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by the Reitox National Focal Point

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DRUG SITUATION 2005

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REPORT ON THE DRUG SITUATION 2005

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The Report on the Drug Situation in the Netherlands 2005 has been written for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Each year, national centres of expertise on drug-related issues in the member states of the European Union ('Focal Points') draw up a report on the national drugs situation, according to guidelines provided by the EMCDDA. These reports form the basis of the "Annual Report on the State of the Drug Problem in the European Union" compiled by the EMCDDA. In line with the guidelines, the report focuses on new developments in the reporting year.

This 2005 national report was written by the staff of the Bureau of the National Drug Monitor (NDM) at the Trimbos Institute and staff of the Scientific Research and Documentation Centre (WODC) of the Ministry of Justice. The NDM was established in 1999 on the initiative of the Ministry of Health, Welfare and Sports. The Ministry of Justice also participates in the NDM. The NDM carries out the functions of the Focal Point.

The NDM relies on the contribution of a multitude of experts and input from registration systems and monitors in the Netherlands. In particular, the authors would like to thank the members of the Scientific Committee of the NDM and other expert reviewers for their valuable comments on the draft version of the report.

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Developments in drug use

There are no new nationally representative prevalence data on drug use in the population in the reporting year. The latest figures suggested that drug use had generally increased (1997-2001) among the population above the school age, and had stabilised or decreased among secondary school pupils (between 1996-2003). Moreover, the increasing trend in cannabis use until 1996 was paralleled by a minor reduction in the age of first cannabis use. Between1996 and 2003, the age of first cannabis use remained stable. These trends among youth are hard to explain, since they may be due to, for example, effective prevention, ceiling effects in drug use, effects of policy measures, or market factors.

Local data from the club scene in Amsterdam suggest that the prevalence of the use of cannabis, amphetamine and ecstasy decreased between 1998 and 2003. Moreover, the amount of substances consumed per occasion or night also decreased. For ecstasy, the moderation of use might be related to changes in music styles and/or the awareness of the potential health hazards. Prevalence rates of cocaine among club visitors in Amsterdam had also dropped, but the average amount consumed per occasion had increased. It is not known whether similar trends have occurred elsewhere in the country since quantitative data are lacking. Nationwide *observational* data in the reporting year suggest that cocaine use is on the rise and has spread through the whole country and to all types of settings (clubs, discotheques, lounges, cafes and at home). The popularity of the combined use of cocaine and alcohol seems to be growing.

Local studies point at the still growing importance of crack in groups of problem hard drug users. Virtually all problem opiate users also consume crack and for a (probably growing) minority crack appears to be the main hard drug (without opiates). In spite of variations in estimation methods, the number of problem opiate/crack users seems to be relatively stable in the past ten years (3.1 per 1000 people of 15-64 years). There are no reliable estimates of the group of primary crack users who do not consume opiates.

The increased cocaine and crack use seems to be consistent with other indicators, showing a steady rise in the number and proportion of cocaine clients at outpatient drug treatment services (nowadays 37% of all new drug clients against 29% for opiates), and an increase in the number of hospital admissions where cocaine abuse or dependence is mentioned as a secondary diagnosis (377 in 2000 and 551 in 2004). However, the initial rise in the annual number of recorded acute cocaine deaths between 1996 and 2002 (10 and 34, respectively) did not continue in the past years. Overall, the total number of recorded acute drug-related deaths remained relatively low in the past ten years (between 100 and140), although upward and downward fluctuations can be noted. The ageing of the population of the opiate/polydrug population is reflected in the further increasing proportion of overdose victims in the higher age groups. In the late eighties (1985-1989), 15% of the victims aged between 35 and 64 years, against 59% in the period 2000-2004.

As far as cannabis is concerned, the proportion of cannabis clients among the new clients at outpatient drug treatment centres has also increased over the years (25% of all new drug

clients today are cannabis clients). The number of hospital admissions with cannabis abuse or dependence as a secondary diagnosis also increased, although remaining at a fairly low level (193 in 2000 and 322 in 2004). Whether these developments correspond with an increase in the number of problem users and/or dependent users is not known, since no trend data are available on the number of problem cannabis users.
Market data show that the average THC concentration in Dutch home-grown cannabis decreased from 20% in 2004 to 18% in 2005, which might indicate a turning point after several years of a steady rise in the THC concentration. The results of research on the acute health effects of high doses of THC will be available next year.

Responses and interventions
Some drug policy measures have been taken recently, or in the past, in response to the developments mentioned above. In 2004, a national action plan was launched to discourage cannabis use, and to promote research on problem use of cannabis, especially in the field of its relationship with mental disorders. Moreover, a new research programme of the National Addiction Research Programme ("Risk behaviour and dependence") of the Dutch Health Research and Development Council (ZonMw) will start in 2006. The themes include the epidemiology of and risk factors related to the initiation of drug use and chronic drug use, and the effectiveness of interventions, with special emphasis on problem use of cocaine and cannabis. Problem use of cocaine was also addressed in the first phase programme, which has resulted in various publications (for example a dissertation on outreach interventions for chronic crack users).

At a more general level, various initiatives focus on the improvement of the quality of addiction care, such as the five-year programme Achieving Results, which is now in its second phase. The impetus is on improving medical and nursing interventions, further development of protocols, and improving professional training and education. This longer term programme explicitly works on the quality enhancement of addiction care in general. Its focus is on the field of prevention and treatment.

Drug prevention is increasingly considered a part of public health prevention, targeting vulnerable groups or risk groups in society. The focus is on health in general, i.e. also covering legal drugs and food and sports. Organisations and tasks in public health prevention are being developed at this moment and the Collective Prevention Public Health Act (Wet Collectieve Preventie Volksgezondheid) delegates preventive activities mainly to the municipalities.

Several developments can be noted at the level of specific interventions. In the reporting year, the experiment with the co-prescription of medical heroin for a specific group of problem heroin addicts was shown to be cost-effective. National policy has now committed itself to continue and broaden this type of care to more cities, but funding this new arrangement still remains insufficient. Further, an American family-based prevention programme (Strengthening Families) targeting problem youth is being tested in three addiction care centres. Furthermore, a randomised clinical trial is currently running which deals with alcohol prevention and treatment via the web. This may also be realised for illicit drugs, such as cannabis and cocaine. Finally, some addiction care organisations started co-operation with self help groups because this is perceived as advantageous for clients, and existing barriers should be demolished between the different types of care.

Law enforcement and criminal justice system

The increasing trend in the number of reported Opium Act crimes during the first phases of the criminal justice chain continued in 2004. For example, in the reporting year the Public Prosecutor recorded 21,597 Opium Act cases against 17,087 cases in 2003. However, prison data, at the end of the chain, did not show such an increase in Opium Act cases. Other sentences did show some increase, like community service orders, financial transactions, fines and dispossessions. These developments are consistent with various policy programmes that were operational in 2004. These include a programme aimed to enhance the efforts to combat ecstasy production and trafficking; a programme aimed to combat cocaine trafficking via airplanes coming in at Schiphol Airport; and a programme to intensify enforcement on cannabis crimes. Moreover, two programmes affect prison sentences and crimes committed by drug users. The first involves the modernisation of the implementation of sanctions and efficient implementation of sentences in the Dutch prison system. Second, a comprehensive programme, running from 2002 up to 2008, aims to reduce crimes and public nuisance caused by, among others, drug users who are repeat offenders.

Part A: New Developments and Trends

1 National policies and context

In accordance with the EMCDDA guidelines, this chapter focuses on new developments after 2003 and does not give an exhaustive picture of the legal framework and the national drug policy in the Netherlands.

1.1 Legal framework

Laws

The use of drugs is not penalised in the Netherlands, unlike the production, trafficking and possession of drugs. The framework for prosecuting unlawful activities, especially the production and trafficking of drugs, and for sentencing criminal drug users has been gradually expanded in the past decade and now involves an extensive set of laws and other legal instruments.

In the Netherlands, the most important laws on drugs are:

- Opium Act (*Opiumwet*) – (penal law)
- Prisons Act (*Penitentiaire Beginselenwet*) - (penal law)
- Placement in an Institution for Prolific Offenders Act (*Plaatsing in een inrichting voor stelselmatige daders – ISD*) - (penal law)
- Act Temporary Measures for Penitentiary Capacity for Drug Couriers *(Tijdelijke Wet Noodcapaciteit Drugskoeriers)* - (penal law)
- Closing Drug Premises Act (*Wet Sluiting Drugspanden*) - (administrative law)
- Abuse of Chemical Substances Prevention Act (*Wet Voorkoming Misbruik Chemicaliën*) - (chemical precursors – administrative law)
- Public Administration Probity Screening Act *(Wet bevordering integriteitsbeoordelingen door het openbaar bestuur or Wet Bibob)* - (money laundering – administrative law)

Changes relating to these laws will be described below. For further information: see our National Reports of 2002-2004.

The Opium Act
Dutch legislation is consistent with the provisions of all the international agreements which the Netherlands has signed, i.e. the UN Conventions of 1961, 1971 and 1988, and other bilateral and multilateral agreements on drugs. The Dutch Opium Act (1928), or Narcotics Act, is a penal law. It was fundamentally changed in 1976. A distinction was made between drugs presenting unacceptable risks (hard drugs) and drugs like cannabis (soft drugs), which were seen as less dangerous. Since then, the Opium Act has been amended repeatedly but its basic structure was maintained. For more detailed information, see our National Report 2002.

Since September 2003, physicians can prescribe cannabis for medical reasons, and pharmacies are allowed to supply this drug. A governmental agency, the Office of Medicinal Cannabis (OMC), regulates the whole process of production, delivery and quality control of medical cannabis. It was estimated that 200 kilos, or more, of medical cannabis could be

sold in 2004 to 10,000 or 15,000 potential patients. But only 1,000 to 1,500 patients did actually use the legal cannabis on a regular basis, leading to annual sales of about 70 kilos (T.K.24077/140:). In 2005, the sales stabilised on this level, leading to a structural loss of about € 172,000. At the end of 2005, the Minister of Health will decide whether or not to continue the legal production and sale of medical cannabis. Three reasons are given for the disappointing sales:

- medical cannabis is twice as expensive as the cannabis from the tolerated coffee shops, and not all the Dutch health insurance companies reimburse medical cannabis;
- most of the physicians are not convinced of the effectiveness of medical cannabis, and are reluctant to prescribe it;
- a bad image of the medical cannabis was created by the illegal competitors, such as coffee shops owners (T.K.24077/140).

Within the regulations of the Opium Act, the OMC is granted opium exemptions for cannabis and cannabis resin, and has the exclusive legal rights on the import and export of cannabis and cannabis resin.

The maximum penalties in the Opium Act remained unchanged (see National Report 2002).

Institution for prolific offenders

On 1 April 2001 the Judicial Placement of Addicts (*Strafrechtelijke Opvang Verslaafden-SOV*) intervention was introduced. It allows the courts to commit prolific offenders, who are addicted to drugs and who have failed to respond to other forms of treatment, to a special institution for up to two years. Originally, it was decided that further implementation of the law should await the outcomes of an evaluation for three to four years (to be expected in 2006). The experiment runs in four institutions – in Amsterdam, Rotterdam, Utrecht and the 'Southern municipalities' -, totalling 219 places. The aim of this initiative is to reduce public nuisance and to stimulate behavioural change of the offenders.

In the reporting year, the *process* evaluation of this experiment was published. The aims of this evaluation were to clarify how and under what conditions this intervention was implemented and carried out, as well as to describe the SOV as intended and as achieved. The evaluation report mentions that several national- and local-level factors did affect the implementation of the SOV. Respondents reported a gap between national-level politics and the local conditions. The frameworks provided for the implementation were deemed insufficient, as was the management of the process. At local levels, cooperation did not always proceed smoothly. The process was characterised by a profusion of actors at both national and local levels, engaged in various circuits and frameworks. At the same time, within the many organisations involved, responsibilities and tasks relating to implementation and adaptive mechanisms were diffuse and relatively powerless. During the experiment, continuous adjustments were implemented resulting in an increasingly better fine-tuning between the participants. The main conclusion is that there a considerable gap between the SOV as intended and the achieved SOV (Van 't Land et al. 2005).

Based on this evaluation, one of the improvements was the development on central level of a policy outline that will be used as a framework on operational level for all (local) partners involved. This is will be implemented at the successor of the SOV (see also chapter 9.3).

In 2004, a new act 'Placement in an Institution for Prolific Offenders (Plaatsing in een inrichting voor stelselmatige daders – ISD)' came into effect (Stb 2004/351). This act refers to all prolific offenders, not only addicts. Until 2007, thousand places will be created for these

offenders, excluding the addicted offenders. The Judicial Placement of Addicts (SOV) will operate as a separate programme within the ISD-programme. About 20 percent of these compulsory treated offenders might give up committing crimes after completion of this programme (E.K.28980/B).

Laws implementation

Opium Act Directive
In the Netherlands, criminal investigation and prosecution operate under the so-called 'expediency principle' or principle of discretionary powers (*opportuniteitsbeginsel*). The Dutch Public Prosecution Service has full authority to decide whether or not to prosecute and may also issue guidelines. The most recent set of comprehensive guidelines for enforcing the Opium Act was the Opium Act Directive of 2000, which is valid from 2001until 2005 (Stc 2000/250: Staatscourant 27 december 2000 nr.250 2000). This Opium Act Directive will be prolonged until the end of 2008. For more information see our National Report 2003.

The sale of cannabis is illegal, yet coffee shops are tolerated to sell cannabis, if they adhere to certain criteria: no advertising, no sale of hard drugs, not selling to persons under the age of 18, not causing public nuisance and not selling more than 5 grams per transaction (AHOJ-G criteria). In recent years, the government policy has aimed to reduce the number of coffee shops. However, the decision whether or not to tolerate a coffeeshop lies with the local governments. At the end of 2004, the Netherlands have 737 outlets of cannabis that are officially tolerated (coffee shops). This is a 2.3 percent overall decrease compared to the situation in 2002, and a 38 percent reduction compared to 1997 (see paragraph 10.1). Eighty percent of the Dutch municipalities do not have a coffee shop. There are major differences between municipalities concerning the enforcement of the coffee shop guidelines (Bieleman et al. 2005).

It is still uncertain whether the decrease in the number of coffee shops has resulted in increased supply of cannabis through channels outside coffee shops, but a study on the non-tolerated sale of cannabis in the Netherlands did shed some light on this issue. The study was conducted in ten municipalities and estimates the size of the non-tolerated cannabis market at 30% in municipalities with officially tolerated coffee shops and a much higher percentage in municipalities without coffee shops. The size of the non-tolerated cannabis market seems to be mainly small-scale. However, the cannabis is supplied by different kinds of dealers. There are fixed as well as mobile non-tolerated cannabis dealers. The fixed dealers include home dealers and under-the-counter dealers, and the mobile dealers include 06 dealers (by mobile phone) and street dealers. In addition, there are home growers, who can be either fixed or mobile dealers. For minors, it is reasonably common to buy at non-tolerated sales points (Korf et al. 2005b). The Minister of Justice and the minister of the Interior and Kingdom Relations intend to reduce the number of non-tolerated cannabis sales points by enlarging the existing judicial instruments to close down premises (T.K.24077/165)(. (See also paragraph 10.1.)

Drug related nuisance
One of the main targets of the Dutch drug policy is the reduction of drug-related nuisance, including nuisance due to drug tourism. Below we will describe three of such recent initiatives.

An important pilot project to combat drug-related crime and nuisance at the local level ran from 2001 to 2005 in the city of Venlo, on the Dutch-German border: the *Hektor Project.* Its purpose was to diminish public nuisance mostly caused by German drug tourists who tended to buy cannabis mainly at 'illegal' coffee shops. The project operated on three levels. One level aimed at diminishing public nuisance by tracking down and closing non-tolerated points of sale (administrative enforcement) and step up action against drug-related crime. The second level had to do with the redevelopment of parts of the city centre to make it more attractive to new investment. The third level of the project concentrated on redefining the local coffeeshop policy.

- In July 2005, a final evaluation report was published (Snippe et al. 2005). Both in organisational terms and in the results reached, the law enforcement goals of the project have largely been achieved. By creating multi-disciplinary law enforcement teams, the local government, the regional police, the Public Prosecution Service and the Fiscal Intelligence and Investigation Department (FIOD-ECD) the number of street drug dealers and drug dealing premises diminished dramatically. Nuisance figures fell by 75%. Also, a substantial amount of money was confiscated.
- As for the policy regarding coffee shops, two coffee shops were relocated from the inner city area to the periphery of town in order to curb public nuisance of drug tourists. The evaluation of the measure is still in process.
- Within the track of redeveloping parts of the city centre some (planning) hurdles had to be taken before this part of the project got underway, as a result of which the execution was delayed. However, the intended efforts were largely realized. The design phase was to be rounded off in the first half of 2005 with a neighbourhood development plan. This plan will form the basis of further realization of the land development and zoning plan.
- The Minister of Justice decided to continue this project for 2005 (T.K.24077/167).

A similar project, *Operatie Hartslag*, runs in the city of Heerlen, also a town on the Dutch-German border. This project is characterized by a multidisciplinary cooperation between the local authority, the Police, the Public Prosecution Service, care institutions, transport companies, residents and entrepreneurs. It combines law enforcement and care in combating drug-related nuisance. In September 2004, this project won an award as the most successful approach in improving safety in the inner city. In November 2005, the same project won the Athena for the Best Practice Example of the Year. Other important projects run in Utrecht, Rotterdam, and Roosendaal.

In 2006, a pilot project will start in the border town Maastricht to investigate the possibility to bar non-residents from the tolerated coffee shops in that city. The intention of this measure is to reduce the number of foreign drug tourists and the nuisance they cause.

Intensified actions against ecstasy

In 2001, the national government announced measures against the production, sale and use of ecstasy in the white paper "A combined effort to combat XTC" (T.K.23760/14). This action plan costs € 18.6 million each year and is evaluated by an independent research institute. The first measurement was carried out in 2003, and the interim evaluation was sent to Parliament in June 2005 (T.K.23760/19). The final evaluation will be conducted in 2006.

- From the interim evaluation (Neve et al. 2005) emerges the general picture that developments have taken the direction as envisaged in the white paper.

- In 2002, six million ecstasy pills were seized, in 2003 5,4 million and in 2004 5,6 million pills. Also, in 2002 43 ecstasy production locations were dismantled against 37 in 2001. In 2003, the number of dismantled locations decreased to 37, which points to a decrease of the XTC production in the Netherlands, according to the researchers. In 2002, 105 persons accused of ecstasy-related offences were arrested, against 214 suspects in 2003 and 197 in 2004. However, the price and purity of ecstasy have not changed.
- So, the interim report comes to the carefully-worded conclusion that it is uncertain whether the afore mentioned developments are the result of the policy set out in the XTC white paper.

The most important export markets for ecstasy pills are the USA, the UK, Belgium and Germany. The investigation services of these countries continue to report a decrease in the seizures of assumed Dutch ecstasy pills (T.K.23760/19). In November 2004, the Government choose combating the production and trafficking of synthetic drugs as one of the six priorities in a general action plan to combat organised crime. In November 2005, the second international synthetic drug conference was organised by the Dutch law enforcement agencies and ministries in close cooperation with their colleagues from Belgium.

Drug trafficking

In January 2002, the government presented the "Plan of Action for Drug Trafficking at Schiphol", which intended to intensify the existing two-line approach to combat cocaine smuggling from the Netherlands Antilles and Aruba, and Surinam (T.K.28192/1). The first line comprises measures to prevent drugs transports to the Netherlands, and the second line is directed at ensuring that intercepted drugs are confiscated and judicial intervention against couriers will follow.

Since early 2003, a special law court with prison facilities has been operational at the airport. Since the beginning of 2005, a *100%-control* of all flights from the Netherlands Antilles, Aruba, Surinam, Peru, Venezuela and Ecuador was completely effectuated. In 2004, the total number of arrested drug couriers had increased to 4,086 persons, of whom 3,466 were caught as a result of the 100% controls and the other 620 by regular controls. In the cargo or luggage of the 100% flights almost no cocaine is found anymore.

Most of the actual drug couriers at Schiphol airport swallow the pellets of cocaine. Since June 2004, body scans are used to determine immediately whether a passenger has swallowed drugs or not. The Department of Justice claims that before the 100%-controls started, about 30 to 50 drug couriers per flight came to the Netherlands from the Antilles, against 1 or 2 couriers after the implementation of this measure (T.K.28192/29;T.K.28192/38).

Another important target of this policy is to improve the collaboration between the authorities of the Netherlands Antilles and Aruba, and international collaboration within the European Union. A special Anti-Drug Team on the Antilles is financed by the Netherlands. One of the results of the European Cocaine Conference in The Hague (June 2004) was an intensification of the collaboration in combating airborne cocaine smuggle between the Netherlands and Spain, Portugal, France, United Kingdom, Ireland, Germany, and Belgium (T.K.28192/36).

As a possible consequence of the 100%-controls at Schiphol airport, it was anticipated that the trafficking of cocaine might be shifted to the harbour of Rotterdam. So, more custom staff was deployed there (T.K.Aanhangsel/2295).

By order of the Minister of Justice, the report 'The Dutch Drugs Market' was drawn up by the National Crime Squad, in which an attempt is made to quantify the position of the Netherlands in the international drug market. The main conclusions are: 1) the Netherlands is one of the most important EU-production countries for synthetic drugs; 2) for heroin, cocaine and cannabis, the Netherlands is an important transit country; 3) the Netherlands is also an important cannabis producing country; and 4) about a third of the global ecstasy market is supplied from the Netherlands (T.K.28192/34).

1.2 Institutional framework, strategies and policies

The national drug policy in the Netherlands has three major objectives:

- To prevent drug use and to reduce harm to users.
- To diminish public nuisance caused by drug use (the disturbance of public order and safety in the neighbourhood).
- To combat drug-related criminality.

This policy was reconfirmed in the white paper on cannabis policy (see below) (T.K.24077/125). For more detailed information on national drug policy: see National Reports 2002 and 2003. In the reporting period no *major* changes in the objectives of the national drug policy were formulated by the government.

Some aspects of the white paper on cannabis policy of 23 April 2004 were implemented in the reporting year.
The main policy intentions were:

- A National Action Plan to Discourage Cannabis Use.
- Intensified enforcement of the laws and regulations on cannabis. The possibilities for the local authorities will be enhanced to apply administrative coercion.
- More severe measures to curb coffee shop tourism. In accordance with the EU Framework Decision on Illegal Drug Trafficking close cross-border police cooperation in this field will be encouraged (see also the previous paragraph on drug-related nuisance).
- Tougher action against large-scale cannabis cultivation. The Government pursuits a combined approach of more severe administrative coercion and criminal prosecution.

See for more details of this white paper: our National Report 2004.

In December 2004, two reports concerning the screening of the Dutch cannabis "branch" were published (Bieleman et al. 2004b;ES&E 2005). The focus of the investigation was the interconnection between the tolerated coffee shops and organised crime. The cannabis "branch" consists for about 60 percent of coffee shops, for 27 percent of grow shops, for eight percent of smart shops and for two percent of combined shops. Grow shops are legal retail or wholesale trades in legal requirements which can also be used for the cultivation of cannabis. Smart shops offer legal 'energizers', 'relaxing herbs', 'aphrodisiacs' and hallucinogenic drugs. It was found that there is no economic concentration of power in the Dutch cannabis trade. However, about 80 percent of the shopkeepers had criminal records. The role of the grow shops appears to be pivotal in the cultivation of Dutch cannabis. It is concluded that this branch is vulnerable for organised crime (T.K.24077/163). In his response to the conclusions of these reports, the Minister of Justice announced to intensify the possibilities to check the criminal antecedents of the entrepreneurs in this branch and to reduce the position of the grow shops.

In a major debate in Parliament, the Minister of Justice announced in April 2005 a new approach to combat cannabis cultivation: an integral approach to round up cannabis farms in urban disadvantaged areas, and more attention to the organised criminal networks behind the cannabis cultivation, with special attention to the grow shops (T.K.Handelingen 2004-2005/ 78).

As part of the programme Enforcement at Level (Handhaven op Niveau), two reports were published to sustain local governments in enforcing local coffee shop policy and practice examples for the integral approach of rounding up large-scale cannabis nurseries. Especially the integral approach to dismantle cannabis farms, combines criminal, administrative and civil law instruments, including house expulsion, additional claims by the tax department and the electricity company (www.handhavenopniveau.nl).

The first annual report of the Public Administration Probity Screening Act (Wet BIBOB), which gives local administrators the possibility to screen all kinds of new licence requests, underscores that consequent use of this instrument can prevent criminals to enter the legal cannabis branch (www.jusititie.nl/bibob/).

Medical Heroin prescription

Already in June 2004, it was decided by the Government that the treatment capacity for the medical prescription of heroin for chronic and treatment-resistant opiate addicts can be extended from 300 to 1000 addicts (T.K.24077/137). This will be a special treatment for a limited group in the setting of the specialised addiction care. The procedure to register heroin as an official medicine was initiated by the Government, but will not be finished before the end of 2006. Most of the treatment costs for this special group have to be paid by the local municipal authorities. By the end of 2005 the Minister of Health adopted the plans of four out of the six municipalities that already provide medical heroine co-prescription to increase their treatment capacity. Moreover, he approved of the plans of eight other municipalities to develop a treatment unit. It is expected that the new units will be in function by the end of 2006. By that time, the number of treatment places will have reached a total of 715 (T.K.Aanhangsel/526)

1.3 Budget and public expenditures

In the reporting year no new study was published on this subject. The data reported in our National Report 2004 will be published in a scientific journal (Rigter 2003).

1.4 Social and cultural context

Public attitudes

There are no recent general surveys or opinion polls concentrating on attitudes towards the drug problem (see National Report 2002). However, the third “Perception of societal issues Monitor” (Belevings monitor maatschappelijke onderwerpen) contains some information on this issue. For most people, to combat criminality is the most important social issue. Prolific offenders and high risk youth have to be approached more toughly (Mies et al. 2005). (See also paragraph 2.4.)

Cannabis in the mass media

Just as in 2004, some City Councils and mayors openly discussed the possibility of legalising the cultivation of cannabis in order to regulate the supply (the so-called backdoor) of the coffee shops. In May 2005, mayor Leers of the border-town Maastricht organised an EU-regional Soft Drug Conference with some colleagues from Belgium and Germany, in order to initiate a common approach to combat the commercial cultivation of cannabis and to investigate experiments to regulate the supply of the coffee shops. This process will be continued in 2006.

In order to diminish the involvement of organised crime with the production of cannabis and the nuisance caused by German, Belgian and French drug tourists in the region of South-Limburg, mayor Leers is an advocate of a strict regulation of the production of cannabis and of creating a special 'street' with coffee shops on the outskirts of the town. The expression of these views in the mass media let to an emergency debate in the Parliament with the Minister of Justice, mister Donner, on the cannabis policy. The Minister declared during this debate that the regulation of the backdoor will not lead to a decrease in the illegal cannabis cultivation and will not solve the problems with the drug tourists. However, the Parliament adopted a motion asking the Government to investigate new scenarios to regulate the supply of the coffee shops (T.K.Handelingen 2004-2005/ 78).

Another motion asked the Government to investigate with our European counterparts whether there is some sympathy for the Dutch liberal drug policy. A letter was sent to the EU-Ministers of Justice and the Interior asking: "I would like to hear from you if it is true that there is a growing sympathy in your country to the Dutch approach in the combating of soft drugs, or that the reports to that effect do not hold ground". On 30 September 2005, Minister Donner reported to the Parliament that he did not receive any reply which supported the Dutch coffee shop policy (T.K.24077/168;T.K.24077/169).

In June 2005, an Attorney General of the Supreme Court of Justice criticised the cannabis policy in the Netherlands as 'an ineffective form of law enforcement' and the efforts to enforce cannabis prohibition as 'extremely thankless' and that 'law enforcement struggles with an unworkable mandate'.

Dutch Cocaine Distribution Chains

In a qualitative study a picture was drawn of cocaine distribution chains in the Netherlands as seen through the eyes of the participants themselves. The interviews demonstrate that the structure and methods of working within the cocaine distribution chain in the Netherlands are connected with the way the cocaine is imported: large-scale via the sea harbour or small-scale via Schiphol Airport. The large-scale smugglers are people who are active on several other terrains of illegal trade and criminal acts. These transports are seldom destined for the Dutch local market. The Dutch local market for cocaine is almost completely supplied by small-scale imports into Schiphol Airport. Most retail dealers in the cocaine business are addicts themselves and their own drug use is the primary motive to start dealing drugs themselves. On the other hand, participants on the middle and import level of the cocaine trade rarely seem to be motivated by their own addictions (Gruter et al. 2005).

2 Drug Use in the Population

2.1 Drug use in the general population

There is no new information on drug use in the general population at the national level. The National Prevalence Surveys in 1997 and 2001 among the population of 12 years and older showed that drug use had generally increased in this period (table 2.1), although this increase was not evident among the 12-15 year old. The third survey will be carried out in 2005 (results available in 2006).

Table 2.1: Drug use (%) in the Dutch population of 12 years and older in 1997 and 2001

	Lifetime prevalence		Last month prevalence	
	1997	2001	1997	2001
Cannabis	15.6	17.0*	2.5	3.0*
Cocaine	2.1	2.9*	0.2	0.4*
Ecstasy	1.9	2.9*	0.3	0.5*
Amphetamine	1.9	2.6*	0.1	0.2
Hallucinogenic mushrooms				
Heroin	0.3	0.4	0.0	0.1

* Significant change from 1997 to 2001. Source: National Prevalence Survey, CEDRO (Abraham et al. 2002).

There are new data only for the city of Utrecht, where cross-sectional surveys among the population of 16-54 years were carried out in 1999 and 2003 (Verburg et al. 2005). The net samples consisted of 2485 responders in 1999 (response rate 56%) and 1840 in 2003 (response rate 54%). Last year prevalence rates of drug use are given in table 2.2:

Table 2.2: Last year prevalence of drug use among the population of 16-54 years in Utrecht

	1999	2003
Cannabis	13%	14%
Cocaine	2%	1%
Ecstasy	3%	3%
Hallucinogenic mushrooms	2%	1%
Other illicit drugs*	1%	1%

* Heroin, amphetamine, LSD, and methadone. Source: Municipal Health Service of Utrecht (Verburg et al. 2005).

Multiple regression analysis correcting for socio-demographic factors did not reveal significant overall differences in drug use between 1999 and 2003. However, a subsequent analysis revealed that trends differed according to socio-economic status. Between 1999 and 2003 the prevalence of cannabis use had increased among people with a low or middle income and decreased among people with a high income. The prevalence of ecstasy use had increased among people with a low education and decreased among those with a middle educational level and remained unchanged among those with a high level of education. Socioeconomic inequalities had also increased for problem use of alcohol and smoking. These data suggested a general increase in unhealthy behaviour among people with a low socio-economic status.

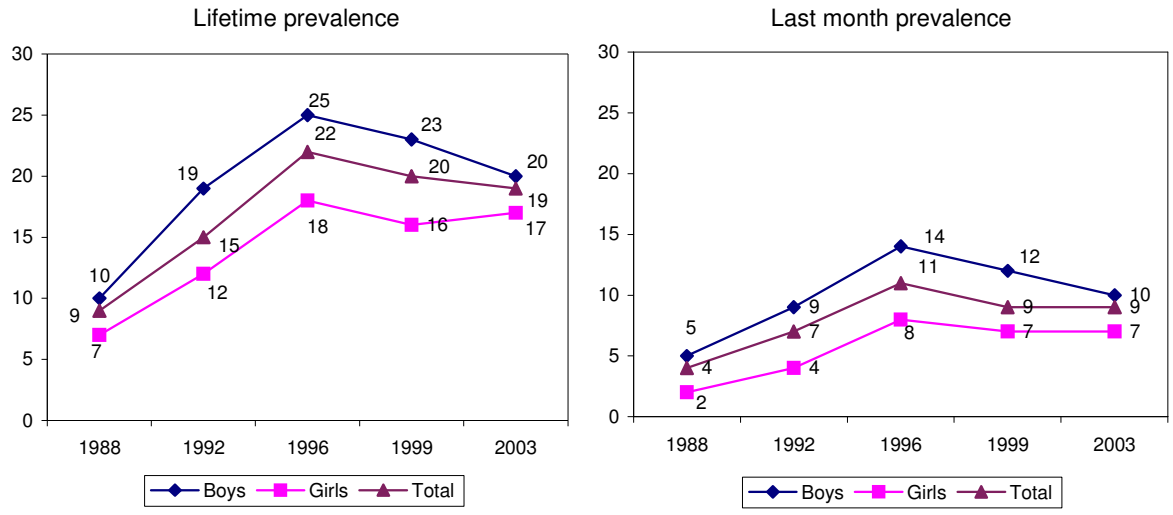
Further, in 2003 the last month prevalence of cannabis use was lower among Moroccan people compared to Dutch people[1]. A similar finding has been reported for pupils (Monshouwer et al. 2004).

2.2 Drug use in the school and youth population

In this section we describe trends in drug use among pupils from regular schools. Data on pupils from special schools or truancy projects and other youth are included in &2.3 (special groups).

Trends in drug use among secondary school pupils between 12 and 18 years have been reported extensively in the National Report 2004 (Monshouwer et al. 2004). In this paragraph we will summarise the main findings from the Dutch National School Surveys on Substance Use and present new findings, especially on cannabis use, derived from secondary analyses of the data (Monshouwer et al. 2005) Verdurmen et al. submitted).

Figure 2.1: Trends in lifetime and last month use of cannabis (%) by gender among pupils of 12-18 years



Source: Dutch National School Survey on Substance Use, Trimbos Institute (Monshouwer et al. 2004).

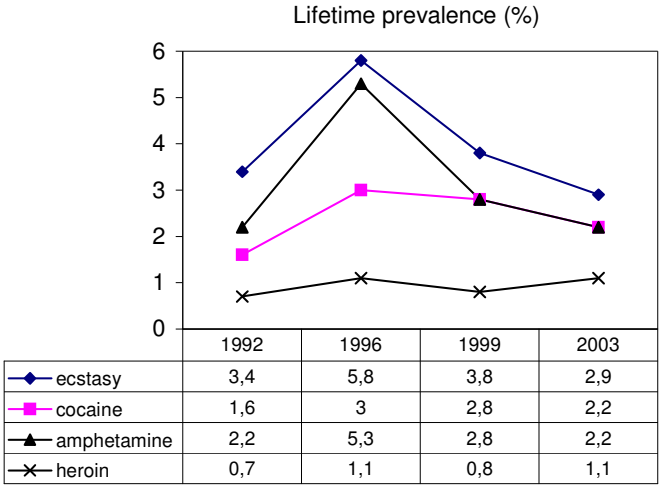
Trends in the prevalence of drug use

In general, drug use among pupils increased between 1988 and 1996 and stabilised in 1999 and 2003. Among boys, the last month prevalence of cannabis use significantly decreased from 14% in 1996 to 10% in 2003 (see figure 2.1). There was no significant change in cannabis use among girls (LMP 8% in 1996 and 7% in 2003). The percentage of pupils using other drugs, such as ecstasy, cocaine, amphetamine or heroin, peaked in1996 and stabilised or decreased since then (figure 2.2). In 2003, 4.5% of the pupils had ever tried one of these drugs and 1.5% was a current user.

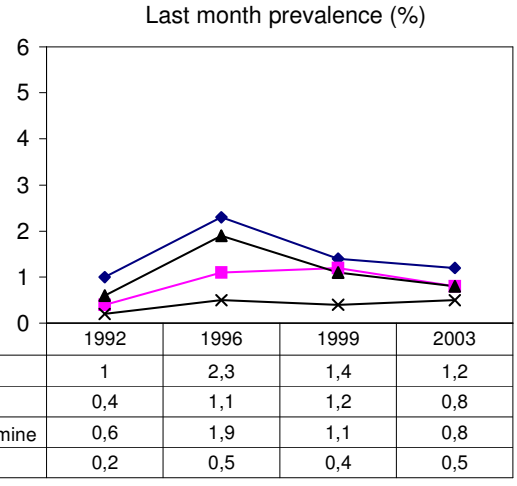
[1] Ethnicity was based on the country of birth of the respondent; for respondents born in the Netherlands, the countries of birth of the mother and father count, with priority of the country of birth of the mother

Note, however, that trends in drug use may be different at the local level. For example, Korf et al. (2003) have noted that the prevalence of cannabis use (ever, current) among pupils in Amsterdam remained at about the same level between 1993 and 2002 (Korf et al. 2003;Verdurmen et al. 2005).

Figure 2.2: Trends in the lifetime and last month prevalence (%) of ecstasy, cocaine, amphetamine and heroin use among secondary school pupils



	1992	1996	1999	2003
ecstasy	3,4	5,8	3,8	2,9
cocaine	1,6	3	2,8	2,2
amphetamine	2,2	5,3	2,8	2,2
heroin	0,7	1,1	0,8	1,1



	1992	1996	1999	2003
ecstasy	1	2,3	1,4	1,2
cocaine	0,4	1,1	1,2	0,8
amphetamine	0,6	1,9	1,1	0,8
heroin	0,2	0,5	0,4	0,5

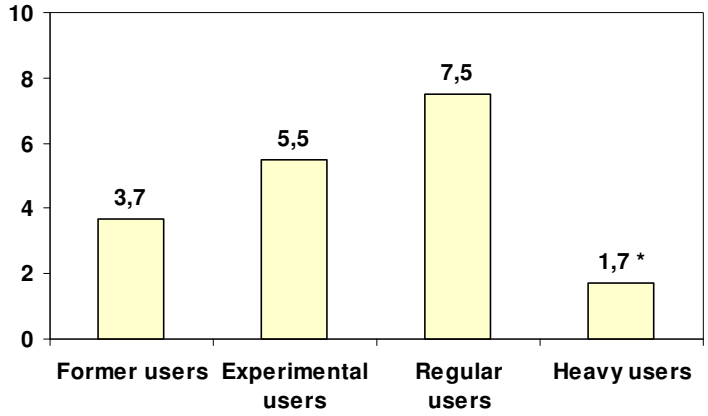
Source: Dutch National School Survey on Substance Use, Trimbos Institute (Monshouwer et al. 2004).

Patterns of cannabis use and correlates

Verdurmen et al. (submitted) investigated patterns of cannabis use by analysing data from the 2003 wave of the Dutch National School Survey on Substance Use. Five groups of users were defined according to the classification applied in the HBSC-study of the WHO: 1) *Never* users, 2) *Former* users, who had ever used but not in the past year, 3) *Experimental* users (one or two times in the past year), 4) *Regular* users (between 3 and 39 times in the past year) en 5) *Heavy* users (40 times or more in the past year).

- The results showed that 82% of the pupils had never used cannabis. Almost 4% had tried cannabis at least once but had ceased used (former user). The majority of the recent (last year) users of cannabis fell in the category of regular users, followed by the experimental users and heavy users (see figure 2.3).

Figure 2.3: Percentage of cannabis users among secondary school pupils (12-18 years) in 2003 by frequency of lifetime use



See text for a definition of the user groups. Source: Dutch National School Survey on Substance Use, Trimbos Institute (Verdurmen et al. 2005).

In the Netherlands, cannabis is virtually always smoked in a joint mixed with tobacco.Table 2.3 gives the average number of joints smoked per occasion by type of cannabis user. It is clear that the frequency of use (as expressed by the types of users) is associated with the number of joints. Most experimental users smoke only one joint or less per occasion, while this amount is reported by only ten percent of the heavy users. Further, over half of the group of heavy users smokes three or more joints per occasion, while only 1 percent of the experimental users indicated to smoke this amount.

Table 2.3: Average number of joints per smoking occasion by type of user

	Less than one	one or two	three or more
Experimental user	84%	15%	1%
Regular users	53%	33%	14%
Heavy users	10%	32%	58%

See text for a definition of the user groups. Source: Dutch National School Survey on Substance Use, Trimbos Institute (Verdurmen et al. 2005).

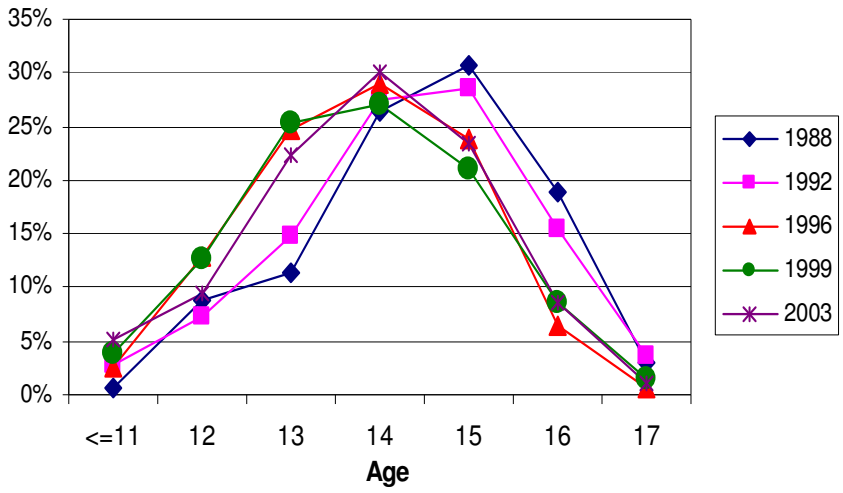
- Significant associations were found between cannabis use and age, regardless of user group (non-users were reference group). More boys than girls were a heavy or regular user, but gender differences were not significant for former of experimental users. In general, pupils from the lower school types were more often a heavy or regular user than pupils from the highest school type.
- Moreover, cannabis use was significantly associated with the quality of the relationship with the parents (having difficulties communicating with parent; parent's lack of knowledge of their leisure time activities and parent's lack of knowledge of their friends). The strength of these associations increased as a function of frequency of use (user group).

Age of first cannabis use

- Monshouwer et al. (2005) have investigated whether changes in cannabis prevalence among secondary school students (age range: 12-17 years) were paralleled by shifts in the age of first cannabis use (Monshouwer et al. 2005).

- They have first charted the cumulative lifetime incidences by age of first cannabis use among all pupils in the five waves of the survey. This showed that the overall increase in prevalence between 1988 and 1996/1999/2003 was the result from an increase in first cannabis use at every age. However, by visual inspection, the slope of the curves in 2003, 1999, 1996, and to a lesser extent 1992, were much steeper than that of 1988, especially at the younger ages (< 15 years). This pattern suggests that the increase in the percentage of very young cannabis users did not merely result from an increase in cannabis use similarly across ages, but that it was also accompanied by a specific shift towards younger ages.
- This suggestion was confirmed in analyses of the age of first use among lifetime users only. The difference in distribution of ages of first use between 1988/1992 (peaking at age 15) and 1996/1999/2003 (peaking at age 14), as shown in figure 2.4, was highly significant. This finding indicates that in later survey years (1996 and later) relatively more users started using at a younger age compared to previous years (1988/1992). For illustration, the proportion of lifetime cannabis users starting at age 13 or younger increased from 21% in 1988 to 40% in 1996, and remained fairly stable since then (37%).

Figure 2.4: Age (in years) of first cannabis use among lifetime users in 1988, 1992, 1996, 1999 and 2003



Source: Dutch National School Survey on Substance Use, Trimbos Institute (Monshouwer et al. 2005).

Possible explanations for trends

It is hard to explain the generally stabilising trend in drug use among young people. Perhaps the reported developments reflect the influence of (school) prevention programmes or point towards a 'ceiling or saturation' effect in drug use. It has also been suggested that the stabilisation or decrease in cannabis use is due to changes in the demographic characteristics of the school population, i.e. the relative increase of pupils of non Dutch ethnic groups that are known to have lower use rates (Korf et al. 2001;Monshouwer et al. 2004). However, Korf et al. (2001) showed that at the national level the breach of trend in 1996 was independent of demographic (including ethnicity) changes in composition of the study population (Korf et al. 2001).

The stabilisation in 1996 in cannabis use has also been linked to Dutch policy changes, such as measures to curb the number of coffee shops (see paragraph 10.1) and the increase in 1996 in the legal age for buying of the age limit from 16 to 18 years for admission to coffee shops. However, it is a matter of discussion of whether these measures have influenced actual availability of cannabis to young people, and hence have affected use rates. At least, they may have had an impact on *perceived* availability as indicated by a post-hoc analysis of data of the National School Survey on Substance Use: the percentage of students, thinking that it would be fairly or very easy to obtain cannabis if they wanted, rose from 24% in 1992 to 34% in 1996 and then dropped to 26% in 1999, remaining at the same level in 2003.

On the other hand, Korf et al. (2001) found that, after 1996, pupils were more likely to buy their cannabis *outside* coffee shops, from friends or family (Korf et al. 2001). Thus, raising the age limit did not seem to have affected the availability of cannabis but rather resulted in a displacement of the cannabis market at the user level. However, as argued by Monshouwer et al. (2004), it is not certain that the share of the coffee shop in this market has been fully taken over by other suppliers (Monshouwer et al. 2004).

Finally, it should be noted that the above mentioned policy measures were specific to cannabis but the stabilisation (or decreasing) trend in cannabis use since 1996 coincided with a similar trend in the use of other drugs. This suggests that some other mechanisms might have been at work as well, although it is also possible that the stabilisation/decrease in other drug use occurred in the wake of the stabilisation/decrease of cannabis use (e.g. social gateway).

2.3 Drug use among specific groups

Although survey methods vary widely, various studies suggest that - compared with the general population - drug use is more common in special settings, such as clubs, parties and coffee shops, and in special groups, such as the homeless, psychiatric patients, school drop-outs, detainees and street prostitutes. In this report we focus on findings from new studies. Data on drug use in the nightlife scene are given in detail in chapter 13.

Pupils from special schools and truancy projects
A national survey in 1997 indicated that substance use is fairly common among pupils of special schools and school drop-outs participating in special ‘truancy projects’ (Stam et al. 1998). For example, the prevalence of last month cannabis use among these groups of young people of 12-18 years was 14% and 35%, respectively. These findings are corroborated by a recent study among 280 pupils of special schools and participants of truancy projects in Amsterdam (Wouters et al. 2004). Prevalence rates have been compared with those of a sample of pupils from regular schools from the same age. Table 2.4 shows that twice as many pupils from special schools or truancy projects have ever tried cannabis or are a current user compared to their peers from regular schools. Moreover, the percentage of daily cannabis blowers among the current users is also about twice as high (33% against 15%). About one in six current users (17%; mostly daily users) is convinced that he or she is dependent on cannabis. The majority of pupils from special schools or truancy projects has never consumed other illegal drugs, but prevalence rates are nonetheless higher compared to pupils from regular schools.

Table 2.4: Prevalence of drug use among pupils of special schools and truancy projects (2003) and among third grade pupils of regular schools (2002) in Amsterdam*

	Special schools/ & truancy projects		Regular schools	
	Lifetime	Last month	Lifetime	Last month
Cannabis	51%	32%	27%	15%
Cocaine**	3%	1%	1%	<0.5%
Ecstasy	9%	3%	3%	<0.5%
Amphetamines	6%	1%	2%	0.5%
Hall. mushrooms	12%	3%	3%	1%
Heroin	2%	1%	1%	<0.5%

* In both samples the respondents were between 13 and 16 years (average 15 yrs). ** excluding crack (both LTP and LMP 1% for both samples). Source: (Wouters et al. 2004).

Young detainees and school drop-outs

In the framework of an international study on the relationship between alcohol, drugs and violence among young people in the Netherlands, United States and Canada, Korf et al. (2005) interviewed 394 juvenile detainees and school drop-outs in three provinces (North-Holland, Utrecht and Flevoland) (Korf et al. 2005c). The detainees were recruited from youth correctional centres. School drop-outs (youth who had not been to school at least one month per 12 months, excluding holidays) were recruited through various institutes and fieldwork. Girls were (deliberately) overrepresented among the detainees. Therefore, prevalence rates are given separately for girls and boys (see tables 2.5 and 2.6). All respondents were between 14 and 17 years at the time of the interview. For detainees, prevalence rates refer to the period just before detention.

Table 2.5 and table 2.6 show that cannabis use is quite prevalent among both young detainees and school drop-outs. The use of other drugs, such as ecstasy, amphetamines and cocaine, is less common, but rates are generally higher compared to their (non deviant) peers. Heroin and crack use is rare. Prevalence rates of male detainees and drop-outs suggest that both groups belong to the same population. However, the relatively high percentages of drug users among female detainees compared to female drop-outs suggest that the former is a more deviant group (see also chapter 11).

About one in three respondents had used alcohol and/or drugs prior or during the most serious violent incidents, with cannabis and alcohol scoring highest. An analysis of data on the (perceived) relationship between substance use and violence according to the tri-partite model of Goldstein, suggests that most drug-related violence can be classified as pharmacological (35% of the incidents). While such a relationship is plausible given the aggression enhancing (or triggering) effects of alcohol, such a mechanism is less likely, however, for cannabis. Moreover, economic-compulsive violence (acquisitive crime) was rare as was systemic violence (violence intrinsically related to the drug dealing scene). Probably, other factors (like personality or behavioural disorders etc.) may contribute to the high level of substance use among these 'deviant' groups.

Table 2.5: Prevalence of drug use among juvenile detainees prior to detention in 2002/2003

	Boys (n=135)	Girls (n=70)

	lifetime	last month	lifetime	last month
Cannabis	78%	58%	89%	61%
Cocaine (hcl)*	11%	4%	24%	11%
Crack	2%	1%	10%	4%
Ecstasy	18%	7%	34%	15%
Amphetamines	8%	3%	13%	4%
Hall. mushrooms	13%	2%	16%	7%
LSD	3%	0%	10%	4%
Heroin	4%	0%	3%	1%

Source: (Korf et al. 2005c).

Table 2.6: Prevalence of drug use among school drop-outs in 2002/2003

	Boys (n=115)		Girls (n=74)	
	lifetime	last month	lifetime	last month
Cannabis	83%	62%	68%	43%
Cocaine (hcl)	11%	3%	7%	1%
Crack	3%	2%	5%	0%
Ecstasy	20%	9%	16%	3%
Amphetamines	12%	3%	14%	0%
Hall. mushrooms	19%	3%	14%	0%
LSD	2%	0%	3%	1%
Heroin	1%	1%	1%	0%

Source: (Korf et al. 2005c).

Visitors of clubs, discotheques and (house) parties

Amsterdam has a relatively long tradition of monitoring substance use in various youth scenes, including the nightlife scene. Results from the Antenna Monitor 2003 (Korf et al. 2004a) suggested that drug use among visitors of clubs (and parties) in Amsterdam increased between 1995 and 1998 and decreased from 1998 to 2003 (corrected for differences in demographic characteristics of the samples). An exception to this trend was the increasing lifetime use of GHB[2] between 1998 and 2003, and the stable current use of this drug. Whether these generally decreasing trends can be extrapolated to the national level remains to be seen. For additional qualitative information on trends in substance use among young people and adults in the nightlife scene: see chapter 13.

Street prostitutes

For information on drug use among street prostitutes: see chapter 11.

2.4 Attitudes to drugs and drug users

The Flash Eurobarometer of 2004 gives information on opinions of 7,659 young people of 15-24 year in the EU-15 with regard to various drug-related issues (EOS Gallup Europe 2005) . In each country, a fairly small number of young people (about 500) was interviewed face-to-face. As far as 'testing drivers for drugs' is concerned, 83% of Dutch youth tend to agree, which is identical to the EU-15 average. However, as far as 'drug testing at schools' is concerned, only 38% of the Dutch youth tended to agree while 57% disagreed. This picture is different from the EU-15 average (58% agreed, 37% disagreed). Dutch youth scored

[2] There was also no decrease in the use of energy drinks and alcohol.

above average as far as the ‘supply of needles and syringes at low cost’ is concerned (61% agreed against 49% for the EU-15) and far below average as far as the ‘punishment of drug users’ is concerned (37% agreed against 47% for the EU-15).

3 Prevention

There are no major new developments in preventive interventions and quality assurance. Yet, there seems to be a growing trend to consider drug prevention as part of the more broader scope of public health prevention. Public health prevention covers determining and combating risk factors for public health in general, contacting and supporting vulnerable groups or risk groups with preventive interventions. Public health prevention does not exclusively cover public nuisance, people that deliberately stay outside regular care facilities (zorgmijders), or social inclusion activities (maatschappelijke opvang). It also includes prevention of mental disorders including addiction. The Collective Prevention Public Health Act (Wet Collectieve Preventie Volksgezondheid) delegates health prevention tasks to the municipalities. Organisation and tasks of public health prevention are still in a developmental phase (Ruiter et al. 2005).

A second remark is that the first phase of the national Addiction research programme of the Dutch Health Research and Development Council (ZonMw) has been evaluated (Van Megchelen et al. 2004). A special on this programme has been published recently (Van de Goor et al. 2005)The six-year first phase (1997-2003) resulted in almost 90 research projects that have been accepted. These covered three main themes: individual sensitivity for substance use; craving and relapse; addiction care, prevention and monitoring. Some of the studies from the third theme are covering the effects of treatment or prevention, e.g. homeparties (see National Report 2002, 8.2 and 9.3), rapid detoxification (National Report 2004, 5.2), outreach treatment programme (OTP) for chronic high-risk crack abusers (Henskens 2004), see also chapter 5) and hostels for chronic drug users ((Vermeulen et al. 2003), see also chapter 9). Currently it has been decided that a second four-year phase of this research programme, named “Risk behaviour and dependence”. will start during the next years. Main themes will probably be drug prevention, reducing health risks, implementation and establishment of high-quality addiction care, and systems of monitoring, education and training (www.zonmw.nl). The programme focuses on cannabis and cocaine.

3.1 Universal prevention

School

The programme The Healthy School and Drugs has published a new fact sheet, presenting data on the relationship between the programme and national policy; the different parts of the programme (lectures, parent meetings, a school policy on drug use, support for pupils with drug abuse, programme effectiveness and future developments (Van Diest 2005). In 2006-2007 an e-programme will be developed for students together with preventive interventions for parents to train them in discouraging drug use by their children.

The quality and effectiveness of healthy school interventions in general may be improved by a checklist, targeting a systematic judgment of the quality of such programmes. Recently one checklist has been evaluated (Boot et al. 2005). Schools and other organisations involved in stimulating healthy behaviour in schools can use the scores of this checklist in order to make qualified choices in strengthening school health promotion.

Family

In our National Report 2002 (8.2 and 9.3) we presented data on family-based prevention projects. These data dealt with addicted parents, parent meetings on drug use (home parties), self help groups for parents, and a therapeutic community (the Herberg). See also for Home parties the more recent publication of Riper et al. (2005)(Riper et al. 2005). Two new activities can be mentioned here.

First, the older multi-component American family-focused preventive programme Strengthening Families (Kumpfer et al. 1996) is now being tested in three addiction care organisations in the Netherlands. Having a drug abusing parent is a strong predictor for future disorders among children, thus the final target group in this programme is children with parents that have drug problems (both legal and illegal). Former evaluation studies showed favourable effects on parental skills and behavioural skills as well as on psychosocial problems of the children. In the Netherlands, some 370,000 children of 22 years and younger, have at least one parent with drug problems. This pilot implementation - that will be evaluated - is targeting an older age group (older than 10 years) compared to the American studies (6-10 years). It is including both complete families and one-parent families (Bool 2003). Excluded were families with serious parental problems and children with behavioural or psychiatric disorders. The programme contains three elements: a parent training, an adolescent skills training and a family skills training. It has fourteen sessions (2 hours each) and 4 booster sessions. Each family programme takes less than six months. Parents and children are separately treated during the first hour and together (as a family) in the second hour. Methods used are: demonstration and role play, home work, support from peers with similar problems, and games. A pre- and post-test are included in the evaluation. Planned outcomes are guidelines for realising a Strengthening Families programme and for training of professionals; a protocol for recruitment of client families; a checklist for effective referral and one for screening; and a description of factors that influence successful implementation of this programme.

Second, drug prevention departments of two addiction care organisations have produced a DVD (“Drugs ABC…..”) meant for use during parent meetings, for introductory courses for professionals and for public debates. It offers objective information about drugs, drug use and addiction.

Community prevention

The National Drugs Information Line (Drugs Info Line) offers neutral, objective information, free leaflets and a counselling service (cf. National Report 2002, 9.4). Nowadays a website is in operation with the same objective. From 1996 to 2001 the number of telephone calls increased from more than 26,000 (the initial target was set at 25,000 calls) to more than 35,000 in 2000 (a hundred calls a day). In 2001 - 2004 this number declined drastically from 32,000 to 15,800 (all these numbers are round offs). This is probably due to the introduction of the voice response system, the success of the websites drugsinfo.nl and trimbos.nl (142,200 visits in 2004) and because less publicity was organised compared to former years (Kok et al. 2005). The questions posed are registered and divided in five categories: drugs in general, cannabis (hash and weed), cocaine, ecstasy and other substances. From 1999 to 2003 the subject of the questions asked changed. Predominant questions in former years were about drugs in general. After 2001 cannabis became more popular. Cocaine and ecstasy have also attracted somewhat more attention by users of the Drugs Info Line. Ecstasy was most frequent the topic in 2001, while cocaine gained more frequently attention after that year (personal communication with Info Line workers). In 2003 most questions were posed by drug users (32%). Second are partners, family or friends (17%). Many questions concern possible interactive effects of medicines and

drugs, especially ecstasy. Questions became more complex during the past decade and the mean duration of the telephone calls increased. In 2004, the web pages most visited were those on cannabis (126,300), followed by cocaine (88,900) and ecstasy (85,700).

Second, a (2 months lasting) new public campaign on cannabis use ("There is more to be known about cannabis") was launched in March 2005. Similar to several earlier campaigns, the target was to inform young people about cannabis and its risks. The method was a game that was being promoted via posters on schools, radio advertisements and MSN Messenger (e-prevention). Additionally, activities at schools and youth centres, and a special campaign site with e-mail contacts were initiated.

A recent phenomenon is the development of e-health interventions. Such prevention or treatment interventions are offered via the internet in combination with e-mail. The success depends on the spread of internet in a country. Internet use became a common way of interaction between Dutch people during the past five years. Today more than 80% of the inhabitants have an internet connection and more than half of this group is connected via ADSL. This facilitates working with advanced programmes.

Professionals that are active in this field expect that e-mental health may be an effective tool for supporting and enlarging the scope and the implementation of these modalities (Riper 2005). These initiatives are not restricted to mental health. Instead, examples of e-help are also found in addiction care, e.g. "Jellinek online" for self help via the internet for alcohol or cannabis users, initiated by the Jellinek in Amsterdam. Effect studies of e-health interventions are still rare (cf. (Andersson et al. 2005)), but (also) in the Netherlands a randomised controlled trial is underway on alcohol abuse and possibly also on illicit drug addiction (Riper H, personal communication).

3.2 Selective/indicated prevention

Drug and alcohol use is relatively common among young people in recreational settings (see chapter 13). During the past years the concept "meaningless violence" (*zinloos geweld*) was coined as a result of several incidents of serious group violence after heavy alcohol use. The link between drug use and violence is less clear (Van der Linden et al. 2004). Health prevention should include alcohol prevention in order to reduce these incidents (Lemmers et al. 2005). The Trimbos programme 'Going out and drugs' developed several publications on risky drug and alcohol use in recreational settings: e.g. a fact sheet, a guideline and tips for prevention done by professionals and tips for cooperation among health professionals and workers in recreational settings (Bolier et al. 2005;Sannen et al. 2005;Van Hasselt et al. 2005).

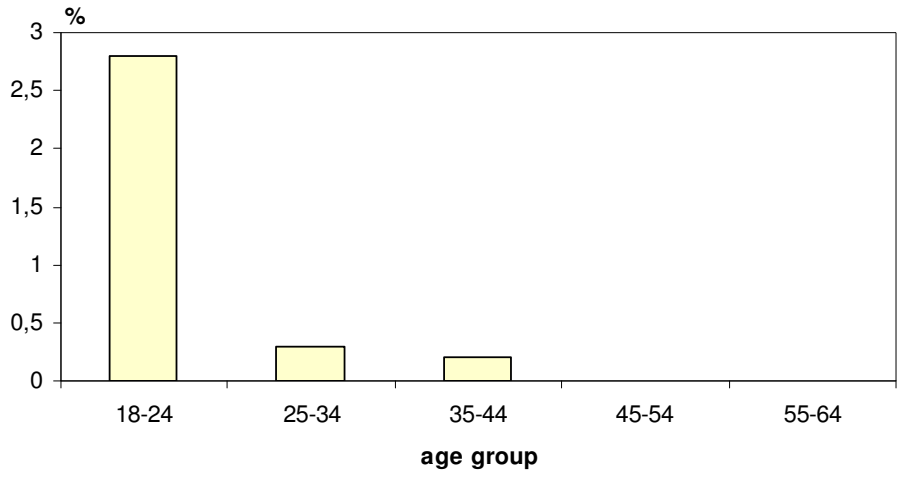
The Drug Information and Monitoring System (DIMS) (see also chapter 10) tested the contents of drug samples offered by consumers showed that during the past years (from 1998 on) pills sold as ecstasy are reasonably 'pure', that means, the large majority contained MDMA-like substances. Moreover, the percentage of high-doses MDMA-pills has increased. In December 2004 an early warning was issued on cocaine adulterated with atropine, and a second red alert warning was launched in November 2005 (Van Dijk et al. 2005).

4 Problem Drug Use

4.1 Prevalence estimates

Cannabis
There is no recent estimate of the number of problem cannabis users, which is in part related to the lack of consensus over the definition of problematic cannabis use. Problem cannabis use may include dependence. According to an outdated estimate of 1996, some 0.5 percent (range: 0.3-0.8) of the general population of 18-64 years is dependent on cannabis (last year prevalence of a DSM-III-R diagnosis of dependence). This translates into about 50,000 (range 30,000 – 80,000) persons, mostly young adults (see figure 4.1). The large majority is male (0.8% against 0.2% female). The third round of the National Prevalence Survey (2005) among the population of 15-64 years also includes a (proxy) measure of cannabis dependence, so a more recent estimate will be available next year.

Figure 4.1: Prevalence of last year cannabis dependence by age group among the population of 18-64 years in 1996



Source: Nemesis, Trimbos Institute.

Ecstasy and amphetamines
The number of problem users of these drugs is not known. Ecstasy has no strong dependence potential. In spite of this, a minority of persons has a compulsive use pattern with associated psychological and somatic problems. Amphetamine use may be problematic and give rise to dependence and health problems, although in the long run most users seem to gain control over their use (Uitermark et al. 2004). The number of ecstasy and amphetamine users applying for help at treatment centres is fairly low. However, there is no information on the 'hidden' part of the population of problem users of these drugs staying out of the reach of treatment services.

Opiates (and/or cocaine)

The number of problem hard drug users in the Netherlands has been estimated several times in the past years (table 4.1). The basis for most estimates are registrations of hard drug users who somehow have been in contact with the police and/or addiction care. For the 2001 estimate, three methods were used: a multivariate social indicator method (MIM) (or regression imputation), a multiple imputation method (on the same data) and a treatment multiplier (TM). The results are shown in table 4.1. These methods yielded a central estimate of about 34,000 problem drug users. Converted to population rates, the TM resulted in 3.0 problem drug users per 1000 inhabitants of 15-64 years (range 2.4 – 3.6), the MIM/regression in 3.1 cases/1000 (range 2.2 -4.3) and the multiple imputation in 3.2 cases/1000 (range 2.3 -4.0). The case definitions may vary between methods. The TM is based on opiate users only. The MIM/regression method and multiple imputation method are based on local estimates (anchor points), some of which could also include cocaine users who did not consume opiates.

Taking the large confidence intervals into account, the outcomes did not differ significantly from the previous estimate (1999) of 2.7 per 1000. Note, however, that the MIM and multiple imputation were based on local estimates that referred to the years 1998 - 2002. Therefore, in contrast to the multiplier method, this estimate does not accurately refer to '2001'.

Table 4.1: National estimates of the number of problem hard drug users*

Site	Year	Method	Case definition*	Estimates (lowest – highest value)	Source
National	1993	Multiple	Problem opiate users	28,000	(Bieleman et al. 1995)
National	1996	Treatment multiplier	Problem opiate users	25,000-29,000	(Toet 1999)
		MIM		27,000	
National	1999	Treatment multiplier	Problem opiate users	25,970-30,298	(Smit et al. 2001)
		MIM	**	29,213	
National estimate	2001	Treatment multiplier, MIM, Multiple imputation	Problem hard drug users**	33,499 (23,881-46,358)	(Smit et al. 2004b)

MIM=Multivariate (social) indicator method. *Mainly opiate users who also consume crack cocaine (and other substances) **Variable case definitions of local estimates (anchor points) used by MIM. Mainly problem opiate users. Yet, some anchor points – especially of the latest estimates - may also include small numbers of primary crack cocaine users who do not consume opiates. TM is based on opiate users only.

Table 4.2 gives an overview of the methods and outcomes of estimates of the number of problem hard drug users in various Dutch cities and regions. Note that the capture-recapture method in these cases may slightly overestimate the number of problem users because of violation of the closed population assumption. For example, an estimate for the number of opiate users in Amsterdam in 2004 based on a 3-months observation period (with less risk of migration, death etc.) yielded 3,524 persons, compared to 3,928 persons based on a 1-year observation period (Van Brussel et al. 2005).

Table 4.2 Local and regional estimates of the number of problem hard drug users

Site	Year	Method	Case definition*	Estimates (lowest – highest value)	Source
Amsterdam	2004	2-sample C-RC	Problem opiate users	3,928	Municipal Health Service Amsterdam (Van Brussel et al. 2005)
Rotterdam	2001	Multiple 2-sample C-CRs	Problem hard drug users	5,051	(Biesma et al. 2004)
The Hague	2000-2002	3-sample C-RC	Problem hard drug users	3,200 (annual)	(Burger et al. 2001)
Groningen**	1993/ 2002	Treatment multiplier	Problem opiate users	1,000	(Bieleman et al. 1995)
Utrecht (province)**	1999	Treatment multiplier (a.o.)	Problem hard drug users	1,300	(De Graaf et al. 2000) (personal comm. J. Toet)
Friesland*** (province)	2001	2-sample C-RC, treatment multiplier	Problem opiate users	1,007	(Biesma et al. 2003)
Enschede	2003	2-sample C-RC	Problem opiate users	600	(Bieleman et al. 2004a)
Almelo	2004	2-sample C-RC	Problem opiate users	229	(Biesma et al. 2005)
Stedendriehoek ****	2000	2-sample C-RC, treatment multiplier	Problem opiate users	750 (561-948)	(Bieleman et al. 2002)
Zuid- Limburg **	1999/ 2002	1-sample C-RC (Chao's estim.) (a.o.)	Problem hard drug users	1,100	(Coumans et al. 2002);(Hoebe et al. 2003)

* Problem opiate users often consume other substances as well (especially cocaine). Problem hard drug users consume opiates and/or cocaine and also other substances.

** Estimates for the regional/province are based on extrapolations from local estimates (cities). City of Utrecht: 570; Parkstad-Limburg: 800.

*** Leeuwarden: 389; North-Friesland: 135; South-West Friesland: 169, Friese Wouden: 314.

**** Deventer, Apeldoorn, Zuthphen.

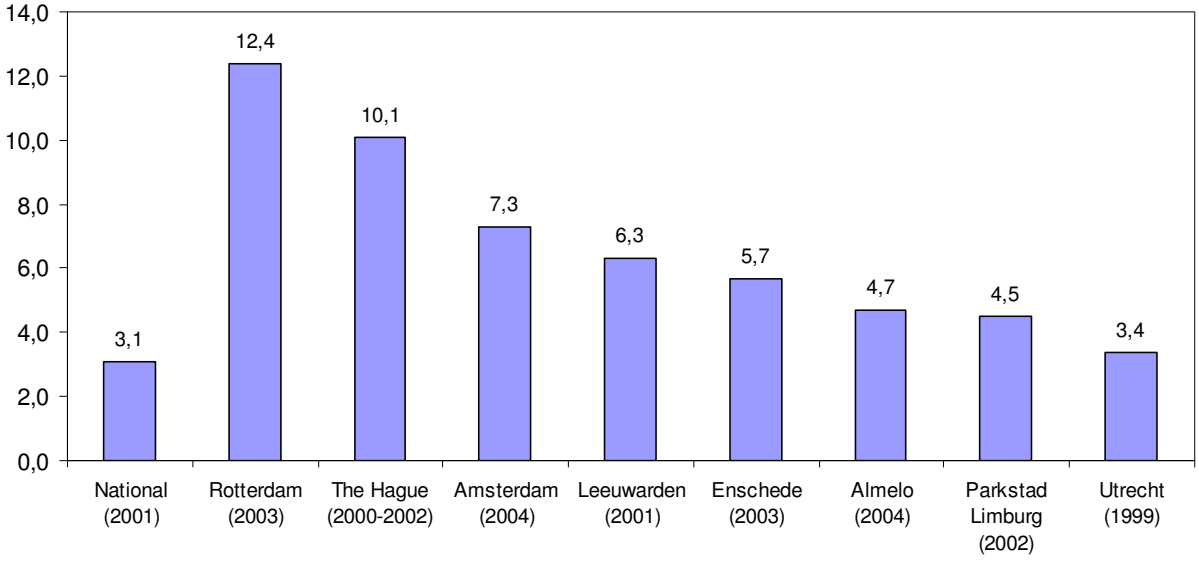
C-RC=capture-recapture. Samples are from treatment and police data.

Figure 4.2 on local estimates shows that the highest concentrations of problem hard drug users per 1000 inhabitants of 15 – 64 years are found in the three largest cities (Amsterdam, Rotterdam, and The Hague). Differences between these cities might – besides actual prevalence differences – also be explained by variations in case definition. In Amsterdam, the estimates are restricted to opiate users (two samples extracted from the central methadone register). Case definitions in Rotterdam and The Hague are broader (Biesma et al. 2004;Burger 2004). In these cities, the C-RC analyses are, among others, based on police registers - with 'hard drug users' known to the police as cases - and drug treatment registers – with heroin, methadone, amphetamine and cocaine users as cases. Moreover, in the Hague clients were selected from the treatment register who reported these substances as primary and/or secondary substance, while in Rotterdam only clients were selected with these substances as primary drug. However, the precise effect of this difference on the C-RC estimation is not known.

In Rotterdam, two groups of hard drug users were estimated in 2003 by applying three 2-sample C-RCs on various police and treatment sources: 1) the total group of regular users of hard drugs, based on police and treatment registrations (excluding experimental and weekend users), and 2) the group of *problem* hard drug users, who had used hard drugs

(almost) daily in the past year and were criminal and/or caused nuisance and/or had psychiatric co-morbidity and/or were homeless. The former definition, which is close to the EMCDDA definition of problem drug use, yielded an estimate of about 5,000 hard drug users. The second estimate resulted in some 3,000 cases, which is about two-third of the total group.

Figure 4.2: Estimated number of problem users of hard drugs per 1000 inhabitants (15-64 years) in the Netherlands



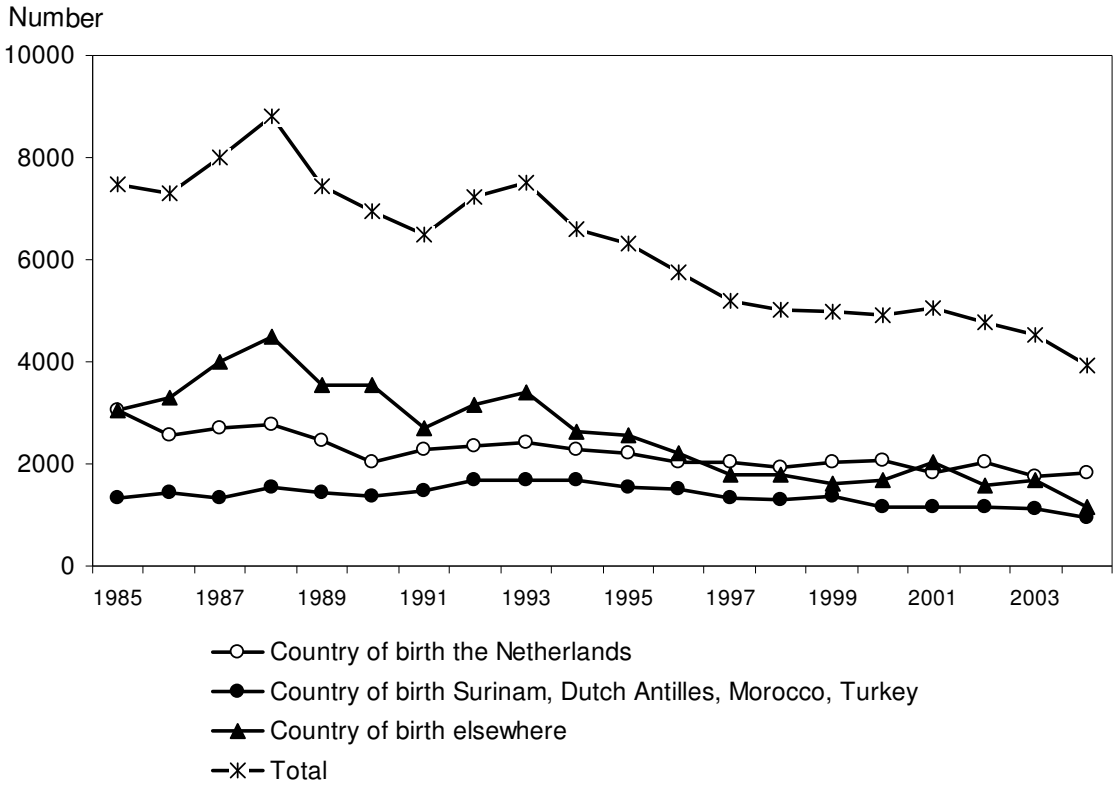
Sources and definitions: see table 4.1 and 4.2. Different case definitions and methods may affect the comparability of results.

Declining number of opiate addicts in Amsterdam

Estimates for Amsterdam are available since 1984. Figure 4.3 shows the estimated number of (problem) opiate addicts broken down by country of origin.

- Since 1988 the estimated number of addicts has declined (with a minor fluctuation in the early nineties). The largest decrease can be attributed to the group of foreign drug users (category 'born elsewhere', including Italians and Germans), but in the past years the size of the other groups has also diminished.
- In 2004, the number of opiate addicts was estimated at 3,928 (one-year observation period), including 47% persons who were born in the Netherlands, 24% persons in Surinam, the Netherlands Antilles, Morocco and Turkey, and 29% who were born elsewhere. Addicts of the first and second subgroup usually have a residence permit and maximum access to (methadone) treatment.
- An estimate based on a three-months observation period, which is less biased by a 'fluid' population (mainly due to short-term migration of drug tourists), arrived at 3,491 opiate addicts in 2004. The difference between one-year and three-months estimate was the smallest ever found, suggesting that the Amsterdam drug scene tends to become more stable and is less dominated by drug tourists.

Figure 4.3: Estimated number of opiate addicts in Amsterdam by country of origin



Problem opiate users: those who have medical and/or judicial problems and/or have difficulties controlling their addiction. Estimates based on 2-sample capture-recapture applied to data from the Central Methadone Register (CMR). Source: Municipal Health Service Amsterdam.

Injecting drug use

There are no specific estimates on the total number of drug users who ever or currently injected their drugs. National treatment data suggest that some 39% of the opiate users have ever injected drugs and 11% is a current injector. If we extrapolate these rates to the estimate of the number of problem hard drug users of 2001, there would be between 9 and 18 thousand ever injectors (midpoint 13 thousand) and between 2.6 and 5 thousand current injectors (midpoint 3.7 thousand).

However, it is not known whether these percentages also apply to non-treatment samples. Some field studies indicate that between 10 and 30 percent of the hard drug users (treatment and non-treatment) is a current injector (see also paragraph 4.3). However, apart from local variations, differences in injection rate may be due to variations in definition (e.g. always injecting, or both injecting and smoking). Moreover, according to a study by the Municipal Health Service Amsterdam, the rate of injection was significantly higher among drug users in methadone treatment compared to drug users not in contact with treatment services (14% against 4%). The overall low injection rate in this study could be related to the relatively high proportion of drug users born in Surinam of the Dutch Antilles (Buster and De Fuentes Merillas 2004).

Problem cocaine users

Estimates of the total number of problem cocaine users are lacking. This is, among others, related to the heterogeneity of the population of cocaine users which includes 1) opiate/crack

users, 2) primary crack users who do not consume opiates, and 3) cocaine sniffers. Estimates are also lacking due to limitations of the available data sets. In the framework of the national Working Group on Prevalence Estimates of Problem Drug Use, a proposal will be developed describing possible methods to estimate these groups and the requirements in terms of necessary data sets.

4.2 Profiles of clients in treatment

Specialised outpatient treatment

The LADIS, the National Alcohol and Drugs Information System, is the most comprehensive information system in the Netherlands about clients in drug treatment. The LADIS mainly contains data from outpatient drug treatment services, including probation services, and has a national coverage. Data on inpatient services are already included to a small extent (4% of all LADIS clients in 2004) and full coverage will be reached in the future as soon as the new information management system of the Dutch Mental Health Service, Zorgis, will be fully operational.

As was done for the first time in the previous national report, the data in this paragraph will be based on the TDI protocol. This means that only clients who have had at least a second direct (face to face) contact with the therapist / treatment facility are included. Moreover, the TDI only includes data from clients subscribing for treatment within the year of registration (‘new clients’, also including first treatments). The TDI does not include subscriptions from a previous year that were continued in the registration year. These criteria are more restrictive than the criteria that are used by the holder of LADIS (IVZ) to assess the LADIS Key Figures. The figures presented here may therefore deviate from the figures reported elsewhere.

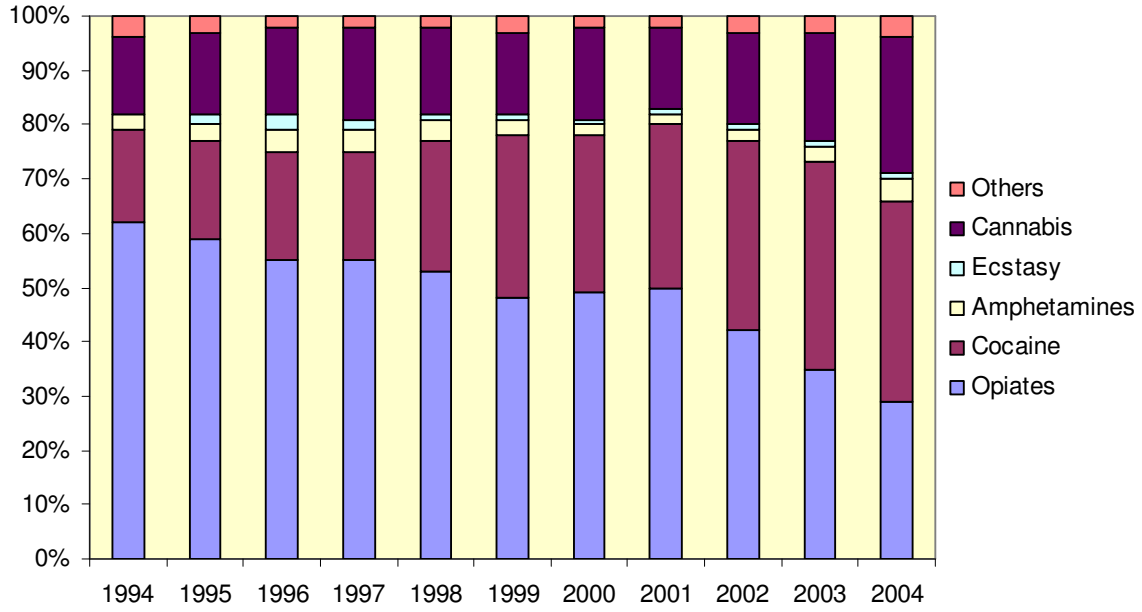
Some further remarks should be made:

- Data will be reported from 1994 onwards, since this is the first year for which IVZ could control for double counting of persons.
- The coverage of the system in terms of participating services has improved over the years. The small relative increase in opiate clients from 2000 to 2001 is mainly due to the participation of the Municipal Health Service Amsterdam in LADIS since 2001. However, data over 2004 were lacking for one region (South-Limburg) due to a reorganisation of institutions. For this region, data from the registration year 2002 were extrapolated to 2004 in order to obtain nationally representative figures.
- "Cocaine" refers to both "cocaine HCL" and "crack cocaine".

Trends

Between 1994 and 2004, the annual number of new clients applying for help at outpatient drug treatment services varied between eight and eleven thousand, with an increasing trend (although with some fluctuations) over the years.

Figure 4.4: Distribution of new clients recorded in 1994-2004 at outpatient treatment centres by primary drug*



* Selection of clients based on the TDI protocol. Source: LADIS, IVZ.

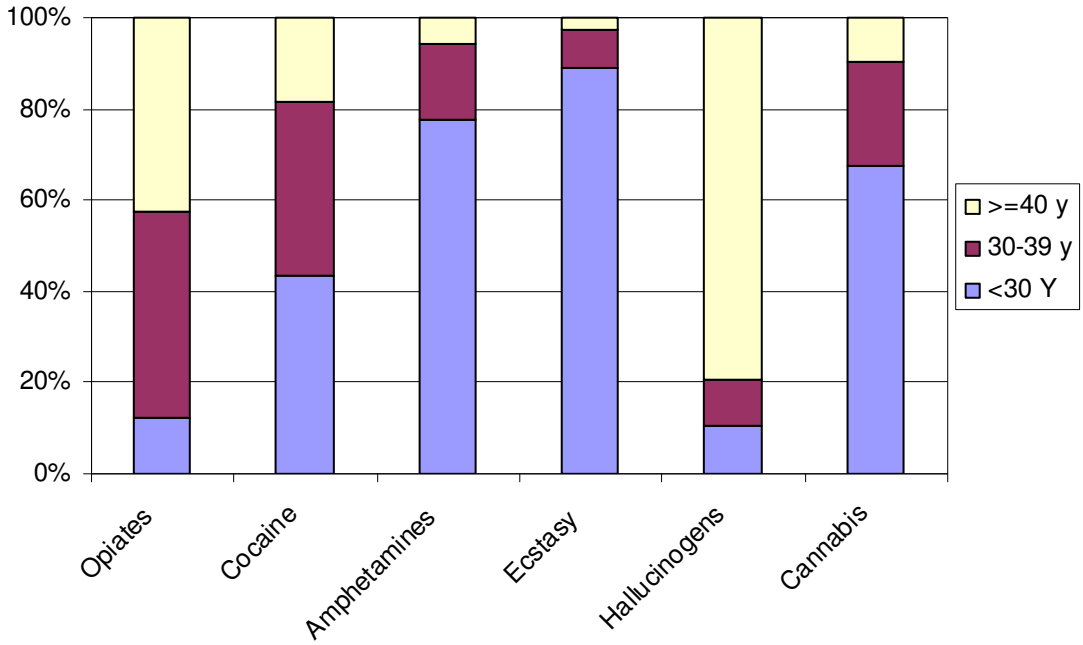
- Figure 4.4 shows that the percentage of opiate clients among all new drug clients decreased over this period (62% in 1994, 29% in 2004), while the percentage of cocaine clients showed an increasing trend (17% in 1994, 37% in 2004).
- Since 2003, the proportion of cocaine clients exceeds the proportion of opiate clients.
- There was also an increase in the proportion of cannabis clients from 14% in 1994 to 25% in 2004.
- Ecstasy and amphetamine clients accounted separately at the most for 4% or less of all drug clients across these years.

The shift in proportions of primary drug clients is even more visible in data on clients who enter treatment in LADIS treatment centres for the first time. These first treatments reflect the incidence of drug users seeking help and may be a better indicator of recent developments in problem use. Among first treatments in 2004, the proportion of opiate clients was only 11% while cocaine clients made up 37% of the first treatments and cannabis clients 38%.

Age

The average age of all drug clients combined increased from 29 years in 1994 to 33 years in 2004. Figure 4.5 illustrates that hallucinogen and opiate clients are on average the oldest, followed by cocaine clients. Cannabis, ecstasy, and amphetamines clients are on average the youngest.

Figure 4.5: Clients recorded in 2004 at outpatient treatment centres by primary drug and age group*

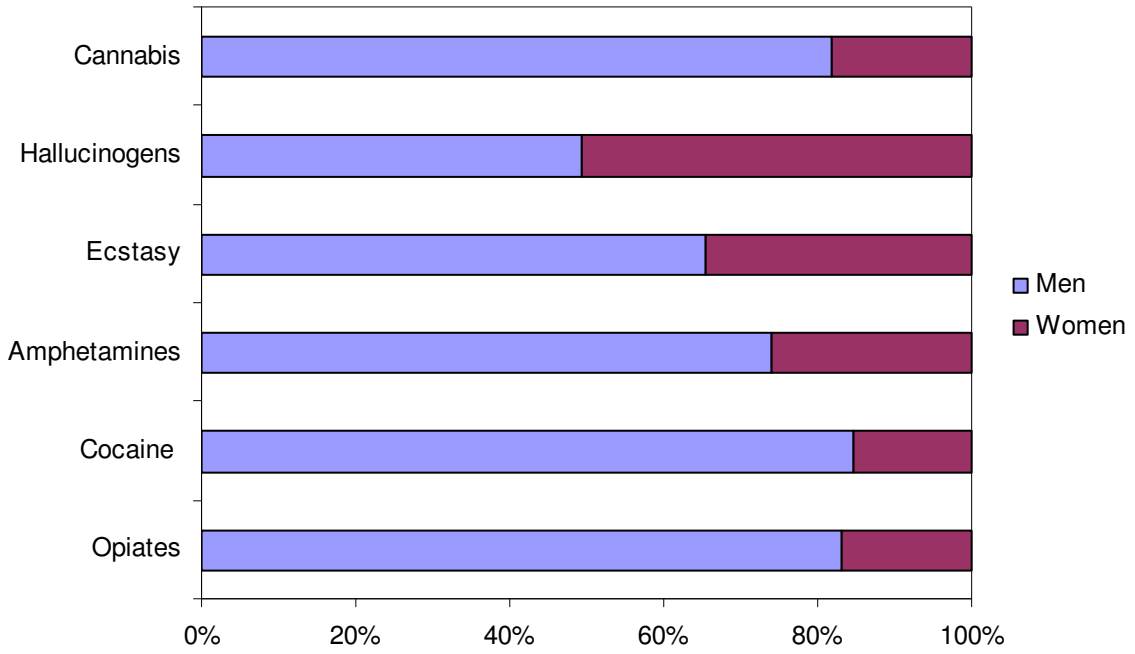


* Selection of clients based on the TDI protocol. Source: LADIS, IVZ.

Gender

The percentage of females among all drug clients varied over the years between 16% and 19%. Figure 4.6 shows the gender distribution by primary drug in 2004. The proportion of females was highest among hallucinogen clients (51%) and lowest among cocaine (15%), opiates (17%), and cannabis clients (18%). Ecstasy and amphetamines clients fell in between these extremes (35% and 26%, respectively). It should be noticed that the increase in ecstasy use between 1997 and 2001 in the general population was most pronounced among women. Moreover, the proportion of females among first ecstasy treatments rose from 21% in 2001 to 40% in 2004 (see also chapter 11).

Figure 4.6: Gender distribution by primary drug of clients recorded in 2004 at outpatient treatment centres*



* Selection of clients based on the TDI protocol. Source: LADIS, IVZ.

Route of administration

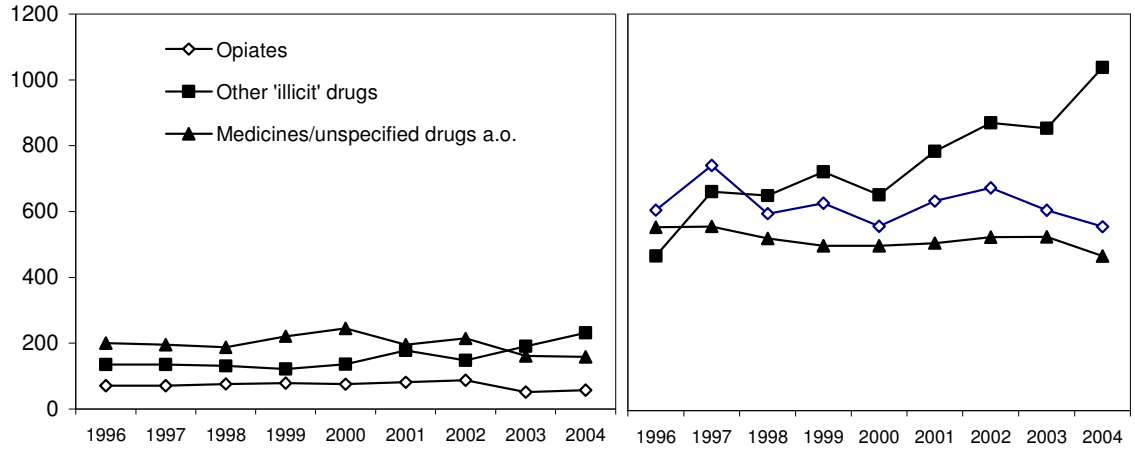
According to the TDI (LADIS, IVZ), injecting drug use strongly decreased from 12% in 1994 to 5% in 2004 for all primary drugs combined. Among opiate clients a decrease was found from 16% to 10%. In 2004 the main route of administration for opiates was smoking/inhaling (75% of the opiate clients). This also applied to cocaine (53% smoking/inhaling) although four in ten cocaine clients sniffed this drug (42%). Probably this distinction refers to different groups of problem users, the problem users of crack cocaine (who often also consume other hard drugs, such as opiates) and the 'recreational' cocaine users who have run into problems because of compulsive sniffing (Stichting IVZ 2004). Cannabis is mainly smoked (96%), while amphetamines are both sniffed (59%) and swallowed (26%).

General hospital admissions

Figure 4.7 shows the number of admissions to general hospitals because of drug dependence or abuse as a primary or secondary diagnosis.

- In 2004, the LMR recorded a total of 1,655,707 hospital admissions. Drug dependence and drug abuse were counted just 447 times as a primary diagnosis and 2,061 times as a secondary diagnosis.
- Within the category of admissions related to drug abuse and dependence, opiates made up 13% of the primary and 27% of the secondary diagnoses. Other illicit drugs accounted for 52% and 50% of the primary and respectively secondary diagnosis related to drug problems. In this category, cocaine ranked as most frequent drug, followed by cannabis. Psychoactive medicines (e.g. benzodiazepines) and unspecified substances accounted for 35% of the primary diagnoses and 23% of the secondary diagnoses.

Figure 4.7: Number of admissions to general hospitals related to drug dependence or nondependent drug abuse (ICD-9 codes 304 and 305.2-9) as primary diagnoses (left) or secondary diagnoses (right)



Other 'illicit drugs': cocaine, cannabis, amphetamines, hallucinogens. Source: LMR, Prismant.

Trends

The number of admissions related to drug abuse or dependence in general as primary diagnoses remained low over the past years. Minor increases were seen for cannabis (24 in 2000 and 56 in 2004) and cocaine (67 in 2000 and 89 in 2004). A (stronger) increase was observed for the number of admissions with 'other illegal drugs' as secondary diagnoses.

- This trend was mainly attributable to cocaine and to a lesser extent to cannabis. More specifically, cocaine dependence and abuse as secondary diagnoses increased from 377 in 2000 to 551 in 2004 (+46%).
- The number of cannabis related admissions was lower and more variable over time, although an increase in secondary diagnoses was observed from 193 in 2000 to 246 in 2003 (+28%) and 322 in 2004 (+68% relative to 2000 and +31% relative to 2003).
- The number of admissions related to opiates as secondary diagnosis tends to decrease.

Table 4.3 gives some more details about admissions related to the main drugs of abuse.

- In accordance with data from outpatient drug treatment services, the average age of patients admitted to general hospitals was the highest for opiates and lowest for cannabis and amphetamines.
- The average number of days hospitalised was the highest for cannabis problems and lowest for amphetamine problems (as primary diagnoses).

Table 4.3: Clinical admissions to general hospitals related to drug abuse and drug dependence in 2004*

	Cannabis	Cocaine	Opiates	Amphetamines
Number of primary diagnoses	56	89	57	40
• Average number of days	15.6	4.8	8.4	1.5
Number of secondary diagnoses	322	551	556	108
Total number of persons**	340	567	501	128
• Average age (years)	30 years	35 years	40 years	31 years
• Percentage male	75%	74%	69%	68%

* ICD-9 codes: cannabis 304.3, 305.2; cocaine 304.2, 305.6; opiates 304.0, 304.7, 305.5; amphetamines 304.4, 305.7. These ICD-9 codes are not 100% specific with regard to the drugs in question. Clinical admissions do not include one-day admissions. ** Number of persons who were admitted at least once because of a drug-related disorder assigned as a primary or secondary diagnosis. Source: LMR, Prismant.

4.3 Main characteristics and patterns of use from non-treatment sources

In the past years, the number of field studies among problem drug users has decreased (probably as a consequence of budgetary constraints at the local level). Moreover, the target groups and methodologies among the studies that have been conducted are generally not comparable, which hampers an analysis of trends. The data in this paragraph therefore mainly rely on previously reported studies. New (occasional) studies include Lempens et al. ((Lempens et al. 2004); on a small sample of problem hard drug users in Rotterdam), Termorshuizen et al. ((Termorshuizen et al. 2005); data from the Amsterdam Cohort on Drug users), Buster and de Fuentes de Ferillas ((Buster et al. 2004); data on a local study among Amsterdam drug users in and outside treatment) and Krol and Van der Helm ((Krol et al. 2004), data on Young drug users in Amsterdam).

Demographic characteristics

- Most problem hard drug users are male (70 to 80%). A higher percentage of males (90%) have been reported among Surinamese/Antillean drug users in Amsterdam (Buster et al. 2004).
- There is an aging trend. Field studies in Rotterdam and Parkstad Limburg among problem hard drug users revealed a current average age of 39 years (Coumans et al. 2002;Van der Poel et al. 2003). Surinamese/Antillean hard drug users in Amsterdam are on average oldest (46 years, against 41 years for other ethnic groups in the same scene) (Buster and De Fuentes Merillas 2003).
- Seven in ten (72%) problem hard drug users in Parkstad Limburg (2002) were born in the Netherlands against 47% in Rotterdam (2003). In Rotterdam the second most common group was born in Surinam (23%).

Substance use

Most problem hard drug users are poly-substance users, with tobacco, cocaine and opiates featuring most prominently. This is illustrated by data in table 4.4. Amphetamines, ecstasy and hallucinogens are not very popular in this population. Most data point at the increasing relevance of crack-cocaine.

- In a field study in Rotterdam in 2003 (table 4.4), cocaine use was more prevalent than heroin use. The percentage of heroin and cocaine users remained stable between 1998 and 2003. Today, an increasing percentage of younger problem hard drug users start

their career with cocaine (and at a decreasing age), while the older users almost all started their career with opiates. The average drug use career was fairly long: 18 years on average for heroin and 6 years on average for cocaine.

- In a follow-up, largely qualitative, study in 2004 among 34 problem hard drug users in Rotterdam, 68% used heroin and 100% used cocaine (Lempens et al. 2004).
- Among young drug users in Amsterdam (18-30 years), cocaine was the dominant drug for 41% and heroin for 9%. For 50% heroin and cocaine were both important (Krol et al. 2004).

Table 4.4: Substance use among a sample of problem hard drug users in Rotterdam in 2003

	Current use (%)	% of (almost) daily users among the current users
Tobacco	98%	100%
Cocaine	96%	78%
Heroin	80%	71%
Cannabis	60%	48%
Methadone	58%	78%
Psychoactive medicines	26%	30%
Alcohol, > 5 units	24%	58%
Ecstasy	2%	-
Amphetamines	1%	-
Hallucinogens	1%	-

N=201. Source: IVO Rotterdam (Van der Poel et al. 2003).

- In a field study in Parkstad Limburg among a street sample of hard drug users, the number of cocaine users among a sample of problem hard drug users had increased from 80% in 1999 to 88% in 2002. The percentage of heroin users did not change much (88% in 1999 and 86% in 2002) (Coumans et al. 2002).
- In a study in Amsterdam among 77 problem opiate users in methadone treatment and 71 opiate users not in methadone treatment, all but one reported to use cocaine. Daily use of heroin was reported by 62% (57% in and 66% outside treatment) and daily use of cocaine by 70% (74% in and 66% outside treatment) (Buster et al. 2004).

Route of administration

Today, chinesing or basing is the most common route of heroin administration, and basing the most common route of cocaine administration, among problem hard drug users in the Netherlands[3]. Injecting drug use has steadily decreased over the past years, but recent trend data are lacking.

- In 1998, 28% of the problem hard drug users in Rotterdam had (sometimes) injected heroin or cocaine in the past six months, whereas in 2003 only 16% were reported to do so (Van der Poel et al. 2003). In a follow-up study in 2004 in a smaller sample (N=34), 13% (sometimes) injected drugs (Lempens et al. 2004).
- In Parkstad Limburg, the percentage of heroin and/or cocaine injectors decreased from 39% (1999) to 31% (2002). According to field workers and observational data, this trend might be attributed to several factors. These include: fear of aids and hepatitis, increasing health messages on the dangers of injecting, low prices of heroin on the Dutch market

[3] These routes of administration of heroin and cocaine are jointly referred to by 'smoking' in this report.

and associated easy availability, which makes injecting (a relatively more efficient route of administration than smoking) less important.

- According to the Municipal Health Service Amsterdam, some 10% of the opiate users is a current injector (Van Brussel et al. 2005). In 2003, a field study in the southeast of Amsterdam showed that the percentage of injectors was higher among those in treatment compared with those not in methadone treatment (4% vs. 14%). However, in an absolute sense these figures may not be representative (lower) for all problem drug users in Amsterdam, since the percentage of Surinamese/Antillean drug users, who have low injection rates, was relatively high. More specifically, the rate of injection among Surinamese and Antillean drug users was 2% against 24% for the remainder of the sample (Buster et al. 2004).
- In a longitudinal study among 194 relatively young (18-30 years) regular hard drug users in Amsterdam recruited through snowball sampling, at street, by word of mouth and the Amsterdam Cohort Studies, one-third (33%) had ever injected drugs and 16% was a current injector (Krol et al. 2004).

Drug use careers and outcome of chronic hard drug use

Termorshuizen et al. (2005) described the results of a study into the long-term outcome of chronic hard drug use in terms of mortality and abstinence (Termorshuizen et al. 2005). Of the Amsterdam Cohort Study that started in 1985, 899 regular hard drug users (or those with a history of use) were selected who were enrolled between 1985 and 2001, were still in follow-up in 1989 (or entered the study thereafter) and were Dutch nationals. They were mainly recruited at low-threshold services, but their study entry and follow-up were independent of any treatment involvement.

- At the time of study entry, 65% used heroin and cocaine, 11% used only heroin, 7% used only cocaine and the remainder used amphetamines or other combinations. The mean age at entry was 32 years and the mean time between starting regular drug use and study entry was 12 years.
- The results showed that an estimated 27% of the drug users had died within 20 years after starting regular drug use. For half of them, the cause of death was related to HIV and for half to other causes. The percentage of drug users who were alive and were fully abstinent from illicit drugs and methadone for at least 4 months was 20% at 20 years after initiation of regular drug use, or 28% when use of methadone was taken out of consideration. The situation was more favourable with regard to abstinence for those with a higher age at initiation of drug use.
- Still, the authors conclude that the concept of natural recovery or “maturing out” to a drug-free state does not apply to a substantial proportion of the drug using population.

Risk behaviour: unsafe injecting behaviour and unsafe sex

There are no new data on risk behaviour since the previous National Report. As was stated in the previous paragraph, most drug users in the Netherlands apply routes of administration other than injecting. Table 4.5 gives the proportion of (ever) injecting drug users who borrowed (used) needles or syringes from their fellows, and who had unsafe sex in the past six months. The data are part of the HIV surveillance among local samples of injecting drug users (see chapter 6.2). In all cities where repeated assessments have been carried out, the borrowing of needles or syringes has decreased (Amsterdam, Rotterdam, South-Limburg, Arnhem). However, rates of between 8 and 30% are still reported.

Table 4.5: Injecting and sexual risk behaviour among injecting drug users (%)

Region	Year of survey	Borrowing [II]	Condom use [V] steady partner	Condom use [V] casual partner	Condom use [V] clients
Amsterdam	1996	18%	24%	60%	70%
	1998	12%	15%	53%	71%
Rotterdam	1994	18%	9%	53%	80%
	1997	10%	16%	46%	69%
	2002/2003	8%	15%	57%	68%
South	1994	19%	14%	39%	87%
Limburg[I]	1996	17%	13%	61%	83%
	1999	10%	11%	51%	75%
Utrecht	1996	17%	16%	55%	83%
Arnhem	1991/1992	42%	na	na	60%
	1995/1996	39%	10%	49%	79%
	1997	16%	4%	47%	78%
Groningen	1997/1998	11%	11%	43%	76%
Brabant[III]	1999	17%	12%	39%	83%
The Hague	2000	21%	16%	27%	60%
Twente[IV]	2000	30%	8%	32%	50%

An injecting drug user is defined as a person who has intravenously injected a drug once or more times in his or her life. I. Heerlen and Maastricht. II. The percentage of IDUs who borrowed needles from somebody else on one or more occasion(s) in the last six months. III Eindhoven, Helmond, Den Bosch. IV Almelo, Hengelo, Enschede. V. Always using condoms in the past six months. na = not available. Source: RIVM (Van de Laar et al. 2004)(De Boer et al. 2004b).

Unsafe sexual behaviour, i.e. not always using condoms with steady partners, remains high in most cities. In the most recent survey in Rotterdam (2002/2003), 85% of the respondents did not always use condoms with steady sexual partners, while the corresponding percentage for casual partners and clients was 43% and 32%, respectively (De Boer et al. 2004b). Given the fairly high (8%) HIV prevalence and high sexual risk behaviours, there is a theoretical risk of transmission of HIV among the population of injecting drug users and to the general population.

5 Drug-Related Treatment

5.1 The treatment system

Organisation

An important development is the amount of mergers between organisations of mental health care and addiction care, and in some cases also between different organisations of addiction care during the past five years (Van den Berg et al. 2004). A result of these mergers is that the number of organisations of addiction care has become somewhat smaller during the past years, but the number of locations largely remained the same (cf. (Trimbos-instituut 2003;Van der Wilt et al. 1998)). In 2004 the Netherlands had seventeen organisations of addiction care that are funded by public money, compared to 32 in 2000. The amount of locations did not change much (somewhat more than 200). Most people with drug problems are treated in outpatient care. Methadone maintenance is a predominant outpatient treatment arrangement.

Quality assurance and evaluation
An evaluation report on the innovation policy programme to improve the quality of addiction care and drug prevention (Resultaten Scoren or 'Acheiving Results') marks the end of the first five-year phase of activities resulting in 50 publications ((Mulder et al. 2004)). The focus in the coming two years will be on: improving medical and nursing interventions; further development of protocols; implementation of guidelines; improving professional training and education in order to deepen the expertise of future professionals (cf. Mulder and Schippers 2005). A set of performance indicators has been constructed in order to enable organisations of mental health care and addiction care to measure their results more systematically. Dutch addiction care is improving due to this policy programme but change takes a substantial amount of time and many shortcomings still exist (Schippers et al. 2005).

Based on a report of Kessels and Smit (2001)(Kessels & Smit 2001), initiatives have been started to increase quality of professional education in addiction care. These initiatives are managed by the new Council for Development of Competence that aims at initiation and support of high-quality education courses within universities, higher professional education, and networks of learning between organisations of addiction care with special focus on certification and maintenance of these courses (GGZ Nederland 2005b). At this moment there are a few courses available at universities and a new course is in preparation for one institution of Higher Vocational Education (GGZ Nederland 2005a).
Client satisfaction is often mentioned as an important outcome variable, especially in connection with quality assurance. Still, here is debate about the meaning of satisfaction scores in addiction care. A recent study compared these scores between patients in addiction care and mental health care (Aarsse et al. 2005). This prospective study in four outpatient treatment centres showed that client satisfaction was higher in addiction care than in mental health care. In mental health care, personality traits and symptom severity at baseline explained more of patient satisfaction than in addiction care. Patient satisfaction is substantially influenced by neuroticism and related psychological distress. These factors partly explain differences in satisfaction between settings. Social desirability did not influence satisfaction scores.

Cost analysis

Studies including cost data are becoming more important during the past few years (see our National Report 2002, 14). In 2006 a thematic report will be published on the Prevention of Mental Disorders drafted by the National Institute for Public Health and the Environment (RIVM) in cooperation with the Trimbos Institute and other experts. This report will present data about the use of care, and the direct and indirect costs and Disability Adjusted Life Years (DALY's) related to various mental disorders, including alcohol addiction. Alcohol disorders are most prone to cause high societal costs (Smit et al. 2005).

Yet, hardly any registration data are available on which interventions are actually applied in daily life at the client level. Thus, in general it remains unknown what the costs and what the effects are of current and newly implemented interventions. Until recently only few cost-analyses relating to drug addiction care have been published. One deals with cost-utility of the experiment with medical heroin co-prescription. The results showed that adding medical heroin prescription to methadone maintenance reduces the mean costs per patient per year with € 13.000. The higher programme costs of heroin co-prescription were compensated for by lower costs of law enforcement and damage to victims of crime (Dijkgraaf et al. 2005).

The second (interim) report deals with cost-effectiveness of a general vaccination campaign targeting hepatitis B. This study revealed no significant cost-effectiveness outcomes by implementing a national immunisation programme. Circulation of the virus occurred within small risk groups. Prevalence of HBV carriage in the Netherlands is mainly determined by immigration of carriers. Therefore, the effects of such a programme on the prevalence of HBV will be marginal and the costs per life year gained high.

5.2 Drug free treatment

The main objective of drug-free treatment is to complement medically assisted treatment (medication) in order to attain longer term effectiveness and reducing relapse rates (Schippers et al. 2002). An overview of data on drug free treatment services does not exist yet. Organisations of addiction care are currently busy with draft reports describing their treatment supply. However, on a national level these systematic descriptions are still largely non-comparable. For data on effectiveness of drug free treatment modalities for cannabis or cocaine problems, progress is expected during the coming years.

Criteria of admission to drug-free treatment

There are no specific admission criteria for drug free treatments. Drug treatment is not systematically combined with drug free treatments (Rigter et al. 2004). In order to improve effectiveness, partners and/or family members should be involved, dependent on the phase of addiction of the client and the objectives agreed upon (Van den Brink et al. 1999).

Evaluation results, statistics, research and training

During the past year four dissertations have been published on drug free treatments. The studies of two dissertations have already been introduced into the EDDRA system.

The first one deals with the validity and reliability of measurement or assessment of motivational interviewing in addiction care (De Jonge 2005). An important characteristic of substance dependence is that abusers continue their use regardless of its negative consequences. Resistance to change is inversely related to motivation, an increase in motivation is related to a reduction in resistance and the other way around. Thus, motivation is a

crucial variable in addiction care specially because motivational interviewing is a cost-effective technique to reduce substance use. However, implementation requires systems for coding the necessary interview skills. This published dissertation describes and evaluates several measurement instruments and their requirements for implementation in addiction care. Communication skills are as important in professional addiction care as it is in 'ordinary' psychotherapy. The Yale Adherence and Competence Scale (YACS) is the only instrument to date that measures these skills in addiction care. A new coding system, inspired by the YACS, is introduced that neutralises some criticisms on the original scale: the Coding System for the Integrity of Treatment (CoSIT-G). Test data indicated that this instrument is reliable and valid. Application of it will increase the quality of addiction care.

A second dissertation deals with treatment techniques that are based on 'cue response'. Many substance dependent clients in (residential) treatment are disturbed by a strong desire for drug use ('craving') when confronted with drug related stimuli ('cues'), which often increases relapse. A solution might be to find a way to diminish these strong reactions towards cues ('response prevention' or 'extinction of cue reactivity'). When cue exposure therapies (instead of cue avoidance therapies) are applied, cues are supposed to have far less impact on clients after therapy. In an experimental study 127 abstinent heroin dependent inpatient clients were randomised to either Cue Exposure Therapy (CET, 9 sessions) or placebo-psychotherapy (PPT). Measurements were done at baseline, post-therapy and 3-months after therapy. Primary research question was whether CET would reduce drop out rate (leaving therapy) and lower relapse rates at follow-up. Cue reactivity was assessed by participant's reactions to a video of a heroin user while simultaneously vaporising heroin as an additional cue. It was measured with a craving scale and skin conductance responses. CET did not influence self-reported mood, nor craving but it did influence skin conductance responses compared to placebo-psychotherapy. Although CET resulted in physiological reaction to heroin stimuli, it led – contrary to the expectations - to significant *higher drop out rates* from the therapeutic centre and significant higher relapse rates after the end of treatment compared with placebo-psychotherapy. Relapse was defined as 'at least one time heroin use during follow-up'. These results did not correlate significantly with changes in cue reactivity (mood, craving or skin conductance). This is the first study that shows detrimental effects of CET in a population of heroin dependent inpatient clients (Marissen 2005).

The subject of a third dissertation is the effectiveness of an outreach treatment programme (OTP) for chronic high risk crack abusers (Henskens 2004). This programme was evaluated on its adherence to the assertive community treatment (ACT) model. The main target was to ground theory for evidence based practice for this particular population. Data were collected via interviews with OTP staff members, registration of treatment attendance, and randomly selected clinical records. Overall, treatment integrity (realising in practice what was planned) was moderate. Adherence was high on 7 items, i.e. clearly defined inclusion criteria, phased enrolment of clients, small case loads, high capacity of staffing, nurses in staff, substance abuse professionals in staff, and high intensity of service. Psychiatric and rehabilitation services were not provided, neither were dual disorder treatments. Components with low fidelity were regular meetings, high frequency of contacts, and cooperation with support network. The author concludes that, based on the ACT model, future multidisciplinary treatments for chronic crack abusers should include the following aspects: a psychiatrist and vocational specialist on the team, a staged addiction care treatment (stepped care), and a longitudinal perspective. In addition, three modifications of the ACT model are proposed in order to better serve chronic crack abusers: a stronger focus on the client-therapist relationship, a substantial decrease in the number of face-to-face contacts required for treatment (from four to

one weekly contact), implementation of on-the-spot incentives to keep the target group involved. These modifications need further validation.

The fourth dissertation deals with the influence of differences in norms and cultural values on the effects of addiction care (Tjaden 2004). It is generally assumed that factors relating to the quality of the treatment process co-determine treatment outcomes. An additional assumption is that both clients and professionals in addiction care may react differently when they differ in cultural norms and values. Thus, cultural differences between addiction care professionals and clients may hamper treatment success. The results of a prospective study showed that differences in cultural norms and values of clients and professionals at pre-test did not influence treatment outcomes or drop out rates. There was only a small effect of differences in values and norms concerning work alliances on treatment satisfaction for clients from cultural minorities. Thus, contrary to common thought, differences in cultural norms and values between clients and professionals are not very important in addiction care. However, because the sample size was rather small and dropout rates high, additional research is necessary.

A recent research review analysed one meta-analysis, six reviews and two randomised trials, targeting the *efficacy of family therapy* in treating adolescents with substance abuse problems (Schurink et al. 2004). Family therapy appeared more efficacious (i.e. reducing drug use) than individual treatment, group therapy and family education but equally effective compared to parent groups. Differences in theoretical orientation did not result in different outcomes, although most evidence exists for multisystemic (or multidimensional) therapies and structural strategic therapies. In multisystemic therapies the environment is considered important, thus not exclusively the family is in focus, but also friends, the neighbourhood, and the school. Structural refers to improving family interaction patterns, and strategic to a pragmatic approach focussing on specific daily problems of the drug using adolescent. It may furthermore be important to include individual sessions with the adolescent. It was not possible to specify further the type of the adolescent client population that may be most effectively approached with these therapies.

During the past years four addiction care organisations have started initiatives to cooperate with *self help groups* (Kolk et al. 2005). In general, both types of care are “separate worlds”. These initiatives are based on the premise that adding self help groups to regular treatment will have added value for clients in outpatient care and those who are leaving regular care and are in need for after care. In one organisation it is assumed that cooperation between both types of care may also be advantageous for double diagnosis patients. Here, support groups exist for sharing experiences relating to psychiatric problems. In three organisations of addiction care self help is mainly or partly based on the Twelve Steps Model that is already in use in Alcohol Anonymous and Narcotics Anonymous for decades. The focus of these self help groups is more or less based on skills training and responsibilities. In two organisations, family or spouses are also involved in self help groups. All organisations use specific contact persons or support workers, to strengthen the links and ties between both types of care. In most cases, support workers are former addicts that voluntary work in these groups and are accessible 24-hours a day. In some cases it is explicitly stated that specific working agreements are necessary to avoid work overload among these volunteers.

5.3 Medically assisted treatment

Substitution treatment

Registration data on methadone maintenance treatment reveal an increase in the number of heroin addicts in methadone maintenance treatment and a slowly increasing daily average dose, at least until 2003 (see tale 5.1; LADIS, 2005). This development is not caused by, but consistent with the results of an experiment with high methadone doses, showing that these high doses are in general more effective than lower doses (Driessen et al. 2002)(Driessen 2002).

Table 5.1: Methadone distribution in outpatient addiction care, from 1994

Year	Number of people	Daily average dose (milligram)
1994	8 882	46
1995	8 817	37
1996	9 068	38
1997	9 838	40
1998	9 754	42
1999	10 666	45
2000	10 805	48
2001	12 538[I]	54[I]
2002	12 805	57
2003	12 048	57
2004	12 493	56

I.The increase in the number of people as compared with 2000 is due to the first supply of data from the Municipal Health Service Amsterdam (GGD Amsterdam). The increase in the average methadone dose may also be (partially) related to this. Source: LADIS, IVZ.

In Amsterdam outpatient methadone maintenance treatment is realised by the Municipal Health Service (GGD Amsterdam), addiction care (Jellinek), the police and (some) General Practitioners.

- Methadone distribution by the Municipal Health Service is voluntary. Addicted detainees are given methadone on the police station by a physician of this Service. General Practitioners are treating patients with methadone who (more or less) control their drug use and are enabled to get their methadone by the pharmacist. Most patients, especially among the first two categories of clients, have many problems, e.g. alcohol, homelessness, psychiatric problems, behavioural disorders, prostitution, and infectious diseases.
- In 2004, the total number of patients in regular treatment (excluding the police station) was 2,660, which is appreciably less than in 1989 (3,940) (Van Brussel et al. 2005). However, due to increasing treatment compliance, the daily workload has hardly reduced, which is evidenced by the more or less stable number of daily methadone supplies (e.g. 399,040 in 1994 and 385,673 in 2004 as regards regular treatment).
- This increasing treatment compliance is strongly related to the aging of the population. In 2004, half of the patients of 40 years and older had used methadone on an almost daily basis. In contrast, half of the younger (less than 30 years) users had used methadone less than 100 days per year, which is too little to improve their social functioning status (Van Brussel et al. 2005).
- There are indications that high doses of methadone are related to increased treatment compliance.

6 Health Correlates and Consequences

6.1 Drug-related deaths and mortality of drug users

General Mortality Register: direct deaths

The main source for the official Dutch statistics on drug-related deaths is the General Mortality Register (GMR) or Causes of Death Statistics held by Statistics Netherlands (CBS) (Van Laar et al. 2003). Causes of death are classified according to the International Classification of Diseases, Injuries and Causes of Death (ICD). The 9th edition of the ICD was used from 1979 through 1995, and the 10th edition of the ICD has been in use since 1996. This register has national coverage, but only includes residents of the Netherlands, and provides data especially on acute mortality due to drug use or drug 'overdose'. The GMR data do not make a distinction between experimental and habitual drug users, and are not suitable to trace deaths due to rare toxicological substances (e.g. various synthetic drugs).

Trend

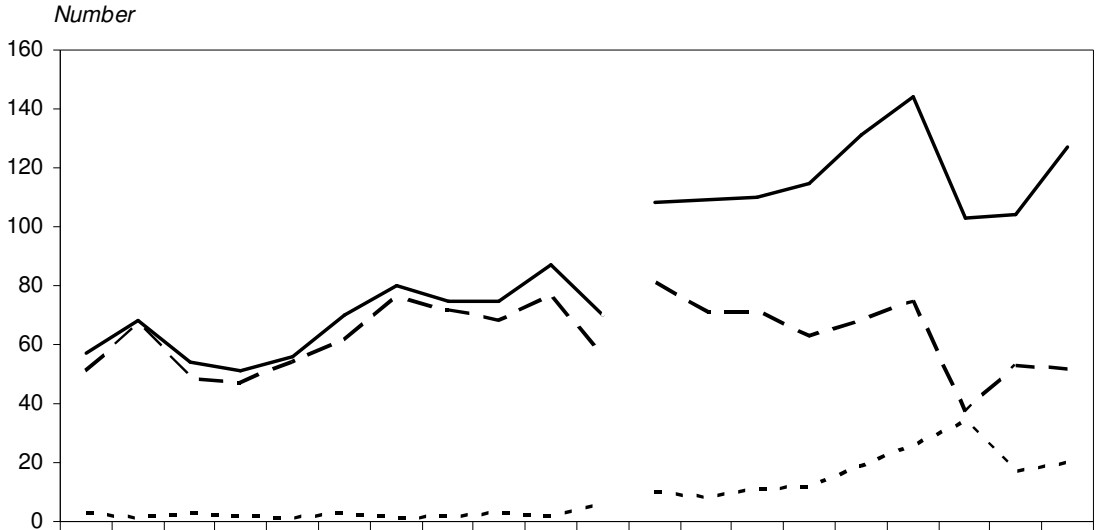
- Figure 6.1 shows the number of cases recorded from 1985 through 2004 according to the EMCDDA selections of ICD-codes. Between 1985 and 2001, opiate intoxications were the most common causes of death recorded among Dutch residents. In this period, the casualty rate fluctuated between 47 and 77 cases. In 2002, the number of opiate deaths dropped and reached about the same level as the number of acute cocaine deaths, which had slowly increased since the late nineties. However, since 2003 these converging trends have diverged. Since that year the number of cocaine deaths has slightly decreased and the number of opiate deaths has slightly increased.

- The *total* number of recorded drug-related deaths increased between 1995 and 2001, decreased in 2002 and 2003, but seems to increase again in 2004. The increasing trend can be attributed to various factors, such as the change from ICD-9 to ICD-10 in 1996 (ICD-10 includes more cases), and the rise in acute cocaine deaths, which seems to parallel an increase in problem use. Moreover, besides deaths due to opiates and cocaine, a growing number of deaths were coded as ‘accidental poisoning by other and unspecified dysleptics’ and ‘poisoning by other and unspecified narcotics’. The drop in the total number of deaths in 2002 is mainly due to opiates. The slight increase again in 2004 is mainly due to substances coded to 'other and unspecified narcotics' and 'other and unspecified psychodysleptics' (34 cases in 2003 and 55 in 2004). For the cases coded this way in 2004, Statistics Netherlands has performed a further inquiry into the substances that were originally mentioned on the respective death certificates. It was found that 80% of these death certificates mentioned “drugs or drug user”, 10% mentioned medicines, 6% mentioned drugs in combination with alcohol, 2% mentioned drugs in combination with alcohol and medicines, and 2% mentioned medicines in combination with alcohol (Deerenberg 2005, personal communication). For the majority of the unspecified cases, these findings indicate that it is appropriate to count them as drug-related deaths.

- Despite fluctuations over the years, the total number of drug-related deaths in the Netherlands remained relatively low. This might be explained by protective factors, such

as the nationwide availability of methadone maintenance treatment and the low rate of injecting drug use in the Netherlands. There are, however, some indications that not all cases of drug-related deaths are recognised in the GMR (De Zwart et al. 2001). A drug swallower, for example, who accidentally dies from cocaine poisoning is not recorded in the Dutch GMR in case the drug swallower is not an official resident of the Netherlands.

Figure 6.1: Number of acute drug-related deaths in the Netherlands according to the EMCDDA selection of ICD-9 codes (1985-1995) and ICD-10 codes (1996-2004)



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total	57	68	54	51	56	70	80	75	75	87	70	108	108	110	115	131	144	103	104	127
Opiates	51	67	49	47	54	62	76	72	68	77	56	81	71	71	63	68	75	37	53	52
Cocaine	3	1	3	2	1	3	1	2	3	2	6	10	8	11	12	19	26	34	17	20

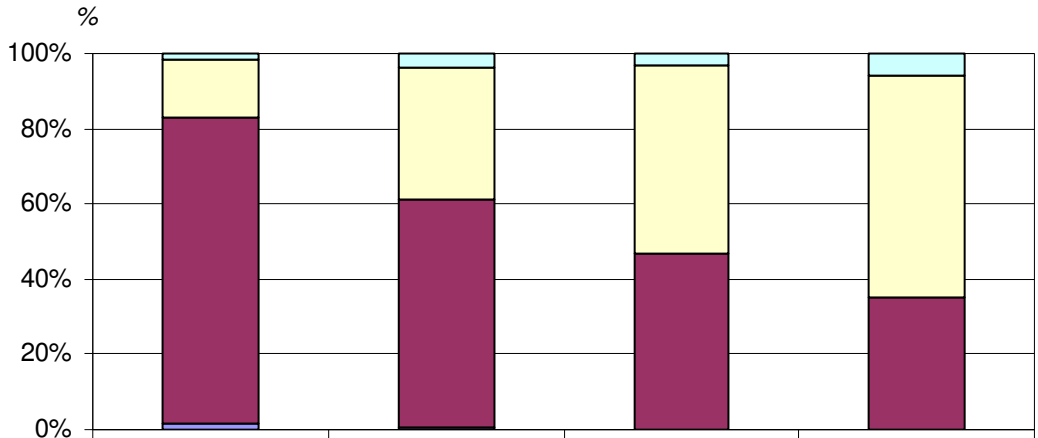
ICD-9: 292, 304.0, 304.2-9, 305.2-3, 305.5-7, 305.9, E850.0, E850.8, E854.1-2, E855.2, and E858.8, E950.0, E950.4, E980.0, E980.4 (selected in combination with N965.0, N968.5, N969.6 or N969.7). **ICD-10**: F11-F12, F14-F16, F19; and X42, X41, X62, X61, Y12, Y11 (selected in combination with T40.0-9, T43.6). Source: Causes of Death Statistics, Statistics Netherlands. Break in lines indicates the switch from ICD-9 to ICD-10.

Age and gender

The population of problem hard drug users is ageing and this trend is reflected in the increasing age of drug users that have died from drugs. Figure 6.2 shows that the percentage of victims aged 35 years and above increased from 16% in the late eighties to 65% in the beginning of this century.

Between 1985 and 2004, the percentage of female cases varied from 10 to 27% per year, without showing a clear trend.

Figure 6.2: Trends in age distribution of cases of acute drug-related deaths in the Netherlands, according to the EMCDDA definition



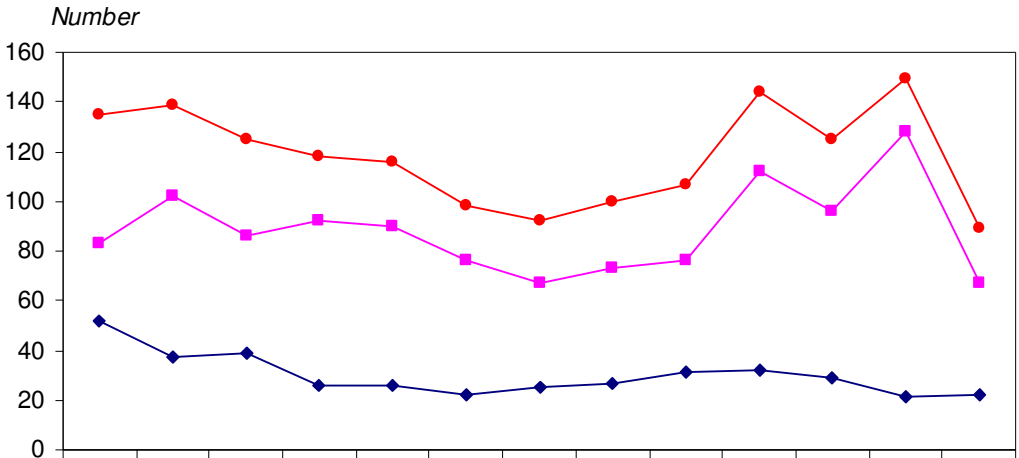
	1985-1989	1990-1994	1995-1999	2000-2004
>=65 y	1	4	3	6
35-64 y	15	35	50	59
15-34 y	82	61	47	35
0-14 y	1	0	0	0

Source: Causes of Death Statistics, Statistics Netherlands (CBS).

Mortality among drug users in Amsterdam

Each year the Municipal Health Service Amsterdam traces drug-related deaths by combining data from the Central Methadone Register, the municipal registrar's office, the municipal coroners, hospital records, and the police. Data on fatal poisonings ('overdoses') from Amsterdam coroners *also* concern tourists and illegal drug users not included in the Population Registry. This is in contrast to the General Mortality Register (GMR), which only includes residents of the Netherlands who are recorded in the Population Registry. Moreover, in addition to direct deaths (or 'overdoses'), the registration also includes indirect causes of death.

Figure 6.3: Number of deaths among drug users in Amsterdam



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Overdose	52	37	39	26	26	22	25	27	31	32	29	21	22
Other causes*	83	102	86	92	90	76	67	73	76	112	96	128	67
Total	135	139	125	118	116	98	92	100	107	144	125	149	89

* Including, among others, infectious diseases, violent deaths, accidents and suicide. Cases are counted among all drug users who have (ever) been registered in the Central Methadone Register of the Municipal Health Service Amsterdam. This may result in an overestimation of the number of cases in the category 'other causes'.

Trend

Each year more deaths are due to other causes than overdose. Apart from the 22 overdose cases in 2004, five persons accidentally died from the drugs which they swallowed to transport these drugs. The total number of deaths slightly decreased in the late nineties, then slightly increased in the beginning of the century, but decreased again in 2004. Van Brussel and Buster (2005) give the following explanations for the decrease in the number of deaths in 2004(Van Brussel et al. 2005):

- a decrease of deaths among HIV-positive drug users due to improved treatment
- drug users with an extremely risky lifestyle have already died
- a decrease in intravenous drug use
- a decrease in the HIV-epidemic.

Characteristics of the drug-related deaths in Amsterdam in 2004

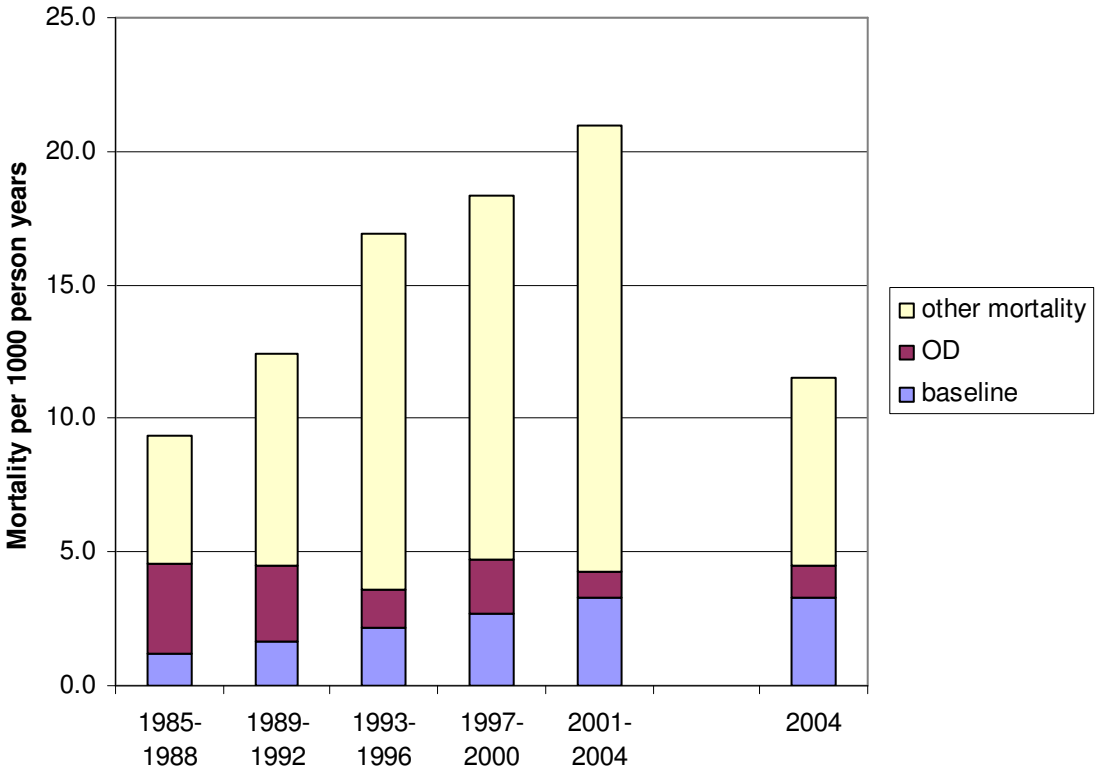
Sluijs (2005) reports the following characteristics of the drug-related deaths that were noticed in Amsterdam in 2004(Sluijs 2005):

- With regard to the country of origin, 48% of the casualties were of Dutch origin and 52% of the casualties came from other countries.
- The mean age was 45 years. Overdose victims were on average 37 years.
- Twenty-two of the overdose cases in 2004 were related to opiates; 'ecstasy' was involved in two cases.

The Municipal Health Service also investigates mortality rates among methadone clients. In order to have a proper follow-up of drug users, only methadone clients who were likely to

stay in Amsterdam are included (i.e. who had a known address in the city and were born in the Netherlands, Surinam, Netherlands Antilles, Turkey or Morocco).

Figure 6.4: Mortality per 1000 person years among Amsterdam methadone clients



Baseline mortality indicates the mortality among the Amsterdam population of the same age. OD= overdose.
Source: Municipal Health Service Amsterdam.

- In 2004, 12 persons per 1000 methadone clients died. Figure 6.4 shows that the overall mortality had increased since the eighties, but has decreased in 2004. The increase in baseline mortality is related to the aging of the drug using population. Across the periods reviewed in figure 6.4, the mortality among methadone clients was about 6 to 8 times higher than the mortality among the Amsterdam population in the same age group. In 2004 this relative risk decreased to about 4. This low risk might be 'accidental' (random fluctuation) but the factors mentioned above (e.g. improved HIV treatment and reduction of injection behaviour) might also play a role.
- Preliminary results from a study into ethnic differences in mortality among methadone clients in Amsterdam showed that drug users born in the Netherlands were more likely to have (ever) injected drugs (51% vs. 15%) and had a higher mortality rate (age adjusted HR 2.0; 95% CI 1.4-2.7) compared with heroin users born in Surinam, Dutch Antilles, Morocco and Turkey (Buster et al., in preparation). A subsequent analysis showed that the lower mortality rate among ethnic minorities was related to the high prevalence of non-injecting.

Deaths related to the use of ecstasy, GHB or other (synthetic) drugs

The number of persons in the Netherlands who died after using ecstasy or other synthetic drugs is not known. There is no central register for these cases and the General Mortality Register does not allow an accurate 'identification' of these deaths. Moreover, full toxicology (and autopsy) is required to determine the exact cause of death. However, this is no routine procedure in the Netherlands. In the framework of the national Working Group on Drug-related deaths, the Focal Point and the National Forensic Institute aim to analyse data on all drug-related deaths investigated by the NFI over the past years, taking toxicological and pathological data into account. Although the cases brought to the attention of the NFI are not representative of the total drug-related deaths population, the detailed data available on these deaths might be helpful in gaining knowledge on the specific substances causing or contributing to mortality.

According to the General Mortality Register (GMR, CBS), 5 people died in 2004 from an acute psychostimulant intoxication. The precise nature of the involved drugs is not known (e.g. amphetamine, MDMA).

6.2 Drug-related infectious diseases

The (HIV) sentinel surveillance system among injecting drug users of the National Institute of Public Health and the Environment (RIVM) is the main source of information on the prevalence of HIV and hepatitis B and C. Other sources include the HIV/AIDS registration (HIV treatment data), notification data (hepatitis B and C; reported by the RIVM) and data from a local (Amsterdam) prospective study on infectious diseases among drug users. For various reasons, the latter sources do not give unbiased estimates of prevalence rates, but they may (in the long run) give additional indications of trends on the incidence of infectious diseases.

HIV

The Dutch HIV surveillance involves repeated surveys among drug users in four fixed cities

- (Amsterdam, Rotterdam, Heerlen/Maastricht en Arnhem) and two optional cities. In these surveys, frequent hard drug users (heroin, cocaine, methadone, amphetamines) are recruited in methadone centres and on the street. Saliva samples are collected and tested for HIV antibodies. The last survey was held in Rotterdam in 2002/2003. A new study among injecting drug users has not been planned.
- In total, approximately 3500 IDUs participated in the 16 surveys held between 1994 and 2003 in the various Dutch cities. HIV prevalence rates ranged from 0.5% to 26%, with the highest prevalence rates found in Amsterdam (26%) and south Limburg (22%) (Van de Laar et al. 2005).
- Results from this survey showed that the prevalence of HIV-infection among IDUs (10.2%) was similar compared to previous surveys in 1994 (11.4%) and 1997 (9.4%) (De Boer et al. 2004b).
- Independent risk factors for HIV were homelessness and onset of injecting drug use at early age. Risky sexual behaviour remained highly prevalent, but the percentage of IDUs that had recently shared needles decreased from 18% in 1994 to 8% in 2002.

Treatment data

Another source of information is the national HIV/AIDS registration of the HIV Monitoring Foundation (SHM), which was appointed by the Dutch Ministry of Health Welfare and Sports as the executive organisation for the monitoring of HIV in the Netherlands in 2002. This registration includes data on HIV-infected patients who are seen regularly by HIV/AIDS treating physicians in one of the 23 collaborative HIV treatment centres throughout the country. This registration also includes data from a prior project on HIV positive patients treated between 1998 and 2001. Together they form the ATHENA national observational cohort on HIV. The data are used to monitor changes in the HIV epidemic and the effect of treatment of infected patients with antiretroviral combination therapy (Gras et al. 2005).

- In 2004, 938 new HIV diagnoses were reported (25% females), of which 9 were injecting drug users (1%; 1 of 9 being female). Up to June 1 2005, the total number of HIV-infected patients included in the HMF programme was 10,619 (23% females). The group of patients infected by intravenous drug use consisted of 561 persons (27% females). Of these, 80% were diagnosed in or prior to 1997 and the remainder from 2000 onward. The estimated number of HIV-patients alive is over 9,550 (Van de Laar et al. 2005).

Table 6.1: Number (%) of recorded HIV infections by year of diagnosis and by route of transmission

Transmission group	<=2000	2001	2002	2003	2004
Homo/bisexual	3403 (58%)	392 (45%)	423 (45%)	419 (44%)	459 (49%)
Heterosexual	1453 (22%)	372 (42%)	410 (43%)	417 (43%)	373 (40%)
Injecting drug use	490 (8%)	18 (2%)	13 (1%)	20 (2%)	9 (1%)
Blood (products)	108 (2%)	7 (1%)	9 (1%)	6 (0.6%)	4 (0.4%)
Mother to child	33 (0.6%)	13 (1%)	10 (1%)	14 (1%)	6 (0.6%)
Needle stick injury	10 (0.1%)	1 (0.1%)	5 (0.5%)	2 (0.2%)	3 (0.3%)
Other/unknown	405 (7%)	75 (9%)	75 (8%)	82 (9%)	84 (9%)
Total	5902	878	945	960	938

'Year of HIV diagnosis' refers to the date of the first HIV positive blood sample known by the HIV Monitoring Foundation. Figures are adjusted constantly because of reporting delays. Source: (Gras et al. 2005) (Van de Laar et al. 2005).

- The median age of diagnosis in IDUs diagnosed with HIV in or after 1996 was 37.4 years. At diagnosis, patients born in the Netherlands were older (median 38.4 years) than non-Dutch patients (median 34.2 years). Sixty-seven percent of HIV-infected IDUS originated from the Netherlands and 18% from other Western European countries. The remaining patients were born in Latin America (4%, 19 of 22 patients originated from Surinam), the Caribbean (1%, all from the Netherlands Antilles), Central and Eastern Europe (3%) and elsewhere. Most of the patients were infected in the Netherlands (87%) or in other Western European countries (8%). Of the 118 patients born outside the Netherlands 34% were infected in their region of origin. Exceptions were the Surinamese patients, since 12 of 13 Surinamese IDUs with a known country of infection were infected in the Netherlands (Gras et al. 2005).
- From July 1, 1996 to December 31, 2004 in total 6000 HIV infected, therapy-naive patients started HAART, of which 246 (4.1%) were infected through IDU. It was shown that among others, intravenous drug use as the mode of HIV transmission was

associated with shorter time to a new AIDS-defining event after starting HAART, and increased probability of death (Gras et al. 2005).

The prospective Amsterdam Cohort Studies (ACS) is carried out since 1984 among homosexual men and since 1985 among drug users. Since 2000, only young drug users (aged <30 years) are allowed to enter the cohort (YODAM). Participants are followed-up every 4 to 6 months, with questionnaires on risk behaviour, and blood samples for virological and immunological testing.

- HIV seroprevalence in all *young* drug users dropped from 31% (in ever-injectors 33%) in the period 1985-1989 to 16% in 1998 and lowered further to 3% (in ever-injectors 7%) in the period 2000-2004 (Van de Laar et al. 2005;Welp et al. 2003).
- From 1994-2002, 100 ACS participants with primary HIV-1 infections were identified, of whom 27 IDUs, and prevalence of resistant HIV-1 strains among these seroconverters was assessed. Despite the fact that conditions for transmission of drug-resistant strains are present in Amsterdam, it was found that the transmission of drug-resistant HIV-1 had decreased since the introduction of HAART in 1996, both in homosexual men and in IDUs (Bezemer et al. 2004).
- Although hampered by small numbers, the study also found that non-B subtypes are not (yet) influencing the HIV epidemic among drug users and men having sex with men in Amsterdam, which is in line with findings from the SHM (Gras et al. 2003).

AIDS

Until 2001 AIDS cases meeting WHO criteria were registered in the national Information System on AIDS Statistics, maintained by the Health Care Inspectorate (IGZ). In 2002 this AIDS registration was replaced by the HIV/AIDS registration of the SHM mentioned above. As the IGZ data appeared to be incomplete since 2000, the data below are based on the IGZ registration until 1999 and the SHM data from 2000 onwards. The year of AIDS diagnosis refers to the date of the first CDC-C diagnosis (classification C according to the Centres for Diseases Control).

- By June 2005, the cumulative total of reported AIDS diagnoses was 6,648, and 4,150 AIDS deaths (85 deaths in 2004). The annual number of AIDS cases peaked between 1992 and 1995 (between 480-533 cases) and then dropped to some 230-280 cases in the last years. The decrease since 1996 is related to the availability of HAART, which slowed progression from HIV to AIDS. The estimated numbers of AIDS patients alive is over 2,400 (Van de Laar et al. 2005).
- The number of cases related to injecting drug use peaked in 1995 (74), dropped to 9, 5, 8 and 6 cases in respectively 2001, 2002, 2003, and 2004. In total, 638 AIDS patients were registered as being infected through injecting drug use. The proportion of injecting drug users varied between 2% and 14% (Van de Laar et al. 2005).

Hepatitis B and C

The HIV surveillance system of the RIVM among local samples of injecting drug users, mentioned above, does not systematically test for HBV and HCV. Occasional local assessments carried out between 1994 and 2000 revealed high infection rates of HBV and HCV, varying between 35% and 67% (HBV) and between 47% and 79% (HCV).

Data from the SHM showed that HCV prevalence *among HIV infected IDUs* in the Netherlands is almost 95% (of 435 patients tested), which is significantly higher ($p<0.001$) than in other HIV risk groups (Gras et al. 2005).

The HCV epidemic among drug users in Amsterdam has been studied by comparing the seroprevalence and HCV subtype distribution among 215 young drug users (aged <30 years) from 1985 to 1989 with 197 counterparts from the period 2000 to 2004, all participating in the Amsterdam Cohort Studies (Van de Laar et al. 2005).

- The overall HCV prevalence had decreased from 83% in 1985-1989 to 14% in 2000-2004, and in injecting drug users HCV prevalence diminished from 91% to 44%. Also the risk factors associated with acquiring HCV lessened: the proportion of individuals reporting a history of injection decreased from 88% to 31%; for recent injection this decrease was even more prominent: from 71% to 16%; and also the median duration of injecting decreased (from 7 to 4 years), as did ever and recent borrowing (from 84 to 44% and from 53 to 13% respectively)
- It was found that the HCV genotype distribution had become more diverse in the period 2000-2004, with the introduction of new genotypes 2 and 4, whereas genotypes 1a and 3a (which are traditionally linked to injecting drug use in Western Europe) and 1b were solely observed in the period 1985-1989. The distribution of HCV genotypes is of clinical importance with regard to prognosis: genotypes vary in their response to treatment, with genotypes 1 and 4 showing lower success rates than genotypes 2 and 3.

Notification data

Since 1976 acute hepatitis B infections have to be notified to the Health Care Inspectorate (IGZ). In April 1999, newly diagnosed chronic and subclinical HBV infections also became notifiable diseases.

- In 2004, 1805 cases of hepatitis B have been diagnosed, of which 293 (16%) acute, 1446 (80%) chronic cases, and in 66 (4%) of cases of unknown nature (Koedijk et al. 2005a).
- Table 6.2 shows the number of acute cases by the route of transmission from 2002 up to 2004. Injecting drug use was among the least important transmission routes (in 2004, 20 (1.7%) of 1215 notified HBV cases (chronic and acute) with known transmission route were IDUs and 1.4% of the 218 acute cases). These findings are in line with the results in previous years: also in the chronic cases notified between 2001 and 2003 (n=4112), the contribution of injecting drug use was limited (1.4%) (Koedijk et al. 2005b).
- Note that the percentage of cases with an unknown transmission route is high (26% in acute infections and 31% in chronic cases notified in 2004 and 43% in chronic cases notified between 2001 and 2003) (Koedijk et al. 2005a).

Table 6.2: Notifications of HBV acute infections by route of transmission

Acute infections	2002		2003		2004	
	N	%	N	%	N	%
Injecting drug use	4	1.5	7	2.2	3	1.0
Accidental exposure incidents	2	0.8	7	2.2	7	2.4
Mother to child	-	-	2	0.6	2	0.7
Sexual contact	157	59.3	194	60.8	176	60.1
Other	35	13.2	19	6.0	30	10.2
Unknown	67	25.3	90	28.2	75	25.6
Total	**265**	**100**	**319**	**100**	**293**	**100**

Source: RIVM (Koedijk et al. 2005a).

Hepatitis C has been a notifiable disease since April 1999. Until October 2003 both chronic and recent HCV infections had to be reported to the Health Care Inspectorate within 24 hours after the diagnosis (positive test for HCV or HCV-RNA-PCR). Since October 2003, this procedure only applies to (suspected) acute or recent infections. The figures mentioned below should be interpreted with caution. As acute infections are often asymptomatic, an unknown rate of missed diagnoses and underreporting is possible. Underreporting also occurs because until 2004 data from the Municipal Health Service Amsterdam are lacking. The registration system also changed in 2002, which hampered the analyses of data even further, and the transmission route is missing for quite a few cases.

- In table 6.3 the numbers of notified acute hepatitis C infections are listed from 2002 to 2004. In 2004, an increase of 79% was reported and 34 acute HCV cases were notified, 22 with known infection route of which half was related to injecting drug use.
- The increase in the number of reported HCV infections transmitted by sexual contact was most likely related to an outbreak of lymphogranuloma venereum among men having sex with men (Op de Coul et al. 2005).

Table 6.3: Notifications of HCV acute infections by route of transmission

Acute infections	2002		2003		2004	
	N	%	N	%	N	%
Injecting drug use	7	50.0	6	31.6	11	32.3
Accidental exposure incidents	0	0	3	15.8	0	0
Sexual contact	1	7.1	4	21.0	11	32.3
Other	1	7.1	3	15.8	4	11.8
Unknown	5	35.7	3	15.8	8	23.5
Total	**14**	**100**	**19**	**100**	**34**	**100**

Source: RIVM (Op de Coul et al. 2005).

Treatment data (hepatitis B and C and other diseases)

Screening of drug users in treatment is no routine procedure, but various pilot studies assessing the feasibility of screening and vaccination or treatment programmes are running (see also chapter 7.2).

Another source of information is the national hepatitis B vaccination campaign for behavioural risk groups (see also paragraph 7.2).

- Until October 2005, over 40,000 individuals received a first vaccination, of which 8,254 were assigned in the group of drug users (including ever and never injectors). Chronic carriership was established in 0.8% of drug users; 14.7% was found to be immune (implying a previous infection, which has been cured) and the remainder was susceptible, and therefore eligible for the full vaccination schedule. These data are preliminary, and may be subject to change (data are provided by M-L Heijnen, Netherlands Association for Community Health Services).
- To assess the effectiveness of the HBV vaccination campaign the number of reported acute HBV cases in Amsterdam has been compared in the periods 1992-1997 and since the start of the HBV vaccination pilot in 1998 (1998-2003) (Boot et al. 2005). A decrease was found from 219 to 131 cases, which was significantly attributable to a reduction of transmission through heterosexual contacts and intravenous drug use. Since 1998, no acute cases of HBV infection were notified among drug users in Amsterdam. Also nationwide, the contribution of intravenous drug use to the total notifications of acute HBV is very limited (1%) (Boot 2005).

TBC

The Municipal Health Service Amsterdam performs half yearly chest X-rays among methadone clients and also receives reports of all tuberculosis cases diagnosed in any inhabitant of Amsterdam, including IDUs.

- In 118 HIV-positive drug users participating in the Amsterdam Cohort Study, the risk of a first tuberculosis was studied. The incidence rate per 1000 person-years (95% CI) was found to be 23.5 (14.2-38.9); whereas a first pulmonary tuberculosis was observed three times more often than a first extra-pulmonary form (van Asten et al. 2003).
- Compared with other European cities, the relative risk of tuberculosis for IDUs in Amsterdam is high. Possibly, a good tuberculosis case-finding system in combination with the absence of a prophylaxis policy, may explain (part of) the incidence rates. Also the low threshold to participate in the Amsterdam Cohort Study may have attracted a marginalised population, which is more prone to TBC infection (van Asten et al. 2003).

In Rotterdam a genetic cluster of TBC has been identified, first among Cape Verdians, and since 1998 including drug users, which expanded rapidly and is currently the largest TBC cluster in the Netherlands. To control further spread, a screenings program started in 2002 in which twice a year homeless people, prostitutes and drug users living in Rotterdam are screened for TBC (GGD Rotterdam en omstreken 2005)).

Hepatitis A

On the 7th of February 2004 the Municipal Health Service of Rotterdam reported an outbreak of hepatitis A among homeless problem drug users (De Vries et al. 2004). Between February and mid April 2004, a total of 15 cases were reported among this population. In order to prevent further spread among the homeless and transmission to the general population, a large-scale vaccination campaign was launched. A total of 1515 homeless people were vaccinated as well as 1197 professionals working at various social services and treatment centres. Genotyping showed that all infections among the homeless were of the same virus type (De Zwart et al. 2005).

6.3 Psychiatric co-morbidity

Recent data on the prevalence of psychiatric co-morbidity are not available. According to local field studies, psychic problems are fairly common among problem hard drug users. In Rotterdam (2003), 33% of this group reported to have had severe psychic problems in the past month and/or received medication and/or had been hospitalised for psychiatric problems (Jansen et al. 2003). In Parkstad-Limburg (2002), more than half (51%) of the problem hard drug users reported to have psychic problems (45% depression, 15% severe anxiety, 16% concentration problems) (Coumans et al. 2002). These problems might be a consequence of someone's hard drug use career but might also be one of the causes.

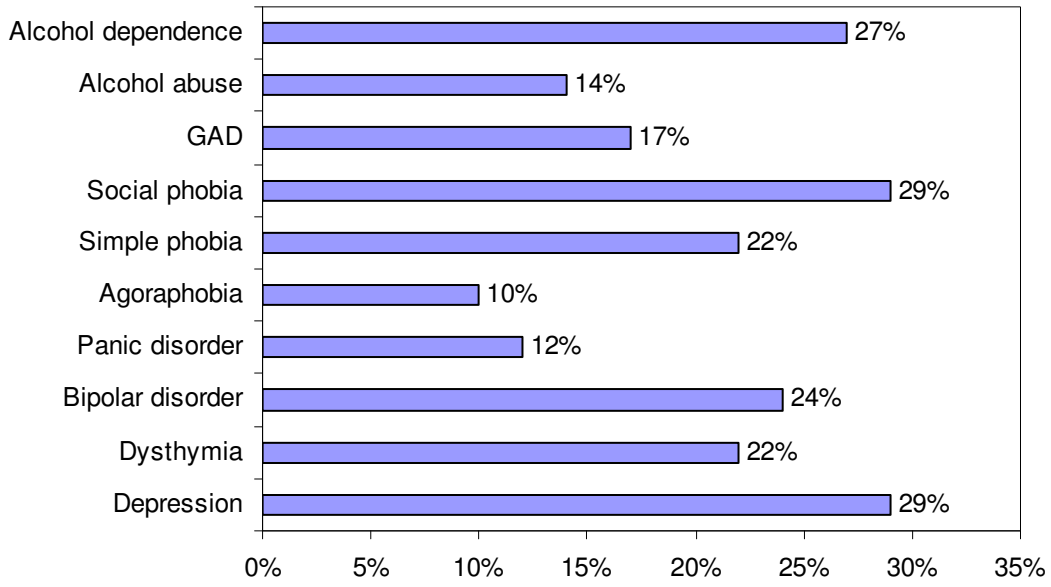
The Municipal Health Service Amsterdam signals an increase in psychiatric co-morbidity among heroin users compared with the start of the heroin epidemic (Van Brussel et al. 2005). The following reasons put forward to explain this trend were:

- Self-selection (natural recovery is more common among addicts without psychiatric co-morbidity compared to double diagnosis patients)
- Harmful effects of a chronic life in the streets
- Harmful effect of frequent interruption of methadone treatment, for example in prison
- Trends in drug use, i.e. use of crack without concomitant use of heroin

According to international studies, the co-morbidity of ADHD and substance use disorders in treatment settings appears to be high (30-50%; (Gordon et al. 2004)). No reliable prevalence data are available yet for the Netherlands. It has been estimated that some 18% of the clients of drug treatment services can be diagnosed with ADHD (Van Duin et al. 2004).

Nemesis provides information on the co-morbidity of mental disorders based on DSM-III-r diagnoses in the Dutch population of 18-64 years in 1996 (figure 6.5). Co-morbidity is defined here as the occurrence of more than one disorder in a person within a given time frame. In 1996, the year prevalence of drug dependence was 0.8% (including 0.5% cannabis dependence). Drug dependence was highly comorbid with alcohol dependence (OR=10.3), bipolar disorder (OR=26) and dysthymia (OR=11) (Ravelli et al. 1998). Note that drug dependence also includes psychoactive medicines.

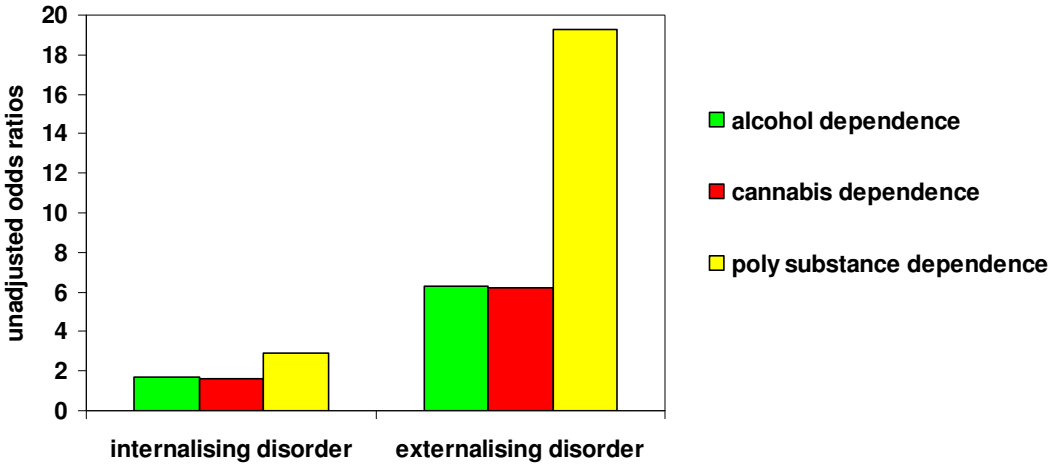
Figure 6.5: One-year prevalence of mental disorders (%) among drug dependent persons in the general population of 18-64 years (in 1996)



Odds ratios between 3 and 26. Source: Nemesis (Ravelli et al. 1998).

Co-morbidity of substance use disorders and non-substance use mental disorders is very high among specific populations, such as forensic psychiatric patients and juvenile detainees (see also chapter 8.3). For example, Vreugdenhil et al. (2003) showed that three-quarters (76%) of a sample of incarcerated boys between 12-18 years met criteria for an externalising disorder (DSM-IV diagnosis of disruptive behaviour)(Vreugdenhil et al. 2003). This finding in itself is no surprise since externalising problems (such as aggression and violence) may be one of the reasons for incarceration. The prevalence of internalising (mood and anxiety) disorders was relatively low (13%). The six-months prevalence rate of cannabis, alcohol or poly substance dependence were 30%, 22% and 14%, respectively. Unadjusted associations between substance dependence and internalising and externalising disorders are shown in figure 6.6. After adjustment for age, ethnicity, severity of offence and criminal recidivism, alcohol dependence cannabis and poly substance dependence were all significantly associated with externalising disorders (OR alcohol 6.3 (1.8-21.4); cannabis 6.2 (2.3-17.0); polysubstance 19.3 (2.5-149.8)), but not with internalising disorders. Note, however, that the 95% confidence intervals were wide, especially for the association between externalising disorders and poly substance use, which might also explain the relatively high odds ratio.

Figure 6.6: Associations between substance dependence and mental disorders among incarcerated boys (12-18 years)



Source: (Vreugdenhil et al. 2003).

Causal link between cannabis use and mental disorders?

In the past year, there has been scientific and political debate on the association between cannabis use and mental disorders (see also chapter 3). National and international studies (Van Os et al. 2002; Henquet et al. 2005; Arseneault et al. 2004; Smit et al. 2004a) tend to provide converging evidence on the etiological role of cannabis in the onset of psychotic disorders. In general, the findings suggest that cannabis use increases the risk of the incidence of psychosis in the 'general population' with a factor 2 on average. This risk increases with the intensity of use and is much higher among vulnerable people with a history of psychotic disorders. These findings have been confirmed in a cohort of young people (Henquet et al. 2004). Moreover, a retrospective study in the Hague showed that in Dutch male schizophrenia patients, the use of cannabis was associated with a much earlier onset of the disorder, but the mechanism for this association remains to be determined (Veen et al. 2004). Despite the many methodological pitfalls and the impossibility to definitely infer causal relationships on the basis of epidemiological research, the bulk of evidence suggests a possible etiological mechanism. Both the dopaminergic and glutaminergic neurotransmitter system have been proposed as possible sites mediating the relationship between cannabis use and psychosis (Bossong et al. 2005;Van Os et al. 2002).

The question whether cannabis use might be linked as well to other mental disorders, such as mood and anxiety disorders, has been investigated less well. Preliminary results from the longitudinal Dutch NEMESIS study (Netherlands Mental H ealth Survey and Incidence Study) indicate that cannabis use in the adult population of 18-64 years was associated with the first incidence of bipolar disorder (OR 5.0; (Van Laar et al. 2005)). A weak association was found with major depression as well (OR 1.6). The associations remained significant after adjustment for a range of strong confounders, but the impact of unobserved confounders (such as genetic predisposition) can not be excluded.

6.4 Other drug-related morbidity

Drug-related emergencies

There is no national registration system for drug-related emergencies in the Netherlands. Various systems give information on part of the cases, such as hospital admissions (LMR, see chapter 4) or cases reported by the Central Post Ambulance Transport in Amsterdam (see below). A recent study investigated the feasibility of implementing a registration system for collecting data on alcohol and drug use among patients frequenting emergency rooms (Vitale et al. 2005). The pilot was carried out in four hospitals in four different regions in the Netherlands.

- The results showed that the response rate was low (between 15% and 37%) when the hospital staff had to distribute questionnaires among patients. An alternative method (retrospective questionnaire send to patients) avoiding the commitment of hospital staff resulted in a response percentage of 40%, and a more labour intensive and costly method (distribution of questionnaires at location by a specific research assistant) resulted in the highest response rate (between 55% and 74%).
- As regards the prevalence rates of drug use, self-report data showed that 3.2% of the patients had used illicit drugs in the past 24 hours (ranging from 1.4% to 10.1%, depending on the region). Based on self-reported data and staff judgement, 14.6% had used alcohol in the past 6 hours prior to the injury or illness (range 4.9% - 18.2%).

Drug-related non-fatal emergencies in Amsterdam

The Municipal Health Service Amsterdam keeps a record of nonfatal emergencies brought to its attention (Central Post Ambulance Transport). The more serious emergencies require transportation to the hospital by ambulance. The link with drug use has been based on case history and circumstantial data; there is no toxicological confirmation.

- In 2004, the total number of drug-related requests for emergency assistance was 841. Table 6.4 gives the annual number of emergencies per drug from 2000-2004.
- The annual number of requests for emergency assistance related to the use of opiates and cocaine varies between 200 and 300.
- In 2004, 602 emergencies were related to ‘recreational drugs’, with cannabis on top of the list, followed by GHB, ecstasy, hallucinogenic mushrooms, amphetamines and LSD (table 6.4). There was an increase relative to 2003 (465), which can be attributed among others to cannabis, ecstasy and GHB.
- GHB is difficult to dose because of the small safety margin. Moreover, an overdose in combination with alcohol may result in coma. Compared with other drugs, the percentage of GHB cases requiring transportation to the hospital is high (83% in 2004, against, for example, 35% for cannabis).

Table 6.4: Number of non-fatal emergencies* due to hard drugs and recreational drugs recorded by the Municipal Health Service Amsterdam

	2000	2001	2002	2003	2004
Opiates/cocaine	188	208	216	226	239
Cannabis	141	289	285	257	320
Hall. mushrooms	24	49	50	60	55
Ecstasy	36	42	39	39	59
Amphetamine	30	6	5	7	9
LSD	2	3	1	1	7
GHB	25	69	67	74	98
Unknown	20	37	38	29	54
	466	703	701	693	841

Source: Municipal Health Service Amsterdam.

Information requests on acute intoxications

Another source of information on trends in emergencies is the number of information requests from physicians, health authorities and others on acute intoxications recorded by the National Poisons Information Centre (NVIC) of the RIVM. Note, however, that these data are just indicative and do not reliably represent the actual number of acute intoxications.

Table 6.5: Information requests on drugs at the National Poisons Information Centre in 2000, 2003 and 2004

	2000	2003	2004
Ecstasy / amphetamines	206	255	297
Cocaine	150	247	227
Cannabis	71	144	191
GHB	91	212	190
Others	138	352	380
Total drugs	*656*	*1,210*	*1,285*

Source: NVIC, RIVM (Van Gorcum et al. 2003).

- From 2002 to 2003 the total number of requests almost doubled (see table 6.5). Relatively strong increases were found for GHB, cannabis and cocaine. In 2004, the number of cocaine and GHB related requests slightly decreased and the number of requests for cannabis further increased
- Moreover, in 2004, 112 questions were related to opiates, 127 to ephedra, 52 to hallucinogenic mushrooms and another 89 to other smart drugs (guarana, ginseng, khat, poppers etc.).

Drugs and driving

According to an international review of epidemiological and experimental studies, cannabis use increases accident risk in a dose-related manner in drivers who are under the influence of this drug (Ramaekers et al. 2004). Recent experimental studies carried out by the University of Maastricht also suggest that ecstasy (MDMA) has the potential to interfere with complex performance, including driving, but the results are more mixed (Lamers 2004).

In the framework of the EU IMMORTAL study (Impaired Motorists, Methods of Roadside Testing and Assessment for Licensing), the accident or injury risk associated with alcohol, drug and psychoactive medicines use was investigated in the region of Tilburg (Mathijssen et al. 2005). The methodology included a case-control study, comparing the prevalence of substance use among injured drivers (hospital sample) with the prevalence in

the general driving population (random roadside sample, N=3,799). Data were collected between May 2000 and March 2004. Table 6.6 shows that 9.9% of the general driving population tested positive for illicit drugs, alcohol or psychoactive prescription drugs. Cannabis, alcohol and benzodiazepines were the most prevailing substances. Prevalence rates were 4.5% for cannabis (0.6% with alcohol) and 2.1% for benzodiazepines (0.1% with other drugs and/or alcohol); 2.1% tested positive for alcohol (blood alcohol concentration BAC ≥0.2 g/l; 0.3% in combination with other substances). Highest rates of illegal drug use were found among males of 18-24 (17.5%), corroborating findings from general population surveys. Psychoactive prescription drugs were concentrated in female drivers aged 50 and older (11.3%). Among seriously injured patients, 44.6% tested positive for illicit drugs, alcohol or prescription drugs. Among male injured drivers, no les than 26.6% had a BAC of ≥ 1.3 g/l.

Accident or injury risk was strongly increased for drug-free BAC levels ≥ 0.5 g/l (with exponentially increasing risks with increasing BAC levels), with drug/alcohol combinations at BAC levels ≥ 0.8 g/l and drug/drug combinations. Single use of cannabis, amphetamine, ecstasy and cocaine was not associated with an increased risk. The combined use of heroin/morphine and alcohol was associated with an extremely high risk; the single use of morphine/heroin also increased accident/injury risk but the confidence interval was very wide because these drugs were hardly detected in controls.

Table 6.6: Relative risk injury associated with the use of various psychoactive drugs by car drivers (in Tilburg, the Netherlands)

Psychoactive substances	Weighted distribution Among cases and controls		Odds ratio	95% C.I.
	Cases (N=184)	Controls (N=3.799)		
Negative	55.4%	90.1%	1.00	
Cannabis only	3.4%	3.9%	1.45 (NS)	0.64-3.29
Amphetamine only	--	<0.01%	Undefined	--
Ecstasy only	--	0.3%	Undefined	--
Cocaine only	--	0.3%	Undefined	--
Morphine/heroin only	0.5%	0.02%	32.4	1.78-592
Codeine only	1.0%	0.5%	3.04 (NS)	0.65-14.2
Benzodiazepines only	3.6%	2.0%	2.98	1.31-6.75
Tricyclic antidepr. only	--	0.3%	Undefined	--
Methadone only	--	--	Undefined	--
Combination of drugs	7.2%	0.5%	24.(Mathijssen et al. 2005)0	11.5-49.7
Alcohol* 0.2-0.5 BAC	1.2%	0.9%	2.12 (NS)	0.54-8.42
Alcohol* 0.5-0.8 BAC	2.2%	0.4%	8.28	2.73-25.2
Alcohol* 0.8-1.3 BAC	2.5%	0.2%	17.6	5.54-56.0
Alcohol* $\geq$ 1.3 BAC	12.7%	0.2%	87.2	39.4-193
Alcohol* < 0.8+drug(s)	2.0%	0.2%	12.9	3.78-44.2
Alcohol* $\geq$ 0.8+drug(s)	8.3%	0.08%	179	49.9-638

* alcohol only

Source: SWOV(Mathijssen et al. 2005)

Health effects of ecstasy

The University of Amsterdam (together with various other organisations) carries out a *prospective* study (coined 'Netherlands Toxicity Study') among 188 young adults, who had never used ecstasy but were likely to start using ecstasy in the near future. This study aims to determine the causality of the relationship between (patterns of) ecstasy use, brain damage and functional impairments. Subjects were recruited between April 2002 and April 2004 at various locations (such as dance events, discotheques, youth fairs), through advertisements on internet and through snowball sampling (see (De Win et al. 2005) for a description of the methods). Measurements at baseline and follow-up included various brain imaging techniques: proton magnetic resonance (1H-MRS; diffusion tensor imaging (DTI); and perfusion imaging (PI). Clinical and cognitive assessments were also included. One part of the study aimed to investigate whether a single or low dose of ecstasy would be harmful for the brain. For this purpose the first 31 incident ecstasy users were assessed in a follow-up session relatively soon after their first ecstasy use. The mean cumulative dose was 1.8 (±1.3 tablets) and the time since the last tablet was 7.7 (±4.4) weeks. The results showed

that the different brain imaging techniques did not demonstrate evidence that a single or low dose of ecstasy produced major brain damage. There were minor significant changes (decreased apparent diffusion coefficient ADC, and regional relative cerebral blood volume rCBV) opposite to the hypothesis of neurotoxicity. Although these changes might reflect decreased brain functioning, the effect sizes were very small. Similarly, a small unexpected decrease in depression scores was found at follow-up. In line with the study hypothesis, impulsivity scores were increased.

7 Responses to Health Correlates and Consequences

The broad lines of the drug policy that are delineated at national level, are put into practice by many local or regional initiatives that have been realised during the past years and were reported in former National Reports.

7.1 Prevention of drug-related deaths

First Aid courses for workers in addiction care and in general health care to manage drugs incidents in recreational settings include knowledge about recreational drugs, possible health consequences, and First Aid possibilities. Pill testing professionals are trained in techniques of chromatography, spectrometry, and paramedical techniques. Trend watchers are trained in techniques of unobtrusive observation of drug habits. Drug consumption rooms are part of the general harm reduction policy and these are (amongst other targets) meant to prevent overdoses (see National Report 2002, paragraph 10d).

7.2 Prevention and treatment of drug-related infectious diseases

Many initiatives on the prevention and treatment of drug-related infectious diseases stem from several years ago. Some initiatives are to be continued, few are new (see the National Report 2003, paragraph 10.1). Examples of these initiatives are: peer support for drug using immigrants, HIV tests, HIV treatment, Hepatitis C tests, HAART, and prophylactic vaccination of early stage syphilis among (drug using) street prostitutes. Over a period a three years the National Co-ordination Structure on Infectious Diseases (LCI) published several protocols on infectious diseases (Van Steenbergen et al. 2004). Since August 2005 the National Network Infectious Diseases and Drug Use started a new website on infectious diseases (www.infectieziekten.net). This website is coordinated by the Trimbos Institute and is meant to give updated information for professionals in addiction care about the most important infectious diseases among drug users.

The total number of *needle exchange programmes* in the Netherlands is not known. The website of Mainline (the grassroots organisation of drug users in Amsterdam) presents some 120 exchange points in different cities (www.mainline.nl; updated in January 2005). Larger cities often have larger numbers of exchange points. Five cities have more than five exchange points (in total 51) and 58 cities have 1 to 5 points (counts based on the website data and done by the NFP). At least three larger cities still do not have syringe exchange points at all. Pharmacists may be involved in syringe exchange as has been reported for ten smaller towns. In several towns the website mentions “all pharmacists” without specifying the total local number. Pharmacists may be active in smaller towns because these have no organisation of addiction care (personal communication with Mainline professional). Finally, this website mentions eight methadone buses that also distribute syringes. It is difficult to validate these data.

Hepatitis B vaccination of high-risk groups has been extended with 6 months and will be continued until 2006 (Hoogenboezem et al. 2005). In 2003 all 39 municipal health services participated in this project. In September 2005 more than 39,000 participants (among which

over 8,000 drug users) had received a first vaccination. This campaign is free of charge and focuses on high-risk groups for hepatitis B, targeting at increasing coverage, and reducing virus transmissions. Compliance was lower among drug users and prostitutes (50%), compared to heterosexuals with multiple sex partners (67%), and men who have sex with men (73%) (Waldhober 2003). The pilot of this vaccination campaign was evaluated recently. It appeared that the proportion of drug users participating in this campaign was low (44%) compared with the other groups (e.g. men that have sex with men). Half of the drug using participants also finished the vaccination programme. There were no significant differences between participant and non-participant drug users in injecting drug use, number of sex partners during the past six months, and having a relationship. The authors also tested constructs of the Theory of Planned Behaviour. The predictive value of this theory for vaccination behaviour of this subgroup was low. Primary life needs (e.g. drugs) were probably more important than a vaccination. Only one significant predictor was revealed: the perceived supervision on vaccination (ibid.).

Notions about the effectiveness of interferon treatment of drug users with hepatitis C are changing. Today, long-term treatment with ribavirine and polyethyleen-glycolinterferon give far better results, also for patients that have never been treated before ((Orlent et al. 2003;Seeff et al. 2002); cf. National Report 2004, paragraph 7.2). The National Hepatitis Centre has started a feasibility study targeting case finding and treatment of drug users infected by HCV. Results are expected at the end of 2005 (Ministerie van Volksgezondheid 2005a). In 2005, the treatment protocol for hepatitis C has been updated and can be downloaded from www.infectieziekten.info/protocol.

The number of *drug consumption rooms* increased from some 20 a few years ago to 32 spread over 14 cities in August 2005. This field is still changing, some may have disappeared and other consumption rooms may have started (personal communication).

7.3 Interventions related to psychiatric co-morbidity

The national report 2003 (chapter 16) reported on several topics of the subject co-morbidity: prevalence rates, impact on services and staff, service provision, examples of best practices and recommendations. A new guideline (Posthuma et al. 2003) has not been mentioned previously. The guideline contains instruments for diagnosis and recommendations for treatment of dual diagnosis patients. The report was funded by and written for the policy programme Achieving Results (see chapter 5) and contains a brief conceptual analysis of dual diagnosis, its aetiology, epidemiological data, a literature review and screening and assessment instruments. Combinations of specific substance disorders with specific mental disorders were analysed (if possible) and recommendations described (i.e. for schizophrenia, bipolar disorder, depression, anxiety disorder, and personality disorders).

In daily practice the gap between addiction care and mental health care still exists. Many experts advocate integrated care (both for addiction and mental disorders) for these patient categories, irrespective of the fact that little evidence can be found in the existing scientific literature. Different possible types of integrated treatment may inspire future addiction care. Integrated treatment can be simultaneous treatment arrangements, sequential treatments or separated treatment modalities for substance use disorders and mental disorders. Partly based on expert knowledge, integrated treatment is recommended for schizophrenia, borderline

personality disorder, and post traumatic stress disorder (PTSD). Sequentially treating substance abuse and mental disorders is recommended for anxiety or mood disorders, and for anti-social personality disorder. These recommendations are not meant as guidelines because optimal solutions are largely dependent on characteristics of the individual client and his/her environment. Effect studies in the Dutch situation for specific client categories are strongly recommended.

8. Social correlates and consequences

8.1 Social Exclusion

General trends in the Netherlands

The Social and Cultural Planning Office of the Netherlands (SCP) monitors the social situation on issues like education, labour, income, health, leisure activities, social participation, safety, housing condition, public opinion, and political climate. Recently, the SCP (2005) has analyzed the trends on these social issues for the period from 1994 up to 2004(Sociaal en Cultureel Planbureau 2005). With regard to social exclusion, the following challenges are reported for the Netherlands in general: an increasing school dropout, especially in the largest cities and among ethnic pupils; an increase in unemployment among women, youngsters, ethnic minorities and the lower educated; unsuccessful attempts to reintegrate the unemployed; and worse health and worse living conditions among ethnic minorities and the lower educated.

With regard to the ethnic minorities, it should be noticed that not all minorities are socially excluded. Whether an ethnic minority, to a greater or lesser extent, is socially excluded or socially integrated depends heavily on the specific ethnic minority under concern.

Drug use among socially excluded groups

For societies in general, as McKee and Leon (2005) have noticed, there is a "two-way relationship" between "[self]-destructive behaviour involving substance abuse" and "societal breakdown", which "can all too easily give rise to a vicious cycle, in which substance abuse leads to exclusion from the work force and impoverishment"(McKee et al. 2005). Therefore it comes as no surprise that also in the Netherlands higher percentages of drug use are found among the socially excluded. Korf, Van Ginkel, and Wouters (2004) report that among young homeless people in 2004 in the Dutch province of Flevoland 78% had used cannabis in the last month (Korf et al. 2004b). The percentages of ever use among these young homeless were 38% for ecstasy, 29% for cocaine, 19% for crack, 26% for amphetamines, and 8% for heroin.

The foundation for Streetcornerwork (Stichting Streetcornerwork) has issued research into how growing up in impoverished neighbourhoods in Amsterdam increases the risk of ending up in the hardcore of a group of criminal youngsters. The hardcore not just uses drugs, but also deals in drugs and causes public nuisance (Hanstede et al. 2004).

A survey conducted in 2003 among problem hard drug users in Rotterdam (N=201) revealed that 49% of them were homeless, 60% had committed criminal offences, 82% had caused public nuisance, and 30% had psychological problems (Lempens et al. 2004). For The Hague in 2002, Burger (2004) observed that per 1,000 native Dutch inhabitants aged 15 through 64 years, 7.2 inhabitants were known as a hard drug user to the police or addiction care (Burger 2004). From the ethnic minorities, people from Turkish origin showed a lower prevalence figure, namely 2.8. Other ethnic minorities showed a higher figure: 11.8 for people of Surinamese origin, 12.4 for people of Moroccan origin, and 15.0 for people of

Antillean origin. These figures confirm that people from some ethnic minorities run a greater risk to become a problem drug users.

In the period from 1997 up to 1999, Kamperman (2005) collected data on the mental health of Surinamese, Moroccan and Turkish migrants in the Netherlands (Kamperman 2005). In a sample of Amsterdam inhabitants, she found the lowest life-time prevalence of drugs dependency and drugs abuse among the Turkish migrants (0.4% males, 0% females), followed by the Surinamese migrants (5.3% males, 0.6% females), and the Moroccan migrants showing the highest prevalence (7.7% males, 0% females). Kamperman et al. (2003, 2005) stress that these figures should be interpreted with caution (Kamperman et al. 2003). The sample of Turkish migrants contained more young people and more people that are lower educated, the sample of Surinamese migrants contained more older ones and more people that are higher educated, and the sample of Moroccan migrants contained more young people and people that are higher educated. Due to their higher education, the Surinamese and the Moroccan migrants under study will be more acculturated to the Dutch society, which may explain the higher prevalence of drug use and resulting drug problems in these groups. In this case, there may be a paradoxical effect in the sense that a higher level of social *in*clusion may lead to a higher level of drug use. Compared to the other migrant groups, the Turkish migrants have carried on a more traditional attitude towards drugs and alcohol. Apart from a lower level of education in the sampled Turkish migrants, the continuation of this tradition may explain their lower level of drug use. Among the pupils following secondary education in 2003, 3.0% of the Moroccan pupils had used any hard drug like ecstasy, amphetamines, cocaine, or heroin, followed by 2.4% of the Turkish pupils and 2.0% of the Surinamese pupils. The last-month prevalence of cannabis use, however, was the lowest among the Moroccan pupils, only 3.9% compared to 5.4% among the Turkish pupils and 8.0% among the Surinamese pupils (Monshouwer et al. 2004).

Asylum seekers are in a situation of utmost social exclusion. Given the fact that in the Netherlands "procedures for obtaining eventual refugee status normally take several years", Dupont et al. (2005) hypothesize that, for asylum seekers in the Netherlands, the use of "opium, khat and alcohol" functions as a way of "killing time".(Dupont et al. 2005) Using substances is a means of "countering the psychosocial distress of the asylum-seeking process and uncertainties about the future as well as past trauma". A qualitative analysis of interviews conducted in three Asylum Seekers Centres showed four types of traditional drug cultures: "abstinence culture, opium culture, khat culture and alcohol culture". The authors conclude that the asylum seekers that have "so much time to kill" tend to intensify their traditional substance use and therewith run a greater risk to end up in problem use.

Although they are socially excluded, asylum seekers that are still waiting for recognition, and refugees that are already recognized as such, are nonetheless legally present in the Netherlands. Those that stay in the Netherlands as illegal aliens are in a still worse position. Hoogenboezem and Bransen (2005) studied problem hard drug use among all three kind of groups in the provincial towns of Apeldoorn and Nijmegen: asylum seekers, recognized refugees, and illegal aliens (Hoogenboezem et al. 2005). Interviews with key informants in Apeldoorn showed that, although the target group was not large, some illegal aliens use opiates daily, sometimes in combination with cocaine, pills, cannabis and cheap alcohol. Key informants in Nijmegen not only revealed the use of hard drugs in a way that caused nuisance, but also revealed the dealing in drugs in and around the Asylum Seekers Centre.

Some people from Iran, Irak, Azerbeidzjan and Turkey are known to use heroin, crack, cannabis, and methadone. Some Moroccans are known to use benzodiazepines and alcohol in addition. Some people from Somalia use crack, khat, cannabis, and alcohol. Finally, some juvenile asylum seekers have been found to smoke cocaine in cigarettes. These results from qualitative research should be interpreted with great caution, since they are still in need of validation by quantitative research.

Outpatient treatment

The relation between indicators of social exclusion and drug abuse becomes apparent in the social characteristics of outpatient drug clients. Table 8.1 shows some social characteristics of outpatient drug clients for the years 1994 and 2004.

Table 8.1: Social characteristics of outpatient drug clients in 1994 and 2004

	Cannabis		Opiates		Cocaine (incl. crack)		Ampheta-mines		All drugs	
Characteristic	1994	2004	1994	2004	1994	2004	1994	2004	1994	2004
Ethnic*	18%	20%	29%	31%	32%	28%	6%	5%	27%	27%
Secondary or higher education	40%	44%	28%	35%	32%	39%	30%	36%	30%	38%
Employed	30%	40%	21%	20%	35%	36%	35%	43%	24%	30%
Cohabitation	62%	59%	59%	44%	59%	51%	71%	62%	59%	50%

*According to the perception of the client. Source: LADIS, IVZ.

In 2004 only 38% of the primary drug clients had finished secondary or higher education, a minority of 30% was employed, and 50% did not live alone but with a partner or children. Compared with clients having a primary problem with cannabis, cocaine, or amphetamines, clients having a primary problem with opiates have a lower level of education, are (slightly) less often employed and live more often alone. The proportion of ethnic minorities is highest among the opiates clients and lowest among amphetamines clients.

Compared with 1994, the social position of the drug clients in general seems to have improved in 2004. The proportion of drug clients that finished secondary or higher education and the proportion of drug clients having a paid job increased in this period. However, the work situation did not improve for the opiates clients.

Inpatient treatment

Tjaden (2004) followed 214 clients from April 1999 up to August 2000 in three different inpatient settings (Tjaden 2004). From the 214 clients, 150 clients were native Dutch and 64 were ethnic. The inpatient settings were located in the city and the province of Utrecht and in the city of Amsterdam. It was found that 25% of the ethnic clients did not show up for a planned inpatient treatment, compared with only 9% of the native Dutch clients that did not show up. However, among clients from ethnic minorities that did show up and actually started treatment, the dropout rates were even lower compared to native Dutch clients. Further research revealed that although differences in values do not affect the result of treatment, these differences decrease the quality of the working alliance with the addiction counsellor and lead to less satisfaction with treatment. Differences were found in that, compared with their counsellors, ethnic clients attribute greater value to safety for the family,

politeness, respect for their family and the elderly, and respect for tradition. Given these results, the authors do not plead for a culture-specific form of addiction treatment. A culture-sensitive form of addiction treatment is recommended in which there is sufficient communication regarding the differences in values between clients and counsellors.

8.2 Drug-related crime

The Scientific Research and Documentation Centre (WODC) of the Ministry of Justice presents statistics on registered drug related crime and responses to this crime in the Annual Report of the National Drug Monitor. Data in this paragraph are drawn from the WODC-chapter of the Annual Report.

The criminal justice system in The Netherlands has to deal with several thousands of drug offences each year. These consist specifically of offences against the Opium Act, in which possession, trafficking, production and cultivation – not drug use – are criminal acts.

The number of Opium Act crimes in the first phases of the criminal justice chain (police and Public Prosecution Service) increased considerably in 2004. Prison data, however, which show the situation at the end of the chain, show no increase in Opium Act cases. This is mainly caused by the fact that less Opium Act cases are brought to court by the prosecutor. Especially in cases of hard drug trafficking at Schiphol Airport, the prosecutor decided more often not to prosecute, as part of the drug oriented approach of drug traffickers at Schiphol (see below.) Other sentences do show some increase, like community service orders, financial transactions, fines, and dispossession.

These developments must be seen in the context of the policy programme of the Dutch cabinet aimed at enhancement of law enforcement efforts in The Netherlands. Three special policy programmes on drugs were running in 2004:

- The programme ‘A combined effort to combat ecstacy’ continued in 2004 (T.K.23760/14:). Law enforcement on production and trafficking of ecstacy and chemical raw materials/precursors is intensified in this programme (see chapter 1).
- The ‘Plan to combat drug trafficking at Schiphol’ which aims at combating cocaine trafficking via airplanes coming in at Schiphol Airport, was in full implementation in 2004 and was even intensified (T.K.28192/1;T.K.28192/23;T.K.28192/36). As part of this plan, further extension of 100%-controls of riskfull incoming flights were carried out by customs and Royal Military Police at Schiphol Airport. Also, the so called ‘drug oriented approach’ has been applied on drug couriers who carry only a small amount of drugs and who are first offenders with regard to the Opium Act. Their drugs are seized and their name is put on a black list to prevent future flights to the Netherlands, but they are not prosecuted. This measure was taken in September 2003 because of the heavy burden these couriers formed on the criminal justice system. It is a temporary measure. In June 2004, a body scan for cocaine swallowers was introduced at Schiphol Airport.
- The Dutch cabinet launched proposals to intensify enforcement on cannabis crimes in April 2004 (T.K.24077/125:).
- These law enforcement efforts all have special attention for organised crime.

In *addition*, 2 programmes should be mentioned that affect prison sentences and crimes committed by drug users:

- The Dutch prison system is changing its strategy and is working towards modernisation of sanctions and efficient implementation of sentences. Within this framework, there is more attention for sentences other than imprisonment (T.K.29200/167). (See also chapter 9.)
- A comprehensive policy programme is running from 2002 up to 2008, which aims at the reduction of crimes and public nuisance. Drug users who are repeat offenders are subject to new and intensified approaches (T.K.28684/1-2).

Although conclusions about causal relationships between these policy programmes and the 2004 data on drug offences cannot be drawn, this political framework is relevant in interpreting and understanding the data.

Offences against the Opium Act

An indicator for offences against the Opium Act is the number of Opium Act cases recorded by the Public Prosecution Service. The data are shown in table 8.2 There is a clear increasing trend in the period 2000-2004.

- In 2004, the total number of Opium Act cases increased to more than 21,000.
- The majority of the Opium Act cases (54%) concerns hard drugs, 41% of the cases concern soft drugs and 4% both hard and soft drugs. The proportion of hard drug cases decreased compared to 2003, the proportion of soft drug cases increased.
- Offenders are mainly male and most of them are between 25 and 35 years old at the time of their 2004-offence (not shown in table).
- Most cases concern preparation, production and trafficking of hard drugs (40%) or soft drugs (31%). Possession of hard drugs (18%) and soft drugs (10%) is a less frequent offence (not shown in table).

Opium Act cases concern 8% of the total number of cases recorded by the Public Prosecution Service.

Table 8.2: Number and percentage of Opium Act cases recorded by Public Prosecutions Service 1999-2004

	2000	2001	2002	2003	2004
Hard drugs	6,397	7,672	9,246	9,989	11,730
Soft drugs	4,324	5,059	5,832	6,156	8,904
Hard and soft drugs	792	827	770	942	1,963
Total	11,513	13,558	15,848	17,087	21,597
Hard drugs	56%	57%	58%	58%	54%
Soft drugs	38%	37%	37%	36%	41%
Hard and soft drugs	7%	6%	5%	6%	4%
Total	100%	100%	100%	100%	100%

Source: OMDATA, WODC. Note that more than one case may be recorded per suspect and that cases may have been 'filtered' at the level of the police (only cases with a reasonable chance of being prosecuted will be sent to the public prosecutor).

Organised crime

Efforts of law enforcement organisations have been focused on more serious cases in recent years; this is reflected in figures from the National Investigation Information Services. In 2004 there were more investigations into more serious cases of organised crime (a total of 289) than in 2003 and drug law offences form a growing proportion of these (see table 8.3).

- 69% concerned drug-related crime, which is slightly more than in 2003.

- 51% of all cases concern only hard drugs and 11% only soft drugs, 7% concerns both soft and hard drugs.
- In 60% of the drug related investigations there is only one type of drug involved. The other cases concern more than one type of drugs. This is about the same as in 2003, when it was 62%.
- 57% of the investigations on hard drugs involve cocaine, 39% synthetic drugs and 18% heroin. The proportion of synthetic drugs among the hard drug cases decreased. However, this does not mean that there is a decrease in the absolute numbers of investigations on ecstasy, there are a total of 80 investigations on synthetic drugs in 2004, more than the 63 in 2003 (T.K.28684/1-2). The proportion of cocaine and heroin cases did not change much.
- The investigations on soft drugs are mostly directed at 'nederwiet' (the Dutch-grown weed; 64%) or hashish (36%) and concern trafficking as well as production. Investigations on 'nederwiet' increased.

Table 8.3: Investigations into more serious forms of organised crime: proportion of drug law criminality and type of drug involved 1999-2004

	2000	2001	2002[I]	2003	2004
Number of investigations	148 (100%)	146 (100%)	185 (100%)	221 (100%)	289 (100%)
Number and % of drug law criminality	78 (53%)	90 (62%)	117 (63%)	146 (66%)	200 (69%)
• Hard drugs	35 (24%)	53 (36%)	64 (35%)	89 (40%)	147 (51%)
• Soft drugs	14 (9%)	15 (10%)	20 (11%)	25 (11%)	32 (11%)
• Hard and Soft drugs	29 (20%)	22 (15%)	33 (18%)	32 (14%)	21 (7%)

I. Due to changes in registration, the number of investigations since 2002 are not directly comparable to the years before. Source: KLPD/DNRI, group Research and Analysis.

Sanctions, convictions and court sentences for Opium Act offences

Table 8.4 shows a selection of sanctions imposed by the courts for Opium Act cases where there is a verdict of guilty, and of transactions offered by the prosecutor.

Most of the Opium Act cases (59%) are taken to court. Of the hard drug cases 61% is taken to court, of the soft drug cases 55%, of the cases with hard ánd soft drugs 81%. In 2004, about 9,000 persons were found guilty of an Opium Act offence. In 2004, the courts handled 12,155 Opium Act cases, 56% hard drugs, 38% soft drugs and 6% hard and soft drugs.

The number of court cases where a sentence was imposed for an Opium Act offence is lower than in the years before; in 2003 it was 89%, in 2004 it is 81% (not shown in table).

Table 8.4: Number of irrevocable sanctions in Opium Act cases imposed by the courts 1999-2004[I]

	2000	2001	2002	2003	2004
Community service order[II]	2,138	2,382	2,985	4,008	4,897
Unconditional prison sentence	3,341	3,523	4,641	5,155	4,672
Financial transaction	838	1,568	1,884	1,797	2,684
Fine	1,350	1,393	1,522	1,547	1,694
Dispossession	73	46	58	105	158

I. There can be combinations of sentences. II. This order applies to relatively minor offences. It can consist of work, treatment, education or a combination of these. Source: OBJD, WODC.

- The number of community service orders increased by 22% in 2004 compared to 2003. The number of unconditional prison sentences decreased. Financial transactions increased (by 49%), as did fines and dispossession cases (see table 8.5).
- The mean duration of the community service is 110 days in 2004; there is almost no difference with 2003. Mean duration of prison sentences is 371 days; this is slightly more than in 2003. Median amount in dispossessions is 4,300 Euro in 2004, much more than in 2003. The amount of money involved in financial transactions and fines is less than in 2003 (not shown in table).

Prison data

In 2004, the number of prison sentences and the total of detention years imposed for drug law cases decreased.

- 15% of all prison sentences concern Opium Act cases, predominantly hard drug cases (table 8.5). There is no increase in proportion in 2004, even a slight decrease, when compared to 2003.
- Opium Act offenders form 22% of the total number of prisoners in 2004 (T.K.24077/125). Over a 5-year period, 45% of Opium Act offenders 1999 show recidivism, 22% committed an Opium Act offence again (T.K.24077/125).
- The proportion of imposed detention years for Opium Act cases of the total of detention years decreased from 31% in 2003 to 28% in 2004, again this concerns predominantly hard drug cases. The proportion of detention years for drug couriers in the total amount of detention years decreased with 4% in 2004 (T.K.24077/125).

Table 8.5: Number of custodial sentences and number of detention years 1999-2004[I]

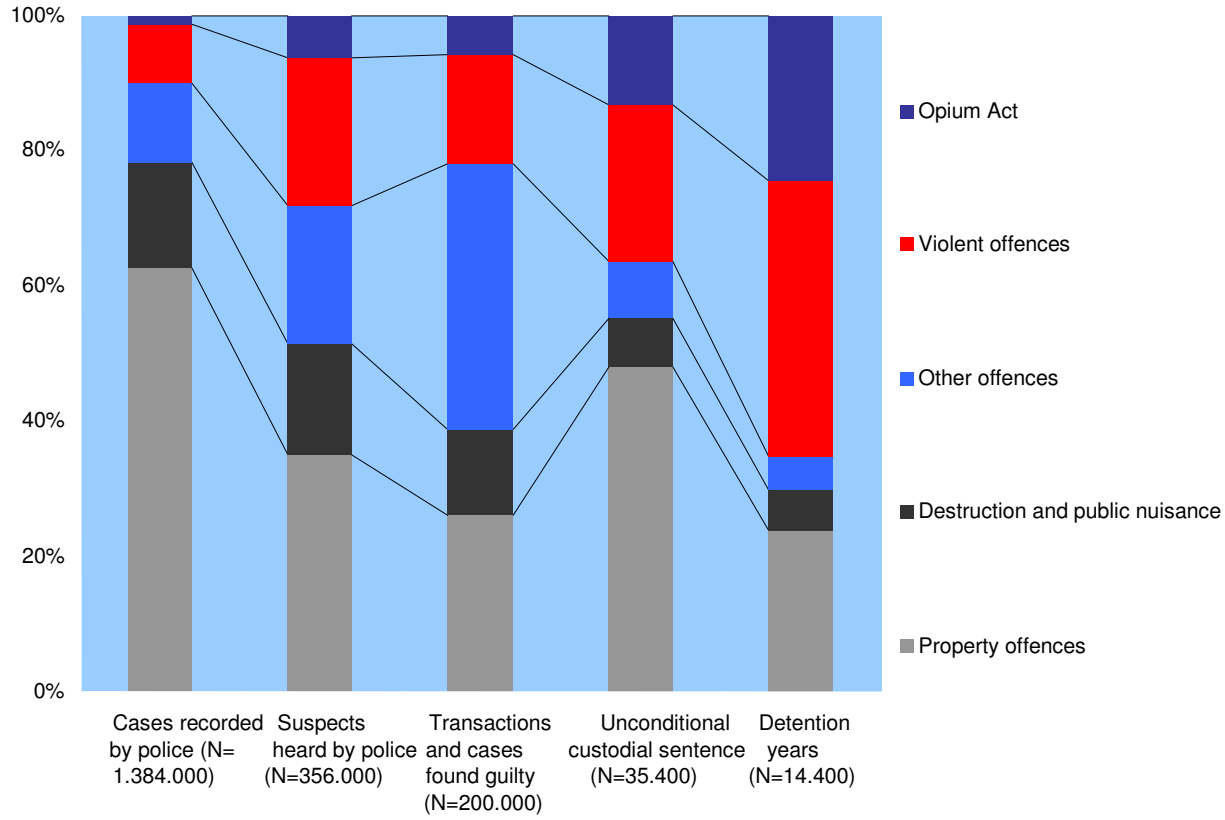
	2000	2001	2002	2003	2004
Number of prison sentences	25,851	27,413	30,994	34,380	31,401
Opium Act total	11%	12%	14%	16%	15%
- hard drugs[II]	10%	11%	13%	15%	13%
- soft drugs[II]	1%	1%	1%	1%	1%
Other criminal cases[III]	89%	88%	86%	84%	85%
Detention years[IV]	9,086	10,079	12,025	12,204	11,925
Opium Act total	24%	23%	28%	31%	28%
- hard drugs[II]	23%	22%	27%	30%	27%
- soft drugs[II]	1%	1%	1%	1%	2%
Other criminal cases[III]	76%	77%	72%	69%	72%

I. Excluding youth detention. II. Cases involving a soft drug offence as well as a hard drug offence are classified as hard drug cases. III. 'Other criminal cases' contain all crimes committed by drug users. IV. Detention years are calculated by adding all unsuspended parts of sentences and deducting early releases. Source: OBJD, WODC.

Opium Act cases 2004 have a relatively high chance of coming through the total criminal justice chain. Eggen and Van der Heide (2005) show that Opium Act offenders recorded by the police have a relatively high chance of ending up in prison for a relatively long time(Eggen et al. 2005). Opium Act cases concern only a very small part of the total amount of cases recorded by the police. They form 7.1% of all cases found guilty. As we have seen

in table 8.6, their proportion in custodial sentences is higher than that, and their proportion of detention years is even more substantial (see figure 8.1).

Figure 8.1: Proportion of offence categories in the criminal justice chain, 2004



Source: CBS/(Eggen et al. 2005).

New developments in 2005

- In 2005/2006, the special programme on ecstasy and chemical raw materials/precursors will continue. According to the interim evaluation, it is expected that the new organisation of the police investigation units is implemented in full extent in 2004/2005 (T.K.24077/125). There are signals that the production of ecstasy in the Netherlands is decreasing when compared to other countries (Huisman 2005;T.K.30100/6: Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 30100 VI nr.6 2005).
- The special programme on cocaine smuggling and trafficking will continue (T.K.24077/125).Whereas the big flow of couriers shows a further decrease in 2005 (T.K.24077/125) and the measure is temporary, it could be expected that in the near future more drug couriers flying into Schiphol Airport might be prosecuted again (T.K.24077/125).
- For cannabis, new interventions for law enforcement aimed at the criminal organisations behind production of 'nederwiet' will be developed and implemented, starting in some Public Prosecution Services in the south of the country. Police and municipalities work together already in combating and dismantling cannabis farms, in particular when located in houses.

- A recent study of the WODC in which a forecasting model for the Dutch criminal justice system is used based on data up to 2003, warns that the inflow of Opium Act offences with the police and the public prosecutor will continue to rise, albeit at a lower rate, if policy does not change (T.K.24077/125). As a consequence the number of unconditional prison sentences is also expected to rise slightly.

Other drug-related crime (i.e. crimes committed by drug users)

Important to mention here is the special policy programme 'Towards a safer society'/Naar een veiliger samenleving, which runs from 2002 until 2008 (T.K.24077/125). Aim of the programme is a reduction of 20-25% of the criminality and nuisance in the public domain between 2002 and 2008-2010. This comprehensive programme, which is coordinated by the ministries of Justice and Internal Affairs, consists of a total of 150 measures to be taken. One focus is on the reduction of the recidivism of repeat offenders of over 18 years old (T.K.28684/1-2;T.K.28684/10)(T.K.28684/29). Those who have been arrested more than 10 times, persist in their criminal behaviour and get into contact with the police again and again are subject to special measures, like systematic screening and assessment, supervision and guidance or long term placement in a Penitentiary Facility for Prolific Offenders/Inrichting voor Stelselmatige Daders (ISD) (Stb 2004/351;T.K.28980-1-2;T.K.28980/16;T.K.28980/3). (see chapter 9).

Offences by drug users
The Police Records System includes a classification "drug user". This notification is made if the suspect may constitute a danger to others due to his or her drug use, if he/she indicates being a drug user or if he/she asks for methadone. The classification is made by the police, but whereas drug use is not assessed systematically, its validity is disputable. According to recent studies, the classification gives an underestimation of the number of drug using offenders. Recent studies indicate that the Police Records System might miss a considerable proportion of the drugs using offenders (T.K.20415/1). Drug using offenders that are recorded as such seem to be mainly users of opiates who are known by the police. Cases that are not recorded as such seem to be offenders with a lower frequency of offending or who do not live in the city were they were arrested.
The police statistics 2004 show that:
- 91% of the recorded drug using offenders is male, 9% is female.
- 40% lives in the larger cities (more than 250,000 inhabitants). 43% is 35-44 years old, 30% 25-34.
- 12% is also classified as having problems with alcohol use and 21% has problems with other drugs (e.g. medicines).

Characteristics of these offenders did not change much compared to 2003.
We know from an overview study that drug using suspects have not only drug problems, but also problems with social relations, education, work and housing; also there is a group with psychiatric co-morbidity. Opiods are the most prevalent primary problem drugs, cocaine/crack is second (Van Ooyen-Houben 2004).
- Drug users form an estimated 71% of the group of repeat offenders - defined as being convicted to a custodiary sentence or measure at least 3 times in 5 years (Wartna et al. 2004b;Wartna et al. 2004a).
- In an ongoing study of WODC, the police database and the database of outpatient addiction care are merged. By doing so, we will gain a better insight in the validity of the

category ‘drug using offender’ in the police data base and in characteristics of these offenders (Wartna et al. 2004b).

Types of offences

- Most drug users (56%) are suspected of property crimes without violence; this is less than in 2003 (see table 8.6). Property crimes show a decreasing trend in proportion over the years.
- 24% is suspected of “other violence (against persons)”, which is slightly more than in 2003. 23% is suspected of vandalism or disturbance of public order, which increased slightly. 22% is suspected of an Opium Act offence; this figure is the same as in 2003. Other violence (against persons), vandalism/disturbance of public order and Opium Act offences show an increasing trend in the period 2000-2004.
- Property crimes with violence is reported for 9% of suspects, which is less than in 2003.

Table 8.6: Type of offence of suspects classified by the police as a drug user, 1999-2004

Type of offence[1]	2000	2001	2002	2003	2004
Sexual offence	2%	1%	1%	1%	1%
Other violence (against persons)	20%	20%	22%	23%	24%
Property crimes with violence	12%	12%	12%	11%	9%
Property crimes without violence	63%	63%	63%	58%	56%
Vandalism, disturbance of public order	21%	21%	22%	22%	23%
Traffic offence	11%	11%	10%	10%	10%
Opium Act offence	18%	19%	19%	22%	22%
Other	11%	10%	10%	10%	11%

I. Suspects may commit more than one type of offence; percentages do not add up to 100. Source: HKS, KLPD/DNRI, group Research and Analysis.

8.3 Drug use in prison

Although drug use (not necessarily addiction) among prisoners is not monitored systematically in the Netherlands, it is studied occasionally. There are eight studies in which pre-prison drug use is assessed and which concern the situation since 1998 (see table 8.7).

Table 8.7: Studies on pre-prison drug use among prisoners. Data collected since 1998

Facilities studied	Author(s) and year[I]	Group studied
Forensic psychiatric facilities	(Hildebrand 2004)	N=98 forensic psychiatric patients
	(Van Emmerik et al. 2001)	N=1105 forensic psychiatric patients (reference date 1-1-2000)
Youth detention centres	(Korf et al. 2005c)	N=205 detainees 14-17 years old
	(Vreugdenhil et al. 2003)	N=204 12-18 years old
Regular detention centres	(Vogelsang et al. 2003)	N=355 detainees
	(De Vrught 2000)	N=554 detainees known by psychological-medical services in prison
	(Bieleman et al. 1999)	N=91 detainees with known problematic substance use
Special detention centre	(Van 't Land et al. 2005)	N=190 detainees in Judicial Treatment of Addicts (SOV)

I. Year of publication. Source: WODC.

The studies apply different definitions of drug use, ranging from broad definitions like "lifetime use" and "last year use" to stricter definitions as "daily use" and "abuse/dependence". Different assessment instruments are used and different groups of detainees studied. To a large extent the different percentages that were found will be due to these differences in definitions. Notwithstanding the deviating definitions, different studies seem to show a similar pattern in that cannabis and alcohol show high percentages of use and problem use, followed by cocaine/crack, then by opiates/heroin and other drugs.

- Inmates in forensic psychiatric centres show relatively high rates of lifetime problematic cannabis and alcohol use/abuse/dependence. Inmates in youth detention centres use mainly cannabis and alcohol. Inmates of regular prisons show high rates of hard drug use before detention, cocaine and cannabis being the most prevalent drug. Many hard drug users report problems with their use. Known drug users in detention show high rates of hard drug use, mainly cocaine and heroin.
- Two studies concern criminal offenders in forensic psychiatric facilities who are sentenced by the court to compulsory residential treatment because they are legally not accountable for their offence (Hildebrand 2004;Van Emmerik et al. 2001) In Dutch, this proceeding is called "terbeschikkingstelling". These studies show that 16% (lifetime abuse/dependence) to 31% (problematic use at the time of the offence) of the inmates had problems with cannabis. Problems with hard drugs occur less, according to Van Emmerik and Brouwers in 27% of the cases and primarily cocaine and heroin. Hildebrand reports 1-8% of lifetime abuse/dependence of hard drugs, cocaine being the most problematic drug. Both studies show that substance use disorders were a highly prevalent type of disorder in this group of forensic subjects. 20-47% of the subjects was diagnosed (lifetime) as having psychoactive substance abuse/dependence disorders. Hildebrand's study revealed a significant association between drug use disorders and psychopathology and a positive trend for alcohol use disorders.
- Two studies concern substance use by youngsters in youth detention centres (Korf et al. 2005c;Vreugdenhil 2003). These studies show high rates of cannabis and alcohol use, lifetime as well as current use. Hard drugs are used less. Of the hard drugs,

amphetamine/ecstasy and cocaine use have a relatively high lifetime prevalence. Korf's study (see also chapter 2.3) shows that in about 40% of the male detainees and 37% of the female detainees had used alcohol and/or drugs before or during the violent incident. From these cases, cannabis was the most common drug (about 75%). Other drugs were less involved. In most cases the violence would have occurred when there had not been any alcohol or drug use, according to the youngsters. Only a minority of violent incidents (16-19%) was drug-related. It concerned mainly alcohol and cannabis, and their role was mainly pharmacological in nature. Although this is only a minority of violent incidents, this minority concerns the most serious cases, where weapons were involved and people were hurt.

- Two studies concern substance use by inmates of regular prisons (De Vrught 2000;Vogelsang et al. 2003). De Vrught shows lower prevalences of all substance use than Vogelsang *et al.* This is certainly due to the fact that De Vrught's study concerns only cases that are known to the psychological/medical units of the prisons. Vogelvang's study gives a better insight in the general prevalence. In this study a representative sample of 355 male prisoners out of the total population in the entrance/intake departments of 8 Dutch prisons were interviewed and systematically assessed. The study shows that there is a high prevalence of pre-prison drug use. 61% of the inmates used hard drugs in the 6 months before imprisonment, 39% used soft drugs. It revealed that a considerable proportion of prisoners (64%) have problems with drug use, mainly with hard drug use. 40% report serious or very serious problems. Inmates that used hard drugs before their imprisonment are significantly less motivated to change the drug using behaviour than those that used soft drugs.
- Two studies focus on inmates who are known to have problems with their substance use (Bieleman et al. 1999;Van 't Land et al. 2005). Bieleman and Van der Laan studied inmates with substance use problems in regular detention centres. They found lower prevalence rates than Van 't Land et al, who studies inmates in the special Judicial Treatment of Addicts. Prevalence of cocaine and heroin use is high in both studies.

9 Responses to Social Correlates and Consequences

9.1 Social integration

The aim of providing social care to drug-dependent persons is harm reduction and restoring to a certain extent social life. Harm reduction is mainly offered by community and private social care organisations, but — without a clear division between 'drug treatment' and 'social care for drug-dependent persons' — social care is also provided by many drug treatment services.
Social care for drug dependent persons includes a wide range of services, e.g. boarding houses or hostels, drop-in centres for (drug dependent) street prostitutes, drug consumption rooms or farm work for drug addicts (cf. National Report, 2002, chapter 10). In former years farm work has been initiated as an experiment in three farms in different parts of the Netherlands. This initiative has been evaluated (Cool 2002). At this moment there are two other farms not far from Amsterdam that have initiated farm work for this target group, especially for drug abusers that are not seriously addicted (Van Harten 2005). An evaluation of the results of these farms has not been published yet.

The target of a long-term project (2001-2006) of the Municipality of Utrecht is to realise six hostels for homeless drug users. These hostels are combined with continuous supportive care. Hostels are 24-hour living facilities for drug users. In each hostel, the number of inhabitants may vary from 15 to 25, and drug use is tolerated. The two objectives are a reduction of public nuisance and an improved low-threshold care for this target group. One of these hostels (De Hoek) has been evaluated (Vermeulen et al. 2003). This hostel started at the end of December 2001. The first evaluation measurement took place in the summer of 2002. Because participants were gradually introduced in this hostel, the mean stay of participants was 2.8 months, thus the results may (still) be biased. Some participants still use the drug consumption room, despite the fact that they are allowed to use drugs in the hostel. An explanation is that they still buy their drugs in the streets, and that especially crack users are hampered by a strong sense of craving, thus they cannot wait to consume their crack until they arrive at the hostel. This indicates that drug-related crime is moderate and changes could not be determined yet. Most participants believe that the hostel is a safe place to stay. Distribution of methadone (more than 50% of the participants use methadone) and medication is considered important. The same pertains to care by medical nurses and the possibility to obtain information. There is a clear need for help, but regular addiction care facilities are rarely involved.

Illegal immigrants, refugees, and asylum seekers

The abuse of hard drugs among illegal immigrants, refugees, and asylum seekers was estimated in a pilot study in two Dutch cities by means of the method of Rapid Assessment and Response (RAR; see paragraph 8.1). The many interviews showed that preventive activities are thought to be especially important in centres for asylum seekers, because here this target group can most easily be reached. Preventive interventions for this target group are mentioned in the literature on intercultural social work. However, this knowledge is rarely transferred to these centres or to professionals working with this target group. There is a need for adapting existing interventions in order to stimulate discussions about hard drug use and to make these interventions applicable for asylum seekers. This need is considered most urgent, because

adult drug users are in danger of being expelled in many cultures that are present in this heterogeneous target group (Hoogenboezem et al. 2005).

9.2 Prevention and reduction of drug-related crime

For drug using offenders - and also for persons with other addiction problems in the criminal justice system - several types of assistance are available within the judicial penal system. The general aim of the assistance is to improve reintegration in society by reducing drug problems and other problems which drug users have to cope with, in order to reduce drug-related crime. Efforts are aimed at all drug users, but hard drug users have the most serious problems (Vogelsang et al. 2003). Not only their drug use and criminal behaviour are a problem, but also housing, finances, work and social contacts (Van Ooyen-Houben 2004).

The services available in 2004 are:
- addiction probation services
- (reintegration) programmes in prisons
- Judicial Treatment of Addicts (compulsory placement)
- care programmes as an alternative to prison.

The policy programme 'Towards a safer society' (Naar een veiliger samenleving) is important for the prevention and the reduction of drug-related crime (T.K.28684/1-2) Under its umbrella new strategies concerning (addiction) probation services, prison sentences, and approaches for drug using repeat offenders are set out. In general, the policy and the strategies are changing towards a more stringent selection of addicts who receive programmes and treatment. In addition, care programmes for criminal addicts are considered: care and judicial interventions should form a well-coordinated chain of services.

Addiction Probation Services
For addicts in the criminal justice system, assistance from addiction probation services is available within budgetary and political limits. Addiction Probation Services form a national foundation (Stichting Verslavingsreclassering GGZ), and addiction probation officers are employees of regular addiction care organisations in every part of the country.
The probation officers report about suspected and imprisoned persons and their circumstances, and advise the court and other organisations about the best approach for a reduction of problems and a decrease of recidivism. They supervise working and learning sentences and are involved in referral to care programmes when appropriate.

In 2004, the position of (addiction) probation services in the criminal justice system has been subject to redefinition and rethinking (T.K.29270/1). This process should result in a more effective and efficient approach by probation services. Examples of new ways of working are:
- Financing of services of (addiction) probation by the Ministry of Justice is only possible if this service is ordered by the justice system. Financing is based on output.
- There is a more stringent selection of cases for programmes. Addicts are systematically screened and assessed and this happens with newly developed instruments: a Quick Scan and a RISc: Risc Inventarisation on the basis of so-called criminogenic factors. RISc is adopted from "what works" approaches in, amongst others, the United Kingdom. It is the basis for a resocialisation plan (Reclassering Nederland et al. 2004).

- Protocols for new cooperation between the prison system and (addiction) probation services are developed. (Addiction) probation services and the prison system will be co-responsible for the re-integration trajectory of an addicted detainee.

Addiction probation services face quite a task to implement the consequences of the new policy. This implementation was running in 2004, and it has an influence on the activities of the addiction probation services in 2004. The activities for 2004 are shown in table 9.1.

Table 9.1: Types of assistance offered by addiction probation services to drug using offenders, and number of times the service was provided, 2002-2004[I]

Services	2002	2003	2004
First visit to arrestee/prisoner in remand	3,629	4,305	4,110
Report to judge with advice regarding continuation remand imprisonment	995	922	889
Devising, coordinating and evaluating a plan of approach following a systematic method[II]	10,048	9,156	1,028
Referral to care programmes	1,568	2,115	2,254
Supervision of clients in framework of judicial decision	2,407	3,726	4,919
Reintegration programmes	1,696	2,566[IV]	2,929
Supervision of working sentences	3,382	4,098	4,650
Supervision of learning sentences	139	217	241
Advisory reports	7,587	8,746	8,369
Diagnoses[III]		10,615	10,605
Total			

I. No figures on case level, no specification for type of drug/alcohol/gambling II. Service is discontinued in 2004. III. Newly defined service in 2003. IV: predominantly Drug Counselling Units in prisons. Source: Foundation of Addiction Probation Services.

- Some activities show an increase, others a decrease. It is clear that some services ('devising, coordinating etc.') are discontinued in 2004 and others ('diagnoses', which aim at systematic assessment and selection of drug users in the criminal justice system for care programmes) were introduced recently, as part of the new policy mentioned above.
- The largest increase is seen in the supervision of clients in the framework of a judicial decision. Supervision of working and learning sentences also increased, as did reintegration programmes.
- Diagnostic activities are carried out most frequently: more than 10,000 times in 2003 and 2004. Diagnoses are carried out partly by using the former procedures, and partly by using the newly introduced standard instrument RISc.
- Early visits to addicted arrestees and prisoners in remand custody also occur with a reasonably high frequency: more than 4,000 times in 2004. A report to the judge with an advise concerning continuation of remand imprisonment has been made 889 times.
- Referral to care programmes – often this concerns referral to care programmes as an alternative to imprisonment - took place more than 2,000 times, slightly more than in 2003.
- Advisory reports were made more than 8,000 times; these consist of written information to the judge or (judicial) organisation in consideration of a specific question or a decision about prosecution, sentencing or the execution of a sentence.

- By 31 December 2004 addiction probation had 10,624 clients, mean age 36 years, 91% male and 9% female.
- In 2003, 27% of the clients of addiction probation had a cocaine/crack problem (more than in regular addiction care); 40% had alcohol problems, 21% had problems with opiates and 6% with cannabis. Fifty-nine percent of the clients were shifting between regular addiction care and addiction probation (Stichting IVZ 2005).

New developments
- (Addiction) probation services are implementing the consequences of the new policy concerning their place in the criminal justice system. The new instruments will be implemented further in 2005 and validated in research.
- Cooperation between addiction probation and prison services will be worked out further. Communication is still difficult and responsibilities should crystallise out. A model for cooperation is piloted (Van Bostelen et al. 2005).

Assistance for drug users in prison
During their stay in prison, drug users can participate in special programmes. Important to note is that the prison system is changing its policy (Ministerie van Justitie 2004a;T.K.29200/167). As a consequence of shortages in prison capacity, new strategies and alternatives to imprisonment are developed:
More selectivity and differentiation will be applied in imposing and executing sentences.
- Selectivity: resocialisation programmes will be offered only to those offenders for whom an improvement can be expected.
- Differentiation: offenders in remand custody stay in a basic regime. For convicted offenders with a short custodiary sentence (3-4 months), no resocialisation programmes will be available. The reason is that within these short sentences there is not enough time to invest in care. For every detainee, however, aftercare is being prepared by social service workers in the prison facility. Those convicted to a longer sentence can participate in resocialisation programmes, if improvement is expected. If not, they will stay in a basic regime. Systematic assessment will show the chances for improvement.
- More attention is given to effectiveness of sanctions. Guidance, treatment, aftercare, other forms of sanctions in addition to or as an alternative to sanctions are applied when this improves effectiveness and resocialisation.

These strategies, which also affect drug users in prison, are in development in 2004.

- In some prison facilities drug users can participate in resocialisation programmes in Drug Counselling Units (Verslaafden Begeleidingsafdelingen, VBA). These are drug-free units in prisons which offer a programme for addicts who are motivated to stop their drug use, and who are eligible for a programme preparing them for treatment outside detention. By the end of December 2004 there were 1,443 clients participating in such a programme (not only addicts).
- Substitution treatment is possible for short-term detainees who already used methadone before imprisonment (T.K.24077/112). However, daily practice is variable and whether detainees receive methadone depends on the policy of the prison physicians. The Dutch Health Council considers non-supply of methadone in these cases as ‘compulsive treatment’, although this is not a clear case in judicial terms (Gezondheidsraad 2002).
- Participation in extramural ‘penitentiary programmes’ for resocialisation is possible at the end of the detention period. However, addicts scarcely participate in these programmes.

- New programmes are available like training for enhancement of social skills and lifestyle training.

New developments
- The implementation of the new prison strategy will continue until 2008 (Ministerie van Justitie 2004a).
- In 2005, an accreditation committee (erkenningscommissie) has been installed which will judge (judicial) interventions for people who are in contact with the criminal justice system. Interventions that do not meet the criteria will not be financed by the Ministry and not be offered to (ex-)detainees.

Judicial Treatment of Addicts (SOV)
The experiment with the measure of compulsory placement in the Judicial Treatment of Addicts (Strafrechtelijke Opvang Verslaafden, SOV) which started in 2001, was continued in 2004 (until end of 2006).
- The aim of the SOV is twofold: a reduction of severe drug related criminal nuisance and resolving or reducing of individual addiction problems in combination with reintegration in society. Adult repeat offenders with a hard drug addiction form the target group of the SOV.
- Drug users in the SOV follow a stepwise reintegration programme into society. There is a first closed phase (day-and-night in SOV), followed by a second half-open phase (outside during daytime, in SOV during the night) and a final open extramural phase. Each phase lasts 6 to 9 months.
- The SOV had 219 places available. In 2004, between 148 and 193 addicts participated in the intramural phases 1 and 2 and between 3 and 11 in phase 3 outside prison (see table 9.2).
- The mean occupation rate was 72.9%.
- Those who do not want to participate in the programme are placed in ‘unit 4’, in which a basic regime is applied. Between 9 and 24 persons stayed in unit 4 (mean per month: 15).
- In 2003 the first participants left the programme on a regular basis. Since then, there has been a continuous outflow.

Table 9.2: Number of participants in facilities for Judicial Treatment of Addicts, 2004

Month 2004	Number of participants[1]	Phase 3	Total
January	193	6	199
February	185	6	191
March	170	9	179
April	158	11	169
May	148	11	159
June	148	10	158
July	148	9	157
August	155	5	160
September	161	3	164
Oktober	153	5	158
November	157	8	165
December	155	7	162

I. Phase 3 (extramural) not included. Source: Trimbos-institute and Service of Penitentiary Facilities/Dienst Justitiële Inrichtingen.

- The implementation and the programme of SOV have been evaluated (Van 't Land et al. 2005). It was found that there were considerable problems in implementing the SOV. Co-operation between different services proved to be difficult. Municipalities, responsible for the extramural phase 3, were slow in organising it. Inflow in SOV had a slow start, due to the complex processes involved. The programme was changing while being implemented. Participants in SOV have complex problems, also of psychological and psychiatric nature. A considerable proportion of participants was not able to reach phase 3 because of a relapse as soon as they received more freedom in phase 2.
- The SOV changed in 2004. It was incorporated in a new measure. Within the framework of the programme 'Towards a safer society' (T.K.28684/29)a new law 'Placement in an Institution for Prolific Offenders' (Plaatsing in een Inrichting voor Stelselmatige daders, ISD) has been in force since October 2004 (Stb 2004/351;T.K.28980-1-2;T.K.28980/16;T.K.28980/3)(Stb 2004/351;T.K.28980/16;T.K.28980/3). This law facilitates sentencing a person to imprisonment in a sober regime for a maximum of two years, even for minor crimes in case those crimes are committed repeatedly. The ISD should prevent new offences. ISD-places are made available stepwise to a total of 1,000 places in 2007, at first in Amsterdam, Rotterdam, The Hague and Utrecht, and next in other larger cities. The ISD applies to all repeat offenders. A large part of the ISD-candidates are drug users, so the ISD will especially apply to drug users. Those who receive a measure of ISD will get an assessment. The outcome can be either the placement in programmes geared at behavioural change - like SOV or a less intensive or extramural programme - or the placement in a sober basic regime with the focus on incarceration. Starting point is the basic regime.

New developments

- The ISD will be implemented further in 2005/2006. Per 1 January 2005 there were 544 places for ISD available and inflow started. Table 9.3 shows the number of persons who received the ISD measure since then. The number of addicts is not specified. Also, the SOV data for 2005 are shown.
- Participation in SOV is decreasing.

- Recidivism of repeat offenders is monitored in research. (Tollenaar et al., to be published)

Table 9.3: Number of participants in Facilities for Prolific Offenders (ISD) and Judicial Treatment of Addicts (SOV), 2005

Month 2005	Number of participants ISD	Number of participants SOV[I]
January	13	171
February	43	162
March	43	171
April	43	162
May	56	162
June	70	148
July	114	136
August	128	132
September	191	131

I. Phase 3 included.

Alternatives to prison for drug users

Ever since the end of the nineteen-eighties, the Netherlands have an explicit national policy to divert drug users to care programmes (T.K.20415/1). This policy is still strong (T.K.28684/44). Referral to care programmes is explicitly stimulated by programmes within the Ministry of Justice since 2002. The idea behind this is that recidivism of drug users can be reduced when they participate in a care programme. The criminal justice system offers a unique possibility to divert criminal drug users to care programmes under the judicial pressure of a conditional sentence.

- In 2004, about 2,200 referrals of addicts (alcohol, drugs and other addictions) to care programmes were carried out. These referrals can take place before conviction. Most referrals concern placement in residential addiction care (41%) or in outpatient/semi-residential addiction care (35%). There are no significant changes compared to 2003.
- From 2002 up to 2004 three programmes were piloted to improve protocols and instruments for the diversion of addicted detainees in the phase of remand custody. The programmes were evaluated (Miedema et al. 2005). Although it proved to be not easy to implement the programmes, protocols and instruments were developed and used. A problems that occurred was that the occupation rates in the programmes proved to be lower than expected due to non-compliance of pilot partners to appointments about selection of addicts for the programme. Another problem was that referral to care proved to be difficult because care facilities sometimes had no adequate places for the addicts. Quantitative targets of the programmes were met for about 50%. These programmes are further implemented and improved in 2005/2006.

Research in 2004 showed that quasi-compulsory treatment for addicts is not implemented to the full extent, and that there are no definitive results about its effectiveness (Van Ooyen-Houben 2004).

Aftercare

Aftercare is considered a very important issue (T.K.28684/44;T.K.28684/51). A report of the Netherlands Court of Audit 2004 showed that aftercare is badly organised (T.K.29660/1-2). Many actors should be involved in effective aftercare. In 2005, efforts on aftercare have been intensified in the framework of the programme 'Towards a safer society'. Municipalities will

be in charge with regard to aftercare. There are agreements/covenants in which tasks of municipalities (who have to take care of prevention and aftercare) and those of justice and police (law enforcement, sentencing and resocialisation) are fine-tuned. New ways of organising the chain around repeat offenders are being defined in 2005 and developed in the near future (Programma Terugdringen Recidive 2004).
In addition, the Minister of Justice is proposing a re-introduction of the legal possibility of conditional release. By keeping ex detainees under the supervision of judicial authorities and – at the same time – stimulating participation in extramural re-integration programmes, it is assumed that recidivism can be reduced.

10 Drug Markets

10.1 Availability and supply

Availability
Information on *perceived* availability of illegal drugs and the actual sources where young people obtain cannabis is available from the last school survey in 2003 (Monshouwer et al. 2004). Pupils of 12-18 years perceive cannabis as the most easily available substance (30%), followed by both ecstasy (10%) and cocaine (9%). More boys than girls rate these drugs as being easily or very easily available. Moreover, perceived availability strongly increases with age. According to a subsequent analysis (see paragraph 2.2), the percentage of students aged 12-17, believing that it would be fairly or very easy to obtain cannabis if they wanted, rose from 24% in 1992 to 34% in 1996 and then dropped to 26% in 1999, and stabilised in 2003 (Monshouwer et al. 2005).

The survey also included questions on the sources where pupils (current users) obtained cannabis. In 2003, two in three current cannabis users obtained cannabis through friends (67%); one in three pupils obtained cannabis in coffee shops (35%). Dealers (12%) and indirect sources (e.g. through other people; 9%) were mentioned by one in ten pupils; 6% reported other sources. Friends are a more important source for girls than for boys while coffee shops are more important for boys than for girls. Quite some pupils between 15 and 17 years reported to buy cannabis in a coffee shop (22% of the pupils between 12-15 years; 57% for boys of 16-17 and 37% for girls of 16-17) while the age limit for entrance to a coffee shop is 18 years (see also paragraph 2.2). However, it is possible that some pupils indicated this source, while in fact they meant that others had bought cannabis for them in a coffee shop. The importance of coffee shops as a source for obtaining cannabis increases with age. In 2003, eight in ten boys and almost six in ten girls of 18 years reported to buy cannabis in coffee shops.

Coffee shops
Cannabis can be obtained in coffee shops adhering to certain criteria (AHOJ-G; see chapter 11). From 1995 onwards, Dutch policy has focused on controlling public nuisance problems associated with coffee shops. As a result of strict enforcement and various administrative and judicial measures, the number of officially tolerated coffee shops has decreased in the past years (table 10.1).

- This trend was most pronounced between 1997 and 1999 (28%), especially in the smaller towns and Rotterdam.
- Since 1999, the annual reduction in number of coffee shops was smaller: 4% from 1999 to 2000, 1% from 2000 to 2001, 3% from 2001 to 2002, 4% from 2002 to 2003 and 2.3% from 2003 to 2004.
- Coffee shops are present in 103 municipalities. This is 21% of all municipalities, about the same level as in previous years. Thus, almost eight in ten municipalities do not have coffee shops.
- The majority (52%) of all coffee shops were located in the big cities with more than 200 thousand inhabitants.
- In most municipalities, the number of coffee shops has slightly decreased from 2003 to 2004, with the exception of municipalities with 20 to 50 thousand inhabitants.

Table 10.1: Number of coffee shops in the Netherlands

Number of inhabitants	1997*	1999	2000	2001	2002	2003	2004
< 20,000	±50	14	13	11	12	12	10
20-50,000	±170	84	81	86	79	73	77
50-100,000	±120	±115	109	112	106	104	101
100-200,000	211	190	168	167	174	168	166
>200,000 (totaal)	628	443	442	429	411	394	383
- Amsterdam	*340*	*288*	*283*	*280*	*270*	*258*	249
- Rotterdam	*180*	*65*	*63*	*61*	*62*	*62*	62
- The Hague	*87*	*70*	*62*	*55*	*46*	*41*	40
- Utrecht	*21*	*20*	*18*	*17*	*18*	*18*	17
- Eindhoven**			*16*	*16*	*15*	*15*	15
Total	**1,179**	**846**	**813**	**805**	**782**	**754*** **	**737**

* Estimated number of coffee shops. ** Eindhoven has passed the limit of 200,000 inhabitants in 2000. This partly explains the slight decrease in the number of coffee shops in cities with 100-200,000 inhabitants. ***In 2003, 3 coffee shops were not allocated to a municipality. Source: (Bieleman et al. 2005).

Non-tolerated cannabis markets

As indicated above, not all cannabis users obtain their cannabis in or through coffee shops. In 2003/2004, the University of Amsterdam (Bonger Institute of Criminology) conducted a study into the nature and number of non-tolerated sales point of cannabis (Korf et al. 2005b). More precisely, this study focused on dealers outside the officially tolerated coffee shops, and on retail trade, not on coffee shop suppliers or the middle or higher levels of the cannabis markets. Information has been obtained in 10 municipalities through interviews with experts, surveys among users and ethnographic field studies.

- The results showed that there are two main categories of non-tolerated sales points: 1) fixed sales points, such as house dealers and under-the-counter dealers primarily at clubs or pubs, and 2) mobile sales points, including home delivery after cannabis has been ordered by phone and sales in the street and at spots where people hang around (street dealers).
- Based on median estimates of users on their own purchasing behaviour, it has been estimated that in the municipalities with officially tolerated coffee shops, about 70% of the local cannabis sales go *directly* through the coffee shops. In addition, coffee shops are indirect suppliers of cannabis, through friends of users but also through non-tolerated sales points.
- Moreover, the higher the coffee shop density, the greater the percentage of local sales that go directly through coffee shops.
- In municipalities with an average coffee shop density, it is estimated that there are about ten non-tolerated cannabis dealers for each coffee shop. Excluding the big cities and municipalities without coffee shops, this would amount to a few thousand non-tolerated cannabis dealers. Since they jointly account for some 30% of the local sales, the investigators conclude that it seems to be mainly small-scale to extremely small scale trade that is involved.

Supply
Due to its position as an important trading country with a large harbour (Rotterdam) and a busy airport (Schiphol), The Netherlands are vulnerable to trafficking of drugs within the country as well as from and towards other countries.
In 2004, three major problems existed with regard to supply of drugs:

- The production of ecstasy in laboratories in The Netherlands. For this problem, an action started in 2001, which will be continued until the end of 2006 ((T.K.23760/14) (see also chapter 1). The results of an interim evaluation of this plan showed that more pills were confiscated and more labs dismantled (Neve et al. 2005).
- The production of 'nederwiet' is a major concern. Focused actions have been going on recently (T.K.24077/125) (see also chapter 1).
- The import of cocaine, mainly at the airport of Schiphol. Focused actions have been implemented in recent years (T.K.28192/1) (see also chapter 1).

10.2 Seizures

Figures about seizures 1999-2004 are available from the National Police Forces (Papenhove et al. 2005). Figures include police forces, Customs and Fiscale Inlichtingen en Opsporingsdienst. 21 out of 25 regional police forces are included in the figures. Ways of registration differ per region. This causes unreliability of the information and makes it difficult to interpret the figures. The figures do not allow conclusions about developments and trends. Table 10.2 gives an overview of seizures in 2004. Figures are truncated.
According to Papenhove *et al.*:

- About 1,200 kilograms of heroin seizures were recorded at the borders, especially in the Rotterdam harbour.
- More than 12,000 kilograms of cocaine seizures were recorded, especially at Schiphol Airport by Customs and Royal Military Police from air passengers.
- About 500 kilograms and 10,000 tablets of amphetamine, and 300 kilograms, about 5,5 million tablets and 200 liter ecstasy (MDMA, MDA or MDEA) were seized. About 30 production places for synthetic drugs were dismantled.
- $\pm$ 52,000 trips of LSD were seized, no LSD tablets.
- Methadone is mainly seized as tablets ($\pm$ 14,000).
- Seizures of raw opium are very limited.
- Of cannabis (hashish, marihuana and 'nederwiet') several thousands of kilograms were seized and more than a million cannabis plants.

Table 10.2: Total amount of drugs seized in 2004[I]

Type of drug	kilograms	tablets	liters	number
Heroin	± 1,200			
Cocaine	± 12,000			
Morphine		± 30		
Amphetamine	± 500			
Ecstasy - MDMA/MDA/MDEA	± 300	± 5.500,000	± 200	
GHB	± 20			
LSD				± 52,000 trips
Methadone	II	± 14,000	II	
Opium	II			
Hashish	±16,000			
Marihuana	± 7,000			
'Nederwiet	± 2,000			
Cannabis plants				± 1,000,000
Hallucinogenic mushrooms	II			

I. figures are truncated. II. <10 kilograms.

- With regard to ecstasy, an interim evaluation study of the 'Combined efforts to combat XTC', which spans the period from 1 July 2001 to the autumn of 2004, concludes that it would appear that the production and trade in ecstasy had decreased in the Netherlands in 2003, particularly in comparison with 2002 (Neve et al. 2005). The latest police analysis confirms this (Huisman 2005).
- A study on the Dutch cocaine trade, based on impressions of participants in drug distribution chains, shows that large-scale cocaine import and the middle market that evolves from this import appear to be the domain of people who are active on several other terrains of illegal trade and illegal acts (Gruter et al. 2005). The Dutch local market for cocaine seems to be almost completely supplied by small-scale imports into Schiphol Airport.

10.3 Price/purity

The Drugs Information Monitoring System (DIMS) of the Trimbos Institute provides detailed information on the quality of 'ecstasy' and other drugs delivered by consumers at test locations of drug treatment services. Part of the samples is identified on the basis of specific characteristics (colour, logo, weight, diameter etc.) and reaction in the Marquis test[4]. Samples which can not be identified at these test locations are sent to the laboratory for chemical analysis. As the total number of delivered samples progressively decreased over the years[5], DIMS also started to report on drug samples confiscated by security services of clubs (since 2003). If these data are given in this paragraph, it will be mentioned explicitly. DIMS is used here as to refer to the testing system for consumers at treatment services.

[4] The Marquis test gives an *indication* of the composition of a sample based on a colour reaction.
[5] This trend is probably related to the discontinuation of the Safe House Campaign (on the spot testing at parties organised by the Stichting Adviesburo Drugs), the increased confidence of users in the fairly stable content of pills and the reduction of the numbers of pills users were allowed to provide for testing (Pijlman et al. 2003).

Ecstasy

The number of pills sold as ecstasy, which were identified at test locations, strongly decreased from 4320 in 1997 to 688 in 2003. In 2004, the number of identified pills slightly increased to 907. The number of pills tested in the laboratory also decreased, but to a lesser extent. Table 10.3 shows the percentage of analysed pills containing certain substance(s), or combination of substances. These categories are mutually exclusive.

- The total percentage of ecstasy pills containing only MDMA (or an MDMA-like substance, such as MDEA, MDA) has increased over the years, while the percentage of pills containing other psychoactive substances has decreased.
- In 2004, 96% of the pills only contained an MDMA-like substance (MDMA, MDA, MDEA), while only 1.4% of the pills containing an MDMA-like substance also contained another psychoactive substance.
- The percentage of pills sold as ecstasy but containing amphetamines has strongly decreased between 1997 and 2000 and remained at a low level thereafter.

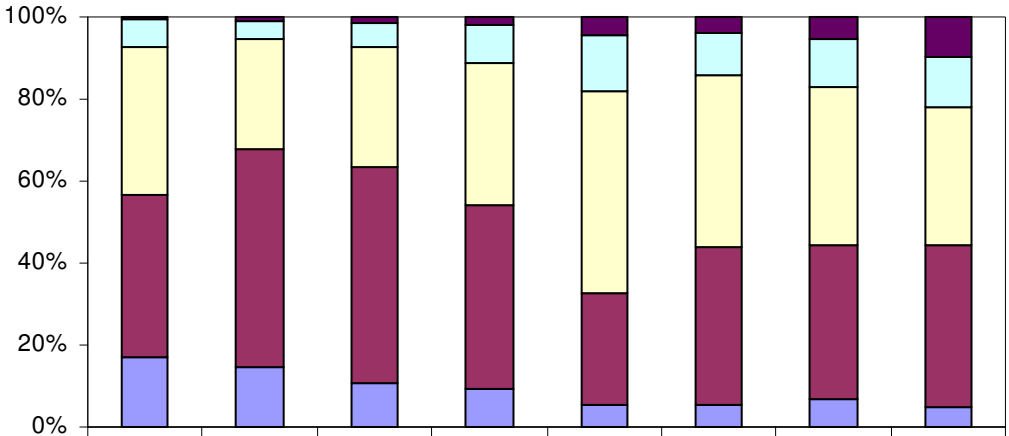
Table 10.3: Content of pills sold as 'ecstasy' based on laboratory analysis, since 1997

Substances (% of pills)	1997	1998	1999	2000	2001	2002	2003	2004
MDMA	44.6	75.2	82.0	89.5	91.4	88.7	91.2	89.4
MDEA	8.2	1.3	1.4	0.9	1.2	0.4	0.5	0.2
MDA	1.5	2.2	2.8	2.0	0.7	1.4	0.9	1.9
Combination MDMA, MDA and/or MDEA	2.6	1.6	1.0	3.0	3.0	1.7	2.7	4.6
Combination MDMA, MDA and/or other psychoactive subst.[1]	9.0	4.3	3.3	1.2	0.9	3.7	2.1	1.4
Tablets without MDMA, MDEA and/or MDA:								
Amphetamine[2]	15.5	6.5	3.9	0.9	1.0	1.7	1.0	0.3
Methamphetamine						0.3	0.3	0.1
Other psychoactive substance[1]	14.7	4.5	2.7	1.6	1.2	1.3	0.7	1.7
No psychoactive substance	3.9	4.3	2.9	0.8	0.5	0.8	0.8	0.7
Total number of pills analysed	2,434	2,713	2,306	2,497	2,402	2,149	2,187	1,985

Percentage of pills containing a certain substance, or combination of substances. Categories are mutually exclusive. [1] E.g. 2-CB, MBDM, DOB, PMA, caffeine, ephedrine etc. [2] Until 2002, no distinction was made between amphetamine and/or methamphetamine. Source: DIMS, Trimbos Institute.

- Figure 10.1 illustrates that the concentration of MDMA in pills has always shown a wide variation. Worrying, however, is the trend towards an increasing proportion of high dose (>140 mg) MDMA pills: 1% in 1997-1999 against 10% in 2003.
- The average amount of MDMA (82 mg in 2003) remained relatively stable.

Figure 10.1: Percentage of ecstasy pills by content of MDMA (mg)



	1997	1998	1999	2000	2001	2002	2003	2004
>140 mg	1	1	1	2	4	4	6	10
106-140 mg	6	5	6	9	14	11	12	12
71-105 mg	36	27	29	35	49	42	38	34
36-70 mg	39	53	52	45	28	39	38	39
1- 35 mg	17	15	11	9	5	5	7	5

Source: DIMS, Trimbos Institute. Only ecstasy pills tested in the laboratory and containing at least 1 mg MDMA or more have been included.

Amphetamines

In 2004, DIMS analysed 490 powders bought as 'speed' (393 in 2003).

- The majority (92%) of the powders contained (at least) amphetamine, with an average concentration of 35%; 2.2% contained methamphetamine. The average methamphetamine concentration was 56%.
- Four percent contained *only* another psychoactive substance and only 0.8% contained no psychoactive substance at all.
- The proportion of caffeine containing speed powders increased from 32% in 2002 to 54% in 2003. In 2004, 58% (also) contained caffeine.

Cocaine

In 2004, DIMS analysed 368 powders that were bought as cocaine (229 in 2003).

- The large majority (91%) did indeed contain (also) cocaine, with an average concentration of 56%, while 7% *only* contained another psychoactive substance and 2% contained no psychoactive substance at all.
- The percentage of cocaine powders containing *phenacetin* (an analgesic withdrawn from the market because of serious kidney damage in chronic use of high therapeutic doses) almost doubled from 8.5% in 2002 to 16.2% in 2003, and further increased to 35% in 2004. Preliminary figures for 2005 indicate no further increase (37%).
- In 2004, three samples contained atropine (11% ± 2.2). In the first half of 2005, *atropine* (plus cocaine) was detected three times in powders bought as cocaine, with a mean percentage of 4,0% ± 2,5%. Atropine (plus cocaine) was detected once in another powder (3%). The detection of atropine and hospital emergencies related to a cocaine/atropine intoxication were reason to start a red alert warning campaign at the

end of 2004. This campaign ended on 29 April 2005. In November 2005, new cases of an atropine/cocaine intoxication were reported and the warning campaign was reactivated.

As far as phenacetin is concerned, it is not likely that the doses of phenacetin used by sniffing cocaine cause any serious health damage, i.e. these doses are much lower than the therapeutic doses known to cause kidney damage. However, little is known about the risks of smoking (and heating) crack cocaine adulterated with phenacetin.

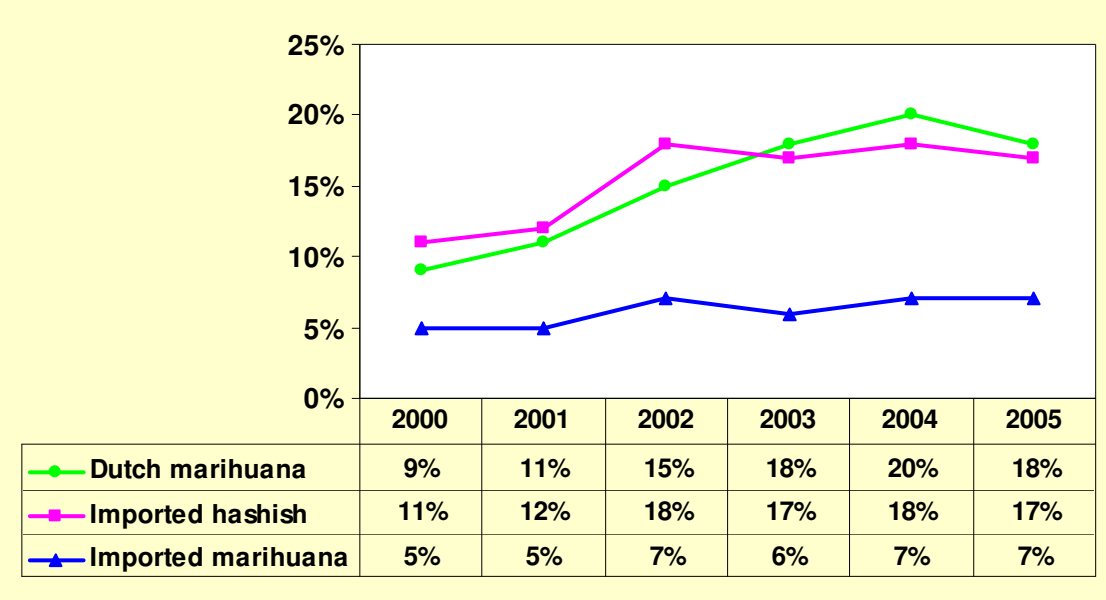
Other substances (based on DIMS and security)
Samples containing GHB are still delivered to DIMS: 98 times in 2004 and 59 times during 2005.

- In 2004, mCPP (meta-chlorophenylpiperazine) was found 13 times in pills, 12 of which were sold as ecstasy. Nine of these pills were bought as ecstasy. In the first half of 2005, mCPP was detected in 26 samples.
- So far, mCPP has not been found to be neurotoxic. Moreover, the doses of mCPP found by DIMS (2-46 mg) are comparable with doses used in human challenge studies to test the serotonergic system (Bossong et al. 2005). Yet, for recreational purposes, more than one tablet may be consumed at a time, increasing the risk of a serotonin syndrome, especially when used in combination with alcohol, ecstasy or antidepressant drugs.

Cannabis
Since 1999 the Trimbos Institute also monitors THC content and prices of cannabis (THC-monitor) (Pijlman et al. 2005). Samples of different cannabis products (about 1 gram each) are regularly procured from a random sample of 50 coffee shops and chemically analysed. Figure 10.2 shows the average concentration of THC in Dutch marihuana (‘nederwiet’), imported marihuana and imported hashish.

- Dutch marihuana contains more THC on average than imported varieties.
- Between 2000 and 2004, the percentage of THC in Dutch marihuana increased progressively each year. However, from 2004 to 2005, a significant decrease was found and the average THC concentration in 2005 reached the same level as in 2003. Thus, the potency of Dutch marihuana seems to stabilise.
- The THC concentration in imported marihuana did not change significantly over the years. For imported hashish an increase was found from 2001 to 2002 but THC levels remained fairly stable afterwards.

Figure 10.2: Average THC percentage in cannabis products



	2000	2001	2002	2003	2004	2005
Dutch marihuana	9%	11%	15%	18%	20%	18%
Imported hashish	11%	12%	18%	17%	18%	17%
Imported marihuana	5%	5%	7%	6%	7%	7%

Source: THC-monitor, Trimbos Institute (Niesink et al. 2005).

- Improved and highly professional cultivation methods probably explain the increasing trend in THC content in home grown cannabis products.
- These high THC levels are not exclusively found in the Netherlands. Relatively high and increasing THC concentrations have also been found in special kinds of American cannabis ('sinsemilla').
- The acute health effects of cannabis with higher percentages of THC are not known. The Ministry of Health has launched a research project to investigate the acute pharmacokinetic and pharmacodynamic effects of three doses of THC (smoked in a joint) in a randomised controlled trial in healthy volunteers'. The range of the selected dose is wide (33, 51, 70 mg THC), with the highest levels representing a worst case scenario. The results will be available in 2006.
- Whether cannabis with a higher THC content will increase the risk of dependence at population level is not known. A field study among coffee shop visitors profiled three types of users: those who seem to titrate their dose (adjust amount consumed for increasing strength), those who use at a stable level; and a third group, of relatively young users, who tend to consume more, the stronger the cannabis (Korf et al. 2004c). This last group might have a relatively high risk of dependence. However, there are no data on the prevalence of these user types.

Prices

No major and systematic changes have been noted in the retail prices of cannabis over the past years (see table 10.4). According to the THC-monitor, the average retail price of a gram imported marihuana is consistently lower compared to other cannabis products.

Table 10.4: Average retail price per gram of cannabis products (in €)

	2000	2001	2002	2003	2004	2005
Dutch marihuana	5.8	5.9	6.3	6.5	6.0	6.2
Imported marihuana	3.9	3.8	4.2	4.3	4.9	4.1
Imported hashish	6.3	6.4	7.1	7.6	6.6	6.8

Source: THC-monitor, Trimbos Institute (Niesink et al. 2005).

No trend data are available on the prices of other drugs.

Part B: Selected Issues

11 Gender differences

Summary
As regards gender differences in the Netherlands, a variety of research and other data on drugs are available. In the general population in the year 2001, the last-month prevalence of women caught up with the last-month prevalence of men for the use of cocaine, ecstasy, and amphetamines. With regard to drug use among youngsters in the nightlife, the use rates of men were typically higher compared with those of women, except for the lifetime use of cannabis. Among the problem drug users that are in treatment, the percentage of male clients far outnumbers the percentage of females. It was found that in 1994 as well as in 2004 the percentage of females among all treatments for drugs was stable at 18.4%. Among the first treatments, however, a slight increase – mainly attributable to ecstasy - was found from 18.4% in 1994 to 22.1% in 2004. Gender-specific prevention activities are fairly scarce. A brief inventory suggests that less than half of the main drug treatment centres in the Netherlands offer gender-specific (or rather gender-directed) treatment programmes or activities.

11.1 Situation

Consumption in the general population
As regards the general population, gender differences are elaborated for the consumption of cannabis, cocaine, ecstasy, and amphetamines/speed. In table 11.1, the LTP and the LMP of men and women are compared for the years 1997 and 2001.

Table 11.1: Gender differences in substance use in the general population in 1997 and 2001

SUBSTANCE:	1997		2001		1997		2001	
CANNABIS	LTP		LTP		LMP		LMP	
Men	20.6%		21.3%		3.5%		4.3%	
Women	10.8%		12.8%		1.4%		1.8%	
Ratio W/M		*0.5*		*0.6*		*0.4*		*0.4*
COCAINE								
Men	2.9%		3.9%		0.3%		0.4%	
Women	1.3%		1.9%		0.1%		0.4%	
Ratio W/M		*0.4*		*0.5*		*0.3*		*1.0*
ECSTASY								
Men	2.7%		3.7%		0.4%		0.5%	
Women	1.0%		2.1%		0.1%		0.5%	
Ratio W/M		*0.4*		*0.6*		*0.3*		*1.0*
SPEED								
Men	0.2%		3.4%		3.4%		0.2%	
Women	0.1%		1.8%		1.8%		0.3%	
Ratio W/M		*0.4*		*0.5*		*0.5*		*1.5*

Percentage of substance use in the general population aged 12 years and above. LTP = Lifetime prevalence, LMP = Last-month prevalence. Source: National Prevalence Survey, CEDRO (Abraham et al. 2002).

Table 11.1 also includes gender ratios obtained by dividing the prevalence rates of women (W) by those of men (M). Most gender (W/M) ratios show substance use to occur more often among men than women. In 2001, the LMP of women caught up with the LMP of men for the

use of cocaine, ecstasy, and amphetamines/speed. For these three substances, all corresponding W/M ratios increased between 1997 and 2001. The LTP percentage of cannabis use by women increased from 10.8% to 12.8% between 1997 and 2001. The LMP percentages for cannabis use show a quite stable gender ratio (0.4).

Consumption among young people in general and in nightlife

Table 11.2 gives the LTP and LMP percentages of substance use among 12-18 year-old students for the years 1992 and 2003. A distinction is made between cannabis, cocaine, ecstasy and amphetamines/speed. Table 11.2 also includes gender (W/M) ratios. The year 2003 was the first year in which no longer a statistically significant difference between boys and girls was measured for the LTP of cannabis use, indicating that on this measure, girls equal boys. As regards the LMP of cannabis use, this difference also decreased over the years, but remained statistically significant in 2003. As for cocaine and ecstasy, no systematic indications were found for increasing use among girls compared to boys. The LMP of speed use, however, suggest that female students are in the process of catching up with male students.

Table 11.2: Substance use by 12-18 year-old school boys and girls in 1992 and 2003

SUBSTANCE:	1992		2003		1992		2003	
CANNABIS	LTP		LTP		LMP		LMP	
Boys	18.6%		20.3%		9.1%		10.2%	
Girls	11.5%		17.1%		4.2%		7.0%	
Ratio W/M		*0.6*		*0.8*		*0.5*		*0.7*
COCAINE								
Boys	2.0%		2.8%		0.4%		1.2%	
Girls	1.1%		1.6%		0.3%		0.5%	
Ratio W/M		*0.6*		*0.6*		*0.8*		*0.4*
ECSTASY								
Boys	4.7%		3.5%		1.4%		1.5%	
Girls	2.1%		2.2%		0.7%		0.8%	
Ratio W/M		*0.4*		*0.6*		*0.5*		*0.5*
SPEED								
Boys	2.9%		2.6%		0.9%		1.0%	
Girls	1.5%		1.8%		0.3%		0.7%	
Ratio W/M		*0.5*		*0.7*		*0.3*		*0.7*

Percentage of use among pupils aged 12 through 18 years. LTP = Lifetime prevalence, LMP = Last-month prevalence. Source: Dutch National School Survey, Trimbos Institute.

With regard to youngsters in nightlife, substance-use researchers present varying data on gender differences. In table 11.3, the Hague nightlife survey gives evidence of lower levels of substance use than the Amsterdam clubbers' survey. These level differences are mainly the effect of dissimilar sampling methods of respondents. In the Hague, *all* youngsters visiting nightlife locations and events were asked to participate, while the Amsterdam survey focused specifically on regulars of (trendy) clubs and parties ("clubbers"). In Amsterdam, 41.1% of all respondents were under 25 years of age against 72.3% respondents in the Hague survey.

Table 11.3: Gender differences in substance use by youngsters in nightlife in Amsterdam and The Hague, 2003

RISK	Amsterdam, 2003 (a)				The Hague, 2003 (b)			
SUBSTANCE:	LTP		LMP		LTP		LMP	
Alcohol								
Men	98.6%		95.4%		-		89.1%	
Women	98.8%		95.7%		-		87.2%	
Ratio W/M		*1.0*		*1.0*				*1.0*
Tobacco								
Men	83.8%		51.9%		-		-	
Women	91.0%		59.1%		-		-	
Ratio W/M		*1.1*		*1.1*				
Cannabis								
Men	82.4%		44.4%		-		47.5%	
Women	81.9%		33.2%		-		24.9%	
Ratio W/M		*1.0*		*0.7*				*0.5*
Ecstasy								
Men	60.6%		43.6%		-		23.3%	
Women	23.7%		14.6%		-		10.2%	
Ratio W/M		*0.4*		*0.3*				*0.4*
Cocaine								
Men	47.2%		30.3%		-		13.1%	
Women	17.7%		9.1%		-		7.0%	
Ratio W/M		*0.4*		*0.3*				*0.5*
Amphetamine								
Men	38.9%		27.7%		-		-	
Women	7.0%		6.4%		-		-	
Ratio W/M		*0.2*		*0.2*				
Ephedra								
Men	48.8%		9.9%		-		-	
Women	44.1%		6.5%		-		-	
Ratio W/M		*0.9*		*0.7*				
GHB								
Men	24.1%		7.0%		-		-	
Women	10.6%		1.1%		-		-	
Ratio W/M		*0.4*		*0.2*				

Source: (a) Clubbers' survey (N=414), Antenne 2003 (Korf et al. 2004a); (b) Youth survey (N=634), the Hague nightlife research (Van Gelder et al. 2004).

- In nightlife scenes, prevalence rates of alcohol use between men and women are fairly similar. Gender differences, first, go together with distinctions between alcoholic drinks. While young men often drink beer, most young women prefer mix drinks or wine (cf. (De Graaf et al. 2004)). Besides, young men consume larger quantities of alcohol than young women. In the Amsterdam clubbers' survey, male respondents had 5.6 alcoholic drinks a time compared to 4.4 drinks by female respondents. Only for tobacco, use rates among women slightly exceeded those of men.
- For all other drugs, except for lifetime use of cannabis, use rates in men were typically higher compared with those of women. However, there are relative differences, with higher women/men ratios for cannabis and ephedra, relative to the other drugs.
- In a study at dance parties throughout the Netherlands (Ter Bogt et al. 2005a), found female users, in particular young women, to suffer more than male users from the

negative consequences of MDMA use. Female respondents tended to experience more depression, nausea, dizziness, and headache, and they were more susceptible to feeling faint or they were actually fainting. As for the psychological effects of *ecstasy* use, women were more fearsome and tended to rate themselves more as "easily out of control" and "aggressive". These findings were rather in line with a large-scale research on ecstasy use at dance party's in the 1990s (Van de Wijngaart et al. 1997). For male respondents, the experience of negative effects of MDMA use appeared to be related to the combined consumption of various drugs. The propensity of young men for conformism to the MDMA use of their friends was also strongly associated with negative outcomes (Ter Bogt et al. 2005a). In a field research among young women in the Dance scene in Amsterdam, informants put forward the following motives for using party drugs: a. to feel more positive about oneself and contacting other people more easily; b. to give one's best; c. to feel more sexy, erotic and sensual (Wesselink 2002).

- Since 6 April 2004, *ephedra* comes no longer under the Commodities Act (Warenwet) but the Medicines Act (WoG) permitting the retailing of ephedra-alkaloids exclusively by way of registered medicine. In an internet survey (n=237) held in 2004 after this alteration, the majority of female users (73.0%) indicated that ephedra helps them to slim down against 28.7% of the male users. For their part, a majority 54.8% of male users indicated that ephedra helps them to keep on dancing, compared to 36.9% of the female users (Barendregt et al. 2005).
- In 2003, the recreative use of Gamma-Hydroxy-Butyric acid (*GHB*) was only accepted in small circles of pleasure-seeking youngsters. In the Amsterdam clubbers' survey, the LMP of GHB use among male respondents was 7.0% compared to 1.1% among female respondents. Due to its image of being a "risky drug" and even "rape drug", generally, women appear to be much more anxious to use GHB for pleasure (Korf et al. 2002).

Consumption among young detainees and school drop-outs

Gender differences in substance use among juvenile detainees and school drop-outs were discussed already in paragraph 2.3. It is striking that the girls among the juvenile detainees show higher prevalence rates for almost all substances. Among the school drop-outs, the boys exceed the girls on cannabis, cocaine, ecstasy, and mushrooms. For the lifetime prevalence (LTP) the girls are catching up with the boys in the case of crack, amphetamines, LSD, and heroin. Korf et al. (2005) explain that detained girls probably show higher prevalence rates of drug use because, compared to boys, it requires more deviance for a girl to become detained (Korf et al. 2005c). This is also due to the fact that there are less detainee places for girls than for boys. Thus, the girls actually detained, seem to make up a select group displaying more deviancy than boys.

Mortality and drug-related deaths

Figure 6.1 in chapter 6.1 gives the number of deaths directly related to drugs. Between the years 1996 and 2004, the percentage of women among all directly drug-related deaths decreased from 23% to 16% (Causes of death statistics, Statistics Netherlands, CBS).

Treatment demand data

Among the problem drug users that are in treatment, the percentage of males far outnumbers the percentage of females. According to the Treatment Demand Indicator (TDI) as established by the EMCDDA, "all treatments" are defined as the number of persons, corrected for double counting, that subscribe within a registration year. The "first treatments" are respectively defined is the number of persons that subscribe for treatment in the respective year for the first time in their life. Applying these definitions to the National Alcohol and Drugs Information System (LADIS), it was found that in 1994 as well as in 2004 the percentage of females among all treatments for drugs was stable at 18.4%. Among the first treatments, however, a slight increase was found from 18.4% in 1994 to 22.1% in 2004. Since the first treatments, compared to all treatments, give a more focused view on newly developed drug problems, this indicates that the proportion of females among people that have recently developed a drug problem is slightly increasing. Between 2001 and 2004 the proportion of females among the first treatments for all drugs taken together slightly increased from 19.9% to 22.1%. As regards specific substances, table 11.4 shows a fairly strong increase in the proportion of female clients for ecstasy. This trend seems to be consistent with the observed increasing proportion in female users in the general population- although time frames differ (see table 11.1) - and the above mentioned heightened sensitivity of women to the negative effects of ecstasy.

Table 11.4: Percentage of females among the first treatments for drug problems in 2001 and 2004*

Substance	2001	2004
Opiates	19.8%	22.5%
Cocaine	18.3%	17.4%
Amphetamines	28.8%	29.8%
Ecstasy	20.5%	39.8%
Hypnotics and sedatives	49.1%	48.3%
Cannabis	17.4%	19.8%
Total drugs	*19.9%*	*22.1%*

* Given the fact that the Treatment Demand Indicator has been in full operation from the registration year 2001 onwards, this table gives the percentages of females among the first treatments for different substances for the years 2001 and 2004. Source: National Alcohol and Drugs Information System (LADIS), IVZ.

Infectious diseases

Only few data are available dissecting by gender incidence and prevalence of infectious diseases among drug users.

- Since the start of its data collection, the Dutch HIV Monitoring Foundation recorded 563 injecting drug users positive for HIV, of which 410 (73%) male and 153 (27%) female (Van de Laar et al. 2005). The numbers of newly diagnosed HIV cases among injecting drug users in 2004 were 8 (89%) men and 1 (11%) woman.
- Table 11.5 lists the most recent studies from the sentinel surveillance system among injecting drug users of the National Institute of Public Health and the Environment (RIVM) reporting HIV prevalence rates separated by gender. Only in South Limburg, HIV prevalence was found to be significantly (though marginally) associated with gender (Beuker et al. 2001a). In the multivariate analyses in Rotterdam and Amsterdam, gender was not a significant determinant of HIV infection. Note that the reference group differs for the study-sites.

Table 11.5: Gender distribution in 4 study-sites of the HIV sentinel surveillance system among injecting drug users of the National Institute of Public Health and the Environment (RIVM)

Study-site (year)	Total men	Total women	HIV positive men (%)	HIV positive women (%)	Odds ratio	95% Confidence interval
Rotterdam (2002)*	326	93	8.9 (ref)	14.0	1.7	0.8-3.3
Twente (2000)**	66	13	1.5	7.7	n.a.	n.a.
Heerlen/Maastricht (1998/1999)***	165	49	17.0	4.1 (ref)	4.8	1.13-42.95#
Amsterdam (1998)****	167	30	27.0 (ref)	20.0	0.68	0.23-1.90

*(De Boer et al. 2004a); ** (Haks et al. 2001); ***(Beuker et al. 2001a) HEERLEN; ****(Beuker et al. 1999)
#p<0.05; ref = reference group; n.a.=not available. Source: RIVM.

In 2000, the sentinel surveillance system among injecting drug users of the RIVM was performed in The Hague and included a prevalence study of hepatitis B and C virus infections (Beuker et al. 2001b). Anti-HBc positivity was found in 63 of 181 men (34.8%) and 7 of 18 women (38.9%), which was not significantly different. Seroprevalence of HCV antibodies was confirmed in 47.5% of men and 44.4% of women, which was also not statistically significant.

Crimes and arrests
The majority of drug-related offences is committed by men.

- 86% of the Opium Act offences are committed by male offenders, 14% by females. These proportions did not change much in the last year. The absolute amount grew for men as well as for women (see table 11.6).
- In 2002, women committed relatively more hard drug and soft drug trafficking offences and were relatively less involved in crimes concerning possession of hard and soft drugs than men (see table 11.1).
- Police statistics show more male than female drug using offenders: 91% male and 9% female in 2004.
- Statistics of addiction probation services show that 91% of their clients is male and 9% is female.

Table 11.6: Number and percentage of Opium Act cases recorded by Public Prosecutions Service and gender, 2002-2004

	2002	2003	2004
Cases men:			
Hard drugs trafficking	5,341	5,974	7,235
Hard drugs possession	3,343	3,400	3,653
Soft drugs trafficking	3,343	4,122	5,601
Soft drugs possession	1,766	1,372	1,928
Not specified	34	30	37
Total	13,827	14,898	18,454
Cases female:			
Hard drugs trafficking	942	1,167	1,369
Hard drugs possession	254	240	290
Soft drugs trafficking	556	782	1,145
Soft drugs possession	326	211	265
Not specified	10	5	6
Total	*2,088*	*2,405*	*3,075*

Source: OMDATA, WODC. Note that more than one case may be recorded per suspect.

11.2 Responses

Gender-specific responses on young people
Few drug prevention initiatives appear to include a gender-specific approach.

a. Universal prevention aimed at boys and girls

No information available.

b. Selective prevention in recreational settings: girls'/boys' peer groups
With regard to drug use in recreational settings, peer education and prevention are only carried out in mixed gender groups. Gender difference appears to be a less significant peer-to-peer denominator than age and music preference. Thus, Jellinek Prevention, Amsterdam, supports *Unity* (www.unitydrugs.nl). About forty, mainly Dutch male and female volunteers in the age of 22 to 33 years give peer education at large-scale dance events. *Cannabis Intelligence Amsterdam (CIA)* is another peer-education group organized by Jellinek Prevention, Amsterdam (www.cia-info.nl). Education is given by a volunteer group of around 15 male and female immigrants aged 17 to 23 years. Main purpose of the education is to promote safer cannabis use (Wesselink et al. 2005).

c. Selective prevention among socially vulnerable groups of girls/boys
A relatively high proportion of migrant youth in Dutch cities, young men more than young women, appears to belong to a socially vulnerable group with a multiplicity of problems including drug problems. The peer-to-peer education method appears to be successful between Moroccan young *men* in a socially vulnerable position. This was shown in a cooperative project with the FORUM and the Trimbos Institute, both at Utrecht, the Institute of Migration and Ethnic Studies (IMES) of the University of Amsterdam. The comparative project consisted of four pilots that were implemented in order to develop a peer-education method as a prevention strategy among vulnerable young migrants with a multiplicity of

problems including the risk of drug addiction. The pilots were carried out in different local settings among three ethnic groups: Moroccans, Antilleans and Turks. Out of the four pilots, only one pilot, *Chebbab* in the city Nijmegen, was successful. Fifteen Moroccan young men succeeded in giving peer education about cannabis use to other Moroccan young men. In 2004, the manual *Youth with a message* ("Jeugd met een boodschap") was presented on basis of the peer-education method by the *Chebbab* project (Kroneman et al. 2003). There were all kinds of reasons why the other three pilots failed. Due to the stigma on drugs, non-using peers were abhorrent of becoming associated with drugs. Unfamiliarity of professionals with the target group or the peer-to-peer method were other main reasons (Lindo 2003).

Responses to problem drug use and gender: *female street prostitutes*
Since the 1970s, street prostitution in Dutch cities was characterized by increasing numbers of female streetwalkers addicted to hard drugs such as heroin and cocaine. In order to regulate concomitant public nuisance, municipalities began to establish a local streetwalking zone including a prostitutes' living room and screened parking lots. Since 1986, seven municipalities set up such official zones (see table 11.7).

Table 11.7 : Proportion of drug-addicted female/transgender street prostitutes in Dutch cities with official streetwalking zones, 2005

City	Official streetwalking zone	Status	Percentage of hard-drug addicts
Amsterdam (1996-2003)	Theemsweg	Zone closed down in 2003	(see table 11.6)
Arnhem (1996-present)	Oude Veerweg	35 licenses for street walkers available (a)	Majority addicted
Eindhoven (2004-present)	Achtseweg-Zuid	34 licenses for street walkers available (b)	Majority addicted
Groningen (1998-present)	Bornholmstraat	No license system for streetwalkers (b)	10-25 streetwalkers Majority addicted (d)
Heerlen (2000-present)	Imsterraderweg	35 licenses for street walkers available (b)	30 out of 35 licenses for addicts available
Nijmegen (2000-present)	Nieuwe Marktstraat	No license system	57% in 2005 (c) 111 streetwalkers (b)
Rotterdam (1994-2005)	Keileweg	Zone closed down in September 2005	± 75% (d) (± 300 streetwalkers)
The Hague (b) (1983-2006)	Waldorpstraat	Zone abolished in 2006	± 70% 413 streetwalkers (e)
Utrecht (1986-present)	Europalaan	± 150 licenses for streetwalkers	± 40% (c)

Source: (a) (Gemeente Arnhem 2005) (b) (Gemeente Nijmegen 2003); (c) (Oostveen 2005); (d) De Boer et al. 2003; (e) time period: 01-10-2003 to 01-10-2004 (Houwing 2005)(Houwing (2005).

In October 2000, brothels were legalised in the Netherlands, accompanied by tightened inspections on compliance with legal regulations. As a consequence, prostitution activities in brothels shifted partially to more hidden and illegal forms of prostitution, including streetwalking zones. As the proportion of *non*-addicted women and transgenders among streetwalkers tended to increase, the municipality of Amsterdam decided to close down its official zone in December 2003. Addicted streetwalkers are still soliciting clients but, at present, illegally. In 2004, the Bongers Institute of the University of Amsterdam carried out the investigation *Streetwalking after the zone* (Korf et al. 2005a). In a field survey of 92,

mainly female, street prostitutes (89% of the total sample) used crack during the last month and 68% used heroin (see tale 11.8). The LMP of respondents in the age of 24 years or below were 50% for crack and 25% for heroin. In 2005, Rotterdam and The Hague also decided to abolish their official zones, because of nuisance problems and the degrading working circumstances of drug addicted streetwalkers. In addition, specific care facilities were arranged for drug addicted prostitutes.

Table 11.8: Substance use by female street prostitutes in Amsterdam, 2004 (n=92)

Substance use	LTP		LMP	
	≤ 24 years	Total sample	≤ 24 years	Total sample
Alcohol	75%	83%	50%	52%
Tobacco	92%	99%	92%	96%
Cannabis	83%	87%	58%	51%
Cocaine (powder)	33%	61%	8%	9%
Crack	50%	91%	50%	89%
Heroin	33%	81%	25%	68%

Source: (Korf et al. 2005a).

Gender specific treatment data and approaches

Historically, the gender-specific treatment of problem drug use was developed within the context of women's assistance (vrouwenhulpverlening) in the Netherlands. Women's assistance, mostly, has a much broader aim, such as the reduction of vulnerability due to neglect, to sexual or physical abuse, to alcohol abuse or to homelessness. From the 1980s, specific relief facilities for drug addicted women, including streetwalkers, were also opened up. At present, it is difficult to draw a specified overview of gender-specific treatment in Dutch addiction care organizations. The available descriptions of treatment methods are often lacking the necessary specifications. Besides, evaluations of applied gender-specific treatment methods are rarely carried out .

In 2004, Rigter et al. carried out a quick study on the available types of treatments in Dutch addiction care organizations (Rigter et al. 2004). Their research was based on a questionnaire and a telephone survey among addiction physicians. Unpublished reports about available treatments were also studied. Although the response was limited, the results give an impression of the available addiction care treatments on a national level. Publications of gender-specific treatments in Dutch addiction care are rare and mainly based on locally developed treatment options (cf. (Schoot-Durkstra et al. 2000)). Gender-specific treatment was available in less than half (7 out of 17) of the participating organizations.[6] Sometimes gender-specific treatment options are spread over several locations, or treatments are different between locations. Almost all gender-specific treatments were described in general terms and lacking in information about gender-specific treatment ingredients. In most cases, participants and therapists were of the same sex. This may be a reason to define treatment modalities not as *gender-specific* but rather as *gender-directed*. Below, the available gender-specific treatment options are elaborated for three distinct addiction care organizations.

Organization I

The first addiction care organization offers thematic clinical groups and outpatient low threshold treatment for men and women separately. A second option is a group specifically for men,

[6] We exclude parent groups, partner groups, treatments for mothers or parents with drug using children, or for children with drug using parents (included are treatment modalities for drug using mothers and their children).

primarily focusing on increasing insight in drug problems (2,5 hour sessions, once per fortnight, duration variable, given by a psychologist and social worker specialised in group work). Another (low threshold) group is focusing on socially isolated males (two social workers, once a week, no time limits). A third group is meant for women who abuse medication or drink too much alcohol (weekly sessions of 1,5 hour, no time limits). Besides the stabilization of substance use, both groups are also aiming to reduce the social isolation of clients. Finally, two gender-specific therapy groups are organized, for males and females separately, focusing on improving knowledge, self image, social contacts, day activities, and housing.

Organization II
The second addiction care organization offers gender-specific treatment to individuals or groups. Treatment is conducted by a team of professionals (psychologists, family therapists, gender specific therapists, and others). Treatment may imply family therapy (family-directed, parent-child groups, parental relation groups), Goldstein training (social skills, sports, gender-specific, personal presentation, aggression reduction, posttraumatic stress disorder, support, and possible new modules).
Furthermore, a semi-outpatient treatment programme to addicted mothers is offered. This treatment is combined with a 24-hours housing project for the mothers and their children (9-12 months). The capacity is eight beds (placement outside the region is possible). Admission is preceded by detoxification. This treatment is facilitated by a close cooperation with a day-care centre for children. Admission criteria are:
1) having drug-related problems; 2) 16-45 years old; 3) having not more than two young children (0-10 years old); 4) displaying an apparent shortage of parental skills; 5) motivation to become abstinent; 6) informed consent to participate in a long-term intensive treatment programme. Exclusion criteria are:
- psycho-organic deregulation symptoms and/or psychotic episodes;
- being suicidal or suffering from a serious personality disorder.
Methods used: a treatment plan is written during week 1-6 with explicit targets; participation in a basic group programme; individual sessions with therapist, group workers and family therapist. If necessary, a psychologist or psychiatrist are involved. Activities are directed by the Social Competence Model. Video home training is also applied.

Organization III
In the third addiction care organization offers the following gender-directed treatment options: group treatment for addicted men; support groups for mothers of addicted children; group treatment for addicted women; a group for women and their partners; and a group for female partners of Turkish addicts. Treatment is a combination of many standard treatments. Special treatment modalities may be added when needed. Some additional details are:

- In-patient treatment for addicted women with drug-related problems. Maximum 6 months; capacity 42 beds.
- Supported housing programme for male ex-detainees with social problems. Education, supportive counselling and evaluation. Maximum 6 months, 14 living places.
- Night-shelter for addicted sex workers, i.e. a time out and drug consumption facility with educational activities, motivational enhancement and referral. Maximum 3 months, capacity unlimited.
- In-patient support for addicted males form ethnic minorities. Maximum 3 months, 16 beds.

- In-patient relief and crisis intervention for addicted women. Maximum 3 months, 25 beds.
- Support for addicted detainees, on request of the judicial or the detainee. Duration is dependent on the period of custody, capacity 10 places.

Gender-specific social reintegration approaches
No information available.

Gender-specific aspects in the criminal justice system
a. Responses to petty crime
No information available.

b. Gender-specific prison responses, differences in culture or practices in men's/women's prison settings
   - There are no special prisons for female detainees. Females stay in separate prison units.
   - The measure of Judicial Treatment of Addicts (SOV) is only for men.
   - Up to 2005 there existed one special Addiction Guidance Unit for women in one of the prisons. This unit does not exist anymore. A new referral project especially for female detainees is being developed (T.K.29270/1). It will be set up in one prison ('Nieuwersluis') and will have a supra-regional function.
   - It is recognised that female prisoners cause less managerial problems than male prisoners.

   New developments like described in the foregoing chapters affect females as much as males.

12 European drug policies: extended beyond illicit drugs?

Summary
Dutch government does not pursue a national drug strategy or action plan in a strict sense. In the Netherlands, an integrated (i.e. interdepartmental) approach is characteristic for drugs policy. In the policy document *Continuity and change* of 1995, the main principles of the national drugs policy were formulated which still hold at present. In principle, the policy targets for illicit drugs are also valid for licit substances like alcohol and tobacco. However, in spite of this overlap, separate policy frameworks are operational for licit risk substances. An integrated (i.e. interdepartmental) approach being a main characteristic of Dutch substance policy, the competence to supervise and to impose penalties is accordingly subdivided.

12.1 Official endorsement by the National Drug Strategy

In this paragraph we will describe the main characteristics with regard to Dutch policies on substance use and risk behaviour (e.g.) gambling.

Integrated drug policy
Dutch government does not pursue a national drug strategy or action plan in a strict sense. In the policy document *Continuity and change* of 1995, the main principles of national drugs policy were formulated which still hold at present (Ministerie van Volksgezondheid 1995). The final target of the policy concerning drugs is "the prevention of health risks and negative social consequences arising from the use and misuse of risky and addicting psychotropic substances." This target is achieved by reducing the demand for drugs (by active care and prevention); reducing the supply of drugs (e.g. by combating organized crime); and counteracting public nuisance (by keeping public order). In principle, the targets of illicit drugs policy are also valid for licit risk substances like alcohol and tobacco. However, separate policy frameworks are operational for licit risk substances.

An integrated approach is characteristic for drugs policy in the Netherlands. A number of ministries share responsibility for policy on a national level.

- The Ministry of Health, Welfare and Sport (VWS) coordinates drugs policy. The Ministry of Health, Welfare and Sport itself is responsible for the policy with respect to drug prevention and assistance. In regard to medicines, it is responsible for availability and care. The ministry is also in charge with the inspection of food and consumer products, including alcohol, tobacco, smart products. Besides, it is responsible for the counteraction of doping indicated substances in sports.
- The Ministry of Justice is in charge of the enforcement of criminal law. From 2004, the Ministry of Justice is also responsible for betting and gambling game policy.
- The Ministry of Interior and Kingdom Relations sees to matters relating to local government and the police.
- Customs and economic offences related to drugs come under the Ministry of Finance.

On a municipal level the drug policy takes shape in the consultation of the mayor, the chief of police and the public prosecutor. Where necessary, Dutch policy regarding the health risk of substances is thus supplemented with other kinds of policy on a national and/or a local level.

Risk substances, risk behaviours and addictions

In national policy documents, the addictive features of risk substances and risk behaviours are treated under different denominators. A number of risk substances, which are used on a wide scale or in a problematic way, receive specific attention. Since the mid 1990s, the Ministry of Health, Welfare and Sport presented one or more policy documents on alcohol; tobacco; cannabis; crack ('gekookte coke'); and ecstasy. Follow-up reports on drug policy of this ministry also referred to the health risks of "new" substances such as 4-MTA, PMA, and GHB. For his part, the Ministry of Justice presented a separate memorandum on ecstasy in 2001 (T.K.23760/14). Beside the confiscation of ecstasy pills, the counteraction of base materials (precursors) of synthetic drugs is a spearhead of national policy.

Alcohol. Since the mid 1980s, the Ministry of Health, Welfare and Sport pursues a harm reduction policy concerning alcohol consumption in order to prevent alcohol addiction, excessive drinking among youngsters, reducing alcohol use in traffic and at work, and the like. With the Alcohol memorandum of 2001, policy measures were intensified (T.K.27565/2). Alcohol is the most popular psychoactive (and addictive), risk substance among young people and the general population. The misuse of alcohol is in the top-10 of health problems in the Netherlands. In the Alcohol memorandum of 2001, the Ministry therefore provided extra financial means for the realization of an "action plan alcohol care" (Actieplan Alcoholzorg) in order to reach a larger number of people with alcohol problems (De Vos 2004).
In the past years the consumption of alcohol per capita of the population has slightly declined. With regard to young people, however, researchers have pointed out two trends of alcohol use: 1. young people start drinking at an increasingly early age; and 2. they drink alcohol in very large quantities (Hibell et al. 2004;Monshouwer et al. 2004). In the white paper on alcohol of 24 March 2005, the Ministry of Health, Welfare and Sport presented extra policy measures in order to prevent alcohol drinking below 16 years of age and to discourage alcohol misuse (T.K.27565/29). The Ministry of Health, Welfare and Sport wants to achieve the following general aims:

- Teenagers to start drinking at a later age (minimum 16 years);
- Youngsters to drink less alcohol;
- To reduce the number of alcohol-dependent people;
- To reduce the harmful effects of alcohol use in specific situations (in families, at work; in traffic, and in nightlife).

Dutch alcohol policy consists of a coherent package of measures such as legislation, self-regulation, care and assistance, education, and policies for specific situations. Thus, the consumption, retailing and accessibility of alcohol are regulated in the Licensing and Catering Act, most recently modified in 2004 (T.K.29299/7).

Tobacco. Dutch government considers smoking of tobacco to be the most significant avoidable cause of death in the Netherlands (see also 12.2). Smoking not only damages the health of the smoker but it is also harmful to non-smokers (Gezondheidsraad 2003;Knol et al. 2005). In 2001, the policy target was formulated to reduce the percentage (prevalence) of tobacco smokers to 28% of the general population (of 15 years an older) at the end of 2004. This target was actually reached by:

a. stimulating tobacco smokers to stop;
b. preventing young people to start smoking;
c. protecting non-smokers against tobacco smoke (Voedsel en Waren Autoriteit 2005a)
.

The 2003 memorandum *Longer healthy living: also a question of healthy behaviour* (Langer gezond leven: ook een kwestie van gezond gedrag) (T.K.22894/20) not only pointed out the discouragement of smoking as a spearhead but also targeted at a further reduction of the percentage of smokers in the Dutch population to 25% at the end of 2007. The consumption, retailing and accessibility of tobacco are regulated in the Tobacco Act (Gewijzigde Tabakswet), which was tightened in 2002 according to European guidelines (T.K.26472/3). The gradual implementation of ensuing discouragement measures was also rounded off. Inspectors of the Food and Consumer Product Safety Authority (VWA) enforcing the Licensing and Catering Act were, after an internal training, also entrusted with the supervision of the Tobacco Law (Voedsel en Waren Autoriteit 2005b).

Hard drugs and soft drugs. In accordance with the official views on the harmfulness of the various forms of drugs in the Netherlands, a legal distinction is prevalent between hard drugs and soft drugs. The harmfulness of hard drugs is taken to be serious to such a degree that it necessitates the avoiding of any measures resulting in an increase in the number of users, on account of the health risks. Dutch government considers the health argument also to play a role in regard to soft drugs, but less serious. Nevertheless, there are dangers attached to soft drugs like cannabis which can affect young people in particular. Therefore, Dutch policy aims at discouraging the use of soft drugs as far as possible by imposing specified criteria (the so-called “AHOJ-G criteria”) such as a minimum age of 18 years for persons wishing to buy soft drugs, by limiting the number of coffee shops, by prohibiting the establishment of coffee shops near schools, and by providing more public information on the negative effects of cannabis. In the white paper on cannabis of 2004, Dutch government expressed its intention to further tightening the national cannabis policy (T.K.24077/125). The interpretation of coffee-shop policy, however, remains a local affair. The “tripartite consultation” (mayor, public prosecutor, and police) formulates a concrete policy and establishes priorities in the daily maintenance. The national government is responsible in case coffee-shop policy affects public health, the combat of crime, or international relations.

The combined use of drugs and poly-drug use. In general, national policy documents do not focus specifically on the combined use of drugs nor on poly-drug use.

Doping. The discouragement of doping is treated distinctly in national policy documents focusing on health and sports (Ministerie van Volksgezondheid 2005b;T.K.27841/2). According to the Doping list 2005, stimulants, narcotics, and cannabinoïds are prohibited in connection with sports competition. Alcohol is prohibited in particular sports. Doping indicated substances give evidence of an interaction with the use of food supplements and vitamin preparations, in top sports as well as in recreational sports. Research has pointed out that at least a part of the available food supplements in the Netherlands contain doping indicated substances causing problems in the sports world (NOC*NSF 2002). Therefore, the main organisations and institutions involved have reached an agreement about establishing a “Dutch Safety System Food Supplements Top Sports (NZVT)” guaranteeing special quality norms for food supplements. With regard to the use of doping indicated substances in recreational sports, the branches of strength sport and bicycle racing appear to stand out (Van den Heuvel et al. 2002).

Betting and gambling games. As regards betting and gambling games policy, from March 2004 the Ministry of Economic Affairs is no longer responsible but the Ministry of Justice. Since the mid 1990s, the following three motives prevail in Dutch policy:

- the regulation of betting and gambling in order to protect the players and to prevent excrescences and abuses, such as addiction and criminality;
- the fundraising: for the treasury as well as for charitable goals;
- the counteraction of illegality or the flowing away of money to foreign providers.

The growth in the opportunities for gambling games (kansspelen) and the increasing competition between suppliers are considered to be a main threat to these principles (T.K.24557/2). The Betting and Gaming Act of 1964 and related regulations were revised to deal with the new situation. The Commission gambling game machines (Commissie kansspelautomaten 1995) formulated the following recommendations to curb addiction and to influence gaming behaviour in a positive way:
- to discourage the automatism of gambling;
- to discourage continuous gambling;
- to restrict the attractiveness of the game;
- to restrict the soliciting character of gambling game machines.

Since the mid 1990s, various addiction prevention measures were taken, e.g. the exclusion of fruit game machines from snack bars and sport canteens, and the raising of the age limit for gambling-machine gaming from 16 to 18 years (De Bruin et al. 2005). At the same time, paid interactive gambling games on the internet (e-gaming) are more and more popular, in particular among young men with a low income (Lampert et al. 2003). Due to such ongoing technological innovations, the existing national regulations regarding the technical aspects and the testing of machine models are being updated again (T.K.24557/54). As regards the prevention of gambling games addiction, the Netherlands Association for Mental Health Care (GGZ Nederland) and a branch organization (VAN Speelautomaten) presented the action plan "*Towards less gambling game addiction in entertainment centres.* (Naar nog minder kansspelverslaving in de amusementscentra)" in November 2005 (Actieplan kansspelen 2005).

12.2 Genesis and rationale (Health-risk prevention)

Although fairly distinct policies exist for the different risk substances or classes of substances, various broader policies can be identified in which illicit drug use is just one of the components.

Public health-risk prevention
A main expanded policy on drugs and other risk substances is implemented within the frame of public health-risk prevention. In *The 2002 Dutch public health status and forecasts report*, the National Institute of Public Health and the Environment (RIVM) calculated that 15 percent of diseases in the Netherlands can be attributed to smoking, 7 percent to excessive alcohol consumption, and 6 percent to severe overweight (Van Oers 2002). Unhealthy behaviours account for at least 20 percent of disease costs. As it is better to prevent than to cure, the Ministry of Health, Welfare and Sport presented in 2003 the memorandum *Longer healthy living: also a question of healthy behaviour* (Langer gezond leven: ook een kwestie van gezond gedrag) (T.K.22894/20). The memorandum is part of a long-term prevention policy in order to promote public health and discourage health-risk behaviours. In the memorandum, smoking, obesity; and diabetes are considered to be the main risk factors in regard to

unwholesomeness, disease, and premature death. They are designated as three spearheads which are tackled in distinct action plans. Apart from smoking, alcohol addiction is also dealt with in the memorandum by focusing on the part general practitioners could play in tracing risk drinkers as well as offering assistance.

Young people and health-risk prevention

In the Netherlands, young people are a main target group approached by an expanded prevention strategy with regard to health risk substances and behaviours. This is, for example, the case in the following projects coordinated on a national level:

1. *The Healthy School and Drugs* (De gezonde school en genotmiddelen)

Since the beginning of 1990s, an integrated approach is propagated in prevention strategies targeting youngsters. A main example is the *The healthy school and drugs* project coordinated by the Trimbos-institute, Utrecht, in cooperation with regional institutions and Community Health Services (GGD) ((Trimbos-instituut 1998;Van Diest 2005)). The project is financed by the Ministry of Health, Welfare and Sports. The project can be used as a stepping-stone for local policy making related to youngsters and risk substances, especially by the concerted action of schools, Community Health Services (GGD), and addiction care organizations. Basic assumption of the project is that taking risks is proper for youngsters growing up. In general, Dutch boys appear to give more evidence of risk behaviours than girls. Some forms of risk behaviour are linked to each other. Unhealthy eating behaviour, suicide or sexual risk-behaviour often go together with risk-substance use. Youngsters start to experiment with tobacco and alcohol at an increasingly earlier age. From the perspective of prevention it is therefore important to support youngsters in a conscious and well-advised choice behaviour. This is possible at school, being the location where nearly all youth throughout the country can be reached. Dependent on the type of education and the socio-demographic composition of the pupils, distinct prevention messages are provided for smoking, alcohol, cannabis and drugs (Van Diest 2005).

2. *Prevention aimed at the recreational use of drugs*

In commission of the Ministry of Health, Welfare and Sport (VWS), the Trimbos Institute formulated a plan “Nightlife and Drugs 1998-2001” amounting to an integrated prevention approach of recreational substance use by youngsters in the nightlife scene. The general plan was developed in consultation with national and regional partners and was mid 1998 presented to all regional institutions for addiction care as well as Community Health Services (GGD). A main target of the “implementation model” is the development of a community-based approach in which regional prevention activities are combined with interventions on a national level. These prevention activities are arranged in product groups: coffee shops, regular catering and large-scale events. A further subdivision is made into the domains of “leisure time”, “school” and “home” making up the life-world of young people. For each of these domains activities (products) were/are developed. In 2005, a handbook on nightlife and drugs was also published (Bolier et al. 2005). The project focuses on the use of alcohol and drugs and is still running.

Problem youth

Various (sub)groups of youth give evidence of problematic drug use while causing public nuisance. For these problem groups, specific expanded strategies were developed on a national level. In *Youth at the right place/Jeugd terecht. Action programme against youth criminality 2003-2006*, disturbing and nuisance causing youngsters are considered to be a public-order problem, including a.o. excessive alcohol use and/or illegal drug use (Ministerie

van Justitie 2004b). With regard to repeatedly offending youngsters, a person-oriented approach started already in the 1990s, presently known as Individual Trajectory Guidance (ITB). The ITB consists of two different trajectories for 1) hard core youth (ITB-HK); and 2) low-rate criminal immigrant youth (ITB-CRIEM) in disadvantaged positions. A main difference with the judicial treatment of adult repeat offenders is the stronger emphasis on prevention and/or integration into society ((Ferwerda et al. 2003); see also chapter 8).

12.3 Responsibility and competences (Coordination)

An integrated (i.e. interdepartmental) approach being a main characteristic of Dutch substance policy, the competence to supervise and to impose penalties is accordingly subdivided. Since March 2005, the Food and Consumer Authority (VWA) is also qualified to impose an "administrative penalty" (bestuurlijke boete) for offences against the Licensing and Catering Act. The outline below provides an overview of the main regulations and the different authorities entrusted with the supervision of the compliance to major acts and regulations.

Act/Regulation	Authority
Licensing and Catering Act	Food and Consumer Product Safety Authority (VWA), Ministry of Health, Welfare and Sport
Tobacco Act (TW)	Food and Consumer Product Safety Authority (VWA), Ministry of Health, Welfare and Sport
Commodities Act (Voedsel- en Waren Wet)	Food and Consumer Product Safety Authority (VWA), Ministry of Health, Welfare and Sport
Medicines Act (WOG)	Dutch Health Care Inspectorate (IGZ), Ministry of Health, Welfare and Sport
Opium Act	Customs, Police and Public Prosecutor
Misuse of Chemicals Prevention Act (WVMC)	Fiscal Intelligence and Investigation Department (FIOD) / Economic Control Department (ECD)
Economic Offences Act (WED)	Fiscal Intelligence and Investigation Department (FIOD) / Economic Control Department (ECD)
Anti-Doping Convention	Dutch Centre Doping issues (NeCeDo) / Doping Control Netherlands
Dutch Safety System Food Supplements Top Sports (NZVT)	Dutch Centre Doping issues (NeCeDo) / Doping Control Netherlands
Betting and Gaming Act (WoK) Gambling Game Machine Decree January 2002 Betting and Gaming Tax Act (Wksb)	Police and Public Prosecutor/ Verispect B.V. (supervisor gambling game machine title)/ Fiscal Intelligence and Investigation Department (FIOD) / Economic Control Department (ECD)

With regard to the inspection of the consumption, quality, retailing and accessibility of risk substances, different authorities can be involved. To give a few examples:

- In 2002, GHB (Gamma-Hydroxy-Butyrate) was included in the Opium Act, while also being covered by the Medicines Act (WoG).
- Smart-shop holders retailing eco-drugs, smart products and smart drugs are supervised by five authorities. Apart from the Commodities Act, the Medicines Act (WoG) and the Opium Act, the Prevention Misuse Chemicals Act (WVMC) and Articles 174 and 175 of the Criminal Code can be enforced (Smits et al. 2003).

Addiction care and funding

The care and assistance to people with addiction problems to the use of risk substances, whether illicit or licit, is primarily facilitated on a local/regional level. Since 1994, the implementation of facilities for social relief and addiction care is a responsibility for municipalities. To this end, so-called “centre municipalities” (centrum gemeenten) were allocated, and funded by the national government. From 2001, all together 43 municipalities are responsible for social relief, women’s relief, and addiction care. In addition, clinical, inpatient addiction care institutions are financed on the basis of the Exceptional Medical Expenses Act (AWBZ) and come under the Ministry of Health, Welfare and Sport. Since 1-1-2005 methadone treatment is not longer the responsibility from the centre municipalities but is financed through the AWBZ.

In the past, addiction care was arranged according to type of care institution: ambulant, semi-mural and intramural. Due to merging, present-day institutions are able to offer all types of addiction care. In regard to the addiction to drugs, a distinction is made between treatment methods and medical addiction care. For that matter, the risk substances of methadone and heroin receive extensive policy attention in consideration of maintenance treatments (see chapter 5). A major development in the years 2000-2005 is the attempt to realize an integration between mental health care (GGZ) and addiction care in a number of regions. A main argument for further integration is the high co-morbidity between substance abuse and psychic problems, such as personality disturbances, anxiety disturbances and depression (cf. (Nolten 2003)).

13 Developments in drug use within recreational settings

Summary of the trends
Drug consumption is largely determined by the music style (Nabben et al. 2005). Alcohol is the major substance used in nightlife, although there has been a major change in sort of beverages consumed in the mid nineties, with a shift away from the traditional beer to innovative mixing drinks and energy drinks. Alcohol is very often combined with other drugs or consumed in large quantities (binge drinking). Cannabis is used in every place of entertainment. At dance events, stimulants are the main illegal drugs used. Ecstasy often dominates, but this largely depends on the type of setting. Today the use of cocaine is popular in the whole country and in virtually all settings (clubs, discotheques, lounges, cafes and at home), as is the combination of cocaine with alcohol (Nabben et al. 2005). In regular nightlife, amphetamine is the least popular stimulant; however in the 'alternative' surroundings relatively more speed is used. Anaesthetics (such as GHB and ketamine) are far less popular than stimulants, but there are indications from qualitative studies that they are on the rise. Currently the most often used anaesthetic drug in nightlife is GHB; ketamine is only marginally available in small networks. Hallucinogens are not regularly used in any scene. Heroin, methadone or are hardly used and/or not observed in recreational settings. Often, different kind of drugs are combined to enhance and/or prolong positive effects or dampen negative effects.

13.1 Research in recreational settings

In the Netherlands, the introduction of house music in the late eighties has had a major impact on the nightlife industry, which expanded tremendously. While in 1991 the number of partygoers was estimated at 40,000, over a million persons participate in this scene nowadays (Nabben et al. 2004;Nabben et al. 2005). Parallel to the rapid increase in and changes of this youth culture scene, the recreational use of (il)legal substances changed.

Data sources
Table 1 lists some studies aimed at monitoring substance use in nightlife scenes. The design and results of these studies have (also) been described in previous National Reports. In brief, the first three studies listed in table 1 use a "mix of methods", comprising a panel study (generating qualitative data) and quantitative sources (written questionnaires, pill testing services, telephone requests for help and advice, health incidents at large dance parties, internet searches, field work etcetera) (Nabben et al. 2005;Van Gelder et al. 2004) (Roomer et al. 2005). Members of the panel studies are typically part of a certain subculture in nightlife themselves, or are professionals in the field (youth workers, policemen). Each of them takes part in, or has contact with one or more networks. The last study listed in table 13.1, NL.Trendwatch, is a qualitative national monitor using a panel of experts at 'grass-root' level (health workers, policemen and partygoers) (Nabben et al. 2005). Because of the uniform data collection, data from Trendwatch can be used for a qualitative comparison in the country. However, the national panel study has a different set-up from the local studies described above. While in the cities there is an in depth focusing on a certain network specific for each member of the panel, the national study members of the panel are asked to provide an overview for their whole city or region. Quick scans are performed only once and

therefore do not generate longitudinal data. They also use a “mix of methods” (“Uit (je dak) in Delft, 2005” (Van Gelder 2005)).

Table 13.1: National, regional and local studies monitoring trends in drug use

Name of study	City / region	Sort data	Year of start
Antenne*	Amsterdam	Quantitative and qualitative	1994
Uit (je dak) in Den Haag**	The Hague	Quantitative and qualitative	2002
Tendens***	Province of Gelderland	Quantitative and qualitative	2003
NL.Trendwatch*	The Netherlands	Qualitative	2003

* (Nabben et al. 2005) ** (Van Gelder et al. 2004) *** (Roomer et al. 2005)

Another source of quantitative data, DIMS, is generating market information based on analyses of drug samples obtained from consumers (Pijlman et al. 2003). See also §10.3. DIMS works in cooperation with Educare, in exchanging information on drug related health incidents (see &14.2). Educare is one of the biggest suppliers of medical services at large dance events in the Netherlands and may reach over 50% of the visitors of large dance parties (Pijlman et al. 2003). Educare systematically registers all its medical actions since 1996 (from 1996 up to 2003: n=16,000). Compared with other quantitative sources, the number of clients reporting drug use at the first aid service is rather low, probably due to the medical setting, and underreporting is likely to influence the absolute numbers. Nevertheless, the data reported by Educare can be used to compare trends over time and between settings within this group of first aid users.

Types of recreational settings

It is widely accepted that recognising the cultural context of youth, music and dance lifestyles is crucial for understanding the differentiated substance use in nightlife (Nabben et al. 2005;Ter Bogt et al. 2005b). Since the range of nightlife settings is almost inexhaustible, we focus upon the two major scenes, the clubs and the party-scene. First, we describe the characteristics of these settings, and second, we discuss the drug use within these contexts.

Types of settings
For this report, the *club-scene* comprises clubs, discotheques, lounges, dance-bars and nightlife areas. In the Netherlands, small or local clubs may host 500 visitors, while large clubs, often reaching nationwide, have a capacity up to 4,000 visitors. Dance events originated in the urban Western part of the country, but soon spread throughout the country and nowadays numerous clubs, discotheques and dance cafés are present in more rural areas. Mainstream clubs have visitors with ages ranging from 20 to 30 years. However, in disco’s at rural areas the age is generally around or below 20. Some locations are associated with certain movements in music, like hard house, punk, electro or garage, and people here are predominantly between 16 and 25 years of age. Some clubs and lounges attract a specific public, e.g., gays. Fetish and kinky parties are increasingly trendy as well; and some erotically tinted parties have a national reputation. Here, the average age is usually above 30 years. Lounging (luxurious chilling: culinary enjoyment and comfort) is popular in many larger cities (Nabben et al. 2004).

The *party-scene* includes large and small scaled parties, including illegal parties. Parties are not geographically localised, but may be organised each time in a different accommodation

(sheds, sports halls, film studios). While club-visitors usually stay in the region, party-goers travel through the whole country and large-scale mega-parties attract a national and even international public. The sense of belonging to a group is important, and visitors usually go with a couple of friends, rather than with a partner, as is usual for club-visitors.

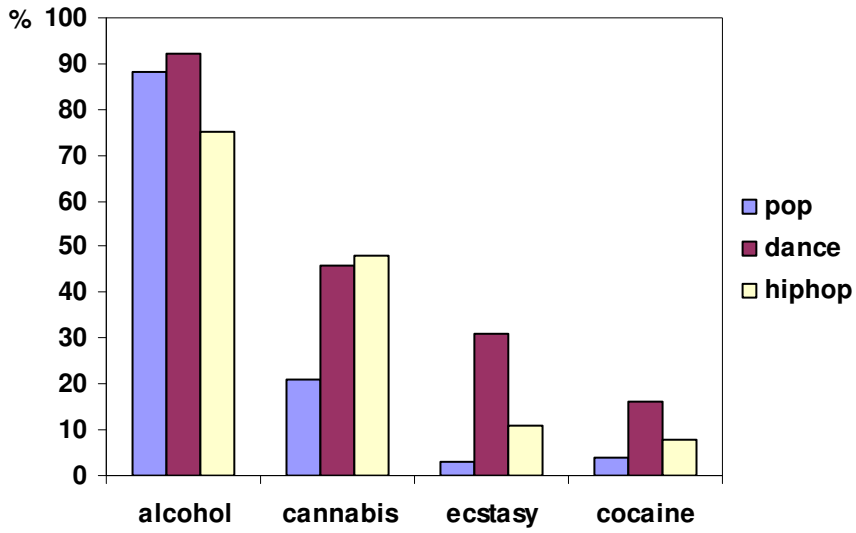
With regard to music, the nightlife scene is very differentiated, but also strictly segmented. To categorise the multitude of music genres, several structures have been proposed. In 1998 Reynolds classified three main types: the sophisticated 'club' (among which were sorted mellow, club, deep house, garage); raucous and energetic dance music styles placed under the heading 'hardcore' (hardcore, hardhouse, techno) and 'ambient', tranquil and atmospheric music without the firm beat (Reynolds 1998). 'Trance', the fourth category, a melodic dance music with pop appeal that is neither club nor hardcore, was added later (Ter Bogt et al. 2002). Other classifications are in use as well, e.g., combinations of dance / house / techno, pop / rock, and hiphop / rap / R&B (Van Gelder et al. 2003). Type of music, gender distribution and ethnicity are highly interrelated. As a "rule", the faster the (electronic) music, the younger, whiter and lower educated the visitors. The differences in age, gender and ethnicity of visitors in the different settings have to be kept in mind while reading the next paragraphs.

Settings and drug use

Music style is highly linked to drug use. The music at mega-parties requires super-fast dancing, and stimulants are used to support this energy outburst. Observational data from a national panel study showed that ecstasy use is mainly seen at dance-parties or in clubs, rather than in cafes (Nabben et al. 2004). Cocaine is more like a club drug than a party drug (visitors of parties are on average younger and have less money to spend). Speed is not very popular; it is related to hardhouse, metal and tekno scenes. GHB is mainly associated with dance, but not very popular; it is more common in trendsetting networks of clubs (gay clubs, partner clubs). Mushrooms, LSD, Viagra, poppers and heroin are not popular among the mainstream public in nightlife scenes (Nabben et al. 2004).

With regard to the *party-scene*, data on the association of drug use and music style are available from a survey in The Hague, which was held among fans of different types of music (Van Gelder et al. 2004). Figure 13.1 lists the differences in last month use of alcohol, cannabis, ecstasy and cocaine by music category. In summary, dance-fans had the highest percentage of alcohol use last month (92%), and hiphop-fans the lowest (75%). Last month use of cannabis was highest among hiphop-fans (48%), and lowest among pop-fans (21%). Ecstasy and cocaine use was most prevalent among dance fans (31% and 16% respectively) and rare among pop-fans (3% and 4%).

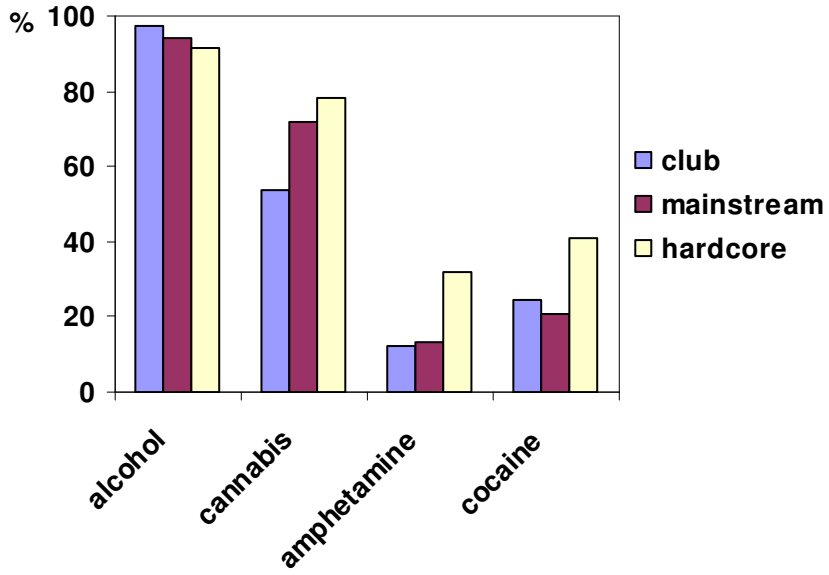
Figure 13.1: Differences in last month alcohol, cannabis, ecstasy and cocaine use among fans of three music categories in The Hague, 2003



Source: (Van Gelder et al. 2004).

Also in the party-scene, polydrug use is found to be related to music style, as illustrated by a study among 490 visitors of different type of rave parties in the Netherlands in 2001 and 2002. Over two third of visitors of house or rave parties indicated the use of MDMA (Ter Bogt et al. 2005b). As illustrated in figure 13.2, visitors of hardcore parties who used MDMA had more often recent experience with other substances as well, compared with visitors of rave parties with club or mainstream music.

Figure 13.2: Last month prevalence (%) of substance use among MDMA using visitors of different parties



Source: (Ter Bogt et al. 2005b).

With regard to the *club-scene*, data collected in 2004 by a panel study in Amsterdam show that cannabis use is decreasing (Nabben et al. 2005). However, in clubs with reggae, hiphop, funk and slower music styles cannabis use is still dominating. The increase in urban music in clubs and rise in migrant visitors, is also leading to a decrease in ecstasy use. The use of GHB in clubs is decreasing, and its use is mainly observed in private settings. The data from Amsterdam also show that the popularity of cocaine is increasing and its use has normalised. Also party-goers earlier get in contact with the drug, since it has become more easily available. Amphetamine is usually considered as a party- and after-drug, more than a drug for use in clubs (Nabben et al. 2005).

13.3 Changes and developments in drug use

In general, drug use in recreational settings in the Netherlands showed an increase until the end of the twentieth century. There are some indications for a general moderation and more sensible use of drugs in the past years, but we lack nationally representative quantitative data on this topic.

For the *club scene*, quantitative data are only available from the Amsterdam Antenna Study, which conducted a survey among club visitors in 1995, 1998 and 2003 (Korf et al. 2004a). Here, the data of 1998 (n=456) and 2003 (n=404) will be compared (tables 13.2a and b).

Table 13.2a Alcohol, cannabis and ecstasy use in Amsterdam in 1998 and 2003

Substance	Year	LYP (%)	LMP (%)	Average amount per occasion in last month
Alcohol	1998	96.4	95.2	5.3 (3.7) glasses
	2003	97.3	95.5	5.1 (3.0) glasses
Cannabis	1998	66.7	52.2	2.1 (2.2) joints
	2003	56.8	39.2	1.5 (1.2) joints
Ecstasy	1998	54.6	41.3	2.4 (3.8) pills
	2003	35.9	19.4	1.9 (1.3) pills

LYP=last year prevalence. LMP=last month prevalence. Source: (Korf et al. 2004a)

Table 13.2b Cocaine and amphetamine use in Amsterdam in 1998 and 2003

Substance	Year	LYP (%)	LMP (%)	<¼-gram (%)	¼-½ gram (%)	½-¾ gram (%)	¾-1 gram (%)	>1 gram (%)
Cocaine	1998	37.3	23.5	51.1	21.3	12.8	4.3	10.6
	2003	25.2	13.7	25.0	41.7	8.3	8.3	16.7
Amphetamine	1998	25.6	13.3	57.1	21.4	17.9	3.6	0
	2003	14.4	6.7	66.7	11.1	5.6	5.6	11.1

LYP=last year prevalence. LMP=last month prevalence. Amounts consumed refer to the average amount per occasion in the last month. Source: (Korf et al. 2004a).

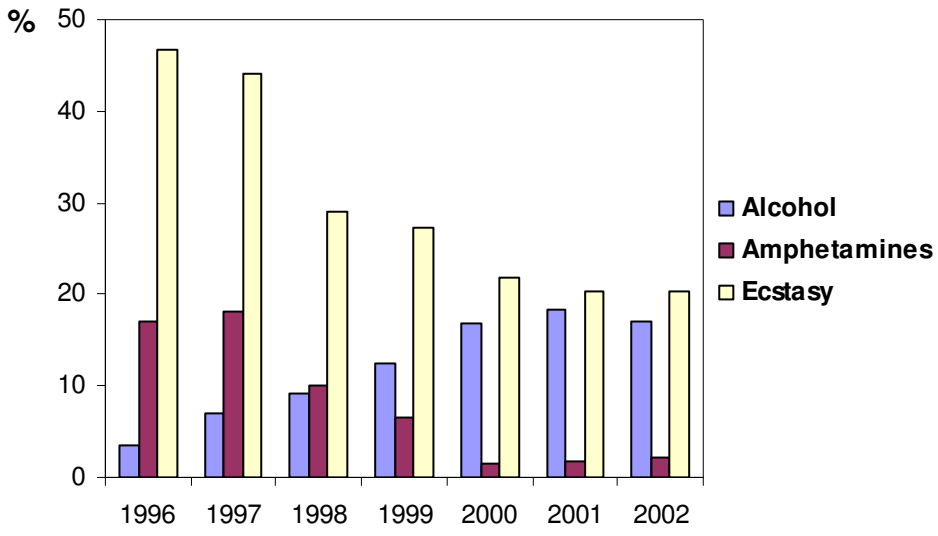
Not only did the percentage of club visitors with last month or last year use of cannabis, ecstasy, and amphetamine reduce, the average amount consumed also tended to diminish between 1998 and 2003.

- Several explanations for the reduction in ecstasy use were put forward, among others the change in music styles played (less dance and more urban music) and the consciousness with regard to potential health hazards of ecstasy use (Nabben et al. 2005). Also the way of administration of ecstasy was found subject to change, since in trendy circles in several cities MDMA powders and crystals have come into use.
- In club visitors in Amsterdam the last month and last year use of cocaine also shrank between 1998 and 2003, but the average amount used increased (table 13.2b). On the other hand, in the nationwide study (Nabben et al. 2005) it was noted that the re-appraisal of cocaine in Amsterdam at the end of the nineties had expanded to the whole country and to all settings (clubs, discotheques, lounges, cafes and the home situation) and currently cocaine was found to be the most fashionable illegal drug (Nabben et al., 2005). According to the national panel, the use of cocaine has become “normal”, and especially the combination of alcohol and cocaine is trendy.
- In the Antenna Monitor, no quantitative comparative data for GHB are available, although in the Amsterdam panel study it was observed that the increasing lifetime use of GHB between 1998 and 2003 had stabilised (Korf et al. 2004a). In 2003, 10% of clubgoers in Amsterdam reported last year GHB use, and 4% last month GHB use. The Amsterdam panel study one year later noted that GHB had further withdrawn from the club scene and into the home setting ((Nabben et al. 2005). The latest nationwide panel study noted that, currently, the popularity of GHB remains in kinky- and gayclubs (Nabben et al. 2005).
- The use of hallucinogens, Viagra, poppers and tranquilisers in clubs is marginal.

Health incidents at parties

Data from Educare showed a reduction in drug-related health incidents on mega parties. Almost 60% of first aid visitors reported drug use in 1996, which dropped to less than 40% in 2002 (Pijlman 2003). Figure 13.5 shows the changes in types of substances used as reported by the visitors at large scale parties with acute health problems. Only alcohol related incidents increased, while amphetamine and ecstasy use was reported less.

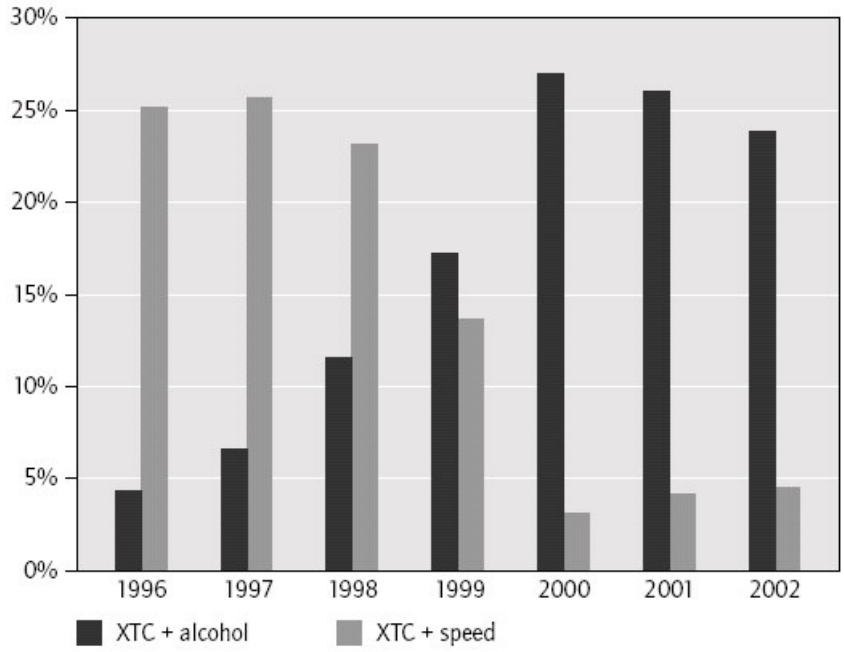
Figure 13.5: Percentage of first aid visitors with health problems related to the use of substances at large-scale parties



Source: (Pijlman et al. 2003).

Major changes have also been observed in preferred combinations of substances used at large dance parties. While in the nineties the combination of ecstasy and amphetamine was most prevalent among first aid visitors, at the turn of the millennium the combination of alcohol and ecstasy had become 5 times as popular as ecstasy and speed (figure 13.6).

Figure 13.6: Changes in combined use of ecstasy (XTC) and alcohol or speed among first aid visitors at large dance parties



Source: (Pijlman et al. 2003).

13.4 Geographical areas

Recent studies point to geographical differences in substance use. It should be mentioned, however, that the Netherlands is a relatively small country and geographical distances do not hamper people to visit a club or a (mega)party. The “Randstad” (urban western part of the Netherlands) is clearly trend-setter in nightlife, and offers a wide selection of innovative clubs, parties, music and drugs. Amsterdam is a very popular city and attracts partygoers from long distances; also clubs in Rotterdam have a nation-wide fame for their trendsetting club-nights. The largest club in the Netherlands is located in de Zaanstreek and is visited by many people from other provinces. Also most mega parties are organised in the surroundings of Amsterdam and Utrecht, South-Holland and Brabant. In the rest of the country, mega parties are rare, but due to the enormous success of mega parties a high mobility has evolved (Nabben et al. 2004;Nabben et al. 2005). As a result, data presented for a certain area do not necessarily represent the situation of local inhabitants.

Table 13.3 list the trends in nightlife drug use in 2004 as observed by the national panel of Trendwatch, in four regions of the Netherlands (Nabben et al. 2005). *Note, however, that no quantitative data are available to endorse these observations.* Region West is composed of

the large cities in the Randstad (Rotterdam, The Hague, Amsterdam, Zaandam and Haarlem). These cities are characterised by ethnic mixing and cultural heterogeneity. Region East contains the province of Gelderland and the cities Enschede, Nijmegen and Arnhem, which are considered trend-following cities. A considerable part of the province of Gelderland is countryside. Region North encompasses the city Groningen, and the atmosphere is determined by students. Region South includes some smaller cities, like Eindhoven (popular in the party-scene) and Venlo.

Table 13.3: Observed trends in drug use in four regions of Dutch nightlife, in 2004

		West	East	North	South
Ecstasy	Clubs*	= (–)	=	=	= (–)
	Parties**	= (–)	= (–)	+	= (+)
Cocaine	Clubs	+ (–)	+	+	+
	Parties	=	=	+	+ (=)
Amphetamine	Clubs	0 (=)	=	0	0
	Parties	= (+)	= (+)	0 (=)	= (+)
GHB	Clubs	–	+	+	=
	Parties	=	0	0 (+)	= (–)

* Clubs, including discotheques and lounges. ** Restricted to local parties. 0 No use; = Stable use; – Decrease; + Increase. Source: (Nabben et al. 2005).

As can be appreciated from table 13.3, ecstasy use is stable or slightly decreasing in most settings, except for the party scene in the student city of Groningen. Cocaine was found on the rise nationwide; but seems to stabilise in the party scene of the large trendsetting cities. Use of amphetamine was not frequently observed, except for the region East, and was associated with young people, poorly educated, and of white ethnicity from the countryside, favouring the “harder” music styles. The popularity of GHB has halted and was clearly declining in the western part of the country, contrasting with a still increasing use at clubs in East and North. It is noteworthy that use and spread of GHB started and have been strongest in smaller closed networks in metropolitan areas like Zaandam and Amsterdam, before it became available in all networks and in the whole country. Most likely the negative side-effects of the drug resulted in a negative image that diminishes its popularity in those parts of the country where they have been observed most.

13.5 Concern

Concern with regard to current trends in recreational drug use is related to the chemical composition of substances used, the setting of use and combined substance use etc.

- Alarming are new ingredients and higher dosages in substances used. In 2004, atropine was found in several samples of cocaine, leading to a large-scale warning campaign (Van Dijk et al. 2005) (see also chapter 10.3). Over a dozen individuals were treated in hospital for this pollution. (it must be noted that these cases concerned both cocaine hydrochloride and crack, probably relating to different scenes). In addition, phenacetin is more often found in cocaine samples, and m-chlorophenylpiperazine (mCPP) has been detected lately in ecstasy tablets. So far no (acute) health emergencies related to these substances among drug users have been recorded recently, but some caution is warranted. Apart from the introduction of new ingredients, also the increasing dosages of MDMA in ecstasy pills should be monitored carefully (see chapter 10.3).

- Another observation pertains the use of stimulants, which has been extended and transferred to settings outside nightlife scene locations (at home, somewhere outside). Moreover, the use of alcohol before ('drinking in') and after going out has gained interest, probably due to the higher prices in the catering industry and the sometimes strict control on possession of drugs (Van Gelder et al. 2004). The phenomenon of binge drinking is also of concern, especially among youngsters.
- The frequent use of cocaine has been recognised to elicit psychological health problems. Panel members in The Hague observed depression, addiction, relational problems, and disturbances of daily working live or study (Van Gelder et al. 2004).
- Another point of concern with regard to practice of drug using is the number of drug-related problems that is caused by the combined use of substances. Combining substances not only changes the individual effects, but may also alter the risks involved. In a Dutch review, co-use of alcohol and cocaine was earlier reported to lead to the formation of cocaethylene, which may potentiate the cardiotoxic effect of cocaine and alcohol alone (Pennings et al. 2004). Dosing properly is difficult and depends on the individual using it and the simultaneous use of other drugs. The latest data of the national panel study report that the problems associated with the combination of alcohol with stimulants seem to be increasing (Nabben et al. 2005). This combination, and especially with cocaine, may elicit aggression, e.g., among soccer fans. Also, the combined use of drugs and combined drug/alcohol use increases accident risk in traffic (see §6.4).

13.2 An overview of developments in responses, national policies and legal aspects

No major new developments are to be mentioned in preventive activities in recreational settings, nor in legal arrangements concerning recreational drug use. All former or existent activities already have been mentioned in our national reports. Hereafter we refer to the relevant text parts in these reports.

- Both *Educare* and *the Drugs Information and Monitoring System (DIMS)* exist for more than ten years and published a book on mayor developments in drug use and safety in recreational settings (National Report 2004, 3.2; 2003, 9.4). Pill testing professionals are trained in techniques of chromatography, spectrometry, and paramedical. Trend watchers are trained in techniques of unobtrusive observation of drug habits (National Report 2004, 7).
- A third programme also exists some ten years now. The manual *City Hall and House,* published by the Ministry of Health, Welfare and Sports in the Spring of 1995,gives advise to municipal authorities on measures to be taken for large-scale recreational events. Examples are providing free drinking water, adequate ventilation, and cooling-off rooms; assuring the presence of first aid staff; entrance checks for drug possession; emergency access for police, fire brigade and ambulance services. An evaluation of this manual shows that this manual contains useful information for local policy-makers. It could be improved by making it also applicable to large parties in general and not just to 'house'-parties.
- The project "Outsider and confederate" (*Buitenstaander en Bondgenoot*), targeting networking (i.e. with owners, barkeepers, doorkeepers, etc.) as a necessary condition for drug prevention in recreational settings.

- Courses for trainers (train the trainers) in First Aid activities in case of drug accidents in recreational settings (*Eerste Hulp Bij Drugsincidenten*). Professionals in organisations of addiction care and Municipal Health Services are trained as a education course leader. Completers are able to train other professionals in recreational settings e.g. owners of and personnel working in these settings, in security agencies and in the police force (National Report 2004, 3.2).
- Prevention in coffee shops was developed, implemented, evaluated and improved in two cities, resulting in a handbook for coffee shop owners. In these regions, the courses are mandatory and will be repeated annually. Invitation of guest speakers improved the motivation of the participants (National Report 2003, 9.4).
- In Amsterdam, Jellinek Prevention supports Unity (www.unitydrugs.nl). About forty, mainly Dutch male and female volunteers in the age of 22 to 33 years give peer education at large-scale dance events. The volunteers are fond of Dance music themselves and a large part uses or used party drugs. The prevention target is not to reduce the drug use but to answer questions of other youngsters about safe use, harm reduction, preparation and repair. The peer-group is guided by a peer coach who is assisted by four peer educators; at least one of them is present at a dance event to coordinate the peer education by the volunteers.
- Regional and local legal strategies were described in the chapter 9.4 of the National report 2003 and outreach work in recreational settings in chapter 10.1 (and in National Report 2002, 10.1.1).

Part C: Bibliography, Annexes

14 Bibliography

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T.K.23760/14: Tweede Kamer der Staten-Generaal vergaderjaar 2000-2001 publicatienummer 23760 nr.14 (2001). Beleid inzake XTC: brief minister bij de nota 'Samenspannen tegen XTC'. Den Haag: Sdu Uitgevers

T.K.23760/19:Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 23760 nr.19 (2005). Beleid inzake XTC; Brief minister ter aanbieding van het tussentijdse evaluatierapport over de uitvoering van de XTC-nota 'Samenspannen tegen XTC'. Den Haag: Sdu Uitgevers

T.K.24077/112:Tweede Kamer der Staten-Generaal vergaderjaar 2002-2003 publicatienummer 24077 nr.112 (2002). Drugbeleid; Brief minister en staatssecretaris over hun standpunt op het advies van de Gezondheidsraad over 'Behandeling drugsverslaafde gedetineerden'. Den Haag: Sdu Uitgevers

T.K.24077/125:Tweede Kamer der Staten-Generaal vergaderjaar 2003-2004 publicatienummer 24077 nr.125 (2004). Drugbeleid: Brief ministers over het cannabisbeleid. Den Haag: Sdu Uitgevers

T.K.24077/137:Tweede Kamer der Staten-Generaal vergaderjaar 2003-2004 publicatienummer 24077 nr.137 (2004). Drugbeleid; Verslag algemeen overleg van 30 juni 2004 over o.a. medicinale cannabis, aanvullende evaluatie CCBH behandeling met heroïne, en rapport 'Sterke wiet'. Den Haag: Sdu Uitgevers

T.K.24077/140:Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 24077 nr.140 (2005). Drugbeleid: brief van minister van VWS over medicinale cannabis. Den Haag: Sdu Uitgevers

T.K.24077/163:Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 24077 nr.163 (2005). Drugbeleid: brief van de minister van Jusitite bij aanbeiding van rapporten "Preventieve doorlichting Cannabissector" en "Zicht op de Cannabissector". Den Haag: Sdu Uitgevers

T.K.24077/165:Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 24077 nr.165 (2005). Drugbeleid: brief minister van Jusititie over twee onderzoeksrapporten over cannabis. Den Haag: Sdu Uitgevers

T.K.24077/167:Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 24077 nr.167 (2005). Drugbeleid: brief minister van Jusititie buij aanbieding Eindevaluatie HEKTOR. Den Haag: Sdu Uitgevers

T.K.24077/168:Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 24077 nr.168 (2005). Drugbeleid: brief minister van Jusititie over EU-sympathie Nederlands drugsbeleid. Den Haag: Sdu Uitgevers

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T.K.28192/23: Tweede Kamer der Staten-Generaal vergaderjaar 2003-2004 publicatienummer 28192 nr.23 (2003). Drugssmokkel Schiphol: brief minister met de vijfde voortgangsrapportage drugssmokkel Schiphol. Den Haag: Sdu Uitgevers

T.K.28192/29:Tweede Kamer der Staten-Generaal vergaderjaar 2003-2004 publicatienummer 28192 nr.30 (2004). Drugssmokkel Schiphol; Verslag van een schriftelijk overleg. Den Haag: Sdu Uitgevers

T.K.28192/34: Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 28192 nr.34 (2004). Drugssmokkel Schiphol: aanbiedingsbrief rapport De Nederlandse Drugsmarkt. Den Haag: Sdu Uitgevers

T.K.28192/36: Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 28192 nr.36 (2004). Drugssmokkel Schiphol: brief minister met de zesde voortgangsrapportage drugssmokkel Schiphol. Den Haag: Sdu Uitgevers

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T.K.28684/10: Tweede Kamer der Staten-Generaal vergaderjaar 2002-2003 publicatienummer 28684 nr.10 (2003). Naar een veiliger samenleving: brief minister over de intensieve aanpak van veelplegers [Towards a safer society: white paper of the Minister on the intensive approach of repeat offenders]. Den Haag: Sdu Uitgevers

T.K.28684/29:Tweede Kamer der Staten-Generaal vergaderjaar 2003-2004 publicatienummer 28684 nr.29 (2004). Naar een veiliger samenleving; Brief ministers met de Derde voortgangsrapportage over de uitvoering van het Veiligheidsprogramma. Den Haag: Sdu Uitgevers

T.K.28684/44: Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 28684 nr.44 (2004). Naar een veiliger samenleving; Brief ministers met de Midterm Review Veiligheidsprogramma. Den Haag: Sdu Uitgevers

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T.K.29200/167: Tweede Kamer der Staten-Generaal vergaderjaar 2002-2003 publicatienummer 29200 VI nr.167 (2004). Vaststelling van de begrotingsstaat van het Ministerie van Justitie (VI) voor het jaar 2004; Brief minister over sanctiecapaciteit. Den Haag: Sdu Uitgevers

T.K.29270/1:Tweede Kamer der Staten-Generaal vergaderjaar 2003 -2004 publicatienummer 29270 nr.1 (2003). Reclasseringsbeleid; Brief minister. Den Haag: Sdu Uitgevers

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T.K.30100/6: Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer 30100 VI nr.6 (2005). Jaarverslag en slotwet van ministerie van Justitie 2004; Lijst van vragen en antwoorden

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14.2 Alphabetic overview of relevant data bases

(Source: Cruts et al. 2004)

Amsterdamse cohortstudie, Amsterdam Cohort Study

- Local cohort study on mortality among methadone clients registered at the CMR (see below), conducted by the Municipal Health Service Amsterdam. Homepage: www.gggd.amsterdam.nl

Antenne

- Local monitor of the use of alcohol, tobacco, and drugs by pupils and outgoing young persons in Amsterdam, conducted by the Bonger Institute of the University of Amsterdam (UvA). Homepages: www.jur.uva.nl & www.jellinek.nl/

Causes of death statistics

- National registration of causes of death, that is the Dutch General Mortality Register (GMR), including deaths due to drugs, conducted by Statistics Netherlands (CBS). Homepage: www.cbs.nl

CBS Politiestatistiek, Statistics Netherlands (CBS) Police Statistics

- National registration of the number of police reports on offences against the Opium Act, conducted by Statistics Netherlands (CBS). Homepage: www.cbs.nl

Cliënt Volg Systeem Amsterdam, Client Monitoring System Amsterdam

- Local registration system of treatment given by the Municipal Health Service, Addiction Care, and Public Mental Health Care, including treatment for drug users. Homepage: www.gggd.amsterdam.nl

Cliënt Volg Systeem van Stichting Verslavingsreclassering Nederland, Client Monitoring System Foundation of Addiction Probation Services

- National registration of probation services offered to drug using offenders, conducted by the Foundation of Addiction Probation Services. Homepage: www.ggznederland.nl

CMR, Centrale Methadon Registratie, Central Methadone Register (CMR)

- Local registration of methadone substitution treatment, conducted by the Municipal Health Service Amsterdam. Homepage: www.gggd.amsterdam.nl

CPA, Centrale Post Ambulancevervoer, Central Post Ambulance Transport (CPA)

- Local registration of ambulance transport, including transport due to problem use of alcohol and drugs, conducted by the Municipal Health Service Amsterdam. Homepage: www.gggd.amsterdam.nl

DIMS, Bureau Drugs Informatie en Monitoring Systeem, Drugs Information and Monitoring System (DIMS)

- National survey on the contents of synthetic drugs, conducted by the Bureau of the Drugs Information and Monitoring System (DIMS) at the Trimbos Institute. Homepage: www.trimbos.nl

DMS, Drug Monitoring Systeem, Drug Monitoring System (DMS)

- Local monitor on problem drug use and living conditions of marginalised hard drug users in the cities of Rotterdam and Utrecht, and the region of Parkstad Limburg, conducted by the Addiction Research Institute Rotterdam (IVO). Homepage: www.ivo.nl

Educare monitor

- National monitor on first aid given at house parties, including first aid for problem alcohol and drug use, conducted by Educare Ambulant, Foundation Nursing & Education Consultancy. Homepage: www.educaregroningen.nl

Haags Uitgaansonderzoek

- Local monitor on the use of alcohol and drugs by outgoing young persons (16-35 years) in The Hague, conducted by the Research Committee Monitoring & Registration (MORE). Homepage: www.denhaag.nl/

HBSC, Health Behaviour in School-Aged Children

- National monitor on physical and mental health and well-being of school-aged children, including the risky use of cannabis, conducted by the Trimbos Institute, Radboud University Nijmegen, and Utrecht University. Homepages: www.trimbos.nl & www.hbsc.org

HIV/aids-registratie, HIV/aids Registration

- National reporting system for diagnoses of HIV and aids assessed by doctors, including HIV and aids due to injecting drug use, conducted by the HIV Monitoring Foundation (SHM). Homepage: www.hiv-monitoring.nl

HIV-surveillance among drug users

- Local surveys in different cities of HIV-infection among injecting drug users, conducted by the National Institute of Public Health and the Environment (RIVM) and the municipal health services. Homepage: www.rivm.nl

Inbeslagnames drugs, Seizures drugs

- National registration of drug seizures, conducted by the Research and Analysis Group of the National Criminal Intelligence Service of the National Police Agency (O&A/dNRI/KLPD). Homepage: www.politie.nl/KLPD/

LADIS, Landelijk Alcohol en Drugs Informatie Systeem, National Alcohol and Drugs Information System (LADIS)

- National registration system of outpatient addiction care and treatment, conducted by the Organization Care Information Systems (IVZ). Homepage: www.sivz.nl

Landelijke Jeugdmonitor CBS-SCP (POLS), National Youth Monitor CBS-SCP (POLS)

- National monitor on the living conditions of young persons (12-29 years), including drug use, conducted by Statistics Netherlands (CBS) and the Social and Cultural Planning Office of the Netherlands (SCP). Homepage: www.cbs.nl

LIS, Letsel Informatie Systeem, Injury Information System (LIS)

- National survey on injuries treated at emergency departments of hospitals, including injuries due to alcohol and drugs, conducted by the Consumer Safety Institute. Homepage: www.veiligheid.nl

LMR, Landelijke Medische Registratie, Dutch Hospital Registration (LMR)

- National registration of admissions to hospitals, including admissions due to problem alcohol and drug use, conducted by Prismant. Homepage: www.prismant.nl

Monitor gedoogde coffeeshops, monitor tolerated coffeeshops

- National monitor of the number of coffeeshops that are officially tolerated by the local municipal policy, conducted by Bureau Intraval. Homepage: www.intraval.nl/

National Investigation Information Services (Opsporingsonderzoeken Georganiseerde Criminaliteit)

- National survey on organised crime, including offences against the Opium Act, conducted by the Research and Analysis Group of the National Criminal Intelligence Service of the National Police Agency (O&A/dNRI/KLPD). Homepage: www.politie.nl/KLPD/

NEMESIS, Netherlands Mental Health Survey and Incidence Study

- National cohort study on the general population (16-64 years) focussing on mental disorders including the abuse of and the dependence on alcohol and drugs, conducted by the Trimbos Institute. Homepage: www.trimbos.nl

NPO, Nationaal Prevalentie Onderzoek, National Prevalence Survey (NPO)

- National survey on the use of alcohol and drugs in the general population aged 12 years and older, conducted by the Centre for Drug Research (CEDRO) of the University of Amsterdam (UvA). Homepage: www.cedro-uva.org

NSO, Nationale Scholierenonderzoek, National School Survey (NSO)

- National survey on alcohol and drug use among pupils in relation to their physical and mental health, conducted by the National Institute for Family Finance Information (NIBUD). Homepage: www.scp.nl

NVIC Monitor, Nationaal Vergiftigingen Informatie Centrum, National Poison Information Centre (NVIC)

- National registration of information requests for poisonings, conducted by the National Institute of Public Health and the Environment (RIVM). Homepage: www.rivm.nl

OBJD, Onderzoeks- en Beleidsdatabase Justitiële Documentatie, Research and Policy Database Judicial Documentation (OBJD)

- National registration of criminal cases registered at the Public Prosecutions Department (OM), including offences against the Opium Act, conducted by the Research and Documentation Centre (WODC) of the Ministry of Justice. Homepage: www.wodc.nl/

OGGZ Monitor Amsterdam, Public Mental Health Care Monitor Amsterdam

- Local monitor on marginalized inhabitants of Amsterdam including problem drug users, conducted by the Municipal Health Service Amsterdam (GG&GD Amsterdam). Homepage: www.gggd.amsterdam.nl

OMDATA, Openbaar Ministerie Data, Public Prosecutions Department Data (OMDATA)

- National registration of criminal cases registered at the county court districts, including offences against the Opium Act, conducted by the Office of the Public Prosecutions Department. Homepage: www.wodc.nl/

Peilstationsonderzoek scholieren, Dutch National School Survey

- National survey on alcohol and drug use among pupils (10-18 years), conducted by the Trimbos Institute and the Municipal Health Services. Homepage: www.trimbos.nl

Police Records System (HKS)

- National identification system for the police, including drug use of suspects, conducted by the Research and Analysis Group of the National Criminal Intelligence Service of the National Police Agency (O&A/dNRI/KLPD). Homepage: www.wodc.nl/

Politiemonitor Bevolking, Police Monitor Dutch Population

- National survey on safety and public nuisance due to alcohol, drugs and other sources, conducted by a consortium of the B&A Groep Beleidsonderzoek & -Advies B.V. and Intomart GfK B.V. Homepage: www.politie.nl/Overige/Documentatie/politiemonitor_bevolking.asp

SOV-onderzoek, Strafrechtelijke Opvang Verslaafden, Judicial Treatment of Addicts (SOV) Survey

- National registration of addicts receiving Judicial Treatment of Addicts (SOV), conducted by the Amsterdam Institute for Addiction Research (AIAR). Homepage: www.aiar.nl

SRM, Strafrechtmonitor, Criminal Law Monitor (SRM)

- National in-depth survey on a sample of criminal cases, including offences against the Opium Act, conducted by the Research and Documentation Centre (WODC) of the Ministry of Justice. Homepage: www.wodc.nl/

THC-monitor

- National monitor on the concentration of THC in cannabis products sold in coffeeshops, conducted by the Bureau of the Drugs Information and Monitoring System (DIMS) at the Trimbos Institute. Homepage: www.trimbos.nl

Trendwatch

- National qualitative panelmonitor on the use of alcohol and drugs by outgoing young persons, conducted by the Bonger Institute of the University of Amsterdam (UvA). Homepage: www.jur.uva.nl/criminologie

TULP/GW, Ten UitvoerLegging van vrijheidsbenemende straffen en maatregelen in Penitentiaire inrichtingen, Execution of detentions in penitentiaries (TULP/GW)

- National registration of detentions, including detentions for offences against the Opium Act, conducted by the Judicial Detention Service (DJI). Homepage: www.dji.nl/

USD monitor, Synthetic Drugs Unit (USD) Monitor

- National registration of seizures of synthetic drugs, precursors and production locations, conducted by the Kernteam Zuid-Nederland/Synthetic Drugs Unit. Homepage: www.politie.nl/Overige/Overigepolitieorganisaties/

WODC-Recidivemonitor, WODC Monitor on Recidivism

- National registration of suspects and convicts that repeat the offence, including offences against the Opium Act, conducted by the Research and Documentation Centre (WODC) of the Ministry of Justice. Homepage: www.wodc.nl/

14.3 List of relevant internet addresses

This list contains only a selection of websites in the Netherlands on the subject of substance use.

Website	Contents
http://www.trimbos.nl/	Netherlands Institute of Mental Health and Addiction
http://www.minvws.nl/	Ministry of Health, Welfare and Sports
http://www.justitie.nl	Ministry of Justice
http://www.wodc.nl	Research and Documentation Centre of the Ministry of Justice
http://www.drugsinfoteam.nl/	Drugs and Alcohol Info Team of Brijder Addiction Care
http://www.unitydrugs.nl	Unity: educational peer project in Amsterdam
http://www.jellinek.nl	Jellinek Addiction Care Amsterdam
http://www.cedro-uva.org	Centre for Drug Research, University of Amsterdam
http://www.intraval.nl	Intraval. Bureau for Research and Consultancy
http://www.aiar.nl/	Amsterdam Institute for Addiction Research
http://www.drugsinfo.nl/	Objective information on drugs for general public
http://www.sidv.nl/	Information Point Drugs and Safety for local authorities
http://www.ivo.nl/	Addiction Research Institute Foundation, Rotterdam
http://www.gggd.amsterdam.nl/	Municipal Health Service of Amsterdam
http://www.cbs.nl/	Statistics Netherlands
http://www.ggznederland.nl/	Netherlands Association for Mental Health Care
http://www.rivm.nl/	National Institute for Public Health and the Environment
http://www.sivz.nl/	Care Information Systems Foundation
http://www.hiv-monitoring.nl/	HIV Monitoring Foundation (HMF)
http://www.politie.nl/KLPD/	National Police Agency
http://www.prismant.nl/	Prismant: Consultancy agency for the Social Care Sector
http://www.scp.nl/	Social and Cultural Planning Office of the Netherlands

15 Annexes

15.1 List of Tables used in the text

15.2 List of Graphs used in the text

15.3 List of Abbreviations used in the text

2C-B	4-bromo-2,5-dimethoxyphenethylamine
4-MTA	4-methylthioamphetamine
ADHD	Attention-Deficit/Hyperactivity Disorder
AIAR	Amsterdam Institute for Addiction Research
AIDS	Acquired Immune Deficiency Syndrome
BZK	Ministry of the Interior and Kingdom Relations
CAM	Coordination Centre for the Assessment and Monitoring of New Drugs
CBS	Statistics Netherlands
CBZ	Board of Construction of Facilities for Hospitals
CEDRO	Centre for Drug Research
CMR	Central Methadone Registration
DIMS	Drugs Information and Monitoring System
DOB	2,5-dimethoxy-4-bromoamphetamine
DSM	Diagnostic and Statistical Manual of Mental Disorders
E.K.	Senate
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EU	European Union
FIOD	Fiscal Intelligence and Investigation Department
GGD	Municipal Health Service
GG&GD	Area Health Authority
GGZ	Mental Health Service
GGZ Nederland	Netherlands Association for Mental Health Care
GHB	Gamma-hydroxy-butyrate
GMR	General Mortality Register
HAART	Highly Active Anti-Retroviral Treatment
HBV	Hepatitis B
HCV	Hepatitis C
HIV	Human Immune Deficiency Virus
HKS	Defendant Recognition System (of the Police)
ICD	International Classification of Diseases, Injuries and Causes of Death
IDUs	Intravenous Drug Users
IGZ	Health Care Inspectorate
IMC	Inpatient Motivation Centre
ISD	Institution for Prolific Offenders
IVO	Addiction Research Institute Foundation
IVV	Foundation of Information on Addiction Care
IVZ	Care Information Systems Foundation
KLPD	National Police Agency
LADIS	National Alcohol and Drugs Information System
LCI	National Coordination Structure on Infectious Diseases
LMR	National Information System on Hospital Care and Day Nursing
LSD	D-Lysergic acid diethylamide
LTP	LifeTime Prevalence
LMP	Last Month Prevalence
LYP	Last Year Prevalence
MBDB	N-methyl-1-(3,4-methylenedioxyphenyl)-2-butanamine

MDA	Methylene-dioxyamphetamine
MDEA	Methylene-dioxyethylamphetamine
MDMA	3,4-methylene-dioxymethamphetamine
MIM	Multivariate (Social) Indicator Method
NDM	National Drug Monitor
NEMESIS	Netherlands Mental Health Survey and Incidence Study
NIGZ	National Institute for Health Promotion and Disease Control
NPO	National Drug Use Survey/National Prevalence Survey
NVIC	National Poisons Information Centre
OBJD	Justice Documentation Research Database
OMC	Office of Medicinal Cannabis
OMDATA	Public Prosecution Department Data
PMA	Paramethoxyamphetamine
RIVM	National Institute for Public Health and the Environment
SCP	National Institute for SocioCultural Studies
SHM	HIV Monitoring Foundation
SOV	Judicial Treatment of Addicts
SRM	Criminal Justice Monitor
SVO	Steering Committee for the Reduction of Nuisance
TBC	Tuberculosis
TDI	Treatment Demand Indicator
THC	Tetrahydrocannabinol
T.K.	House of Representatives
TM	Treatment Multiplier
USD	Synthetic Drugs Unit
VVGN	Dutch Association of Addiction Physicians
VWO	Pre-University Education
VWS	Ministry of Public Health, Welfare and Sports
WHO	World Health Organisation
WODC	Research and Documentation Centre of the Dutch Ministry of Justice
XTC	Ecstasy
ZORG-IS	Registration System on Mental Health Care

15.4 Map of the Netherlands: provinces and major cities