and this was mainly due to an increase for men aged 15-17 years (from 7% to 27%). There was no change in the proportion of current users that grew their own marijuana: 10% in 1998 and 9% in 2001 grew any of their own supply.



Figure 5.2 Sources of marijuana supply, 1998 & 2001



### Price and availability of marijuana

Current marijuana users who had indicated they had bought at least some of their marijuana were asked if the price of marijuana was higher, lower or the same as a year ago. There was an increase in the proportion of current users who thought the price of marijuana was higher than a year ago, from 13% in 1998 to 23% in 2001, and a corresponding fall in the proportion who thought the price was the same, from 82% in 1998 to 69% in 2001.

Current users were also asked how easy it was to get marijuana compared to a year ago. There was no change between 1998 and 2001. In 2001, 36% thought marijuana was easier to get, 48% thought there had been no change, and 15% thought it was harder to get.

## 6. PERCEPTIONS OF MARIJUANA

### Perceptions of risk of harm from using marijuana

Respondents were asked if they thought people risked harming themselves if they smoked marijuana once or twice, occasionally, and regularly. Perceptions of risk did not change between 1998 and 2001. The proportion of respondents who thought marijuana use caused harm steadily increased as the level of use increased. About one third (32% in 1998 and 30% in 2001) thought trying marijuana posed no risk of harm, 10% and 9% thought occasional use posed no risk, and 2% in both surveys thought regular marijuana use posed no risk of harm.

### Attitudes to marijuana use

All respondents were asked how generally acceptable they thought it was to smoke marijuana in a range of settings: at a party; at the beach with friends; when children are around; before driving; and before work or study (Table 6.1).

There was an increase in the proportion of respondents who thought it was acceptable to at least most people (i.e. Most people/Almost everyone/Everyone) to smoke marijuana at a party, up from 26% in 1998 to 30% in 2001, and this was reflected in increases for women (from 24% to 28%). There was a trend towards more young people aged 15-17 years old thinking it was acceptable to at least most people to smoke marijuana at a party, up from 29% in 1998 to 35% in 2001.

Fewer respondents thought it was acceptable to no-one to smoke marijuana before driving, down from 74% in 1998 to 71% in 2001, and this reflected a fall for those aged 18-19 years (from 76% to 67%).

**Table 6.1** How generally acceptable is it to smoke marijuana in different contexts?

Social Setting	Acceptable to					
	Most people / Almost everyone / Everyone		Few / Some		No one	
	1998 %	2001 %	1998 %	2001 %	1998 %	2001 %
Party	26	30	50	48	24	22
At beach	17	18	48	49	35	33
Around child	1	1	20	20	79	79
Before driving	4	4	23	25	74	71
Before work	1	2	25	27	73	72

(Percentages are of total sample)



## 7. HARMFUL EFFECTS IDENTIFIED FROM USE OF MARIJUANA AND ALCOHOL

### Harmful effects

In each survey, those who had used alcohol in the last 12 months were asked to identify if this use had had any harmful effect on eight areas of their lives. Similar questions were asked of those who had used marijuana in the last 12 months. Table 7.1 presents the results calculated at a population level (i.e. for the entire sample). The higher level of harm from alcohol in part reflects the fact that more people use alcohol than marijuana.

The harmful effects most often identified in both 1998 and 2001 were on energy and vitality, financial position, health, and outlook on life. There were no changes in the proportion of users reporting these harmful effects from 1998 to 2001.

*Table 7.1 Harmful effects identified from use of marijuana & alcohol in last year, 1998 & 2001*

Area of life	Alcohol		Marijuana	
	1998	2001	1998	2001
	n=5475 %	n=5504 %	n=5475 %	n=5504 %
Your energy and vitality	18	17	5	5
Your financial position	11	11	3	3
Your health	7	6	3	3
Your outlook on life	5	5	2	2
Your friendships and social life	5	4	2	1
Your home life	4	4	1	1
Your work or work opportunities	3	3	1	1
Your children's health or well-being	1	0	0	0

(Percentages are based on all respondents)

### Harmful effects identified by more frequent marijuana users

Table 7.2 shows the percentage of more frequent marijuana users (those who used marijuana on ten or more occasions in the last month) who identified aspects of their life as having been harmed by alcohol or marijuana consumption.

This group were relatively heavy drinkers. In 2001, some 54% of frequent marijuana users drank six (for men) or four (for women) drinks in one sitting at least weekly (compared to 26% of all drinkers). A similar disparity occurred when looking at reports of feeling drunk. Three-quarters of frequent marijuana users reported feeling drunk at least monthly (compared to 40% of drinkers).

There were no significant changes between the surveys, but there was a trend found in the proportion of frequent marijuana users who reported harm to their friendships from their marijuana use, down from 21% in 1998 to 11% in 2001. There was also a trend in the proportion of frequent marijuana users who reported harm to their health from their alcohol use, down from 26% in 1998 to 15% in 2001.

**Table 7.2 Harmful effects identified from use of marijuana & alcohol by more frequent marijuana users, 1998 & 2001**

Area of life	Alcohol		Marijuana	
	1998 %	2001 %	1998 %	2001 %
Your energy and vitality	40	33	50	43
Your financial position	37	36	34	33
Your health	26	15	28	21
Your outlook on life	11	13	20	17
Your friendships and social life	16	15	21	11
Your home life	14	14	14	12
Your work or work opportunities	9	8	10	11
Your children's health or well-being	3	0	1	1

(Percentages are of more frequent marijuana users; those using marijuana on 10 or more occasions in last month)