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by the Reitox National Focal Point**

**THE NETHERLANDS
DRUG SITUATION 2003**

FINAL VERSION

REITOX

REPORT ON THE DRUG SITUATION 2003

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The Report on the Drug Situation in the Netherlands 2003 has been written for the European Monitoring Centre of 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.

The current national report was written by the staff of the Bureau of the National Drug Monitor (NDM) located at the Trimbos Institute. 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.

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SUMMARY

MAIN TRENDS AND DEVELOPMENTS

PART 1 NATIONAL STRATEGIES: INSTITUTIONAL & LEGAL FRAMEWORK

1.	Developments in drug policy and responses	7
1.1	Political framework in the drug field	7
1.2	Legal framework	7
1.3	Laws implementation	10
1.4	Developments in public attitudes and debates	13
1.5	Budget and funding arrangements	13

PART 2 EPIDEMIOLOGICAL SITUATION

2.	Prevalence, patterns and developments in drug use	17
2.1	Main developments and emerging trends	17
2.2	Drug use in the population	17
2.3	Problem drug use	23
3.	Health consequences	28
3.1	Drug treatment demand	28
3.2	Drug-related mortality	32
3.3	Drug-related infectious diseases	36
3.4	Other drug-related morbidity	38
4.	Social and legal correlates and consequences	40
4.1	Social problems	40
4.2	Drug offences and drug-related crime	43
4.3	Social and economic costs of drug consumption	47
5.	Drug markets	47
5.1	Availability and supply	47
5.2	Sources of supply and drug seizures	48
5.3	Price/purity	50
6.	Trends per drug	52
7.	Discussion	54
7.1	Consistency between indicators	55
7.2	Methodological limitations and data quality	56

PART 3 DEMAND REDUCTION INTERVENTIONS

8.	Strategies in Demand Reduction at National Level	59
8.1	Major strategies and activities	59
8.2	Approaches and new developments	59
9.	Prevention	60
9.1	School programmes	61
9.2	Youth programmes outside school	62
9.3	Family and childhood	62
9.4	Other programmes	63
10.	Reduction of drug related harm	65
10.1	Description of interventions	65
10.2	Standards and evaluation	68
11.	Treatment	69
11.1	“Drug-free” treatment and health care at national level	69
11.2	Substitution and maintenance programmes	70
11.3	After-care and re-integration	72
12.	Interventions in the Criminal Justice System	73
12.1	Assistance to drug users in prisons	73
12.2	Alternatives to prison for drug dependent offenders	74
12.3	Evaluation and training	74
13.	Quality Assurance	74

PART 4 SELECTED KEY ISSUES

14.	Evaluation of Drugs National Strategies	81
14.1/2	Existence of evaluation and methodology of evaluation	81
15.	Cannabis problems in context	86
15.1	Demand for treatment for cannabis use	86
15.2	Prevalence of problematic cannabis use and patterns of problems	89
15.3	Specific interventions for problematic cannabis use	90
16.	Co-morbidity	91
16.1	Main diagnoses, prevalence	91
16.2	Impact of comorbidity on services and staff	92
16.3	Service-provision	93
16.4	Examples of best practices and recommendations for future policy	94

REFERENCES

Bibliography

Data Bases/Software/Internet addresses

ANNEXES

Annex 1: Drug monitoring systems and data sources

Annex 2: List of tables

Annex 3: List of graphs

Annex 4: Map of the Netherlands, provinces and cities

Annex 5: List of abbreviations

SUMMARY: MAIN TRENDS AND DEVELOPMENTS

The Report on the Drug Situation in the Netherlands 2003 provides an overview of current developments in the legal and organisational framework of Dutch drug policy, the epidemiology of drug use and drug addiction and strategies in drug demand reduction and harm reduction interventions. Three special topics are highlighted: the evaluation of national drugs strategies, problem cannabis use and co-morbidity. The report and has been drafted according to the guidelines of the EMCDDA and focuses on developments in the reporting period 2002/2003.

Developments in legal, political and organisational framework

National drug policy in the Netherlands has five major objectives: prevention of drug use; treatment and rehabilitation of addicts; reduction of harm to drug users; diminishing public nuisance caused by drug users (i.e. disturbance of public order and safety in the neighbourhood); and combatting the production and trafficking of drugs. In 2003, the Opium Act was amended to legalise the medical use of cannabis. Since September 2003, prescribed medical cannabis is available at pharmacies for patients with indicated disorders. Pill testing will be continued at office-based testing facilities but is not allowed at parties or in nightlife areas. The most recent bill to combat money laundering is the Public Administration Probity in Decision-making Act, which came into effect on 1 June 2003. The Judicial Treatments of Addicts Act will be incorporated in a new bill directed at habitual offenders in general. Intensified action was undertaken to combat the production and trafficking of ecstasy, and the trafficking of cocaine at the national airport Schiphol. The medical prescription of heroin was continued at the experimental sites but was not extended to other cities.

Developments in the drug situation in the Netherlands

The prevalence of cannabis consumption in the general population slightly increased between 1997 and 2001 (LMP 2.5% and 3%, respectively), especially among adolescents in the age group 20-24. The number of primary cannabis clients asking help at outpatient drug treatment services increased from 1951 in 1994 to 3701 in 2002. Yet, the rate of growth is declining. The number of general hospital admissions related to a primary diagnosis of cannabis abuse or dependence remained stable. The number of admissions related to a secondary diagnosis of cannabis problems slightly rose from 160 cases in 1994 to 235 in 2002. THC content of Dutch marihuana has increased from 9% in 1999/2000 to 15% in 2001/2002, which is probably related to improved cultivation methods. The sharp decline in the number of coffee shops between 1997 (1179) and 2000 (813) did level off in 2001 (805) and 2002 (782). The number of seized nederwiet plants increased from over 553 thousand in 1998 to over 900 thousand in 2002.

The use rate of ecstasy in the general population is low, but increased between 1997 and 2001 (LMP 0,3% and 0,5%). The use rate of amphetamine is even lower (LMP 0,1% and 0,2%). Ecstasy is still popular among visitors of (dance)parties, discotheques and clubs, although there are signs that experienced users have moderated their use. Outpatient treatment demand for ecstasy and amphetamine is relatively low (250 and 543 primary

clients, respectively), but the decrease seen since 1997 appears to have stopped in 2002. The number of registered ecstasy and amphetamine related health incidents at large-scale parties has decreased in the past years. The composition of 'ecstasy' pills has been fairly stable in the past years (95% of the pills tested in 2002 (also) contained MDMA). However, there is a slight increase in the proportion of pills with a high dose of MDMA (>105 mg), i.e. from 7% in 1998 to 14% in 2002). According to data from Amsterdam, GHB has gained popularity in special (local) networks of users. The initial rapid spread seems to have halted. The number of GHB related requests for emergency assistance in Amsterdam did not change from 2001 to 2002 (over sixty cases each year).

The number of problem opiate users remains fairly stable. The latest (preliminary) estimates arrive at a figure of 28,000 – 33,000 problem opiate users. The average age of opiate users is still on the increase. The number of opiate overdoses recorded at the national level is stable since the early nineties (around 68 cases), but the total number of recorded acute drug-related deaths increased from about 60 in the late eighties to 144 in 2001. This may be due to an increase in cocaine deaths, a change in registration procedures, and an increase in deaths due to unspecified or multiple substances (which may or may not include opiates). Overall mortality among methadone clients in Amsterdam has increased since the eighties. This is probably explained by the advancing age of this population. The proportion of hard drug users injecting drugs intravenously continues to decrease. Sexual risk behaviour remains worrisome. TBC infections among hard drug users did increase in Rotterdam but remained low in Amsterdam, which might reflect differences in screening policy. HIV prevalence among drug injectors remained stable in Rotterdam (11% in 1994 and 10% in 2002/2003).

The percentage of current cocaine users in the general population remained low but doubled between 1997 and 2001 (LMP 0,2% and 0,4%, respectively). Cocaine sniffing is still fairly popular among young people visiting raves and clubs. Today, cocaine base/crack tends to be more popular than heroin among hard drug addicts. In Rotterdam, a growing proportion of young problem hard drug start their hard drug career with the consumption of cocaine (instead of opiates). Outpatient treatment demand for cocaine keeps rising (2468 primary clients in 1994 and 7774 in 2002). In this period, the number of admissions to general hospitals related to a primary diagnosis of cocaine abuse and dependence remained low (between 24 and 84 cases) but the number of admissions related to a secondary diagnosis of cocaine problems doubled from 246 in 1994 to 562 in 2002. The number of recorded acute cocaine deaths is low but rose from 10 cases in 1996 to 26 in 2002.

Crimes by hard drug users and drug law offences draw heavily on the resources of the police and the criminal justice system. The recent increases in the number of Opium Act cases recorded by the Public Prosecution Service (13558 in 2001 and 15848 in 2002) and the number of unconditional prison sentences (3523 in 2001 and 4641 in 2002) can be explained in part by the increased arrests of drug couriers at Schiphol Airport.

Developments in demand and harm reduction

Policy evaluation on a national level (all Ministries) was started a few years ago, so part of this operation was also to set targets for drug prevention and addiction care. Evaluation of both policies will therefore become more specific during the coming years. Policy should be

more evidence-based. Client satisfaction has become an issue of importance, and measurement instruments, both for adults and young people, have been evaluated and implemented.

Drug prevention units are part of addiction care organisations. An exploratory study presented data on the size, the organisation and content of drug prevention. The national government has decided to cut budgets to reduce the overall spending level. The budget for the main school-based programme, the Healthy School and Drugs, has been cancelled for primary schools but continues for another year for secondary schools.

An increasing number of outpatient care organisations offer free-of-charge courses for parents on drugs and drug use. It is not certain yet if the national campaign 'Drugs, don't fool yourself' will be continued in Spring next year.

Data were published on drug use and safety in recreational settings. Systematic registration of incidents allows for better estimates of health risks. First aid at dance parties can be improved through courses. According to a study in three European cities, pill testing services in recreational settings are unlikely to stimulate synthetic drug use among non-users. Pill testing information often is disseminated effectively among informal user networks in addition to folders or flyers. General anti-nuisance regulations exist for restaurants, cafés, and discotheques. For one-time organised dance events special permits from the local government are mandatory. City mayors decide on these permits, based on reports prepared by the initiators in advance. Mayors are legally permitted nowadays to order body searching at high-risk events.

Harm reduction policies did not change much in 2002. Many initiatives of outreach work have been taken during the past years. User rooms, or drug consumption rooms, are being evaluated.

Drug-free treatment is formally part of the treatment package. No admission criteria are used for offering these treatments. Brief treatment websites have been set up for cannabis and cocaine users. Users can also use the computer for e-consults. The National Drug Monitor will soon publish a review of the effectiveness of interventions in addiction care.

A recent evaluation of methadone substitution treatment in the Netherlands shows that maintenance treatment during the past decade has been reduced to merely dispensing methadone.

So far, the policy programme 'Getting Results' has provided many products to improve the quality of drug prevention and addiction care. It enters its second phase next year. Recent products are: protocols to enhance standardisation in drug prevention; an evaluation of the value of client satisfaction as an indicator of quality of care; an evaluation of feedback of the outcome of treatment to professionals, shared decision making techniques for professionals and clients.

Key issues

Evaluation of drugs national strategies

The Netherlands has a long tradition in policy evaluation. A specific evaluation of national drug strategies has started recently as part of a more comprehensive evaluation of governmental policy in general. Health care policy (including mental health and addiction care) had to formulate its targets to enable Parliament and others to check what has been accomplished. This operation will be evaluated by an independent agency.

In the past decade, monitoring has become an accepted strategy to evaluate drug policy and to set the political agenda. A mental health and addiction care branch report is periodically published to inform government, Parliament and others. In 1999 the Minister of Health started the National Drug Monitor that publishes annual reports and back ground reports for government and Parliament on all aspects of drugs and drug use. Besides this, many local or regional monitors already exist for many years.

Cannabis problems in context

There is no recent figure on the number of problem cannabis users in the Netherlands. According to a somewhat older figure (1996) about 0,3-0,8% of the population between 18-64 years is dependent on cannabis. In absolute numbers this would amount to some 30,000 to 80,000 people. The large majority of problem users does not apply for help at drug treatment services. Yet, outpatient treatment demand because of a primary or secondary cannabis problem has increased with 53% from 5,202 in 1994 to 7,969 in 2002. The largest group consists of clients who have problems with both cannabis and another drug, followed by groups of clients with a joint cannabis and alcohol problem, older clients (>20 years) who have only problems with cannabis and younger clients with only a primary cannabis problem, respectively. The largest proportional increase between 1994 and 2002 occurred in the group of older 'cannabis only' clients and in the group of clients with a joint cannabis and alcohol problem.

There are very few specific interventions in the Netherlands for problematic cannabis use. Most users are helped with stepped care strategies starting with cheap and simple interventions and after relapses treatment is proceeded with more intensive and expensive intervention types. The international literature of the past five years shows some promising examples of cannabis treatments that may be exemplary for addiction care.

Co-morbidity

Drug dependence often is associated with other mental disorders, especially alcohol dependence, depression, bipolar disorder and phobia. Though monotherapy is considered to be insufficient for dual diagnosis patients and integrated care may be more effective, the realisation of such integrated care appears to be difficult. This is partly due to a lack of effective co-operation between the two entirely different cultures of mental health care and addiction care. We offer two examples of integrated care in the Netherlands. Several protocols have been published for treating patients with comorbid problems. Case management may be an option to provide continuity of treatment that is needed for patients with comorbid problems.

PART 1

National strategies: Institutional and legal frameworks

1 Developments in drug policy and responses

1.1 Political framework in the drug field

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

- To prevent drug use and to treat and rehabilitate drug users.
- To reduce harm to users.
- To diminish public nuisance by drug users (the disturbance of public order and safety in the neighbourhood).
- To combat the production and trafficking of drugs.

Dutch drug policy continues to give priority to a public health approach. Importance is given to a balanced and integrated approach of the drugs issue. The national drug policy is carried out in close collaboration with municipalities, health care and social care professionals and institutions, criminal justice authorities and the police.

Collaboration and co-ordination between ministries and between ministries and (government) agencies is currently realised within a number of formalised and non-formalised structures. Policy in the Netherlands is highly decentralised. Local authorities have their own responsibilities in addressing the drug problem, though within the limits of national drug laws. (For more detailed information, see National Report 2002).

In the reporting period no major changes in the objectives of the national drug policy were formulated by the new government. In the Coalition Agreement (May 2003), the following issues are stressed:

- More priority is given to combating public nuisance by drug users and the production and trafficking of (hard) drugs, especially ecstasy. Airline companies will be held responsible for checking passengers on drug trafficking.
- The new government will enhance the capacity for coerced treatment of recidivist criminal addicts and will close 'coffee shops' near schools and the Dutch borders.
- It will continue the medical prescription of heroin for chronic treatment resistant opiate addicts.
- A national action plan to discourage the use of cannabis was announced to be launched in the Spring of 2004 (T.K.24077/114).

The law enforcement policy towards cannabis accentuates the coffeeshop criteria (see 1.3) and to combat large-scale professional cannabis cultivation by criminal organisations. In the law enforcement policy with regard to ecstasy efforts are increased to dismantle illegal ecstasy production locations and to strengthen international collaboration. The law enforcement policy towards cocaine is concentrating on combatting drug trafficking, especially at Schiphol Airport (T.K.28192/23).

1.2 Legal framework

The use of drugs is not penalised in the Netherlands, in contrast to the production, trafficking and possession of drugs. (Article 2 and 3 of the Opium Act). 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.

The Opium Act

Dutch legislation is consistent with the provisions of all the international agreements 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. Since then, the Opium Act has been amended repeatedly but its basic structure has been maintained (for more detailed information, see National Report 2002).

The bill to amend the Opium Act in order to legalise the medical use of cannabis, accepted by Parliament (Stb 2002/520) in 2002, came into force on 17 March 2003 (Stb 2003/154). This bill regulates the cultivation of cannabis for medical and scientific purposes. A governmental agency, the Bureau for Medical Cannabis (BMC), can grant permission to qualified growers to cultivate cannabis. It has to check the integrity of potential "permitted" cannabis growers. The BMC also takes care for quality control and the standardisation of medicines produced from cannabis. Also, guidelines for cultivation of legal cannabis were developed by the Ministry of Health (Stc: 2003/6).

In October 2002, the Dutch government decided that physicians might prescribe cannabis for medical reasons and that pharmacies are allowed to supply this drug. But it is only since September 2003 that the first legal medical cannabis -Cannabis flos as it is officially named- became available in pharmacies. Medical cannabis can only be prescribed in case of the following disorders: multiple sclerosis; nausea caused by chemotherapy, radiotherapy and HIV combination therapy; chronic neuralgia; syndrome of Gilles de la Tourette and palliative treatment of cancer and aids. The price of the legal cannabis is much higher than that of marijuana in coffeeshops (Kievits and Adriaanse 2003).

In November 2003, the Minister of Justice announced his plan to investigate the possibility to bar foreigners from the tolerated coffeeshops in the Netherlands by way of a pass holder system (SIDV 2003).

Besides the medical cannabis regulation, the Opium Act was also changed on the following items:

- Explicit mention of the requirements of article 28 of the Single Convention for the licensing procedures. In this way the BMC is guaranteed by international law (Article 8a).
- The licence to produce or trade in substances mentioned in the Opium Act is connected with the new possibility of checking persons for criminal antecedents through the Public Administration Probity in Decision-making Act (article 8e).
- The substances in Schedule I and Schedule II have now been alphabetically ordered according to system of the International Non-proprietary Names (Schedule I and Schedule II).
- Equal procedures for amending both substances lists.

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

Smart shops

In the about 165 "smart shops" in the Netherlands mushrooms with psychedelic properties can be bought. The active ingredients psilocybine and psilocyne are listed in Schedule I of the Opium Act, but until recently it was not clear if the Opium Act also applies to the fresh or dried mushrooms themselves. The Supreme Court of the Netherlands reached a sentence

on 5 November 2002: only fresh mushrooms fall outside the scope of the Opium Act and can still legally be sold by smart shops.

Besides psychedelic mushrooms, other ecodrugs - like psychotropic herbals- and smart products like herbal ecstasy, energy drinks and smart nutrients are sold in Dutch smart shops. The local governments in Amsterdam and Maastricht have signs of the involvement of organised crime with the smart shop business. An inventarisation of all the legal instruments that can be used to close down smart shops was written by the national Support and Information Point Drugs and Safety (SIDV)(Smits et al. 2003).

Pill testing

Pill testing on the spot -at raves and other events- was discontinued in the Netherlands in 1999. However, office-based pill testing facilities are still functioning. On 29 January 2002, the Dutch Parliament passed a motion asking the government to reject any resumption of pill testing at dance events (T.K.24077/98). Before coming to a final decision the government decided to commission a study to compare the pill testing done at currently existing locations with other procedures that could potentially improve the monitoring of party drugs. The most important conclusions of this study were: 1. Pill testing in nightlife areas has advantages to the existing office-based testing facilities, because new groups of drug users can be reached in this way. 2. Pill testing does not play an important role in encouraging the use of ecstasy (Korf et al. 2003a). However, the new Minister of Health decided not to change the existing practice of not testing in nightlife areas (T.K.Aanhangsel/161).

Money laundering

The Netherlands has introduced or changed laws to meet the EU directive on money laundering, making it more difficult for criminal organisations to retain the proceeds of their illegal activities. The most recent legal action of the Dutch government to get a grip on money laundering was the Public Administration Probity in Decision-making Act (*Wet Bevordering integriteitsbeoordelingen door het openbaar bestuur* or *Wet Bibob*). By creating an Investigation Agency, that checks background data of organisations that apply for subsidies and permits, the Dutch government attempts to prevent that criminal organisations can take advantage of public money or can launder money with the unintentional assistance of the Public Administration. The Agency can only investigate when asked to do so by governmental bodies. This act came into effect 1 June 2003. Within three years the efficacy of this act will be evaluated (Stb 2003/216).

The so-called Confiscation Legislation (*Wet Ontneming wederrechtelijk verkregen voordeel*) came into force in 1993. A recent study investigating the nature and size of the assets of 52 large criminal organisations which were brought before justice, came to the conclusion that only ten percent of the estimated unlawfully acquired money could be confiscated. It remains difficult to prove exactly how much money was unlawfully acquired (Meloan et al. 2003). The investigators recommend to improve the expertise of the criminal financial investigation.

Judicial Treatment of Addicts

On 1 April 2001 the Judicial Treatment of Addicts (*Strafrechtelijke Opvang Verslaafden-SOV*) intervention was introduced. It allows the courts to commit habitual 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. The alternative is a prison sentence. The act is set up as an experiment. Further implementation of the law must await the outcomes of a stringent

evaluation for three to four years. Addicts from all participating municipalities spend the first part of the programme in the special institution. The second part is directed to resocialisation. In the third phase the participants live in halfway houses or under supervision. The experiment runs in four institutions – in Amsterdam, Rotterdam, Utrecht and the ‘Southern municipalities’ -, totalling 220 ‘cells’. All the institutions have commenced operation and in October 2003 181 inmates had been ordered there (Van Laar et al. 2004). In December 2002, the Supreme Court of the Netherlands reached a sentence in a case of a convicted addict who refused to be treated in this special institution: willingness to be treated is not necessary for placement in the Judicial Treatment.

The Judicial Treatment of Addicts Act will be incorporated in a new bill facilitating to sentence recidivist criminals more severe than is possible under the current laws. The focus will be on the person and not on the case (mostly a minor crime). In 2004, about 1000 places will be created for these habitual offenders. About half of these habitual offenders have addiction problems. The aim of this initiative is to reduce public nuisance and to stimulate behavioural change of the offenders (T.K.28684/10).

Act Temporary Measures

In 2001, the number of drug couriers who have swallowed small packages of drugs increased to unprecedented levels at the Dutch national airport Schiphol. The limits of the criminal law chain were reached by the end of that year. The courts were overloaded with cases. A special Act was drawn up: Act Temporary Measures for Penitentiary Capacity for Drug Couriers (*Tijdelijke Wet Noodcapaciteit Drugskoeriers*). This Act went into effect on 6 March 2002 (Stb 2002/124). This Act is unique as it is specially made for one kind of offender. Because of the shortage of cells in the Netherlands, the temporary measures enable to place a number of detainees together in one cell in special emergency detention facilities. This is contrary to the Prisons Act, which stipulates that only one person may be detained per cell. In these exceptional circumstances, other staff is deployed than the usual judicial institution staff. The regime in these emergency facilities is severely restricted but complies with the relevant minimum international requirements. In the reporting year it was decided to continue this temporary law until 8 March 2005.

The evaluation of the implementation of these measures in the first half year of the Act revealed many shortcomings and complaints (Maalsté et al. 2002a). Already during the evaluation period improvements were implemented by the government. Some of the detainees were transferred to regular prisons and the quality of the staff was improved. The Minister of Justice stated in February 2003 that the circumstances of the detainees were much improved (E.K.28627/134a).

1.3 Laws implementation

Opium Act Directive

In the Netherlands, criminal investigation and prosecution operate under the so-called ‘expediency principle’ or principle of discretionary powers (*opportuiniteitsbeginnel*). 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 2001 until 2005 (Stc 2000/250).

The Opium Act Directive stipulates when the maximum penalty or a lesser sanction is required. Decision criteria are the amount of drug, the kind of drug, the place where the drug was sold, and occasional versus long-term dealing. The sale of cannabis is illegal, yet coffee shops are allowed to sell cannabis, if they adhere to certain criteria: no advertising, no hard drug sale, not selling to persons under 18 years, not causing public nuisance and not selling more than 5 grams per transaction. Cannabis is also sold at other unofficial locations. In 2002, a feasibility study to find a method for counting such not tolerated outlets of cannabis sales was conducted under the authority of the Ministry of Justice (Maalsté et al. 2002b). The conclusion of this report is that it is not feasible (too expensive) to develop a regular national monitor for not tolerated outlets of cannabis sales, but it is possible to obtain insight of trends in this sector.

In recent years, the government policy has been aimed to reduce the number of coffee shops. The estimated number went down from almost 1200 in 1997 to 782 in 2002. It is unclear yet if this has resulted in increased supply of cannabis through channels outside coffee shops. Most of the Dutch municipalities do not have a coffee shop. High prosecution priority is given to professional and commercial cannabis cultivation. The indicators for professional dealing with regard to cannabis cultivation are listed in great detail in the Opium Act Directive. The number of large scale illegal cannabis farms and seized cannabis plants has increased in the past years (Van Laar et al. 2003) (See also 5.2).

In March 2003, new general Directives for Investigation were ordered by the Minister of Justice for the Police Departments and the Public Prosecution Service. The Directives indicate when the authorities will come or not come into action when a criminal offence is reported to the police. In the Directives large scale cultivation of cannabis is described as a major crime which justifies prosecution, because it effects the quality of life in neighbourhoods (Stc 2003/41). This fits with the conclusions of a scientific report investigating the connection between organised crime and large scale cannabis cultivation. In many underprivileged areas large scale cannabis cultivation is directed by criminal organisations. On a large scale, electric current is illegally tapped and the nuisance for the neighbours who are not participating in the cultivation network can be strong (Bovenkerk and Hogewind 2003).

An important pilot project to combat drug-related crime and nuisance at the local level is the Hektor Project in the city of Venlo. The purpose is to diminish the nuisance caused by many German drug tourists who buy cannabis mostly at 'illegal' coffee shops, i.e. coffee shops not tolerated by the local authorities. The project has a three-line approach: 1. Low tolerance towards nuisance in the public space; 2. Revision of the coffee shop policy; 3. To combat the infiltration of the real estate market by organised crime. By creating special teams the local government, the regional police, the Public Prosecution Service and the Fiscal Intelligence and Investigation Department (FIOD), succeeded in closing many drug dealing premises and illegal coffee shops. Also, substantial amounts of black money could be confiscated. The Hektor Project runs from 2001 to 2005 and will be evaluated by an independent research institute (Ministerie van Volksgezondheid 2002). In 2002, it was reported by the city of Venlo that there was a measurable decrease in the nuisance caused by drug users and drug couriers. This nuisance was not shifted to other neighbourhoods. Also, a number of important confiscations of criminal assets could be realised (Bloem 2003).

Other important projects run in Utrecht, Rotterdam and Roosendaal.

Intensified actions against ecstasy

In 2001, the national government announced in the white paper "Uniting against XTC" measures against the production, sale and use of ecstasy (T.K.23760/14). This action plan costs € 18.6 million each year and is evaluated by an independent research institute. The first measurement took place in 2003, the second will be in 2004 and the final evaluation in 2006. It was announced that the Public Prosecution Service should intensify investigations into the manufacture and sale of ecstasy. The Ministry of Justice and the police should gear up their joint efforts. The Synthetic Drugs Unit (USD) has a pivotal role in the implementation of these efforts. In 2002, five special XTC-teams were created by the regional police forces. In 2002, 43 ecstasy production locations were dismantled against 35 in 2001. The international contacts with countries that are important in the trafficking of ecstasy were intensified. The Netherlands participates actively in the PRISM project of the International Narcotic Control Board (INCB) which is directed at combatting the illegal trade of ATS precursors. It is also a member of the European Joint Unit on Precursors in which member countries share operational information with each other. In the course of 2003, a more intensive collaboration with the USA in investigating and prosecuting criminal organisations in the production and trafficking of ecstasy came into being (T.K.23760/16).

Drug trafficking

In January 2002, the Code of Criminal Procedure was changed concerning investigating criminal activities. Besides investigations 'on the body', including rectal and vaginal searching, which were already legal, intrusive methods -investigations 'in the body'- such as the use of X-rays and ultra-sound scans are permitted, as long as a physician applies these techniques.(Stb 2002/66). These intrusive methods are used to search persons suspected, for instance, of having swallowed small packages of drugs or having pushed packed drugs into body orifices (body packing).

The increase in the number of arrested couriers at Schiphol Airport who have swallowed pellets of drugs (cocaine) resulted in an overload of criminal cases. Most of the couriers come from the Netherlands Antilles and Aruba. This problem was frequently discussed in the mass media. The regional courts are hardly able to handle this extra case overload and it became highly problematic to find prison cells for the arrested couriers). In December 2001 the government accepted the "Plan of Action for Drug Trafficking at Schiphol", which intends to intensify the existing two-line approach (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.

In October 2003, the fifth progress report concerning "Drug Trafficking at Schiphol" was sent to Parliament by the Minister of Justice (T.K.28192/23). The number of drug couriers is still increasing: from 1303 in 2001 to 2176 in 2002. Until September 2003, 1552 couriers were already arrested. The number of "drug swallowers" has decreased, because of the use of body scans at the airport of Curaçao. Other methods of smuggling are preferred by the couriers. From January 2002 to July 2003, 4012 couriers were sentenced by the law courts. In a special study analysing the background of this flood of Antillian drug couriers, a major conclusion was that there is a connection between the decentralisation of the drug cartels in South America and the bad economic situation of the Dutch Antilles with much unemployment (Kerkhof 2003). To combat the trafficking problem, the Minister of Justice announced more collaboration between the Dutch and Antillean authorities, and measures to increase the chance of arrest, such as pre-flight controls of all the airplanes from the Antilles.

Also, more collaboration with other European countries will be sought. In the first place, all the efforts will be directed to confiscating the cocaine. The Public Prosecution Service can decide in each case whether or not to prosecute the couriers themselves. Couriers caught with small amounts of cocaine at Schiphol are sent home with a summons.

1.4 Developments in public attitudes and debates

Public attitudes

There are no recent general surveys or opinion polls concentrating on attitudes towards the drug problem (see National Report 2002 & 8.2). Some information on attitudes towards perceived street safety and exposure to drug-related crime can be found in the Eurobarometer on Public Safety, Exposure to Drug-Related Problems and Crime (EORG (European Opinion Research Group) 2003). In the Netherlands, the respondents did have more than average contact with drug-related problems in the area of residence. But their perceived street safety was also above average. So, there seems to be no direct connection between feelings of safety and living in a neighbourhood with drug-related problems (see also 8.2)

Medical Heroin prescription

The debate in the Parliament on the continuation of the medical prescription of heroin for chronic treatment resistant opiate addicts attracted much attention in the mass media. The Lower House decided that the experiment at the existing treatment units could be continued. The advise of a special committee to study the implementation of medical prescription of heroin was to augment the number of treatment units from six to fifteen (CIBH (Commissie Invoeringsaspecten Behandeling Heroïneverslaving) 2003). However, the decision whether or not to extend this treatment to other cities was postponed by the government to Spring 2004.

Other debates

A few other issues dominated the public debate and coverage by the media. From time to time the seemingly endless flood of drug (cocaine) couriers at the national airport and the difficulty of combatting this trafficking, reach the mass media. Recently, much indignation was caused by a directive of the Minister of Justice, indicating that couriers who are arrested with less than three kilogram cocaine will not be prosecuted. In this way the criminal law chain will not be overloaded.

The plea of a Court president for the legalisation of soft drugs was also discussed in the Lower House. Many politicians of left wing parties support this idea. In February 2003, a member the Police Union also suggested to legalise the production of cannabis. However, the new government has no intention of changing the drug policy in that direction.

1.5 Budget and funding arrangements

In the reporting period an attempt was made to estimate how much money is spent on drug policy in the Netherlands (Rigter 2003). Estimates of the official public expenditures are presented. Besides these costs, other societal costs as a result of drug use -more indirect costs- can be discerned but these are not included in this report.

**Table 1.1: Estimated expenditures on drug policy in the Netherlands in 2003
(x million Euro)**

Target	Estimated expenditure
• Prevention	42
• Treatment	278
• Harm reduction	220
• Law enforcement	1,646
Total	2,186

Source: Rigter (2003)

Drug policy in the Netherlands is multifaceted. It involves a variety of parties and funding arrangements. The estimates are based on the budget proposals for the year 2003 from the national ministries, white papers published by the ministries on drug-related topics and personal contacts with civil servants. The available data were often not drug-specific and various methods were applied to parcel out the drug "component" of the general figures. The figures of table 1.1 have to be taken with caution, but do give an indication of the budget that is spent on drug policy.

About 75 per cent of the budget is spent on law enforcement in a broad sense (police, prosecution, detention), whereas two per cent is spent on prevention.

PART 2

Epidemiological Situation

2 Prevalence, patterns and developments in drug use

2.1 Main developments and emerging trends

There are no new national data on drug use in the general population. The last survey in 2001 showed that cannabis remained by far the most popular illicit drug in the Netherlands. The number of current users in the population of 12 years and older is estimated at 408,000 (3%), which is more than the number of users in 1997 (326,000). Lifetime and current use of hard drugs, such as ecstasy, amphetamines, cocaine and hallucinogenic mushrooms, is much lower compared to cannabis but also showed a general increase since 1997. This trend was most pronounced among young people of 20-24 years, while drug use remained fairly stable among youth in the school age (about 12 to 16 years). Among pupils in Amsterdam, drug use has also generally stabilised or declined since 1995 (third formers) or 1997 (older pupils), which might be attributed to the growing proportion of non-western pupils (Korf et al. 2003b).

Compared to the general population, drug use is much more prevalent among special populations, such as visitors of entertainment places (bars, cafés, clubs, coffeeshops, party's - the nightlife scene), the homeless, truants, youth in correctional institutes, detainees and psychiatric patients. Stimulant drugs, like ecstasy and cocaine, are still quite popular among young people visiting raves and clubs - and to a lesser extent among pubgoers and visitors of coffee shops (Korf et al. 2003b; Ter Bogt and Engels 2003; Van Gelder et al. 2003). Yet, according to qualitative data sources, ecstasy use has stabilised or tends to wane in networks of experienced users (Korf et al. 2003b). Both ecstasy and cocaine are often used in combination with other substances, especially alcohol (Korf et al. 2003b). The consumption of drugs is more common among visitors of hardcore parties compared to mellow or mixed parties (Ter Bogt et al. 2003). Amphetamine is less popular in the nightlife scene compared to ecstasy and cocaine, although the drug occupies a steady position among party visitors. The poor availability of this drug in the past years (especially 1999) seems to have eased slightly in 2002 (Pijlman et al. 2003). According to qualitative data the growing popularity of GHB seems to have halted, although the drug is still used in special networks (especially at home) (Korf et al. 2003b).

According to the latest estimates, the number of problem users of hard drugs (opiates, usually combined with basecoke and other substances) in the Netherlands seems to be stable. Injecting drug use in this group is further decreasing (Coumans and Knibbe 2002; Van der Poel et al. 2003).

2.2 Drug use in the population

General Population

There is no new information on drug use in the general population. In this paragraph we will briefly report on some basic prevalence figures and present additional data on combined use. For more detailed information, we refer to the National report 2002.

The *National Prevalence (drug use) Survey* was carried out twice (in 1997 and 2001) among the Dutch population of 12 years and older. The main results are given in table 2.1.

- Significant increases in lifetime prevalence were found for cannabis, cocaine, ecstasy, amphetamine and hallucinogenic mushrooms. For the first three drugs the last month

prevalence also showed an increase since 1997. These increases were most prevalent in age group 20-24 years, while virtually no change was found among young people in the school age (12-15 years).

- Prevalence rates for cannabis use were roughly twice as high among men than women (in 2001: LTP 21.3% vs. 12.8%; LMP 4.3% vs. 1.8%). This also applied to the percentage of users who ever tried hard drugs¹ (LTP: 6.2% vs. 3.7%). However, there was no gender difference for the percentage of current users of hard drugs (LMP: 0.8%).

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
Hallucinogens ^a	1.8	1.3	0.0	0.0
LSD	1.2	1.0	--	--
Halluc. Mushrooms	1.6	2.6*	0.1	0.1
Heroin	0.3	0.4	0.0	0.1

a. Hallucinogens, including LSD, mescaline, psilocybin, 2CB, ayahuasca, and excluding mushrooms. * Significant change from 1997 to 2001. Source: National Prevalence Survey, CEDRO (Abraham et al. 2002).

Based on these prevalence rates, table 2.2 gives the estimated absolute numbers of current users.

Table 2.2: Minimum estimates of the number of current drug users in the Netherlands in 2001*

	Average	95% CI
Cannabis	408,000	375,000 - 443,500
Cocaine	55,000	43,300 – 68,900
Ecstasy	67,000	54,400 – 82,700
Amphetamine	30,000	21,700 – 40,700
Hallucinogens ^a	2,600	900 – 7,600
LSD	1,200	300 – 5,800
Hallucinogenic mushrooms	11,300	6,800 – 18,800

* Extrapolated from last month prevalence rates to the Dutch population of 12 years and older. various groups of drug users are likely to be underrepresented in the survey, such as homeless youth, prisoners, opiate addicts and frequent visitors of coffee shops. This applies especially to users of hard drugs, such as cocaine and heroin. Moreover, the surveys are based on self-reported drug use, which may cause an underestimation of the actual consumption. a. Hallucinogens, including LSD, mescaline, psilocybin, 2CB, ayahuasca, and excluding mushrooms. Source: National Prevalence Survey, CEDRO (Abraham et al. 2002).

Information on population density, age distribution and frequency of use can be found in the National Report 2002.

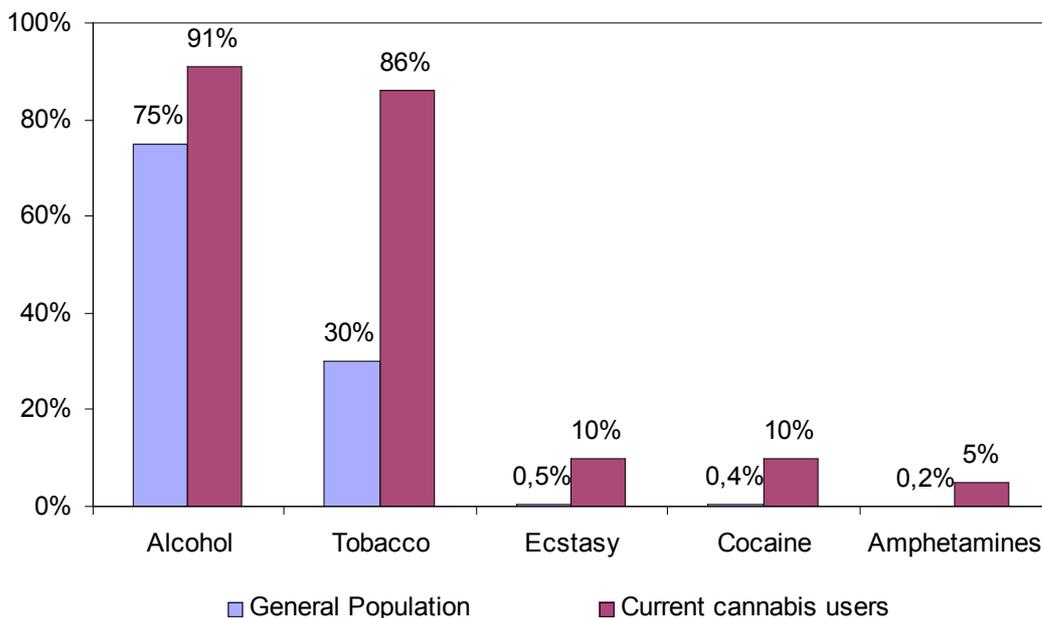
Because most drug users have experience with more than one substance, we have asked CEDRO (M. Abraham) to provide a cross-table on the prevalence of current (last month) use

¹ cocaine, amphetamines, ecstasy, hallucinogens (excl. mushrooms) and heroin

of alcohol, tobacco, cannabis, cocaine, ecstasy and amphetamine among current (last month) users of these substances. Figure 2.1 shows the prevalence rates of these substances (excl. cannabis=100%) among current cannabis users.

- It is clear that the use of substances is more prevalent among cannabis users compared to the general population (note that these data have not been adjusted for age and gender).
- Still, these figures also indicate that most cannabis users (83%) had *not* used any hard drug in the past month.
- A similar pattern is found for users of other substances (i.e. more experienced with using substances compared to the population as a whole).

Figure 2.1: Current use of alcohol, tobacco and drugs among the Dutch population of 12 years and older and among current cannabis users in 2001



Current use: last month use. Source: CEDRO (M. Abraham).

Pupils

There is no new information on drug use among pupils at the *national* level. The *National Youth Health Surveys* (in 1988, 1992, 1996, 1999) among pupils (12-18 years) showed that the increase in cannabis use since 1988 stabilised between 1996 and 1999 (De Zwart et al. 2000). According to the Health Behaviour in School-aged Children study, this trend continued in 2001 (Ter Bogt et al. 2003). Use of other drugs showed a similar trend or slightly decreased (LTP of ecstasy and amphetamine).

The results of the 2003 school survey will be available in 2004.

New trend data on drug use are available for pupils in *Amsterdam* (Korf et al. 2003b). Substance use was assessed by a questionnaire distributed in the class-room among 'older pupils' (since 1993) and among third- form pupils (since 1995). The samples were weighed

for gender and school type. Prevalence rates are given in tables 2.3 and 2.4. The main conclusions are as follows:

- Drug use among third-form pupils was fairly stable over time (no significant increases, and a decrease in lifetime and last year prevalence of cocaine and amphetamine).
- Cannabis use among older pupils remained stable (no significant changes over time); use of other substances peaked in 1997 and decreased since then. In 2002, prevalence rates were at the same level, or lower, compared to the situation in 1995. This declining trend is probably explained by the growing proportion of non-western pupils, which have lower rates of drug use than western (largely Dutch) pupils.

Table 2.3: Trends in drug use among third-form pupils in Amsterdam (1995-2002)*

	LTP (%)				LMP (%)			
	1995	1997	1999	2002	1995	1997	1999	2002
Cannabis		25	28	28	20	15	15	15
Cocaine	6	2	2	1	3	1	1	<0.5
Ecstasy	9	5	4	3	3	2	1	<0.5
Amphetamine	6	3	1	2	2	1	1	1
Heroin	2	1	1	1	1	<0.5	1	<0.5
GHB			<0.5	<0.5			<0.5	0

* Pupils in their third year of secondary academic or prevocational school (VMBO, HAVO, VWO). Average age = 15 years. N= 780. Source: Antenne monitor (Korf et al. 2003b)

Table 2.4: Trends in drug use among older pupils in Amsterdam (1993-2002)*

	LTP (%)					LMP (%)				
	1993	1995	1997	1999	2002	1993	1995	1997	1999	2002
Cannabis	39	43	41	39	37	19	20	22	19	19
Cocaine	4	5	6	3	3	2	1	2	1	1
Ecstasy	5	8	10	6	7	3	4	3	2	2
Amphetamine	3	6	7	3	4	2	2	2	1	1
Heroin		0	1	1	2		0	<0.5	1	<0.5
GHB				<0.5	1				0	<0.5

* Pupils in their next-to-last year of secondary academic or prevocational school or first year of intermediate vocational school (VMBO, HAVO, VWO). Average age = 17 years. N = 1027. Source: Antenne monitor (Korf et al. 2003b)

Drug use in specific groups

Nightlife scenes

Since drug use is highly associated with a pleasure-seeking and outgoing lifestyle, drug use is commonly more prevalent among visitors of coffee shops, café's, discotheques and raves compared to the general population. In our previous report we have described the results of three different populations studied by the Antenne monitor among Amsterdam youth: 1) visitors of coffee shops (2001), 2) pubgoers (2000) and 3) visitors of trendy clubs and (house) parties (1998). The 2002 Antenne monitor did not include a quantitative survey in one of these special groups, but only reported on the outcomes of the qualitative panel study. In 2002, however, a study using a similar methodology as the Antenne monitor, was carried out in another city, i.e. The Hague (Van Gelder et al. 2003).

In this paragraph, we will describe the main qualitative findings from both surveys as well as the (quantitative) results on drug use among youth in the nightlife of The Hague. Moreover, information on ecstasy use is available from a survey among visitors of five large-scale houseparties in the Netherlands.

The Hague:

- Between May 1 and July 15, 2002, questionnaires were distributed among 2,100 visitors of dance- or houseparties & Parkpop festival or other places of entertainment in the Hague centre and Scheveningen (beach location close to The Hague) and among student organisations.
- The response rate was fairly low (15%). The gender distribution in de final sample was quite balanced (53% male). Over one-third (38%) was under 20, 45% was between 20 and 29 years, 10% above 30 years and for 7% information on age was missing. About one-fifth (22%) was non-Dutch, which might be low compared to the proportion of 'allochtonous' people among youth in the nightlife scene of The Hague.
- Table 2.5 gives the lifetime and last month prevalence rates of alcohol and drug use. It is clear that alcohol peaks among the substances used ever and currently, followed by cannabis, and at some distance ecstasy and cocaine.
- Visitors of dance parties have relatively more experience with ecstasy and cocaine: 66 and 43% of the partygoers had ever used ecstasy and cocaine, respectively (c.f. figures in table 2.5 for the total group).

Table 2.5: Alcohol and drug use among young people in the nightlife scene of The Hague in 2002

	LTP	LMP
Alcohol	96%	91%
Cannabis	75%	46%
Cocaine	33%	15%
Ecstasy	46%	23%

N (net sample)=319. Response rate was 15%. Source: (Van Gelder et al. 2003)

Observations from key informants in a wide range of youth nightlife scenes in Amsterdam and The Hague (panel studies) suggest the following developments (signals, trends) (Korf et al. 2003b; Van Gelder et al. 2003):

- Cocaine sniffing remains popular in several nightlife scenes, especially among 'older youth (as of age 25). There might be a slight increase in cocaine consumption in the Hague, although the contrary (a decrease) has also been mentioned due to the fairly high price (€ 50 per gramme). Reasons for its popularity: drug is a social lubricant, stimulating effect, drug gives confidence, cocaine is 'cool', less risk of (subjective) alcohol intoxication with combined use of alcohol and cocaine. Both panels report cases of unrestrained sniffing. Cocaine is occasionally smoked in a cigaret ('ploffie').
- Although use rates between cocaine and ecstasy tend to converge, ecstasy is still the most prevalent hard drug in the nightlife scene, especially in younger networks and dance parties.
- Speed is less popular than cocaine and ecstasy but still has a group of consumers, especially in party scenes. The poor availability of speed in recent years (see also 5.3) seems to have abated somehow in 2002.

- In Amsterdam, the increasing use of GHB seems to have halted. In the Hague, some members suggest a still growing popularity of this drug (note, however, that the last panel interview in the Hague was held in June 2002 and in Amsterdam in autumn/winter).
- There are signals from Amsterdam that experimental use of ketamine has slightly expanded in different networks.
- Other psychedelic/hallucinogenic drugs do not seem to be popular (as well), with the exception of mushrooms.

The panel studies in Amsterdam and the Hague showed that ecstasy is still commonly used among visitors of (dance)parties. This is also supported by a survey in 2001 among visitors of five large-scale houseparties across the country (Ter Bogt, personal comm.; Ter Bogt et al. 2003).

- Three in four (76%) visitors had ever used ecstasy; more than half (58%) had used ecstasy in the past month.
- Some 17% of the current users reported to have used ecstasy ‘a few times a week’ in the past month and 22% did so weekly. One in three (32%) consumed ecstasy ‘a few times a month’
- Use of ecstasy and other drugs was associated with the type of music: higher among visitors of hardcore parties compared to mellow or mixed parties.

Drug use among the homeless

Substance use is more prevalent among the homeless compared to the general population. Results from a survey among the homeless youth have been reported in our National report 2001 (see also Korf et al. 1999). In the current report we describe the results from a recent study among the total homeless population (N=500) recruited at street in 20 cities (De Bruin et al. 2003). The homeless are defined here as “persons who are not able to attain or keep a home or house due to financial/economical, social and/or psychological circumstances”. The sample included mainly the *visible* population of the homeless recruited at street and those who perceived themselves as being homeless. Those not recognised as being homeless and those living in special shelters are likely to be underrepresented.

- The sample consisted mainly of male respondents (87%). The large majority (85%) is between 25 and 55 years (average age males: 39 years; average age females: 37 years).
- Three in four respondents was roofless, spending most nights on the street. Fourteen percent was houseless or lived in shelters or hostels, while 11 percent could be described as ‘marginally housed’, having only temporary accomodation.
- According to table 2.6, substance use is fairly common in the homeless, especially alcohol, cannabis, heroin and basecoke.
- The respondents mentioned drug use and dependence as the most common reason of their homelessness (62%), followed by relational problems (48%), family and financial problems (both 45%) and non-payment of rent (44%).

Table 2.6: Substance use among the homeless in 2002

	LTP	LMP
Alcohol	86%	63%
Cannabis	74%	52%
Basecoke	63%	47%
Cocaine HCL (sniffing)	49%	10%

Heroin	59%	40%
Methadone	45%	29%
Speed	45%	6%
Hallucinogens	37%	3%
Ecstasy	36%	5%
Others*	9%	2%

* Mainly tranquillisers and hypnotics; also qat, opium, mescaline, peyote, anabolics, ketamine, poppers etc.

Source: (De Bruin et al. 2003)

Drug use among detainees

In 2002 a survey into the prevalence of criminogenic factors among male detainees was held in 8 penitentiary institutions in the Netherlands (Vogelsang et al. 2003).

- The target group consisted of 797 persons, of whom 45% was interviewed, 49% did not respond and the remainder was excluded for other reasons. The final sample did not differ from the non-responders on various demographic factors. The instrument was the translated version of the OASys (Offender Assessment System 2, short intake version), developed by the National Probation Services in England & Wales. One section involves substance use in the past 6 months before detention. The measures are different from those specified by the EMCDDA Model Questionnaire.
- According to table 2.7, drug use is common among this group, especially daily use of cocaine and cannabis.

Table 2.7: Drug use among male detainees in 2002*

	Monthly	Weekly	Daily
Cannabis	2%	12%	33%
Ecstasy	3%	6%	2%
Hallucinogenics	2%	2%	<1%
Amphetamine	<1%	2%	2%
Cocaine/crack	2%	10%	32%
Methadone	2%	1%	9%
Heroin	<1%	3%	21%

* in the past 6 months before detention. N=355. Source: (Vogelsang et al. 2003)

2.3 Problem drug use

Prevalence estimates

Cannabis

According to a slightly outdated estimate of 1997, some 0,3-0,8 percent of the general population of 18-64 years is dependent on cannabis (last year prevalence). See chapter 15.2 for more information on problem cannabis use.

Ecstasy and amphetamines

The number of problematic 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. The number of ecstasy and amphetamine users applying for help at treatment centres is fairly low and decreasing. 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

Most household or other population surveys do not yield accurate estimates of regular use of opiates and other hard drugs. The samples are either too small to include enough hard drug users for that sort of calculations, or are biased due to under-representation of these persons. Other methods are required to estimate the number of these 'hard to reach' opiate and/or poly drug users.

- The number of problem opiate users in the Netherlands has been estimated several times in the past years (table 2.6). In the last (preliminary) estimate, two methods were used: a multivariate (social) indicator method (MIM) and a treatment multiplier (TM). Taken the large confidence intervals into account, the outcomes were well in agreement with those of previous years, especially when converted to population rates: between 0,26 and 0,30 per 1000 inhabitants of 15-64 years (0,23-0,27 in 1996 and 0,27 in 1999).
- Note that the 2001 MIM estimate came close to the highest TM estimate. Closer examination of the case definitions of the local estimates (anchor points) used by MIM showed some heterogeneity in that some estimates also included primary cocaine (basecoke) users who did not use opiates, in addition to opiate users (who also generally consumed other substances, such as basecoke). This might lead to a slight overestimation of the number of problem opiate users. This overestimation does not occur for the TM, which is based purely on opiate users (as primary or secondary problem).

Table 2.8: 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)
National	1999	MIM Treatment multiplier	Problem opiate users	27,000 25,970-30,298	(Smit & Toet, 2001)
National	"2001"	MIM Treatment multiplier	Problem opiate users	29,213 27,924 – 32,578	(Smit & Van Laar, 2003)
		MIM	**	31,720 – 32,989***	

MIM=Multivariate (social) indicator method. *Mainly opiate users who also consume basecoke (and other substances) **Variable case definitions of local estimates (anchor points) used by MIM. Some anchor points – especially of the latest estimates - may also include small numbers of primary basecoke users who do not consume opiates. ***lowest: Gaussian model, highest: Neg. Binomial model. 95% CI of prevalence rate (per 1000) between 2,0 – 3,8 (Gaussian) and 2,2 – 3,9 (Neg. Bin.).

Table 2.9 gives an overview of the methods and outcomes of estimates of the number of problem hard drug users in different Dutch cities and regions (which have been used as anchor points for the MIM). Figure 2.2 on local estimates shows that the highest concentrations of problem hard drug users per 1000 inhabitants are found in the three biggest cities (Amsterdam, Rotterdam and The Hague).

Table 2.9 Local and regional estimates of the number of problem hard drug users

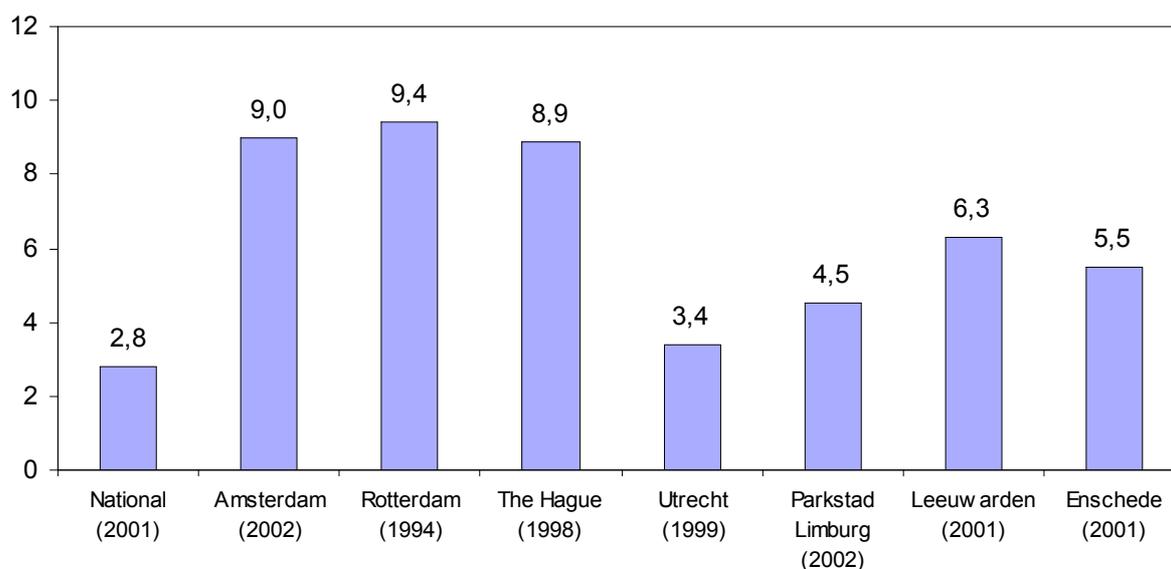
Site	Year	Method	Case definition*	Estimates (lowest – highest value)	Source
Amsterdam	2002	2-sample C-RC	Problem opiate users	4,778	GG&GD Amsterdam (pers. comm. M. Buster)
Rotterdam	1994	Truncated Poisson		3,500 – 4,000	(Smit et al. 1997)
Den Haag	1998	2-sample C-RC	Problem hard drug users	2,586 – 2,740	(Burger and Struben, 2001)
Groningen**	1993/ 2002	Treatment multiplier	Problem opiate users	1000	(Bieleman et al. 1995)
Utrecht (province)**	1999	Treatment multiplier (a.o.)	Problem hard drug users	1300	(De Graaf et al. 2000) (personal comm. Toet, J.)
Friesland*** (province)	2001	2-sample C-RC, treatment multiplier	Problem opiate users	1,007	(Biesma et al. 2003)
Enschede	2001	2-sample C-RC	Problem hard drug users	570	(Bieleman et al. 2003a)
Stedendriehoek**	2000	2-sample C-RC, treatment multiplier	Problem opiate users	750 (561-948)	(Bieleman et al. 2002a)
Zuid- Limburg **	1999/ 2002	1-sample C-RC (Chao's estim.) (a.o.)	Problem hard drug users	1,100	(Coumans and Knibbe 2002; Hoebe et al. 2001)

** 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, Zutphen.

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

Figure 2.2: Estimated number of problem users of hard drugs per 1000 inhabitants in the Netherlands

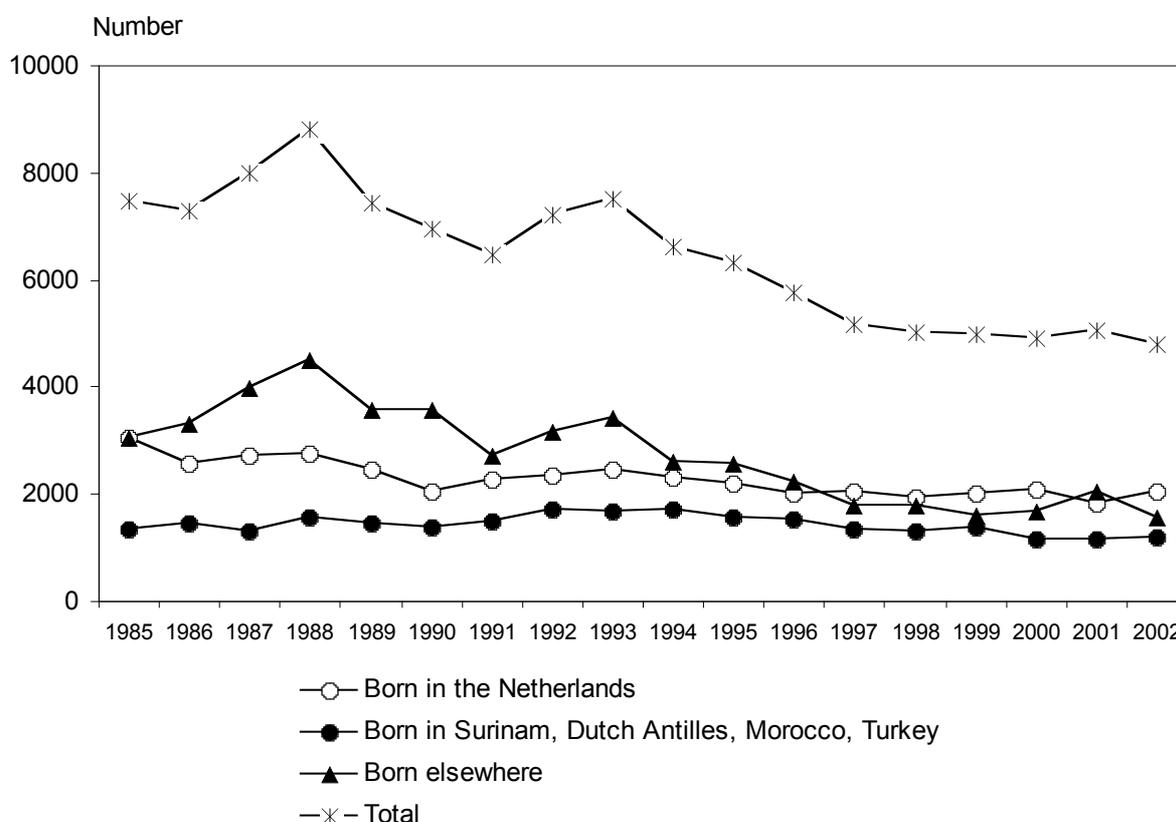
Average values of lowest and highest estimates. Sources and definitions: see table 2.8 and 2.9.

Stable number of opiate addicts in Amsterdam

Estimates for Amsterdam are available since 1984. Figure 2.3 shows the estimated number of (problem) opiate addicts broken down by country of origin. Between 1988 and 1997, a declining trend is evident among foreign drug users (Italians and Germans), whereas the number of Dutch and ethnic-Dutch users remained relatively stable throughout the years.

- In 2002, the number of opiate addicts was estimated at 4,700, including 42% persons who were born in the Netherlands, 25% persons in Surinam, the Netherlands Antilles, Morocco and Turkey and 33% elsewhere. The first and second subgroup generally has a residence permit and maximal access to (methadone) treatment.
- Buster (pers. comm.) also applied a 2-sample capture-recapture method using a 3-months observation period which minimised violation of the closed-population assumption. Using this window, the estimate amounted to a total of 4,104 problem users.

Figure 2.3: 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.

Characteristics of problem hard drug users

- Most problem hard drug users are poly-substance users consuming heroin, methadone, cocaine, cannabis, alcohol and psychoactive medicines. The large majority of opiate users also regularly consume cocaine (base-coke) and for a minority basecoke is the main drug (without opiates).
 - In a field study in Parkstad Limburg, 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 and Knibbe 2002).
- In a similar study in Rotterdam among problem hard drug users, the percentage of heroin and cocaine users remained stable between 1998 and 2003. In the last survey, 80% used heroin and 71% did so (almost) daily. A higher percentage (96%) used cocaine, and 78% did so (almost) daily (Van der Poel et al. 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.
 - 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. Injecting drug use steadily decreased over the past years.
 - In 1998, 28% of the problem hard drug user in Rotterdam (sometimes) injected heroin or cocaine, while only 16% reported to do so in 2003 (Van der Poel et al. 2003).
 - For Parkstad Limburg these percentages are 39% (1999) and 31% (respectively). According to field workers and observational data, this trend might be explained by several factors. These include the fear of aids and hepatitis, increasing health messages on the dangers of injecting, low prices of heroin on the Dutch market and associated easy availability, which makes injecting (a relatively more efficient route of administration than smoking) less important.
 - According to a field study in 2001, injecting is not very popular either among young hard drug users in Amsterdam (18-30 years) (Witteveen and Van Ameijden 2003). Reported motives for not starting injecting were: fear of needles, barrier/no way to return, fear of not finding veins and fear of getting abscesses or other diseases. Reported motives to start injecting were: increased kick, curiosity, more economical (efficient), not dangerous, more healthy.
 - Most addicts are male (about 80%). There is an aging trend. The municipal health service in Amsterdam recorded an increase in average age of opiate users in methadone treatment from 32 years in 1989 to 43 years in 2002 (Buster, pers. com.). Recent field studies in Rotterdam and Parkstad-Limburg among problem hard drug users revealed a current average age of 39 years.
 - According to cultural background (country of origin), 72% of the problem hard drug users in Parkstad Limburg (2002) were Dutch (72%) against 47% in Rotterdam (2003). In Rotterdam the second most common group was Surinamese (23%) (Coumans and Knibbe 2002; Van der Poel et al. 2003).

Risk behaviour: unsafe injecting behaviour and unsafe sex

As has been stated in the previous paragraph, most drug users in the Netherlands do not inject. Table 2.10 gives the proportion of injecting drug users who borrowed (used) needles for their fellows. The data are part of the HIV surveillance among local samples of injecting drug users. In all cities where repeated assessments have been carried out, borrowing needles has decreased (Amsterdam, Rotterdam, South-Limburg, Arnhem).

Table 2.10: Needle-sharing among injecting drug users (%)*

Location	Survey year	Borrowed needles**
Amsterdam	1993	18%
	1996	18%
	1998	12%
Rotterdam	1994	18%
	1997	11%
	2002/2003	8%
South-Limburg	1994	19%
	1996	17%
	1999	10%
Utrecht	1996	17%
Arnhem	1991–1992	42%
	1995–1996	39%
	1997	16%
Groningen	1997–1998	11%
Brabant***	1999	17%
The Hague	2000	21%
Twente****	2000	30%

* An injecting drug user is defined as a person who has intravenously injected a drug once or more times in his or her life. ** The percentage of IDUs who borrowed needles from somebody else on one or more occasion(s) in the last six months. *** Eindhoven, Helmond, Den Bosch. **** Almelo, Hengelo, Enschede. Source: RIVM ((Van de Laar et al. 2000; De Boer et al. 2003)).

Unsafe sexual behaviour, i.e. not using condoms especially with stable 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 varying partners and clients was 43% and 32%, respectively (De Boer et al. 2003). Given the fairly high (8%) HIV prevalence and high sexual risk behaviour users, there is a theoretical risk of transmission of HIV among the population of injecting drug users and to the general population.

3. Health consequences

3.1 Drug treatment demand

We will describe trends in treatment demand at the following institutes:

- Specialised outpatient drug treatment centres, based on the National Alcohol and Drugs Information System (LADIS). Due to data delivery problems and the implementation of a new client monitoring system (Cliëntvolgsysteem – CVS) of the Netherlands Probation Foundation, the data for 2001 have been corrected lately. This causes minor differences between figures presented before in the Annual report of the National Drug Monitor and figures presented in the current report.
- General hospitals, based on the National Information System on Hospital Care and Day Nursing (LMR).

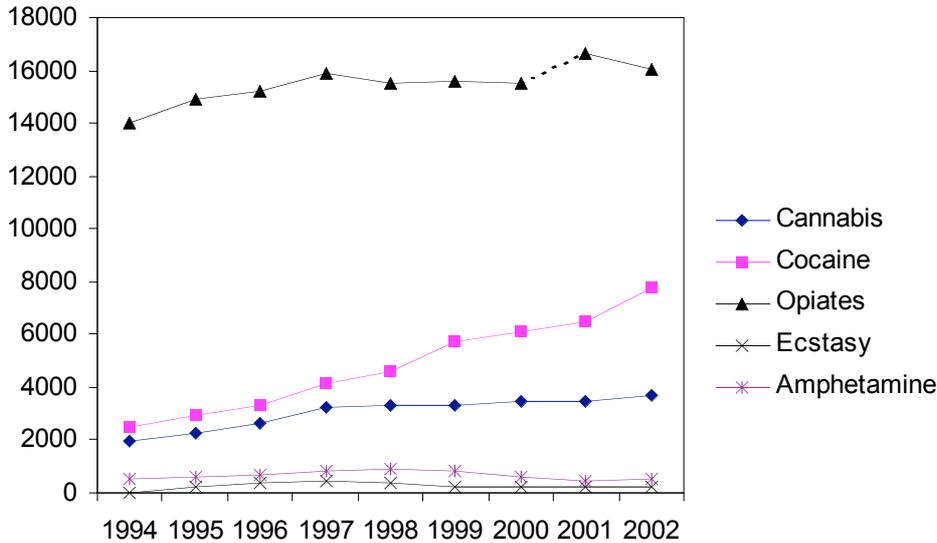
The former register of specialised inpatient drug treatment centres (PiGGz) has been replaced by the new information management system of the Dutch Mental Health Service ZORG-IS. However, this system is not yet fully operational, so we can not present data in this report.

Outpatient treatment demand

In contrast to previous years, we will only report data on unique clients (not on registrations, which may include double counting of persons). Correction for double counting is possible since 1994. Therefore trends will be described as of this year.

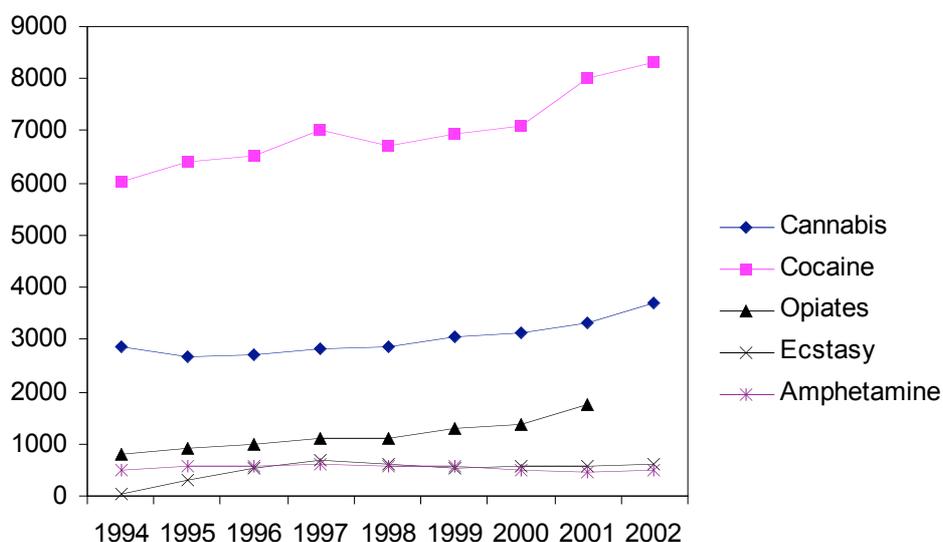
- The total number of clients at outpatient drug treatment services rose from 49,156 in 1994 to 55,783 in 2002. The percentage of clients with a primary drug problem increased from 40% to 52%. Part of the increase is related to the expansion of the registration, as more (low-threshold) drug services joined LADIS. The increase from 2000 to 2001 (especially related to opiates) is explained to a large extent by the additional data supply of the Municipal Health Service of Amsterdam.
- LADIS records not only the substance that is the primary problem (according to the opinion of client) but also substances that are reported to be secondary problems (see figures 3.1 and 3.2; *mind the differences in scaling*).

Figure 3.1: Number of clients at outpatient drug treatment services with a primary drug problem in 2002



The increase in opiates between 2000 and 2001 is largely due to the data supply of the Municipal Health Service of Amsterdam, joining LADIS in 2001. Source: LADIS, IVZ.

Figure 3.2: Number of clients at outpatient drug treatment services with a secondary drug problem



The number of clients with a secondary opiate problem is not yet available. Source: LADIS, IVZ.

- Most drug clients report to have a primary problem related to opiate use, followed at some distance by cocaine and cannabis. Users of ecstasy and amphetamine rarely apply for treatment. Two in three primary cocaine users has a basecoke problem; one in three had a problem related to cocaine sniffing.
- The number of primary as well as secondary cocaine clients showed the most remarkable increase since the early nineties. The number of ecstasy clients has decreased between 1997 and 1999 and seemed to stabilise since then. The number of amphetamine clients decreased between 1998 and 2001, and shows a minor increase in 2002. The number of primary cannabis clients is still rising since 1997 although at a much lower rate compared to the period 1994-1997. The number of secondary cannabis clients shows an overall slowly growing trend.

Table 3.1: Drug clients at outpatient drug treatment services in 2002

	cannabis	Cocaine	Opiates	ecstasy	amphet.
Total number of persons with primary drug problem*	3701	7774	16043	250	543
• Percentage of all drug clients	13%	27%	55%	1%	2%
• Mean age (years)	28	32	39	25	28
• Percentage males	83%	82%	80%	74%	77%
• Percentage of first treatments**	38%	25%	6%	39%	33%
Total number of persons with secondary drug problem*	3697	8319	3890	622	481

* Includes both persons who applied for treatment in 2001 and persons who were also registered in adjacent previous years. Whether a given substance is reported as a primary or secondary problem depends upon the perception of the client. ** Concerns persons who have never been registered in LADIS because of a drug problem before (since 1994). Source: LADIS, IVZ.

- Clients with a primary opiate problem are on average the oldest clients, followed by primary cocaine clients (table 3.1) . Ecstasy clients are on average the youngest clients.
- About eight in ten drug clients is male.
- The number of clients applying for help at an outpatient centre for the first time is highest among cannabis and ecstasy clients. Most opiate clients have sought help before.

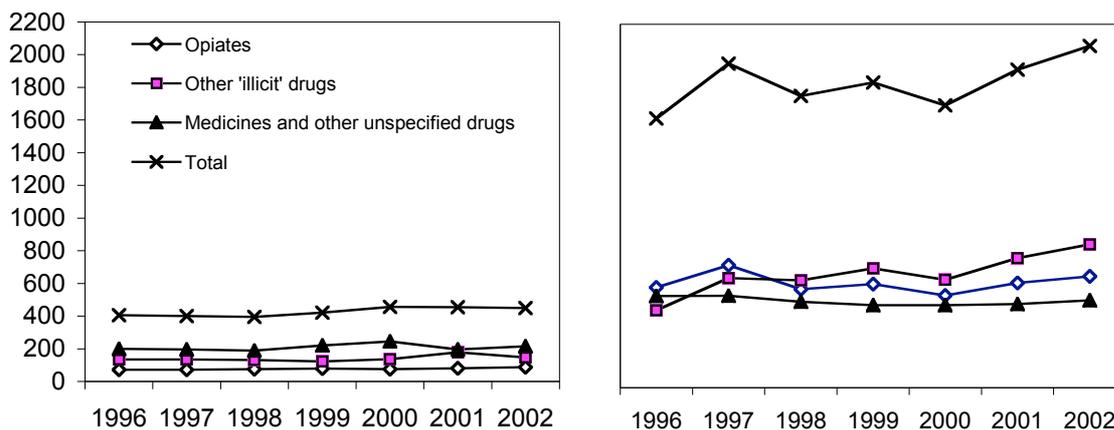
In 2001, LADIS recorded 12,538 methadone clients. About 95% of these clients joined a methadone maintenance programme and the others took methadone on a reduction basis for detoxification. The minimum number of methadone clients is estimated at about 13,500. This figure also includes clients of general practitioners and specialists, obtained from the Health Care Insurance Board (CVZ) (Van Alem and Mol 2001).

General hospital admissions

Figure 3.3 shows the number of admissions to general hospitals because of drug dependence or abuse. It is clear that these disorders are counted much more often as a secondary diagnosis than a primary diagnosis. However, the overall number of admissions related to illicit drugs is still relatively low and stable over the years.

- In 2002 the LMR recorded a total of 1.5 million hospital admissions. Drug dependence and drug abuse were counted 449 times as a primary diagnosis and 2,069 times as a secondary diagnosis. Twenty-one percent of the drug-related cases counted as primary diagnoses were due to the use of psychoactive medicines (e.g. benzodiazepines).

Figure 3.3: Number of admissions to general hospitals because of a primary (left) or secondary (right) diagnosis drug dependence or nondependent drug abuse (ICD-9 codes 304 and 305.2-9).



Source: LMR, Prismant.

Table 3.2 gives some more details about admissions related to the main drugs of abuse.

- The number of admissions related to cocaine dependence and abuse as secondary diagnoses increased from 246 in 1996 to 562 in 2002. The number of cannabis problems was lower and more variable over time, although a slight increase in secondary

diagnoses was observed (from 160 in 1994 to 235 in 2002). Trends in admissions related to opiates were fairly stable.

- For cases in which opiates, cocaine and cannabis abuse or dependence were the secondary diagnoses, it has been examined which were the accompanying main reasons (primary diagnoses) for admission (2002 data).
 - For opiates the most important main reasons were respiratory diseases (23%), injuries due to accidents (12%) and gastro-intestinal diseases (11%).
 - For cocaine the most important main reasons were injuries due to accidents (16%), respiratory diseases (16%), drug poisoning (12%; especially benzodiazepines) and cardiovascular diseases (8%).
 - For cannabis the most important main reasons were a psychotic disorder (36%), alcohol and drug abuse and dependence (19%, especially alcohol) and injuries due to accidents (11%).
- The average number of days hospitalised was highest for cannabis problems and lowest for amphetamine problems (as primary diagnoses).

Table 3.2: Clinical admissions to general hospitals related to drug abuse and drug dependence in 2002

	Cannabis	cocaine	opiates	amphetamines
Number of primary diagnoses	33	84	88	29
• Average number of days	8,1	6,7	6,7	2,7
Number of secondary diagnoses	235	562	674	70
Number of persons*	257	550	626	89
• Average age (years)	28 years	34 years	39 years	28
• Percentage male	80%	73%	68%	70%

* 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.

3.2 Drug-related mortality

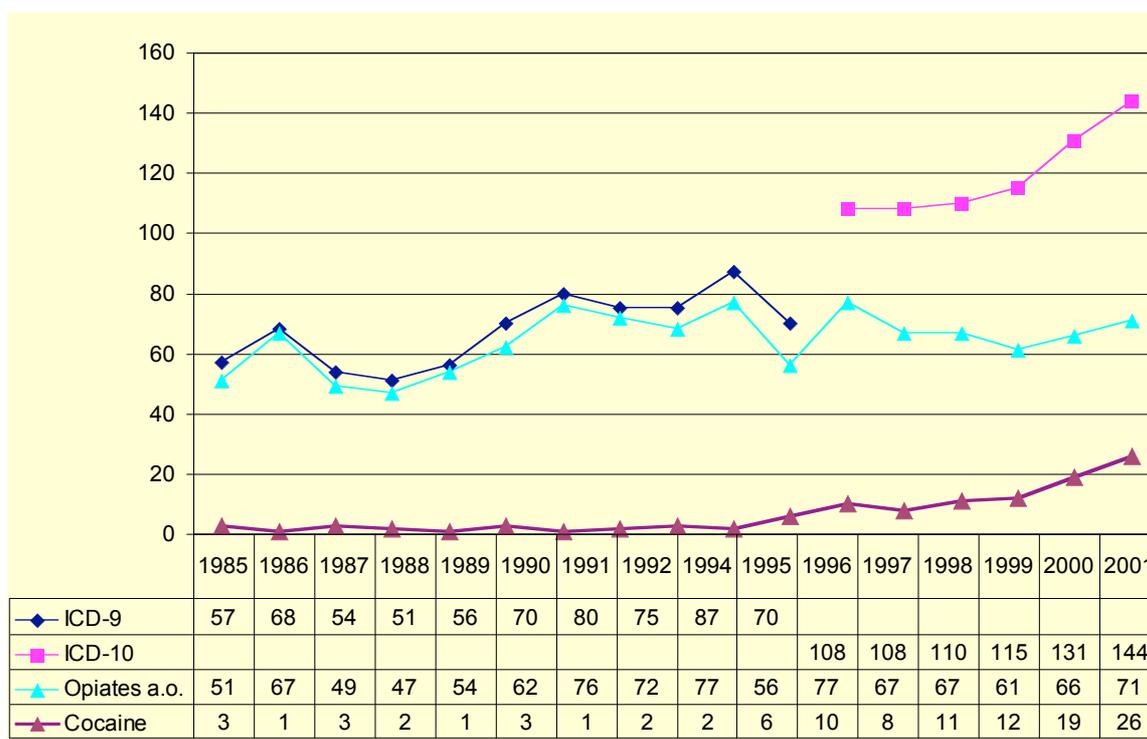
3.2.1 General Mortality Register

The main source providing the official Dutch statistics on drug-related deaths is the General Mortality Register (GMR) or Causes of Death Statistics held by Statistics Netherlands – CBS – (Bonte et al., 1985) Causes of death are classified according to the International Classification of Diseases, Injuries and Causes of Death (ICD). The 9th edition was used from 1979 through 1995, until the implementation of the 10th edition in 1996. This register has national coverage, includes only residents of the Netherlands and provides data especially on acute mortality due to drug use. Cases refer mainly to direct or acute deaths (drug ‘overdose’). The GMR data do not offer 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).

Figure 3.4 shows the number of cases recorded from 1985 through 2001 according to the EMCDDA selections of ICD-codes.

- Opiate intoxications were the most common causes of death recorded among Dutch residents and the casualty rate has fluctuated slightly between 1985 and 1995.
- The total number of (registered) drug-related deaths slightly increased since 1996. This can be attributed to various factors, such as the change from ICD-9 to ICD-10 in 1996, a slight rise in acute cocaine deaths, and increases in 'accidental poisoning by other and unspecified dysleptics' and 'poisoning by other and unspecified narcotics'. It is not clear which drugs were involved in these latter two categories of deaths.
- In 2001, most cases were counted in age group 30-44 years (see figure 3.5); 78% were male.
- In spite of the recent increase, the number of drug-related deaths in the Netherlands is still relatively low, which might be explained by protective factors, such as the nationwide availability of methadone maintenance treatment and the low frequency of intravenous 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 and Wieman 2001).

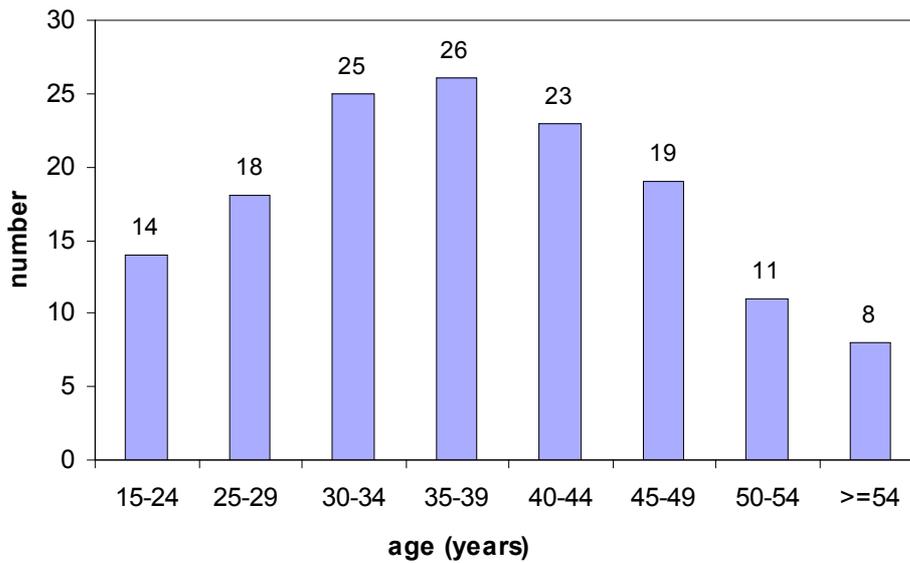
Figure 3.4: Number of acute drug-related deaths in the Netherlands according to the EMCDDA selection of ICD-9 codes (1985-1995) and ICD-10 codes (1996-1998).



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 (combined with N965.0, N968.5, N969.6 or N969.7).

ICD-10: F11-F12, F14-F16, F19; and X42, X41, X62, X61, Y12, Y11 (combined with T40.0-9, T43.6). Source: National Causes of Death Statistics, Statistics Netherlands.

Figure 3.5: Age distribution of cases of drug-related deaths in 2001

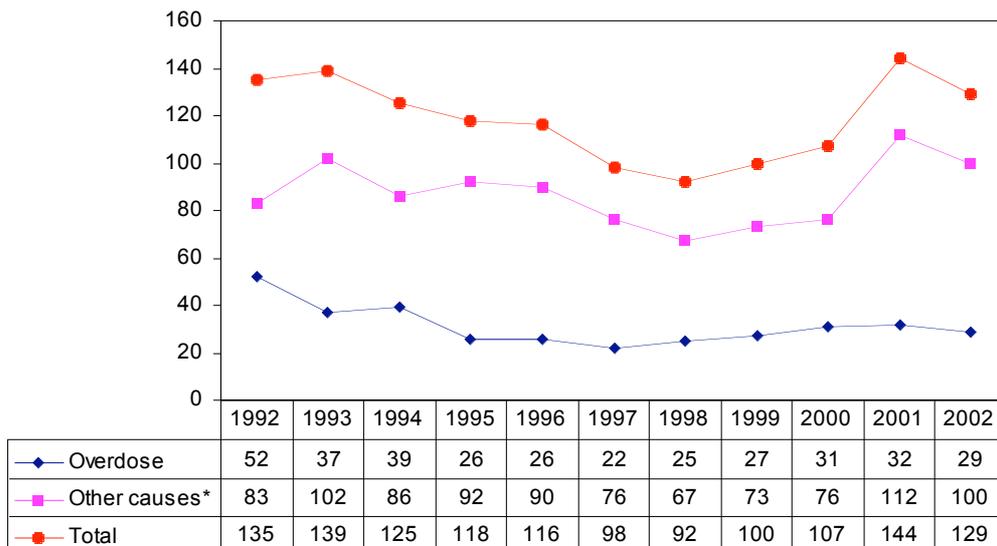


Source: National Causes of Death Statistics, Statistics Netherlands.

Registration of drug-related deaths in Amsterdam

Each year the Municipal Health Service of 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 overdoses from Amsterdam coroners also concern foreigners not included in the Population Registry. This is in contrast to the GMR, which only includes Dutch residents.

Figure 3.6: Number of deaths among drug users in Amsterdam



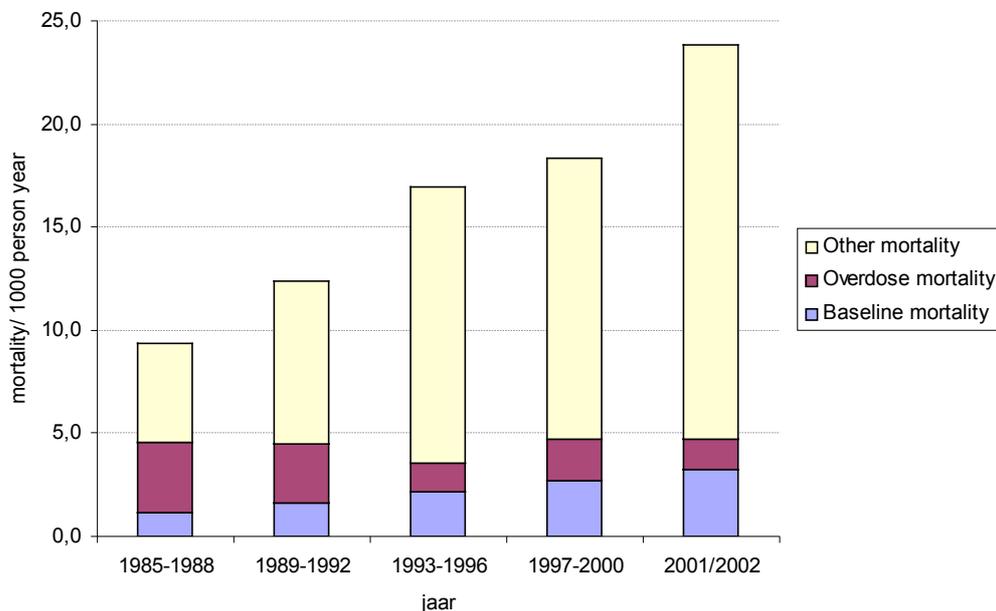
* Including, among others, infectious diseases, violent deaths, accidents and suicide. Until 2000, cases are counted among all drug users who have (ever) been registered in the Central Methadone Register of the Municipal Health Service Amsterdam. Since 2000 only cases are counted among drug users who have been registered in the past 5 years in the CMR. Source: Municipal Health Service Amsterdam (personal communication M. Buster; T. Sluijs).

Characteristics of the cases recorded in 2002 are as follows:

- Ten persons who died from overdose were resident of Amsterdam and 11 persons (including 6 US citizens) were foreign drug tourists.
- Almost three in four (72%) *overdose* deaths were caused by heroin and/or methadone, often injected and consumed in combination with other substances (cocaine, alcohol, medicines). Eight cases were related to other drugs: 4x cocaine and alcohol (and medicines); 1x cocaine and GHB, 1x GHB and alcohol, 1x MDMA and alcohol, 1x MDMA and lost of water, 1 time cannabis and poppers and 1 time other drugs.
- Dutch overdose victims were on average older than their fellows who were born abroad (41 against 37 years).
- The contribution of other pathology, such as respiratory, liver and cardiac diseases in establishing overdose deaths is increasing with the ageing of the population of drug users.
- Most drug users died from other causes of death than overdose and their number is slightly increasing in the past years (figure 3.6). Twenty persons were HIV infected (but this infection was not necessarily the cause of death).

The Municipal Health Service also investigates mortality rates among methadone clients (data provided by Marcel Buster). 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 3.7: Mortality per 1,000 person years among Amsterdam methadone clients



Baseline mortality indicates the mortality among the Amsterdam population of the same age. Source: Municipal Health Service Amsterdam (M. Buster).

- Figure 3.7 shows that the overall mortality has increased since the eighties. Across these years, the mortality among methadone clients remained about 7 to 8 times higher than the mortality among the Amsterdam population in the same age group.

- In 2002, 25 persons died per 1000 methadone clients per year. The increase might be partly related to the ageing of the population. The overdose mortality remained low, which might be related to the low rate of injection. The main increase is seen in the category 'other causes of death', including aids, livercirrhosis, cancer, respiratory diseases, endocarditis, suicide and violence.

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

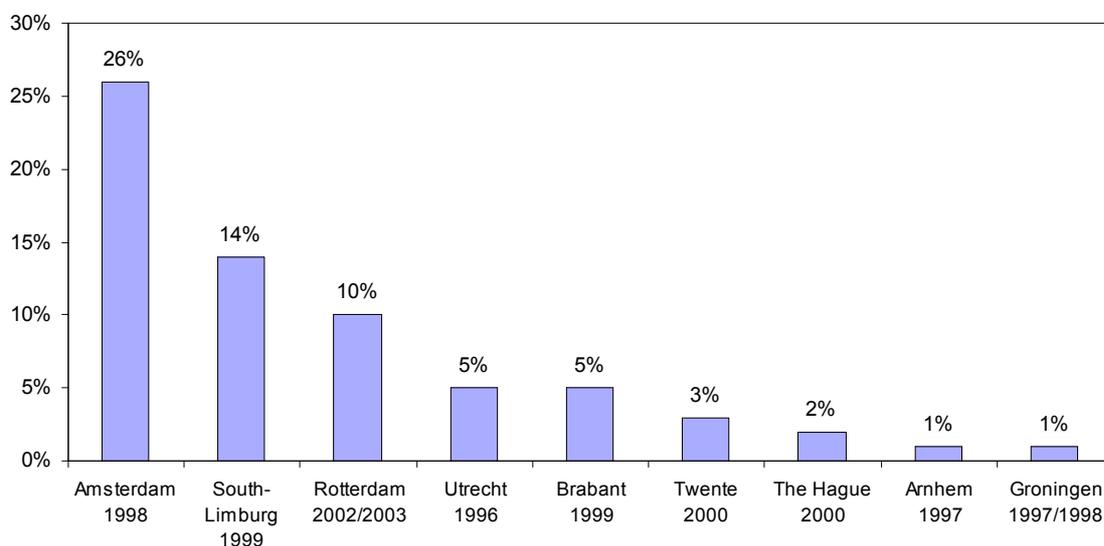
The number of persons in the Netherlands who died after using ecstasy or other synthetic drugs is not known since there is no central registration of these cases. Moreover, full toxicology (and autopsy) is required to identify the precise cause of death. However, this is no routine procedure in the Netherlands.

3.3 Drug-related infectious diseases

HIV prevalence

The Dutch HIV surveillance of the National Institute of Public Health and the Environment (RIVM) uses repeated surveys among drug users in four fixed (Amsterdam, Rotterdam, Heerlen/Maastricht en Arnhem) and two optional cities. Since 2001, one fixed city is studied per year. 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.

Figure 3.8: HIV-prevalence among injecting drug users*



* Injecting 1 time or more in lifetime and using hard drugs on at least one day per week in the past 6 months. The figure includes only the most recent prevalence rates. South-Limburg: Heerlen: 11% (1994), 16% (1999), 22% (1999) and Maastricht: 8% (1994) 3% (1996), 5% (1999).

Figure 3.8 shows that the pattern of HIV prevalence among (ever) drug injectors across the Netherlands is quite heterogeneous.

- HIV prevalence is highest among drug injectors in Amsterdam, followed by Heerlen and Rotterdam.
- In the 2002/2003 survey in Rotterdam, the most important determinants of HIV prevalence were: 'no stable address', 'ever had hepatitis', and 'low age of onset of injecting' (De Boer et al. 2003).
- In most cities where repeated surveys have been held, HIV prevalence remained fairly stable, with the exception of Heerlen. In this city, the percentage of HIV infected injecting drug users increased from 11% in 1994 to 22% in 1999. This increase could not be explained by changes in demographic characteristics of the population (e.g. increase in drug users born in the Netherlands) or increases in risk behaviour. The fairly high prevalence might be related to the fact that injecting drug users in Heerlen were slightly more 'marginalised' (e.g. homeless, criminal career), had a longer history of injecting and more often used cocaine and speedballs than their fellow users in Maastricht (Beuker et al. 2002). There is no information on the development in HIV prevalence in Heerlen since 1999.

Hepatitis B and C

There is no new information on the prevalence of hepatitis B and C among injecting drug users. The seroprevalence of HCV and HBV in local studies between 1994 and 2000 is high, varying between 35% and 67% (HBV) and between 47% and 79% (HBC). Rates are higher in Rotterdam and Heerlen/Maastricht compared to the Hague.

Aids

Aids cases meeting WHO criteria were until 1999 registered in the national Information System on AIDS Statistics, maintained by the Health Care Inspectorate (IGZ). Since 2000 the National Institute of Public Health and the Environment (Infectious Diseases Surveillance Information System, ISIS) reports on these data. Since 2002 the Aids registration has been replaced by a Hiv/Aids registration, which is not yet fully operational.

- The number total cases peaked in 1992 (583) and dropped since then (234 cases in 2002).
- The number of cases among injecting drug users peaked in 1995 (79) and dropped to 3 cases in 2002. Between 1985 and 2001, the proportion injecting drug users with aids was 11 on average.

TBC

There is a three-fold increase over the past ten years in the number of recorded tuberculosis (TBC) cases among problem hard drug users and the homeless in Rotterdam (De Vries et al. 2003). Due to signals of an increase in 2001, a screening program was started in May 2002. In this year, a total of 26 hard drug addicts and 6 homeless with hard drug problems were diagnosed with TBC (note that the number of hard drug addicts is about 3,500 and the number of homeless without hard drug problems is estimated at 1,000). Nine cases were detected through the screening program. The incidence of TBC in 2002 was very high: 743 per 100,000 for problem hard drug users.

In Amsterdam each year some 14-15 cases of TBC are recorded among methadone clients. TBC prevalence is lower compared to Rotterdam (244 per 100,000 for methadone clients in 2001; De Vries et al. 2003) and there are no indications of an increasing trend (Jaarverslag 2001, GG&GD Amsterdam). This difference is probably explained by the existence of

systematic screening programmes among risk groups (such as hard drug users) implemented many years ago in Amsterdam, while such programmes were terminated in 1996 in Rotterdam for financial reasons (De Vries et al. 2003).

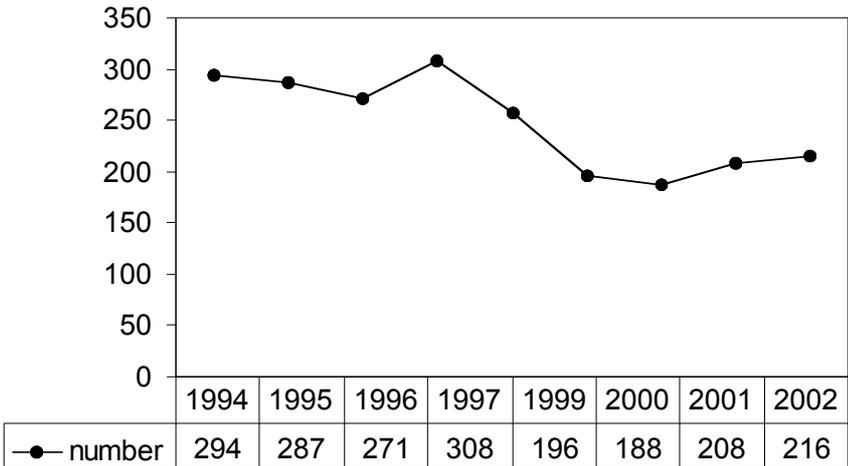
Still, data from a cohort study of HIV infection among Amsterdam drug users revealed a 13-fold increase in TBC risk among HIV positive drug users compared to HIV negative drug users (Keizer et al. 2000).

3.4 Other drug-related morbidity

Drug-related non-fatal emergencies in Amsterdam

The Municipal Health Service of Amsterdam keeps a record of nonfatal emergencies brought to their attention (Central Post Ambulance Transportation). 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.

Figure 3.9: Number of non-fatal emergencies due to hard drug overdose recorded in Amsterdam*



* Includes heroin and cocaine. Source: Municipal Health Service Amsterdam.

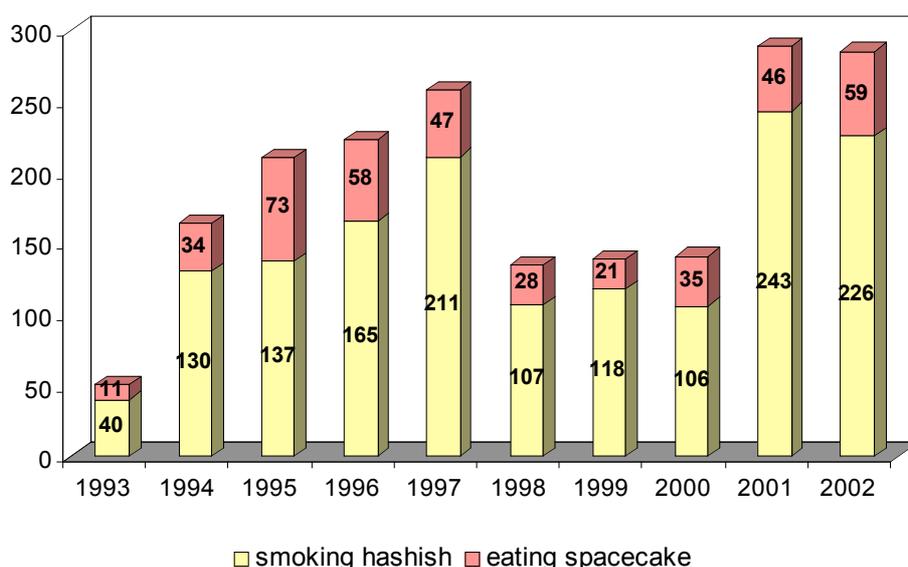
- In 2002, 216 requests for emergency assistance were recorded, which could be related to the use of opiates and cocaine.
- This is less than 1% of all emergencies in Amsterdam. In most cases (72%) transportation to a hospital was required.
- In 2002, 485 emergencies were reported related to ‘recreational drugs’ (amphetamines, cannabis, GHB, LSD, mushrooms, ecstasy), requiring transportation in about half of the cases, although differing per type of drug (table 3.3).
- This number is about the same as in 2001 (495) but more than in 1999 (229) and 2000 (288).
- About half were due to the consumption of cannabis, which may sometimes lead to panic attacks and other untoward reactions, particularly in inexperienced users (figure 3.10).

Table 3.3: Number of non-fatal emergencies* due to recreational drugs recorded by the Municipal Health Service of Amsterdam in 2002

	Amphet.	Cannabis	Mushr.	Ecstasy	LSD	GHB	Other
Transported	4	114	30	23	0	61	25
Not transported	1	171	20	16	1	6	13
<i>Total</i>	5	285	50	39	1	67	38
%	1%	59%	10%	8%	0%	14%	8%

* Transported to a hospital or treated at the spot. Source: Municipal Health Service Amsterdam.

Figure 3.10: Number of non-fatal emergencies in Amsterdam related to the use of cannabis



Source: Municipal Health Service Amsterdam.

The number of cannabis emergencies fluctuates between 1993 and 2002. The highest numbers have been recorded in 2001 and 2002.

- In 2002, about half (52%) of the cases concerned tourists from abroad (especially from the United Kingdom).
- The reason for the relatively high number of cannabis emergencies in the past two years is not known.

Emergencies at (house)parties

Educare, an organisation that offers first-aid at large-scale (house) parties throughout the country, records health-related emergencies among visitors of parties. (Pijlman et al. 2003)

- Between 1996-2002, Educare recorded a total number of 15,000 visitors of parties.
- The proportion of persons seeking assistance at a first-aid post due to health problems decreased from 1,2% in 1996 to 0,8% in 2002.
- The reported use of ecstasy and amphetamine among these cases dropped in this period from 47% and 17% respectively in 1996 to 20% and 2%, respectively, in 2002 (Pijlman et al. 2003). In contrast, the proportion of alcohol related health problems increased from 4% to 17%.

- Moreover, there was a decrease in the percentage of health related problems due to a combination of ecstasy and speed from some 25% in 1996 to some 4% in 2002, while the percentage of health problems related to the combination of ecstasy and alcohol increased in this period from less than 5% to almost 25%.
- Note that the causal role of these substances in causing the health problems has not been verified by toxicological or medical examinations.

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 (Van Gorcum et al. 2003). Note, however, that these data are just indicative and do not reliably represent the actual number of acute intoxications.

In 2002, the NVIC was consulted 32,000 times.

- The total number of information requests on drugs has increased from 656 in 2000 to 904 in 2001.
- The number of requests on *ecstasy and amphetamine* remained fairly stable (206 requests in 2000 and 223 in 2002).
- The number of requests on *cocaine* intoxications increased from some 150 in 2000 to 217 in 2002, which might be related to the growing popularity of cocaine.
- The number of requests on *GHB* increased most from 2000 to 2001 (91 and 172, respectively); there was a slight further increase in 2002 (194).
- The number of requests on *cannabis* increased from 71 in 2000 to 141 in 2002. This increase might be due to the increasing THC content of cannabis ((Van Gorcum et al. 2003).

4. Social and legal correlates and consequences

4.1 Social problems

Social exclusion

That drug users may be at a social disadvantage can be tentatively inferred from treatment statistics, such as those of LADIS. In 2002, 28% has a paid job (depending on main drug) - the majority receiving some form of social benefit – and the same proportion is an immigrant (table 4.1). These percentages deviate from those of society at large but that in itself is not proof of excessive social problems. Table 4.1 also illustrates differences between drug users, with the highest rates of allochthonous clients and lowest rates of employment recorded among opiate users.

Table 4.1: Social characteristics of primary drug clients at outpatient centres in 2002

	Cannabis	Opiates	Cocaine	Amphetamines	All drugs
Allochtonous*	21%	33%	29%	5%	29%
Secondary or higher education	72%	63%	68%	68%	66%
Employed	41%	20%	35%	44%	28%
Cohabitation	57%	45%	51%	63%	49%

* Definition: cultural background according to the perception of the client. Source: IVZ, LADIS.

People from ethnic minorities are apparently overrepresented among problematic drug users², although precise figures are lacking. They also seem to be less well reached by the addiction care and treatment services than autochthonous drug clients and have a relative high treatment dropout rate: 60% for Dutch clients against 70% for Moroccan, 67% for Surinamese and 65% for Antillean clients (Vrieling et al. 2000).

A recent field study in Rotterdam gives some information on social problems among problem hard drug users (Van der Poel et al. 2003).

- In 2003, most male problem hard drug users received a social benefit (77%) although many of them also generated income from other sources, e.g. drug dealing/trafficking (45%), legal work (33%), property crime (33%), selling newspapers at street (25%). For female problem hard drug users, a social benefit was also the main source of income (68%), closely followed by prostitution (66%), drug dealing/trafficking (42%), property crime (25%) and selling newspapers at street (21%).
- Most respondents had some form of debt with an average value of 6,000 euro.
- Four in ten problem hard drug was homeless³ and the remainder had a more or less stable housing situation (alone or shared with others).

Drug-related nuisance

A key of the Dutch drugs policy is to reduce drug-related nuisance, such as disturbances of public order, property crime, aggression and violence, deviant behaviour, pollution and neglect of drug-premises, feelings of a lack of safety and threats to health, fear and irritation related to violence. A small proportion of hard drug addicts is responsible for the majority of the nuisance problems, particularly in the cities. However, other (socially marginalised) groups may also contribute, such as alcohol addicts, homeless people and psychiatric patients are also responsible for nuisance problems.

In 1996 the Ministry of the Interior has established a system to monitor developments in drug-related nuisance experienced by residents in different neighborhoods in 13 municipalities across the country (Snippe et al. 2000).

- In *general*, drug-related nuisance (street prostitution, pollution and annexation of public areas, nuisance by dealing locations coffee shops) perceived by residents has decreased since 1996. This trend was most obvious between 1998 and 2000. Between 2000 and 2002, nuisance by street prostitution and annexation of public spaces further

² Substance use itself is not necessarily higher, or may actually be lower among ethnic minorities.

³ Not having stable individual housing (private, with family, residential, including hospitals or prisons).

reduced, while there was a slight increase in nuisance by pollution of public spaces and coffeeshops (Snippe et al. 2002).

- The initial general improvement might be related to the national policy introduced in 1993 to fight drug-related nuisance. The (prior) interdepartmental Steering Committee for the Reduction of Nuisance (SVO), awarded 26 municipalities a financial grant to develop projects to fight drug-related nuisance, including all municipalities in this monitor.
- The consequences of drug-related nuisance also improved (especially between 1998 and 2000), i.e. the number of victims and crimes involving property or violence as well as the feelings of insecurity declined while the perceived quality of the neighbourhood increased.

Coffee shops

From 1995 onwards, Dutch policy has focused on controlling the 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 4.2).

- This trend was most pronounced between 1997 and 1999 (28%), especially in the smaller towns and Rotterdam.
- Since 1999, the overall reduction in number of coffee shops was smaller: 4% from 1999 to 2000, 1% from 2000 to 2001 and 3% from 2001 to 2002.
- In 2002, 51% of all coffee shops were located in the big cities with more than 200 thousand inhabitants.
- The large majority (79%) of all Dutch municipalities does not have any coffee shop at all.

Table 4.2: Number of coffee shops in the Netherlands

Number of inhabitants	1997	1999	2000	2001	2002
< 20,000	±50	14	13	11	12
20-50,000	±170	84	81	86	79
50-100,000	±120	±115	109	112	106
100-200,000	211	190	168	167	174
>200,000:					
- Amsterdam	340	288	283	280	270
- Rotterdam	180	65	63	61	62
- The Hague	87	70	62	55	46
- Utrecht	21	20	18	17	18
- Eindhoven**			16	16	15
Total	1179	913	813	805	782

* 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. Source: Bureau Intraval (Bieleman et al. 2003b).

- Besides coffee shops, (other) illegal sales outlets do exist in a number of these municipalities, such as private homes, courier services and so forth. The Ministry of Justice has commissioned a pilot study to investigate these illegal outlets. Results of this pilot study are not yet available.

4.2 Drug offences and other drug-related crime

In 2003, the Ministry of Justice has contributed for the second time to the National Drug Monitor (NDM), which was established in 1999 by the Minister of Health. A preparatory study has shown that the availability and quality of data on drug-related criminality is not yet sufficient and will require extensive efforts of police and justice in the years to come (Snippe et al. 2000; Meijer et al. 2003). Still, taking these limitations into account, various statistics can be presented on *solved* drug-related crime, i.e. drug (law) crimes and crimes among drug users. Most data in this paragraph are drawn from the chapter of the ministry of Justice (drafted by the Research and Documentation Centre of the Ministry of Justice, WODC) in the Annual Report of the NDM (Van Laar et al. 2003).

Offences against the Opium Act

The best indicator of the (registered) number of arrests for offences against the Opium Act is the number of Opium Act cases recorded by the Public Prosecution Service (Public Prosecutions Department Data, the OMDATA-database. Note that more than one case may be recorded per suspect and that cases recorded by the Public Prosecution Service 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). The data are shown in table 4.3.

- In 2002, 58% of the Opium Act cases were related to hard drugs, 37% to soft drugs and 5% to both hard and soft drugs.
- About half of the recent increase in number of Opium Act cases (table 4.3) is related to the 'arrondissement Haarlem' (including Schiphol Airport), probably representing cases against drug couriers, including body packer (bolletjesslikkers).

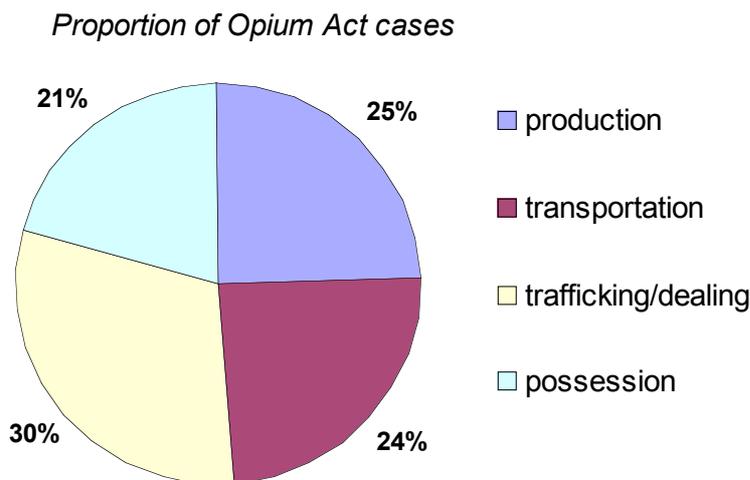
Table 4.3 Number of Opium Act cases recorded by the Public Prosecutions Service

	1997	1998	1999	2000	2001	2002
Hard drugs	7 232	6 553	6 407	6 397	7 672	9 246
Soft drugs	4 800	4 832	4 380	4 324	5 059	5 832
Hard- en soft drugs	1 371	1 231	888	792	827	770
Total	13 403	12 616	11 675	11 513	13 558	15 848
Hard drugs	54%	52%	55%	56%	57%	58%
Soft drugs	36%	38%	38%	38%	37%	37%
Hard- en soft drugs	10%	10%	8%	7%	6%	5%
Total	100%	100%	100%	100%	100%	100%

Number of Opium Act cases per year and percentages of the total number. Source: OMDATA, WODC.

Registration data on the type of Opium Act offences (e.g. production, trafficking) are not available. Some information can be drawn from the Criminal Justice Monitor (SRM), which is based on a detailed analysis of a random selection of files of criminal cases settled by the Public Prosecutor and at court. The data were obtained from cases recorded in 1993, 1995 and 1999. The criminal files of the selected cases are analysed with a tool specifically developed for this purpose. The following figures can only be read as percentages and do not give information on absolute numbers.

Figure 4.1: Nature of criminal cases involving offences against the Opium Act (1999)



Source: SRM/WODC (Meijer et al. 2002).

- As shown in figure 4.1, one quarter of the cases is related to drug production. This is significantly more compared to 1993 and 1995 (3% and 7%, respectively).
- A similar proportion is related to the transportation of drugs. This last category includes importation (12%), exportation (10%) and transportation within the Netherlands (2%).
- Drug trafficking and dealing is on top of the list, although the proportion of cases is lower than in 1995 (46%).
- Possession of drugs (whether or not for personal use) takes the last position. The proportion of cases related to this offence has decreased since 1993 (45%).

Organised crime

Opium act offences play an important role in investigations into more serious forms of organised crime (Source: KLPD/DNRI, group Research & Analysis).

- In 2002, hard and/or soft drug offences played a role in 63% of the more severe cases of organised crime (117 out of 185).
- Fifty-two percent of the cases involved hard drugs; over half of the hard drug cases (53%) concerned synthetic drugs; 44% cocaine and 28% heroin.

Convictions and court sentences for drug offences

A special database of the Ministry of Justice (Justice Documentation Research Database, the OBJD-database) gives information on the number of Opium Act cases irrevocably disposed and the sanctions imposed in Opium Act cases.

In 2002, the Public Prosecution Service irrevocably disposed a total of 13,206 Opium Act cases.

- This is an increase of 17% compared to 2001. Most cases were taken to court (67%).
- The number of cases disposed by court increased with 15% from 8,837 in 2001 to 10,202 in 2002. Most cases concerned hard drug offences (64%), followed by soft drug offences (30%) and hard and soft drug offences (6%).

Table 4.4 gives a breakdown by sentence imposed to Opium Act cases following a verdict of guilty.

- The number of unconditional prison sentences and community service orders increased from 2001 to 2002 (with 32% and 25%, respectively). The increase in prison sentences is probably related to the increased arrests of drug couriers (body packers) at Schiphol Airport.
- The mean duration of unconditional prison sentences increased from 356 days in 2001 to 382 days in 2002.

Table 4.4: Number of irrevocable sentences in Opium Act cases imposed by the courts

	1997	1998	1999	2000	2001	2002
Community service order*	1 441	1 853	2 129	2 138	2382	2985
Unconditional prison sentence	3 522	3 676	3 578	3 341	3 523	4641
Financial transaction	1 101	1 157	911	838	1 568	1884
Fixed penalty	1 287	1 476	1 634	1 350	1 393	1552
Dispossession	90	91	74	73	46	58

* If the court imposes a sentence, it has the option of imposing a community service order. This applies to relatively minor offences punishable by a maximum non-suspended prison sentence of six months. A task sentence can consist of work, treatment, education or a combination of these.

Recidivist offenders

Opium Act offenders have a slightly higher rate of recidivism, i.e. higher risk to get into contact with the criminal justice system again, compared with other offenders.

- Within one year after their first Opium Act offence, 25% of the Opium Act offenders came into renewed conflict with the law (any offence) against 22% for the total population of criminal offenders.
- Within 3 years, these percentages were 43% and 39%, respectively.

There are also major differences in the severity of recidivism between Opium Act Offenders and the total population of offenders.

- In 1997, 40% of the cases of Opium Act offenders occurring in the period following the initial case was disposed by an unsuspended custodial sentence or an order. For the total population, this percentage is much lower (13%).
- The duration of the custodial sentence or order was also longer for Opium Act Offenders (22% lasted more than 6 months against 15% for all offenders together).

Prison data

- According to table 4.5, the total number of detention years imposed also increased from 11,226 in 2001 to 13,249 in 2002.
- Moreover, the proportion of imposed detention years related Opium Act cases grew from 25% to 31%, which is mainly due to hard drug offences (alone or combined with soft drug offences). Almost two-thirds of the total increase in number of detention years can be attributed to the increase in detention years imposed for Opium Act offences.
- This increase is probably also related to the increased attention paid to drug couriers at Schiphol Airport (Moolenaar et al. 2002).
- According to the registration system of the penitentiary institutions (TULP), the total number of detainees increased from 8,789 in 1999 to 11,960 in 2002. The percentage of Opium Act offenders also increased from 21% to 27%.

Table 4.5 Number of custodial sentences and number of detention years since 1997

	1997	1998	1999	2000	2001	2002
Number of custodial sentences	24 165	25 014	27 408	27 499	29 703	33 618
Opium Act total	13%	13%	12%	11%	12%	15%
- hard drugs ^{II}	12%	12%	10%	10%	12%	14%
- soft drugs ^{II}	1%	1%	1%	1%	0%	0%
Other criminal cases	87%	87%	88%	89%	88%	85%
Detention years ^{III}	10 182	9 625	10 001	9 763	11 226	13 249
Opium Act total	25%	26%	24%	23%	25%	31%
- hard drugs ^{II}	24%	25%	23%	23%	25%	30%
- soft drugs ^{II}	1%	1%	1%	0%	0%	0%
Other criminal cases	75%	74%	76%	77%	75%	69%

I. Excluding youth detention. II. The distinction between hard and soft drug offences is made according to the most severe offence. Therefore a case involving a soft drug offence in addition to a hard drug offence is classified as "hard drugs" III. Detention years are calculated by adding the unsuspended part of the unsuspended sentences, excluding early releases. Source: WODC.

Crimes by drug users

The qualification 'drug user' or 'drug addict' is often not very accurate in police statistics. However, some sources give a rough indication of the group of criminal 'drug users'. Due to a possible underreporting, the data are most meaningful in describing a profile of the 'criminal drug user' rather than drawing conclusions about absolute figures.

The registration system of the police (Police Records Systems, the HKS-database) includes a classification 'drug user'. This notification is made when the suspect may constitute a danger to others due to his or her drug use.

- In 2002, the HKS recorded 9,579 suspected (hard) drug users.
- Ten percent were females.
- The average age is increasing from 33 years in 1997 to 36 years in 2002.
- Most drug users were suspected of a property crime without violence (see table 4.6).
- Almost half of them lived in one of the four big cities (45%).
- Some 44% committed his or her first crime before the age of 18.
- The rate of recidivism is high: three-quarters of the registered drug users had 11 or more records of an offence in his or her total criminal career and slightly less than a quarter had more than 50 records.

Table 4.6: Offences among suspects registered by the police as a drug user in 2002

<i>Type of offence</i>	<i>Percentage*</i>
Sexual violence	1%
Other violence (against other persons)	21%
Property crimes with violence	12%
Property crimes without violence	62%
Vandalism, disturbance public order	22%
Traffic offence	10%
Opium Act offences	18%
Other	9%

* Total number of cases is 9,579. Source: HKS.

According to the Criminal Justice Monitor (SRM, see 4.2), the estimated proportion of hard drug addicts in criminal cases recorded by the Public Prosecution Service and court was 12% (1999). Soft drug addicts accounted for 3% of the cases and in 5% of the cases other substances (e.g. alcohol, medicines, gambling) were involved.

4.3 Social and economic costs of drug consumption

There are no recent estimates of the social and economic costs of drug use. Recent estimates of public expenditures on drug policy amount to a total of € 2,186 million (Rigter 2003). Enforcement makes up 75% of this budget. See chapter 1 for more details.

5 Drug markets

5.1 Availability and supply

The Netherlands takes up an important position as a market and, more importantly, as a transit country of heroin and cocaine. The supply of heroin to Europe, including the Netherlands, is mainly determined by the production of opium in Afghanistan, which has increased substantially in the past ten years. The Netherlands is located at the endpoint of the main route of transportation, the Balkan route. From here, most of the heroin is further distributed to other countries, especially Belgium, France and the United Kingdom.

There is an increasing supply of cocaine from Latin-America to Europe. Main point of entry is Spain, followed by the Netherlands. The Caribbean region (especially the former colonies of the Netherlands) plays a main role in the transition of cocaine. The routes of transportation have been changed greatly in the past years: the role of maritime trade has decreased while transportation by air (Schiphol) has increased, especially by means of drug couriers. Intensified investigation efforts (scanners for containers) at Rotterdam harbour and Schiphol (cargo transportation) might have contributed to this change (see also chapter 1). Cocaine transported to the Netherlands is further distributed to Scandinavia, United Kingdom and Ireland.

The Netherlands is an important production country of ecstasy and amphetamine. In 2002, some 43 production locations (including laboratories) for synthetic drugs have been dismantled in the Netherlands. In the past years, such locations have also been detected in neighbouring countries (Belgium, Germany, UK) as well. Ecstasy produced in the Netherlands is distributed mainly to other EU countries, the United States and Canada. Amphetamine is distributed especially to the UK, Ireland and Scandinavia. According to the USD, there are indications that traffickers seem to avoid direct transportation from the Netherlands but first bring the drugs to other Western European countries (such as Belgium and Germany) before shipping or storing them in a container (KTZ/USD. 2003). This is because of the increased attention of foreign investigation services to Dutch persons or goods. Synthetic drugs intended for the United Kingdom and Ireland are often combined with cannabis, heroin and cocaine ('poly drug transportation'). Synthetic drugs intended for Eastern Europe, Spain and Scandinavia are also often transported by car, bus or train.

The Netherlands is an important transit and production country of cannabis. It is estimated that the about three-quarter of the cannabis consumed in the Netherlands is home grown (Nederwiet).

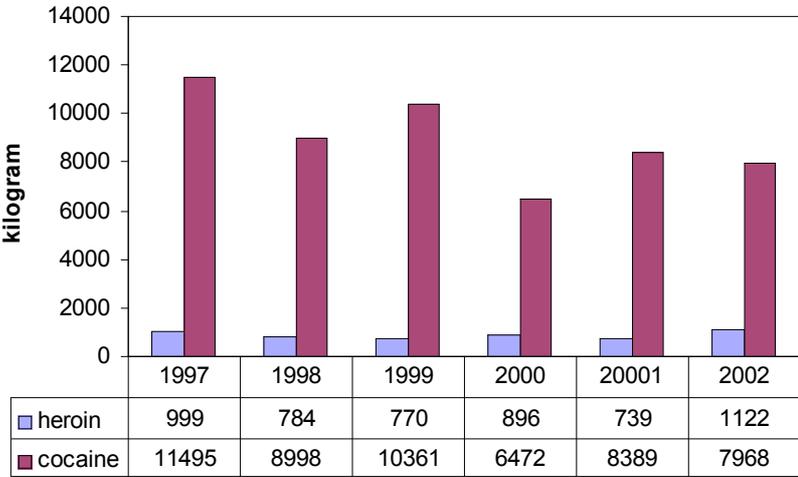
Korf (2003) estimated various parameters of the Dutch cannabis market. Based on prevalence studies corrected for underreporting of high use groups and estimates of the amounts of cannabis used, he arrived at some 26,117 kg consumed nationally per year (range 24,892 - 26,117 kg). Consumption or exportation by coffee shop tourists was estimated at 9,445 kg (range 6,641 – 13,282 kg). Supply of cannabis through coffeeshops was estimated at 37,940 kg per year (Bovenkerk and Hogewind. 2003).

5.2 Drug seizures

There is no central registration of drug seizures in the Netherlands. Each year, the National Police Agency (KLPD) collects data from 26 regional police departments, Customs, the Royal Netherlands Military Constabulary (Dutch police with military status) and the Synthetic Drugs Unit (Bijkerk & Van der Werf, 2003). Underreporting and a lack of uniform registration hamper the quality of the registration. Moreover, trends may be influenced by other many factors, such as investigation efforts and methods, consumption pattern, occasional big seizures and so on. Therefore the data should be interpreted with caution.

- Quantities of seized drugs fluctuated strong over the years. In 2002, the total number of seizures was 18,823, which is more than in 2001 (14, 535). The number of recorded investigations was 4,344, about the same as in 2001 (4,701).

Figure 5.1: Amount (kg) of heroin and cocaine seized in the Netherlands



Source: KLPD (Bijkerk et al. 2003)

- Between 1997 and 2002, the amount of cocaine seized greatly exceeded that of heroin. There was no clear trend in the amounts of heroin and cocaine seized, although a slight increase in heroin seizures was noted in 2002. The Royal Military Constabulary and Customs confiscated 94% (2002) of the total amount of cocaine.

The Synthetic Drugs Unit (USD) provides some more detailed information on seizures of synthetic drugs (KTZ/USD 2003); see table 5.1).

- In 2002, the amount of MDMA tablets seized abroad was slightly lower than in 2001. For tablets seized in the Netherlands an increase was seen.

- Most of the MDMA powder seized in the Netherlands was found at production locations. Assuming an average MDMA content of 76 mg, the powder (and additional 3,2 kg MDMA paste) would be sufficient for the production of over 10 million tablets.
- In 2002, the total number of MDMA seizures in the Netherlands was 205.
- From 2001 to 2002 the amount of amphetamine seized abroad (connected to the Netherlands) slightly increased, while a decrease was seen in the amount seized in the Netherlands.
- According to the FIOD-EC, 318 litre and 9255 kg PMK and 1228 litre BMK were seized in 2002. These precursors would be sufficient for producing some 127 million MDMA pills and 626 kg amphetamine powder, respectively.
- The number of detected production locations of synthetic drugs increased from 35 in 2001 to 43 in 2002. This increase, together with the increase in seized ecstasy pills (in NL), is probably related to the intensified investigation efforts as regards the production and trafficking of ecstasy (see chapter 1.3).

Table 5.1: Amount of confiscated ecstasy tablets, attributed to the Netherlands

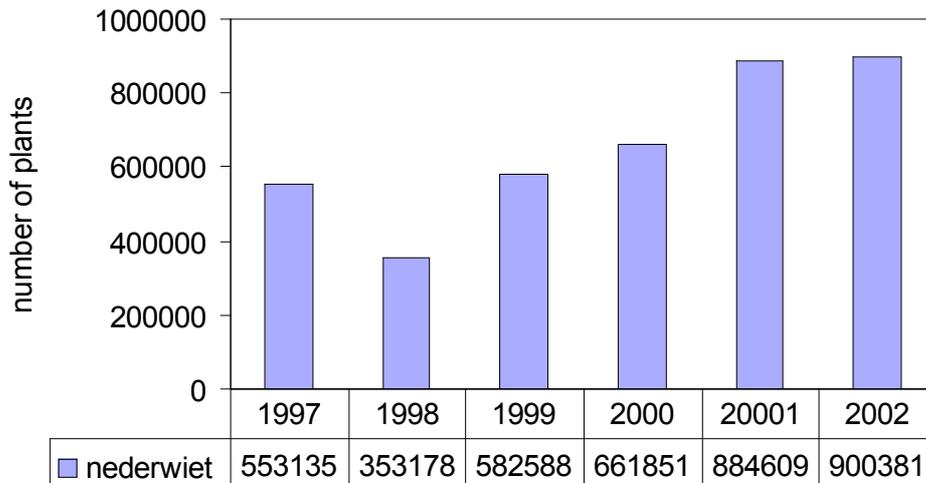
	1999	2000	2001	2002
Amphetamines				
Seized abroad*	990 kg	1,251 kg	530 tablets, 731 kg	868 tablets, 1655 kg
Seized in the Netherlands	853 kg	293 kg	514 kg	418 kg
	450,000 tablets		20,592 tablets	100 tablets
Ecstasy				
Seized abroad*	9.7 million tablets	16.2 million tablets	22.1 million tablets	18,6 million tablets
Seized in the Netherlands	3.6 million tablets	5.5 million tablets	3.6 million tablets	6,0 million tablets
	405 kg	632 kg	113 kg	789 kg

Number of tablets and kilograms of powder. Only registered if seizure exceeded 500 tablets and/or 500 gram of powder. * Related to the Netherlands. Source: USD.

The amount of cannabis (kg, excluding plants) seized varies over the years. In general, a decrease is seen since the mid-nineties. In 1995 over 330,000 kg was seized against some 30,000 to 40,000 kg in the past years.

- In contrast, the number of nederwiet plants tends to increase, at least since 1998 (see figure 5.2).
- The number of reported dismantled cannabis farms also increased, from 342 in 1996 to 2012 in 2001, followed by a slight drop to 1574 in 2002.
- Korf (2003) attempted to estimate the total number of cannabis farms in the Netherlands. He combined estimates of the national consumption and consumption due to coffeeshop tourism with those based on the supply of cannabis through coffeeshops (see also under 'availability and supply') and arrived at a minimum estimate of some 5,000 cannabis nursery gardens. Note that this estimate is based on some (hypothetical) assumptions (e.g., the average number of nederwiet plants per farm), which have a major impact on the final number.

Figure 5.2: Number of nederwietplants confiscated in the Netherlands



Source: KLPD (Bijkerk and Van der Werf 2003)

5.3 Price/purity

The Drugs Information Monitoring System (DIMS) provides detailed information on the quality of 'ecstasy' and other pills on the Dutch market and since 1999 also on the THC content and prices of cannabis samples sold in coffee shops (THC-monitor). Information on prices of synthetic drugs is obtained from the Synthetic Drugs Unit (USD). Note that methods to collect these data are different.

Content of pills

The DIMS registration has changed. Instead of categorising pills according to the main component, the data in table 5.2 shows the percentage of pills containing any of the listed substances, regardless of their concentration. Since one pill may contain more than one substance, the percentages do not necessarily sum to 100.

- The total number of (ecstasy)pills tested by DIMS has decreased over the past years. This trend is assumed to be related to the discontinuation of the Safe House Campaign (important participant in DIMS), the increased confidence of users in the fairly stable content of pills and the reduction of the numbers of pills users are allowed to provide for testing (Pijlman et al. 2003).
- The total percentage of pills tested by DIMS containing MDMA or an MDMA-like substance has increased over the years, while the percentage of pills (also) containing other (psychoactive) substances has decreased (see table 5.2)⁴.
- The concentration of MDMA in pills always showed a wide variation, but there is a trend towards an increasing proportion of high dose (>105 mg) MDMA pills: 7% in 1998 against 18% in 2001 and 14% in 2002.
- The percentage of tablets in the category 'other active substances' has decreased.

⁴ These percentages concern all pills delivered to DIMS, whether sold as ecstasy or not. Yet, in 2002 similar percentages were found for pills that were *sold as ecstasy* (and analysed in the laboratory), i.e. 94% contained MDMA.

- The percentage of pills containing (meth)amphetamine strongly decreased between 1997 and 2001 and shows a slight increase again in 2002.

Table 5.3: Percentage of pills tested by DIMS, since 1997

	1997	1998	1999	2000	2001	2002
MDMA	34	72	86	89	92	93
MDEA	7	1	1	1	1	1
MDA	<1	1	2	2	1	2
Combination ¹	4	1	1	3	2	1
Amphetamines ²	32	11	6	2	2	5
Other psychoactive substances ³	9	6	2	1	1	not known
Other/unknown ⁴	11	7	2	3	2	not known
<i>Total number tested</i>	7009	6268	4751	3961	3549	3144

Source: DIMS. ¹ Combination of MDA, MDEA and/or MDMA. ² Amphetamine and/or methamphetamine, either or not in combination with other substances. ³ See table 5.3. ⁴ Caffeine, yohimbine, ephedrine, medicines (paracetamol, quinine, etc).

Many 'other' psychoactive substances that entered the market since 1997, seem to have largely disappeared from the market (e.g. atropine, DOB, MBDB, PMA). In 2002, DIMS detected 2 pills containing 2-CB, 5 with 4-MTA and 2 with ketamine. Samples containing GHB are still seen by DIMS (102 in 2001 and 69 in 2002).

Cannabis: THC content

Between 1999 and 2001, samples of different cannabis products (about 1 gram each) were procured from coffee shops and chemically analysed (Niesink et al. 2002).

- Dutch marijuana and hashish contain more THC on average than foreign varieties (table 5.3).
- Of the analysed cannabis products the THC content was found to be highest in Dutch hashish (nederwiet). However, this concerns a small number of samples of a type of hashish that is not very popular and not often sold in coffee shops.
- Since 1999, the percentage of THC in nederwiet has increased significantly. For Nederhashish and foreign hashish, the THC content was only higher in 2001/2002 compared to the previous two years.

Table 5.3: Average THC percentage in cannabis products

	1999/2000	2000/2001	2001/2002
Dutch marihuana (nederwiet)	9%	11%	15%
Foreign marihuana	5%	5%	7%
Dutch hashish (nederhashish)	21%	16%	33%
Foreign hashish	11%	12%	18%

Source: THC-monitor, Trimbos Institute (Niesink et al. 2002).

- Improved and highly professional cultivation methods probably explain the increasing trend in THC content in home grown cannabis products. Moreover, the percentage of indoor grown nederwiet (which usually contain more THC than outdoor grown cannabis) was slightly higher in the last study compared to the previous studies (83% against 77% and 65%).

- Relatively high and increasing THC concentrations have also been found in special kinds of American cannabis ('sinsemilla').
- The health consequences of cannabis with higher percentages of THC are not known.

Prices

Cannabis

According to the THC-monitor (see above), the average street price of a gram of nederwiet as well as foreign marijuana remained stable over the years (table 5.4). The price of nederhashish was lower in the second compared to the first and second study, while foreign hashish was more expensive in the third study compared to the former two studies.

Table 5.4: Average price per gram of cannabis products (in €)

	1999/2000	2000/2001	2001/2002
Dutch marijuana (nederwiet)	5.83	5.86	6.28
Foreign marijuana	3.87	3.80	4.16
Dutch hashish (nederhashish)	8.85	7.11	10.29
Foreign hashish	6.29	6.36	7.14

Source: THC-monitor, Trimbos Institute (Niesink et al. 2002).

Ecstasy

According to the USD, the street price of an MDMA-tablet has decreased and is among the lowest in Europe. In March 2003, the price of one tablet was 1 to 4,5 euro (KTZ/USD 2003).

6 Trends per drug

This paragraph summarises the main trends related to the consumption of cannabis, ecstasy/amphetamine, cocaine, opiates, and other drugs.

Cannabis

Cannabis consumption in the general population showed a slight increase between 1997 and 2001, especially among adolescents in the age group 20-24. Outpatient treatment demand related to cannabis use slightly increased in the past years but at a lower rate compared to the increase in the mid-nineties. General hospital admissions related to cannabis abuse or dependence as a primary diagnosis are still rare but the number of admissions in which these disorders were recorded as secondary diagnoses show an overall rising trend. THC content of Dutch marijuana has increased since 1999/2000, which may be partly related to the improved and highly professional cultivation methods. Whether the increased treatment demand or hospital admissions reflect the increased use and/or increased THC content is not known. Finally, the sharp decline in the number of coffee shops between 1997 and 2000 did level off since 2001. The number of seized nederwiet plants has increased since 1998.

Ecstasy, amphetamines and other synthetic drugs

The percentage of users of ecstasy and amphetamine in the general population is low but increased between 1997 and 2001. Ecstasy is still popular among visitors of (dance)parties,

discotheques and clubs, although there are signs that experienced users have moderated their use. Outpatient treatment demand for ecstasy and amphetamine is relatively low, but the decrease seen since 1997 seems to have stopped in 2002. The number of recorded ecstasy and amphetamine related health incidents at large-scale parties has decreased in the past years. The composition of 'ecstasy' pills is fairly stable in the past years, although there is a slight increase in the proportion of pills with a high dose MDMA (>105 mg). According to data from Amsterdam, GHB has gained popularity in special (local) networks of users but the initial rapid spread seems to have halted. The number of GHB related requests for emergency assistance in Amsterdam did not change from 2001 to 2002 (over sixty cases each year).

Opiates

The number of problem opiate users remained fairly stable. The latest (preliminary) estimates arrived at a figure of 28,000 – 33,000 problem opiates users. The average age of opiate users is further increasing. The number of opiate overdoses recorded at the national level is stable since the early nineties, but the total number of recorded acute drug-related deaths has increased in the past years. This may be due to an increase in cocaine deaths, a change in registration procedures, and an increase in deaths due to unspecified or multiple substances (which may or may not include opiates). Overall mortality among methadone clients in Amsterdam has increased since the eighties. This is probably explained by the advancing age of this population. The proportion of hard drug users injecting drugs intravenously continues to decrease. This may be explained by a variety of (personal, health, market) factors. Sexual risk behaviour remains worrisome. TBC infections have increased in Rotterdam but remained low in Amsterdam, which probably reflects differences in screening policy. HIV prevalence appears to be stable in Rotterdam.

Cocaine

The percentage of current cocaine users in the general population remained low but doubled between 1997 and 2001. Cocaine sniffing is still fairly popular among young people visiting raves and clubs. Today, cocaine basecoke is more popular than heroin among hard drug addicts. In Rotterdam, a growing proportion of young problem hard drug start their hard drug career with the consumption of cocaine (instead of opiates). Outpatient treatment demand for cocaine keeps rising. The number of admissions to general hospitals related to cocaine dependence and abuse (primary diagnoses) remains low but the the number of cases related to cocaine problems as secondary diagnoses steadily increased. The number of recorded acute cocaine deaths is low but slightly increased in the past years. Crimes among hard drug users and drug law offences draw heavily on the resources of the police and the criminal justice system. The recent increases in number of Opium Act cases recorded by the Public Prosecution Service and the number of unconditional prison sentences can be explained in part by the increased arrests of drug couriers at Schiphol Airport.

Multiple use

Users of illicit drugs often have experience with multiple substances, e.g. almost all current consumers of cannabis also smoke tobacco, the large majority also uses alcohol and they have more experience with using other “hard” drugs than the general population. Combined use of various substances is rule rather than exception, especially among (young) people with an outgoing lifestyle (visiting bars, discotheques and parties) and among regular hard drug users. Cocaine and ecstasy are often combined with alcohol. The percentage of health problems at large-scale parties caused by the combined use of ecstasy and alcohol is increasing.

7 Discussion

7.1 Consistency between indicators

The slowly but steady rising trend in cannabis treatment demand might reflect increased prevalence rates or perhaps the increased THC content. These trends are not consistent with the decreasing number of coffeeshops, which appears to have little impact on cannabis use.

Cocaine (sniffing) has increased in the general population (most clearly in age group 20-24 years) and is fairly popular among visitors of party- or clubgoers. Moreover, the consumption of basecoke/crack among problem users of hard drugs has sharply increased in the past decade. These trends are consistent with the growing number of cocaine users seeking assistance at drug treatment services and admissions to general hospitals, the increase in information requests on cocaine intoxications and low but increasing number of registered acute cocaine deaths. The increased efforts to combat cocaine trafficking do not seem to have influenced drug use rates so far.

The decreasing number of registered ecstasy related health incidents at parties is consistent with the trend to moderate use by experienced users and the fairly stable composition of ecstasy pills in the past years. However, information is too limited to draw conclusions about such causal factors.

7.2 Methodological limitations and data quality

We have a fairly good picture on the *prevalence of drug use* in the general population and among pupils. Systematic information on special (risk) groups is less well available.

Prevalence estimates have largely focused on opiate users who also consumed other substances (especially) basecoke. An estimate of the total number of problem coke users (smokers and sniffers) is not yet available and we have virtually no insight into the number of problem ecstasy and amphetamine users. The number of problem cannabis users (operationalised as cannabis dependence) needs to be updated.

Data on inpatient drug treatment demand are lacking. Hopefully, the new system (ZORGIS) will be operational in 2004.

Data from the General Mortality Register (supplied by Statistics Netherlands) meet the basic requirements of the EMCDDA protocol as far as the extraction of data concerns. There

are, however, indications that these data underestimate the true number of drug-related deaths. Deaths due to synthetic drugs are hard to trace on the basis of the GMR.

HIV prevalence data are available from repeated serosurveys among street samples of drug users at different locations in the Netherlands. However, the frequency is fairly low, which makes it difficult to determine trends in different locations. For example, it is not clear whether there is a further spread in infection rate in Heerlen since 1999. Moreover, there is no systematic data collection on the prevalence of hepatitis C (and B) among drug users, which is the main focus of the EMCDDA infectious diseases indicator.

Finally, the quality of some justice related statistics is questionable (e.g. drug seizures). The Research and Documentation Centre (WODC) and the Ministry of Justice have initiated actions to improve this situation.

PART 3

DEMAND REDUCTION INTERVENTIONS

8. Strategies in demand reduction at national level

8.1 Major strategies and activities

Though recently drug policy targets have been set, there is no explicit general national strategy for realising these targets. The targets of drug policy are prevention and reduction of risks of drug use for the individual, the direct environment and society (IOO, 2003); see also chapter 14). These targets should be further specified in order to enable a more specified strategy and evaluation. Demand and harm reduction have predominantly been viewed from a health perspective in Dutch drug policy during the past 25 years. Judicial action (prosecution and imprisonment) is mainly reserved for possession, trade and trafficking of hard drugs (National Report 2001, see also 1.2.3). The responsible Ministries are steering and are (directly and indirectly) funding most activities in addiction care (National Report 2002, chapter 14). For a list of intermediary organisations at national level and their tasks, see our National Report 2001.

8.2 Approaches and new developments

From the sixties on, addiction care predominantly consisted of social work and psychological interventions though pharmacological treatments were also available. During the past few years the emphasis on pharmacological treatments (drug treatment) is growing (Gezondheidsraad, 2002b). This shift might be part of a broader shift, focussing on promising results of neuroscientific and pharmacotherapeutic studies. However, the effectiveness of drug therapies (with and without psychological interventions) have yet to be determined in more detail (Van den Brink & Geerlings, 1999a; Van den Brink & Geerlings, 1999b; Schoemaker, 2002), in order to justify implementation in the Dutch context and to support a more evidence-based addiction care in our country.

The results of a five-year policy programme to improve the quality of addiction care and drug prevention (Resultaten Scoren or 'Getting Results') will be published in 2004 (see National Report 2002). We also mentioned policy initiatives for improving national monitoring and registration activities. A nation-wide registration system for outpatient and inpatient addiction care is in its experimental phase, National Monitors and Branche Reports were started (see chapter 14). These initiatives improve the dissemination of relevant information on the drug issue to our Parliament and other stakeholders (see National Reports 2001 and 2002). The Ministry of Justice participates in these reports with data on registered criminality, criminal prosecution, and alternative judicial measures against drug-related criminality as a substitution for imprisonment (Van Laar et al. 2002). Web site information (also in English) will increasingly replace the hard cover fact sheets from earlier years. Finally, an international action plan on cannabis research has been launched. This is a joint effort of Belgium, France, Germany, the Netherlands and Switzerland to address the most important research questions resulting from the international conference in Brussels in 2002. Because the literature on the consequences of cannabis abuse is still unclear, this plan sets targets and priorities and proposes a division in tasks among the participant countries. It also touches the recent research issue of the relationship between cannabis use and mental illness (Steering Committee, 2003).

Socio-cultural developments relevant to demand reduction

The historical background and context of attitudes and opinions on drug use have been described in our National Report 2001. It was concluded that these variables do not clearly explain our drug policy.

Developments in public opinion

In general, drug users are a public issue as far as they cause nuisance or criminal acts. Reports of the Social Cultural Plan Bureau that have been published during the past years do not explicitly cover this issue (www.scp.nl). And although the idealistic attitudes of the sixties towards drug use disappeared, restrictions by law of drug issues are still not done (Sociaal en Cultureel Planbureau, 2000). To date, stricter policies have not been implemented. It is still thought that repressive drug policy is counterproductive although public attitudes towards drugs and related issues have grown more negative. The opinions on mental health care and addiction care published in 2001 was in general neutral to positive (Nabitz et al. 2001).

Specific events during the reporting year

Client satisfaction about mental health care or addiction care, was the subject of a working conference in March 2003. An earlier constructed measurement instrument (2001) has been evaluated in 10 locations of organisations of mental health care and addiction care. The instrument showed to be adequate for the measurement of client satisfaction in a uniform and standardised way. In May 2002 this instrument was already used by 50 care locations. In the most recent version of this instrument, clients can exclusively answer the questions with yes or no (Kertzman et al. 2003). A special instrument for young people has also been published (GGZ Nederland 2002).

In May 2003 an international working conference in Rotterdam targeted improvements in offering possibilities for paid work for addicts. This conference was co-organised by workers active in Judicial Treatment of Addicts (*Strafrechtelijke Opvang Verslaafden*). Among the questions that were discussed were: What are success factors for effective support to get and keep a paid job? Are repeated assessments useful? What are the necessary skills for addiction workers in this field?

9. Prevention

Organisation and co-ordination within national structures

Drug prevention has not been organised nor co-ordinated at a national level. This is partly related to the Dutch funding system. Municipalities are paid by national assurances for drug prevention activities (see National Report 2002, 9, 9c, 14). School-based prevention is the core of prevention in the Dutch addiction care system, but other services like telephone help lines, drug information web sites and pill test services are also important. Good evaluation studies however, are still rare in the Netherlands. In most cases targets and interventions are not specified. Furthermore, prevention often consist of several interventions (packages) at the same time or sequentially (*ketenbenadering, interventiepakketten*). Combinations are assumed to be more effective, but are far more difficult to evaluate in a methodologically sound way (National Report 2002).

Two new reports were published on drug prevention in the Netherlands. The first report was based on an exploratory study of size, organisation and content of drug prevention in the Netherlands (Van der Zanden and Veenhuizen 2002). The questions asked

were: "How is it organised? What preventive activities take most of the available time? and What may be the best way to improve drug prevention?" Many of the organisations of addiction care are recently merged with other organisations. Fourteen of the 18 institutions responded. In less than 10% drug prevention is a staff section in the organisation. The tasks of the head of drug prevention sections are different but almost all are member of the management team. Seven percent of the drug prevention sections are less than 4 full-time equivalents, 27% 4-8, and 67% more than 8 full-time equivalents. One third of the budget is project-dependent, the other two third is on a regular basis. Compared with mental health prevention, drug prevention is better organised (cf. (Bohlmeijer et al. 2000)) but additional funding is required to support co-operation with other sectors, evaluation research and monitoring, and development of prevention policy. The existent differentiation of prevention themes was not criticised.

The second is a report giving an overview of addresses of Dutch prevention workers with their specific expert domains (Landelijke Steunfunctie Preventie 2003).

9.1 School programmes

Due to the budget cuts of the current government, a continuation of the nation wide programme The Healthy School and Drugs is cancelled for primary schools and continuation has been ascertained for secondary schools in 2004.

Specificities of policies

In the Netherlands, schools are required by law to provide students with information on health issues in general but not on drug issues specifically.

Models of school prevention

The most common type of school-based drug prevention (legal and illegal drugs) is the national programme *The Healthy School and Drugs*, directed at teachers and parents as intermediary target groups. This programme exists already for more than ten years (National Report 2001, 9.1.2). School staff and personnel are responsible for the activities for the Healthy School and Drugs and support is given by professionals from Municipal Health Services and organisations of addiction care. The Trimbos Institute is responsible for giving advice, consultation, training, education, and publishes and disseminates printed and audiovisual materials. The new (Dutch) website is www.dgsg.nl.

Prevention programmes available in the country and evaluation

There are 33 registered local applications of the Healthy School and Drugs. Some other short-term regional or local initiatives, for instance with police officers, have not been evaluated (see 15.3a). The Healthy School and Drugs has not been re-evaluated after the first evaluation of 1999 (National Report 2001).

Research projects

No new publications of studies on effectiveness of school-based drug prevention are available except one on polydrug use (see National report 2002, page 125; (Smit et al. 2002), which is important for prevention.

9.2 Youth programmes outside school

The bulk of drug use by young people in the Netherlands is situated in two scenes representing two different drug users: young participants in recreational settings and, to a far lesser extent, the problem youth (the down-and-outs in the streets). Programmes in both scenes are in most cases also meant for adult users. Family-based programmes are often directed to parents and children outside school (these issues overlap with 9.3 and 9.4). Examples of youth programmes outside school are public campaigns specifically directed at youngsters and adolescents, and the Drugs Info Line (the Dutch telephone information line and its web site).

Types and characteristics of interventions outside school

These interventions have already been described in more detail (National Report 2001, 2002)

Statistics and evaluation results

Educare ('partner in care and education') and the Drugs Information and Monitoring System (DIMS) published a book on drugs and safety in recreational settings (Pijlman et al. 2003); see also chapter 3.4). Educare registers health disorders during big parties and DIMS describes chemical and toxicological aspects of recreational drugs and initiates early warnings. Both do this already for longer than ten years. During this period four developments were most pronounced. First, the varying chemical composition of ecstasy pills from 1997-1998 and a recovery towards a far more constant quality in later years. Secondly, the almost complete absence of amphetamines in speed powder in 1999-2000 and the rise in prevalence in the years after. Third, the arrival of new drugs especially GHB; and finally the reduction of drug-related accidents during big parties. Systematic registration improves estimates of health risks and sharpens a targeted surveillance during parties.

Specific training for professionals and peers in this field

The Trimbos Institute continuously organises First Aid courses (train the trainer) for workers in addiction and general health care to manage drugs incidents in recreational settings (www.trimbos.nl → see links to: "scholing en studiedagen"). These courses include knowledge about recreational drugs, possible health consequences, and First Aid possibilities. Pill testing professionals are trained in chromatography and spectrometry, First Aid professionals are trained paramedically and trend watchers or trend spotters are trained to unobtrusively observe dance scene activities and (changing) drug habits. Educare developed two train-the-trainer courses aimed at First Aid for drug incidents in recreational settings. In one course the target group was cafe- or restaurant workers, door keepers, taxi drivers and a second for security personnel and the police (De Jonge 2003).

9.3 Family and childhood

Prevention explicitly directing family and childhood is uncommon in the Netherlands and no recent evaluations are available. These omissions have been criticised during an annual meeting of addiction researchers. To increase effectiveness of drug prevention in the future this omission should be compensated (Engels, 2002). In our former National Report (8.2 and 9.3) we presented some studies and data on families at risk because parents were drug addicts

and a few existent specialised programmes e.g. parent meetings on drug use (“home parties”), self help groups for parents and a therapeutic community (“the Herberg”).

Types and characteristics of interventions for family and childhood

An increasing number of organisations of outpatient addiction care offer free of charge courses (one or two sessions) on drugs and drug use to parents. During these sessions, information is given on parenting techniques and on the risks of drug use. Finally we mentioned the public campaign ‘Drugs, don't fool yourself’ aiming at stimulating seeking information about drugs and drug addiction among parents and their older children and to improve parenting skills and family discussions about these subjects (see our former National Report). In Spring 2004 a new campaign has been planned with a focus on new knowledge about cannabis, but it is uncertain yet whether it will be funded or not.

9.4 Other programmes: prevention in recreational settings

Pill testing is nowadays only allowed to be done in specialised drug treatment centres (National Report 2002; see also chapter 1).

Definitions used

The website of the Support and Information Point Drugs and Safety (SIDV) defines recreational settings as “large-scale dance events”, clarified as dance events organised on locations or spots that are unusual for regular catering services (sporting halls, exhibition halls, football stadiums, or just on “wild” spots in the open air). The number of visitors varies enormously. Sporting halls can accommodate 1000-1500 visitors, other locations 45.000 (www.sidv.nl). Besides these large-scale dance events, drugs are also regularly used by young people in pubs, discotheques and other recreational settings.

Drug prevention in the coffeeshop

In order to prevent drug abuse in coffeeshops activities were developed, implemented, evaluated and improved (quality circle) in two cities, Leyden and Schiedam. Initially the project started with courses for coffeeshop owners, support and controls of prevention activities within participating coffeeshops and a written agreement between these owners and the local authorities. A handbook (Drug prevention in coffeeshops) including a manual for coffeeshop owners (Ever thought about it?) was developed. The basic assumption is that knowledge on cannabis is in the common interest of different stake holding local parties: coffeeshops, municipal health services, regional addiction care, and the police. The handbook focussed on knowledge of cannabis, drug legislation, psychiatric disorders, First Aid skills, entrepreneurship, and educational skills. The process evaluation in these two cities showed that the planned regular meetings between the different stakeholders (targeting at the creation of networks) could not be realised during this pilot project. Possibilities will be explored in the next future. In these regions, the courses are mandatory and will be repeated annually. Invitation of guest speakers improved motivation of the participants (Bolier and Riper 2002a; Bolier and Riper 2002b).

Train-the-trainer course in First Aid for drug incidents

Educare (‘Partner in care and education’) annually organises train-the-trainer courses in First Aid for drug incidents in recreational settings. Professionals in addiction care and municipal health services can subscribe for being trained as a specialised teacher (De Jonge 2003).

A background study on pill testing

Pill testing is considered an important part of prevention of lowering risks of recreational drug use in the Netherlands. It is the subject of both scientific and policy debate. Does pill testing encourage the use of ecstasy? (Benschop, et al. 2002). The impact of pill testing services on drug-taking behaviour and the risk awareness of ecstasy users were studied in three European cities (Amsterdam, Hannover and Vienna). Despite differences in testing methods and chosen venues (on-site testing, in laboratories, or both), the results are interesting. Three groups of party-goers (only parties attended by more than 1000 people) were questioned (N=702): testers, non-testers and non-users. Questions on sensation seeking behaviour were included to enable gauging whether differences in testing behaviour (testers versus non-testers) or in ecstasy use (users versus non-users) derived more from personality traits than from the accessibility of pill testing services. Remarkably few differences were found between respondents from the three cities: testers and non-testers show more similarities than differences. Users and non-users (both testers and non-testers) differed more. Non-users are more often female, have somewhat more education, are more often unemployed (having a lower income) and show lesser sensation seeking behaviour. Reasons for testing are curiosity, earlier warnings about dangerous pills and health concerns. Almost half of the non-testers report they just have not come around testing yet. Peers play the most important role in obtaining ecstasy, while mass media and life style magazines do not. Testers inform their friends about test results. This informal route of dissemination about potential dangerous pills is considered the hidden strength of pill testing, and an important component of the information spread by flyers or folders. Pill testing also reaches other users than those who come in contact with regular care. It raises the knowledge on crucial risks (e.g. the likelihood of fatal emergencies when using doses of more than 500 mg of MDMA or the optimal dose with minimal risk). Pill testing widens the net of drug prevention and lowers the threshold for getting in contact with regular preventive activities. Users and non-users seem to be part of separate social networks. This mutual orientation even holds true in the same context (parties). Pill testing services do not stimulate ecstasy use and most likely will not extend the circle of ecstasy users. These services also lead most potential ecstasy users to postpone or abstain from starting to use it. Longitudinal studies are required to test this more thoroughly. Nevertheless, the availability of pill testing services do not easily motivate non-users to start using recreational drugs (ibid.).

Do regional and local strategies exist that refer to recreational settings?

Regional and local strategies are existent for regular hotels, restaurants and café's. General nuisance regulations are valid for these establishments (also when events are organised frequently). For incidentally organising dance events a special license is necessary. This licence is also mandatory for letting the establishment to external parties for organising (dance- or other) events. Large-scale events are unusual, thus special licence is mandatory. Events without this licence are called "wild" events. For each large-scale event it is obligatory to do an ex-ante analysis of the consequences for public order, risks of fire, general environmental consequences, public health, morality and public safety. City mayors are responsible for estimating the risks and decisions based on these. The 1995 guidelines of an inter-ministerial commission (*Stadhuis en house*) are still valid because these have not been updated. The number of municipalities that develop local policy to enhance safety of recreational activities is growing. This concerns safety in general, i.e. measures against (subjective feelings of) increasing public violence. Policy is thus not confined to possible

dangers of specific drug use. Municipal guidelines were developed including rules, regulations, agreements and suggestions for owners of establishments where parties are organised, and co-operation between stakeholders. From September 2002, mayors are legally permitted to allow preventive searching in situations that are considered of high-risk for public safety. Risks may concern violence (weapons), but also drug-related nuisance and health risks.

Short analysis of the legal situation of work in recreational settings

Pill testing on the spot (during big parties and festivals) has been forbidden which reduces opportunities for tracing dangerous pills and early warnings.

Describe existing basic standards for regulating nightlife settings (legal and agreed consensus)

The basics of regulating nightlife drug use are: no drug dealing, no drug use, and searching pockets at the entrance. These commandments are rarely followed completely, especially during the bigger parties and festivals, because adequate control is hampered by the quantity of participants involved. Agreed consensus has been created on the prerequisite of caring for enough fresh air, chill out opportunities, and free of charge water supplies.

10. Reduction of drug related harm

Role of harm reduction within national drug policy

Harm reduction was and is one of the pivotal aspects of our national drug policy (see 8). No changes in policy could be traced compared to former years. Underlying policy assumptions are: healthy behaviour should be endorsed; preventing unhealthy behaviour cannot be enforced; at best it can be inhibited by restrictive measures. This health perspective contrasts with the punitive-judicial view on drugs and drug addiction.

Definition and priority

Defining clear differences between outreach work, low-threshold services and harm reduction activities remains hazardous. All three deal with seducing difficult-to-reach drug users to participate in some action to prevent a worsening of their situation and/or the situation of others (National Report 2002).

10.1 Description of interventions

Many interventions have already been mentioned earlier (National Reports 2001, 2002). We give a brief overview.

- Relief centres for homeless that are mostly opened 24 hours for homeless (addicted or not).
- Pill testing preventing health damage from overdose or toxicity after use of synthetical drugs by people in recreational settings.
- Needle exchange targeting the minority group of injecting hard drugs users, to reduce needle sharing, infections, infectious diseases and the spread of dirty needles in the neighbourhood.
- Heroin co-prescription targeting treatment resistant chronic heroin addicts, avoiding the use of additional drugs and improving or stabilising the health situation. Will probably be continued after the experiment.

- Farm work giving the opportunity to dual diagnosis patients to participate in supported farm work in order to engage in structured day activities, social contacts (when needed) and to stabilise their lives.
- Living units for older addicts for a small group of older methadone and cocaine users to reduce drug-related nuisance and stabilising their drug use.
- User rooms/drug consumption rooms or safe injection rooms for a selected group (a permit is mandatory) of hard drug users to offer them some rest, safety and food, and reduce public nuisance.
- Mainline (www.mainline.org) is an independent non governmental organisation of streetworkers, striving to improve the health and quality of life of drug users. Targeted harm reduction activities are possible, as well as health education, consultancy and training of social workers.
- Enhancing vocational opportunities for addicts In Brabant (a Southern part of the Netherlands) co-operation between an addiction care organisation (Novadic) and the Weener Group has been agreed upon. The Weener Group targets at offering paid work and vocational support to persons with different kinds of disabilities. They do so to implement several legal arrangements for increasing participation of these groups at the labour market (GGZ Nederland 2002).
- Health rooms for addicted prostitutes offer regular and direct accessible day-and-night support and keeps in contact with this target group, offering solutions for acute problems, and working on a more continuous care provision.
- Case management for chronic addicts with dual diagnosis offers practical and psychological help, supplemented by co-ordination of different care activities for individual clients.

HR professionals generally know each other from conferences, other meetings or incidental co-operation. Formal networking does not exist. This can be a limiting factor for case management, because a coherent network of addiction care facilities is crucial for success (Wolf et al. 2002). Case managers however, do not have the authority to enforce co-operation among different organisations. Professional rivalries can be an important barrier to collaboration (McLellan et al. 1999). The question is what conditions might avoid or reduce these rivalries.

Co-ordination of national policies and local practice

Local practice is mainly left to local strategies. This is probably due to our complex and stratified financing system (National Report 2002, 14).

Outreach work in recreational settings

Safe dance parties do not exist and a prohibition of these events - when drug use is involved - is not effective. These events would be continued underground making participants more difficult to reach by preventive activities. A preferable approach is assumed to be a combination of prevention and cure by monitoring and testing new drugs and offering professional First Aid in case of emergencies (De Bruin et al. 1999). Regular monitoring and testing of drugs can quickly prevent the continuation of disastrous effects of pills with dangerous components. The effectiveness of First Aid services at big dance parties has been evaluated. Small teams that are well trained are more effective than bigger teams with a moralistic approach and insufficient knowledge of the possible effects of several drugs.

Prevention of infectious diseases

The grass roots organisation Mainline Amsterdam still distributes leaflets to drug users and intermediaries about the following subjects: tuberculosis, HIV tests, viral load and CD4, safe injecting, hepatitis A to G, and condom use (www.mainline.org).

Outreach to problem drug users, groups at risk

Many initiatives were taken some years ago, some are to be continued, few are new. For the older ones (continued or not) we refer to our former National Report 2002. Examples are: peer support for drug using immigrants, HIV tests, HIV treatment, Hepatitis C tests, and prophylactic vaccination of early stage syphilis among (drug using) street prostitutes. Hepatitis B vaccination of high-risk groups is continued until 2006 (GGD Nederland 2001, Trimbos Institute, 2002). This year all 40 municipal health services participated in this project and more than 10.000 participants have been registered (Waldhober 2003).

A local study showed that therapy compliance (HAART) of almost half of the interviewed 27 HIV infected addicts was insufficient. Several manipulable determinants were detected in order to guide new measures to enhance compliance to this therapy. Examples of these factors are negative attitude towards health workers and insufficient knowledge, positive expectancies of the therapy (Witteveen en Van Ameijden 2003).

A current study compares some 40 projects dealing with so-called 'interfering care' for addicts (bemoeizorg). This concerns continuing outreach care. Interfering care also means care that has not been asked for, targeting vulnerable multiproblem addicts that cannot take care of themselves. How to organise this type of care? The results will be reported in 2007. In a preliminary publication, differences between interfering care, training in community living and case management are highlighted (Roeg et al. 2003).

Peer-outreach NO INFORMATION AVAILABLE

Secondary Needle Exchange through user networks NO INFORMATION AVAILABLE

Others NO INFORMATION AVAILABLE

Prevention of drug related overdoses

Examples of 'policies'

The initiation of user rooms is part of harm reduction policy and these rooms are (amongst other targets) meant to prevent overdoses (see National Report 2002, 10d).

Examples of specific projects NO INFORMATION AVAILABLE

Projects in high-risk settings NO INFORMATION AVAILABLE

Documentation, evaluation results, research

The cocaine experiment in Rotterdam is meant to motivate multiproblem crack users living under extreme conditions in the streets. The question is: "Is it possible to motivate members of this group for treatment and to keep them in treatment for a year, thus improving their health situation and reducing public nuisance?" The measurable target was set at an increase of at least 10% on one of the domains of the EuropASI. The Dutch Health Research

and Development Council funded this controlled experiment with 170 treatment-resistant crack users. The target group was approached by intensive fieldwork. Half of this group was randomly assigned to motivation treatment and the other 85 receive standard treatment from a separate research team. The control group was told that they participate in an evaluation of regular addiction care in Rotterdam to avoid turmoil. Both interventions lasted eight to eleven months. Measurement took place before treatment, and four and eight months later. The drop out rate appeared to be 65%. Fifty-nine crack users finished the experiment. The 10% target was not realised, improvements appeared to be less substantial after 8 months. Physical health, contacts with the police and judicial organisations did not improve, but drug use, psychological situation, family, social relations, work, education and income did. Partly however, these improvements could be caused by a stay in a hospital, prison or clinic (Henskens 2002).

In Amsterdam interventions to enhance self control of crack users and controlled crack use in the street are implemented in regular addiction care. The first phase targets the necessary conditions for implementing these interventions in regular care and will result in a guideline. Attention will be paid to transferring specific expertise and to co-ordination of the different local settings (Van Aalderen 2003). A study of the Municipal Health Services in Amsterdam searched for explanations of overdoses. One of the main factors appeared to be the risk of periods of abstinence. Habituation of the body to the drug has been reduced. Some relapsing (ex)users take the old dose and this might be fatal (Buster et al. 2002).

Users rooms

State of the situation

For types of user rooms or safe injection rooms see our National Report 2002. A follow-up study wants to describe developments since 2001 (targets, basic philosophies, organisation and design, target groups, admission criteria, house rules, personnel, and their relationship with the surrounding neighbourhoods). Results will be published in 2004 (Bransen and van 't Land). An overview of all user rooms has not been published yet. Some were evaluated, e.g.: De Verwijsplek in the city of Apeldoorn; De Buren and Spanjaardstraat, both in Rotterdam; De Daeke in Venlo. By and large the results of several evaluation studies indicate that user rooms might have positive effects on nuisance and maybe also on health and regular care contacts (National Report,2002).

10.2 Standards and evaluations

Existence of professional standards on HR interventions

Some professional standards for harm reduction activities are developed at this moment, e.g. for medical heroin co-prescription and rapid detoxification. Guidelines are published for the organisation and design of user rooms, for patient placement matching, and for choice of (route of addiction) care.

Evaluation studies on HR measures

The study of Linssen et al. (2002) also gives guidelines for the organisation and design of user rooms, for selection and admission of members of the target group (by addiction care professionals, the police and neighbourhood inhabitants), house rules (no drinking, no dealing, etc.), personnel (a mix of different professionals when possible), anticipation of relationship with the neighbourhood (explicit agreements, complaint procedures, commitment), safety and hygiene (preventive measures: First Aid attributes, syringes, tinfoil, condoms, etc.) and liability (signing liability contracts by participants). (Linssen, De Graaf, & Wolf, 2002)

No other new evaluations published in 2002 could be traced.

Training of staff in HR techniques: organisation, access, target groups for training

No officially regulated specific training in harm reduction available.

Major research projects on HR topics carried out in the past 5 years

Subjects/main projects (National Report 2001, EDDRA database):

- Methadon in maintenance treatment (two-year effects, higher doses)
- Immediate detoxification with naltrexone under anaesthesia
- Medical heroin co-prescription
- Vaccination programmes to prevent infectious diseases
- Integrated care, farm work or psychiatric home care for dual diagnosis patients
- The Drugs Information Line
- The Drug Information and Monitoring System (DIMS)
- Parent oriented work to stimulate talking about drugs ('home parties', etc.)
- The Healthy School and Drugs
- Peer education for immigrant users (Moroccan, North African, Moluccan)
- Effects of compulsory treatment (Triple-Ex, SOV)

11. Treatment

11.1 "Drug-free" treatment and health care at national level

No general information is available on the availability, financing, and organisation of delivery of drug-free treatment services. The situation at national level has not changed. In most organisations of addiction care, drug-free treatment (including psychosocial support, motivational interviewing or counseling) is part of other treatments, dependent on the phase of addiction of the client and the objectives agreed upon. The main objective is to complement drug treatments in order to increase the duration of effectiveness and reducing relapse rates (Schipper & De Jonge, 2002).

Criteria of admission to drug-free treatment

Specific criteria are not used for drug-free treatments. Drug treatment should be complemented as much as possible with drug-free treatments. If possible, partners and/or family members should be involved, again, dependent on the phase of addiction of the client and the objectives agreed upon (Van den Brink et al. 1999b).

Evaluation results, statistics, research and training

The Jellinek started with a web site targeting self help initiatives of cannabis abusers (see: www.jellinek.nl). Self-help web sites are supposed to have lower thresholds than usual care. This innovative programme offered, concerns a “translation” of the brief intervention model (four sessions). The user may start a dialogue with the computer and/or by e-mail with a professional (e-consult). Recently some 800 hits were registered (personal communication) and the programme will be complemented by an sms-service with reminders for activities (only on request of the client). A web site for cocaine abusers is also being realised. Using the web and other electronic communication media for addiction care is not new. In the United States a survey revealed differences in users of many ways of using electronic communication media for substance abuse (Hall & Tidwell, 2003).

Recently the results of a 12-months dialectical behaviour therapy (DBT) for Dutch female borderline patients with and without substance abuse was reported (Van den Bosch, Van den Brink, & Verheul, 2003). This therapy simultaneously focusses on applying both acceptance and validation strategies and change (behavioural) strategies to achieve a synthetic (dialectical) balance in client functioning. DBT is manualised and practised by trained therapists. It combines 4 modules: (1) weekly individual cognitive-behavioural psychotherapy sessions; (2) weekly skills training groups lasting 2-2,5 hours per session; (3) weekly supervisions and consultation meetings for therapists, and (4) phone consultation for patients to encourage them to get coached in the appliance of effective skills by phoning their primary therapists either during or outside office hours. In this randomised clinical trial, the efficacy of DBT is compared to treatment-as-usual and the impact of baseline severity on effectiveness is considered. Outcome measures included treatment retention, and course of suicidal, self-mutilating and self-damaging impulsive behaviours. DBT resulted in better retention rates and greater reductions of self-mutilating and self-damaging behaviours, especially those with histories of frequent self-mutilation.

Another project on the effects of inpatient cue-exposure to prevent relapses in opiate addicts is currently running. Does cue exposure therapy reduce relapse rates more than standard treatment? The results will be reported in 2004 (Marissen & Franken, 2003).

Finally, the National Drug Monitor (NDM) in the Netherlands is working on a background study on the efficacy of interventions in addiction care (Rigter & Van Gageldonk, 2004). The international literature on treatment of addiction (cannabis, cocaine, opiates and amphetamines) is screened and evaluated. This study is an update and improvement of an earlier systematic review study of the Trimbos Institute (Van Gageldonk, De Zwart, Van der Stel, & Donker, 1997). Especially on treatment of cannabis and cocaine abuse, progress has been made during the past years. The report is expected in 2004.

11.2 Substitution and maintenance programmes

Objectives for substitution treatment

Reducing the harm caused by drug use, i.e. stabilisation of the situation of the client, reducing heroin use, reducing drug-related nuisance, and infectious diseases, improving physical and psychological health, and finally to stay in contact with hard drug users (Driessen, Völker, & Kregting, 1999).

Criteria of admission to substitution treatment

During the past decades the admission criteria for methadone programmes were never specified. Being addicted to heroin for more than six months was enough for entering a maintenance programme. Up to date, in most cases there are no stricter regulations for admission to substitution treatment.

Availability, financing, organisation and delivery of substitution treatment services

Substitution treatments are funded indirectly by the municipalities and there is no consistent methadone maintenance policy (see National Report 2002, 14). Methadone programmes are nowadays offered in different ways in all outpatient addiction care institutions and by some municipal health services. There is neither a consistent policy for distributing methadone in prisons. This depends entirely on the viewpoint of individual prison doctors or directors (National Report 2001, 9.3.2).

A recent study indicated that the organisation and practice of methadone maintenance treatments have grown worse during the past decade. In most cases nurses do their job quickly after determining the optimal dose by a doctor. Additionally, other professionals lost their interest in these treatment resistant patients ("only caring for getting their dope"). The emphasis has moved to merely nuisance control, which resulted in inadequate (outpatient) care and supervision for this group of chronic, often also psychiatric patients. Facilities appeared to be poorly maintained, the professional tasks have become unclear and the professional status of the nurses has deteriorated. Maintenance treatment seems to have altered from a more broader treatment strategy to merely dispensing methadone (Loth, Schippers, & 't Hart, 2003).

Substitution drugs and mode of application

More than half of the clients in methadone programmes, get 25-55 mg per day but in some cases also higher doses are dispensed (Ouweland, Mol, & Boonzajer Flaes, 2003). The mean dosage is increasing since 1995 (Van Laar et al. 2004). After the favourable outcomes of the experiment with high doses of methadone (Driessen, Van der Lelij, & Smeets, 2002) it may become more common to use higher doses. Addiction is better manageable with higher doses, heroin use reduces and the use of other substances stabilises, but preventive activities should be implemented to avoid undesirable incidents (National Report 2002).

Psycho-social counseling

In general, the time for psycho-social counseling is limited in current practice of methadone maintenance. This is partly caused by an inadequate funding structure and subsequently a restricted money supply to allow for adequate additional counseling practices. This growing deficit conflicts with the aggravating situation of the patients. The methadone posts are often the only opportunity for this target group to get some psycho-social counseling (Loth et al. 2003).

Diversion of substitution drugs

In former years other substitution drugs have been tried out (LAAM, clonidine and palfium) but these were not successful. The present situation of methadone distribution is becoming different compared to the 80's, but methadone as a maintenance drug is still unchallenged.

Evaluation results, statistics, research and training

Registration data on outpatient methadone programmes show that, compared to other drug users, methadone users are a group with serious problems (Van Alem et al. 2001). Methadone users are older than users of exclusively opiates, they stay much longer in care and occupy a relative large proportion of the available care capacity. Furthermore, the clients themselves are often dissatisfied with the methods of methadone dispensation (Verbraeck and Van de Wijngaart, 1989; Driessen, 1990; Driessen, 1992; Driessen et al. 1999; Driessen and Van der Wal, 1993; Jongerius et al. 1994; Eland-Goossensen, 1997; Lilly et al. 2000; Loth et al. 2003). For more details and evaluation reports we refer to our National Reports 2001 and 2002.

11.3 After-care and re-integration

The Forensic Addiction Clinic is meant for imprisoned drug-using recidivists, resisting regular care and treatment. The treatment programme has three subsequent stages: an intramural, a semi-mural and a resocialisation stage. The last stage is similar to 'supported living': clients are supported in learning to live independently again after release from prison. The stages of this long-term programme are the same as in Judicial Treatment of Addicts (National Report 2001, 9.5).

Links with national strategy and legislation

Re-integration is one of the three components of the new legal measure of Judicial Treatment for Addicts (SOV). This is a compulsory treatment set by law for recidivist addicts (see National Report 2001; 2002 and chapter 12 in this report).

Objectives, definitions and concepts of reintegration

An important problem remains the existent conceptual confusion. Re-integration may be mentioned as part of social addiction care or after-care. It may also signify concerted activities, specifically initiated to get former addicts back to work, trying to organise paid jobs for them (Michon et al. 2000). The term social addiction care is coined in the Netherlands to cover types of care meant to improve the quality of life of (former) addicts (GGZ Nederland, 2002). Re-integration may point at social re-integration, including (sheltered) living, schooling and vocational re-integration and other elements e.g. contacts with family and friends, creating lasting social networks to avoid contacts with the "old" drug scene. The concept may also point at one or more of these subcategories. It remains difficult to formulate clear definitions and objectives because these concern different conceptualisations and meanings. GGZ Nederland tried to review and order these concepts for social addiction care targeting an improvement of daily functioning of an (ex)addict. The conclusion was that a common language is lacking, thus different concepts are used for similar empirical phenomena. The result is that, using these concepts, it seems as if one is pointing at the same phenomenon but this is not always true. An example may illustrate this conceptual confusion. Do the terms social network, social contacts, and social situation refer to the same phenomena or not, and what is the relationship between these terms and social functioning? (ibid.).

Accessibility for different target groups

The accessibility of provisions for after-care is diverse, institution-specific provisions and an overview have not been published yet, except for one measure, namely Judicial Treatment of Addicts (see above). In another (pilot) project, farm work for addicts was initially accessible for

nuisance causing addicts, but during the project only addicts were referred to these farms with dual diagnosis that were not treated in the referring organisations of addiction care (see chapter 10).

Organisation, financing, managing, availability and delivery of services

There is no formal organisation, financing, management or delivery of after-care for addicted people at a national level. After-care is in most cases part of broader programmes of addiction care.

Statistics, research and evaluation results

Few evaluation studies on after-care are published. Some examples cover vocational rehabilitation (National Report 2001).

Training

No formal training is organised for vocational rehabilitation of (former) drug users.

12. Interventions in the Criminal Justice System

For assumptions and viewpoints on interventions for drug users in the criminal justice system, see our National Report 2001.

12.1 Assistance to drug users in prisons

Examples are the Addiction Guidance Departments (*Verslaafden BegeleidingsAfdelingen*), the Judicial Treatment of Addicts (*Strafrechtelijke Opvang Verslaafden*), the Forensic Addiction Clinic (National Report 2001, chapter 13.4). The Early Intervention Approach for justiciable addicts (*VroeghulpInterventie Aanpak*) is a type of assistance for justiciable addicts that recently have been evaluated (see National Report 2002).

Abstinence oriented treatments

Though all treatment programmes in prison are abstinence directed (National Report 2001) it is recommended for Addiction Guidance Departments to include harm reduction measures, housing, solving financial debts, social skills training, brief behavioural interventions, and re-integration (Gezondheidsraad, 2002a).

Substitution treatment

Guidelines from the Ministry of Justice tolerate methadone treatment for short-term detainees when these already used methadone before imprisonment. But in practice many prison physicians reduce and end methadone treatments. Variations in these treatments in prisons are many, a fact that the National Health Council considers undesirable. Consensus driven guidelines are necessary (Gezondheidsraad, 2002a).

Harm reduction measures

For Aids prevention within prison walls, see the National Report of 2001. Prisons have their own medical staff but this is in most cases not concerned with harm reduction activities for drug users.

Community links NO INFORMATION AVAILABLE

12.2 Alternatives to prison for drug dependent offenders

For arrested, as well as sentenced and imprisoned addicts, several possibilities exist to enter judicial or non-judicial addiction care outside prison. Participation in these types of care can be chosen instead of imprisonment; *quasi-compulsory as well as incentive-driven options are possible* (the principle of implicit dissuasion, 'soft' coercion or "the carrot instead of the stick"). In the first phase (police contacts) probation workers can stimulate addicts to enter the Early Intervention Approach for addicts (*Vroeghulp Interventie Aanpak*). Generally, the judge or another judicial decision making agency makes the formal decision about which alternative to imprisonment is most adequate for individual addicts (Van Laar et al. 2003).

12.3 Evaluation and training

Evaluation results

For details of the Early Intervention Approach, long-term effects of drug-free detention programmes, and descriptive data of the experimental Judicial Treatment of Addicts (SOV), (see the National Report 2002). Improvements were most pronounced among the minority of participants that finished this experimental programme. Improving diagnosis and individualised care may increase the number of successful SOV-treatments (Bieleman 2002b). A more thorough effect evaluation of the compulsory SOV will be reported in 2006.

Statistics, research and training NO NEW INFORMATION AVAILABLE

13. Quality Assurance

Although quality assurance of health care in general (including addiction care) was settled by law in 1996, politicians and legislators chose for the principle of self regulation (*Kaderwet*). Important parts of this law are directing to the necessity of evidence-based care, specified care policy, quality assurance systems and an annual quality report. During this initial period, improvements appeared to require more time than was expected (National Report 2001). Although quality concepts were introduced, and quality instruments and procedures were developed, far less attention has been given to evaluating the effectiveness of the process, the outcomes and costs (T.K. 28.439, nr.1).

In the field of drug prevention, quality assurance is stimulated by the five-year policy programme "Getting Results" (see National Report 2002, 8.2, 9b). However, up to date legal pressures or sanctions are absent or low. The last working plan of the first phase of this programme presented the products of this five-year period. Besides general information reports and starting documents (e.g. results of focus group discussions) about the programme itself, methods were described in a handbook and disseminated, e.g. the four-sessions- and the ten-sessions-model for lifestyle training. Other methods dealt with the start of user rooms, and with protocols on intake and choice of care. Many protocols were developed and the initial actions for implementation are started this year. Finally, several literature studies were published (e.g. on user rooms, stepped care and case management, effectiveness of drug prevention in schools, in the family and in communities, and on certification of knowledge and skills in addiction care). The final symposium of the first phase is on December 9th, 2003. At this moment, funds for more thorough implementation activities are absent (GGZ Nederland, 2003).

Description of new trends and developments

It is foreseen that the second period of this policy programme will be focussing on describing and positioning pharmacological interventions among other interventions (offering treatment and care modules via so-called 'diagnosis-treatment-combinations'), further implementation of evidence based interventions, and on updating the state of knowledge (ibid.). It has been recognised that evidence-based addiction care is an ambitious and longer-term target, emphasising facts instead of biased judgements for decision making. This requires a new funding system but also systematic reporting activities by professionals (Tieken, 2002).

Formal requirements for quality assurance

The Law on Quality Care set the main lines for quality care in health care in the mid nineties. The most important prerequisite is qualified personnel for pharmacological and psychological treatment and care. This also goes for addiction care. Up to date, there are no formal requirements set for quality assurance in addiction care specifically.

Criteria and instruments applied in quality assurance

Training to increase knowledge about quality of (addiction) care for general health professionals is underdeveloped (National Report 2001). The attention paid to addiction issues during basic professional training for physicians, nurses, social workers, psychiatrists and psychologists remains insufficient, although possibilities for specific addiction care training have increased somewhat for students in health care. There is a new specialisation for addiction and addiction care in medical course at the University of Nijmegen for instance, and some schools for higher education for professionals in health care, have specialised lessons in this subject, given by prevention professionals in addiction care (Landelijke Steunfunctie Preventie, 2003).

Together with the National Support Centre for Prevention (LSP), the Netherlands Focal Point has organised a third round of training sessions for prevention professionals in December 2003. Furthermore the policy programme Getting Results (although not evaluated yet) continues to create documents for quality control and assurance. One type of documents is protocols, meant to enhance standardisation in drug prevention (Bool and Blekman 2003) and addiction care (cf. (Luijting, 2002); (De Wildt et al. 2002)). Bool and Blekman described explicit starting points and delimiting factors for standardisation of drug prevention and mental health prevention. In addiction care, these protocols are directing at the intake procedures, patient placement matching, and choice (or routes) of care (see National Report 2002).

What is the value of patient satisfaction as an indicator of the quality of care? A recent dissertation tries to answer this question (Aarsse 2003). It covers a prospective study with five measurement points in four locations of care. Participants were 240 patients with alcohol and psychiatric problems, 157 with short-term addiction treatment (4 sessions) and 83 with short-term psychiatric treatment (mainly anxiety and depression; 5 sessions). In one addiction location and one mental health care location, treatments were controlled with a manual or protocol. In the other two locations no protocol was used. One third (72) dropped out during treatment and 40% during follow-up. Patient characteristics and treatment preference were pre-tested. Realisation of treatment preference, quality of working alliance, symptoms and patient satisfaction (again) in an early phase. Satisfaction was broken down to communication (information and consultation), the therapist (expertise and treatment), and treatment results. Validated measurement instruments were used. We do not go into too

much methodological and empirical detail. The summarised conclusions are described briefly hereafter. Patient satisfaction does not predict drop out. Patient satisfaction can be a process indicator because it is not independent of subsequent treatment outcome. The construct can also be used as an outcome indicator, because it is at least partly determined by treatment preference disconfirmation, the quality of the working alliance and treatment outcome. Patient satisfaction however, is also related to patient characteristics, which restricts its value as an indicator for quality of care. This may be neutralised by measuring this concept multidimensionally and adjusting it for the severity of psychological distress.

As part of the policy programme 'Getting Results', patient-specific treatment outcomes are being collected and made available for the professionals in four organisations of addiction care. A current pilot project (Outcome Bench) tries to introduce and evaluate feedback of treatment outcomes to professionals in addiction care (Oudejans et al. 2003). This is unusual in Dutch addiction care. Consequently, professionals cannot indicate clearly what the outcomes of treatment are. A questionnaire has to be filled in by clients on quality of life, treatment use, and treatment satisfaction. This was done during and after treatment, and three months later. Feed back is given via three-monthly reports. Participants were sceptical at the beginning but became enthusiastic after the first rounds. Limiting factors were: the incomparability of organisations (different terminology and treatment characteristics). Besides that, the non-response was considerable (more than 90% at follow-up). The methods of a follow-up project have been improved. By choosing a common standardised treatment module, lifestyle training became more comparable. One question has been added, the satisfaction of professionals of this treatment outcome feedback. An evaluation of these projects will be done in the coming years. In a second pilot project ("Deciding Together") the effects of shared decision making techniques (professionals and clients) on treatments is investigated (De Jong and Joosten, 2003). Clients are co-deciding what types of treatment they want. Professionals are now being trained in specially designed persuasive counseling techniques.

Application of quality assurance procedures and results

Application of quality assurance procedures is in its rudimentary phase. Quality assurance in health care is annually monitored as part of the branch report on mental health (National Report 2002, also see 14 of this report). The new registration system (ZORG-IS) has been constructed, enlarging possibilities for regular reports of essential data on addiction care in a systematic way. Since not all organisations have sent their data to this registration bank, the first publication of ZORG-IS-data only covered a small part of the total addiction care field.

The Amsterdam Institute of Addiction Research (AIAR) is developing criteria and indicators for a monitoring system for addiction care services. The target is to improve the effectiveness and efficiency of drug prevention and treatment programmes (National Report 2001). The current project of Oudejans et al. (2003) also deals with desirable procedures. Results have not yet been reported (see above, Project Outcome Bench). Unfortunately the response was very low.

Recently the Trimbos Institute published a report with negative results on the quality of low threshold care for chronically addicted people in the Netherlands (Van 't Land et al. 2003). This report focussed on the general quality of care meant for addicts with many other problems, polydrug use, psychiatric and health problems and homelessness. Examples of existent supportive services for this group are 24-hour-shelters and drug consumption rooms (see National Report 2002, 10c). The authors interviewed workers in addiction care,

municipal health services, mental health care, police officers and the addicted themselves. The acute problem appears to be the insufficiency of low threshold services for this serious group of drug users. Problems are specifically concentrated in the group with dual diagnosis. Psychiatric disorders and addiction is a mix that is hardly accepted in usual addiction care and mental health care. Combined expertise on both types of problems is rare. Crisis intervention services do not have sufficient beds to cope with these clients. So many are condemned to the street where the police is confronted with this group, not knowing what to do with them. Finally, social work services are hardly supportive for this client group in taking care of housing or day activities. Co-operation of the involved care sectors appears to be insufficient. It is unclear who is responsible for this group. Of all vulnerable groups in our country, dual diagnosis patients are most in need of help.

Despite these negative conclusions, evaluations of projects in the city of Rotterdam for target groups that show a considerable overlap with dual diagnosis patients, presented more positive results. One evaluation dealt with stimulating housing of addicts in the city. A protocol was published for guiding actions to increase housing possibilities for addicts (GGD Rotterdam en omstreken, 2002). One year after the start of the project 84 houses with rooms became available for homeless addicts and 147 addicts live there under supervision of professionals. Since the beginning 54 people stopped living in a house. Eight due to nuisance and two because they continued to be more self supporting, 44 dropped out (Keegel et al. 2002). A second evaluation showed positive effects of low threshold care for crack users in the street (Henskens 2002).

PART 4

Selected issues

14. Evaluation of drug strategies

14.1/2 Existence of evaluation and methodology of evaluation

In this chapter we will give a brief overview of methodology in policy evaluation research. Then we will describe the state of the art of policy evaluation on governmental (national) level that also has consequences for the domain of health care, mental health care and addiction care. Finally, we will mention evaluation activities specifically in drug policy and addiction care. In all parts of this chapter, both existent evaluation approaches and methodologies are mentioned.

A short methodological note

Policy evaluation has a long history. Many organisations are involved in policy evaluation and many types of methodologies have been developed to face the specific difficulties that are common for evaluators in this field. There has been a main shift in methods from an impetus on “direct” effect evaluation with sophisticated methodologies (cf. (Campbell and Stanley, 1966) to indirect (“softer”) measurement of the state of affairs in order to support future policies, e.g. programme evaluation, evaluation of policy theories or case study comparison ((Donker, 1990); (Leeuw, 1986; Leeuw, 1987); (Yin, 1989)). During the past decade, registration and monitoring also became a well-known and a more than once used strategy (see above).

Effects of policy on a national level are not measurable with scientifically sound methods. There are too much confounding factors involved. This conclusion is even more valid for longer-term effects. Besides, many are difficult to control or manipulate. For instance, the interventions set on higher policy levels may not equal those that are actually realised on lower levels (Kilmer, 2002). This also goes for addiction care. Finally it should be born in mind that monitoring is not equal to evaluation although monitoring can be part of it. Actually, both cannot give final answers on the effects of policy but may give indications of changes that might stimulate political interventions.

Evaluation and monitoring on different levels

Evaluation of national drug strategies has hardly been a subject of attention in former years because we do not have a national drug strategy in a strict sense (see 8). However, this does not mean that evaluation and monitoring are not done at all.

In 1995 a White Paper on Dutch drug policy (Continuity and change) was written stating the targets and achievements of Dutch drug policy and the principles of future policy. This report was followed by several Progress Reports, the last one in 2001, showing developments in drug policy of the past years. Developments in the domain of drugs, drug use and the consequences of it were highlighted, targets were formulated and measures described. These papers can be perceived as rudimentary parts of drug policy evaluation. The start of the National Drug Monitor in 1999 (see below) was a logical step after this, ensuring annual reporting of facts and figures on drug use.

During the past three years several other evaluation and monitoring activities have started that are relevant in this respect. Some are broader in scope (health care in general or mental health) and support the discussion on changing the health care system (*StelselDiscussie*). In the Netherlands, addiction has traditionally been considered primarily as a national health problem, thus addiction care falls primarily under health care. Examples of the broader

activities are the so-called VBTB-operation, the Branch Reports and background studies to support starting a national monitor of health care, focussing on performance indicators. More specific for addiction care are the annual reports of the National Drug Monitor (NDM), the NDM Background studies (immigrants and addiction care; facts and figures on cannabis; a currently running study on effectiveness of interventions in addiction care) and several reports on costs, expenditures and funding structure. All these activities are meant to support or evaluate Dutch policy targeting health care in general or addiction care specifically.

Performance indicators of health care

Assumptions and principles of a new government style

Ideas of a new government style go back to the early nineties, when government budgets were constantly rising while at the same time the concomitant tasks became more and more complex. The future task of the government will be steering the boat, not rowing.

Accordingly, the effects of governmental policy will be determined at individual civilians level. If the central government is to maintain control over the implementation of policies while at the same time decentralising day to day responsibility, performance indicators become an essential tool (Carter et al. 1992; Osborne and Gaebler, 1992).

In 2002 the Dutch government committed itself to this new political steering strategy. This strategy became also valid for national health care policies. In the next future, supplies of health care will not automatically be funded anymore. Instead it will be dependent on the efficiency of choices made and on the effectiveness for clients or consumers. Important elements are: a strengthened position of the health care consumer, a management role for health insurance companies, and more stimuli or incentives for health care suppliers (hospitals etc.) to adapt to the new strategy.

An external report of Delnoij et al. (2002) gives reasons for developing and introducing performance indicators in health care (Delnoij et al. 2002). The new system also supports the targets of the Law on Quality Assurance in Care Institutions (*Kwaliteitswet Zorginstellingen*) (National Reports 2001, 2002, chapters 13). Accreditation and external certification stimulate transparency and public accountability of supplied health care. Performance indicators should be both part of quality assurance and funding arrangements between government, health assurance companies and health care suppliers. Publicly comparing performances will stimulate innovations in health care assurances and supplies. These indicators should: (1) meet future needs and demands of health care; (2) meet the new steering role of government (to guard over public interest "at a distance"); (3) give insight in performances on different mutually dependent levels; (4) support the development of integrated care provisions; (5) enable the steering capacity of the health care system; and (6) link to international developments. The authors further present an analysis of the international literature on indicators and monitoring, and select dimensions that should be monitored related to basic public interests (see the scheme below). Because even a restricted number of policy choices may result in many indicators that might be monitored, the authors defend a two-tracks strategy. Essentially, this resembles the monitoring strategy of the EMCDDA for the national report, namely: (1) continuing monitoring the performances of national health care with a selected minimal data set, and (2) thematic in-depth studies that may include more qualitative data. These themata are presumed to be changing over time, depending on current policy priorities. Themata may thus be suggestive for changing existent (or choosing new) indicators.

Table 14.1: Relationship between public interest and dimensions to be monitored

Public interests	Dimensions
Quality	Effectiveness Safety Patient-centeredness Evidence-based care Co-operation/mutual fits withing the care system and patient flow (throughput)
Accessibility	Accessibility and national dispersion of care Availability of qualified personnel Waiting periods
Efficiency/control of costs	Payability of care on macro level Payability of care on micro level Cost-effective supply of health care Sharing risks Technical efficiency Allocative efficiency Product innovation (dynamic efficiency)

Source: (Delnoij et al. 2002)

Client-centered performance indicators

A related type of reporting performances is in development. Although this type is not directly equal to policy evaluation it certainly has a role in the total enterprise to gather information on the performances of health care policy. The basic assumption behind this endeavour is: developing and implementing client-centered performance indicators (creating more transparency) supports clients of health care to choose the best available quality of care. Though several studies have shown that the (potential) client does not (or hardly) use available performance indicators, this operation should be seen as a necessary condition for choosing for quality, not as a sufficient condition (Groenewoud and Huijsman, 2003). Systematic comparisons can be made between health care supply, based on this performance indicators. Making this type of information publicly available, is assumed to stimulate GPs, hospitals, health assurance companies and other stakeholders to choose more critically among the local and regional alternatives of care facilities.

Costs, expenditures and funding structure

Changes in the funding system, amongst which explicit prerequisites for funding, are essential for changes in the effectiveness and efficiency of the Dutch addiction care system. The funding structure of addiction care has been criticised recently and is (and has been) evaluated by several organisations including the National Office of Audit (this report has not yet been published). We refer to chapter 14 of the former national report for details on this subject.

The VBTB-operation

Since three years all Ministries have been committed to create possibilities for ministerial policy evaluation. This operation is called From Policy Budget To Policy Accountability (*Van Beleidsbegroting Tot Beleidsverantwoording* or shorter VBTB). It is perceived as a part of the fore-mentioned operation to a new governmental strategy and will be evaluated both internally and externally (www.ggzbeleid.nl this site gives an overview in Dutch of published documents). VBTB is meant to improve the legibility, accessibility, the possibilities

for evaluation and the comparability of the annual budgets of Ministries (Van Schoten 2003). The first activity was to formulate policy targets and operational targets within each Ministry. A recent evaluation shows that, although progress has been made, 35% of the operational targets of all Ministries were not specific, measurable, and time-bound and that 17% did answer these three fundamental characteristics. Expenditures that are authorised by the forementioned 35% targets, cover some 40% of the total budget of all ministries (Van Dijken 2003). Another independent evaluation came to the same conclusions. Substantial improvements of the annual report of the Ministry can be realised by appointments with organisations in the field to deliver relevant data (Algemene Rekenkamer 2003). Although the aims of VBTB have up to now only partly been accomplished, it is perceived as a learning process, leading to substantial improvements during the next years. The Ministry of Health, Welfare and Sport itself has also concluded that improvements are necessary during the coming years. It has been promised to the national Parliament to consider annual reports on performances of the Ministry together with the evaluation of the VBTB-operation in 2004 (Algemene Rekenkamer 2003).

An external evaluation of the first phase of the VBTB ('defining targets') shows that seven operational targets were formulated on the different domains of the Ministry of Health (IOO, 2003). Two of these operational targets explicitly refer to addiction care. The first is formulated in general – not straightforward measurable - terms:

- strengthening outpatient and inpatient care for vulnerable people, women's support and addiction care.

The second one is somewhat more specific but still not measurable and consists of two parts:

- reducing and preventing problems caused by abuse of alcohol, drugs and medical drugs, or by gambling, and
- consolidation of high quality information systems for national and international aims.

Specific targets for addiction care are:

- maintaining the existent stabilisation of drug-related deaths;
- supporting preventive actions;
- maintaining and improving of the supply of addiction care;
- stimulating participation of vulnerable groups in addiction care;
- increasing scientific research and data collection (i.e. monitoring, analysis and information systems).

Three instruments should enable to realise these targets are: financial support (e.g. national institutes, projects supporting international co-operation, the NFP, The Pompidou Group, etc.), research (the National Drug Monitor and specific evaluation or effect studies) and education (international conferences). Legislation is beyond the responsibility of this Ministry. The proceedings of this agenda are dependent on the choices of our new government. But due to the external evaluations of the VBTB-operation and the reports to our Parliament, these targets will most probably be formulated in the near future in terms that are more suitable for measurement.

The Branch Reports

The Action Plan Information Supply in Health Care (TK 2000-2001, 26 753, nr. 57) initiated new style (i.e. standardised) Branch reports on public health and health care. Branch reports are published periodically and focus on health care sectors: i.e. mental health: adults, children and adolescents, the elderly, forensic care, addiction care, prevention, and care for

vulnerable people. These sector specific reports are meant as neutral information sources on the performances of care, that are easily readable (general accessibility). It contains data on the organisational context of a sector, and facts and figures on supply (capacity) and demand (use of care or production), funding and quality of care. The primary target group is our Parliament, but an internal evaluation showed that the Branch Reports were mentioned and probably used by many other stakeholders (personal communication).

The National Drug Monitor (NDM)

The National Drug Monitor has been established in 1999 by the Ministry of Health, Welfare and Sport. Its task is to collect and summarise information relevant for monitoring data on legal and illegal substances. The NDM produces annual reports (*Jaarberichten*) to inform politicians, professionals, policy makers and the public about the national situation with regard to substance use. International organisations receiving reports from the NDM include the United Nations and the EMCDDA (European Monitoring Centre for Drugs and Drug Addiction).

The annual reports enable users to evaluate developments in the state of affairs concerning drugs, drug use, prevention and addiction care. English translations are available on the internet site of the Trimbos institute (www.trimbos.nl). The NDM also produces background studies (*Achtergrondstudies*), for example, on drug use and minority groups and on cannabis. A current study covers the state of knowledge on the effectiveness of interventions (drawn from the international literature) and current use of interventions in Dutch addiction care.

The Ministry of Justice also contributes to the NDM and provides data on drug related crime and crime among drug users (through their Research and Documentation Centre, WODC). This includes information about, for example,:

- Drug-related crime, such as violations of the Opium Act, property offences and drug use by arrested people.
- The number of addicts in the criminal justice system and the functioning of institutions for the care and treatment of these people.
- Production, distribution and trafficking with information about issues such as drug sales, confiscations, supply lines and clandestine laboratories, etc.

The NDM also presents data on legal drugs because these are substantially more frequently used and cause much more problems and costs than illegal drugs. The government's policy document on alcohol (Ministerie van Volksgezondheid 2000) contains suggestions for further expansion of data on this substance.

A new registration system for addiction care

A new registration system (ZORG-IS) combines data on inpatient and outpatient addiction care. Although data registration systems of inpatient and outpatient care were different, these systems have to be combined during the coming years. A new data-set has been compiled. This set also includes data on treatment evaluation (clinical results and client satisfaction). The first publication is published. However, this is considered a tryout because the number of institutions that have not sent in data in the past year is still considerable (Prins et al. 2003).

Other monitoring systems

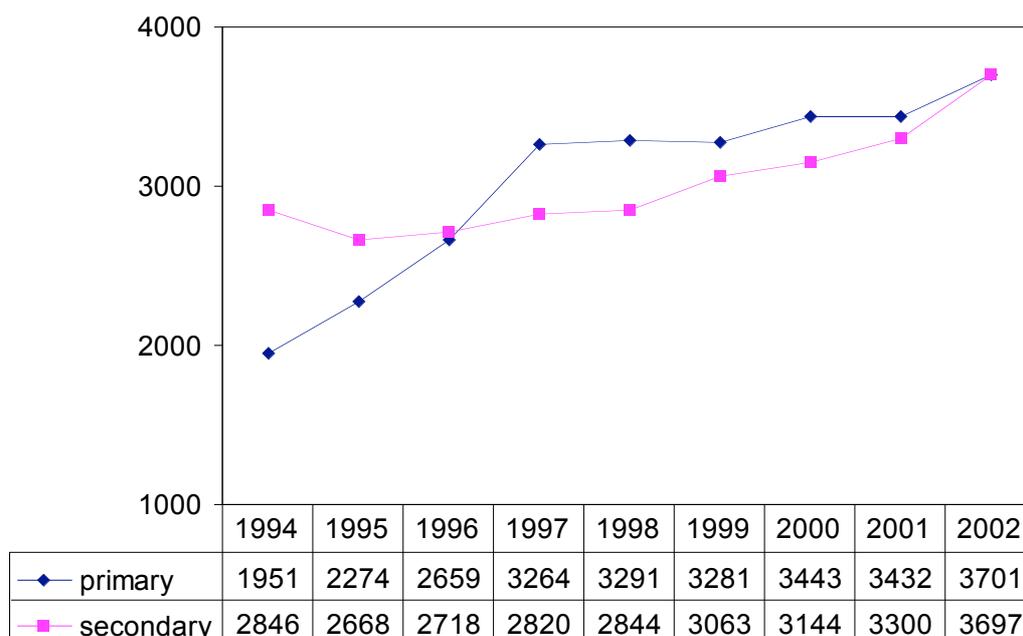
Besides the above-mentioned evaluation and monitoring systems on a national level, there are many other types of primary monitoring systems working in the Netherlands, which provide the basic input for the National Drug Monitor and National Reports of the EMCDDA. Basically there are two types: surveys (periodical monitoring) and information systems (continuing data registration). For an overview of these monitors, see Annex 1.

15 Cannabis problems in context: understanding increasing treatment demand

15.1 Demand for treatment

Outpatient treatment demand related to cannabis use has increased in the past years in the Netherlands (see figure 15.1). The growth in number of clients with a primary cannabis problem was most rapid between 1994 and 1997 and levelled off since then, while the number of clients with a secondary cannabis problem kept slowly rising.

Figure 15.1: Outpatient treatment demand related to cannabis use

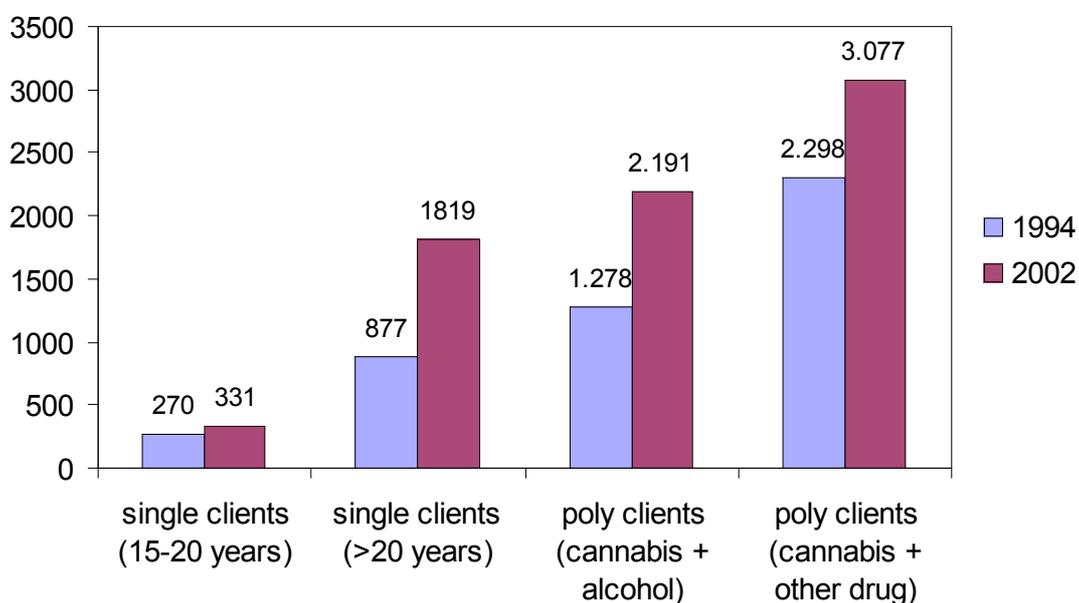


Source: LADIS, IVZ.

IVZ recently published a report on cannabis clients based on a more detailed analysis of LADIS data between 1994 and 2002 (Van Alem & Mol, 2003). The authors made a distinction between 'single users', who applied for help only because of a primary cannabis problem and 'poly users', who applied for help because of a cannabis problem (as a primary or secondary problem) in combination with an alcohol or other substance (often opiates) problem. The group single clients was further differentiated into younger (<20 years) and older clients (>= 20 years). This was not done for the poly clients because the number of younger clients was too low. The main findings are as follows:

- The total number of (single and poly) cannabis clients increased from 5,202 in 1994 to 7,969 in 2002 (+53%).
- The percentage of cannabisclients of all clients increased from 11% to 14%, while the percentage of cannabis clients of all *drug* clients remained stable at 24%.
- Figure 15.2 shows that most cannabis clients are poly clients, i.e. also have a problem with another substance (or gambling). Yet, the largest proportional increase between 1994 and 2002 occurred for the older (>20 years) single clients (107%), followed by the cannabis users who also had a primary or secondary alcohol problem (73%).
- The increase in number of cannabis clients is also apparent when calculated as population rate (from 4,2 to 6,1 per 10,000 residents).

Figure 15.2: Number of single* and poly* cannabis clients in 1994 and 2001



* See text for an explanation of these terms. Source: LADIS, IVZ (Van Alem and Mol, 2003)

Table 15.1 gives some characteristics for the single and poly cannabis clients.

- The education and work situation is slightly more favourable for older single clients compared to the other groups.
- The percentage of allochtonous clients is higher among poly clients compared to single clients.
- Single young clients are relatively often referred by acquaintances compared to the other groups; poly clients are mor often referred by the criminal justice system compared to single users.
- It is estimated that some 39% of the older single users has a ever been admitted in a psychiatric hospital, but this figure should be interpreted with caution.

Other characteristics

- Single older clients are most often daily users: 88% against 68% for single young clients, 79% for cannabis/alcohol clients and 71% for cannabis/other drugs clients (not shown in table).
- Single clients older clients also contended most frequently with problems for a fairly long period (> 5 years): 68% against 66% for cannabis/alcohol clients, 57% for cannabis/other drugs clients and 6% for single young clients; not shown in table).
- Most single older clients have sought help at outpatient drug treatment services before 2002 only for cannabis and hardly because of other substance problems (26% cannabis, 2% alcohol, 5% hard drugs). Poly clients have been registered before also for other substances (cannabis/alcohol clients: 24% cannabis, 13% alcohol, 8% hard drugs; cannabis/other drug clients: 23% cannabis, 2% alcohol, 26% other drugs).

Table 15.1: Characteristics of cannabis clients in 2001

	Single cannabis clients		Poly cannabis clients	
	<20 years	>= 20 years	Cannabis and alcohol	Cannabis and other drug
Percentage male	79%	81%	86%	86%
Average age	17	30	33	32
Cultural background*				
• Dutch	84%	81%	80%	75%
• Western	4%	6%	6%	6%
• Allochtonous	12%	13%	15%	19%
Source of referral				
• Client	35%	42%	37%	46%
• Acquaintances	19%	3%	2%	4%
• Drug services	5%	18%	18%	12%
• Justice	9%	14%	21%	23%
Education				
• No/lower	74%	48%	56%	68%
• Secondary	24%	44%	35%	30%
• Higher	1%	8%	9%	2%
Work situation				
• Employed	30%	45%	42%	34%
• Inactive/education	65%	15%	11%	16%
• Unemployed	5%	40%	47%	49%

* according to the perception of the client. Source:: LADIS, IVZ (Van Alem and Mol, 2003)

It is difficult to explain the increasing trend in treatment demand. It might reflect the increased prevalence of use and/or the increased THC content and/or general increased attention for drug problems at the outpatient drug treatment system. Note that most (problem) cannabis users (see 15.2) are not in contact with the specialised drug treatment system for unknown reasons. Perhaps because they are able to cope with their problems in daily life, or because they (finally) grow out of it and/or are able to moderate or stop use without professional help. The above mentioned profile suggests that especially poly substance users as well as those people with (prior) psychiatric problems apply for help because of their cannabis use. Note also that the above mentioned data pertains only to the specialised outpatient drug treatment services, while an unknown proportion of problem users might also enter the mental and/or general health care system.

There is no specific change in legislation which could explain the increase in treatment demand.

15. 2 Prevalence of problematic cannabis use and patterns of problems

Little is known about the percentage of persons in the population who run into problems by using cannabis. This is partly due to the lack of an unambiguous definition of 'problematic use'. Table 15.2 gives some prevalence data in different populations using different definitions.

- According to a fairly outdated (1996) estimate, less than one percent of the population suffered from cannabis dependence in the year before the interview. Extrapolated to the population, there were at least some 30,000 - 80,000 people with cannabis dependence. Problem use appears to be more prevalent among problem youth.

Tabel 15.2: Problem use of cannabis in different groups

Group	Year	Age (year)	Definition of problem use	Percentage of problem users	Source
General population in the Netherlands	1996	18 – 64	DSM-III-r diagnosis of cannabis dependence (LYP)	0,3% - 0,8% (LYP)	Bijl and Ravelli, 1998
General population in Middle-Holland	1999	16 – 50	Use of cannabis on at least 15 days in pas month and having use related psychological, social and financial problems	0,5% (LMP)	Van der Poel and Van de Mheen, 1999
Boys in youth correctional institutes	1998/1999	12 – 18 (average 16)	DSM-III-r diagnosis of cannabis dependence in past 6 months before detention	30% in past 6 months	Vreugdenhil et al. 2003
Problem youth in Rotterdam***	1998	14 – 17 (average 16)	Use of cannabis on at least 11 days in past month and having use related problems	20% (LMP)	Wits et al. 1999

* 0,5% on average. ** officially this diagnosis is assigned if someone fulfils at least three of seven criteria; in this study three of five criteria were used (two criteria were excluded: tolerance and withdrawal). *** truancy, delinquent behaviour. DSM=Diagnostic and Statistical Manual.

Cannabis and traffic accidents

Drug use in traffic appears to be fairly common. In a study in Tilburg (2000/2001), 11% of the urine or blood samples of weekend drivers tested positive for drugs (Mathijssen et al. 2002). Three out of four concerned cannabis and the remainder cocaine and ecstasy, often combined with cannabis. Accident risk is slightly increased among drivers under the influence of cannabis (Ramaekers et al. 2004). However, statistics on the number of accidents are lacking.

Cannabis use and school attainment

Dutch studies on the effects of cannabis and school attainment using objective measures are lacking. A study among current blowers in Amsterdam coffeeshops shows that 9% experiences problems at work or school because of consuming cannabis (Korf et al. 2002). In a study in Middle-Holland, 56% of the last year cannabis years reported to (occasionally)

have difficulties concentrating at school or work (Van der Poel et al. 1999). Whether such difficulties, which may be apparent especially when users are under the influence of cannabis, will finally result in impaired educational attainment is not known.

According to a study in New Zealand, there is indeed a link between cannabis use and educational attainment (increasing risks of leaving school without qualifications, failure to enter university and failure to obtain a university degree)(Fergusson et al. 2003). However, this relationship seems to be related to the social milieu within which cannabis is used, rather than any direct effect of cannabis on cognitive ability or motivation.

Cannabis use and mental health

According to Nemesis (a longitudinal study into mental health of the Dutch population between 18 and 64 years), cannabis use doubles the risk of later onset of psychotic symptoms (Van Os et al. 2002). Although studies establishing a relationship between cannabis use and mental problems are fraught with difficulties, their findings tend to converge and support an etiological role of cannabis use (Smit et al. 2003). The risk increases in a dose-related manner and is much greater in people with a history of psychosis. Such 'vulnerability', which may be defined as much broader than having a history of psychosis, may play a role in general in explaining this relationship. Data on the annual number of persons in the Netherlands with a cannabis induced late onset psychosis are lacking. The only source we have is the LMR: in 2002 some 36% of the 235 admissions to general hospitals related to a cannabis use disorder (secondary diagnosis) was due to a psychosis (primary diagnosis). These figures might also include acute psychosis due to a cannabis intoxication.

Less information is available on the association between cannabis use and other mental disorders, such as anxiety or depression'. According to Nemesis, cannabis use is more common among people with a mood disorder (LYP 7,1%) or a mixed mood/anxiety disorder (8,8%) compared to people without these disorders (3,2%). However, that in itself is no proof of a causal relationship.

15.3 Specific interventions for problematic cannabis users.

The international literature shows many new developments in successful interventions during the past five years. These are not yet applied in the Netherlands as far as we know at this moment. An ongoing systematic research review (publication of the National Drug Monitor) will give insight in effective interventions for cannabis use based on the international literature. This review will also give more insight in current interventions in Dutch addiction care. This information will be attained by focussed interviews, which are planned in January 2004 with key persons in all major addiction care organisations. The report is planned to be published in Spring 2004.

Some indications of the interventions applied for cannabis users in outpatient treatment can be derived from a recent report on cannabis clients (Van Alem and Mol 2003). This report included also data on treatment supply (questionnaire survey). Only eight of the 22 approached organisations responded the answers on treatment supply in the questionnaire. Four answers were given that did not really include specific cannabis interventions. Two

respondents applied group interventions, a third the Libermann module (skills training to remain alert on drug use) and the fourth replied that treatment did not need to be cannabis-specific and could better be included in regular supplied treatments.

In order to obtain more information on cannabis specific treatments, we have also conducted some telephone interviews ourselves with professionals in some major organisations of addiction care. These interviews resulted in one specific intervention, a self-help internet programme for cannabis users initiated by the Jellinek (one of the major institutions). The Jellinek also has an alcohol and cocaine self-help programme on its site. The advantage is that users can link to it every moment of the day. Participation will take around five minutes per day and the whole programme will last 4-6 weeks. The programme starts with five steps (15-20 minutes) to enable admission to the programme. After admission, one can log in on every moment of the day. If needed (preference is left to the user), a personal chat or e-mail contact is possible with a professional. Admission data are sex, age, education, place of residence and e-mail address (to enable sending reminders). At this moment there are about 800 registered users of the cannabis site (personal communication).

Most interviews further revealed that addiction treatment generally has a stepwise structure (detoxification, meant to stabilise the patient before referral to other treatment options, does not apply to cannabis use). In most cases the first contacts are used for screening and intake. The results of these contacts are evaluated by one or more professionals in order to determine the types of treatment that are most adequate to begin with. Mostly, more intense treatment options (day treatment or inpatient treatment) are chosen after one or more relapses. Motivation is considered essential for success by all professionals. Examples of outpatient addiction care are training in self-control techniques, life-style training, supporting or motivational counseling, training in problem solving skills, or group sessions with feedback (client groups, spouse/partner groups, assertivity groups (to say no), groups for children (with addicted parents), women groups, social integration groups. Day- or parttime treatments are for instance offering a quiet room to chill out, relapse prevention techniques (skills training targeting motivation, identifying first signs of craving mechanisms, and learning to cope with it in an effective way).

In short, the available information suggests that very few cannabis specific interventions are applied in Dutch addiction care and little is known about such specific treatments. Actually, "e-care" via the internet is probably the only example in Holland.

16 Co-morbidity

16.1 Prevalence of main diagnoses

Recent data on the prevalence of co-morbidity are not available. According to local field studies, psychic problems are fairly common among problem hard drug users. In Rotterdam (1998), 37% of this group reported to have psychic problems in the past month (7% mild, 9% moderate and 21% severe) (Jansen and Karaköse, 2003). Most common were depression, aggressiveness and anxiety/phobias. 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 and Knibbe 2002).

High rates of co-morbidity (6 months prevalence, DSM-III-r diagnoses) were found in an older study among opiate addicts in the Hague. Alcohol abuse and dependence (26%), simple and social phobias (21% and 17%) and major depression (23%) featured in this group. One-third of all users had a lifetime diagnosis of an antisocial-personality disorder (Eland-Goossensen 1997).

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 (table 16.1). Co-morbidity is defined here as the occurrence of more than one disorder in a person within a given time window. Drug dependence is highly co-morbid with alcohol dependence (OR=10,3), bipolar disorder (OR=26) and dysthymia (OR=11).

Table 16.1: One-year prevalence of mental disorders (%) among drug dependent persons (in 1996)

	Disorders among drug dependent people
Depression	29%
Dysthymia	22%
Bipolar disorder	24%
Panic disorder	12%
Agoraphobia	10%
Simple phobia	22%
Social phobia	29%
GAD	17%
OCD	<
Alcohol abuse	14%
Alcohol dependence	27%

<=less than 5 cases. Odds ratio's between 3 and 26. Source: Nemesis (Ravelli et al. 1998)

16.2 Impact of co-morbidity on services and staff

Fundamental problems arise for practice and research in addiction care due to comorbidity or dual diagnosis. Spotting dual diagnosis patients in psychiatric or addiction care is still sub-optimal. The professional responsibility for these patients is insufficiently recognised by both fields. Mental health workers are inclined to send people with dual diagnosis to addiction care and workers in addiction care promptly send them back because they cannot handle psychiatric problems. Patients are often moved to and fro between psychiatry and addiction care, thus rarely meeting sufficient care for their problems. Continuity of care is absent. At the same time there is a growing awareness that "monotherapies" (treating addiction and psychiatric problems separately) are insufficient for helping these people. Besides, professionals in addiction care should be careful with (possible addictive) drug therapies (e.g. benzodiazepines) for hard drug addicts or they should be well informed about important risks, e.g. negative interactions of the drugs taken (Van den Brink et al. 1999a). Co-operation of mental health care and addiction care is considered a *conditio sine qua non* to develop integrated care for this dual diagnosis group (Meeuwissen and Kroon, 2000).

Existent frontiers between the systems of addiction care and mental health (or barriers between the two professional cultures) are difficult to bridge. And although in all Dutch regions covenants were signed to improve the co-operation between mental health care

and addiction care for dual diagnosis patients, in 2000 more than half of this patient group thought that this did not result in improved care (Van Rooijen 2001). Slowly however, these two domains begin to co-operate and many organisations have merged during the past years, although mainly for other reasons. Several organisations have special links for comorbidity on their web site (cf. Parnassia). In several regional centres, projects are now initiated to take care of this target group ((Noorlander, 1997; Huygen et al. 1997; Van Weeghele et al. 1997; Lohuis and Bosma, 1998; Van Nes, 1999; Polstra et al. 1999). The Trimbos Institute organises training courses for the treatment of dual diagnosis patients for professionals in both addiction care and mental health care. The Trimbos Institute also has developed and tested protocols for the diagnosis and treatment of addicted clients with Attention-Deficit/Hyperactivity Disorder or ADHD (Eland and Van de Grint, 2001). At this moment, as part of a more extensive systematic research review on the effectiveness of addiction care, the evidence is also screened for effective treatments for comorbid disorders (Rigter et al. 2004). The report will be published in Spring 2004.

16.3 Service provision

Up to date, two specialised wards for inpatient treatment for dual diagnosis exist, offering integrated care, one in the region of Dordrecht, the other in Utrecht. The impetus of these centres lies on getting more detailed information on comorbidity clients and on the development of best practices or strategies for care (sequentially or combined).

The clinic in the Dordrecht region (Portugaal) opened in 1999. After half a year, workers in this ward were able to categorise these clients (Noorlander, 2002). Most of them are long-term addicts (15 years and more), 70% suffer from severe mental disorders (psychosis, affective disorders, anxiety disorders, ADHD, posttraumatic stress disorder, neurological disorder or Korsakov syndrome). Thirty percent had a personality disorder. Most of the clients had a history of long neglected physical problems (venereal diseases, Hepatitis B and C, HIV, and other illnesses). Many have financial problems, are homeless, or without meaningful relationships. Almost all women and some of the men had experience with prostitution. Some 85% of the clients came voluntarily to this special ward. These people were not admitted to regular settings because specialised diagnostic and treatment knowledge was not available, compulsory admission targeting abstinence or time out and stabilisation was necessary but impossible to organise, family care was absent, or care professionals were plagued by burnout. In short, the absence of offering adequate help for these clients destined them to this ward.

The second clinic (*Roosenburg*) opened also around 1999 in Den Dolder in the Utrecht region. It is offering twelve beds for a three months stay. The first phase is to observe each client during several weeks during different activities to enable a valid diagnosis. Cure and care is taken care of by professional therapists, a psychiatrist, a physician specialised in addiction problems, and psychiatric nurses. What needs to be treated first is important (mental illness or addiction problems). In most cases it is clear within six weeks which treatment path could best be chosen. Longer detoxification periods are tolerated and relapses are not punished but talked about and treated (Van Rooijen 2001).

16.4 Examples of best-practices and recommendations for future policy

It is still not known which treatments deserve the title “best practice” for clients with comorbid problems. Most studies offer results for specific subgroups of comorbidity, i.e. specific addiction problems with (again) specific mental health disorders. We can only give some examples of studies (not evidence) dealing with this problem. Due to the current lack of evidence, best practice should for the time being be based on experience and expertise.

A randomised controlled trial targets the effectiveness of dialectical therapy for women with a borderline personality disorder and substance abuse (drugs and/or alcohol). For this extremely problematic group other treatments were not acceptable or remained without results (Van den Bosch et al. 2001). Measured effects are self-destructive behaviour, treatment interfering behaviour, quality of life interfering behaviour (alcohol and drug use, unstable relationships, housing facilities, unemployment, etc.). Fifty-eight women were randomly assigned to either 52 weeks of dialectical behaviour therapy or treatment as usual. Six months after discontinuation of treatment, the initial benefits of both treatments (lower levels of parasuicidal and impulsive behaviours) were sustained. In addition, dialectical therapy showed significant larger reductions in alcohol use than the control group. No differences were found for drug use. In another study, a protocol for diagnosis and treatment of addicts with ADHD is developed and tested (Eland et al. 2001). This study is conducted in two inpatient settings. The protocol is meant to describe treatment elements such as medication, coaching, partner therapy, health education. It will be implemented in two settings and followed by a process evaluation to improve it. ADHD patients with addiction problems were also the subject of second study (Vitale and Van der Eijnden, 2002) also focussing on the bottlenecks of implementing integrated care for these patients. A third, currently running project is determining the effects of pharmacotherapy (methylphenidate) for patients with ADHD and addiction (De Jong and Carpentier, 2001).

A current research project aims at psychometric evaluation of checklists and clinical judgement for psychiatric disorder in addiction care and to evaluate a stepped assessment procedure in daily practice of addiction treatment (De Jong, 2001).

Improving treatments for dual diagnosis patients by evaluating, adjusting and implementing the programmes for this client category in Dordrecht and Utrecht (see 16.3) is the target of a process evaluation (Van Wamel et al. 2004). “What are the problems in current treatment?”, “What are the gaps between existing and desired treatment?”, “Which gaps exist between existing and desired co-operation between parties?”, and “How to improve existing programmes?”. The results are expected to be reported in 2004.

Case management

The term case management (also called ‘actively interfering care’ or *bemoeizorg*) as an intervention for chronic addicts often with dual diagnosis, stems from psychiatry. A definition was not formulated but an important part of case management is co-ordination of activities and therapies in order to enable stepped care or individualised packages of simultaneous/sequential care for individual clients.

Case management for chronic addicts with dual diagnosis consist of offering practical and psychological help, supplemented by co-ordination of different care activities for individual clients. Referral to inpatient addiction care may also be part of these activities to reduce escalations or dangerous situations (Wolf et al. 2002). The report offers a typology of case management and conditions for effectiveness (based on international publications). The

scope of this study is broader than dual diagnosis patients and covers also exclusively addicted clients, homeless addicts, and drug use during pregnancy. The results of five effect studies (four with control groups) for dual diagnosis show that case management has small positive effects on patients satisfaction, drug use, psychiatric symptoms, social skills, and utilisation of care. An effective model of case management is most probably Assertive Community Treatment. This model can be characterised by several criteria:

- structural (caseload, teamwork, co-operation with other health professionals, etc.);
- organisational (explicite inclusion criteria, slow admittance of new clients, a 24-hour crisis intervention facility, etc.);
- content (support and care is provided in daily client situations, an active approach or interference, high frequency of contacts, etc.).

The study of Wolf et al. (2002) mentioned above gives guidelines. This type of intensive case management activities are still rare in the Netherlands, partly because it is expensive and partly because case managers with this expertise are also rare.

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ANNEX 1: DRUG MONITORING SYSTEMS AND DATA SOURCES

The main sources of information on drug use in the Netherlands are given below.

Monitoring drug use

<i>Survey</i>	<i>Scope</i>	<i>Measurements</i>	<i>Organisation(s)</i>
National Drug Use Survey (NPO)	National, Dutch population of 12 years and older	1997, 2001	CEDRO, University of Amsterdam, with Statistics Netherlands
Local Monitor Alcohol and Drugs (MAD)	Population of Utrecht, Rotterdam, Parkstad Limburg, 16-69 years	since 1997 annually (not each year in each site)	Trimbos Institute, IVO, University of Maastricht, Municipal Health Services, and Institutes for Addiction Care
National Youth Health Survey (Peilstationsonderzoek scholieren)	National, students of primary and secondary schools (10-18+ years)	1984, 1988, 1992, 1996, 1999, 2003	Trimbos Institute
National Youth Health Survey 'Special' (Peilstationsonderzoek scholieren)	National, students of special schools and participants in truancy projects	1990, 1997	Trimbos Institute in co-operation with Municipal Health Services and committees of school truancy projects
Health Behaviour in School-Aged Children (HBSC)	National, pupils of primary and secondary schools aged 11 through 17 years	2001	Trimbos Institute in co-operation with the University of Nijmegen and the Utrecht University.
Antenna Survey	Amsterdam youth, including students and occasionally other groups	since 1993 annually, but frequency depends on target group	Institute Bonger, University of Amsterdam and Jellinek Prevention & Consultancy

Monitoring treatment demand

<i>Information system</i>	<i>Scope</i>	<i>Population</i>	<i>Organisation</i>	<i>Last reporting year</i>
LADIS. National Alcohol and Drugs Information System	National	Outpatients of specialised addiction care and treatment centres	Organization Care Information Systems (IVV/IVZ)	2001 full report, 2002 key figures
Zorgis. Care Information System	National (Not yet complete)	Inpatients and outpatients of mental health care institutions and institutions for addiction care and treatment. ICD-9 and ICD-10 diagnoses.	Netherlands Association for Mental Health Care (GGZ Nederland) in co-operation with Prismant	2002
LMR. Dutch Hospital Registration	National	Inpatients of general hospitals ICD-9 diagnoses	Prismant	2002
CMR. Central Methadone Register	Amsterdam region	Methadone clients	Municipal Health Service Amsterdam (GG&GD Amsterdam)	2002

Monitoring diseases and mortality

<i>Information system</i>	<i>Target group and scope</i>	<i>Organisations responsible</i>
HIV monitoring	Injecting drug users in different towns	RIVM

HIV/aids registration	Injecting drug users	IGZ at the Ministry of Health, Welfare and Sport (VWS).
Causes of Death Statistics ^{a)}	National, people listed in the population register	Statistics Netherlands (CBS)

^{a)} Mortality among Amsterdam drug users is recorded yearly by the Municipal Health Service Amsterdam (GG&GD Amsterdam).

Monitoring the drugs market

<i>Project</i>	<i>'Target group'</i>	<i>Report</i>	<i>Organisations responsible</i>
Drugs Information and Monitoring System (DIMS)	Composition of party drugs offered by consumers	Yearly	Trimbos Institute, with drug treatment agencies
THC Monitor	THC content and price of cannabis samples from coffee shops.	Yearly	Trimbos Institute

ANNEX 2: LIST OF TABLES

Table 1.1	Estimated expenditures on drug policy in the Netherlands in 2003
Table 2.1	Drug use (%) in the Dutch population of 12 years and older in 1997 and 2001
Table 2.2	Minimum estimates of the number of current drug users in the Netherlands in 2001
Table 2.3	Trends in drug use among third-form pupils in Amsterdam (1995-2002)*
Table 2.4	Trends in drug use among older pupils in Amsterdam (1993-2002)*
Table 2.5	Alcohol and drug use among young people in the nightlife scene of The Hague in 2002
Table 2.6	Substance use among the homeless in 2002
Table 2.7	Drug use among male detainees in 2002*
Table 2.8	National estimates of the number of problem hard drug users*
Table 2.9	Local and regional estimates of the number of problem hard drug users
Table 2.10	Needle-sharing among injecting drug users (%)*
Table 3.1	Drug clients at outpatient drug treatment services in 2002
Table 3.2	Clinical admissions to general hospitals related to drug abuse and drug dependence in 2002
Table 3.3	Number of non-fatal emergencies due to recreational drugs recorded by the Municipal Health Service of Amsterdam in 2002
Table 4.1	Social characteristics of primary drug clients at outpatient centres in 2002
Table 4.2	Number of coffee shops in the Netherlands
Table 4.3	Number of Opium Act cases recorded by the Public Prosecutions Service
Table 4.4	Number of irrevocable sentences in Opium Act cases imposed by the courts
Table 4.5	Number of custodial sentences and number of detention years since 1997
Table 4.6	Offences among suspects registered by the police as a drug user in 2002
Table 5.1	Estimations of the Dutch cannabis market (x 1000 kg)
Table 5.2	Amount of confiscated ecstasy tablets, attributed to the Netherlands
Table 5.3	Percentage of pills tested by DIMS, since 1997
Table 5.4	Average THC percentage in cannabis products
Table 5.5	Average price per gram of cannabis products (in €)
Table 14.1	Relationship between public interest and dimensions to be monitored
Table 15.1	Characteristics of cannabis clients in 2001
Tabel 15.2	Problem use of cannabis in different groups
Table 16.1	One-year prevalence of mental disorders (%) among drug dependent persons (in 1996)

ANNEX 3: LIST OF GRAPHS

- Figure 2.1 Current use of alcohol, tobacco and drugs among the Dutch population of 12 years and older and among current cannabis users in 2001
- Figure 2.2 Estimated number of problem users of hard drugs per 1000 inhabitants in the Netherlands
- Figure 2.3 Estimated number of opiate addicts in Amsterdam by country of origin
- Figure 3.1 Number of clients at outpatient drug treatment services with a primary drug problem in 2002
- Figure 3.2 Number of clients at outpatient drug treatment services with a secondary drug problem
- Figure 3.3 Number of admissions to general hospitals because of a primary (left) or secondary (right) diagnosis drug dependence or nondependent drug abuse (ICD-9 codes 304 and 305.2-9)
- Figure 3.4 Number of acute drug-related deaths in the Netherlands according to the EMCDDA selection of ICD-9 codes (1985-1995) and ICD-10 codes (1996-1998)
- Figure 3.5 Age distribution of cases of drug-related deaths in 2001
- Figure 3.6 Number of deaths among drug users in Amsterdam
- Figure 3.7 Mortality per 1,000 person years among Amsterdam methadone clients
- Figure 3.8 HIV-prevalence among injecting drug users
- Figure 3.9 Number of non-fatal emergencies due to hard drug overdose recorded in Amsterdam
- Figure 3.10 Number of non-fatal emergencies in Amsterdam related to the use of cannabis
- Figure 4.1 Nature of criminal cases involving offences against the Opium Act (1999)
- Figure 5.1 Amount of heroin and cocaine seized in the Netherlands
- Figure 5.2 Number of nederwietplants confiscated in the Netherlands
- Figure 15.1 Outpatient treatment demand related to cannabis use
- Figure 15.2 Number of single and poly cannabis clients in 1994 and 2001

ANNEX 4: MAP OF THE NETHERLANDS, PROVINCES AND CITIES

The Netherlands



ANNEX 5: LIST OF ABBREVIATIONS

ADHD	Attention-Deficit/Hyperactivity Disorder
AIAR	Amsterdam Institute for Addiction Research
AIDS	Acquired Immune Deficiency Syndrome
ASI	Addiction Severity Index
BMC	Bureau for Medical Cannabis
CAM	Coordination Centre for the Assessment and Monitoring of NewDrugs
CBS	Statistics Netherlands
CBZ	Board of Construction of Facilities for Hospitals
CCBH	Central Committee on the Treatment of Heroin Addicts
CEDRO	Centre for Drug Research
CIBH	Committee on Introductory Aspects of Treatment of Heroin Addicts
CMR	Central Methadone Registration
CVS	Client Monitoring System
CVZ	Health Care Insurance Board
DIMS	Drugs Information and Monitoring System
DOB	2,5-dimethoxy-4-bromoamphetamine
DSM	Diagnostic and Statistical Manual of Mental Disorders
EDDRA	Exchange of Drug Demand Reduction Activities
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EU	European Union
EuropASI	European version of the Addiction Severity Index
FADO	Forum of Alcohol and Drug Researchers
FIOD	Fiscal Intelligence and Investigation Department
GGD	Municipal Health Service
GG&GD	Area Health Authority
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
IOO	Economic Research Institute for the Public Sector
ISIS	Infectious Diseases Surveillance Information System
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
LMR	National Information System on Hospital Care and Day Nursing
LSD	D-Lysergic acid diethylamide
LSP	National Support Centre for Prevention

LTP	LifeTime Prevalence
LMP	Last Month Prevalence
LYP	Last Year Prevalence
MAD	Region and City Monitor on Alcohol and Drugs
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
OASys	Offender Assessment System
OBJD	Justice Documentation Research Database
OMDATA	Public Prosecution Department Data
PiGGz	Inpatient Register Mental Health Care
PMA	Paramethoxyamphetamine
RIVM	National Institute for Public Health and the Environment
SIDV	Support and Information Point Drugs and Safety
SCP	National Institute for SocioCultural Studies
SOV	Judicial Treatment of Addicts
SRM	Criminal Justice Monitor
SVO	Steering Committee for the Reduction of Nuisance
TBC	Tuberculosis
THC	Tetrahydrocannabinol
TM	Treatment Multiplier
USD	Synthetic Drugs Unit
VBTB	From Policy Budget to Policy Accountability
VTV	Centre for Public Health Studies
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
ZORGIS	Registration System on Mental Health Care