Abraham, Manja D., Hendrien L. Kaal, Peter D.A. Cohen (2003), *Licit and illicit drug use in Amsterdam, 1987 to 2001. Development of drug use in Amsterdam, as measured in five population surveys between 1987 and 2001*. Amsterdam: CEDRO/Mets & Schilt.

URL of this document: http://www.cedro-uva.org/lib/abraham.licit.pdf

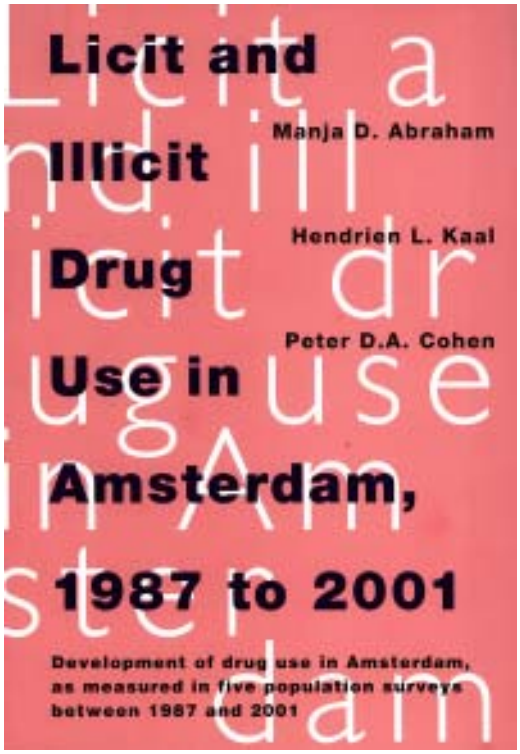
CEDRO
centrum voor drugsonderzoek

UNIVERSITEIT VAN AMSTERDAM

LICIT AND ILLICIT DRUG USE IN AMSTERDAM, 1987 TO 2001

Development of drug use in Amsterdam, as measured in five population surveys between 1987 and 2001

Manja D. ABRAHAM, Hendrien L. KAAL, Peter D.A. COHEN



Manja D. Abraham
Hendrien L. Kaal
Peter D.A. Cohen

Licit and Illicit Drug Use in Amsterdam, 1987 to 2001

Development of drug use in Amsterdam, as measured in five population surveys between 1987 and 2001

METS & SCHILT PUBLISHERS, AMSTERDAM
CEDRO, UNIVERSITEIT VAN AMSTERDAM

ISBN 90 5330 379 0
NUR 751

COVER DESIGN
Victor Levie

PRINTING
Haasbeek, Alphen a/d Rijn

CEDRO
Universiteit van Amsterdam
Wibautstraat 4
Postbox 94208
NL-1090 GE Amsterdam
The Netherlands
info@cedro-uva.org
http://www.cedro-uva.org

Mets & Schilt publishers
Westeinde 16
NL-1017 ZP Amsterdam
The Netherlands
info@metsenschilt.com
http://www.metsenschilt.com

Further copies of this report are available from:
http://www.cedro-uva.org/bookstore

CONTENTS

LIST OF TABLES AND GRAPHS

CHAPTER 1: INTRODUCTION

1.1 Introduction

This report presents an overview of the main results of five drug use prevalence surveys amongst the population of Amsterdam aged 12 years and over conducted by the Centre for Drug Research (CEDRO). The consecutive surveys were conducted in 1987, 1990, 1994, 1997 and 2001 to measure the prevalence of the use of a range of licit and illicit drugs at these particular points in time (Sandwijk et al., 1988; Sandwijk et al., 1991; Sandwijk et al., 1995; Abraham et al., 1998; Abraham et al., 2002). Substances included in the study are alcohol, tobacco, hypnotics, sedatives, cannabis, cocaine, amphetamines, ecstasy, hallucinogens, mushrooms, a range of opiates, inhalants and performance enhancing drugs.

The survey population was defined as all persons of 12 years and older, registered in the Amsterdam population registry. In each Amsterdam drug use survey, 3,000 to 4,000 randomly selected respondents participated and answered questions about their use of drugs. Although adjustments were made in the survey methodology, none were made in the sample strategy, target population, and only a few in the questionnaire (drugs were added, questions about use frequency were extended, etc.). Therefore, it is possible to use the several measurements as a time series and explore drug use developments over time.

The data is presented in three chapters. Chapter 2 gives an overview of the survey and methodology and describes the changes over time with regard to the sample, method, representativity and data weighting. Chapters 3 and 4 describe the prevalence of drug use expressed in core

indicators for all five survey years. Drug use is defined by three prevalence indicators (lifetime, last year and last 30 days). Lifetime and last month prevalence rates are also given for each drug per gender. Other core indicators are last year and last month continuation, percentage of experienced users per drug, and incidence rates. Last, mean age of initiation and mean age of current use (last 30 days) are reported.

1.2 Discussion

The aim of this study is to give insight into the drug use prevalence in Amsterdam between 1987 and 2001. Conclusions can be drawn on the development of drug use in Amsterdam. It was found that a small but growing minority of the Amsterdam population uses illegal drugs. Since the first Amsterdam survey was conducted in 1987, the proportion of the Amsterdam population ever having used cannabis has increased from 23.2 per cent to 38.1 per cent in 2001. Approximately 5.6 per cent would smoke cannabis once a month or more in 1987, in 2001 7.8 per cent of the Amsterdam population reported doing so. The use of cocaine, ecstasy and amphetamine has also increased. For example, the proportion of the Amsterdam population ever having used cocaine has increased from 5.7 per cent to 10.0 per cent between 1987 and 2001. The use of amphetamine showed a smaller increase from 4.5 per cent in 1987 to 6.6 per cent in 2001. Ecstasy was used by 1.3 per cent of the Amsterdam population in 1990 (not measured in 1987), while this increased to 8.7 per cent in 2001.

The reader should be aware of Amsterdam's special position in regard to the usage of drugs compared to other areas of the Netherlands. Compared to the rest of the Netherlands, drug use is still most prevalent in Amsterdam (Abraham et al., 2002). Drug use was also measured in the Netherlands in each of the five address density

categories[1] of municipalities in order to establish the exact differences in drug use within the Netherlands. In 2001, 38.1 per cent of the Amsterdam population of 12 years and over has ever used cannabis. In Rotterdam, the figure is 22.4 per cent, while in the least densely populated areas of the Netherlands the figure was 11.4 per cent (17.0% average for the entire Dutch population). Prevalence rates per address density area and for various drugs can be found in chapter 2 in table 2.1.

Further research is needed to be able to *explain* the observed trend. This will be done to some extent in forthcoming secondary analyses, which will focus on cohort analysis and explanatory variables within the dataset. Merely based on these five drug use surveys, one has to be cautious to draw firm conclusions on the relationship between the development in drug use prevalence in Amsterdam and issues such as problematic drug use, drug trade, drug related crime and policy changes. For this purpose, further study is needed. More often one might conclude that there is no such relationship (e.g. Cohen and Kaal, 2001) pointed out that penal policy regarding the use of cannabis has hardly any influence on the use patterns of experienced cannabis users).

[1] Address density is defined and calculated by Statistics Netherlands as follows: for all addresses within a given municipality, the number of addresses within the radius of 1 kilometre from a given address is counted; then the total is summed up and divided by the number of addresses in that municipality (Statline 2002 http://statline.cbs.nl/). There are five address density areas: 1) All municipalities with address densities over 2,500 addresses on average within a radius of one kilometre per address; 2) All municipalities with address densities between 1,500 and 2,500; 3) All municipalities with address densities between 1,000 to 1,500; 4) All municipalities with address densities between 500 and 1,000; and 5) All municipalities with address densities lower than 500.

CHAPTER 2: SURVEY AND METHODOLOGY

2.1 Introduction

This report presents an overview of the main results of five drug use prevalence surveys amongst the population of Amsterdam aged 12 years and over. The consecutive surveys were conducted in 1987, 1990, 1994, 1997 and 2001 in order to measure the prevalence of the use of a range of licit and illicit drugs at that point in time. The aim of this report is to compare these outcomes to be able to give insight into the dynamics of drug use prevalence in Amsterdam between 1987 and 2001 [1].

In this chapter the history of the Amsterdam drug use prevalence surveys and their methodology will be described. The first paragraph gives a brief overview of the history of Dutch drug use prevalence studies in general, the Amsterdam reports and the National Prevalence Surveys. The remainder of the chapter outlines the methodology and describes the changes over time with regard to the following subjects: sample, method, representativity and data weighting. The final paragraph contains some remarks on important statistical issues.

2.2 History

Together with the social and political drugs debate, the need for scientific drug use studies became pressing in the 1960s. De Kort (1995) gives an overview of drug use surveys conducted in the Netherlands. One of the first modern, post war social-scientific research

[1] In 1998 a similar though less extensive overview was given for main findings of the studies carried out in 1987, 1990, 1994 and 1997 in the report Licit and illicit drug use in Amsterdam III, Developments in drug use 1987-1997 (Abraham, 1998).

projects on drugs conducted in the Netherlands was instigated by the National Federation for Mental Health (Nationale Federatie voor Volksgezondheid). The epidemiological survey was carried out in 1967 by the social- psychologist Herman Cohen, who had been a member of both the Hulsman commission and the Baan commission. Both commissions, set up in the late sixties, have been influential and successful from a harm reduction point of view in renewing the drug policy in the Netherlands. As a result the main concept of today's policy is the separation of the demand and the supply sides of different drug markets.[2] Between 1969 and 1973, the criminologist Buikhuisen conducted three prevalence studies among school going youth. Between 1970 and 1991, a further six *population* surveys (among adolescents and older) were conducted in the Netherlands (Korf, 1995, gives an overview of these surveys). In 1997 and 2001, these were supplemented by two CEDRO drug use surveys among the Dutch national population aged 12 years and over.

Amsterdam

The reputation of Amsterdam as a 'drug use city' is profound and longstanding, both in the Netherlands and abroad [3]. The first report on licit and illicit drug use in Amsterdam in 1987 (Sandwijk et al., 1988) was the result of a comprehensive research programme designed in support of the metropolitan drug policy (Cohen, 1984). The aim was to gain insight in the use of a range of licit and illicit drugs amongst the Amsterdam population aged 12 years and over. For this purpose, almost 4,400 randomly selected respondents were interviewed.

---

[2] See for an overview Cohen, P.D.A. (1994), *The case of the two Dutch drug policy commissions. An exercise in harm reduction 1968-1976.* Paper presented at the 5th International Conference on the Reduction of Drug related Harm, 7-11 March 1994, Addiction Research Foundation, Toronto. In Erickson et al. "A new direction for drug policies and programs" University of Toronto Press, 1997.

[3] According to the drug czar Robert DuPont (in duty 1973-1978) the Dutch youth in the Vondelpark were "stoned zombies", another czar put forward that "you can't walk down the street in Amsterdam without tripping over junkies" (Reinarman, 1998).

In order to get insight in development of drug use in the city, it would be necessary to carry out repeated measurements. Hence, in 1990 and 1994 similar Amsterdam population surveys were conducted again (Sandwijk et al., 1991; Sandwijk et al., 1995). In 1997 and 2001, the surveys were expanded to cover the national population, but still contained an independent sample of the Amsterdam population (Abraham et al., 1999; Abraham et al., 2002). Each of these studies included approximately 4,000 respondents of 12 years and older sampled from the Amsterdam population registry. Data was collected by face-to-face interviews, first with pen and paper (PAPI), later by computer assisted personal interviewing (CAPI), and in 2001 partly by Multi Method interviewing (MM). Although some adjustments were made to improve the quality of the survey and to adjust to the decreasing response rates, the target population, questionnaire and sampling methodology remained almost constant. Hence, comparisons between the surveys can be made and conclusions on the development of drug use over time can be drawn.

National Prevalence Survey

Amsterdam is hardly representative of the Netherlands. It is a metropolitan city, which is 'deviant' from the rest of the Netherlands in terms of population composition (age, address density, nationality, household size, educational and professional variation), lifestyle, the number of coffeeshops [4] and (maybe as result of some or all of these differences) the prevalence of drug use. National estimates cannot be gained by extrapolating Amsterdam estimates. Therefore, since 1997 the Amsterdam surveys were expanded to a national level.

Table 2.1 shows some results of the last national drug use prevalence survey (Abraham et al., 2002). It can be seen that the Amsterdam prevalence rates are higher than those for the Netherland's average for

[4] In 2001 the Netherlands counted 805 official coffeeshops, Amsterdam accommodated 280 of them (B. Bieleman, P. Goeree, 2002).

almost all drugs, with the exception of alcohol. This is true for lifetime use as well as last month use. It is found that prevalence of drug use is correlated with address density; the lower the address density area, the lower the prevalence rates of drug use. The fact that Amsterdam falls in the high address density category (like The Hague or Rotterdam) partly explains the relative high drug use prevalence in relation to the rest of the country. Nonetheless, the use rates for Rotterdam and The Hague are lower than those in Amsterdam and hence other factors such as specific lifestyles and going out behaviour are expected to play an important role in explaining the higher drug use prevalence in Amsterdam (Abraham, 1999).

Nevertheless, the perception of the drug situation in the Netherlands by foreign visitors is heavily influenced by their experience of Amsterdam. There are three important reasons for this. First, many tourists *only* visit Amsterdam. Historically, the old part of town (and especially the red-light district), which is very popular with tourists, has long been the site of many marginal activities. Secondly, as a result of the harm-reduction policy, drug users do not need to hide from the police. As a consequence, tourists visiting Amsterdam are far more likely than in Paris or New York (where users need to hide) to encounter drug addicts, especially in the old city. Finally, the largest concentration of cannabis selling places (coffeeshops) is found in tourist areas (Boekhout, 1999).

Table 2.1: Lifetime and last month drug use prevalence in the Netherlands, average and in seven samples: Amsterdam, Rotterdam, and five categories of address density municipalities, 2001 (weighted percentages, in the population of 12 years and older)

Drug	*The Netherlands*	*Amsterdam*	*Rotterdam*	*Other Highest a.d.*	*Highest a.d (>2500)*	*High a.d (1500-2500)*	*Moderate a.d (1000-1500)*	*Low a.d. (500-1000)*	*Lowest a.d. (<500)*
Lifetime									
Tobacco	66.4	68.8	64.8	66.3	66.7	67.2	68.4	65.3	63.3
Alcohol	91.6	87.2	86.2	90.4	88.7	92.3	92.4	92.2	92.1
Cannabis	17.0	38.1	22.4	26.3	28.6	18.7	15.7	10.1	11.4
Cocaine	2.9	10.0	5.2	5.4	6.6	3.0	2.1	1.3	1.6
Amphetamines	2.6	6.6	3.8	4.2	4.8	2.8	2.5	1.4	1.4
Ecstasy	2.9	8.7	4.3	5.3	6.0	3.4	2.1	1.5	1.4
Heroin	0.4	1.3	0.9	0.7	0.9	0.4	0.4	0.1	0.4
Difficult drugs	4.9	15.5	7.3	8.4	10.0	5.4	3.8	2.6	2.5
Last month									
Tobacco	30.2	36.7	32.8	32.0	33.4	31.1	31.2	27.6	27.0
Alcohol	75.1	73.5	68.8	74.6	73.1	76.7	75.2	75.3	74.2
Cannabis	3.0	7.8	5.0	4.8	5.7	3.6	2.5	1.3	1.7
Cocaine	0.4	1.2	0.9	0.9	0.9	0.4	0.3	0.2	0.3
Amphetamines	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.1	0.2
Ecstasy	0.5	1.1	1.0	0.9	1.0	0.5	0.4	0.3	0.3
Heroin	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0
Difficult drugs	0.8	2.1	1.5	1.7	1.8	0.8	0.6	0.4	0.5
Total respondents	*17,655*	*3,934*	*2,547*	*2,330*	*8,811*	*2,640*	*2,123*	*2,149*	*1,932*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms excluded), heroin.

2.3 Sample

Target population
The exact definition of the target population is: all persons aged 12 years and above registered in the Amsterdam municipal population registry (GBA: Gemeentelijke basis administratie persoonsgegevens) at January first in the year of sampling. Note that the registry, and hence the sampling frame, does not include homeless persons, illegal residents, prisoners and asylum-seekers who stay in Amsterdam but are not yet registered. Between 0.5 per cent and 1.0 per cent of all Dutch residents is illegal (CBS, 2002). However, the registry does include high school dropouts, who are omitted in school surveys. The Amsterdam municipality itself performed the sampling procedure.

The sample design is generally the same in all years, with the exception of the oversampling of the younger age groups since 1997. In 1997 the group of 12- to 18-year-olds was oversampled, in 2001 the same was done for the age group 12-19. These groups were selected with a probability twice as high as the rest of the population in order to be able to make drug use estimates for 2-year wide age groups (age groups: 12-13; 14-15; 16-17; 18-19).

The size of the samples was determined by the response rate of the previous survey and the required number of respondents. This required number was calculated to be around 4,000 in order to provide detailed coverage of drug use prevalence of the Amsterdam population down to the level of geographical variables (age groups, gender and marital status).

Representativity, response and non-response
Table 2.2 gives an overview of the size of the target population, the number of respondents, the sample size, the response rate and the valid sample size, for each survey year. As the definition of the sampling frame did not change, it can be seen that the Amsterdam population is

growing. This increase in population can also be observed in the rest of the Netherlands. In 1987, the total number of inhabitants was 14.6 million; in 2001 this number had increased to 16.1 million [5].

Response rates are calculated as being the number of those who completed the interview successfully divided by the number of persons in the valid sample. The valid sample is the (gross) sample minus the non-used addresses and frame errors (unknown at address, vacancy, etc.). This results in a particular proportion of non-respondents (refusal, non at home, illness, language problems, etc.). It can be seen that response rates are gradually declining from 63 per cent in 1987 to 39 per cent in 2001. The problem of response (un)willingness is commonly known to the field of population surveys in general. The increasing rate of non-responders can also be seen on a national level in the national drug use surveys (as opposed to the Amsterdam surveys). The problem of low response can be serious because it might indicate selective non-response, which might imply that the survey data are less representative. Post-stratification weighting of response data partly corrects for this possible bias (see paragraph 2.5). Furthermore, a non-response survey was carried out in the surveys since 1990 [6]. In order to check whether respondents were different from non-respondents, a split-sample was drawn from those who initially were not reached and those who refused to participate in the main survey. This selection of non-respondents was re-approached and asked a few questions regarding the use of cannabis and alcohol, going-out behaviour, some background issues, and, if applicable, their reason for refusal.

[5] CBS Statline http://statline.cbs.nl/StatWeb/

[6] A non-respondent is a person that refused to participate or was not reached in the main survey. In 1990, the non-response survey was limited to those who were not reached in the main survey. A special committee of the municipality charged with the privacy protection of Amsterdam citizens, did not allow approaching persons for a second time, once they had refused to cooperate at an earlier stage of the project (Sandwijk et al., 1991).

Table 2.2: Population aged 12 yrs and over, sample and response group, in Amsterdam, in 1987, 1990, 1994, 1997, 2001

Year	*Municipal registries*	*Sample*	*Response*	*Net response %*	*Valid sample*
	n	*n*	*n*	*%*	*n*
1987	607,216	7,500	4,378	62.9	6,960
1990	613,158	8,800	5,207	55.4	8,024
1994	632,832	10,000	4,164	50.2	8,686
1997	621,955	8,450	3,710	51.9	7,151
2001	635,374	11,402	3,934	39.1	10,063

2.4 Method

In order to permit conclusions with regard to the development of drug use in Amsterdam, the emphasis in designing the five drug use surveys was put on comparability regarding target population, sampling, and the survey methodology. Nevertheless it was necessary to make some methodological fine adjustments to improve the survey over time. In table 2.3 an overview is given of the survey methodologies in all five Amsterdam surveys.

Questionnaire
All respondents were questioned about their use of licit and illicit drugs using a standardised questionnaire. Detailed questions were asked about the subject's use of particular drugs, the frequency and intensity of use and age of first use. These questions were asked for a range of substances: tobacco, alcohol, sedatives, hypnotics, cannabis, cocaine, ecstasy, amphetamines, hallucinogens, mushrooms, opiates, inhalants, performance-enhancing substances and so called smart drugs.

Since the first survey, only in a few cases modifications were made. Questions on education and profession were changed to match the definitions used by Statistics Netherlands. Questions about use frequency were added since 1990. Some drugs were only included in the survey at a later stage. Ecstasy was introduced in the survey in 1990, as were lifetime questions regarding morphine, codeine and heroin.

Questions on mushrooms and performance enhancing drugs were added to the survey in 1997, and questions on smart drugs in 2001. Questions on the places where drugs were obtained [7] were introduced in 1997. Because the focus here is on the development of drug use over time, outcomes of the questions on smart drugs and place of acquisition are not included in this report (see for these data Abraham et al., 1998; Abraham et al., 2002).

Interview Method

Most respondents were questioned in a personal face-to-face interview at their homes. In 1987 and 1990, the interviewer wrote the answers down on a paper questionnaire (paper assisted personal interview: PAPI). In 1994, the laptop computer was introduced as interviewer aid, and answers were typed in directly (computer assisted personal interview: CAPI). CAPI had important advantages to offer: using a computer minimises routing errors, instantly alerts in the case of inconsistencies in given answers and saves data-entry labour and therefore omits the entry process in which errors can be made. To guarantee comparability with the results of the 1987 and 1990 Amsterdam surveys it was considered to be necessary to investigate possible interview effects. For that reason, the 1994 sample was split in two equal halves. Persons were questioned using either PAPI or CAPI, depending on the sample they were appointed to. Analysis of the data suggested that there were no significant differences between the outcomes due to different approaches (Sandwijk et al., 1994). CAPI was also used for interviewing in 1997, but in 2001 it was no longer feasible to repeat this method. The two main reasons were the tight labour market, which made it almost impossible to recruit CAPI interviewers, and the absence of response readiness, (hence even more interviewers would be required to accomplish the fieldwork). As an

[7] All last year users of cannabis, cocaine, amphetamines, ecstasy, hallucinogens, mushrooms, smart drugs, and performance enhancing drugs were asked where they obtained the drugs they had used.

alternative method for CAPI a new approach was developed: Multi Method (MM). The respondent indicated whether (s)he preferred to answer the questions on a paper questionnaire (non-assisted paper interview), in a face-to-face interview (CAPI), via an interview per telephone, via their own computer on the Internet, or on a computer disk (floppy disk by mail). All non-reacting persons were re-approached and reminded, with the offer to be interviewed by phone (CATI; computer assisted telephone interview) or, if their phone number was not listed, were sent a reminder consisting of questionnaire and diskette by mail[8]. To investigate the impact of effects caused by methodological differences, the Amsterdam 2001 sample was split in two parts. Approximately 1,000 persons were approached following CAPI procedure; the others were addressed according to the MM protocol. Differences between CAPI and MM results turned out to be small. A more detailed description of MM, the differences between CAPI and MM and how these were dealt with, can be found in the national report (Abraham et al., 2002).

Fieldwork

In 1987, the research institute O&S was responsible for the fieldwork. From 1990 onwards, the fieldwork was carried out by the NIPO institute under supervision of the same supervisor managing the fieldwork. This contributed to the constancy of the methodology over time.

[8] In 2001, the Amsterdam sample and the middle address density stratum of the national sample were both serving as pilot samples to develop and monitor the newly developed MM. In the final form of MM, respondents could not choose the options CAPI and CATI anymore. Since only a very small number of people indicated they preferred to be interviewed that way these choices were later omitted.

Table 2.3: Overview methodology in Amsterdam surveys in 1987, 1990, 1994, 1997, 2001

Year	*Method*	*Incentive*	*Matched interv.*	*Fieldwork org.*
1987	Personal interview, recorded on paper (PAPI)	no	no	O&S
1990	Personal interview, recorded on paper (PAPI)	no	yes*	NIPO
1994	Personal interview, recorded on paper & computer assisted (PAPI&CAPI)	no	no	NIPO
1997	Personal interview, computer assisted (CAPI)	no	yes**	NIPO
2001	Personal interview, computer assisted & Multi Method (CAPI&MM)	for MM: yes***	no	NIPO

*Matched interviewers Moroccan/Turkish
**Matched interviewers Moroccan/Turkish; translated questionnaires
*** ƒ10.- = €4.54; ƒ25.- = €11.34.

Response encouragement

Persons selected in the sample were encouraged to participate in the surveys in several ways. In all survey years, Turkish and Moroccan people were especially hard to reach and interview. In 1990 and 1997, it was tried to reach higher response rates for these groups through matched interviewing. This means that Turkish respondents were interviewed by Turkish interviewers, and Moroccan respondents by Moroccan interviewers. Regretfully this did not lead to higher response rates for both groups but to lower ones and it was decided not to continue matched interviewing in 2001. Incentives were given to respondents in the 2001 survey (euro 5.- and 10.- equivalents [9]). In the four previous surveys this was not considered necessary because persons were clearly more willing to respond. Respondents for the non-response surveys in 1994, 1997 and 2001, were offered an incentive (euro 5.- equivalents).

2.5 Data weighting

To provide Amsterdam estimates it is necessary to adjust response data for differences in the selection probabilities due to over-sampling of the youth in 1997 and 2001. For this purpose weights were calculated following a post-stratification weighting procedure. Within each age group, persons were classified according to gender and marital status. The calculation of each individual weight was based on the aim to achieve complete correspondence of distributions of mentioned characteristics between the response group and the population according to the population registry (GBA). An important additional advantage of this weighting procedure is that results are improved for non-response errors. Because of practical reasons and comparability, weights were calculated for the 1987, 1990 and 1994 data as well. As a result, some of the estimates for these years presented in this report can

[9] A split-sample experiment was conducted in the second stage of the fieldwork to show whether a higher incentive would contribute to a higher response rate.

show small differences with the original reports. The drawback of post-stratification weighting is that it becomes less straightforward to perform statistical tests, as weighting and stratification affect computation and interpretation of statistical significance.

2.6 Statistical notes

Confidence interval

The 95 per cent confidence intervals for the prevalence of drug use and the corresponding population estimates were calculated using logit transformations of the probability distribution. This was done because the drug use rates are often small. The logit transformation yields asymmetric interval boundaries that, in the case of small use rates, are more balanced with respect to the probability that the interval is above or below the true population value than standard symmetric confidence intervals. (SAMSHA, 1998; Cochran, 1977)

The logit transformation of the 95 per cent interval of the proportion p (p_{lower}, p_{upper}) was calculated in two steps. First, the 95 per cent logit interval was calculated, given by the logit transformation of p (L), and the standard error of L:

$$L \pm 1.96 \left\{ \frac{\sqrt{\mathrm{var}(p)}}{pq} \right\} \mid (A, B)$$

With

p = estimated proportion
q = 1-p
var (p) =variance estimate of p
L = ln (p/q)
var (L) = var (p)/$(pq)^2$ = var (p)/$(pq)^2$

Then, the 95 per cent confidence interval was calculated for the proportion p as:

$$\left[\frac{1}{1+2\exp(4A)}, \frac{1}{1+2\exp(4B)}\right] = (P_{lower}, P_{upper})$$

Tables

In most tables the number of unweighted cases (n) is given alongside the weighted percentages. The unweighted n serves as an indicator of the design-effect; it shows on how many (or few) observations the estimate is based and thus allows the reader to judge the relative reliability of the estimate. Due to the small number of persons that use certain substances (e.g. heroin), results cannot always be generalised for the population. By drawing large samples, this problem is minimised but not solved. The following rule of thumb is applied: an estimate is considered to be unreliable if the sub-sample group is smaller than 50. In tables these are noted with a hyphen (-).

The following symbols are used in the tables:

.	Data not available
-	Low precision, no estimate reported
0 (0.0)	Less than half of unit employed
a blank	Category not applicable

CHAPTER 3: DRUG USE PREVALENCE

3.1 Introduction

In chapters 3 and 4, an overview will be given of the trends in drug use patterns amongst the population of 12 years and over in Amsterdam between 1987 and 2001. Since 1987, drug use in Amsterdam has been measured with comparable surveys in five different years. Of these, the last two were part of a larger, national study (Abraham et al., 2002). In this chapter, tables will be presented for each of the various core indicators of drug use prevalence – such as lifetime, last year, and last month use and continuation rates, incidence rate, and age of first and current use – for the five years studied. Chapter 4 will contain partially the same data, presented by drug and specified for ten different age groups.

Drug use indicators are given for tobacco, alcohol, hypnotics, sedatives, cannabis, cocaine, amphetamine, ecstasy, hallucinogens, mushrooms, all opiates (of which morphine, codeine and heroin are specifically mentioned as well), inhalants, performance enhancing drugs, and the category 'difficult drugs'.

This report uses the term 'performance enhancing drugs' instead of the more popular term 'doping'. This is preferred since the term doping includes a much wider range of substances and practices. Cannabis, for example, features on the IOC doping list (IOC, 2001), but also blood transfusions fall under the term doping. The term 'performance enhancing drugs' emphasizes that it is the purpose with which these substances are consumed that is important here. The generic category 'performance enhancing drugs' in this study includes anabolic androgen

steroids (AAS), growth hormone, erythropoietin (EPO), thyroid gland preparation, clenbuterol, and stimulants (e.g. amphetamine, cocaine, and caffeine) taken in high doses.

The concept of 'difficult drugs' was introduced to avoid definitional problems associated with the more conventional term 'hard drugs' (Sandwijk et al., 1991). 'Difficult drugs' are illicit drugs that are difficult to get, more difficult than those illicit drugs of which the sale is tolerated, as is the case with cannabis and mushrooms. It was decided not to use the term 'hard drug' because of its many non-scientific connotations. Also, the term 'hard drug' might give the impression that one is referring to a particularly hazardous category of drugs and that 'soft drugs' on the contrary pose (almost) no health risk. A seemingly simpler division into just licit and illicit drugs could not be made straightforwardly, due to the specific wording of the Dutch Opium Act. This Act makes a distinction between cannabis and other illicit drugs, such as cocaine, amphetamine, ecstasy, hallucinogens, and heroin. Both categories of drugs are illicit, but priority for criminal investigation and prosecution is given to the latter. So, although illegal, the sale of cannabis (later joined by psychotropic mushrooms) is not prosecuted when small amounts are concerned, making the acquisition of these drugs relatively easy.

The position of mushrooms is ambiguous under Dutch law, but in practice the situation is very similar to that of cannabis. The mushroom itself is legal, but the active substances psylocybin and psilocin are registered as illicit substances. Mushroom sales, when fresh, are tolerated under the current Dutch policy. Their purchase is not 'difficult' as that of other drugs, and in this study, mushrooms therefore fall under the category hallucinogens, but should strictly speaking not fall under 'difficult drugs'. However, since mushroom use was not asked about before 1997, this drug could not be excluded from the definition of 'difficult drugs' in the years prior to that study. Thus, the category 'difficult drugs' consists of amphetamine, cocaine, ecstasy, all

hallucinogens (where possible reported with and without mushroom use), and heroin. For the same reason, mushroom use could not be excluded from the definition of 'hallucinogens' in the years prior to 1997. Where possible the use of hallucinogens is reported with and, without mushroom use.

Some drugs were only included in the survey some years after the start of the survey series. Ecstasy was introduced in the survey in 1990, as were lifetime use questions regarding morphine, codeine and heroin. Questions on mushrooms and performance enhancing drugs were not included until 1997. This caused some problem with regard to the definition of the category 'difficult drugs' as described above. A similar problem arose with the category 'no drugs', indicating the proportion of people who hadn't used any drugs. As performance enhancing drugs were not asked about in some years, for reasons of comparability this drug type could not be included in the definition of the category 'no drugs'. For the years in which performance enhancing drug use was measured, figures for 'no drug use' are given both including and excluding performance enhancing drugs.

For categories such as 'opiates', or 'hallucinogens', no data are available on intensity and frequency of use: questions on intensity and frequency were asked for each of the drugs in these categories, but they could not be combined.

3.2 *Prevalence and continuation of drug use*

Prevalence rates of lifetime, last year and last month substance use are given in tables 3.1 through 3.3, plus in graphs 3.1 and 3.2. Tables 3.4 and 3.5 show the unweighted number of persons in the survey in order to give an indication of the precision on which estimates are based; an estimate is considered to be unreliable if the sub-sample group is smaller than 50. Population estimates and their 95 per cent confidence intervals are shown in table 3.6 and 3.7. Last year and last month

continuation rates are presented in table 3.9 and 3.10. Continuation rates are computed as the proportion of lifetime users of a drug who also used that drug in the last year or last month. This means that if lifetime use of a drug is 90 per cent and last year use of that drug is 50 per cent, the last year continuation rate is 50/90 = 55.5 per cent.

The most popular drug amongst the Amsterdam population is ***alcohol***. No fewer than 87 per cent of the population of 12 years and over has ever consumed alcohol. This proportion has remained stable over the period covered by the five surveys. The Amsterdam figure of lifetime use of alcohol is slightly lower than the national figure, which is 92 per cent. Last year prevalence (81%) and last month prevalence (73%) are not much lower than lifetime and also fairly stable. This automatically means that continuation rates are very high: the vast majority of people who have ever consumed alcohol also did so in the last year and the last month.

Alcohol is followed in popularity by ***tobacco***. Around two-thirds of the Amsterdam population has ever smoked, but here the continuation rate is much lower. Only 61 percent of those who ever smoked also did so in the last year, while just over half did so in the last month. This means that of all people who ever smoked, almost half had not done so in the last month. Last year and last month tobacco use rates have also decreased since 1987, suggesting that smoking is becoming less popular.

The use rates of ***hypnotics*** and ***sedatives*** are relatively high and have been very stable. It can be assumed that the majority of users are medical users. One fifth of the population has ever used these substances, while around a tenth has done so in the past year. Continuation rates are also fairly high: around half of all hypnotics or sedatives users also used this substance in the last year, while a third did so in the last month.

Of the illicit drugs, ***cannabis*** is by far the most popular one. No less than 38 percent of the Amsterdam population of 12 years and over has

ever used cannabis. This figure has increased steadily since 1987, especially in the period between 1994 and 1997. It is not surprising that the lifetime prevalence of cannabis is increasing, as the generation effect (people above a certain age are highly unlikely to have used cannabis, so as time progresses there are more people who have grown up in the 'cannabis era') will automatically cause this figure to go up. In order to judge what is really happening with the popularity of cannabis in Amsterdam, the figures on recent use and the use figures per age group (later in table 4.5) are much more revealing. Looking at recent use, it can be seen that cannabis use has increased until 1997, and has stabilised since. At the same time continuation rates for cannabis have decreased, suggesting that although more people have experience with cannabis, relatively more of those quit using.

The use of stimulants such as ***cocaine***, ***amphetamine*** and ***ecstasy*** has increased since 1987. Lifetime prevalence of cocaine has risen from 6 to 10 per cent and of amphetamine from 5 to 7 per cent. No figures are available on ecstasy use in 1987, but between 1990 and 2001 lifetime prevalence of ecstasy has risen from 1 to 9 per cent. This shows the short period in which ecstasy was introduced into the population. Due to the same generation effect that was earlier described for cannabis, it was to be expected that lifetime prevalences of these 'party drugs' would have increased. Last year and last month use rates have equally increased. Continuation rates of amphetamines, and to a lesser extent cocaine, are low. Thus, in 2001 only 0.3 per cent of the Amsterdam population of 12 years and over had used amphetamine in the last month, while one per cent used cocaine. The last year continuation rate for ecstasy is high, suggesting that a large number of those ever using this drug continues doing so every now and then. The *last month* continuation rate of ecstasy is similar to that of cocaine, and only one per cent of the population had used ecstasy in the past month. The increase in all use rates seemed to have been strongest between 1994 and 1997, and the last month rate of at least amphetamine and ecstasy seems to have stabilised between 1997 and 2001.

The interpretation of the prevalence figures on hallucinogens is limited by the fact that only since 1997 are separate data available on mushrooms and other hallucinogens. The prevalence rates for ***mushrooms*** in the two years for which data are available are much higher than they were for all hallucinogens together in 1987. This suggests that their popularity has increased substantially over the past decade and a half. Between 1997 and 2001, lifetime prevalence of mushrooms has increased, and last year and last month use have decreased. Continuation rates of mushrooms have more than halved in that period, another indication that mushrooms might have had their peak in popularity. It is difficult to say to what extent the rise in prevalence rates of ***hallucinogens*** is the result of the increased use of mushrooms. As lifetime and last year rates of 'other hallucinogens' in 1997 were much higher than those of all hallucinogens in 1987 there must have been an increase in other hallucinogen use as well. Hallucinogens rates *ex*cluding mushroom use are published tables. However, there has been a decrease since 1997. The continuation rates of hallucinogens are low compared to other drugs, which means that only a very small proportion of those who have ever used hallucinogens repeat this during the years after initiation.

The lifetime prevalence of all ***opiates*** has increased from 9 per cent in 1987 to 13 per cent in 2001. This was largely the result of an increase in the prevalence of the mostly medicinally used opiates such as ***morphine*** and ***codeine***. ***Heroin*** is used by a very small group only and its lifetime prevalence rate has increased only marginally since 1990. Last year and last month use rates of all opiates have increased, especially those of codeine. However, for heroin these more recent prevalence figures seem relatively stable (any fluctuations are equally likely to be the result of the very small numbers using the drug at all). The continuation rates for heroin are also very low, suggesting that only a very small proportion of people who experiment with the drug continue using it in the long term. It must be noted that the figures on opiate use for 1997 are extremely high, mostly as a result of high

codeine figures. It is not clear what has caused this, possibly a systematic interviewers error has been made, but it does not seem to be in line with the overall trend and it therefore seems wise to reject those 1997 data as unreliable [1].

The prevalence of ***inhalants*** has increased substantially since 1987, lifetime, last year and last month prevalence alike. However, the overall proportion of the Amsterdam population of 12 years and over who uses inhalants remains relatively low. ***Performance enhancing drugs*** were not included in the survey until 1997, and since then their use seems to have decreased somewhat. Remarkable is the continuation rate for performance enhancing drugs. The last year continuation rate is comparable to that of ecstasy, while the last month continuation rate is higher than that of cannabis. This suggests that most users of performance enhancing substances are very persistent in doing so on a regular basis.

In all, the use of ***difficult drugs*** increased between 1987 and 2001. This must be largely attributed to the increase in the use of the 'party drugs': cocaine, ecstasy, to a lesser extent amphetamine, and, indirectly, to the generation effect. The lifetime use rate of all difficult drugs combined is much lower than if we would add up the percentages for each separate drug type: this implies that many people used more than one of these drugs. The continuation rates on this combined variable seems to fluctuate a little, with a peak in 1997. The continuation rates for difficult drugs is high, but not much higher than, for example, those for cocaine or ecstasy. Even higher rates would be expected if there was

[1] In 1997 we asked Amsterdam pharmacies whether they had distributed prescription codeine more often than a few years ago. The possible explanation they gave was that the pharmaceutical industry switched from noscapine to a mixture of codeine and paracetamol for minor painkilling functions (Abraham et al., 1998). However, this should affect codeine prevalence rates in the rest of the Netherlands and this is not the case. Furthermore, the 1997 codeine rates are grossly out of line with the Amsterdam time trend on codeine, as can be seen in the figure for 2001.

much successive use of different drug types. The actual continuation rates suggest poly-drug use often takes place around the same occasions.

Only a small proportion of the population is completely abstinent, i.e. never used any of the substances mentioned, which means they consumed no alcohol or tobacco either. Fewer than 8 per cent belong in the category ***'no drugs'*** looking at lifetime drug use. In the more recent periods this proportion is considerable higher: around one fifth of the population of Amsterdam did not use any substances in the year prior to interview.

Gender differences in drug use are a well-known phenomenon. In general, men use more substances than women. Table 3.8 shows that while this is the case for all recreational drugs, it is the other way around for medicinal drugs: the women in Amsterdam used more hypnotics, tranquillizers and medicinal opiates than the men. For all drugs we find that the differences have been consistent over the years.

3.3 *Incidence of drug use*

The term 'incidence of drug use' refers to the proportion of the entire research population that started using a particular drug in the year prior to the interview. The incidence rates give an indication of the development of the popularity of certain drugs. An increase in incidence rates suggests that more people start using the drug each year. A decrease, on the other hand, shows a decline in popularity; even if the lifetime prevalence rates still increase (e.g. due to the generation effect), in the long term a decrease of lifetime use can be expected. The incidence rates presented here in table 3.12 and graph 3.3 are based on the age of the respondent and the reported age of first use.

The highest incidence rates are those for ***hypnotics*** and ***sedatives***. Almost 3 per cent of the population in Amsterdam started using one of these substances in 2001. There have been some fluctuations in the incidence rates with a peak in 1997, but there is no clear increase or decrease between 1987 and 2001.

The incidence rates for ***alcohol*** and ***tobacco*** are relatively stable at around 1.7 and 1.0 per cent. The incidence rates for ***cannabis*** are comparable to those for tobacco: also stable, at around 1.1 per cent. There is only one incidence rate for the 'difficult drugs' that is of an equal level: the incidence rate for ***ecstasy*** was around one per cent in 2001, after having peaked with 1.3 per cent in 1997. After a steady increase in the popularity of ecstasy until 1997, it seems that this popularity is now declining somewhat. However, compared to the other difficult drugs a large number of people still began using the drug in 2001.

The incidence rates for ***amphetamines*** are much lower than those for ecstasy, but seem to follow a similar trend: a steady increase until 1997, with a slight decrease since then. This contrasts with the trend for ***cocaine***, where the incidence rate has increased as well, but remained stable at 0.6 per cent since 1997.

The incidence rates for ***hallucinogens*** other than mushrooms are comparable to those of other difficult drugs. Separate figures for ***mushrooms*** are only available for the last two surveys, but it seems as if the incidence of mushroom use increases substantially around 1997: in 1994 the incidence rate for all hallucinogens (*including* mushrooms) was 0.3 per cent, while in 1997 the incidence rate for mushrooms *alone* was 2.0 per cent. The latter figure decreased again to 0.7 per cent in 2001, thus coming more in line with other difficult drugs again.

In 2001, the medicinal opiates ***morphine*** and ***codeine*** were used for the first time by around 0.5 per cent of the Amsterdam population. There

had been a peak in the number of people using these substances for the first time in 1997, but overall the initiation rate has been relatively stable. The initiation rate of ***heroin*** is much lower: it has been less than 0.05 per cent for most years about which data are available.

The incidence rate of ***inhalants*** was at its highest with the first measurement in 1987, when 1.1 per cent of the population started using inhalants. Since then the initiation rate has been a lot lower, even less that 0.05 per cent in 1994, but has been slightly increasing again in the last few years. Incidence rates for ***performance enhancing drugs*** are only available since 1997. Not many people started using these substances then (only 0.4 percent of the population), and in 2001 this number had fallen by half.

3.4 *Frequency of drug use*

As a measure of frequency of use, the term 'experienced user' was introduced. An experienced user is defined as a person who has used a particular drugs 25 times or more during his or her life. The rate of experienced users is the proportion of the *user population* that used a drug 25 times or more. Thus, this figure gives an indication of the relative number of all people who ever experimented with a drug continuing to use this drug for a longer period. The total number of users for some drugs was too small (<50) to give accurate estimates of the experienced user rate. In these cases, no estimates are given in the table. Experience user rates are presented in table 3.13 plus in graph 3.4.

Not surprisingly, the vast majority of ***alcohol*** and ***tobacco*** users are experienced users. Nearly 90 percent of those who have ever used alcohol or tobacco have done so more than 25 times. The figures for 1990 seem slightly lower than those for the other years, but the difference is marginal.

The rates of experienced users for ***sedatives***, ***hypnotics*** and ***cannabis*** are all in the same league: around 40 per cent of those ever using these substances has done so more than 25 times. There has been a decrease in experienced use rates for these substances, as the rates were closer to 50 per cent in 1990. This cannot be linked to an increase in use figures (and thus a stable number of experienced users). The use rates for sedatives and hypnotics have been fairly stable over the years, so the decrease in experienced user rates suggests that fewer people who do use these substances do so for a long time. The use rate for cannabis, on the other hand, has increased significantly, while the decrease in experienced user rate has not been as strong as for the other two substances. This means that the absolute number of experienced users has almost certainly increased.

In 2001, the proportion of lifetime users who had used any of the party drugs (cocaine, ecstasy, amphetamines) 25 times or more was around 25 per cent. However, in the past there were important differences in the proportion of experienced users for each of the party drugs. The proportion of experienced users amongst all ***cocaine*** users was also around 25 per cent in 1990, and was slightly higher in 1994 and 1997. The proportion of experienced ***amphetamine*** users has been fairly dynamic: it was almost 35 per cent in 1990 and only slightly lower in 1997, although in 1994 it was around 28 per cent. Finally, the proportion of experienced users amongst all ***ecstasy*** users has been increasing steadily over the past ten years, as it was only seven percent in 1990. This coincides with the steady increase in lifetime prevalence of ecstasy over the same period: not only do more people use the drug, and of those people there are also more who have done so frequently (25 times or over).

The proportion of experienced users of ***mushrooms*** was only measured in the last two surveys, and in those years this proportion was very low: not only do few people use mushrooms, but over 90 percent of those who did, only did so on fewer than 25 occasions. ***Morphine*** was also

used frequently by only a very small proportion of the total group of users. This proportion was a lot higher for the other medically prescribed opiate in the survey: ***codeine***. The proportion of experienced users amongst all ***heroin*** users was very high, even compared to other illicit drugs: over 40 percent of all users had used more than 25 times, which is comparable to the proportions for hypnotics, sedatives and cannabis. Finally, the experienced user proportion for ***inhalants*** was stable around 20 per cent, which is quite low, while the proportion for ***performance enhancing drugs*** is only known for 1997, and in that year was 35 per cent.

3.5 *Age of first and current use*

The mean age of first use of all reported ever use is shown in table 3.14 and, for some substances, in graph 3.5. Table 3.15 presents the mean age of current users of some substances – current users being defined as those who have indicated use of a substance over the past month. This latter figure is only given for a few substances as the number of last month users was often too small to give reliable estimates. The difference in time between the average age of first use and the average age at current use can be used as an indicator of the relative length of user careers, only when one takes in account that there are persons who 'drop out'.

The age of first use of all substances dealt with in the surveys was lowest for ***alcohol*** and ***tobacco***. Both substances are on average first used in the 18th year of one's life. The age of first use used to be around one year higher, but has decreased since 1990. The average alcohol and tobacco user is around forty years of age, suggesting a long user career.

Cannabis is another drug that people start using at a relatively young age, and the average is around 20 years of age. This figure has been quite stable since 1987. Other illicit drugs also have a stable age of first use, and the averages for ***cocaine, amphetamines, ecstasy, hallucinogens,***

mushrooms, heroin, inhalants and ***performance enhancing drugs*** are all in the early twenties. The average age of current users of cannabis and other illicit substances is a great deal lower than that of alcohol and tobacco users, suggesting that people stop using these substances relatively soon after they start using them. There has been an increase, though, especially in the average age of current cannabis users. This, combined with the stable age of first use, implies that the careers of cannabis users are slowly becoming longer.

The average age of first use for medically prescribed substances, such as ***hypnotics, sedatives, morphine*** and ***codeine,*** is a lot higher – in the early thirties – and has changed substantially over the past years. Since 1987, the average age of first use has decreased with around five years for hypnotics and sedatives, while it has increased with around five years for morphine.

Table 3.1: Lifetime drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages of the population of 12 years and older)

	Lifetime drug use				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	87.5	86.0	86.4	88.7	87.2
Tobacco	71.3	67.7	66.7	71.8	68.8
Hypnotics	20.1	18.8	19.0	23.8	20.8
Sedatives	22.2	20.3	19.9	22.9	20.9
Cannabis	23.2	25.2	29.8	36.7	38.1
Cocaine	5.7	5.7	7.0	9.4	10.0
Amphetamines	4.5	4.2	4.7	6.0	6.6
Ecstasy	.	1.3	3.3	7.0	8.7
Hallucinogens all	3.9	4.2	4.5	9.3	9.4
Hall. excl. mushrooms	.	.	.	6.3	4.8
LSD	.	.	.	4.5	4.1
Mushrooms	.	.	.	6.6	7.6
Opiates all	9.2	7.4	7.7	21.4	12.6
Morphine	.	1.9	2.0	4.4	4.4
Codeine	.	3.6	3.4	16.0	7.2
Heroin	.	1.1	1.4	1.8	1.3
Inhalants	1.1	1.0	1.1	1.9	2.6
Perform. enh.	.	.	.	1.5	0.8
Difficult drugs	8.3	8.6	10.7	15.5	16.9
Diff. excl. mushrooms	.	.	.	14.3	15.5
No drugs	6.3	8.0	8.0	6.0	7.9
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Table 3.2: Last year drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages of the population of 12 years and older)

	Last year drug use				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	78.7	78.0	77.8	80.2	80.6
Tobacco	49.6	46.8	45.7	46.7	42.3
Hypnotics	11.4	9.3	9.8	13.1	11.0
Sedatives	10.8	9.2	9.1	11.5	9.7
Cannabis	9.5	10.2	11.2	13.2	13.1
Cocaine	1.6	1.3	1.9	2.6	2.8
Amphetamines	0.6	0.5	0.5	0.9	1.1
Ecstasy	.	0.7	1.6	3.2	3.6
Hallucinogens all	0.4	0.3	0.6	2.8	1.5
Hall. excl. mushrooms	.	.	.	1.1	0.2
Mushrooms	.	.	.	2.4	1.3
Opiates all	2.3	1.9	2.1	16.5	3.1
Morphine	0.4	0.4	0.5	0.8	0.5
Codeine	1.4	1.2	1.2	7.3	2.4
Heroin	0.3	0.1	0.3	0.5	0.2
Inhalants	0.3	0.1	0.2	0.4	0.7
Perform. enh.	.	.	.	0.6	0.4
Difficult drugs	2.2	2.1	3.0	5.6	5.7
Diff. excl. mushrooms	.	.	.	4.9	5.1
No drugs	12.1	13.8	13.9	11.4	13.3
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Table 3.3: Last month drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages of the population of 12 years and older)

	Last month drug use				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	71.1	69.1	70.3	71.5	73.5
Tobacco	45.9	43.0	41.5	42.0	36.7
Hypnotics	8.4	6.4	6.6	7.9	7.1
Sedatives	7.4	6.0	5.4	7.3	6.2
Cannabis	5.6	6.1	7.2	8.1	7.8
Cocaine	0.6	0.4	0.8	1.0	1.2
Amphetamines	0.3	0.2	0.3	0.3	0.3
Ecstasy	.	0.1	0.7	1.1	1.1
Hallucinogens all	0.1	0.1	0.3	0.6	0.4
Hall. excl. mushrooms	.	.	.	0.0	0.1
Mushrooms	.	.	.	0.6	0.3
Opiates all	1.1	0.6	0.7	4.2	1.2
Morphine	0.0	0.0	0.1	0.1	0.1
Codeine	0.2	0.4	0.3	3.6	0.9
Heroin	0.1	0.0	0.1	0.3	0.1
Inhalants	0.2	0.0	0.1	0.2	0.5
Perform. enh.	.	.	.	0.3	0.3
Difficult drugs	1.0	0.8	1.3	2.3	2.3
Diff. excl. mushrooms	.	.	.	2.0	2.1
No drugs	17.5	20.0	19.2	18.0	19.0
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Table 3.4: Unweighted n reported lifetime drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001

	Unweighted n reported lifetime drug use				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	3,826	3,818	3,746	3,200	3,349
Tobacco	3,132	3,008	2,898	2,551	2,601
Hypnotics	873	847	844	852	785
Sedatives	970	912	876	825	794
Cannabis	995	1,096	1,272	1,265	1,409
Cocaine	245	245	297	316	360
Amphetamines	193	183	203	201	234
Ecstasy	.	56	137	228	309
Hallucinogens all	167	182	192	319	340
Hall. excl. mushrooms	.	.	.	212	166
LSD	118	.	.	148	145
Mushrooms	.	.	.	226	276
Opiates all	401	325	337	763	475
Morphine	.	84	89	158	164
Codeine	.	160	151	577	278
Heroin	.	48	57	59	44
Inhalants	47	42	47	61	95
Perform. enh.	.	.	.	52	28
Difficult drugs	359	372	463	529	615
Diff. excl. mushrooms	.	.	.	484	562
No drugs	277	356	361	305	378
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Table 3.5: Unweighted n reported last month drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001

	Unweighted n reported last month drug use				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	3,107	3,039	3,015	2,522	2,759
Tobacco	2,009	1,898	1,778	1,461	1,364
Hypnotics	357	289	292	284	260
Sedatives	319	272	240	265	240
Cannabis	241	263	293	283	291
Cocaine	26	17	32	32	43
Amphetamines	13	10	12	11	10
Ecstasy	.	5	28	35	39
Hallucinogens all	5	3	4	20	14
Hall. excl. mushrooms	.	.	.	1	3
Mushrooms	.	.	.	19	11
Opiates all	46	28	29	152	43
Morphine	1	1	3	6	4
Codeine	11	19	13	132	34
Heroin	6	1	3	8	3
Inhalants	7	2	5	6	16
Perform. enh.	.	.	.	12	11
Difficult drugs	41	32	54	76	82
Diff. excl. mushrooms	.	.	.	64	75
No drugs	761	895	862	800	861
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Table 3.6: Lifetime drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted population estimate and 95% confidence interval in population of 12 years and older), reported in thousands

Reported in thousands	*1987*		*1990*		*1994*		*1997*		*2001*	
Drug	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*
Alcohol	531.3	(525.1 , 537.0)	527.4	(521.5 , 533.0)	546.8	(540.0 , 553.1)	551.5	(544.9 , 557.6)	555.9	(549.0 , 562.3)
Tobacco	433.1	(424.9 , 441.2)	415.0	(407.1 , 422.7)	422.1	(412.9 , 431.0)	446.5	(437.4 , 455.4)	438.8	(429.5 , 448.0)
Hypnotics	122.3	(115.2 , 129.6)	115.4	(109.1 , 122.1)	120.0	(112.7 , 127.8)	148.2	(139.8 , 156.9)	132.8	(124.8 , 141.1)
Sedatives	134.7	(127.4 , 142.3)	124.2	(117.7 , 131.1)	125.7	(118.2 , 133.5)	142.7	(134.4 , 151.3)	133.3	(125.3 , 141.7)
Cannabis	140.8	(133.3 , 148.5)	154.7	(147.6 , 162.1)	188.8	(180.1 , 197.7)	228.2	(218.6 , 237.9)	243.1	(233.5 , 252.8)
Cocaine	34.6	(30.7 , 39.0)	35.0	(31.3 , 39.1)	44.2	(39.6 , 49.4)	58.8	(53.2 , 64.9)	64.0	(58.3 , 70.3)
Amphetamines	27.3	(23.8 , 31.3)	25.8	(22.7 , 29.4)	29.5	(25.7 , 33.9)	37.1	(32.6 , 42.1)	42.1	(37.4 , 47.4)
Ecstasy	.	.	8.1	(6.4 , 10.2)	21.0	(17.8 , 24.7)	43.3	(38.4 , 48.6)	55.5	(50.1 , 61.4)
Hallucinogens all	23.8	(20.5 , 27.5)	25.8	(22.7 , 29.4)	28.5	(24.8 , 32.8)	58.0	(52.4 , 64.1)	60.1	(54.5 , 66.2)
LSD	.	.	.	.	.	.	27.9	(24.0 , 32.3)	26.2	(22.6 , 30.5)
Mushrooms	.	.	.	.	.	.	41.3	(36.6 , 46.6)	48.7	(43.6 , 54.2)
Opiates all	56.1	(51.1 , 61.5)	45.1	(41.0 , 49.7)	48.7	(43.8 , 54.0)	133.3	(125.3 , 141.7)	80.4	(74.0 , 87.3)
Morphine	.	.	11.6	(9.5 , 14.1)	12.6	(10.1 , 15.6)	27.5	(23.7 , 31.9)	27.9	(24.1 , 32.3)
Codeine	.	.	22.0	(19.1 , 25.3)	21.6	(18.4 , 25.4)	99.8	(92.7 , 107.4)	46.0	(41.1 , 51.4)
Heroin	.	.	7.0	(5.4 , 9.0)	8.6	(6.6 , 11.1)	11.1	(8.7 , 14.0)	8.2	(6.2 , 10.7)
Inhalants	6.7	(5.0 , 8.8)	6.1	(4.7 , 8.0)	7.0	(5.3 , 9.4)	11.6	(9.2 , 14.6)	16.8	(13.9 , 20.3)
Perform. enh.	.	.	.	.	.	.	9.1	(7.0 , 11.8)	5.2	(3.7 , 7.3)
Difficult drugs	50.5	(45.8 , 55.7)	52.4	(48.0 , 57.3)	67.8	(62.1 , 74.0)	96.6	(89.6 , 104.1)	107.9	(100.6 , 115.6)
Diff. excl. mushrooms	.	.	.	.	.	.	89.1	(82.3 , 96.3)	99.1	(92.1 , 106.5)
No drugs	38.5	(34.3 , 43.1)	48.9	(44.6 , 53.6)	50.6	(45.7 , 56.1)	37.3	(32.8 , 42.3)	50.1	(45.0 , 55.7)
Total population (12 a.o.)	*607.2*		*613.2*		*632.8*		*622.0*		*635.4*	

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.

No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

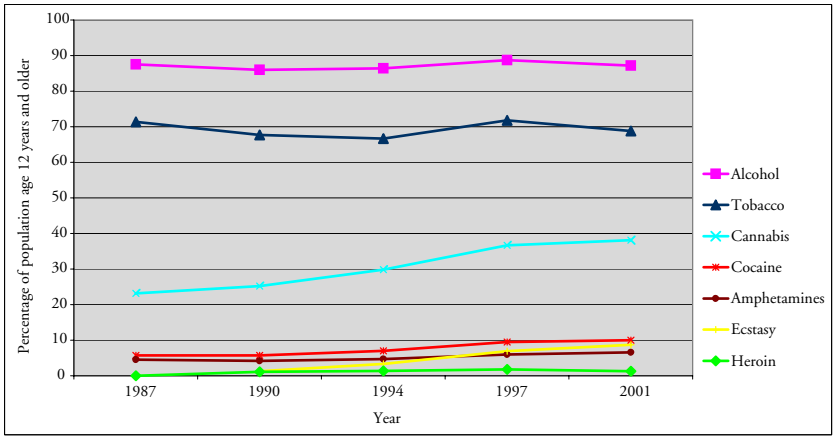
Table 3.7: Last month drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted population estimate and 95% confidence interval in population of 12 years and older), reported in thousands

Reported in thousands										
	1987		*1990*		*1994*		*1997*		*2001*	
Drug	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*	*Pop. estimate*	*95% c.i.*
Alcohol	431.7	(423.4 , 439.7)	423.7	(416.0 , 431.4)	444.9	(436.0 , 453.6)	444.8	(435.6 , 453.7)	468.7	(459.7 , 477.3)
Tobacco	278.6	(269.7 , 287.6)	263.6	(255.3 , 271.8)	262.6	(253.2 , 272.1)	261.0	(251.2 , 270.9)	233.8	(224.3 , 243.5)
Hypnotics	50.7	(46.0 , 55.9)	39.2	(35.3 , 43.5)	41.5	(37.0 , 46.5)	49.1	(43.9 , 54.8)	45.2	(40.3 , 50.5)
Sedatives	44.8	(40.3 , 49.7)	36.6	(32.9 , 40.8)	34.4	(30.3 , 39.0)	45.4	(40.5 , 50.9)	39.7	(35.1 , 44.8)
Cannabis	34.2	(30.3 , 38.6)	37.5	(33.7 , 41.7)	45.4	(40.6 , 50.6)	50.5	(45.3 , 56.2)	50.0	(44.9 , 55.6)
Cocaine	3.6	(2.5 , 5.3)	2.5	(1.6 , 3.8)	4.9	(3.5 , 6.9)	5.9	(4.3 , 8.2)	7.6	(5.7 , 10.1)
Amphetamines	1.9	(1.1 , 3.2)	1.4	(0.8 , 2.5)	1.9	(1.1 , 3.3)	2.0	(1.1 , 3.5)	1.6	(0.9 , 3.0)
Ecstasy	.	.	0.7	(0.3 , 1.6)	4.5	(3.2 , 6.5)	6.8	(5.0 , 9.2)	7.1	(5.3 , 9.5)
Hallucinogens all	0.7	(0.3 , 1.6)	0.5	(0.2 , 1.2)	1.9	(0.6 , 5.8)	3.5	(2.3 , 5.4)	2.4	(1.5 , 4.0)
Mushrooms	.	.	.	.	.	.	3.4	(2.2 , 5.3)	1.9	(1.1 , 3.4)
Opiates all	6.4	(4.8 , 8.5)	3.9	(2.8 , 5.5)	4.2	(2.9 , 6.0)	26.1	(22.4 , 30.4)	7.4	(5.5 , 9.8)
Morphine	0.1	(0.0 , 1.0)	0.1	(0.0 , 0.8)	0.4	(0.1 , 1.4)	0.9	(0.4 , 2.1)	0.7	(0.3 , 1.8)
Codeine	1.5	(0.8 , 2.7)	2.7	(1.8 , 4.1)	1.8	(1.0 , 3.2)	22.5	(19.1 , 26.6)	5.9	(4.2 , 8.1)
Heroin	0.9	(0.4 , 1.9)	0.1	(0.0 , 0.8)	0.4	(0.1 , 1.4)	1.6	(0.8 , 3.0)	0.5	(0.2 , 1.6)
Inhalants	1.1	(0.5 , 2.2)	0.3	(0.1 , 1.0)	0.8	(0.3 , 1.8)	1.2	(0.6 , 2.6)	3.0	(1.9 , 4.7)
Perform. enh.	.	.	.	.	.	.	1.8	(1.0 , 3.3)	2.2	(1.3 , 3.7)
Difficult drugs	5.8	(4.3 , 7.8)	4.6	(3.4 , 6.3)	8.3	(6.4 , 10.8)	14.3	(11.5 , 17.6)	14.5	(11.8 , 17.8)
Diff. excl. mushrooms	.	.	.	.	.	.	12.2	(9.7 , 15.3)	13.5	(10.9 , 16.7)
No drugs	105.8	(99.1 , 112.7)	122.6	(116.1 , 129.4)	121.6	(114.2 , 129.4)	112.2	(104.7 , 120.1)	121.3	(113.6 , 129.3)
Total population (12 a.o.)	*607.2*		*613.2*		*632.8*		*622.0*		*635.4*	

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.

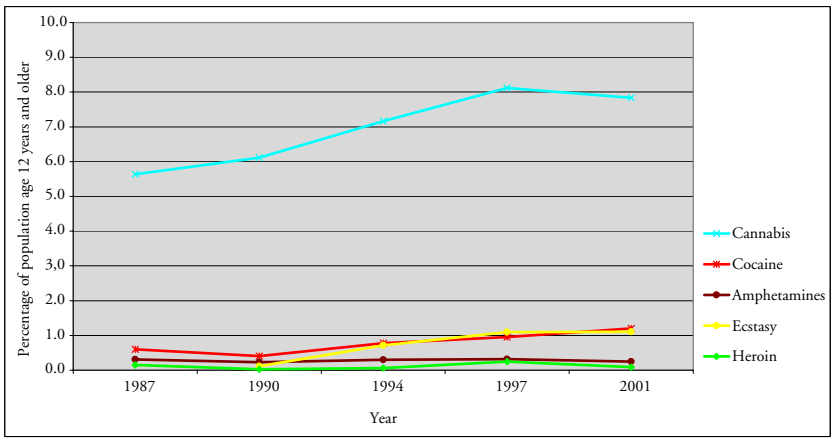
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Graph 3.1: Lifetime drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 yrs and older)



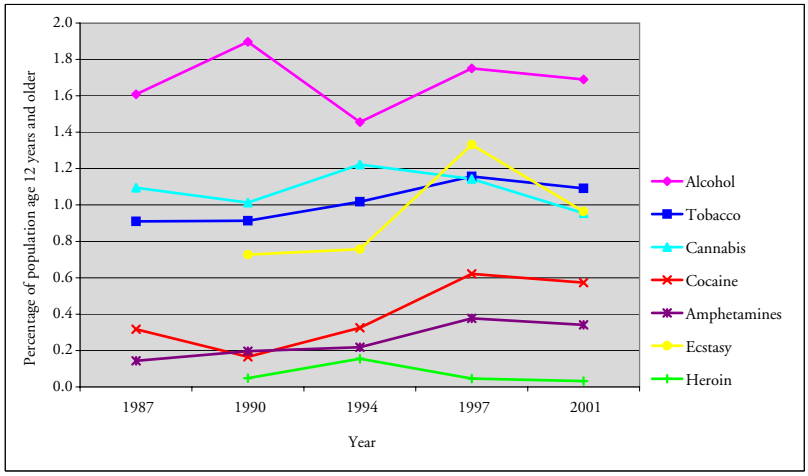
* The exact figures can be found in table 3.1 (p. 42).

Graph 3.2: Last month drug use prevalence in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 yrs and older)



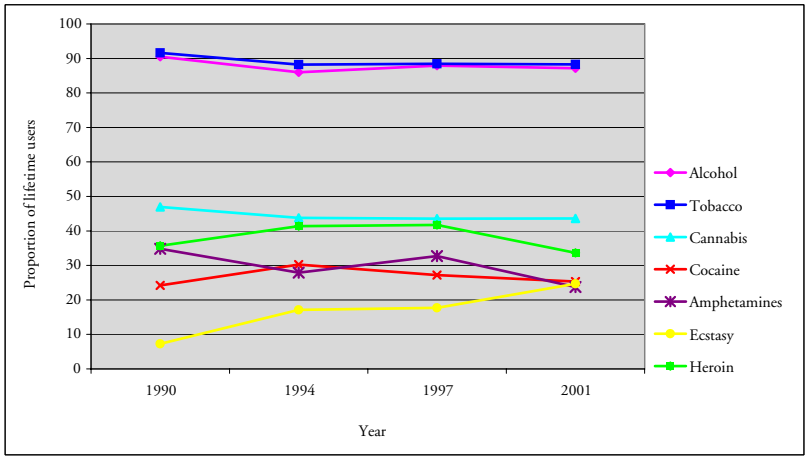
* The exact figures can be found in table 3.3 (p. 44).

Graph 3.3: Incidence of drug use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 yrs and older)



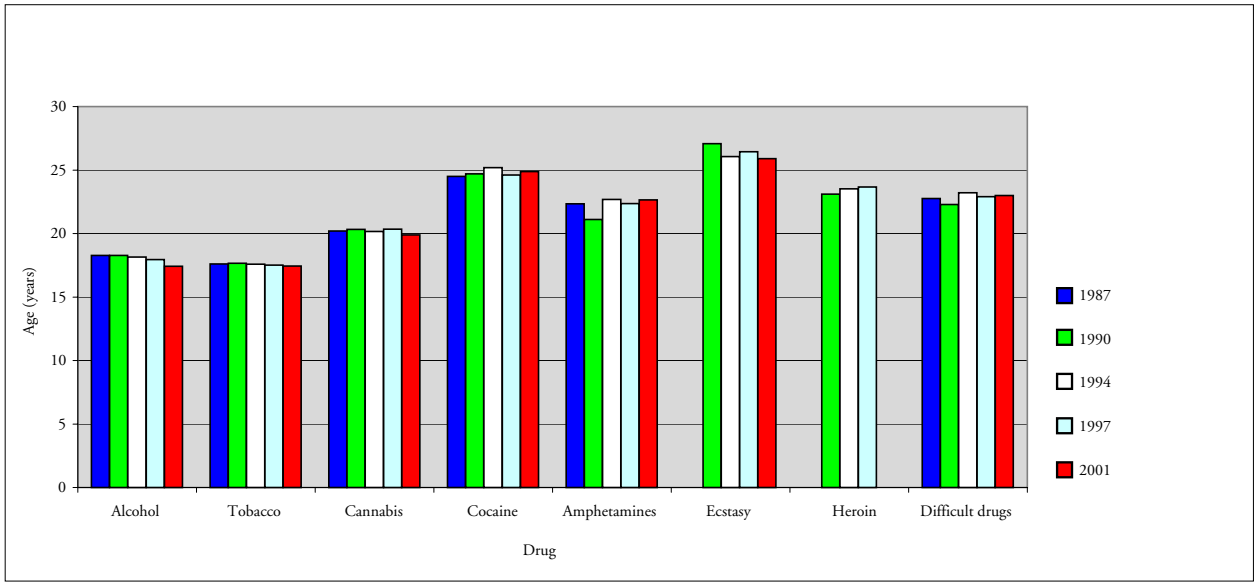
Incidence of drug use = percentage new users (persons that used a drug for the first time in the year prior to the interview.
* The exact figures can be found in table 3.12 (p. 57).

Graph 3.4: Experienced drug use in Amsterdam in 1990, 1994, 1997, 2001 (weighted percentages in population of 12 yrs and older)



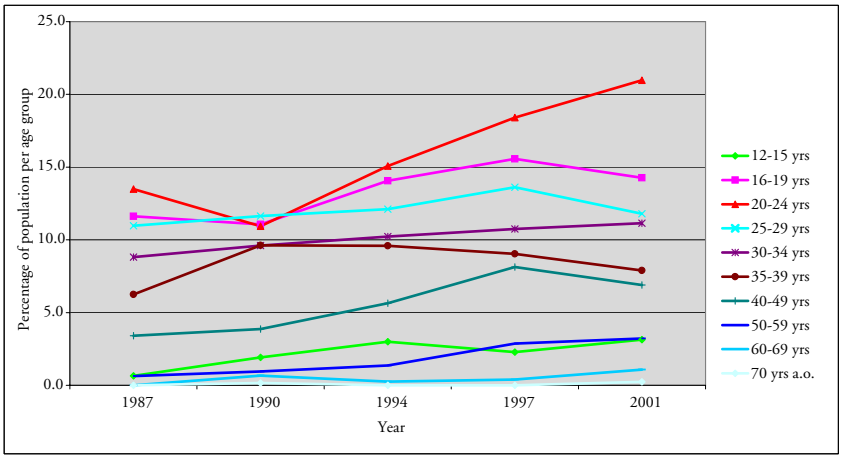
Experienced drug use = the proportion of lifetime users who used 25 times or more.
* The exact figures can be found in table 3.13 (p. 58).

Graph 3.5: Mean age of first use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted data in population of 12 yrs and older)



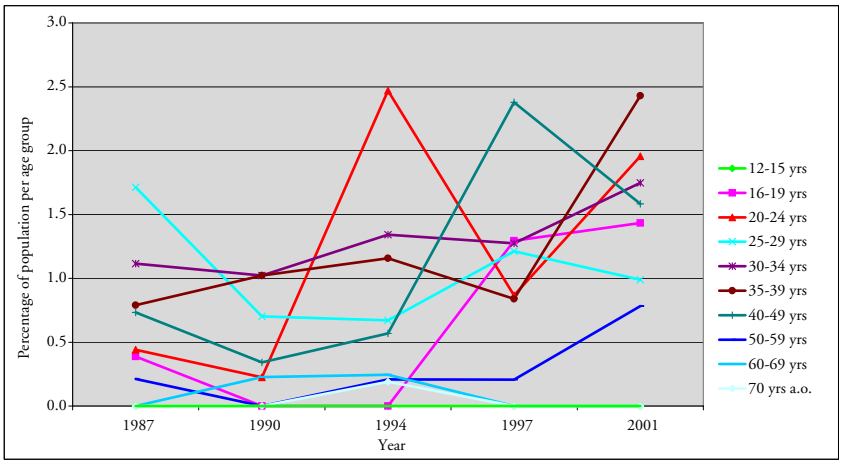
* The exact figures can be found in table 3.14 (p. 59).

Graph 4.1: Last month cannabis use in Amsterdam, per age group, in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 yrs and older)



* The exact figures can be found in table 4.5 (p. 66).

Graph 4.2: Last month cocaine use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 yrs and older)



* The exact figures can be found in table 4.6 (p. 67).

Table 3.8: Lifetime drug use prevalence in Amsterdam by gender in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 years and older)

	Men					*Women*				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	90.6	89.2	89.1	91.3	89.9	84.6	83.0	83.8	86.2	84.6
Tobacco	79.0	73.8	72.7	76.4	72.9	64.2	62.0	60.9	67.4	64.9
Hypnotics	14.8	13.9	13.7	18.0	16.2	25.1	23.4	24.0	29.3	25.3
Sedatives	15.9	15.0	14.3	15.6	15.5	28.0	25.2	25.2	29.9	26.2
Cannabis	28.2	30.6	35.0	43.6	44.0	18.5	20.2	24.9	30.1	32.5
Cocaine	7.6	7.7	8.7	11.8	12.8	4.0	3.8	5.4	7.2	7.4
Amphetamines	6.1	6.1	5.7	7.5	9.0	3.1	2.4	3.7	4.5	4.3
Ecstasy	.	1.8	4.4	8.7	10.8	.	0.9	2.2	5.3	6.7
Hallucinogens all	5.5	6.2	6.1	11.8	12.5	2.5	2.4	3.0	7.0	6.5
Hall. excl. mushrooms	.	.	.	8.5	6.7	.	.	.	4.2	2.9
LSD	4.1	0.0	0.0	6.4	5.7	1.6	0.0	0.0	2.7	2.6
Mushrooms	.	.	.	8.4	9.9	.	.	.	5.0	5.5
Opiates all	8.5	7.5	7.8	19.2	11.0	9.9	7.2	7.6	23.6	14.2
Morphine	.	1.8	2.0	3.7	3.4	.	2.0	1.9	5.1	5.3
Codeine	.	2.8	2.6	13.2	5.1	.	4.3	4.2	18.7	9.3
Heroin	.	1.7	2.0	2.4	2.0	.	0.6	0.8	1.1	0.6
Inhalants	1.2	1.6	1.6	3.0	3.7	1.0	0.5	0.6	0.8	1.6
Perform. enh.	.	.	.	1.9	1.3	.	.	.	1.1	0.4
Difficult drugs	10.8	11.8	13.0	18.6	21.1	6.0	5.5	8.6	12.6	13.0
Diff. excl. mushrooms	.	.	.	17.3	19.5	.	.	.	11.5	11.8
No drugs	4.8	6.2	6.0	4.4	6.0	7.8	9.6	9.9	7.5	9.6
Total respondents	*2,093*	*2,081*	*2,028*	*1,725*	*1,729*	*2,284*	*2,362*	*2,336*	*1,985*	*2,205*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Table 3.9: Last month drug use prevalence in Amsterdam by gender in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 years and older)

	Men					*Women*				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	76.8	75.7	76.0	76.8	79.0	65.7	62.9	64.9	66.5	68.2
Tobacco	52.2	49.0	46.3	46.3	39.8	40.0	37.4	36.9	37.8	33.7
Hypnotics	5.7	4.2	4.3	5.6	4.8	10.8	8.4	8.7	10.1	9.3
Sedatives	4.7	3.9	3.2	5.7	4.2	9.8	7.9	7.5	8.8	8.2
Cannabis	7.8	8.6	10.7	11.1	10.9	3.6	3.8	3.8	5.3	4.9
Cocaine	0.8	0.5	1.0	1.5	1.6	0.4	0.3	0.6	0.4	0.8
Amphetamines	0.5	0.3	0.4	0.5	0.2	0.1	0.1	0.2	0.1	0.3
Ecstasy	.	0.2	1.1	1.2	1.6	.	0.0	0.4	1.0	0.6
Hallucinogens all	0.2	0.1	0.6	0.5	0.7	0.0	0.1	0.0	0.6	0.1
Hall. excl. mushrooms	.	.	.	0.0	0.1	.	.	.	0.0	0.1
Mushrooms	.	.	.	0.5	0.6	.	.	.	0.6	0.0
Opiates all	1.0	0.6	0.8	2.9	0.9	1.1	0.7	0.5	5.4	1.4
Morphine	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2
Codeine	0.2	0.4	0.2	2.4	0.6	0.3	0.4	0.3	4.8	1.2
Heroin	0.2	0.0	0.1	0.5	0.2	0.1	0.0	0.0	0.0	0.0
Inhalants	0.2	0.1	0.2	0.4	0.8	0.1	0.0	0.0	0.1	0.2
Perform. enh.	.	.	.	0.4	0.6	.	.	.	0.2	0.1
Difficult drugs	1.5	1.1	1.7	3.1	3.1	0.5	0.5	0.9	1.5	1.4
Diff. excl. mushrooms	.	.	.	2.7	2.8	.	.	.	1.2	1.4
No drugs	13.5	14.9	15.0	14.2	14.9	21.0	24.7	23.3	21.6	22.9
Total respondents	*2,093*	*2,081*	*2,028*	*1,725*	*1,729*	*2,284*	*2,362*	*2,336*	*1,985*	*2,205*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
No drugs is *none* of the above drugs EXCLUDING performance enhancing drugs.

Table 3.10: Last year drug use continuation in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 years and older)

	*Last year continuation**				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	89.9	90.7	89.9	90.4	92.3
Tobacco	69.5	69.1	68.7	65.0	61.5
Hypnotics	56.8	49.5	51.6	54.8	53.1
Sedatives	48.5	45.5	46.0	50.0	46.7
Cannabis	41.2	40.4	38.4	35.9	34.3
Cocaine	27.3	23.5	26.5	28.0	28.4
Amphetamines	13.9	11.0	11.5	14.7	16.8
Ecstasy	.	53.4	47.1	45.5	41.9
Hallucinogens all	10.6	7.1	12.8	29.5	15.5
Hall. excl. mushrooms	.	.	.	17.0	5.2
Mushrooms	.	.	.	36.7	17.7
Opiates all	25.3	26.3	27.4	62.0	24.8
Morphine	.	22.9	26.6	18.1	11.5
Codeine	.	34.4	40.0	45.8	33.3
Heroin	.	10.5	25.0	26.5	11.9
Inhalants	24.5	14.5	23.2	20.6	25.2
Perform. enh.	.	.	.	42.3	48.1
Difficult drugs	26.2	24.2	28.4	36.2	33.9
Diff. excl. mushrooms	.	.	.	34.4	33.1
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
* The proportion of lifetime users who continued to use in the past year.

Table 3.11: Last month drug use continuation in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 years and older)

	*Last month continuation**				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	81.3	79.8	80.9	80.6	83.9
Tobacco	64.3	63.5	62.4	58.5	53.4
Hypnotics	41.8	33.9	34.7	33.1	34.3
Sedatives	33.3	29.5	27.4	31.8	30.0
Cannabis	24.4	24.3	24.1	22.1	20.6
Cocaine	10.5	7.1	11.2	10.1	11.9
Amphetamines	6.8	5.6	6.5	5.4	3.8
Ecstasy	.	8.9	21.6	15.8	12.7
Hallucinogens all	2.8	1.8	2.6	6.1	4.0
Hall. excl. mushrooms	.	.	.	0.2	1.7
Mushrooms	.	.	.	8.3	4.0
Opiates all	11.5	8.7	9.0	19.6	9.2
Morphine	.	1.2	3.5	3.4	2.5
Codeine	.	12.3	8.4	22.6	12.6
Heroin	.	2.1	4.8	14.2	6.7
Inhalants	16.3	4.7	11.0	10.8	18.0
Perform. enh.	.	.	.	20.3	42.9
Difficult drugs	11.4	8.8	12.2	14.8	13.5
Diff. excl. mushrooms	.	.	.	13.7	13.7
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
* The proportion of lifetime users who continued to use in the past month.

Table 3.12: Incidence of drug use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 years and older)

	*Incidence**				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	1.6	1.9	1.5	1.8	1.7
Tobacco	0.9	0.9	1.0	1.2	1.1
Hypnotics	2.5	2.3	2.4	4.4	2.8
Sedatives	3.2	2.3	2.4	3.6	2.8
Cannabis	1.1	1.0	1.2	1.1	1.0
Cocaine	0.3	0.2	0.3	0.6	0.6
Amphetamines	0.1	0.2	0.2	0.4	0.3
Ecstasy	.	0.7	0.8	1.3	1.0
Hallucinogens all	.	0.1	0.3	2.0	0.7
Hall. excl. mushrooms	.	.	.	0.6	0.1
Mushrooms	.	.	.	2.0	0.7
Morphine	.	0.3	0.4	0.7	0.5
Codeine	.	0.5	0.3	1.6	0.6
Heroin	.	0.0	0.2	0.0	0.0
Inhalants	1.1	0.1	0.0	0.2	0.3
Perform. enh.	.	.	.	0.4	0.2
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

* Percentage new users (persons that used a drug for the first time in the year prior to the interview).

Table 3.13: Experienced drug use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages in population of 12 years and older)

	*Experienced use**				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	.	90.5	86.0	87.9	87.2
Tobacco	.	91.6	88.2	88.5	88.3
Hypnotics	.	51.4	45.9	41.1	41.5
Sedatives	.	47.0	41.3	45.7	38.8
Cannabis	.	47.0	43.8	43.6	43.6
Cocaine	.	24.2	30.3	27.2	25.3
Amphetamines	.	34.8	27.9	32.7	23.7
Ecstasy	.	7.3	17.1	17.7	24.7
Mushrooms	.	.	.	6.7	8.4
Opiates all	.	.	.	33.2	-
Morphine	.	9.9	11.7	12.8	8.2
Codeine	.	21.5	25.7	36.3	25.1
Heroin	.	35.7	41.4	41.7	33.6
Inhalants	.	16.5	19.3	18.1	22.2
Perform. enh.	.	.	.	35.3	21.3
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

* The proportion of lifetime users who used 25 times or more.

Table 3.14: Mean age of first drug use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted data in population of 12 years and older)

	Mean age of first drug use				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	18.3	18.3	18.1	17.9	17.4
Tobacco	17.6	17.7	17.6	17.5	17.4
Hypnotics	40.0	39.3	38.3	37.0	35.3
Sedatives	36.0	35.2	33.9	33.7	31.4
Cannabis	20.2	20.3	20.2	20.3	19.9
Cocaine	24.5	24.7	25.2	24.6	24.9
Amphetamines	22.3	21.1	22.7	22.4	22.7
Ecstasy	.	27.1	26.1	26.4	25.9
Hallucinogens all	.	22.1	22.2	23.3	23.0
Hall. excl. mushrooms	.	.	.	22.7	22.3
Mushrooms	.	.	.	25.4	24.8
Opiates all	30.3	29.0	28.5	28.7	31.0
Morphine		28.9	31.9	33.3	34.3
Codeine	.	30.9	30.9	28.9	31.2
Heroin	.	23.1	23.5	23.7	-
Inhalants	.	19.4	20.0	20.1	21.6
Perform. enh.	.	.	.	23.3	25.8
Difficult drugs	22.8	22.3	23.2	22.9	23.0
Diff. excl. mushrooms	.	.	.	22.9	23.1
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.

Table 3.15: Mean age of current drug users in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted data in population of 12 years and older)

	*Mean age of current drug users**				
Drug	*1987*	*1990*	*1994*	*1997*	*2001*
Alcohol	41.9	41.7	41.2	42.0	41.9
Tobacco	40.1	39.8	39.5	39.7	39.5
Hypnotics	59.6	60.4	59.5	55.7	56.0
Sedatives	53.3	53.0	52.8	50.3	48.8
Cannabis	27.9	29.7	30.0	31.0	31.1
Difficult drugs	30.8	30.3	30.3	30.8	32.0
Diff. excl. mushrooms	.	.	.	32.1	32.4
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.
* Mean age of current drug users (reported last month drug use).

CHAPTER 4: USE FIGURES PER DRUG

4.1 Introduction

This chapter provides some of the same data as the previous chapter, but this time presented separately for each drug, and split for different age groups. It was thought that this would make it easier to get an overview of the use patterns of one particular drug. For each drug the tables give the lifetime prevalence rates per age group and, if the number of last month users permits it, the last month prevalence rates per age group. This allows one to follow the development of drug use in time per age group. Additionally, a summary of the core figures is given. Since the figures have already been discussed in the previous chapter, only the tables (4.1 through 4.14) and two additional graphics (4.1 and 4.2) are presented here. Note that the drug use prevalence rates given in the age groups 12-15 yrs and 16-19 yrs might differ from those given in Dutch school surveys. The most probable explanation for this is that school surveys sample schoolgoing pupils, whereas the populations survey presented here represents the population.

Table 4.1: Alcohol use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Alcohol					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	52.6	49.4	38.8	51.8	50.7
16-19 yrs	77.3	79.4	76.1	75.8	76.0
20-24 yrs	89.2	87.3	91.1	89.0	90.5
25-29 yrs	92.9	90.2	90.6	92.0	88.7
30-34 yrs	90.5	88.1	89.4	91.5	92.0
35-39 yrs	92.7	87.5	91.8	92.7	90.3
40-49 yrs	90.8	90.0	90.4	90.5	89.2
50-59 yrs	88.7	87.2	87.4	93.3	92.5
60-69 yrs	89.5	87.4	87.2	91.1	86.6
70 yrs a.o.	83.4	83.7	82.1	86.6	83.7
Last month prevalence					
12-15 yrs	13.8	8.4	14.4	20.1	22.9
16-19 yrs	57.0	55.3	52.2	58.0	57.0
20-24 yrs	77.5	75.0	79.7	71.0	79.5
25-29 yrs	81.1	76.2	78.1	79.3	76.8
30-34 yrs	79.5	75.0	78.9	77.8	81.3
35-39 yrs	81.2	76.2	76.3	76.4	78.5
40-49 yrs	77.5	78.4	76.5	75.8	77.1
50-59 yrs	72.2	72.1	71.8	79.8	81.8
60-69 yrs	67.2	67.2	65.8	67.7	72.0
70 yrs a.o.	60.7	56.4	57.1	62.7	62.6
Total population					
Lifetime prevalence	87.5	86.0	86.4	88.7	87.2
Last month prevalence	71.1	69.1	70.3	71.5	73.5
Last month continuation	81.3	79.8	80.9	80.6	84.4
Experienced use	.	90.5	86.0	87.9	87.2
Mean age of first use	18.3	18.3	18.1	17.9	17.4
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.2: Tobacco use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Tobacco					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	22.8	15.4	19.2	24.6	23.5
16-19 yrs	53.5	46.7	54.1	56.4	50.2
20-24 yrs	72.3	63.6	64.5	64.5	69.5
25-29 yrs	74.1	70.9	67.2	74.6	66.4
30-34 yrs	77.4	73.0	67.1	74.6	72.7
35-39 yrs	80.5	75.9	75.5	75.1	71.1
40-49 yrs	77.8	77.4	75.9	80.1	73.1
50-59 yrs	79.8	75.6	70.8	79.1	79.5
60-69 yrs	74.6	68.5	72.2	77.9	73.9
70 yrs a.o.	62.6	61.7	60.2	66.7	66.8
Last month prevalence					
12-15 yrs	8.4	5.1	9.4	6.9	8.0
16-19 yrs	35.8	31.7	39.8	36.6	34.0
20-24 yrs	53.4	48.5	47.6	46.7	45.7
25-29 yrs	54.6	51.2	48.7	52.7	42.5
30-34 yrs	55.0	54.4	43.8	51.4	44.8
35-39 yrs	57.7	51.5	51.8	47.7	41.2
40-49 yrs	53.1	48.8	49.5	47.2	40.1
50-59 yrs	47.9	49.2	39.5	40.9	38.9
60-69 yrs	36.4	33.0	34.0	33.6	28.7
70 yrs a.o.	29.0	23.1	24.1	23.4	18.4
Total population					
Lifetime prevalence	71.3	67.7	66.7	71.8	68.8
Last month prevalence	45.9	43.0	41.5	42.0	36.7
Last month continuation	64.3	63.5	62.4	58.5	53.4
Experienced use	.	91.6	88.2	88.5	88.3
Mean age of first use	17.6	17.7	17.6	17.5	17.4
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.3: Hypnotics use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Hypnotics					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	5.5	3.8	3.2	3.9	5.0
16-19 yrs	5.8	4.3	4.8	10.6	9.6
20-24 yrs	8.8	8.6	8.1	13.8	10.2
25-29 yrs	12.3	10.6	11.0	16.2	15.8
30-34 yrs	13.9	14.6	14.1	19.9	15.0
35-39 yrs	19.8	17.9	21.3	23.6	20.8
40-49 yrs	22.2	24.3	23.4	30.2	28.0
50-59 yrs	26.6	24.3	22.4	29.9	26.1
60-69 yrs	30.1	27.1	28.3	33.4	27.0
70 yrs a.o.	39.2	34.9	36.3	35.2	30.9
Last month prevalence					
12-15 yrs	0.0	0.0	0.5	1.3	1.3
16-19 yrs	0.8	1.3	0.5	2.5	1.2
20-24 yrs	1.6	1.8	0.0	2.0	0.7
25-29 yrs	2.9	1.1	2.8	2.6	3.4
30-34 yrs	3.2	2.2	2.4	4.7	2.8
35-39 yrs	6.9	4.4	4.2	6.2	6.5
40-49 yrs	8.5	6.3	7.7	8.8	8.1
50-59 yrs	11.8	7.2	6.5	9.1	9.4
60-69 yrs	12.6	12.9	12.5	13.7	9.6
70 yrs a.o.	25.1	20.3	21.9	21.8	21.0
Total population					
Lifetime prevalence	20.1	18.8	19.0	23.8	20.8
Last month prevalence	8.4	6.4	6.6	7.9	7.1
Last month continuation	41.8	33.9	34.7	33.1	34.3
Experienced use	.	51.4	45.9	41.1	41.5
Mean age of first use	40.0	39.3	38.3	37.0	35.3
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.4: Sedatives use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Sedatives					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	2.6	4.5	3.2	4.0	5.4
16-19 yrs	8.0	4.7	8.5	15.0	13.6
20-24 yrs	15.3	16.7	12.8	17.5	18.1
25-29 yrs	16.1	17.1	18.3	17.0	20.1
30-34 yrs	20.9	18.0	15.4	22.0	19.2
35-39 yrs	23.6	21.1	23.3	21.9	21.4
40-49 yrs	27.0	25.1	23.5	27.9	23.2
50-59 yrs	31.6	26.0	26.1	30.7	23.5
60-69 yrs	29.5	27.3	26.1	31.7	28.9
70 yrs a.o.	28.2	23.5	24.7	24.9	22.5
Last month prevalence					
12-15 yrs	0.0	1.3	0.6	1.3	2.3
16-19 yrs	1.9	0.9	1.1	4.4	5.6
20-24 yrs	3.6	1.6	2.0	2.9	3.8
25-29 yrs	4.0	3.7	3.2	2.4	4.2
30-34 yrs	5.4	3.2	2.6	6.3	3.5
35-39 yrs	5.7	5.0	4.4	5.3	4.4
40-49 yrs	7.7	8.3	7.4	9.6	7.2
50-59 yrs	11.8	8.6	6.9	11.2	7.5
60-69 yrs	12.2	9.2	9.8	12.6	11.2
70 yrs a.o.	13.8	11.8	11.1	11.6	11.3
Total population					
Lifetime prevalence	22.2	20.3	19.9	22.9	20.9
Last month prevalence	7.4	6.0	5.4	7.3	6.2
Last month continuation	33.3	29.5	27.4	31.8	30.0
Experienced use	.	47.0	41.3	45.7	38.8
Mean age of first use	36.0	35.2	33.9	33.7	31.4
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.5: Cannabis use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Cannabis					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	4.6	2.6	4.5	6.9	8.3
16-19 yrs	25.5	23.2	31.5	34.0	36.4
20-24 yrs	38.6	36.8	46.3	50.5	58.6
25-29 yrs	41.6	42.2	44.4	53.6	51.8
30-34 yrs	47.0	44.3	42.8	56.4	57.2
35-39 yrs	36.5	44.0	46.5	48.9	51.6
40-49 yrs	19.2	27.3	35.4	46.7	43.4
50-59 yrs	8.1	8.0	16.2	25.0	31.5
60-69 yrs	1.3	2.4	2.8	7.7	9.4
70 yrs a.o.	0.2	1.1	0.8	1.2	1.5
Last month prevalence					
12-15 yrs	0.6	1.9	3.0	2.3	3.1
16-19 yrs	11.6	11.1	14.1	15.6	14.3
20-24 yrs	13.5	10.9	15.1	18.4	21.0
25-29 yrs	11.0	11.6	12.1	13.6	11.8
30-34 yrs	8.8	9.6	10.2	10.7	11.1
35-39 yrs	6.2	9.6	9.6	9.0	7.9
40-49 yrs	3.4	3.9	5.6	8.1	6.9
50-59 yrs	0.6	0.9	1.4	2.9	3.2
60-69 yrs	0.0	0.7	0.2	0.4	1.1
70 yrs a.o.	0.0	0.2	0.0	0.0	0.2
Total population					
Lifetime prevalence	23.2	25.2	29.8	36.7	38.1
Last month prevalence	5.6	6.1	7.2	8.1	7.8
Last month continuation	24.4	24.3	24.1	22.1	20.6
Experienced use	.	47.0	43.8	43.6	43.6
Mean age of first use	20.2	20.3	20.2	20.3	19.9
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.6: Cocaine use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Cocaine					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	0.5	0.0	0.0	0.0	0.0
16-19 yrs	2.3	0.4	0.6	4.6	4.5
20-24 yrs	6.2	4.8	6.7	10.3	12.9
25-29 yrs	14.5	10.1	8.4	10.5	8.9
30-34 yrs	14.5	13.7	13.4	17.1	17.1
35-39 yrs	8.0	12.6	15.9	16.2	16.9
40-49 yrs	4.6	6.1	9.3	14.3	15.6
50-59 yrs	0.9	1.2	3.3	5.5	7.1
60-69 yrs	0.2	0.5	0.5	0.9	1.5
70 yrs a.o.	0.0	0.2	0.2	0.2	0.5
Last month prevalence					
12-15 yrs	0.0	0.0	0.0	0.0	0.0
16-19 yrs	0.4	0.0	0.0	1.3	1.4
20-24 yrs	0.4	0.2	2.5	0.9	2.0
25-29 yrs	1.7	0.7	0.7	1.2	1.0
30-34 yrs	1.1	1.0	1.3	1.3	1.7
35-39 yrs	0.8	1.0	1.2	0.8	2.4
40-49 yrs	0.7	0.3	0.6	2.4	1.6
50-59 yrs	0.2	0.0	0.2	0.2	0.8
60-69 yrs	0.0	0.2	0.2	0.0	0.0
70 yrs a.o.	0.0	0.0	0.2	0.0	0.0
Total population					
Lifetime prevalence	5.7	5.7	7.0	9.4	10.0
Last month prevalence	0.6	0.4	0.8	1.0	1.2
Last month continuation	10.5	7.1	11.2	10.1	12.0
Experienced use	.	24.2	30.3	27.2	25.3
Mean age of first use	24.5	24.7	25.2	24.6	24.9
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.7: Amphetamines use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Amphetamines					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	0.5	0.0	0.0	0.3	0.0
16-19 yrs	1.2	2.5	2.4	3.9	5.2
20-24 yrs	4.3	2.0	3.8	8.2	10.2
25-29 yrs	8.3	6.4	5.0	5.1	5.8
30-34 yrs	11.0	9.5	6.4	7.8	9.1
35-39 yrs	8.6	11.1	9.5	10.7	9.8
40-49 yrs	4.9	4.7	7.8	8.9	9.4
50-59 yrs	2.2	1.4	2.8	5.5	5.6
60-69 yrs	0.4	0.5	2.2	1.3	2.7
70 yrs a.o.	0.0	0.2	0.4	0.9	0.9
Last month prevalence					
12-15 yrs	0.0	0.0	0.0	0.0	0.0
16-19 yrs	0.8	0.8	0.6	0.5	1.1
20-24 yrs	0.9	0.2	1.4	0.9	0.4
25-29 yrs	0.5	1.1	0.5	0.2	0.2
30-34 yrs	0.2	0.0	0.2	1.0	0.4
35-39 yrs	0.3	0.0	0.2	0.0	0.6
40-49 yrs	0.3	0.0	0.1	0.4	0.0
50-59 yrs	0.0	0.2	0.0	0.0	0.2
60-69 yrs	0.0	0.0	0.0	0.0	0.0
70 yrs a.o.	0.0	0.0	0.0	0.0	0.0
Total population					
Lifetime prevalence	4.5	4.2	4.7	6.0	6.6
Last month prevalence	0.3	0.2	0.3	0.3	0.3
Last month continuation	6.8	5.6	6.5	5.4	3.8
Experienced use	.	34.8	27.9	32.7	23.7
Mean age of first use	22.3	21.1	22.7	22.4	22.7
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.8: Ecstasy use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Ecstasy					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	.	0.0	0.0	0.3	1.0
16-19 yrs	.	1.6	5.1	7.7	6.0
20-24 yrs	.	2.9	7.2	13.4	18.4
25-29 yrs	.	3.1	7.2	15.8	14.9
30-34 yrs	.	1.6	4.8	12.6	18.4
35-39 yrs	.	1.7	3.8	8.7	11.6
40-49 yrs	.	1.0	2.5	4.5	6.6
50-59 yrs	.	0.0	0.0	0.9	1.7
60-69 yrs	.	0.0	0.2	0.0	0.7
70 yrs a.o.	.	0.0	0.0	0.0	0.0
Last month prevalence					
12-15 yrs	.	0.0	0.0	0.0	0.3
16-19 yrs	.	0.4	1.7	1.6	2.1
20-24 yrs	.	0.7	3.1	3.9	3.5
25-29 yrs	.	0.2	1.1	2.9	2.2
30-34 yrs	.	0.0	0.8	1.5	1.6
35-39 yrs	.	0.0	0.5	0.6	0.3
40-49 yrs	.	0.0	0.3	0.4	1.0
50-59 yrs	.	0.0	0.0	0.0	0.4
60-69 yrs	.	0.0	0.0	0.0	0.0
70 yrs a.o.	.	0.0	0.0	0.0	0.0
Total population					
Lifetime prevalence	.	1.3	3.3	7.0	8.7
Last month prevalence	.	0.1	0.7	1.1	1.1
Last month continuation	.	8.9	21.6	15.8	12.8
Experienced use	.	7.3	17.1	17.7	24.7
Mean age of first use	.	27.1	26.1	26.4	25.9
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.9: Hallucinogens use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Hallucinogens					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	0.0	0.0	0.6	0.0	0.3
16-19 yrs	1.9	0.8	2.3	4.6	1.0
20-24 yrs	4.3	2.5	5.6	7.8	7.2
25-29 yrs	7.1	5.5	4.9	7.1	3.8
30-34 yrs	9.2	9.5	5.1	8.7	6.5
35-39 yrs	9.2	11.4	8.5	7.3	7.1
40-49 yrs	3.5	5.7	8.7	12.3	7.0
50-59 yrs	0.7	1.2	2.2	4.5	5.5
60-69 yrs	0.4	0.2	0.7	1.5	2.2
70 yrs a.o.	0.2	0.3	0.2	0.0	0.2
Last month prevalence					
12-15 yrs	0.0	0.0	0.0	0.0	0.0
16-19 yrs	0.4	0.0	0.0	0.3	0.0
20-24 yrs	0.0	0.7	2.7	0.0	0.3
25-29 yrs	0.5	0.0	0.0	0.0	0.0
30-34 yrs	0.0	0.0	0.0	0.0	0.0
35-39 yrs	0.3	0.0	0.0	0.0	0.0
40-49 yrs	0.0	0.0	0.2	0.0	0.2
50-59 yrs	0.0	0.0	0.0	0.0	0.2
60-69 yrs	0.0	0.0	0.0	0.0	0.0
70 yrs a.o.	0.0	0.0	0.0	0.0	0.0
Total population					
Lifetime prevalence	3.9	4.2	4.5	6.3	4.8
Last month prevalence	0.1	0.1	0.3	0.0	0.1
Last month continuation	2.8	1.8	2.6	0.2	1.7
Experienced use	.	.	.	13.5	-
Mean age of first use	.	22.1	22.2	22.7	22.3
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.10: Mushrooms use in Amsterdam in 1997, 2001 (weighted percentages)

Mushrooms					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	.	.	.	0.3	0.6
16-19 yrs	.	.	.	9.9	8.5
20-24 yrs	.	.	.	10.9	15.7
25-29 yrs	.	.	.	12.4	9.9
30-34 yrs	.	.	.	9.8	13.6
35-39 yrs	.	.	.	8.6	9.0
40-49 yrs	.	.	.	7.7	7.9
50-59 yrs	.	.	.	1.6	4.6
60-69 yrs	.	.	.	0.7	1.5
70 yrs a.o.	.	.	.	0.0	0.0
Last month prevalence					
12-15 yrs	.	.	.	0.3	0.0
16-19 yrs	.	.	.	1.6	1.6
20-24 yrs	.	.	.	2.2	1.3
25-29 yrs	.	.	.	1.2	0.5
30-34 yrs	.	.	.	0.7	0.2
35-39 yrs	.	.	.	0.0	0.0
40-49 yrs	.	.	.	0.2	0.2
50-59 yrs	.	.	.	0.0	0.0
60-69 yrs	.	.	.	0.0	0.0
70 yrs a.o.	.	.	.	0.0	0.0
Total population					
Lifetime prevalence	.	.	.	6.6	7.6
Last month prevalence	.	.	.	0.6	0.3
Last month continuation	.	.	.	8.3	4.0
Experienced use	.	.	.	6.7	8.4
Mean age of first use	.	.	.	25.4	24.8
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.11: Opiates use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Opiates					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	1.3	0.7	1.0	6.8	3.2
16-19 yrs	2.7	2.1	2.7	13.1	2.8
20-24 yrs	7.4	6.1	3.5	12.7	10.2
25-29 yrs	9.0	9.6	8.1	22.3	9.5
30-34 yrs	14.9	9.8	9.8	26.7	14.4
35-39 yrs	15.5	9.9	12.2	23.9	15.3
40-49 yrs	8.7	8.1	10.0	29.1	17.9
50-59 yrs	11.2	7.1	9.9	23.8	12.4
60-69 yrs	8.6	7.7	6.5	20.6	13.7
70 yrs a.o.	6.5	4.7	4.4	14.0	11.9
Last month prevalence					
12-15 yrs	0.0	0.0	0.0	1.0	0.0
16-19 yrs	0.0	0.0	0.5	3.2	0.2
20-24 yrs	0.9	0.9	0.3	1.7	2.6
25-29 yrs	1.5	0.7	0.7	4.6	0.0
30-34 yrs	1.8	0.8	0.7	6.1	0.5
35-39 yrs	1.5	1.0	0.6	2.6	0.9
40-49 yrs	0.7	0.3	0.6	6.7	1.3
50-59 yrs	0.9	0.8	1.4	3.6	1.3
60-69 yrs	1.1	0.9	0.5	4.4	1.0
70 yrs a.o.	1.0	0.4	0.8	3.0	3.1
Total population					
Lifetime prevalence	9.2	7.4	7.7	21.4	12.6
Last month prevalence	1.1	0.6	0.7	4.2	1.2
Last month continuation	11.5	8.7	9.0	19.6	9.2
Experienced use	.	.	.	33.2	-
Mean age of first use	30.3	29.0	28.5	28.7	31.0
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.12: Heroin use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Heroin					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	.	0.0	0.0	0.3	0.0
16-19 yrs	.	0.4	0.0	0.0	0.0
20-24 yrs	.	0.9	0.9	0.4	0.4
25-29 yrs	.	2.4	1.6	1.2	0.3
30-34 yrs	.	2.7	2.6	3.0	2.1
35-39 yrs	.	1.7	3.9	3.4	2.7
40-49 yrs	.	1.0	1.8	3.8	3.2
50-59 yrs	.	0.0	0.3	1.4	0.6
60-69 yrs	.	0.2	0.2	0.4	0.3
70 yrs a.o.	.	0.4	0.0	0.0	0.0
Last month prevalence					
12-15 yrs	0.0	0.0	0.0	0.0	0.0
16-19 yrs	0.0	0.0	0.0	0.0	0.0
20-24 yrs	0.2	0.0	0.0	0.0	0.0
25-29 yrs	0.2	0.2	0.2	0.5	0.0
30-34 yrs	0.7	0.0	0.0	0.0	0.0
35-39 yrs	0.3	0.0	0.2	0.0	0.3
40-49 yrs	0.0	0.0	0.1	0.9	0.0
50-59 yrs	0.0	0.0	0.0	0.4	0.4
60-69 yrs	0.0	0.0	0.0	0.0	0.0
70 yrs a.o.	0.0	0.0	0.0	0.0	0.0
Total population					
Lifetime prevalence	.	1.1	1.4	1.8	1.3
Last month prevalence	0.1	0.0	0.1	0.3	0.1
Last month continuation	.	2.1	4.8	14.2	-
Experienced use	.	35.7	41.4	41.7	-
Mean age of first use	.	23.1	23.5	23.7	-
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.13: Performance enhancing drug use in Amsterdam in 1997, 2001 (weighted percentages)

Performance enhancing drug					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	.	.	.	0.0	0.4
16-19 yrs	.	.	.	3.6	0.4
20-24 yrs	.	.	.	2.7	1.2
25-29 yrs	.	.	.	1.2	1.3
30-34 yrs	.	.	.	1.5	1.4
35-39 yrs	.	.	.	3.0	0.9
40-49 yrs	.	.	.	1.4	1.1
50-59 yrs	.	.	.	0.9	0.2
60-69 yrs	.	.	.	0.6	0.0
70 yrs a.o.	.	.	.	0.3	0.3
Last month prevalence					
12-15 yrs	.	.	.	0.0	0.4
16-19 yrs	.	.	.	1.4	0.0
20-24 yrs	.	.	.	0.0	0.9
25-29 yrs	.	.	.	0.2	0.3
30-34 yrs	.	.	.	0.5	0.7
35-39 yrs	.	.	.	0.5	0.6
40-49 yrs	.	.	.	0.4	0.2
50-59 yrs	.	.	.	0.0	0.0
60-69 yrs	.	.	.	0.4	0.0
70 yrs a.o.	.	.	.	0.0	0.3
Total population					
Lifetime prevalence	.	.	.	1.5	0.8
Last month prevalence	.	.	.	0.3	0.3
Last month continuation	.	.	.	20.3	-
Experienced use	.	.	.	35.3	-
Mean age of first use	.	.	.	23.3	-
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Table 4.14: Difficult drug use in Amsterdam in 1987, 1990, 1994, 1997, 2001 (weighted percentages)

Difficult drugs					
Age group					
Lifetime prevalence	*1987*	*1990*	*1994*	*1997*	*2001*
12-15 yrs	1.1	0.0	0.6	0.3	1.0
16-19 yrs	3.1	3.7	6.7	10.1	7.9
20-24 yrs	8.1	7.0	11.1	17.3	23.3
25-29 yrs	16.8	13.0	13.2	19.0	16.6
30-34 yrs	19.7	17.7	16.4	22.2	25.8
35-39 yrs	14.4	19.4	20.4	21.1	21.6
40-49 yrs	8.6	10.9	15.9	20.1	20.6
50-59 yrs	3.7	2.8	6.0	10.8	13.0
60-69 yrs	1.0	0.7	2.2	2.4	4.5
70 yrs a.o.	0.2	0.9	0.8	1.2	1.3
Last month prevalence					
12-15 yrs	0.0	0.0	0.0	0.0	0.3
16-19 yrs	1.2	1.2	1.7	2.5	2.1
20-24 yrs	1.1	1.6	4.1	4.4	5.0
25-29 yrs	2.4	1.6	1.9	3.6	3.2
30-34 yrs	1.6	1.0	1.9	2.5	3.1
35-39 yrs	1.3	1.0	1.1	1.4	2.7
40-49 yrs	1.1	0.3	1.0	2.9	2.3
50-59 yrs	0.2	0.2	0.2	0.4	1.2
60-69 yrs	0.0	0.2	0.2	0.0	0.0
70 yrs a.o.	0.0	0.0	0.2	0.0	0.0
Total population					
Lifetime prevalence	8.3	8.6	10.7	14.3	15.5
Last month prevalence	1.0	0.8	1.3	2.0	2.1
Last month continuation	.	.	.	13.7	13.7
Experienced use	.	.	.	.	.
Mean age of first use	.	.	.	23.4	23.6
Total respondents	*4,378*	*5,207*	*4,164*	*3,710*	*3,934*

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens (mushrooms included), heroin.

REFERENCES

Abraham, M.D., P.D.A Cohen, R.J. van Til, M.P.S. Langemeijer (1998) *Licit and illicit drug use in Amsterdam III: Developments in drug use 1987-1997,* Amsterdam: CEDRO Centrum voor Drugsonderzoek, Universiteit van Amsterdam.

Abraham, M.D., P.D.A. Cohen, RJ van Til, M.A.L. de Winter (1999) *Licit and illicit drug use in the Netherlands, 1997*, Amsterdam: CEDRO/Mets.

Abraham, M.D., H.L. Kaal, P.D.A. Cohen (2002) *Licit and illicit drug use in the Netherlands, 2001*, Amsterdam: CEDRO/Mets & Schilt.

Bieleman, B., P. Goeree (2002) *Aantal coffeeshops en gemeentelijk beleid in 2001*, Intraval/WODC, Drukkerij De Bie.

Boekhout van Solinge, T. (1999) Dutch drug policy in a European context. *Journal of Drug Issues* 29 (3), 511-528.

CBS: Hoogteleijling, E.M.J. (2002) *Raming van het aantal niet in de GBA geregistreerden.* April 2002/ BPA no. 177-020SOO, CBS.

Cochran, W.G. (1977) *Sampling Techniques*, New York, John Wiley & Sons.

Cohen, P.D.A. (1994) The case of the two Dutch drug policy commissions. An exercise in harm reduction 1968-1976. Paper presented at the 5th International Conference on the Reduction of Drug related Harm, 7-11 March 1994, Addiction Research Foundation, Toronto. Revised in 1996. In Erickson et al. *A new direction for drug policies and programs*. University of Toronto Press, 1997.

Cohen, P.D.A., H.L. Kaal (2001) *The irrelevance of drug policy*. Amsterdam, CEDRO.

IOC (2001) *Substitutes Appendix A of the OMAC 1999 Olympic Movement Anti-doping Code; Appendix A Prohibited classes of substances and prohibited methods 2001-2002.* IOC.

Korf, D.J. (1995) *Dutch treat.* Amsterdam: Thesis Publishers.

De Kort, M. (1995) *Tussen patiënt en delinquent. Geschiedenis van het Nederlandse drugsbeleid*. Hilversum: Verloren.

Reinarman, C. (1998) Why dutch drug policy threatens the US (published in Dutch). *Het Parool*, July 30.

Sandwijk, J.P., I. Westerterp, S. Musterd (1988) *Het gebruik van legale en illegale drugs in Amsterdam,* Amsterdam: Instituut voor Sociale Geografie.

Sandwijk, J.P., Cohen P.D.A., Musterd S. (1991) *Licit and illicit drug use in Amsterdam,* Amsterdam: Department of Human Geography, University of Amsterdam.

Sandwijk, J.P., Cohen P.D.A., Musterd S., Langemeijer M.P.S. (1995) *Licit and illicit drug use in Amsterdam II*, Amsterdam: CEDRO.

Substance Abuse and Mental Health Services Administration (1998) *National Household Survey on Drug Abuse: Population Estimates 1997*, Rockville, MD, NHSDA.

ALSO AVAILABLE IN THIS SERIES

Licit and Illicit Drug Use in the Netherlands, 1997
ISBN 90 5330 279 4

Licit and Illicit Drug Use in the Netherlands, 2001
ISBN 90 5330 354 5

Drugs and Decision-Making in the European Union
ISBN 90 5330 327 8

The Swedish Drug Control System
ISBN 90 5330 211 5

Besluitvorming rond drugs in de Europese Unie
ISBN 90 5330 285 9