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## REPORT TO THE EMCDDA by the Reitox National Focal Point

## THE NETHERLANDS DRUG SITUATION 2008

As approved on 16-12-2008 by the Scientific Committee of the Netherlands National Drug Monitor (NDM) REITOX

REPORT ON THE DRUG SITUATION 2008

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#### PREFACE

The Report on the Drug Situation in the Netherlands 2008 has been written for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Each year, national centres of expertise on drug-related issues in the member states of the European Union ('Focal Points') draw up a report on their respective national drugs situation, according to guidelines provided by the EMCDDA. These reports form the basis of the "Annual Report on the State of the Drug Problem in the European Union" compiled by the EMCDDA. In keeping with the guidelines, the report focuses on new developments in the reporting year. In order to avoid too much overlap, the reader is repeatedly referred to previous National Reports.

This 2008 national report was written by the staff of the Bureau of the Netherlands National Drug Monitor (NDM) at the Trimbos Institute and staff of the Scientific Research and Documentation Centre (WODC) of the Ministry of Justice. The NDM was established in 1999 on the initiative of the Ministry of Health, Welfare and Sport. The Ministry of Justice also participates in the NDM. The NDM carries out the functions of the Netherlands Focal Point.

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

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#### Summary

#### Developments in drug law and policies

#### Hallucinogenic mushrooms on Schedule II of the Opium Act

The Minister of Health decided to add all hallucinogenic mushrooms to Schedule II of the Opium Act (as of the 1st of December 2008).

Research shows that the annual government expenses on Opium Act crime increased with 92% compared to the year 2000. As a percentage of the total government expenses on crime, the expenses on Opium Act crime slightly decreased from 6.0% in 2006 to 5.9% in 2007.

#### Parliamentary Debate

During a parliamentary debate in March 2008, the Ministers of Health, Justice and Home Affairs announced that the Dutch drug policy of the past thirty years will be evaluated. By the end of 2009, the Dutch government will launch a new comprehensive drug policy document. A new comparative risk assessment of drugs of potential misuse will be performed. Moreover, a separate risk assessment of cannabis will be made.

#### Developments in drug use and related problems

#### Overall decreasing trend in drug use among pupils since 1996

There are no new data on drug use in the general population. Between 2001 and 2005, the percentage of last year drug users remained stable among the general population of 15-64 years. However, among pupils of secondary schools (12-18 years) an overall decreasing trend in drug use is observed since 1996, although differences between 2003 and 2007 were generally not significant. Cannabis remained the most popular illegal drug with a last month prevalence of 8%. Last month prevalence rates for other drugs were below 1%.

#### Slight increase hospital admissions for cocaine and cannabis

Preliminary figures from addiction treatment suggest that, in absolute terms, the increase in the number of cannabis clients and amphetamine clients has continued in 2007, although the proportion of amphetamine clients of all drug clients remains small. For opiates, a minor increase is seen after some years of a decrease, which is probably due to improved registration of cases. However, these trends still need to be confirmed (see § 4.2). In 2007 general hospitals report a slight increase in the number of admission related to cocaine and cannabis abuse/dependence as secondary diagnoses (607 for cocaine and 399 for cannabis), but these disorders are not often recorded as primary diagnoses (114 for cocaine and 69 for cannabis). The increase until 2006 in the number of acute emergencies related to cannabis and GHB in Amsterdam did not continue in 2007 (444 and 110 in 2007, respectively). The number of emergencies related to hallucinogenic mushrooms further increased, from 125 in 2006 to 149 in 2007. As Amsterdam has a high load of young drug tourists in Amsterdam, who often experiment with drugs, these trends can not be generalised to the Netherlands as a whole.

#### Decreasing mortality

National data from Causes of Deaths Statistics indicate that drug overdose mortality has remained low since the mid-nineties, and decreased in the past years (99 cases in 2007). With some fluctuations, the number of acute deaths related specifically to opiates show a similar declining trend (34 cases in 2007). Data for Amsterdam also point at a decreasing mortality rate among methadone clients, in spite of the progressive ageing and pathology in this group. Probably, the majority of the (ultra) high risk group of injecting drug users has died already, and mortality rates may drop to the level of non-injecting drug users.

#### Low number of new infections of HIV and hepatitis

The number of exchanged syringes in Rotterdam and Amsterdam continued to decline in 2007 (180,100 and 210,000, respectively) suggesting a further decreasing popularity of drug injecting. However, while a cohort study among young hard drug users (18-30 years) confirmed a low incidence of injecting in this group, relapse among those who had ever injected before was common (2 against 13 per 100 person-years).

Data from various sources on infectious diseases suggest that the number of new diagnoses of HIV and hepatitis B and C among hard drug users is low, but there are many indications that the number of chronically infected drug users, and thereby the burden of these diseases is much higher.

#### Increase in price of Dutch marihuana

Market data show that the average THC concentration in Dutch home-grown marihuana bought in coffee shops in 2008 remained at the level measured in 2007 (16%). The percentage of THC in imported hashish dropped from 18.7% in 2006 to 13.3% in 2007, and partially recovered in 2008 (16.2%). The increase from 2006 to 2007 in the price of Dutch marihuana at user level continued in 2008 (6.2, 7.3 and 7.7 euro, respectively), which may be related to the intensified actions of police and justice to combat large-scale cannabis cultivation.

#### **Developments in prevention and treatment**

#### Emphasis on vulnerable groups

Drug prevention in the Netherlands is part of the broader domain of health prevention. In the last four-year policy plan, the main focus is on alcohol abuse among young people. Currently, prevention of drug use is focused on vulnerable or at-risk groups, not only younger people but also the elderly, patients with mental retardation, several other client groups in mental health care and people in prison. The growing emphasis on risk groups is reflected in (pilot) studies that evaluate interventions for heavier alcohol and drug using students. Examples of these interventions are brief face-to-face motivational interviews combined with incentives to increase participation and response, in-school office hours for drug problems and the start of a school-based outpatient clinic. New is also a private course for parents at home, training them in recognising and correcting drug use behaviour of their children. Two projects (the Parent Management Training Oregon and the Coping Power Programme) are specifically targeting the reduction of problem behaviours at an early age because these appear to be strongly related to substance abuse and criminality at a later age. A national office hour on party drugs is initiated for complaints about these drugs via a national phone number. The popularity and number of prevention and

treatment programs via the internet is increasing. New are a website on drug use and infectious diseases and one on integrated treatment for dual diagnosis or co-morbidity.

#### More treatment interventions for young people

Treatment of drug use problems is also increasingly focussing on young people. All organisations of addiction care and juvenile justice institutions now have specific treatment facilities for this target group, or are currently developing these. In line with earlier studies, the results of a recent systematic review showed that, of the available evidence for effectiveness of interventions for young people who use drugs, the evidence is strongest for family-based therapies, motivational enhancement techniques, brief interventions (combined with personal feed back and normative comparison), and cognitive-behavioural therapy. As part of the national programme Scoring Results, a guideline and a protocol are constructed for the treatment of younger drug clients. The guideline is targeting early detection and patient-treatment matching. The protocol covers cognitive-behavioural therapy targeting drug abuse in general. Finally, a treatment monitoring system is set up for young people with substance use disorders.

#### Continued attention for quality of addiction care

Because professional education in addiction care was largely unstructured in former years, a council for enhancing professionalism in addiction care was set up to develop quality standards, certification and accreditation. As part of this exercise, an overview of the most important issues on addiction was published. Furthermore, teaching modules were initiated for medical nurses and students in social work, specialised courses in addiction for physicians and psychologists started as well as accreditation initiatives. As part of the current trend toward standardisation and control in health care, directives for the construction of multidisciplinary evidence-based guidelines and protocols were published. The guideline Maintenance Treatment for Opiate Addicts (*RIOB*) will be updated with outcome indicators, with additional material on diagnosis and with treatment of alcohol problems and co-morbid problems in this client group. An outcome indicator set is in development for the entire sector of mental health care and addiction care.

#### Aftercare treatment needs improvement

Recent data on methadone maintenance treatment present striking differences in doses per region. Differences in organisational policies and the fact that methadone clients are in general reluctant to take higher doses may be the reasons for these differences.

Drug free treatment is uncommon as an isolated treatment option for opiate addicts, but commonly applied for addiction problems related to other substances. This is partly because effective medical assisted treatments for addiction to these other drugs are still not available. An exception for opioid addiction is the experiment with a voucher-based Community Reinforcement Approach (CRA) to reduce cocaine use in methadone programme participants. It shows that this potentially effective treatment is not easily accepted by addiction care, thus the implementation needs supportive action. In the past year the evidence-based 'lifestyle training' became increasingly popular as a treatment option, especially for problems related to the use of substances other than opiates. A recent evaluation of this training shows an average abstinence rate of 21 percent, and 24 percent with reduced drug use nine months after the end of treatment. Another study suggests that aftercare is still rare in addiction care (outside the judicial system) but crucial for maintaining success after treatment. The number of participants in the currently running IN- CANT study (272 in May 2008), focussing on family-based treatment for young problematic cannabis users, is increasing and participants are now coming from five European countries. Sixtytwo are from the Netherlands.

#### More attention for dual diagnosis

Attention for dual diagnosis patients is gradually growing. This is represented by the increasing number of conferences on this topic and the fact that 75 percent of the regional organisations of addiction care now have (or are currently starting) integrated treatment possibilities for dual diagnosis patients. Unfortunately, the evidence-base for effectiveness of these treatments is still insufficient, but the growing treatment need has to be met. An experiment with outpatient Integrated Dual Disorder Treatment (IDDT) in five teams showed that the implementation of IDDT is hampered partly because these patients with serious problems are difficult to approach.

#### Developments in the field of law enforcement and the criminal justice system

#### Stable or decreasing number of Opium Act offences

With regard to *production, trafficking, dealing and possession of illegal drugs*, the preliminary criminal justice statistics 2007 show flattening trends and even decreases in numbers of registered offences:

- There are less Opium Act cases in the criminal justice chain than in 2006. The police registered about 21,250 cases minus 4% compared to 2006. The Public Prosecutor handled over 19,200 Opium Act cases minus 5%. The courts handled about 12,000 cases minus 9%.
- Opium Act offences follow a more general decreasing trend in registered offences. They form 7% of the total number of offences, which is not different from 2006.
- In the period 2000-2006 we saw a rising trend in the fraction of soft drugs in all parts of the criminal justice chain. In 2007 this trend discontinued.
- Hard drug cases still form the majority of the Opium Act cases. The difference with the number of soft drug cases, however, is very small in the first parts of the criminal justice chain.
   Hard drug cases get a clear majority in the final parts, especially in prisons. This means that especially hard drug offences are likely to end up in an imprisonment.
- A considerable proportion (72%) of the investigations into more serious forms of organised crime involve trafficking or production of drugs. In 2006 this was 75%.

The organized crime with regard to heroin, cocaine and synthetic drugs forms one of the priority areas of the fight against organized crime. The approaches contain a combination of administrative and preventive measures, criminal justice and repressive approaches and international co-operation. There is a close link with activities against money laundering and other financial-economic crime.

#### Increasing number of criminal drug users referred to care

Crimes committed by drug users form a considerable fraction of crime and recidivism in the Netherlands. The policy view point is that a substantial reduction of this type of crime can only be realised by offering help for the user's problems and addictions. This viewpoint was confirmed in July 2007 and again in August 2008. Quasi-compulsory treatment, fine tuned to the individual criminogenic factors, is strongly advocated and stimulated. In July 2008, the new law for conditional release from prison came into force. Findings for 2007 are:

- Addiction Probation Services saw more clients in 2007 than in the years before (17,103 contacts with 10,360 unique persons). Characteristics of clients 2006-2007 did not change much.
- The kind of services did not change much. The biggest changes can be seen in supervisory activities (now more than in 2006) and in interventions (now less than in 2006). There are more referrals to care programmes than in the years before, mostly to nonclinical addiction care.
- New in 2008 is that the Ministry of Justice expressed intentions for a small-scale experiment with a more open budget and more autonomy for probation services, which are very tightly bound now to production guidelines and output-finance systems.
- The number of offenders under the measure of Placement in an Institution for Prolific Offenders (ISD)/Judicial Placement of Addicts (SOV) ranged from 629 and 679 per month. Most of them are drug addicts.
- Serious problems in the implementation of the measure ISD have been identified (see § 9.2).
- Since 2006 there is a special aftercare-procedure in prisons. Detainees are screened by special penitentiary workers and problems in the field of identity cards, housing, income and care are identified. If there exists a problem in these fields, a signal is given to the municipality where the detainee will go to after his release. Recent research showed that this procedure is not crystallized out yet and that there are problems in the information exchange.

#### Fight against synthetic drugs production continues

With regard to the supply situation, new findings are noted:

- The situation around import of cocaine by swallowers and body packers at Schiphol Airport is under control. There is no special law enforcement programme any more, the activities are part now of the regular activities of the Royal Police Forces at Schiphol Airport. The number of cocaine couriers at Schiphol Airport still seems to be decreasing.
- 15 Dismantlements of production locations of synthetic drugs were reported, which is the lowest number since 2000. Five locations were for amphetamine production, two for MDMA and two for other synthetic drugs. The number of confiscated MDMA-tablets increased to 8,1 million. There were 2 big confiscations of 1.1 and 2.5 million tablets. In 2005, the number was low, but in 2006 and 2007, there is an increase again. Confiscations of MDMA-powders also increased again in 2007. Like in 2006, there were almost no confiscations of BMK and PMK.
- The intensification (T.K.28192/23) of law enforcement on cannabis cultivation, which was launched in April 2004, is still running. Administrative approaches play an important role here. A Task Force was installed in 2008.

### Part A: New Developments and Trends

#### 1 National policies and context

#### 1.1 Legal framework

#### Introduction

In the Netherlands, the national drug policy 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.

The primary aim of Dutch drug policy is focused on health protection and health risk reduction. However, the enforcement of relevant laws also has special attention. This policy was first formulated in the white paper: The Dutch Drug Policy: Continuity and Change (1995) (Ministry of Foreign Affairs et al. 1995) The implementation of this policy was monitored and updated by four progress reports. Since then, Dutch drug policy has developed drug strategies for specific drugs and different initiatives to diminish public nuisance, drug offences and drug related organized crime. The ecstasy and cocaine strategies have a strong focus on law enforcement, while the cannabis strategy touches upon all aspects of the issue:

- Ecstasy: the white paper "A combined effort to combat ecstasy" (2001) announced intensified law enforcement in the battle against the production and trafficking of ecstasy (T.K.23760/14). In May 2007, the government decided to continue this policy on a regular basis (T.K.23760/20).
- Cocaine: The 'Plan to combat drug trafficking at Schiphol Airport' (2002) was directed against the trafficking of cocaine at Schiphol Airport (T.K.28192/1: Tweede Kamer der Staten-Generaal vergaderjaar 2001-2002 publicatienummer 28192 nr.1 2001). This policy is also continued on a regular basis now.
- Cannabis: the Cannabis Policy Document (2004) tightened Dutch policy on cannabis (T.K.24077/125);
- Heroin: an experimental programme to treat chronic and treatment-resistant opiate addicts by means of medically prescribed heroin (first announced in 1995).
- There are several laws and policies aimed at reducing drug related nuisance with the last resort being the possibility to apply a measure on (addicted) prolific offenders for at most two years, under which they can be placed in a penitentiary facility, more or less irrespective of the nature of the offence (E.K.28980/B); (Stb 2004/351). The present government intends to offer these offenders behavioural interventions and to refer them to appropriate (addiction) care. The main target is to diminish crime with 25 per cent and recidivism of criminals with ten per cent. (T.K.31110/1).

#### Laws

In the Netherlands, only a few laws and regulations are primarily directed towards drugs, but many other laws with a broader scope are important in relation to illegal drugs:

#### Drug laws and regulations

- Opium Act (Opiumwet) (criminal law)
- Opium Act Decision (Opiumwetbesluit) (Royal Decree)
- Opium Act Directives (Directive of Public Prosecution Service)
- Victor Act (Wet Victor) (criminal law/administrative law)
- Regulation Heroin Treatment (ministerial regulation)

#### Laws and regulations indirectly important for illegal drugs

- Prisons Act (Penitentiaire Beginselenwet) (criminal law)
- Conditional Release Act (criminal law)
- Placement in an Institution for Prolific Offenders Act (Plaatsing in een inrichting voor stelselmatige daders – ISD) - (criminal law)
- Abuse of Chemical Substances Prevention Act (Wet Voorkoming Misbruik Chemicaliën) (chemical precursors administrative law)
- Public Administration Probity Screening Act (Wet bevordering integriteitsbeoordelingen door het openbaar bestuur or Wet Bibob) (money laundering administrative law)
- Health Insurance Act (Zorgverzekeringswet) (health law)
- Medicines Act (Geneesmiddelenwet) (health law)
- Collective Prevention Public Health Act (Wet collectieve preventie volksgezondheid) (health law)
- Community Support Act (Wet Maatschappelijke Ondersteuning WMO) (health law)
- Plan of approach for social relief (Plan van aanpak maatschappelijke opvang) (policy letter)

For more information about the content and impact of these laws and regulations: see our previous National Reports.

#### The Opium Act

Dutch legislation is consistent with the provisions of all the international agreements which the Netherlands has signed, i.e. the UN Conventions of 1961, 1971 and 1988, and other bilateral and multilateral agreements on drugs. The Dutch Opium Act (1928), or Narcotics Act, is a partly criminal law. It was fundamentally changed in 1976, when a distinction was made between drugs presenting unacceptable risks (hard drugs - Schedule I) and drugs like cannabis (soft drugs - Schedule II), which were seen as less dangerous. Since then, the Opium Act has been amended on various occasions but its basic structure has been maintained.

#### Article 13b

In 2006, an amendment to the Opium Act was proposed. Until then, article 13b of the Opium Act combined with article 174a of the Local Government Act could only be used to close premises used for the sale of illegal drugs, if *disturbance of the public order* could be proved. In April 2006, a proposal was sent to Parliament, in which *only* the *sale* of illegal drugs has to be proved. The scope of this bill includes the sale of hard drugs as well as the illegal sale of cannabis. The toler-

ated sale of cannabis in the coffee shops falls outside the scope of this bill. In practice, in these cases law enforcement will be used in proportionality. That means that the closing of premises will be the ultimate sanction in a chain of sanctions (T.K.30515/3). In November 2007 this law came into effect (Stb 2007/392). It falls within the jurisdiction of the local authorities to use this new instrument of administrative coercion (E.K.30515/C). In the reporting year some mayors already used this new legal instrument to close down premises.

#### Hallucinogenic mushrooms

On 1 July 2008, a concept decision to change Schedule I and Schedule II was sent to the Lower House of Parliament. Oripavine - an opiate and the major metabolite of thebaine- will be placed on Schedule I of the Dutch Opium Act, following the decision of the Commission on Narcotic Drugs of the United Nations to add this substance to Schedule I of the Single Convention. In the same decision it is proposed to add all hallucinogenic mushrooms, which contain the substances psilocine or psylocybine by nature, as well as mushrooms containing muscimol or iboteen acid by nature to Schedule II of the Opium Act. This means that 186 different kinds of mushrooms will get the same judicial status as cannabis. This applies to the fresh as well as to dried hallucinogenic mushrooms, meaning that the dried mushrooms, which were already placed on Schedule I, move from Schedule I to Schedule II. The reason to also legally control the poisonous mushrooms like the fly agaric (amanita muscaria muscaria) and the amanita pantherina is based on research from England where after the prohibition of hallucinogenic mushrooms in 2005, a shift to the mentioned poisonous mushrooms was discerned (T.K.31477/2). With this decision the Minister of Health surpasses the advise of the Dutch committee on the assessment of new drugs (CAM), which judged the overall risks of hallucinogenic mushrooms to be low. Yet, foreign tourists in Amsterdam were identified as a specific vulnerable group.(T.K.31477/2).

On 1 December 2008, the prohibition of hallucinogenic mushrooms came into force.

#### Risk assessment khat

In March 2007 the Lower House of Parliament passed a motion to forbid the substance khat (T.K.30515/12). As a response, the Minister of Health asked the Committee on the assessment of new drugs (CAM) to make an assessment of khat. Khat (*Catha edulis*) is a flowering shrub native to Yemen and the Horn of Africa that is known for its mildly stimulating properties. In the Netherlands it is mainly used by the immigrant Somalian population. The conclusion of the CAM was: the use of khat poses little risk to the health of the individual user, and it presents no appreciable risk to Dutch society as a whole. There is therefore no reason to prohibit its use in the Netherlands. However, it is recommended that (potential) users of khat receive targeted education aimed at discouraging its use. Such educational initiatives should increase the awareness of users to the possible negative social and economic consequences and the potential adverse health effects of excessive khat use. The Minister declared to follow this advise (T.K.24077/208).

#### Medicinal cannabis

The existing policy for medicinal cannabis, which gives physicians the possibility to prescribe cannabis for medical reasons, will at least be continued until the end of 2012. The cannabis has to be cultivated under the aegis of the Office of Medicinal Cannabis (OMC). However, a recent

judgement of the Supreme Court discharged a MS-patient for cultivating its own cannabis which has a salutary effect on his spasticity and pain.

#### Institution for Prolific Offenders (ISD)

In 2004, the act 'Placement in an Institution for Prolific Offenders (Plaatsing in een inrichting voor stelselmatige daders – ISD)' came into effect (Stb 2004/351). This act refers to all prolific offenders, not only addicts. The main targets of the Prolific Offenders Programme are to prevent high risk youth from becoming prolific offenders and to reduce recidivism for adult prolific offenders. Some personal support during detention plus individual aftercare following detention are part of this Programme. In April 2007, 556 of the 874 available intramural places and 88 extramural places were occupied (T.K.31110/1). Up to 2008, this measure was imposed 1,177 times. It is suggested that the mere threat with an ISD-measure makes many prolific offenders willing to accept quasi-compulsory treatment. However, within the group of prolific offenders three sub-groups can be discerned: offenders who can be influenced and who are motivated; offenders who are not fitted for behavioural interventions, but who need care; offenders who are not motivated, not impressionable and unwilling (T.K.31110/4). An evaluation of this act is being prepared.

In 2008, the Inspectorate for the Implementation of Sanctions (ISt) published a critical report on the implementation of the ISD-measure. For more detailed information on this subject see chapter 9.

The Netherlands Institute for Social Research/SCP performed an analysis of the presumed and actual effects of the safety policy since the launch in 2002 of the Safety Programme (*Naar een veiliger samenleving* – 'Towards a safer society'). The tackling of prolific offenders lies at the heart of the Safety Programme. The main conclusion is that some parts of the Programme offer promise in reducing crime and nuisance (such as the deployment of the police at hot spots and hot times, attention for parenting support and the use of quality marks), while others do not (e.g. harsher detention regimes, arrests for minor offences and disciplinarian re-education facilities), while the effect of others is unknown (e.g. camera surveillance). In the area of reducing recidivism, which is key to success in the longer term, there are no indications that 'sure, faster and more severe punishments' achieve greater success than would have been the case with a different policy (Van Noije et al. 2008).

The new Conditional Release Act came into force on 1 July 2008. This Act gives authorities the possibility to impose judicial supervision on detainees with a sentence longer than one year after release from detention, for instance while they are in quasi-compulsory treatment after they served their sentence (T.K.31110/5).

#### Implementation of Laws

#### **Opium Act Directive**

In the Netherlands, criminal investigation and prosecution operate under the so-called *opportuniteitsbeginsel* ('expediency principle' or principle of discretionary powers). Within certain boundaries, the Dutch Public Prosecution Service has full authority to decide whether or not to prosecute. For this it issues guidelines. The most recent set of comprehensive guidelines for enforcing the Opium Act was the Opium Act Directive of 2000, which was valid from 2001 until 2005 (Stc 2000/250). This Opium Act Directive has been prolonged until the end of 2008 (Stc 2004/246)). It contains the investigation priorities concerning the Opium Act as formulated by the Board of Procurators General.

In the Netherlands the sale of cannabis is illegal, yet sale of cannabis in coffee shops is tolerated if the shops adhere to certain criteria: no advertising, no sale of hard drugs, not selling to persons under the age of 18, not causing public nuisance and not selling more than 5 grams per transaction (AHOJ-G criteria). Three additional criteria are: no alcohol vendor, no more than 500 grams in stock and - in most municipalities that allow coffee shops to operate on their territory - a minimum distance from a school or from national borders. Although these additional criteria have not yet been integrated in the Opium Act Directives, the Public Prosecution Service is very strict in enforcing the alcohol and 500 gram criteria. In 2007, eighty per cent of the municipalities with tolerated coffee shops had implemented the minimum-distance-to-schools criterion (Bieleman et al 2008). In the Coalition Agreement of 2007 the Dutch government announced that coffee shops in the neighbourhood of schools will be closed and coffee shops in border regions will be discouraged (Rijksvoorlichtingsdienst 2007). Every municipality is, within certain limits, free to determine the exact distance.

At the end of 2007, the Netherlands had 702 officially tolerated cannabis outlets (coffee shops). This is a 3.7 percent overall decrease compared to the situation in 2005 (729 coffee shops). In 2007, the majority of the 443 municipalities in the Netherlands pursued either a zero policy (66%) or a maximum policy (24%) with regard to the number of tolerated coffee shops (Bieleman et al 2008).

For more information: see chapter 10.

In a policy letter from 6 November 2007, the project 'Safety starts with Prevention' was announced. Among the many targets, three intentions relating to coffee shop policy were formulated by the government. First, in 2011, all the municipalities with coffee shops must have implemented a distance-to-schools criterion. Every coffee shop violating one of the AHOJ-G criteria will be closed down immediately. Thirdly, coffee shops in the border region will be discouraged (T.K.28684/119). In the last 10 years, government policy has aimed to reduce the number of coffee shops (see also § 10.1). However, the decision whether or not to tolerate a coffee shop lies with the local governments.

Other drug related targets of the project 'Safety starts with Prevention' are:

- To stimulate the founding of the so-called Safety Houses: local co-operations between local authorities, care facilities, police, Public Prosecution and others in order to gear to one another the approach to individual prolific offenders and juvenile delinquents.
- To diminish the public nuisance caused by substance use among persons in the nightlife scene.
- To improve the implementation of the ISD-measure.
- To launch the new programme 'Strengthening of approaches against organised crime' in which existing administrative, preventive, criminal justice approaches are combined and linked with international collaboration. Special focus will be directed to the organised cannabis cultivation (T.K.28684/119).

#### Drug-related nuisance

One of the targets of Dutch drug policy is the reduction of drug-related nuisance, including nuisance due to drug tourism. Especially the larger cities and border towns are confronted with these problems.

In 2006, a pilot started in the border town Maastricht to investigate the possibility of barring nonresidents from tolerated coffee shops. With this measure the local authority intended to reduce the number of foreign drug tourists and the related nuisance. The mayor of Maastricht started a judicial test case, in which the mayor decided to close down a coffee shop for three months, because of the sale of cannabis to non-residents of the Netherlands. With success, the coffee shop owner objected to the closure, because the lower Court of Justice put the coffee shop owner in the right. A prohibition of sale to non-residents would violate the discrimination ban, and the justifications for such a violation are not sufficient, according to the Court. The municipality of Maastricht will appeal to the Council of State (T.K.Aanhangsel/2172).

Another increasing public nuisance phenomenon in Maastricht are the so-called *drug runners*, who try, in an aggressive way, to persuade foreign drug tourists to visit illegal drug selling premises (T.K.Aanhangsel/2172).

In order to diminish the public nuisance, the municipality of Maastricht intends to create so-called CoffeeCorners (with cannabis selling coffee shops) at three different places in the outskirts of the town. The neighbouring towns – most of them are situated in Belgium- are against these projects, because they fear that the nuisance will spread to their region. Recently, a regional consultation to reach an regional approach against drug tourism got off the ground (www.maastricht.nl; visited: 27 August 2008).

According to the Community Support Act, every municipality has the responsibility to organise relief centres for drug addicts. Sometimes, local residents react with hostility to these kind of centres. Mostly, their resistance is based on anticipated public nuisance. However, the municipality of Utrecht has developed an approach in which the local residents are involved from the beginning, leading to the paradoxical situation that the local residents feel safer after the found-ing of a shelter for addicts in their neighbourhood (Schoemaker 2008).

#### Intensified actions against ecstasy

In May 2007, the Dutch government decided to continue the intensified actions against the synthetic drugs market, which started in 2001. Each year about  $\in$  18.6 million is placed on the Budget to organise the combined actions under the responsibility of the various Ministries (T.K.23760/20).

In 2006, the new national Expertise Centre for Synthetic Drugs and Precursors was founded. In its annual report information on the nature, size, trends and developments of synthetic drugs and precursors is presented. In 2007 fifteen production locations and 50 depositories of hard ware and precursors were dismantled. In November 2007 the Synthetic Drugs Enforcement Conference (SYNDEC) III was organised under the direction of the Netherlands Public Prosecutors' Office. One of the conclusions was that regarding the main precursors for the production of ecstasy -BMK and PMK-, there is not much insight into their flow and presence worldwide (Expertisecentrum Synthetische Drugs en Precursoren 2008).

An important conclusion of an analysis of the National Crime Squad on recent trends and developments of the synthetic drug market is that the Netherlands will continue to hold a crucial position in this market, because of the 'good' quality of Dutch ecstasy pills and its geographical position (Expertisecentrum Synthetische Drugs en Precursoren 2008). For more information: see chapter 9 and 10.

#### Combating cocaine trafficking

The 100%-controls of the passengers of all flights from the Netherlands Antilles, Aruba, Surinam, Peru, Venezuela, Ecuador and the Dominican Republic were continued in the reporting year.

In September 2007, the States of Ireland, the Netherlands, Spain, Italy, Portugal, France and the UK concluded an Agreement to co-operate through the Maritime Analysis and Operations Centre – Narcotics (MAOC-N) in the suppression of illicit drug trafficking – in particular cocaine - by sea and by air across the Atlantic towards Europe and the West African Seaboard. The MAOC-N will be located in Lisbon (Trb2007/231).

The Treaty of San José of 2003, which is an Agreement concerning co-operation in suppressing illicit maritime and air trafficking in narcotic drugs and psychotropic substances in the Caribbean area, was submitted for approval to the Lower House (T.K.31355/1) (T.K.31355/2)(T.K31355/3). For more information see chapter 10.

#### 1.2 Institutional framework, strategies and policies

The overall coordination of Dutch drug policy remains with the Ministry of Health, Welfare and Sport. The Ministry of Justice and the Ministry of the Interior are responsible for law enforcement and public nuisance issues.

In the Coalition Agreement of the present government of 2007 the following national drug policy priorities were formulated:

- Combating production and trafficking of drugs and drug-related public nuisance will continue unabated;
- More preventive actions will be directed at young people;
- Coffee shops in the neighbourhood of schools will be closed and coffee shops in border regions will be discouraged;
- The tough action against large-scale cannabis cultivation will be intensified;
- Experiments to regulate and legalise the supply of cannabis for local coffee shops will not be allowed;
- Medical heroin prescription will be continued (Rijksvoorlichtingsdienst 2007).

#### Parliamentary Debate on Drug Policy

On 6 March 2008, a plenary parliamentary debate on the Dutch drug policy took place in the Lower House. One of the reasons behind this debate is the coming evaluation of the UNGASS agreements in 2009. The Ministers of Health, Justice and Home Affairs were present on behalf of the government.

The most important promises and remarks of the three Ministers are:

- The existing drug policy will be evaluated: whether the major aims of the Dutch drug policy, such as the intended separation of drug markets, are achieved will be investigated, including a comparison with other countries.
- Before the end of 2009, the Dutch government will launch a new comprehensive drug policy document, including drug prevention.
- In international organisations, the Dutch government will defend the importance of the harm reduction approach of drug related matters.
- The new comparative risk assessment of drugs of potential misuse, which was performed in 2006 in the UK under the authority of the English House of Commons, will be replicated in the Netherlands.
- An independent risk assessment of cannabis will be made by the Committee on the assessment of new drugs (CAM).
- More research into the impact of drugs on vulnerable groups in society will be stimulated.
- The Minister of Justice promised to take measures to forbid the so-called grow shops grow shops are (legal) retail or wholesale trades in legal requirements which can also be used for the cultivation of cannabis.
- Coffee shops offering their merchandise via the Internet (digital coffee shops) are not allowed.
- The Minister of Justice announced to make a bill to close down the grow shops.
- Because coffee shops fall under the same regulations as the entire catering industry, they also have to create separate (tobacco) smoking area's for their customers (T.K.Handelingen 2007-2008/60-1;T.K.Handelingen 2007-2008/60-2).

#### Local cannabis policy

In April 2004 the Dutch government launched proposals to intensify enforcement on cannabis cultivation (T.K.28192/23);(T.K.24077/125). These proposals devote special attention to the organised crime behind the cannabis cultivation. A clear nationwide trend is emerging of increasingly frequent and vigorous police cooperation with other institutions and with commercial firms (Wouters et al. 2007). In recent years, the dismantling of cannabis cultivation sites has taken on the character of a structured, streamlined and even routinely conducted campaign.

In June 2006, the government outlined the so-called Integral Approach to Cannabis Cultivation. In this approach, administrative and civil law instruments are combined in clamping down on large-scale marihuana cultivation sites. Under the direction of local governments the following parties may enter into a special agreement: Public Prosecution Service, the police, power companies, insurance companies, housing corporations and the tax department. Every one of these organizations has its own interest in combating illegal cannabis cultivation (T.K.24077/184). Supplementary to this administrative approach, the Programme Reinforcing the Tackling of Organised Crime intends to develop an approach to tackle the criminal networks behind the large scale cannabis cultivation. In July 2008, the Task Force Tackling Organised Hemp Cultivation was installed by the Minister of Justice. Its main targets are:

• To realize a measurable and visible reduction of large-scale hemp cultivation in the Netherlands by the end of 2011;

 To interrupt the normalization process that has taken its course concerning the cultivation of hemp by the end of 2011 (T.K.29911/10).

The following municipalities introduced bans on smoking cannabis in specific public areas ('blowverbod'): Amsterdam, Haarlemmermeer, Dordrecht, Doetinchem, Rotterdam and Maastricht. In 2007, 350 persons were expelled from their houses, because in their house a hemp cultivation site was dismantled (T.K.Handelingen 2007-2008/60-2). For more information: see chapter 10

From 2005 to 2008, the Municipal Health Authority of Rotterdam performed a prevention project in the coffee shops of Rotterdam aiming at increasing the knowledge of effects and risks of the use of cannabis for current cannabis users (customers of the coffee shops) and to train the staff of the coffee shops to detect early problematic cannabis use, and eventually suggest to the problematic users to ask for help. The targets of this project proved to be realistic (GGZ Nederland et al. 2007).

In May 2008, the largest coffee shop in the Netherlands, Checkpoint, in the border town of Terneuzen, was closed down. Ninety per cent of the 2,900 daily visitors came from France and Belgium. They caused much traffic and parking nuisance. The owner of Checkpoint is arrested on suspicion of belonging to a criminal organisation (De Graaf 2008b). After this closure, other Dutch border towns, like Maastricht, reported an increase in drug tourists (De Graaf 2008a).

The Public Administration Probity Screening Act (Wet BIBOB) gives local administrators the power to screen all kinds of new licence requests. The actual screening is conducted by a special central BIBOB-office. This office has access to secured sources such as the police files and the Tax and Customs Administration. The BIBOB office not only inspects the antecedents of the applicant, but also checks his or her immediate environment. This may result in a recommendation about the degree of risk. Dutch administrative authorities may refuse contracts, subsidies or permits for organisations and companies if they have serious doubts about the integrity of the applicant. In its most recent annual report, with data of the year 2006, the BIBOB-office writes that seven per cent of the requests is about coffee shops (Bureau BIBOB 2007).

#### Medical heroin and methadone treatment

In June 2004, the Dutch government decided that the treatment capacity for the medical prescription of heroin for chronic and treatment resistant opiate addicts could be extended from 300 to 1,000 places (T.K.24077/137). Since 20 December 2006, heroin is officially registered as a medicinal product for treatment resistant heroin addicts (Central Committee on the Treatment of Heroin Addicts (CCBH) 2006).. By the end of 2005 the Ministry of Health (VWS) adopted the plans of four out of the six municipalities already providing medical heroin co-prescription to increase their treatment capacity. Moreover, it approved the plans of eight other municipalities to develop a treatment unit. By the end of 2008, 17 units in 15 different municipalities, with a total of 715 places will be operational. The yearly funding by the central government is on average  $\in$ 16,500 per place. Municipalities have to complete the total costs of the places: the municipal costs are on average around  $\in$  10,000 per place (personal communication Ministry of Health). Besides heroin treatment, there remains a large group of opiate addicts on oral methadone maintenance treatment. In order to ameliorate the care for these people, the Minister of Health will extend the structural budget with  $\in$  15 million per year as of 2009 (see also § 5.3) (T.K.24077/224).

#### Plan of approach for social relief

In 2006 an agreement to improve the living conditions of the homeless was reached between the four major cities and the government. In the so-called 'Plan of approach for social relief' it was agreed that by 2010 at least 60 per cent of the homeless will be living in a suitable accommodation, receive effective support and care and perform meaningful daily activities. In order to prevent new street homelessness the authorities also agreed to reduce forced house evictions by 30 per cent in 2008 (T.K.29325/8). In his progress report to Parliament, with data from 2007, the Minister of Health mentioned the following results:

- In the four major cities, the number of homeless people has decreased with 25%;
- The police reported a substantial decrease of public nuisance reports;
- Very few homeless people are actual sleeping outdoors;
- The personal reintegration plans are working;
- With a court order, homeless people with multi problems can be placed in a special treatment clinic: the 120 beds are always occupied;
- There is a fruitful collaboration between the municipalities, assurance companies and the care institutions (T.K.29325/25).

For more information: see § 9.1

#### 1.3 Budget and public expenditure

#### Expenditures on addiction care

In the Netherlands, an institute for addiction care or mental health care is financed by several sources. As a rule, a regular institute receives funding from the following financial resources and underlying legal regulations (Slabbers 2008), (Van Hoof et al. 2008):

- The Ministry of Health
  - Exceptional Medical Expenses Act (AWBZ)
- The Ministry of Justice
  - Addiction Probation Services
- The Municipalities
  - Community Support Act (WMO)
- The health insurance companies
  - Health Insurance Act (ZVW)
- Additional temporary funds
  - Occasional benefactions
  - Occasional projects
- Private funding

- Individual Health Care Professionals Act (BIG)

Unfortunately, the resources that flow from the ministries and the municipalities to the addiction care are not labelled beforehand in order to retrieve which amounts will actually be spent on addiction care, let alone treatment for drug addiction. Moreover, the national information system for the health insurance companies is not adapted yet to retrieve the expenditures on drug treatment. However, the actual expenditures by the main institutes for addiction care are retrievable from their annual accounts. Table 1.1 gives an overview of these expenditures.

During the past years, a wave of mergers took place among institutes for health care. Some institutes for addiction care merged with an institute for mental health care within its own region. Other institutes for addiction care merged with another institute for addiction care in a neighbouring region or with an institute for social relief. In case an institute for addiction care has merged with an institute for mental health care, the annual account of the merged institute, unfortunately, does no longer reveal the expenditure on addiction care, let alone addiction care for drug addicts. On the other hand, in regions where institutes for addiction care did not yet merge with its neighbouring institute for mental health care, the expenditures of the institute for mental health care on addiction care become not visible at all. From table 1.1 it can be estimated that the annual expenditures of the main regular institutes for addiction care, together with the institutes for integrated addiction care and mental health care, amount to about 850,535,508 euros. Unfortunately, it is not directly clear which part of this amount is spent on treating addiction, let alone drug addiction, and which amount is still missing from the non-merged mental health care.

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Institute, year	Domain	Expenditures	Source		
Jellinek, 2006	Addiction care	35,395,000 EUR	(Van Dam et al. 2007)		
Bouman GGZ, 2007	Addiction care*	58,757,027 EUR	(Czyzewski et al. 2008)		
Parnassia Groep, inclu- ding Brijder Verslavings- zorg, 2006	Addiction care and mental health care	228,707,978 EUR	(Verschoor 2007)		
Centrum Maliebaan, 2007	Addiction care	30,102,850 EUR	(Van der Linden et al. 2008)		
Verslavingszorg Noord Nederland, 2007	Addiction care	42,278,310 EUR	(Koops et al. 2008)		
Tactus Verslavingszorg, 2006	Addiction care	32,916,000 EUR	(Rutten 2007)		
IrisZorg, 2007	Addiction care and social relief	67,985,571 EUR	(Olthof et al. 2008)		
Emergis, 2007	Addiction care and mental health care	74,798,000 EUR	(Van Leersum et al. 2008)		
De Hoop, 2007	Addiction care	19,659,527 EUR	(Stortenbeker et al. 2008)		
Novadic-Kentron, 2006	Addiction care	51,408,245 EUR	(In 't Veld et al. 2007)		
GGZ Noord- en Midden Limburg	Addiction care and mental health care	91,707,000 EUR	(Van der Sanden et al. 2007)		
Mondriaan Zorggroep	Addiction care and mental health care	116,820,000 EUR	(Janssen et al. 2008)		
Total		850,535,508 EUR of which at least for drug treatment: 165,866,240 EUR			

## Table 1.1:Expenditures by institutes for addiction care and institutes for integrated mental<br/>health care and addiction care

\*Although Bouman GGZ offers mental health care as well as addiction care, its actual clients are still addiction clients. Source in general: <u>http://www.jaarverslagenzorg.nl</u>.

Nonetheless, telephoning key informants at some institutes for addiction care has revealed that it is admissible to estimate the expenditures on drug treatment by the share of the drug clients in the total addiction treatment. According to the National Alcohol and Drugs Information System (LADIS), the drug clients in 2006 had a share of 49% in all clients (Ouwehand et al. 2007). According to Table 1.1, the institutes for addiction care that did not merge with mental health care, on an annual basis have spent a total of 338,502,530 euros on addiction care. Given the share of 49% of the drug clients among all addiction clients, it can be estimated that from this amount a total of 165,866,240 euros have been spent on treating drug addiction.

#### Expenditures on Opium Act crime

Table 1.2 shows the estimated costs of the criminal justice chain for Opium Act crime. These estimates include the costs of preventing and investigating Opium Act crime and prosecuting Opium Act criminals. Only the costs of borne by the Ministry of Justice and the ministry of Internal Affairs are included. These estimates do not include the costs of the Ministry of Health spends on preventing drug abuse. Nor do these estimates include the costs of crimes committed by drug addicts, because it is not known to what degree criminals being prosecuted are addicted to drugs. The estimates in this report are an adaptation of the estimates of the total government expenses on crime made by Moolenaar (Moolenaar 2008).

In 2007 the government spent about 429 million euro on combating drugs crime and prosecuting suspects on Opium Act charges (see table 1.2). This is a 92% increase compared to 2000. It also amounts to 6% of the total expenses on combating crime. About 52% of the costs are borne by the ministry of Justice (mainly prosecution, courts, execution of sentences, legal aid and probation services), 44% by the ministry of Internal Affairs (mainly investigation and crime prevention by the Police) and 5% by other ministries (mainly special investigation services).

	2000	2001	2002	2003	2004	2005	2006	2007
Crime prevention	59.2	77.7	89.4	103.4	119.6	119.6	119.1	117.0
Investigation	48.5	63.9	74.4	82.9	93.6	93.8	93.2	91.5
Prosecution	16.5	22.0	25.7	26.8	33.9	31.1	30.8	30.0
Courts	11.3	15.4	19.5	20.5	20.3	21.2	22.8	22.2
Execution of sentences	75.5	94.5	102.7	78.7	97.1	103.6	117.2	138.5
Probation services (after care)*	7.8	11.7	13.5	15.0	12.5	15.9	17.4	18.6
Legal aid**	4.4	6.4	7.1	9.0	10.6	11.7	11.4	11.2
Total	223.4	291.6	332.3	336.3	387.7	396.8	411.9	428.9
As a percentage of total gov- ernment expenses on crime	4.1%	4.9%	5.3%	5.1%	5.6%	5.8%	6.0%	5.9%

Table 1.2	Annual governme	nt expenses or	n Opium Act c	rime (x million euro	, prices
	0	,		<b>N</b>	· •

In general, the government spends relative small amounts on victim care and this is not different for victims of Opium Act crime. Victim care may include listening to victims, helping them with filling out forms for insurance and or compensation, assisting them when reporting the crime to the police or accompanying them at the suspect's trial, or accompanying them when talking to the suspect. The costs of victim care also includes compensation payments paid by the government (and not by the suspect). Of course the number of direct victims of Opium Act crime are limited. The health care costs of drug addicts are not included here. In total the government spent an estimated 0.2 million euro on victim care in 2007.

The budget for crime prevention is large, i.e. 117 million euro in 2007. This is almost twice as much as in 2000. This figure mainly represents the expenses on general crime prevention, such as patrolling the streets by police officers. Although it is hard to tell how many Opium Act crimes have been prevented by street patrol, it is assumed that it is proportional with the number of

Opium Act suspects. Very little is known on the costs of Opium Act specific crime prevention programs.

The expenses for investigation of Opium Act crime amount to an estimated 92 million euro in 2007. These costs include investigation activities (but not crime prevention) by the police, military police, custom officers and other investigation services, including forensic investigation services. The prosecution stage, the courts, subsidized legal aid and probation services cost relatively little, only 30 million euro, 22 million euro 19 million euro and 11 million euro respectively in 2007. But the costs of subsidized legal aid and probation services in Opium Act cases have more than tripled in seven years time.

The largest budget item is the execution of sentences, especially prison sentences. The execution of sentences in Opium Act cases cost 138 million euro in 2007. Compared with the other budget items the rise in costs is much smaller: only an 80% increase compared to 2000. The execution of prison sentences accounts for 96% of total execution costs in Opium Act cases.

#### 1.4 Social and cultural context

#### Public attitudes

In Spring 2008, the third National Security Monitor was published. The extent of perceived drugrelated nuisance is one of the items which was measured at neighbourhood level. In each of the 25 police regions at least 750 persons were interviewed. Less than one in twenty people (4.8%) report that drug-related nuisance is common in their neighbourhood. In comparison with 2006 and 2007, this is a slight decrease. Inhabitants of the four major cities (Amsterdam, Rotterdam, the Hague, and Utrecht) more often perceive drug-related nuisance as a problem compared to the Netherlands as a whole (Centraal Bureau voor de Statistiek 2008).

#### Eurobarometer

The 2008 Flash Eurobarometer on *Young People and Drugs* was requested by the European Commission. The objective was to study young (15-24 years) EU citizens' attitudes and perceptions about the issues of drugs, such as:

- past and potential information sources about illicit drug use and the related risks and effects;
- perceived health risks associated with using various licit and illicit substances (i.e. heroin, cocaine, ecstasy, cannabis, alcohol and tobacco);
- opinions about the effectiveness of alternative drug policies;
- attitudes towards banning or regulating illicit drugs, alcohol and tobacco;
- perceptions about the availability of specific drugs.

Some results of the Dutch respondents (N=503):

• On the potential sources of information about illicit drugs and drug use the Dutch youth scored highest of all countries on The Internet and lowest on a telephone helpline, police of-ficer or youth worker as a potential source of information;

- Although a large majority of all the respondents remain against a regulation of heroin, cocaine and ecstasy – and to a lesser degree cannabis-, the Dutch youth is less inclined to back this than young people in the other EU countries;
- On the perceived ease of access to cannabis, the Dutch youth scored on average (Gallup Organization 2008)

#### Dutch parents underestimate substance use of their children

In 2007, a special National School Surveys on Substance Use for Parents was performed. More than 4000 parents and 7500 pupils filled in the questionnaires. It was for the first time in the Netherlands that parents were asked about the subject of substance use of their own children. Only a third part of the parents of pupils who use cannabis is aware of this (Verdurmen et al. 2008).

#### Zero tolerance policy at dance-festivals?

Possession of small quantities for personal use of drugs has low priority in law enforcement policy. However, last year the police and the Public Prosecution Office were active in searching for drug possession on dance festivals, where they focussed on persons who posses larger quantities, which might be used for dealing. Although this kind of decisions are made by the local authorities, reports in the Dutch newspapers suggest that partygoers are body-searched everywhere in the Netherlands (Redactie Volkskrant 2008). Partygoers possessing small quantities of illegal drugs –including cannabis- have to give up the drugs and are booked on the spot, but they won't be prosecuted. Partygoers possessing larger quantities run the risk of being prosecuted. The mayor of Amsterdam had to retreat his statement that the so-called 'zero tolerance policy' is performed at the special request of the organisers of the festivals (Redactie Parool 2008a). Some prevention workers declared that the body-searches can lead to dangerous situation, because partygoers who won't be caught may take all their drugs in one time (Redactie Parool 2008b). Several members of the Lower Chamber of Parliament made inquiries at the government on this matter. The answer of the Minister of Health was that there are no reports known to him which support the assumption that more incidents are taking place (T.K.Kamervragen 2007-2008).

#### Pleas to change drug laws

In the reporting year it happened several times that prominent figures expressed their critical views on the existing international drug conventions. According to some mayors, MPs, scientists, and ex-politicians, it is time to regulate the cultivation of cannabis for the coffee shops. As the reply of the government is always that the international treaties do not allow the proposed regulation, the advocates of regulation ask the government to insist in the international forums to change the treaties in a more lenient direction.

#### Mass Media Campaigns

During the past four years two public campaigns targeting cannabis use have been initiated. The national Drugs Education Campaign 2007/2008 is targeting alcohol and drug use. The strategy is based on the Entertainment-Education strategy. It consists of a television series with concurrent interactive online activities. The TV series show real-life stories of young drug users. The actors serve as a role model for the watching youth. A pre-post-test evaluation of this campaign,

as usual done by the University of Amsterdam, has not been published yet (Van Leeuwen et al. 2007).

### 2 Drug Use in the Population

#### 2.1 Drug use in the general population

#### <u>NNIA</u>

In 1997, 2001 and 2005 nationwide surveys on substance use in the general population were conducted. Methods of data collection were different between surveys. Trend analyses were conducted only on data collected with the Computerised Assisted Personal Interview (CAPI). For more information about the methods, see National Report 2006 and Online Standard Table 01<sup>-</sup>

- Table 2.1 gives the lifetime and last year prevalence rates of drug use. The results show that the lifetime use of cannabis and ecstasy was higher in 2005 compared to both 2001 and 1997. Lifetime prevalence of ecstasy showed a steady increase between 1997 and 2005. For heroin a significant rise between 1997 and 2005 was found. The percentage of last year users of ecstasy also increased between 1997 and 2001, and remained at the same level between 2001 and 2005. Last year prevalence rates of the other drugs were fairly stable across the years.
- Incidence rates, defined as the percentage of first time users of all respondents in the past year, decreased between 2001 and 2005 for cocaine (0.4% and 0.1%, respectively) and amphetamine (0.2% and 0.1%, respectively). Changes in incidence rates of cannabis, ecstasy and heroin were not significant.
- Data on frequency of use are only available for cannabis. In 2005, 23,3% of the last month users reported daily or almost daily use (on 20 days or more). This is some 0.8% of the total population aged 15 through 64 years, or 85.000 (almost) daily cannabis users in absolute numbers.

	Lifetime prevalence (%)			Last year prevalence (%)		
	1997	2001	2005	1997	2001	2005
Cannabis	19.1	19.5	22.6 <sup>b, c</sup>	5.5	5.5	5.4
Cocaine	2.6	2.1	3.4 <sup>b, c</sup>	0.7	0.7	0.6
Ecstasy	2.3	3.2 <sup>a</sup>	4.3 <sup>b, c</sup>	0.8	1.1	1.2 °
Amphetamine	2.2	2.0	2.1	0.4	0.4	0.3
LSD	1.5	1.2	1.4	-	0.0	0.1
Heroin	0.3	0.2	0.6 <sup>b, c</sup>	0.0	0.0	0.0

Table 2.1: Prevalence of drug use (%) in the D	Outch population of 15-64 years in 1997,
2001 and 2005*	

Data collected by CAPI. \* N= 17,750 in 1997; N= 2,312 in 2001; N=4,516 in 2005. a Significant change from 1997 to 2001. b Significant change from 2001 to 2005. c Significant change from 1997 to 2005. Figures in italics = less than 50 cases. Source: National Prevalence Survey, IVO(Rodenburg et al. 2007).

- <u>NNIA (no new information available)</u>. Table 2.2 shows that the percentage of recent cannabis users decreases with age. In 2005, one in ten young people between 15 and 24 years had consumed cannabis in the past year as against one in sixty seven persons between 45 and 64 years.
- There was a shift towards the higher age groups between 1997 and 2001. The percentage of young cannabis users (15-24) decreased while the percentage of cannabis users aged 25-44 years increased in this period. This shift may have resulted from a cohort effect in that some of the cannabis users from the age group 15 through 24 years in 1997 migrated to the age group 25 through 44 years in 2001.
- In 2005, the prevalence of last year cannabis use was about 2.5 times higher among men than women (7.8% as against 3.1%). This male-female ratio was smaller in previous years (almost 2:1). Apparently the gender gap is widening.
- The number of users of other drugs was too small to allow a breakdown.

Age-group (years)	1997	2001	2005
15-24	14.3	11.6	11.4
25-44	5.2	6.5	6.4
45-64	1.1	1.1	1.5

Table 2.2:Last year prevalence (%) of cannabis use by age group in 1997, 2001 and 2005

Source: National Prevalence Survey, IVO(Rodenburg et al. 2007)

In conclusion, drug use in the general population remained fairly stable in the past years, and decreases in incidence rates of cocaine and amphetamine suggest a waning popularity of these drugs. This seems to be at odds with media reports and (qualitative) local studies suggesting increases in the popularity of cocaine and amphetamine (at least outside Amsterdam). Possibly observational/local data reflect trends among subgroups that are insufficiently captured in national population surveys.

#### 2.2 Drug use in the school and youth populations

Data on trends in drug use among pupils aged 12-18 years are available from the Dutch National School Surveys on Substance Use carried out every 3 or 4 years since 1988 (Online Standard Table 02). The most recent survey was conducted in 2007. The pupils completed written questionnaires in the classroom. Random sampling occurred in two stages (first at the level of the class room and second at class level). The final net sample of respondents consisted of 7,550 students. In order to analyse trends, data from the different surveys were weighted with respect to gender, level of urbanisation and school type and school class. Until age 16, school attendance is fully compulsory; as of age 16 attendance is required only for unqualified pupils. As the higher school types are overrepresented among pupils of 17-18 years, the data for this age group are not considered to be representative for youth in general. Overall, the results showed that drug use among secondary school pupils increased between 1988 and 1996, and stabilised or decreased between 1996 and 2007 (see also Online Standard Table 02).

#### Trends in cannabis use

- Figure 2.1 shows that the lifetime and last month prevalence rates of cannabis use increased steadily between 1988 and 1996.
- Between 1996 and 2007, lifetime use decreased significantly. This decrease was apparent both for boys and girls but reached significance only for boys.
- Last month prevalence rates also significantly decreased between 1996 and 2007. Again, the difference was only significant for boys, although a decreasing trend is also visible for girls.
- In 2003 the gender gap as regards lifetime cannabis use had disappeared for the first time, but in 2007 lifetime use of cannabis was again more prevalent among boys than girls. Concerning last month cannabis use the gender gap became smaller as well since 1996, but differences between boys and girls remained significant throughout the years.
- There were no major differences in prevalence rates between Dutch and other ethnic groups, except for a lower rate of lifetime use among Moroccan pupils (8.1% against 16.5% among Dutch pupils).





Source: Dutch National School Survey, Trimbos Institute (Monshouwer et al. 2008)

#### Cannabis and age (of onset)

Figure 2.2 shows that cannabis use strongly increases with age.

- At age 12 only few pupils have ever used cannabis: one in fifty (2.3%). At age 16, one in three pupils had ever tried cannabis (30%).
- The right panel of figure 2.2 shows that the percentage of current cannabis users increases until age 15 among girls and remains around 10% thereafter, while among boys a further sharp increase is observed in the higher age groups.

• The percentage of very young pupils (≤14 years) having ever tried cannabis decreased between 2003 and 2007 (trend significant for total and for boys separately). For example, LTP among 14-year old boys was 21% in 2003 against 13% in 2007.

# *Figure 2.2:* Lifetime and last month prevalence (%) of cannabis use among pupils by gender and age in 2007



Source: Dutch National School Survey, Trimbos Institute (Monshouwer et al. 2008)

#### Frequency of cannabis use

Most pupils consume cannabis infrequently.

- Over half (55%) of the current cannabis users used cannabis on only one or two occasions in the past month. Figure 2.3 shows that this pattern of use is more common among girls than boys. Fourteen percent used cannabis on more than 10 occasions in the past month, more boys than girls (18% and 7%, respectively).
- Half of the current users (46% among boys, 57% among girls) smoked less than one joint per occasion, probably indicating that they shared a joint. Eighteen percent of the boys and 11 percent of the girls who were a current cannabis user smoked 3 or more joints per occasion.





Source: Dutch National School Survey, Trimbos Institute (Monshouwer et al. 2008)

#### Trends in the use of other drugs

Trends in the lifetime and last month prevalence of use of ecstasy, cocaine, amphetamine, hallucinogenic mushrooms and heroin is depicted in figure 2.4.

- In general, the 2007 survey showed that prevalence rates of use of these drugs are much • lower compared to cannabis, with lifetime rates around 2%, while only 0.8% of the pupils had ever tried heroin. Last month prevalence rates are all below 1%.
- As for cannabis, the use of other drugs generally peaked in 1996 and decreased or stabi-• lised since then. Ecstasy remains the most popular 'party' drug throughout the years, except for the last month prevalence in 2007, which was similar for ecstasy, cocaine and amphetamine (0.8%).

#### Trends in lifetime and last month prevalence (%) of ecstasy, cocaine, ampheta-Figure 2.4: mine, hallucinogenic mushroom and heroin use among pupils (12-18 years)







1996

5.3

4.5

1.1

6.0

5.0

4.0

3.0 2.0

1.0

0.0

amphet.

<del>₩ heroin</del>

– h. mushr.

1992

2.2

0.7



1999

2.8

3.8

0.8

2003

2.2

3.1

1.1







2007

1.9

2.3

0.8

36
Information on drug use among other youth populations is included in Part A §2.3 (special groups) and § 8.1 (social exclusion).

# 2.3 Drug use among specific groups

In part A, § 8.1 it is reported that higher levels of drug use, especially more intensive patterns of drug use, are found among socially excluded groups like certain ethnic minorities, neighbourhood and problem youth, homeless people, and prolific offenders. Apart from these marginalised groups, new information has become available for four specific groups: nightlifers, people with intellectual disabilities, and "non-participating youth".

# Nightlifers

*NL.Trendwatch* monitors the use of drugs among nightlifers at national level (Nabben et al. 2007). A panel of key informants serves as the main source of information for NL.Trendwatch. The key informants were interviewed during the winter of 2006 and the spring of 2007. Findings from the Amsterdam Antenna Monitor 2006 were included in this study as well. More recent findings from the Antenne Monitor 2007 will be reported only for specific trends in Amsterdam (Nabben et al. 2008).

With regard to the different drugs, the following observations are reported:

- <u>Cannabis</u>: Everywhere, cannabis can be obtained easily, also by minors. The drug is mainly used to relax or to neutralise the effects of stimulants, and is mainly used in coffeeshops and at home, but less in the nightlife itself. Cannabis is also used less in rural areas, but is often used in underground and hardstyle scenes and is often used by youngsters who hang around. In Amsterdam (2007), "a palpable decline" in the number of marihuana smokers has been noted. Moreover, most "cannabis users now limit themselves to one or two joints on a night out".
- <u>Ecstasy</u>: In general, the use of ecstasy is stabilizing at a lower level than a few years ago, and has spread outside the dance scene. Ecstasy is used in a more planned out way, older nightlifers show ecstasy fatigue and excessive use is no longer tolerated in the nightlife.
- <u>Cocaine</u>: Even more than before, the use of cocaine has spread to a broad public, including working youngsters in rural areas, football supporters, and students. Among nightlifers cocaine has become as popular as ecstasy. Cocaine is also used at home and on weekdays and is used to sober up after the use of alcohol.
- <u>Amphetamine</u>: Although its use has increased slightly, amphetamine is used less often than ecstasy and cocaine and has in general a negative image ('second-rate' stimulant). Nonetheless, amphetamine is appreciated for sobering up after the use of alcohol and has a more positive image among youngsters in rural areas.
- <u>GHB and ketamine</u>: GHB is used more often than ketamine, but both substances are used less often than other party drugs, and are mostly used at home and at after parties. Slight increase in specific networks and regions in the Netherlands.

- <u>Psychedelics</u>: Although their use seems to be increasing, psychedelics only play a marginal role in the nightlife. From the psychedelics, hallucinogenic mushrooms are used most often, but mostly occasionally and their problematic use occurs mostly among tourists in Amsterdam. LSD has gained popularity in the underground scene where it is more often used in combination with alcohol.
- <u>Polydrug use</u>: In almost all networks polydrug use occurs. Moreover, polydrug use still increases. Most drugs are combined with alcohol and cannabis, since these substances are used most often. Cocaine with alcohol is a very popular and intentional combination, but also amphetamine and ecstasy are often used in combination with alcohol. "Excessive and impulsive mixing of drugs and other substances happens the most at specific dance events and afterparties, especially in urban regions".

#### People with intellectual disabilities

When lacking appropriate knowledge about drugs, and when lacking the appropriate social skills to say no to drugs, people with intellectual disabilities are especially at risk for problem drug use. In the Netherlands, it was rumoured that certain drug dealers were deliberately pushing drugs to young people with intellectual disabilities, just because they are such an easy prey. As a first response to these rumours, a pilot study was conducted into the use of substances among these young people with intellectual disabilities.

The young people themselves, as well as their supervisors, were interviewed online by means of net questionnaires that were adapted to this target group. Moreover, during January and February 2008, in-depth interviews were held with some young people with intellectual disabilities (Bransen et al. 2008). A total of 1,076 questionnaires were distributed among the young people, of which 760 net questionnaires were returned, which implies a response of 71%. Among their supervisors, a total of 115 questionnaires were distributed, of which 63 net questionnaires were returned, implying a response of 55%. The mean age of the young people was 16 years, 74% being between 14 and 17 years, and 63% was male.

It was found that among the young people (average age 16 years) with intellectual disabilities 33% had ever used cannabis, 7.5% had ever used cocaine, 5.9% ecstasy, 4.1% hallucinogenic mushrooms, 3.5% amphetamine, and 1.4% had ever used heroin. These life-time prevalences are similar to the life-time prevalences that were found among 16-year old young persons in the general population. The mean age of first cannabis use was 14.5 years, which also equals the mean age of first use among their peers in the general population. One in five (20%) of these young people use cannabis 'regularly or occasionally'. About 3% of all respondents (or 16% of the occasional or regular users) indicated to use more than six joints per typical using day, but it is possible that some of them might have interpreted this question as 'number of puffs'. The researchers expect that among the young people with intellectual disabilities the percentage of heavy drug users is at least as large as among their peer group in the general population. To answer the question whether the percentage of heavy users is perhaps even larger among the intellectually disabled, further research will be required.

Although the lifetime prevalences among the young people with intellectual disabilities generally equal the prevalences among their peers in the general population, the researchers nonetheless conclude that this is an alarming finding. The same level of drug use is alarming in this group because there is a greater risk to run into problems. The risk for addiction is greater due to less self-determination, more dependence on others, less insight in being manipulated by others, less insight in the consequences of substance use, less social participation, and more boredom due to more spare time. Moreover, due to the use medicines, also the restricted use of drugs may have severe consequences in this group.

Finally, the researchers plead for a long-range plan to develop a special prevention program to target this vulnerable group of young people with intellectual disabilities.

#### Non-participating youths

Non-participating youths are youngsters "between the age of 12 and 27 who skip school for longer periods of time, do not have a job, are not on benefits, are not looking for a job or training, do not have a basic qualification", "are not reached by the current facilities", and "do not have to care for anyone" (Bieleman et al. 2008).

Between November 2007 and April 2008, a total of 136 such youngsters were interviewed. It was found that 87% of the youngsters were male, their mean age was 18 years. Compared to their peers in the general population, the youths in pilot projects for non-participating youths had more often used drugs, soft drugs as well as hard drugs. From the youngsters aged 15 up to including 24 years, 59% had ever used cannabis, 10% had ever used hard drugs, compared to only 28% and 6% among their peers in the general population. However, no information is available on the last month prevalence or on the intensity of use.

To target these non-participating dropouts, the Ministry for Youth and Families has invested ten million euros in nine specific pilot projects that are run by councils and other local and regional project implementers. Originally, these pilot projects were called "Preparation Camps", or "Boot camps". The main goal of these projects is "the completion of a (normal) training that will help youths get (normal) jobs". The trainings are quite intensive since "the youths spend long days in the facility, whereby the aim is to keep them occupied for 12 hours a day and in some cases even provide 24-hour support". A project called *De Uitdaging* (The Challenge) is even run by the Ministry of Defence and is staffed by seasoned sergeant-majors who became experienced in dealing with unwilling conscripts.

# 3 Prevention

#### New developments and trends

Since 2006, a second Dutch policy paper on health prevention (Preventie Nota) has formally been the main guidance principle for activities in health prevention including drug prevention. It was presented by the Minister of Health, Welfare and Sports for a period of four years (2007-2010) and defined five priorities for prevention: smoking, alcohol abuse, overweight, diabetes, and depression (T.K.22894/10). The main focus for prevention of drug use is on young people. During the past decade three prevention research programmes were funded by the Dutch Health Research and Development Council (ZonMw). A fourth programme 2010-2014 and a commission of € 47.8 million is the most recent initiative (Minister of Health 2008). A new centre has been initiated in 2007 in the field of health prevention, the Centre of Healthy Living (Centrum Gezond Leven). This centre is part of the National Institute for Public Health and the Environment. Main target is enhancing the use of evidence-based lifestyle interventions in health prevention. The five tasks of this centre are: 1) constructing a single internet site to inform local prevention professionals about quality, implementation, costs and other conditions of available interventions; 2) increasing coherence between health-focussed interventions targeting behaviour changes; 3) creating consensus among stakeholders about a certification system for quality judgment of preventive interventions; 4) reducing disconnections between demand and supply of preventive interventions, including reductions in the existent overlap in supply; 5) exchanging knowledge with policy makers and prevention practitioners, e.g. coordinating the construction of guidelines. The centre also supports the activities of local professionals by maintaining a Databank Effective Youth Interventions, presenting the available interventions in the Netherlands with judgments about their quality and coherence.

Other initiatives especially concern vulnerable or at-risk groups in the field of substance abuse. In the first place, since 1996 attention for both younger and older people seems to have increased in the drug prevention field (Van der Veen et al. 2008). There is also growing attention for specific vulnerable groups (T.K.24077/224). One of these is the group of patients with mental retardation. This group appears to be particularly vulnerable for alcohol and drug use, specifically cannabis. Preventive interventions are important because people with mental retardation often do not sufficiently realise the risks of drug use (Bransen et al. 2008; Mutsaers et al. 2007). In February 2008 a congress was devoted to this subject. National guidelines and recommendations for this target group in addiction care were published in 2006 in a separate paragraph of an implementation report of the Guideline for methadone maintenance treatment (Loth et al. 2006). Several client groups in mental health care appear to use legal and illegal drugs and are clients of different organisations (e.g. mental health care and youth care institutions). There is uncertainty about the proper methods to combat these problems. The Netherlands Organisation of Health Research and Development (ZonMw) funded a private agency for developing and implementing training courses for enhancing the development of organisation-specific safety policies to tackle these problems. Recently these courses have started for managers and professionals in eight organisations in mental health care. In 2009 a second round will follow. The course is partly based on a toolkit. This toolkit describes for instance how to start discussion about these problems within the organisation, which set of measures may be appropriate for reducing these problems, how to collect complaints on clients drug use in and outside the organisation, and cooperation models with judicial institutions and the police for reducing drug dealing and drugrelated nuisance. Another example is a study which is currently conducted, focussing on preventive drug education for detainees.

Finally, since February 2008, a website has started, targeting at an improvement of knowledge exchange among health prevention professionals, and of implementation of effective interventions. It presents an overview of experiences, research, implemented interventions, existent networks of professionals, recent developments and activities in this field in the Netherlands.

# 3.1 Universal prevention

No major changes have been realised in our oldest school-based drug prevention program, the Healthy School and Drugs. It is still an intervention mix of several lectures given in the last forms of primary schools and in secondary schools. These lectures deal with subjects such as alcohol abuse, smoking and cannabis. Additional interventions are supportive activities for parents, school policies on drug use, and case finding and support of at-risk students. A research proposal for evaluating the behavioural effects (drug use by students) of this programme has been submitted (Malmberg et al. 2008). Electronic intervention strategies focussed on substance using students in schools were piloted and implemented (digital e-learning modules for lectures on alcohol, smoking and cannabis). Currently, an e-learning module has been developed on alcohol, drugs and driving. The effectiveness of the Digital Alcohol Module is now evaluated. After three anti-drug mass media campaigns (from 2004 to 2006), the strategy of the new campaign has been changed in focus, namely targeting both entertainment and education via TV series combined with related interactive online activities for young people of 14 to 18 years, including those who are still unconscious of the risks of drug use and probably unwilling to listen to health prevention messages. The new strategy is assumed to be more effective than the former campaign strategies that were passive or non-interactive. The authors give a brief overview of theories and research that support this claim (Mutsaers et al. 2008; Van Leeuwen et al. 2007). The programme Alcohol and Education from the Trimbos Institute, started in February 2007 and tries to increase parent conciousness of the risks of alcohol use of their children (see former national report). This programme is merely focussing on alcohol and uses comparable strategies as the Healthy School and Drugs. Campaign materials include posters, picture post cardsleaflets, a DVD and a fact sheet. Both programmes are co-operating in evening meetings to support parents of at-risk children.

## 3.2 Selective/indicated prevention (recreational settings, at-risk groups or families)

An American study shows that heavier alcohol and/or drug using students are less accessible for universal school-based interventions, such as the Healthy School and Drugs (D'Amico et al. 2004). Therefore, a pilot study was performed to investigate additional interventions for this target group with growing drug problems. In this pilot study Dutch researchers cooperated with American researchers. It showed that brief motivational interviews on a one-to-one basis with 18 participants under eighteen in two Los Angeles continuation high schools, can be reasonably successful. Students of continuation high schools are unable to attend regular high schools e.g. because of conduct problems or drug use. For various reasons, participation and response rates were low (18 of the 59 who were invited) (Grenard et al. 2007). The interviews resulted in improvements in five of the nine outcomes at 3-month follow-up. The provision of some incentives were reported to be necessary to increase participation and response.

There are currently also some initiatives with facilities in schools to reduce drug use. Two organisations (one in youth care and the other in addiction care) are experimenting with drug office hours within lower vocational schools (*vmbo*) in the Western part of the Netherlands. Students can come to this office by themselves or by referral of a teacher. A second provision is an outpatient clinic targeting drug use at the campus of one school with 10,000 students (a regional combination of lower an middle level vocational education) to combat drug use at school. In former national reports, parent meetings for reducing drug use among their children using a 'Tupperware' method (the Home Party's) were mentioned. –A new type of prevention at home is The Home Clinic. This clinic can be contacted by parents who are suspicious about their children's or their partner's drug-related behaviour. On request, an anti-drug and alcohol team will visit the parent(s) at home for training them in recognising drug use and acting against it. Due to the costs of these courses (€ 4500,- for the total course), parents are advised to start a course together with other parents.

The Dutch Strengthening Families Programme focuses on (children of) parents with substance abuse problems. It is based on the principles of the Australian evidence-based Triple P-programme (Positive Parenting Programme). The aim is to improve mental health of both children and parents by changing parent behaviours and creating a "positive" family atmosphere. It is also assumed to prevent substance use (see our former national report). It consists of 14 evening sessions for children and parents (older than 11 years). Each meeting starts with a collective diner. Parenting and communication skills are trained after diner (e.g. attentive listening). The children are learning general communication skills (e.g. problem solving, coping with emotions). After one hour, parents and children are joining for training and discussing the learned skills. The effectiveness of this programme will be evaluated in a randomised controlled trial (4-months with intervention versus no intervention), and a six-months follow-up.(Speetjens 2008).

Earlier conduct problems in childhood and behavioural and substance use problems in adolescence and adult life are associated. It is assumed that disruptive behaviour in middle childhood results in less favourable chances in life, and higher risk of substance abuse and criminality in adolescence. Two Dutch projects are based on these insights from research. The first project is of American origin, the Parent Management Training Oregon (PTMO), which is gradually implemented in the Netherlands for parents of children (4-12 years) with disruptive behaviour disorder ((Lamers 2007)). PTMO focuses on parent-child interaction patterns. It encourages new behaviours, reinforcement of good behaviour and discouraging wrong behaviour, keeping track of the child, finding solutions for problems raised, encouraging to stick to agreements and to stay engaged. Second, the experimental Coping Power Programme offered cognitive behavioural therapies for children and manualised behavioural interventions for parents during a RCT to improve parenting behaviour and reduce disruptive child behaviours. Basic assumption was that problem behaviours including substance use during adolescence would reduce after the much earlier finished interventions during middle childhood (8-13 years). A 5-year follow-up among 61 of the initial 77 participants when compared to a matched healthy control group, showed significant better results on delinquency and substance use for the intervention group when compared to both the care-as-usual group and the matched healthy control group (Zonnevylle-Bender et al. 2007).

*The drug Information and Monitoring System (DIMS)* is initiated in 1992 for monitoring and surveillance of illegal drugs in recreational settings. What are the drugs that are supplied on the illegal market? What are the health consequences of these drugs? In 2007 a total of 5,866 drug samples have been offered for testing to DIMS. The majority was sold as ecstasy (3,796). Substances that were offered more frequently to the testing programme than in former years were speed, GHB and ketamine (see § 10.3) (Van Dijk P. 2008).

The appearance of contaminated cocaine on the Dutch drug market was in August 2007 answered by DIMS by a (public) warning campaign. Via national and regional media, posters and flyers (potential) users were warned for the serious risks of using this cocaine. DIMS is a market monitor and does not give insight in drug-related emergencies among drug users. Based on the perceived problems of information provision, a monitor for drug-related health emergencies will be set up. The pilot testing the feasibility of this monitor in four regions in the Netherlands started in October 2008 (Croes et al. 2008).

One Dutch organisation of addiction care has started a national office hour for complaints about party drugs. The reason for this initiative is the large amount of questions of (ex-)users of these drugs (especially ecstasy) that are asked on the special website of this organisation and the presupposed lack of specialised knowledge of general practitioners on this subject. People with complaints about party drugs (the most important complaints are mentioned on the website) can contact addresses in three cities via a national phone number (Haarlem, Alkmaar and The Hague).

Since 1996, the National Drugs Information Line (*Drugs Info Lijn*) offers objective information, free leaflets and a counselling service on drugs and drug use. Since 2002, a website is also in operation. Chatting services started in 2005. In 2007 the Drugs Information Line received 9,844 telephone calls, indicating a gradual reduction since 2005. In contrast, the website and the e-mail and chat services became more popular. The number of unique visitors of the site has increased to 198,806 in 2007. The Drugs Information Line answered 1,044 e-mails (compared to 289 e-mails in 2006) and 236 chat messages, compared to 123 in 2006. The Drugs Information Line, together with two organisations of addiction care, evaluated this chat service in a pilot study. It appeared that chatting attracted another population compared to the telephone and website service, i.e. the group

younger than 18 years that is rarely reached with by telephone (Van der Gouwe et al. 2008). The most popular part of the site is the so-called Drugs ABC with information on hash, marijuana, cocaine and ecstasy as the most frequently visited items. These items are also most popular for the other three services of the Drugs Information Line. From 2007 on, the Drugs Information Line is also visible via the much frequented site of Partyflock where Information Line workers answer questions on drug-related issues from a harm reduction point of view. In general, the often critical visitors of this site are reacting quite positively on the information given. (Gorter et al. 2008;Kok et al. 2007).

#### Other risk groups

One of the results of the action plan "Discouraging cannabis use", launched in 2004 by the Ministry of Health, Welfare and Sports, the Ministry of Justice and the Ministry of Foreign Affairs, is an additional course in cannabis education to improve knowledge on health risks of cannabis, to recognise problematic cannabis use, to improve coping skills (e.g. for reducing problems of cannabis users and maintaining cannabis policy within the coffeeshop for owners of coffee shops. The course is given by regional organisations of addiction care and is based on the principles of Barcode, a course for owners of restaurants, bars and café's (national report 2006). Comparable local initiatives have been realised for instance in Rotterdam where a two-day course for owners, workers and visitors of coffee shops was successfully implemented and evaluated (De Jong et al. 2008).

# E-health interventions

The popularity of prevention and treatment interventions using the internet increases during the past few years (see the National Drugs Information Line above and our national report 2007). A new initiative is the website on drug use and infectious diseases, meant for both drug users and professionals in addiction care. It presents textual information and illustrations on the most common infectious diseases among drug users. Target is to stimulate integration of infectious disease prevention in regular addiction care. Questions can be asked to specialised nurses via e-mail. It is also possible to make an appointment online for a hepatitis B vaccination at the local municipal health service. Other promotional devices are developed (e.g. posters, T-shirts). There are no quality standards in use yet for e-health interventions (see national report 2007).

# 4 Problem drug use and the treatment demand population

#### 4.1 Prevalence estimates

#### Cannabis, ecstasy, and amphetamines

<u>NNIA.</u> There are no recent data available on the number of problem users of cannabis, ecstasy and amphetamines.

#### Problem hard drug use (opiates and cocaine): national estimates

Since the last national estimate of the number of problem hard drug users in the Netherlands pertains to the year 2001, it has been planned to update this estimate as soon as possible. The plan is to update the estimate by means of a two-track policy. On the one hand, it has been planned to update the estimate by using the two methods applied previously, i.e. the treatment multiplier (TM) and multivariate social indicator method (MIM). In order to apply the TM, is is necessary to establish new estimates of in-treatment rates that are to be assessed by field work. Following an Amsterdam study, it is intended to distinguish between problem hard drug users and "hard drug users' in methadone treatment, who function fairly well, do not use heroin or other hard drugs, and are in this sense not problematic anymore (Buster et al. 2001). On the other hand, it has been planned to update the estimate by means of a national three-sample capture recapture analysis on police data, probation data, and treatment data. This method has not been applied on national level before. The anonymous linking of police data, probation data and treatment data, which is needed to perform the three-sample capture recapture analysis, has been planned to take place in the autumn of 2008.

<u>NNIA.</u> Table 4.1 lists the national estimates of the number of problem hard drug users based on surveys conducted several times in the past years. For the 2001 estimate, three methods were used, namely the multivariate social indicator method (MIM) (or regression imputation), the multiple imputation method (on the same data), and the treatment multiplier (TM). These methods yielded a central estimate of about 33,500 problem drug users, which implies 3.1 problem drug users per 1,000 inhabitants aged 15 to 64 years (range 2.2 - 4.3). Due to the large confidence intervals, the estimate for 2001 did not differ significantly from the previous estimate for the year 1999. For this previous survey the number of problem drug users per 1,000 inhabitants aged 15 to 64 years (range 4.2 - 4.3).

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

Site	Year	Method	Case definition*	Estimates (lowest – highest)	Source
National	1993	Multiple	Problem opiate users	28,000	(Bieleman et al. 1995)
National	1996	Treatment multiplier MIM	Problem opiate users	27,000 (25,000 - 29,000)	(Toet 1999)
National	1999	Treatment multiplier MIM	Problem opiate users**	29,213 (25,970 - 30,298)	(Smit et al. 2001)
National	2001	Treatment multiplier, MIM, Multiple impu- tation***	Problem hard drug users**	33,499 (23,773 - 46,466)	(Smit et al. 2006)

MIM=Multivariate (social) indicator method. \*Mainly opiate users who also consume crack cocaine (and other substances) \*\*Variable case definitions of local estimates (anchor points) used by MIM. Mainly problem opiate users, who usually also consume crack. Yet, some anchor points – especially of the latest estimates - also include small numbers of primary crack cocaine users who do not consume opiates. Treatment multiplier is based on opiate users only. \*\*\*The MIM and the multiple imputation were based on local estimates for the years 1998 - 2002. Therefore, in contrast to the multiplier method, this estimate does not accurately refer to '2001'.

#### Problem hard drug use: local estimates

Table 4.2 gives an overview of the estimates of the number of problem hard drug users in various cities and regions in the Netherlands. For some of these estimates the capture-recapture method has been applied. In these cases the number of problem users may have been overestimated because of a violation of the closed population assumption. For example, an estimate for the number of opiate users in Amsterdam in 2004 based on a 3-month observation period (with less risk of migration, death, etc.) yielded 3,524 persons, compared to 3,928 persons based on a 1-year observation period (Van Brussel et al. 2005).

New information has become available for 2005 for the city of Hengelo, for 2006 for the cities of Enschede and Almelo, and for 2007 for the city of Amsterdam (Standard Table 7 & 8). By means of capture-recapture analyses the numbers of problem opiates users were estimated at about 200 for Hengelo, 717 for Enschede, 200 for Almelo (Bieleman et al. 2007), and 2,885 for Amsterdam (Buster, personal communication). Per 1,000 inhabitants aged from 15 up to 64 years this respectively amounts to about 3.7, 6.7, 4.2, and 5.3 problem opiates users.

City or region	Year	Method	Case definition*	Estimates (lowest – highest)	Source
Amsterdam	2007	2-sample C-RC	Problem opiate users	2,885	Municipal Health Service Amsterdam (Buster, personal communication)
Rotterdam	2003	3 times 2-sample C-RC	Problem hard drug users	5,051 (4,804 - 5,298)	(Biesma et al. 2004)
The Hague	2000 - 2002	3-sample C-RC	Problem hard drug users	3,200 (annual)	(Burger 2007)
Groningen**	1993/ 2002	Treatment multiplier	Problem opiate users	1,000	(Bieleman et al. 1995)
Apeldoorn	2005	2-sample C-RC	Problem opiate users	223	(Bieleman et al. 2006a)
Friesland*** (province)	2001	2-sample C-RC, treatment multiplier	Problem opiate users	1,007	(Biesma et al. 2003)
Enschede	2006	2-sample C-RC	Problem opiate users	717	(Bieleman et al. 2007)
Hengelo	2005	2-sample C-RC	Problem opiate users	200	(Bieleman et al. 2007)
Almelo	2006	2-sample C-RC	Problem opiate users	200	(Bieleman et al. 2007)
Stedendriehoek	2000	2-sample C-RC, treatment multiplier	Problem opiate users	750 (561 - 948)	(Bieleman et al. 2002)
South-Limburg	1999/ 2002	1-sample C-RC (Chao's estim.) (a.o.)	Problem hard drug users	1,100	(Coumans et al. 2002); (Hoebe et al. 2003)

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

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

\*\* Estimates for the region/province are based on extrapolations from local estimates (cities). Parkstad-Limburg: 800.

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

\*\*\*\* Deventer, Apeldoorn, Zutphen.

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

Figure 4.1 gives the estimated number of problem hard drug users per 1,000 inhabitants aged 15 to 64 years at national level and for some cities and regions. The local estimates show that the highest concentrations of problem hard drug users were found in Rotterdam and The Hague. Besides actual differences, the differences that were found between the cities and regions will also be due to variations in case definitions. In particular, the differences between the three largest cities Amsterdam, Rotterdam, and The Hague should be interpreted with great caution. For Amsterdam, the estimates are restricted to the problem opiate users. Compared to Amsterdam, however, broader inclusion criteria have been applied in Rotterdam and The Hague (Biesma et al. 2004), (Burger 2007).

Among homeless problem drug users in Amsterdam it was found that between 35% and 40% use only crack cocaine (Buster, Municipal Health Service Amsterdam, personal communication, 12-07-2007). Adding these percentages to the rate of 5.3 for the problem opiate users, it can be estimated that in total, when including problem opiate and problem crack cocaine users, there will be between 8.2 and 8.8 problem drug users per 1,000 inhabitants aged 15 to 64 years in Amsterdam. After including the problem crack cocaine users, Amsterdam comes more in line with The Hague where a rate of 10.1 was found. Moreover, in Rotterdam the case definition applies to the whole group of regular hard drug users. The group of problematic drug users (almost daily users, who were criminal and/or causing nuisance and/or homeless and/or had psychiatric comorbidity) was about one-third smaller. Although the wider definition more closely matches the EMCDDA definition of problem drug user, the more restrictive definition might be more in line with definitions in other cities.

# Figure 4.1: Estimated number of problem hard drug users per 1,000 inhabitants (15-64 years) at national level and for some cities and regions



Sources and definitions: see table 4.1 and 4.2. Different case definitions and methods will have affected the comparability of the estimates.

#### Declining number of opiate addicts in Amsterdam

Estimates for the number of opiate addicts in Amsterdam are available since 1985. Figure 4.2 shows the estimated numbers broken down by country of origin.

- Since 1988 the estimated number of opiate addicts has declined (with a minor fluctuation in the early nineties). The largest decrease can be attributed to the group of foreign opiate users (category 'born elsewhere', including Italians and Germans), but in the past years the size of all groups has diminished.
- In 2007, the total number of opiate addicts was estimated at 2,885 (one-year observation period). Of these opiate addicts 49% were born in the Netherlands, 26% in Surinam, the Netherlands Antilles, Morocco, or Turkey, and 25% were born elsewhere. Addicts of the first and second subgroup usually have a residence permit and maximum access to (methadone) treatment.





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: Amsterdam Municipal Health Service.

# Injecting drug users

<u>NNIA.</u> The number of drug users who are currently injecting their drug can be estimated from treatment data reported to the National Alcohol and Drugs Information System (LADIS), in combination with the estimated number of problem hard drug users at national level. According to the LADIS, 10% of the opiate clients in 2005 injected their drug. There were 16,199 clients who had a primary or a secondary problem with opiates. This implies that there were about 1,620 currently injecting opiate users in treatment.

There were 11,652 clients in treatment with a primary or a secondary cocaine or crack problem, who were not yet counted among the clients with a primary or secondary problem with opiates. Of these cocaine/crack clients only 1% injected, whereas 59% smoked, and 40% sniffed the drug. The approximately 4,661 clients who snort their cocaine are less problematic and less marginalised and are not included in the estimated number of problem hard drug users at national level. Of the remaining 6,991 problematic cocaine/crack users who are in treatment, about 117 clients are estimated to be injecting drug users.

All in all, these figures from the opiate and cocaine/crack clients imply that, of the 18,643 problem hard drug clients in treatment, about 1,737 currently inject, which comes down to about 9.3%. Given the estimated number of about 33,500 problem hard drug users at national level, it is then assumed that there are about 3,115 currently injecting problem hard drug users in the Netherlands, within a range of 2,210 to 4,320 injectors. Given the total of 11,008,282 inhabitants aged from 15 to 64 years in 2005, it is thus estimated that among the general population, 0.03% are current injectors of hard drugs, within a range of 0.02% to 0.04%. As argued in § 4.1 of the National Report 2006, these figures may be an overestimate as some local studies suggest that drug users who seek treatment may be more problematic and more often injecting drugs compared to those outside treatment.

# Problem cocaine users

There is no reliable estimate of the number of problem cocaine users. Roughly, three groups of problem cocaine users can be distinguished: 1) Traditional problem users of opiates, most of whom (some 80%) also use crack cocaine, either as a primary or secondary drug; applying this percentage to the estimated number of 34,000 problem hard drug users, some 27,000 problem crack users belong to this group; 2) primairy crack users who do not consume opiates and 3) the relatively more integrated group of people who mainly sniff cocaine (hydrochloride) (see also chapter 12, National Report 2006). Prevalence estimates for the last two groups are missing. A recently started studie financed by ZonMw aims, among others, to estimate the size of the total population of crack users in three big cities (Amsterdam, Rotterdam and the Hague) using capture recapture methods and multiplier techniques (Van den Brink et al. 2008).

# 4.2 Profiles of clients in treatment

# Specialised addiction treatment

In August 2008, the Organization Care Information Systems (IVZ) issued a prepublication about the treatment demand during the registration year 2007 (Mol et al. 2008). However, due to technical and administrative complications in some clinics, this prepublication of key figures from the National Alcohol and Drugs Information System (LADIS) is based on extrapolations from only 70 percent of the required data. The final figures are expected to become available by the end of 2008.

<u>NNIA.</u> In short, data until 2006 showed that according to the TDI definition of new drug clients, the proportion of opiate clients decreased from 62% in 1994 to 22% in 2006, while the proportion of cocaine clients increased from 17% in 1994 until 38% in 2003 and slightly decreased thereafter (35% in 2005 and 2006). Also, the proportion of cannabis clients increased to a similar extent, from 14% in 1994 to 32% in 2006. Ecstasy and amphetamine are among the less important drugs as far as treatment demand is concerned (each accounting for less than 6% of all drug clients over the years). However, an increase is observed for the proportion of amphetamine clients from 1.5% in 2001 to 5.9% in 2006.

Preliminary findings based on the above mentioned extrapolated data, suggest that in absolute terms, the increase in the number of cannabis clients and amphetamine clients has continued in 2007. For opiates, a minor increase is seen after some years of a decrease, which is probably due to improved registration of cases. However, these trends need to be confirmed when the data set is complete.

#### General hospital admissions

Admissions to a general hospital in the Netherlands are recorded via the Dutch Hospital Registration (LMR). Figure 4.3 shows the number of clinical admissions to a general hospital because of drug dependence or abuse as a primary or a secondary diagnosis.

- In 2007, the LMR recorded a total of 1,790,683 clinical hospital admissions. Drug dependence and drug abuse were recorded only 627 times as a primary diagnosis and 2,223 times as a secondary diagnosis.
- Within the category of admissions related to drug abuse and dependence, opiates made up 13% of the primary and 24% of the secondary diagnoses. Other illicit drugs accounted for 46% of the primary and 53% of the secondary diagnoses. In this category, cocaine ranked as the most frequent drug, followed by cannabis. Psychoactive medicines (e.g. benzodiazepines) and unspecified substances accounted for 41% of the primary diagnoses and 24% of the secondary diagnoses.

# *Figure 4.3:* Number of admissions to general hospitals related to drug dependence or nondependent drug abuse (ICD-9 codes 304 and 305.2-9) as primary diagnoses (left) or secondary diagnoses (right), from 1997 to 2007



Other 'illicit' drugs include amphetamines, and hallucinogens. Source: LMR, Prismant.

#### Trends

The number of admissions related to drug abuse or dependence as a primary diagnosis remained rather low over the past years. Minor increases were seen for cannabis (24 in 2000 and 69 in 2007) and cocaine (67 in 2000 and 114 in 2007). A stronger increase was observed for the number of admissions with other illicit drugs as a *secondary* diagnosis.

- This trend was mainly due to cocaine and to a lesser extent to cannabis. More specifically, cocaine dependence and abuse as a secondary diagnosis increased from 377 in 2000 to 607 in 2007.
- The number of cannabis related admissions was lower and more variable over time, although an overall increase in secondary diagnoses was observed from 193 in 2000 to 399 in 2007.
- The number of admissions related to opiates as a secondary diagnosis varied between 476 and 750 cases annually (525 in 2007), with a tendency to decrease over time.

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

- In accordance with the data from the addiction treatment services, the average age of the hospital patients was highest for the opiate patients and the lowest for the cannabis and the amphetamine patients.
- With regard to the primary diagnoses, it is remarkable that the average number of days during which the patients stayed in the hospital was highest for the cannabis patients. The lowest number of days were recorded for the cocaine and amphetamines patients. There is no explanation for these differences.

	Cannabis	Cocaine	Opiates	Ampheta- mines
Number of primary diagnoses	69	114	84	56
Average number of days	11.6	3.6	6.4	3.6
Number of secondary diagnoses	399	607	525	136
Total number of persons**	394	602	460	166
Average age (years)	30 years	35 years	43 years	29 years
Percentage male	79%	78%	71%	74%

Table 4.3:Clinical admissions to general hospitals related to drug abuse and drug<br/>dependence in 2007\*

\* 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. \*\* After correction for double counting: number of persons who were admitted at least once because of a drug-related disorder assigned as a primary or secondary diagnosis. Source: LMR, Prismant.

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

In the past decade, field studies among traditional groups of problem opiate users have shown an increase in the use of crack cocaine, a reduction in injecting drug use and an increase in psychiatric and somatic comorbidity, which is partly associated with the ageing of this population. However, the number of field studies providing quantitative data on characteristics of users and patterns of drug use and risk behaviours has strongly declined in the past years. Recent field studies employing observational methods and interviews among key informants point at new groups of (young) problem drug users, including those consuming crack as their first and main drug, and daily cannabis users, who may be at risk of becoming problem hard drug users (see National Report 2006). Moreover, these studies confirm the increase in comorbidity and poly drug use (including alcohol) among the traditional ageing population of hard drug users.

One qualitative study in the South of the country suggests that the decreasing trend in injecting drug use may now have halted (Van der Dam et al. 2006). However, until 2006 treatment data still pointed at a decreasing prevalence of injection (see National report 2007). Moreover, in the Amsterdam Cohort Study on HIV and AIDS, the proportion of hard drug users who self-reported the sharing of needles decreased from 47% in 1986 to 9% in 2004 (Lindenburg et al. 2006). This decrease was most prominent in the period after 1996. In contrast, sexual risk behaviour remained quite common. The proportion of hard drug users in the cohort who self-reported unsafe sex decreased from 52% in 1990 to 40% in 1996, but has remained stable since then.

# Young (problem) hard drug users

More recently, new data were reported from a satellite study of the Amsterdam cohort study, YODAM, which focused on young drug user aged 18-30 years, who were recruited directly by treat and methadone outreach and indirectely through respondent-driven-sampling (Buster et al. 2008). At the start of the study (n=187, recruited between 2000 and 2003) crack cocaine appeared to be the most frequently used drug (90%), followed by (smoked) heroin (54%). Illicit (oral) methadone use was reported by 11%. Injecting drug use was reported by 16% of the respondents and 9.1% belonged to the group of frequent injectors (multiple times a week). Over half of the group (55%) had used both cocaine and opioids (all routes of administration) in the past six months.

Follow-up data until 2007 (n=126) showed that the incidence of injecting drug use among those who had never injected drugs was 2.1 per 100 person-years. However, among drug users with a history of injecting, incidence (or 'relapse') of injecting was 13.2 per 100 person-years. Transition towards (temporary) abstinence or non-frequent drug use was common (23/100py), but this applied also to relapse into drug use (73/100py). Moreover, the risk of new-onset heroin use among crack users is not high (incidence 4.8 per 100py), but higher compared to the general population (e.g. 0%, (Rodenburg et al. 2007)).

# 4.4 Intensive or frequent patterns of use

Data on frequency and intensity of cannabis have been reported in § 2.1 and § 2.2. Data on the prevalence of cannabis use disorders in the population of 18-64 years will be available mid 2009.

In 2008, a cohort study financed by ZonMw started which aims to recruit 275 regular (at least 12 days/month) cannabis users who are not dependent and 275 cannabis dependent users to determine risk factors for the transition from regular cannabis use to dependence and factors predicting the 3-year course of cannabis dependence. Risk factors include exposure to cannabis and other substances (including preference for potent wiet; THC content), personality, mental

disorders, life events, functioning, and early childhood factors. In addition, as only a minority of (frequent or dependent) cannabis users seems to seek help at drug treatment services, factors and motives related to treatment seeking (or not seeking treatment) will be investigated. For this purpose additional data from 100 cannabis users in treatment will be collected.

# 5 Drug-related treatment

#### 5.1 Treatment system

#### New developments and trends

Funding and organisational mechanisms of treatment of people with substance disorder have changed, due to several new measures in national health policy that have been taken during the past five years, e.g. the introduction of a new Exceptional Medical Expenses Act (AWBZ) in 2003 and the introduction of privatisation in mental health care (including addiction care) in 2006. Consequently, in that period several changes have also emerged in the supply of addiction care. First, the organisation of addiction care has been substantially concentrated. Due to mergers, the number of regional organisations of addiction care in the Netherlands decreased from more than thirty to twelve main institutes (Hilderink et al. 2008;Van Hoof et al. 2008) (see table 1.1). A few years ago the number of locations was just over 200. Some big regional organisations had more than 20 locations. More recent numbers were not reported yet. Second, these organisations have partly been privatised. Though this privatisation is tolerated by the Ministry of Health, Welfare and Sports for outpatient addiction care and mental health care, private inpatient clinics are forbidden by law. In daily practice, inpatient care by private clinics is now partly supplied by delivering day care to patients who stay in a hotel during the night, conseguently the hotel costs should be paid by the clients (T.K.24077/224). The hotel costs are not paid, but the reimbursements for day care are determined between the Ministry and the provider and may rise to a pre-determined maximum sum per night (personal communication).

Another trend during the past years is that more attention is given to young people in general and those who are at (high) risk specifically. Partly this is caused by the increased treatment demand among young people (although this trend is clearly not exclusively limited to the lower age groups) and partly because research has revealed more serious risks of drug abuse for this target group compared to adults, e.g. a probably chronic suboptimal functioning of the brains for ecstasy users or a higher risk for psychotic symptoms for young cannabis users. Many Dutch organisations of addiction care are now implementing special facilities for young drug users (clinical, outpatient or semi-residential).

Furthermore, one detoxification clinic for young people already exists (Mistral) and a second one started its activities. The results of a recent inventory show that more than half of the regular organisations of addiction care and juvenile justice institutions (15 of the 24) now have specific treatments available for young people. Nine organisations of addiction care have facilities or are currently starting these for young people. Treatment interventions that are most frequently used in existent addiction care programmes are: single-session counselling, motivational enhancement, family-based treatments (sometimes Multi Dimensional Family Treatment), and lifestyle training. Juvenile justice institutions are using predominantly motivational enhancement techniques, voucher-based techniques, cognitive-behavioural interventions and family-based therapies (MDFT included). Eleven of the thirteen juvenile justice institutions are cooperating with addiction care organisations. Two treatment programmes in two different facilities, one in addiction care (Bauhuus) and the second in a juvenile justice institution (Brains4use) have been evaluated on effectiveness (Lodewijks 2006;Smit et al. 2007;Strijker et al. 2001).

The publication of Verdurmen et al. (2007) also reports the outcomes of a systematic review of the international literature on the effectiveness of interventions for problem substance use among young people. The authors collected many reviews (meta-analyses, systematic reviews and narrative reviews). An initial impression was that there are many primary studies available in the literature. However, after a second analysis, relatively few of these studies fulfilled the inclusion criteria. Besides, the average methodological quality score of these studies was low. Thus the conclusions should be interpreted with caution. The evidence is strongest for family-based therapy (especially MDFT), motivational interviewing and other brief interventions (combined with personal feed back and normative comparison techniques), and cognitive-behavioural group therapy. The results are reported to be largely similar with those of earlier review studies (e.g. (Rigter et al. 2004;Van Gageldonk et al. 2006)).

Currently, the national programme Scoring Results (see former National Reports) is active in developing projects and protocols for this target group. Three projects are in development. The first project focuses on guideline formulation and guideline implementation strategies for younger people at risk for substance abuse. This project should explore the literature on characteristics of young high-risk groups and published instruments for early detection (*vroegsignaler-ing*) and patient-treatment matching (*indicatiestelling*). The focus of a second project is on the development of a treatment protocol for cognitive-behavioural therapy for young people with substance use problems in general, i.e. not specified for certain types of drugs. Another project aims at starting a new system of regular measurement of data on young clients, treatment processes and treatment results in Dutch addiction care (monitoring). Data collection should result in: 1) transferable and verifiable treatment practices; 2) improvement of these practices, based on feedback of data and exchange of experiences. The outcomes of this exploratory study are descriptions and recommendations concerning treatments for young people at risk of substance abuse (a proto-protocol). The longer-term goal should be a permanent benchmark process for treatment of this target group.[1]

A fourth project that is currently in development is not specifically looking at young people at risk but is looking at residential or inpatient addiction care in general. A quick scan from 2006 indicated that there exists a large diversity on criteria for patient-treatment matching, target groups (comorbidity!), treatment programmes (labelling, content, intensity) and evaluation methods. Thus it remains difficult to evaluate and improve the existent programmes and consequently it is also difficult to develop focussed training programmes for residential addiction treatment. The target of this first call for a project on inpatient addiction treatment is to provide a specified description - based on an adapted instrument from the international literature - of these treatment modalities in the Netherlands. Mentioned examples of candidate instruments are the Fidelity Scale (IDDT), the General Organisation Index (GOI).

Another development of the past few years is the increasing number of web-based interventions. Currently, five sites from three organisations of addiction care have been developed. Four sites

are for cannabis users and one for problems with the use of party drugs. One of the cannabis sites is a self help site. Most of the other existent online treatment sites are targeting alcohol problems. A sixth internet site started recently for mental disorders. This is the first site in the Netherlands offering integrated care for people with light to moderate substance use disorders and mental health disorders, who are consciously choosing internet treatment.

Finally, the number of treatment options for dual diagnosis patients has been increased (see chapter 6).

#### Quality of treatment

A multidisciplinary evidence-based guideline on problematic drug use will probably be published in Spring 2009.

Since 2005 a Council for enhancing professionalism in addiction care (Raad voor Bekwaamheidsontwikkeling) is active. In 2006 this council reported the results of a national survey in higher and university education on the existent supply of education in addiction in general. It appeared that education in professional knowledge on this subject was seriously deficient (Rodenburg et al. 2006). Meanwhile, several initiatives have been realised. In six schools for higher vocational education, teaching modules focussing on addiction and addiction care have been initiated for medical nurses and students in social work. Furthermore, in cooperation with their national professional organisations, specialisation courses in addiction (1-2 years) for physicians and psychologists have been initiated. A third example is the development of accreditation for schooling of the present population of addiction professionals (T.K.24077/224). The ultimate target of the council is the development of quality standards, certification and accreditation. An overview of knowledge about addiction (a so-called *canon*) that may be considered crucial for every interested professional in the broad field of health care was published. This publication summarises key facts about drugs, drug use and drug users, abuse and dependence, risk factors and societal consequences, treatment and care, organisations, publications and journals (Van der Stel 2007). Specialist courses in addiction medicine and addiction care in universities and higher vocational education were rare in former years, but new initiatives are now realised. These initiatives are answers to the need for increasing quality of schooling in addiction care. An additional higher education lectureship (at the InHolland school) was established (see for the university chairs, National Report 2006 and 2007, par. 5.1). Besides quality enhancement in schooling of professionals for addiction care, the programme Scoring Results is active for nearly ten years to promote the quality of addiction care in the Netherlands by supporting and facilitating cure and care via guidelines, protocols and other publications (see National Report 2007). This programme has published a master protocol containing a manual for the development of protocols and expert-knowledge-documents (Jansen et al. 2007). An update of a similar publication was finished for evidence-based guideline construction (CBO et al. 2007). Both are products of the trend toward more standardisation and control in health care.

The Guideline Maintenance Treatment for Opiate Addicts (RIOB) was one of the products of Scoring Results (see §5.3 and SQ27-1). The process of implementation of guidelines is in most

cases hampered by resistance from professionals, the fact that guidelines often lack specific information on how to handle (in contrast to protocols) and other obstacles. Therefore, in 2008 a report was published to support the implementation of RIOB. One of the most important conclusions is that implementation is not realistic without further financial support from the Ministry. Examples of activities that are meant to support the implementation of this guideline are leaflets for clients in maintenance treatment, modules for educating professionals, and meetings of an Educational Training Group (*Leergroep*). A special committee has been active to study daily practice in maintenance treatment. The Guideline will be updated with additional material on diagnosing and treatment of alcohol problems among opiate addicts, specifying the diagnosis and treatment of co-morbid disorders, further describing the role and content of psychosocial rehabilitation, and medical heroin prescription. Finally, outcome indicators will be developed for enabling adequate monitoring of opiate maintenance treatment (Wits et al. 2008).

In November 2006, an outcome indicator set (basisset) was published for the entire sector of mental health care and addiction care(GGZ Nederland et al. 2006). This initiative is part of the current movement in health policy to make the outcomes and guality of care measurable as well as accessible for the general public. This is considered a long-term process with many intermediary adaptations. The set is supposed to "mature" by experience and adaptation during the coming years. Institutions should also get accustomed to filling in the set-questionnaire annually. The data resulting from these annual reports are supposed to be useful for different stakeholders: health care organisations and the professionals, the National Health Inspectorate, health insurance companies, and clients (in supporting them to select the best care via a website). Roughly, the indicators in this set are divided in those targeting effectiveness of care (e.g. coverage, changes in client problems, dropout, adherence to guidelines, aftercare), safety of care (undesirable combinations of medication, information on side effects, coercion, suicide, incidents), and client-centeredness (e.g. waiting lists, access, informed consent, freedom of choice, client information). This set was evaluated, resulting in a first revision (Van Ham et al. 2008). One of the conclusions was that the current indicators do not mirror quality of care yet. This ultimate ambition will take more years of development. Examples of problems that arose are definitions of indicators, questions that are not applicable, and a lack of reliable data (Van Ham et al. 2008).

# 5.2 Drug-free treatment

Drug-free treatment is uncommon as an isolated treatment option for opiate addicts. It is rather common for dependence on other substances. Cannabis, cocaine or ecstasy problems are generally treated with variations of cognitive behavioural treatment (CBT). There are no specific admission criteria for these treatments. Recent developments focus on possible effective treatment modalities for cocaine and cannabis users, and on young drug users. This in response to the increased treatment demand of these client groups. An additional reason for (prevention and) treating younger drug users is that research findings suggest that drug (and alcohol) exposure during adolescence and puberty may be more detrimental compared to later onset substance use. (Verdurmen et al. 2006) (Solowij et al. 2008)

## The INCANT study(INternational Cannabis Need of Treatment study)

Three treatment services (including one addiction care organisation) in the Netherlands participate in the international INCANT experiment, based on the evidence-based MultiDimensional Family Therapy (MDFT) or briefly "Multidimensional Therapy". INCANT is targeted at cannabis users and their daily environment (see National Report 2007). The interest in this therapy is growing among countries in Europe and the number of adolescents and parents that have been randomised in the currently running trial is 272 (May 2008). Sixty-two participants are from the Netherlands. In the Netherlands the first course to train professionals started in February 2008 with 39 participants in eight teams from different organisations of addiction care, mental health care and youth care. IN-CANT participants come from five European countries. Switzerland is the last country that entered this trial (Rigter et al. 2008).

A variant of MDFT, called Multidimensional Therapy, with the primary focus on the young cannabis user, is also planned to be introduced in an inpatient institution for youth with complex problems (drug use and disruptive or criminal behaviours). These young people have raised considerable trouble in Dutch society during the past years. This version of MDFT will probably last three to six months. The first target in these institutions is to select those young people who will be motivated to participate. Secondly, parents will be approached to cooperate. Thirdly, the therapy will be continued after leaving the institution in order to become effective.

#### Self help groups

Self help groups for addicted young people did not exist before 2005, thus these groups are a fairly recent phenomenon (see national report 2007). Some of these emerge 'bottom-up', on the initiative of 'courageous mothers' whose children were heavy drug users. Those for addicted adults are older. Research from 2004 showed that self help for addiction problems is considered unpopular among professionals in addiction care and, unlike for instance in Germany, historically a gap existed between the two in the Netherlands. The reasons for this gap largely remain unknown, but probably this is partly due to differences between self-help and addiction care professionals in perceived status and in basic visions on addiction and treatment. Recently the Trimbos Institute looked for changes in contacts of organisations of addiction care with self help organisations in the period 2004-2007. The number of contacts between the two types of care had increased and intensified. Referrals from organisations of addiction care to self help groups increased and information about self help groups was more frequently given to clients. However, these developments are not yet part of the formal policy of these organisations (Muusse et al. 2008). Recently, the Information and Development Centre for Self Help Groups and Addiction of the Trimbos Institute published an information folder to encourage people with substance use problems to participate in self-help groups.

Self help groups are traditionally active as stand alone treatments but are now beginning to become partners in addiction care. An example is the combination of the 12-step programme of Mirage (a brief clinical treatment) followed by or combined with self help group membership (Brijder Verslavingszorg 2008).

# Effectiveness of drug-free treatment

A Dutch addiction physician and researcher recently wrote a comment on a meta-analysis on the effectiveness of psychosocial interventions for substance use disorders (Dutra et al. 2008). They stipulated that many clients are entering treatment in a demoralised state of mind, often resulting

in an unfavourable prognosis, that further deepens demoralisation tendencies among clients and professionals. He coined the term "therapeutic nihilism" as a result of this undesirable mutually enforcing mechanism. The meta-analysis showed that drug-free treatments can have positive effects. Still, several difficulties hamper effectiveness-of-treatment studies. For example, these studies rarely focus on effective parts of intervention packages, while these are important for determining optimal efficiency of treatments. Another example is the lack of studies focussing on long-term or follow-up effects of treatment (De Jong 2008).

#### Voucher-based interventions to reduce cocaine use in methadone patients

Earlier American studies showed that the combination of the Community Reinforcement Approach (CRA) and incentives (contingency management) is effective for cocaine dependence among methadone clients (Rawson et al. 2002; Silverman et al. 1996). This combination was introduced in the Netherlands as an experiment. This experimental treatment has been evaluated in a randomised controlled trial.. Sixty-six patients (methadone clients who also chronically used cocaine) participated, 35 in the experimental group and 31 in the care-as-usual group. The characteristics of participants in both groups were comparable to those of patient populations in daily care, thus the results are supposed to offer indications for effectiveness instead of efficacy. Treatment compliance of the experimental group was higher (not significant) and the same conclusion goes for cocaine abstinence (significant). Overall, the results are comparable with those of the earlier American studies. (DeFuentes-Merillas et al. 2008) The implementation of protocolbased CRA plus vouchers was successful. A manual is being published to support the implementation elsewhere in addiction care. It was not feasible to introduce CRA plus vouchers in every organisation of addiction care. In two of the six participating organisations this project had to be stopped. Feedback information showed that CRA and contingency management should be separated and that CRA should be the leading principle in drug-free addiction care because it partly fits with already available treatment options and it offers opportunities to improve mutual tuning of these options. This will also reduce the costs of CRA and possibly stimulates further studies on its effectiveness. Contingency management has proven to be effective in many studies but it appears to be difficult to accept and implement voucher-based care. New studies should target optimal reward schemes and optimal duration of voucher-based treatment. Still, the attitude of professionals has to change by more impetus on rewarding desirable and not punishing undesirable behaviours. Recently a handbook on CRA has been published in which the results and lessons learned during this experiment have been integrated (Greeven et al. 2008).

## Lifestyle training and relapse

"Lifestyle training" programmes are important evidence-based treatment options in current Dutch addiction care, and a product of the national programme Scoring Results. A recent telephonic evaluation among former participants in lifestyle training and early quitters of four organisations of addiction care, showed the following results at nine months after the end of the therapy. During the training period, many participants quit these trainings. Furthermore, more than half (55%) of the interviewees had relapsed in heavy drug use during the last 30 days before the interview. Twenty-one percent is still abstinent and 24% is not using drugs moderately. Though these results are not significantly different from earlier high quality studies (e.g. the American MATCH study), it remains a problem that patient compliance in these trainings is low {Oudejans, Schippers, et al. 2008 2151 /id}.

# Relapse and aftercare

Relapse happens frequently among patients that have finished addiction treatment. Relapse prevention and after care is often promoted to reduce this phenomenon. A recent study aims at describing the availability and role of after care in addiction care. Telephone interviews were held with fifteen former patients and managers of eleven addiction care organisations. The patients were active in client advisory groups during their therapy. An important conclusion is that there is a gap between treatment and being home again. Aftercare should fill this gap, but this appears to be either absent or quite brief and the content differs substantially across the eleven participating organisations. It also appears that on many aspects, management and clients have different perceptions of aftercare. Addiction care management is more inclined to collaborate with other programmes within the organisation than with programmes outside the organisation, which are important for housing, work and finances. Clients perceive most problems within the organisation, e.g. they prefer continued accessibility of care (Oliemeulen et al. 2008a).

# 5.3 Medically assisted treatment

# Withdrawal treatment

Withdrawal treatment or abstinence-oriented treatment exists in the Netherlands. It has not been reported how many drug users participated in that treatment annually.

# Substitution treatment

In 2006 from the more than 32,000 clients in treatment, 12,500 opiate addicts received methadone (see also ST24). For 9,811 of these more detailed data are available, e.g. the average dose was 62 mg per day for this group and the average number of portions of methadone distributed in 2006 was 242. There are striking differences in doses per region and higher dosages are not necessarily given in big cities. These differences are probably due to differences in policy of the institutions (Ouwehand et al. 2007). Besides, it appears that maintenance treatment patients are reluctant to take higher dosages of methadone and most professionals are reluctant to do so against the will of the patients.

Dutch methadone treatment has been criticised during the past years, resulting in a new guideline for methadone maintenance treatment and in request for increasing the budget (see § 5.1). The estimated amount of money needed for the implementation of this guideline (€ 55.5 million) was not ascribed. Mid July 2008, the Minister of Health, Welfare and Sports reserved € 7.5 million for improving methadone maintenance distribution in 2008. He also informed Parliament to increase this budget to € 15 million annually during later years (Ministerie van Volksgezondheid 2008b).

# Medical heroin prescription

Experimental medical heroin prescription is continued. By the end of 2008, 17 units in 15 different municipalities, with a total of 715 places will be operational. National funding is on average  $\leq$  16,500 per place. Municipalities have to compensate the total costs which will be on average around  $\in$  10,000 per place. Formally, heroin prescription is still an experimental project (see also §1.2).

# 5.4 Research

The new research programme Addiction (Risk Behavior and Dependency) of the Dutch Health Research and Development Council (ZonMw) is currently funding fifteen studies on addiction. Five of these cover treatment issues. The first one deals with effectiveness of intensive community-based care (*bemoeizorg*) for persons with complex addiction problems and focus on the contribution of specific programme components to drug use reduction and other outcomes. A second study compares the difference in effectiveness of antipsychotics (clozapine versus risperidone) on craving in persons with schizophrenia and problematic cannabis use. The third study focuses on treatment needs of chronic crack users and investigates the therapeutic efficacy of three new medically assisted treatments (rimonabant, modafinil and dexamphetamine). The fourth study examines the effects of two long-term medically assisted treatments (rimonabant and varenicline) on the dopaminergic system, impulse control, and other outcomes. This study also tries to determine the predictive value of these treatments for relapse in cocaine abuse. A fifth study is done in collaboration with NIDA/University of Pittsburg and covers the outcomes of rimonabant for cocaine users in a double-blind placebo controlled randomised trial (Dutch Council of Health Research and Development (ZonMw) 2007).

Two projects from the former ZonMw programme Addiction are still running. One is planned to offer information materials, a strategy and handbook on ultra rapid detoxification with naltrexone. This experiment was already described in EDDRA and the National Report 2004). The result of the other study is a module for addiction care education (Bachelor and Masters level) ( (ZonMw 2008). A spin-off activity of this experiment is also an evaluation of the psychometric properties of the Dutch version of the 16-item Subjective Opiate Withdrawal Scale (SOWS) during different stages of withdrawal of patients who participated in this rapid detoxification experiment. SOWS is one of several instruments for measuring withdrawal symptoms. None of these instruments is widely accepted. Exploratory factor analysis of the measurement outcomes resulted in exclusion of three items. After this, four factors could be identified that satisfactorily represented the most important detoxification symptoms. The final 13-item SOWS shows high internal consistency, high test-retest reliability and good validity at different stages of withdrawal (Dijkstra et al. 2007b).

It is often assumed that naltrexone reduces craving. A follow-up study (baseline, 1-, 5-, and 10months after rapid detoxification treatment) measured craving with three pre-existing instruments. Based on the results of urinanalysis, patients were divided over three conditions: 1) abstinent + taking naltrexone, 2) abstinent without taking naltrexone, and 3) relapsed in opiate use. It shows that people who took naltrexone, did not experience significantly less craving than those in the two conditions who did not. Thus the initial intuition-driven assumption is refuted. The study was funded by the Dutch Health Research and Development Council (ZonMw) (Dijkstra et al. 2007a).

# 6 Health Correlates and Consequences

# 6.1 Drug-related deaths and mortality among drug users

# General Mortality Register: direct deaths

In the Netherlands, statistics on drug-related deaths are available from the General Mortality Register (GMR), or Causes of Death Statistics, held by Statistics Netherlands (CBS) (Van Laar et al. 2006). In this register the causes of death are classified according to the International Classification of Diseases, Injuries and Causes of Death (ICD). The 9th edition of the ICD was used from 1979 through 1995, and the 10th edition of the ICD has been in use since 1996. The register has national coverage, but in standard form only includes deceased residents of the Netherlands who were registered at a municipal register. However, data on drug-related deaths among non-residents are available from an additional database.

The General Mortality Register (GMR) specifically provides data on acute mortality due to drug use, that is poisoning by drugs, or drug 'overdose'. These are the cases in which death is directly related to drugs. The GMR data do not make a distinction between experimental and habitual drug users, and are not suitable for tracing deaths due to rare toxicological substances like various synthetic drugs. Nonetheless, the registered cases can be selected according to the EM-CDDA definition of acute drug-related death as reported in the Standard Tables ST05 and ST06.

# Overall trend

- Figure 6.1 shows the number of cases recorded from 1987 through 2007 according to the EMCDDA selection of ICD-codes (ST05, ST06). The figure only includes cases from residents that were registered at a municipal register. Among non-residents, an additional 30 cases were registered in 2007 in a separate database (Deerenberg, Statistics Netherlands, personal communication, 30-07-2008). The total number of recorded drug-related deaths among residents increased between 1995 and 2001; it decreased in 2002 and 2003, rose in 2004, and declined ever since. The rising trend until 2001 can be attributed to various factors, such as the change from ICD-9 to ICD-10 in 1996, since ICD-10 includes more cases. It can also be attributed to the rise in acute cocaine deaths, which appears to parallel an increase in the problem use of this substance.
- Of the 99 cases in 2007, a total of 42 cases were coded to unspecified substances, compared to 47 cases in the 2006 registration year. Although the specific substances are not known, an inquiry at Statistics Netherlands (CBS) revealed that these cases are mostly related to hard drugs and to polydrugs, and are therefore rightly included in the group of drugrelated deaths. The number of unspecified cases ranges from 18 in 1996 to 53 in 2004.

# Substance specific trends

• Cases of "opiates" and "cocaine" refer to cases in which these substances were explicitly stated as the primary cause of death on the death certificate. Between 1985 and 2001, opiate intoxications were the most common causes of drug-related death recorded among Dutch residents. In this period, the casualty rate fluctuated between 47 and 77 cases. In 2002, the number of opiate deaths decreased and reached about the same level as the number of acute cocaine deaths, which had slowly increased since the late nineties. Since 2003 these converging trends diverged, but since 2005 they are merging again, due to the decline in the number of opiate deaths.

 In 2007 there was only one case that was coded to an acute psychostimulant intoxication, compared to 4 cases in 2006. Whether these fatal intoxications concerned amphetamines, MDMA, or other psychostimulants is not known.

Despite fluctuations over the years, the total number of drug-related deaths in the Netherlands has remained relatively low. This might be explained by prevention measures and protective factors, such as the nationwide availability of methadone-maintenance treatment and the low rate of injecting drug use in the Netherlands. There are, however, some indications that not all cases of drug-related deaths are recognised in the GMR (De Zwart et al. 2001), although the level of underreporting will probably be rather low.

# Figure 6.1: Number of acute drug-related deaths in the Netherlands according to the EMCDDA selection of ICD-9 codes (1987-1995) and ICD-10 codes (1996-2007)\*



\*Only residents that were registered at a municipal register in the Netherlands are included. Among nonresidents, an additional 30 cases of acute drug-related deaths were registered in 2007. ICD-9 from 1987 through 1995: 292, 304.0, 304.2-9, 305.2-3, 305.5-7, 305.9, E850.0, E850.8, E854.1-2, E855.2, and E858.8, E950.0, E950.4, E980.0, E980.4 (selected in combination with N965.0, N968.5, N969.6 or N969.7). ICD-10 from 1996 onwards: F11-F12, F14, F16, F19; and X42, X41, X62, X61, Y12, Y11 (selected in combination with T40.0-9 or T43.6). Source: Causes of Death Statistics, Statistics Netherlands (CBS). The break in lines between 1995 and 1996 indicates the switch from ICD-9 to ICD-10 coding.

# Age and gender

The population of problem hard drug users is ageing, and this trend is reflected in the increasing age of drug users that have died from drugs. Figure 6.2 shows that the percentage of victims

aged 35 years and above increased from 22% in the late eighties to 65% at the beginning of this century.

Between 1986 and 2007, the percentage of female cases varied from 10 to 28% per year, without showing a clear trend.





# Mortality among drug users in Amsterdam

In paragraph 6.2 below, results will be reported from the ongoing Amsterdam Cohort Studies (ACS) among drug users. With regard to mortality among drug users, it will be reported there that HIV accelerates the HCV disease progression (Smit et al. 2008). As a consequence of this, HIV accelerates mortality due to HCV.

Each year the Municipal Health Service Amsterdam (GGD Amsterdam) traces drug-related deaths by combining data from the Central Methadone Register, the municipal registrar's office, the municipal coroners, hospital records, and the police. Data on fatal poisonings ('overdoses') from the Amsterdam coroners also include tourists and drug users that stay illegally in the Netherlands and are therefore not included in the Population Registry. The General Mortality Register (GMR), on the contrary, only includes residents of the Netherlands who are recorded in the Population Registry. Moreover, in addition to direct deaths (or 'overdoses'), the Amsterdam registration also includes mortality cases that are indirectly related to drugs. Figure 6.3 gives the number of deaths that were found according to this procedure among the drug users in Amsterdam.

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



Figure 6.3: Number of deaths among drug users in Amsterdam

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

Each year more deaths were due to "causes other than overdose". In 2005 the number of deaths temporarily increased, but in general there is a downward trend since 2003.

Apart from the absolute number of deaths per year, the Municipal Health Service Amsterdam also monitors the mortality rates per observed person years. In order to conduct a proper followup of drug users, only methadone patients who are likely to stay in Amsterdam are included in this monitoring system. Moreover, only those methadone patients are included who have a known address in the city and were born in the Netherlands, Surinam, the Netherlands Antilles, Turkey, or Morocco.

Figure 6.4 gives the mortality per 1,000 person years of observation for the four-year periods from 1985-1988 to 2001-2004, and the three-year period 2005-2007. A steady increase in the baseline mortality is seen, which is related to the ageing of the population of opiate users. More-over, while the overdose mortality showed a declining trend, a steady increase was seen in mortality due to other causes until 2001-2004, which might be indirectly related to the ageing of the population (more somatic and psychiatric comorbidity). The standardised mortality ratios further decreased from 6.4 in 2006 to 4.7 in 2007. Probably, the majority of injecting drug users who are at highest risk of dying have died already and current risk ratios tend to decrease to the level among non-injecting drug users.

*Figure 6.4:* Mortality per 1,000 person years among Amsterdam methadone patients from 1985-1988 to 2005-2007



The baseline mortality indicates the mortality among the Amsterdam population of the same age as the methadone patients. Source: Municipal Health Service Amsterdam.

# Direct and indirect deaths for the whole of the Netherlands

<u>NNIA.</u> There is no new information available with regard to the total number of deaths. The total number includes the deaths that are directly as well as indirectly related to drugs. As reported already in the previous national report (Van Laar et al. 2008), it is estimated that in 2001 there was a total of 479 deaths of which 11% were considered to be the base-rate mortality not related to drugs, 23% were attributed directly to drugs (poisoning, overdose), and 66% were attributed indirectly to drugs (Cruts et al. 2008). Given the fact that a decreased mortality rate has been found in Amsterdam in 2006, the mortality rate may have started to drop throughout the Netherlands.

# 6.2 Drug-related infectious diseases

The most important drug-related infectious diseases include HIV/ AIDS, and hepatitis B and C. They are transmissible through sexual contact (HIV, hepatitis B) and blood (hepatitis C, HIV and hepatitis B). Infectious diseases associated with poor living conditions (such as hepatitis A and tuberculosis) may also have higher incidence and prevalence rates among drug users. The overall conclusion of the data presented here is that the number of new diagnoses of HIV, hepatitis B and C among injecting drug users is low, but there are many indications that the number of chronically infected drug users, and thereby the burden of these diseases, is much

higher. It is of note that, apart from data derived from the local study in Amsterdam, recent information on *prevalence* of infectious diseases in drug users is limited. Today most figures on drug-related infectious diseases are available from registration sources.

# HIV

For many years, the main source of information in the Netherlands on the prevalence of HIV and hepatitis B and C has been the (HIV) sentinel surveillance system among injecting drug users of the RIVM. However, as regards drug users, this surveillance system has been discontinued in 2003. For the historical data collected as part of this surveillance system we refer to the National Reports in previous years. It is expected that in 2009 a new survey will be conducted. Four sources of surveillance data with regard to HIV among injecting drug users are currently providing data on newly diagnosed HIV infections.

a. *The national HIV/ AIDS registration of the HIV Monitoring Foundation (SHM)* was appointed by the Dutch Ministry of Health Welfare and Sport as the executive organisation for the monitoring of HIV in the Netherlands in 2002. This registration contains data on HIV-infected patients who are seen regularly by HIV/ AIDS treating physicians in one of the 28 collaborative HIV treatment centres (24 for adults and 4 paediatric) throughout the country. It also includes data from a prior project on HIV positive patients treated between 1998 and 2001 (the AIDS Therapy Evaluation Netherlands, or ATHENA, cohort). The longitudinal, anonymous data are used to monitor changes in the HIV epidemic, the natural history of HIV and the effects of treatment (www.hiv-monitoring.nl).

- Up to December 2007 a cumulative total of 14,019 HIV-infected individuals were registered by the treatment centres and the HIV Monitoring Foundation. The registered number of HIV patients alive is over 12,500 persons (Van den Broek et al. 2008).
- In the total database of the SHM, the percentage of patients infected with HIV through injecting drug use is 5% (653 patients). A steady decrease of injecting drug use as the mode of transmission has been noticed from 9% before the year 2000 to 1% or less in recent years (table 6.1). For comparison: in the total database 7480 patients (53%) have been identified belonging to the transmission risk group MSM (men having sex with men).
- The characteristics of patients in follow-up is even more skewed towards sexual transmission. Of 10,095 HIV-infected patients with data available up to June 2007, 71% belong to the transmission risk group MSM and 17 % to the heterosexual risk group. Injecting drug use as likely route of infection is only found in 3.3% (Gras et al. 2007).
- In 2007, 864 new HIV diagnoses (82% male) were reported in the treatment centres, which number is likely to increase due to reporting delay. In 94% of cases the most likely route of transmission was known, which in 5 cases (4 males) was through injecting drug use (0.6%). The far majority (93%) of registered new HIV cases was likely to be infected through sexual contact, of which over two third through MSM contact. Table 6.1 gives the number of diagnoses by route of transmission up to 2007.
- In 2007, the median age at diagnosis in injecting drug users was 47 years, which is comparatively high: in the overall group the median age at diagnosis was 39 years, in the MSM 39 years and in the heterosexuals 38 years (Van den Broek et al. 2008).
- Of the registered HIV positive injecting drug users, 72% (416 patients) originate from the Netherlands and 21% from other Western European countries. This is in sharp contrast to HIV-positives infected through heterosexual contact, of whom almost half (2001 out of 4056 patients) have their origin in Sub-Saharan Africa (Van den Broek et al. 2008).
- Injecting drug users with a known country of infection mention to be infected in the Netherlands in 86% of cases; for Dutch injecting drug users this is even 98%. These numbers are comparable with MSM (87% of total group infected in the Netherlands, 96% of Dutch MSM), but in contrast with heterosexuals (overall 44% infected in the Netherlands), and blood products recipients (48% infected in the Netherlands) (Van den Broek et al. 2008).
- The far majority of identified HIV cases among injecting drug users are living in the western part of the country, including Amsterdam. Only 28% is living in the northern, eastern of southern part of the country (Van den Broek et al. 2008).
- A study on the effectiveness of cART showed that injecting drug users had a significantly worse virological (defined as HIV RNA plasma concentration of less than 50 copies/ ml) as well as immunological (mean change in CD4 cell count) response after 24 weeks on initial cART (Gras et al. 2007).
- One of the limitations of the SHM surveillance system is that most of the data do not represent recent HIV infections, and therefore the course of the HIV epidemic is less accurately monitored. To overcome this problem, an international research collaboration, including participants from the Netherlands, is validating various assays for the detection of recent HIV infections.
- Another parameter influencing the HIV epidemic is the time-interval between positive HIV test and the start of treatment. In 2008 a project has started that will use modelling, virological and behavioural data to study the prevalence and potential impact of delayed treatment on HIV transmission in the Netherlands (Van den Broek et al. 2008).
- It has been estimated that in the Netherlands 18,500 individuals aged between 15 and 50 years are HIV-infected. When considering the patients registered in the HIV treatment centres as those aware of their HIV infection, the remaining 60% of the estimated infected population is expected to be unaware of their HIV-status. It has also been modelled that the spread of HIV in the Netherlands is still epidemic. In 2015, it is foreseen that the HIV-infected population in active follow-up is twice this population registered in 2005 (Gras et al. 2007). An additional problem is the aging of the HIV-infected population, which adds age-related (treatment) problems.

Transmission group	<=2002	2003	2004	2005	2006	2007
MSM	4,772	440	539	589	579	561
	53%	43%	49%	52%	60%	65%
Heterosexual contact	2,701	445	435	436	314	245
	30%	44%	40%	38%	32%	28%
Injecting drug	588	22	13	14	11	5
use	7%	2%	1%	1%	1%	0.6%
Blood (products)	157	10	4	4	4	2
	2%	1%	0.4%	0.4%	0.4%	0.2%
Mother to child	113	20	12	7	3	0
	1%	2%	1%	0.6%	0.3%	0%
Needle stick	18	2	3	4	3	0
injury	0.2%	0.2%	0.3%	0.4%	0.3%	0%
Other/ unknown	578	84	95	78	60	51
	7%	8%	9%	7%	6%	6%
Total	8,927	1,023	1,101	1,132	972	864

 Table 6.1: Number and percentage of recorded HIV infections by year of diagnosis and by route of transmission

'Year of HIV diagnosis' refers to the date of the first HIV positive blood sample known by the HIV Monitoring Foundation. Figures are adjusted constantly because of reporting delays. Source: RIVM (Van den Broek et al. 2008).

b. *The 8 regional STI centres* form the sexually transmitted infections (STI) sentinel surveillance. The network was implemented in January 2003 and collects a minimum set of epidemiological data to meet surveillance criteria. In 2006, a limited number of (voluntary) key indicators for behavioural surveillance purposes was added, including the number of partners in the last six months, condom use at last sexual intercourse and sexual contacts abroad in the last three months. Since July 2007, the case report also changed to include data for seven specific indicators for high risk, including: presence of STI-related symptoms, notified or referred for STI-test, age below 25 years, MSM, involved in commercial sex, originating from an HIV / STI endemic area or three or more sexual partners in the previous six months. Individuals fulfilling any of these criteria can be tested free of charge, with the aim to prevent ongoing transmission from these identified high risk groups (Van den Broek et al. 2008). On average, 80% of consultations is covered by this network. The web-based application SOAP facilitates the reporting of consultations (Van de Laar et al. 2005).

- In 2007, 78,031 consultations were recorded. Of all STI-clinic visitors, 0.5% reported to have (ever) injected drugs: 198 consultations (52% males) involved drug users who ever (but not in the previous 6 months) injected, 133 (52% males) involved drug users who reported injecting drugs in the past 6 months. As this information is based on self-report, the data may be hampered by underreporting. It is also likely that the core group of drugs users may not visit an STI-clinic.
- In 2007, 304 individuals were newly diagnosed with HIV at the STI-centres; 3 of them (1%) reported to have ever or recently injected drugs (Van den Broek et al. 2008).

• Of the STI-clinic visitors reporting injecting drug use, 12% were diagnosed with an STI, which is comparable with other STI-clinic attendees in 2007 (Van den Broek et al. 2008).

c. *The prospective Amsterdam Cohort Studies (ACS)* has been carried out since 1984 among homosexual men and since 1985 among drug users. Since 2000, only young drug users (aged <30 years) are allowed to enter the cohort (YODAM; see also § 4.3). Participants are followed up every 4 to 6 months, with questionnaires on risk behaviour, and virological and immunological testing of blood samples (www.amsterdamcohortstudies.org). The total drug user cohort includes 1508 individuals, of whom 432 are in follow up (data of January 2008).

HIV incidence rates among ever-injectors dropped from 8.6/ 100 person-years in 1986 to virtually 0 since 2000, with a slight increase to 0.85/ 100 person-years in 2005, when 2 HIV-cases were found (van den Berg et al. 2007). In 2006 and 2007, no new HIV infections were diagnosed in drugs users (injecting and non-injecting). The decline in HIV incidence has been accompanied by a reduction in injecting drug use and needle sharing. Sexual risk behaviour continued, and the few new HIV seroconversions in the last couple of years are related mainly to unprotected heterosexual contacts (Lindenburg et al. 2006).

d. The Municipal Health Service (GGD) of Amsterdam collects information on HIV antibodies in drug users visiting the low threshold methadone services. All users of this service are offered screening once every two years. In 2007, 71 injecting drug users visited the GGD methadone centres, of whom 56 were tested for HIV. One injector (1.8%), male, had a positive test result (see ST09).

# AIDS

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

- Up to December 2007, the cumulative total of reported AIDS diagnoses was 7,515, and 4,661 HIV infected individuals died (116 deaths in 2007). The annual number of AIDS cases peaked between 1992 and 1995 (between 400 and 450 cases) and then dropped to around 100-150 cases per year (Van den Broek et al. 2008). The decrease since 1996 is related to the availability of HAART, which slowed progression from HIV to AIDS.
- In 2007, 179 new AIDS diagnoses were made, but this number is subject to change due to reporting delay (Van den Broek et al. 2008). While 7 (4%) new AIDS diagnoses involved injecting drug use, the highest proportion of AIDS cases is in MSM (50% in 2007) (table 6.2).
- Until 2007, 672 AIDS patients were registered as being infected through injecting drug use. In previous years, the number of cases related to injecting drug use peaked in 1995 (74), then dropped to between 7 and 20 cases since 1999 (see table 6.2). Thereby, the annual proportion of injecting drug users varied between 3% and 14% (De Boer et al. 2006;Van den Broek et al. 2008).

- Note that the proportion of AIDS patients infected through injecting drug use (9% overall) is considerably higher than the number of HIV patients infected through injecting drug use (5% overall).
- This is in line with the finding that injecting drug use as the route of transmission is associated with a significantly shorter interval between HIV diagnosis and death than other transmission routes (Gras et al. 2007). In multivariate analyses, the hazard ratio of time to death for injecting drug users is four times higher than for MSM.

Transmission group	<=2002	2003	2004	2005	2006	2007	
MSM	3,979 64%	118 41%	111 40%	143 43%	114 43%	89 50%	
Heterosexual contact	1,194 19%	110 38%	111 40%	129 39%	101 38%	67 37%	
Injecting drug use	612 10%	14 5%	8 3%	20 6%	11 4%	7 4%	
Blood (products)	146 2%	7 2%	3 1%	4 1%	2 0.8%	0 0%	
Mother to child	51 1%	6 2%	3 1%	1 0.3%	0 0%	0 0%	
Other/ unknown	193 3%	36 12%	44 16%	34 10%	36 14%	16 9%	
Total	6 175	291	280	331	264	179	

# Table 6.2:Number and percentage of recorded AIDS patients, by year of diagnosis and by<br/>route of transmission

AIDS cases were registered by the Health Inspectorate before 1999 and from 1999-2007 by the HIV Monitoring Foundation. Figures are adjusted constantly because of reporting delays. Source: RIVM (Van den Broek et al. 2008).

## Hepatitis B and C: notification data

Notification data are reported by the municipal health services to the National Institute of Public Health and the Environment (RIVM). It is of note that estimating the incidence of hepatitis B and C based on notification data of acute cases will give an underestimation, as a large percentage of new infections remains asymptomatic. However, they may (in the long run) give indications of trends on the incidence of these infectious diseases.

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

 In 2007, 220 acute and 1,563 chronic cases of cases hepatitis B infection were notified (Koedijk 2007)). Notifications of acute hepatitis B decreased with 33% between 2003 and 2007, mainly attributable to a decrease in transmission through sexual contact. In 2007, 2 of 168 patients with known route of acute hepatitis B infections were considered to be infected through injecting drug use (table 6.3). In 10 (9 males) of 1106 chronic infections with known route of infection injecting drug use was regarded as the vector. These data show that injecting drug use currently plays a minor role in newly diagnosed acute (1.2%) and chronic (0.9%) hepatitis B infections. Sexual contacts (MSM and heterosexual) remain important routes of acute hepatitis B transmission, while a large number of chronic hepatitis B infections is found in migrants from high endemic countries (Van den Broek et al. 2008).

Transmission group	2003	2004	2005	2006	2007	Total
MSM	104	105	106	82	78	475
	32%	36%	35%	34%	36%	34%
Heterosexual contact	84	74	88	76	69	391
	26%	25%	29%	31%	31%	28%
Sexual contact,	13	7	4	4	2	30
unknown type	4%	2%	1%	2%	1%	2%
Injecting drug	7	3	0	1	2	13
use	2%	1%	0%	0.4%	1%	1%
Needle stick,	8	7	4	4	3	26
bite	2%	2%	1%	2%	1%	2%
Other/ unknown	110	100	100	75	66	451
	34%	34%	34%	31%	24%	32%
Total	327	296	302	242	220	1387

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

Source: RIVM (Koedijk et al. 2008)

Hepatitis C is a notifiable disease since April 1999. Until October 2003 both chronic and recent HCV infections had to be reported to the Health Care Inspectorate within 24 hours after the diagnosis (positive test for HCV or HCV-RNA-PCR, with or without clinical symptoms). Since October 2003, this procedure only applies to (suspected) acute or recent infections. As acute infections are often asymptomatic, an unknown rate of missed diagnosing and underreporting is possible. Underreporting also occurs because until 2004 data from the Amsterdam Municipal Health Service are lacking. The registration system also changed in 2002, which hampers the analysis of data even further.

 In 2007, an increase of 60% of notified acute hepatitis C infections was observed compared with 2006. The transmission route of 38 of 48 cases was reported; in 5 cases (3 males) injecting drug use was the likely route of transmission (see ST09). There was a sharp increase of notified acute hepatitis C infections among MSM (29 of 38 cases with known route of transmission in 2007).

Hepatitis B and C: treatment data and other sources

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

- Since 2003, the Municipal Health Service (GGD) of Amsterdam collects information on hepatitis C virus antibodies in methadone clients participating in low threshold services. In 2007, HCV antibodies were detected in 26 (16 males) of 46 (57%) tested current injecting drug users. Prevalence of HCV antibodies was only found in injecting drug users over 34 years of age and all but one had their first injection ten or more years ago (see also ST09). Note however that HCV RNA was only found in 7 of the 38 (18%) tested injecting drug users.
- Similarly, data on hepatitis B infections are collected this way by GGD Amsterdam. In 2007, 11 (9 males) of 36 tested injecting drug users were anti-HBc positive (31%) and in 13 (11 males) of 32 tested individuals anti-HBs was detected (see also ST09).

The open and ongoing Amsterdam Cohort Studies (ACS) among drug users (see above) focuses among others on hepatitis C.

- To disentangle the effects of HIV and HCV on death the overall and cause-specific mortality
  was compared between 1295 drug users with an HCV/HIV co-infection (20%), HCV-infection
  (44%) or without HCV or HIV infection (36%) from 1985 to 2006 (Smit et al. 2008). The data
  showed that for HIV and HCV co-infected drug users the risk of liver-related death did not
  change over time, while the risk of AIDS-related mortality decreased. It was concluded that
  HCV disease progression is accelerated by HIV, even after the introduction of highly active
  antiretroviral therapy, which argues for an effective treatment for HCV infection in HCV/HIV
  co-infected drug users.
- In order to understand the parameters associated with resolved HCV infection, the HCV specific T-cell response was studied within the framework of the ACS (Ruys et al. 2008). Thirteen drug users were prospectively identified with an acute HCV infection of whom seven cleared HCV and six remained chronically infected. The study concluded that not so much difference exists between the total CD4+ memory-T-cell responses of resolvers and chronic carriers, but rather that the specificity of the CD4+ memory-T-cell response measured after 12 day expansion seems to predict resolved infection. The resolvers targeted a median of five antigens, while the chronic carriers targeted only a median of two antigens. The data also suggested that re-infection with HCV in injecting drugs users often occurs.

In the database of the national HIV/ AIDS registration of the HIV Monitoring Foundation (SHM), in total 9,291 registered individuals were tested for the hepatitis B surface (HBsAg) or envelope (HBeAg) antigen. There were 812 (8.7%) HIV-infected individuals who also tested positive for hepatitis B, with the highest prevalence among injecting drug users (11.6%) (Gras et al. 2007). The presence of an infection with the hepatitis C virus was assessed in 8,581 persons, of whom 926 (10.8%) were found HCV positive. Prevalence of HCV infection was by far the highest among injecting drug users (93.9%). For comparison: a co-infection of HIV and HCV was found in 5.8% of MSM (Gras et al. 2007).

The Netherlands is a low hepatitis B endemic country with higher prevalence in specific risk groups. There is no universal but a risk group vaccination policy. Medical professionals, children

with at least one migrant parent from a high endemic region, chronically ill people such as haemophiliacs, and children with Down syndrome living in an institution are offered vaccination. In addition, a vaccination programme was started in 2002 targeting at behavioural risk groups: MSM, sex workers, hard drug users and heterosexuals with multiple sex partners. *See also §* 7.2.

- From November 2002 until the end of September 2008, 14,299 drug users (including current, ever and never injectors, 83% male, median age 37 years) received a first vaccination. During this visit, a blood sample was taken to screen for a previous hepatitis B infection. Chronic carriership was found in 0.7% of drug users and immunity (implying a previous infection, which has been cured) was found in 14% of the drug using participants. The data presented are preliminary and subject to change, since the campaign is ongoing (data are provided by Q.Waldhober, Netherlands Association for Community Health Services).
- In the framework of the evaluation of the hepatitis B vaccination campaign, genotype analysis of notified acute hepatitis B patients was used to get insight in the transmission networks (Koedijk et al. 2008). The most prevalent virus genotypes were A and D. Genotype A was found to be a relatively homogeneous cluster, and for a large part associated with homosexual contact. Genotype D was predominant among heterosexuals, and characterised by more heterogeneity, indicating new introductions, among others via chronic carriers from hepatitis B endemic countries. Within genotype D several subclusters were identified related to Turkey, Morocco, Surinam and the Dutch Antilles, the major ethnic minorities in the Netherlands. There was no cluster of acute hepatitis B associated with drug users, which suggests that the transmission within this group is small. However, for only 2 injecting drug users notified with acute hepatitis B the virus genotype could be determined (both genotype A).

## 6.3 Psychiatric co-morbidity

Recent data on the prevalence of psychiatric co-morbidity in the general population or samples of drug users are not available. According to local field studies, mental problems are fairly common among problem hard drug users (see previous National Reports).

Recent data from treatment studies and studies among inmates also suggest that mental disorders are common among substance users, but these figures are probably not representative for the group of (problem) drug users in general. A study among 202 opiate dependent methadone clients of an addiction centre in North-Brabant (see map 15.4), illustrates the high co-occurrence of mood, anxiety and psychotic disorders and opiate dependence (see National Report 2007) (Knapen et al. 2007a). Briefly, the most prevalent current disorders were major depression and generalised anxiety disorders, both in almost one-third of the sample (34% and 31%, respectively). Moreover, over one in three clients had previously had a psychotic disorder (39%) and one in ten had a current psychotic disorder (9%). A comorbid substance use disorder was also very common; 84% fulfilled a diagnosis of substance dependence and 96% of substance abuse. Cocaine, alcohol and sedatives were the most common substances. Furthermore, a probable diagnosis of current ADHD was made among 21% of the clients, and 60% had a history of conduct disorder. This study also included the Euro-Qol-5D, which showed a strong reduction in quality of life among clients with comorbid mental disorders compared to those without a comorbid disorder.

A study among clients of a clinic specialised in treating for double diagnosis problems (Parnassia in the Hague) analysed characteristics of 617 clients admitted between 1996 and 2006 (Termorshuizen et al. 2007). The percentage of heroin users decreased from 92% in 1996-1998 to 37% in 2004-2006 and the percentage of cocaine users increased in this period from 41% to 66%, which is consistent with trends in the prevalences of substance use among problem hard drug users in general. The percentage of cannabis users increased from 32% to 44%. Also, the percentage of poly drug users increased from 44% to 66%. Over half of the clients had a psychotic disorder (53%). The percentage of clients with a personality disorder (cluster B) slightly increased from 14% to 20%, and this trend was also observed for the combination of axis I and II disorders (minor increase from 14% to 18%).

In their three-year report (2002-2004), the Amsterdam Municipal Health Service also signalled an increase in psychiatric co-morbidity among heroin users compared with the start of the heroin epidemic (Van Brussel et al. 2005). The following reasons were put forward to explain this trend:

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

Co-morbidity is also common among incarcerated drug users. In 2006/2007 161 problem substance users and problem gamblers (11% of sample) in eight prisons were questioned about mental health problems (Oliemeulen et al. 2007). A variety of (screening) instruments were used, none of them yielding clinical diagnoses but rather providing indications of specific mental health problems. The results showed that about three of four interviewed detainees had a possible personality disorder, over half had an indication for a possible anxiety disorder and one in three a possible mood disorder (depression). Psychotic symptoms were present among 40% of the problem substance users and gamblers.

# 6.4 Other drug-related morbidity

#### Drug-related emergencies

There is no national registration system yet for drug-related emergencies in the Netherlands, although in November 2008 the Trimbos Institute started a pilot study testing the feasibility of a drug emergency monitor in four regions of the country.

Current sources giving partial information on emergencies include the registration of hospital admissions (LMR, see chapter 4) or cases reported by the Central Post for Ambulance Transports in Amsterdam (see below). In addition, the injury information system (Letsel Informatie Systeem, LIS) of the Consumer Safety Institute gives information on the number of people treated annually at the emergency departments of hospitals. These data are derived from a representative selection of hospitals and are extrapolated to yield national estimates.

- Averaged over 2002-2006, it is estimated that 3,200 people are treated annually at a hospital emergency department following an accident, violent incident or self-mutilation related to drug use (cp. 13,000 on account of alcohol).
- Forty-three percent are aged between 20 and 30 years and 73% are male.
- The proportion of drug-related emergencies requiring hospitalisation is relatively high (34%; cf. 17% for traffic accidents or 10% for private accidents).
- Poisoning is the most frequent cause of emergency (72%); 12% is due to complications of body-packing.
- Cocaine is the most frequently cited drug (34%); cannabis is involved in 18% of the cases with a known substance. Lower ratios are found for ecstasy (10%), heroin (4%), hallucinogenic mushrooms (4%) and amphetamines (3%). Note, however that it was not possible to specify a drug in 32% of the cases. The proportions of different drugs among valid cases is therefore higher.
- Although annual trends should be interpreted with caution due to the extrapolation method, results from a trend anaysis tentatively suggest that the number of cannabis-related emergencies had increased between 2002 and 2006, and this also applied to hallucinogenic mushrooms, although the latter still account for a fairly small number of emergencies.
- These figures are likely to be an underestimate of the true number of emergencies related to drugs due to underreporting.

## Drug-related non-fatal emergencies in Amsterdam

The Amsterdam Municipal Health Service keeps a record of non-fatal emergencies brought to its attention (Central Post for Ambulance Transports). 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. Table 6.4 gives the annual number of emergencies per drug from 2000 to 2007.

- In 2007, the total number of drug-related requests for emergency assistance was 1,065, which is at the same level as 2006.
- Most drug-related emergencies are related to the use of cannabis (42%), followed by heroin/cocaine (21%).

- The increases in cannabis-related emergences and GHB related emergencies reported between 2005 and 2006 have not continued in 2007.
- However, the increasing trend (+20%) in emergencies related to hallucinogenic mushrooms went on in 2007.
- LSD and amphetamines are hardly associated with emergencies, but the number of emergencies related to amphetamine was higher in 2006 and 2007 compared to the years before. The number of ecstasy emergencies remained at about the same level in the past four years.
- The proportion of cases requiring transportation to a hospital (a proxy measure for the seriousness of the emergency) were 39% for cannabis, 54% for hallucinogenic mushrooms, 70% for opiates/cocaine, 77% for amphetamine, 80% for ecstasy and 81% for GHB. This latter substance is difficult to dose because of the small safety margin, which often results in loss of consciousness.
- The increasing trends for hallucinogenic mushrooms is probably related to the growing number of (fun) tourists visiting Amsterdam. In 2007 four cases were potentially serious and/or life threatening (CAM 2007). They were all related to secondary injuries as a consequence of behavioural changes. One (fatal) case concerned a girl with a history of a suicide attempt, and in the remaining cases poly substance use probably played a role. These emergencies and the risk of unpredictable behavioural changes with possible severe consequences were among the reasons for the Ministers of Health and Justice to decide that fresh hallucinogenic mushrooms will be brought under the control of the Opium Act (see also §1.1). Dried or other preparations of hallucinogenic mushrooms are already legislated for under the Opium Act.

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

	2000	2001	2002	2003	2004	2005	2006	2007
Opiates/cocaine	188	208	216	226	239	230	234	220
Cannabis	141	289	285	257	320	342	461	444
Hall. mushrooms	24	49	50	60	55	70	125	149
Ecstasy	36	42	39	39	59	63	53	67
Amphetamine	30	6	5	7	9	3	13	17
LSD	2	3	1	1	7	1	1	4
GHB	25	69	67	74	98	76	110	110
Unknown/other	20	37	38	29	54	89	46	54
Total	466	703	701	693	841	874	1043	1065

Source: Amsterdam Municipal Health Service.

#### Information requests on acute intoxications

Another source of information on trends in emergencies is the number of information requests (by telephone) from physicians, health authorities and others on acute intoxications recorded by the National Poisons Information Centre (NVIC) of the RIVM. Note, however, that these data are

just indicative and do not reliably represent the actual number of acute intoxications. Since April 2007, information requests can also be sent through the internet but these data are not yet included in table 6.5.

	2000	2001	2002	2003	2004	2005	2006	2007
Ecstasy	164	194	184	208	246	217	183	171
Amphetamines***	42	39	39	47	51	128	106	94
Cocaine	150	184	217	247	227	254	211	231
Cannabis	71	129	141	144	191	202	186	178
GHB	91	174	194	212	190	241	203	202
Opiates	51	42	95	112	112	129	32*	47
Ephedra	16	28	61	110	127	67	55	26
Hallucinogenic mush- rooms	34	58	49	65	52	62	67	68
Other (smart shop) products	37	56	43	65	89	83	103	103
Total drugs	656	904	1,023	1,210	1,285	1,383	1,146	1,120

Table 6.5: Information requests related to drugs at the National Poisons Information Centre

\* Due to a change in registration: since 2006 methadone is not counted in the group of illicit drugs but in the group of medicines. \*\* Provisional figures. \*\*\*Including also methamphetamine (6 times in 2007). Source: NVIC, RIVM (Van Velzen et al. 2007).

Table 6.5 shows that the total number of information requests related to drugs sharply increased between 2000 and 2005 but dropped in 2006 and remained at the same level in 2007. A possible explanation for the reduction is that physicians have become more familiar with recognising and treating problems related to these drugs, especially if they have been on the market for some time, which reduces the need to consult the NVIC for information.

- In 2006, most information requests were related to cocaine (21%), GHB (18%), cannabis (18%) and ecstasy (15%). This distribution showed little change from 2006. Other drug categories each made up less than 9% of all requests.
- In the past years, requests for information on methamphetamine have been recorded occasionally, but their number is very low (20 in 2004; 14 in 2005; 9 in 2006 and 6 in 2007). However, it is not known whether the distinction between methamphetamine and amphetamine is or can be made reliably by victims or physicians.

## Driving under the influence of drugs

It has been roughly estimated that some 80 people die annually because of driving un der the influence of drugs (Ministry of Transport 2008). Each year, the polic reports some 1000 (possible) offences of driving under the influences of drugs (alone and combined with alcohol). For all cases blood samples are sent to the Netherlands Forensic Institute. After chemical analysis approximately 80% samples test positive and these cases are sent to the Public Prosecutor. Re-

cently, the Minister of Transport, Public Works and Water Management announced a pilot starting in November 2008 to test the practical use of saliva testing in traffic participants who are suspected of drug use. This test is aimed to facilitate pre-selection of relevant cases. For the purpose of the pilot it will be applied on a voluntary basis and in addition to a traditional blood test. Both will be analysed for illegal drugs by the Netherlands Forensic Institute. Results of the saliva test will not be used for prosecution. The results of this project are awaited in Spring 2009.

# 7 Responses to Health Correlates and Consequences

The broad lines of drug policy at the national level aimed to limit the health consequences of drug use are put into practice by many local or regional initiatives.

# 7.1 Prevention of drug-related deaths

<u>NNIA.</u> Within the framework of its harm reduction policy, the Netherlands has consolidated the prevailing practices to prevent drug-related deaths. There is no specific new information available in addition to the prevention measures that have been reported already in the previous national reports.

# 7.2 Prevention and treatment of drug-related infectious diseases

# Needle/syringe exchange

Estimates from Mainline (a grassroots organisation for drug users in Amsterdam) and the Trimbos Institute indicate that there are approximately 150 needle/syringe exchange programmes in the Netherlands. This is a rough estimate because for some cities it has been reported that "some" pharmacists are also exchanging syringes. In total it may be that 20 to 30 pharmacists in the Netherlands are doing this.

In Amsterdam and Rotterdam the numbers of syringes that were exchanged are reported. In Amsterdam, after a steady increase until 1993 (1,082,880 syringes were exchanged in that year), a gradual decline started and this continued until the last reporting year (2007) with a reported number of 171,200 syringes. The same phenomenon is visible in the number of syringes that have been ordered at the municipal health service (*GGD*) in the city of Rotterdam. This is considered a rough estimation procedure for the real number of exchanges. A clear decline in this number is reported from 422,400 in 2000 to 168,900 in 2007. Rotterdam also calculated numbers of injecting drug users (based on an estimated ten syringes weekly per injecting drug user), resulting in a steady decrease of this number from 812 in 2000 to 325 in 2007 (Municipal Health Service Rotterdam, personal communication).

## Drug consumption rooms

Around 40 drug consumption rooms are operating in the Netherlands. Though these are also present in smaller cities, most of these harm reduction facilities are concentrated in bigger cities. Besides, not all rooms have injecting rooms, mainly because there are no injecting drug users (anymore) who use these rooms.

## Harm reduction for crack users

The Institute for Research, Education, Training, Consultancy, Cooperation in the addiction field (CVO), an independent institute in the city of Utrecht, evaluated the implementation of two harm reduction interventions for crack users in the street. These interventions were developed in earlier years by the Mainline Foundation in Amsterdam and are targeting the health situation and

self control of crack users. Health is tackled by brief health tests that are playfully realised and targeting at increased knowledge about the harmful consequences of crack use and methods to reduced these consequences. This programme is promoting several self control techniques via short questionnaires. The main target is raising consciousness on possibilities of self control. An important preliminary condition is that street workers are actively reaching these hidden groups. The evaluation was realised by four organisations of addiction care in two cities in Belgium and the Netherlands. The results mainly showed that the organisations of addiction care responsible for this experiment, did not invest enough interest and action into these interventions. First, there appears to be insufficient knowledge about crack, crack users and their needs which hampers the development of fine-tuned interventions. Second, there remained insufficient conditions (money, personnel) for realising the intervention effectively. Third, when cooperation with the police force failed during this experiment, the conditions for (thus the realisation of) outreach work were less favourable (De Bruin et al. 2008).

#### Infectious disease related risk behaviour in prison

In 2007 (January to May), a guick scan was performed within the Department of Judicial Institutions of the Ministry of Justice (Dienst Justitiële Instellingen or DJI) on infectious disease related risk behaviour among detainees. Questionnaires were presented for discussion among professionals who are working with prisoners, e.g. physicians, nurses, security workers, unit management. Forty questionnaires were filled in by groups of professionals (experience-based), indicating that medical and non-medical professionals think that the attention for risk behaviours of prisoners should be increased. Information and prevention materials are for instance not available in all prisons and in many cases the content of these materials need an update. In general, professionals do not support syringe exchange facilities because injecting drug use is reported to be rare and because they think that it will generate more serious drug related problems. Although approximately half of the professionals was confronted with injecting drug use within the last five years, it was noted that this type of drug use was occasional or rare. Nevertheless, needle stick accidents were more prevalent, as were bite accidents, tattooing and sexual contacts between prisoners. The quick scan was meant as a preparatory activity to the infectious disease strategy 2008-2012. A predominant feature in this strategy is that current prison policies concerning infectious diseases should be updated and based on current knowledge and insights (Commissie Samenwerking Infectieziekten 2008).

#### National hepatitis B vaccination campaign

Compared to many other countries, hepatitis B is a rare phenomenon in the Netherlands, with higher prevalence in specific risk groups. Until now, there is no universal but selective (risk group) vaccination policy (see § 7.2). In line with a recommendation of the Dutch Health Council, free vaccination of behavioural risk groups (drug users, men having sex with men, heterosexuals with multiple sex partners, including commercial sex workers) is taking place nationwide since 2002. Since 2004, there is a formal cooperation with penitentiary institutions, which also provide vaccinations. This cooperation has proven to be very fruitful, since 12,5 % of the total number of participants of the campaign has been vaccinated in the 50 participating penitentiary institutions. In 2005, the World Health Organization awarded the WHO Award Health in Prisons Project (HIPP) to the national hepatitis B vaccination campaign (see also 6.3).

From November 2002 until the end of September 2008, 14,299 drug users received a first vaccination. Compliance of those drug users with the indication for a second vaccination (condition: susceptible *and* a received first vaccination more than a month ago) was 82.5%. Compliance for the third vaccination (six months after the first vaccination) is currently 59,3%. These data imply that the protection rate of the 14,299 drug users taking part in the campaign until now is 65,3 %, including individuals receiving the full vaccination schedule and those tested as either immune or carriers. As it is currently unclear whether an incomplete series of vaccinations - two or one vaccination(s) - may also be effective, the actual number of protected drug users may be higher. The data presented are preliminary and subject to change, since the campaign is ongoing.

The coverage of the campaign and the compliance of participants have been evaluated ad interim in 2007 (Baars et al. 2007). This evaluation study suggests that not participating in this campaign – even if drug users knew about the existence - is that they usually do not think about hepatitis or vaccination, probably because of their chaotic way of life. The results suggest that vaccination should be made more convenient for this target group. Just a flyer is insufficient for increasing motivation to engage in a vaccination campaign, The outcomes of earlier research suggest that self efficacy (the individually perceived ability to participate) may be an important covariate for participation. Important predictors for knowing about the existence of the free of charge vaccination campaign are contacts with professionals in regular addiction care, frequency of visits to the drug consumption room and being homeless (a condition for subscription to the drug consumption room). Participation in the campaign is partly determined by contacts with professionals in regular addiction care (ibid.).

The effectiveness of the hepatitis B vaccination campaign for behavioural risk groups has been evaluated in 2008. This evaluation focussed on the numbers of at-risk individuals reached as well as on molecular epidemiological aspects of virus transmission. The main conclusion derived from both approaches is that the recent drop in notified acute hepatitis B cases may possibly result from the campaign. Table 7.1 lists the vaccination coverage for the various target groups. It may be concluded that, although substantial numbers have been reached, the overall estimated vaccination coverage is low (17%, range 9-25%). For drug users, the estimated vaccination coverage is higher (41%, range 18-63%). This may be the result from the pro-active and outreaching activities by the addiction care institutions in close cooperation with the municipal health services. It remains questionable however whether the vaccination coverage currently reached will create a sufficient group immunity.

	Drug users	MSM	Prostitutes	Heterosexuals
Number of participants	13,316	20,551	10,083	38,065
Number immune	1,840 (14%)	2,469 (12%)	1,327 (13%)	1,718 (5%)
Number of carriers	99 (0.7%)	153 (0.7%)	101 (1%)	210 (0.6%)
Compliance second vac- cination *	83	86	74	77
Compliance third vaccina- tion *	58	73	50	58
Estimated target group	24,000- 46,000	278,000- 392,000	20,000- 25,000	195,000
Estimated vaccination coverage (range)**	41 (18-63)	7 (5-9)	28 (21-34)	18 (13-22)

Table 7.1: Results of the hepatitis B risk group vaccination campaign 2002-2007

\* in percentages, taking into account the minimally required period between consecutive vaccinations

\*\* in percentages, including participants fully vaccinated and the estimated number in the target group being anti-HBc positive (indicating immunity or carriership). Source: GGD Nederland/ RIVM {Koedijk, Op de Coul, et al. 2008 2111 /id}; presentation Robin van Houdt, 10 October, 2008: HBV mini-symposium.

The evaluation has been hampered by several factors. First, the size of the target groups is difficult to estimate. Second, there are no data available on the number of people vaccinated outside this vaccination campaign. Third, the number of fully vaccinated participants may increase with time and fourth, it is unknown whether immunity may also be achieved with an incomplete vaccination scheme.

Currently, the National Health Council is preparing an advice with regard to universal hepatitis B vaccination. Nevertheless, if the advice will be to start universal vaccination in the Netherlands, risk group vaccination will still be necessary for many years.

## Testing for hepatitis B and C

In Rotterdam, a project is ongoing to test and treat stabilised drug users and homeless people on HIV, hepatitis C and B. The project ("Active Testing") is a collaborate action of the municipal health service Rotterdam-Rijnmond, addiction care institute Bouman GGZ and several bodies for community-based services. Clients having a long-standing relation with addiction care and community-based services are pro-actively approached. They are offered an intensive guidance in the trajectory from screening to treatment. In total, the project aims to include 850 individuals, of whom half are recruited at methadone posts and double diagnosis facilities. The project aims to formulate a general screening and treatment strategy on HIV, hepatitis C and B for these target group and to embed this within regular addiction care.

# Hepatitis C projects

Two pilot projects were started in 2007. First, from the beginning of 2007 until mid 2008 a hepatitis C internet project has been running to inform risk groups about the existent possibilities for treatment and to enable epidemiological research in this domain. This project runs both in Amsterdam and in one of the Southern regions (Zuid Limburg). Risk groups for hepatitis C are hidden in the general population. In order to reach these hidden risk groups, an open media campaign was started combined with an interactive online HCV risk test (a questionnaire). Filling in this questionnaire results in a personal advice. In case of real risk, one is offered the possibility of a free of charge and anonymous blood test. During this project it was possible to receive a free of charge blood test in one of the cooperating labs after showing the printed labquestionnaire that is available from the project site. The second pilot project started autumn 2007. This hepatitis C information campaign targeted the general population in two regions (Amersfoort and Apeldoorn) and risk groups in two other regions (Rotterdam and Dordrecht). An evaluation of both projects is currently running. (Kok et al. 2008)

In December 2006, the DUTCH-C treatment study (part of the Amsterdam Cohort Studies) started to enrol drug users for hepatitis C treatment. This treatment study is a collaborative project with the Academic Medical Centre (AMC) of the university of Amsterdam. It aims at evaluating the possibility of HCV testing and treatment combined with methadone substitution therapy.

#### Tuberculosis

In Rotterdam tuberculosis had re-emerged among illicit drug users and homeless people in 2001, which became known as "the methadone cluster". Although this cluster had its roots in Cape Verdean patients, there was an intensive transmission among drugs users and homeless people, and it soon became the largest cluster in the Netherlands. In response, a periodic radiological screening programme was re-introduced in May 2002, which aimed to screen drugs users and homeless people bi-annually. A mobile digital X-ray unit visited day and night shelters and hostels for the homeless, as well as methadone centres, drug consumption rooms and street prostitution zones. In a recent publication the coverage of this tuberculosis screening programme was estimated, using simple single-source truncated models {van Hest, De Vries, et al. 2008 2114 /id}. The estimated number of illicit drug users and homeless people decreased between 2003 and 2005 from around 3000 to around 2500 individuals. Between 21 and 25% of the estimated target population was found to meet the objective of at least two X-rays taken per year. It was noted that some problematic drug users, for example crack users, will never be reached by the tuberculosis screening programme, as they do not use the facilities where the X-ray unit was parked. They were thus not included in the estimates.

## Research

A new analysis of data from the Amsterdam Cohort Studies was conducted, targeting the impact of harm reduction programmes on HIV and hepatitis C virus incidence. The target group was drug users who have ever injected their drugs. The concept of harm reduction was operationalised by two components, methadone dose and participation in a syringe/needle exchange programme (NEP). Five categories of participation were discerned, ranging from no methadone use and injecting drug use in the past six months and no participation in a NEP to full methadone use (≥ 60 mg/day) and no current injecting or current injecting but full participation in a NEP. This study revealed that full participation in both harm reduction programmes was associated with a lower incidence of HCV and HIV infection. Participation in only one of these two programmes was not associated with lower incidence rates. Though strictly spoken, this study cannot prove causal relationships, the authors suggest that the results are important for countries with recent and explosive outbreaks of HIV and/or HCV among injecting drug users. Curbing the rapid spread of these diseases seems insufficient tackled by applying only one of these harm reduction programmes (Van den Berg et al. 2007).

# 7.3 Psychiatric co-morbidity (dual diagnosis)

Given the high prevalence of co-morbidity between substance use and other mental disorders (Bijl et al. 1997;Knapen et al. 2007b), there is increasing attention for this topic in addiction care and mental health care. Although knowledge about effective treatments is growing (Posthuma et al. 2003; Van der Stel 2004; Van der Stel 2005), scientific evidence in this field still shows large gaps. This may be caused partly by the large number of combinations of addiction (severity and kind of drugs, including polydrug use) and mental disorders (ADHD, schizophrenia, etc.) and also by partly unknown interaction effects of psychoactive substances and prescription drugs. Although the number of dual diagnosis treatment units is growing in the Netherlands, professional responsibility for these patients is still insufficiently recognised by both fields. Incompatibilities between professionals in mental health care and addiction care still result too often in moving dual diagnosis patients to and from psychiatry and addiction care (see National Report 2006). However, during the past years the number of regional centres that also take care of this target group is increasing and nowadays at least seven specialised inpatient wards for dual diagnosis exist, which offer different types of integrated care for this target group. The religionbased addiction care centre De Hoop and a second centre have planned to open specialised clinics in 2009. Furthermore, two regional care organisations, one for people with mental retardation and the second for addiction problems, signed an agreement for cooperation to increase possibilities and effectiveness of joint care for this target group. In another centre an existent inpatient ward has been split up in two wards, one for psychiatric patients with serious addiction problems and another one for the less-serious drug using group. This was partly done for increasing the control over drug smuggling and its consequences. Some organisations for mental health care are formulating anti-drug policies because drug problems among their clients became more serious. Unfortunately there do not exist good practices yet (Borgesius et al. 2008).

For a brief description of the two oldest dual diagnosis treatment wards we refer to our National Report 2006.

The number of evidence-based interventions for clients with mental health problems and addiction problems is still limited. Besides, research shows that it remains difficult to implement integrated treatment and/or show partly successful outcomes, e.g. improvements on mental disorder symptoms but no improvements in substance use. Some RCTs are currently running in The United States and England (Craig et al. 2008), e.g. the MIDAS trial in Manchester and the West Study (Community Connections) in Washington. In the research group around Drake et al. the Community Reinforcement Approach is gained interest.

The first developed comprehensive, integrated treatment for dual diagnosis patients is the American Integrated Dual Disorder Treatment (IDDT). This treatment has been implemented in five treatment teams in four Dutch outpatient treatment centres during a two-year project with four targets.: 1) translation and adaptation of the American implementation strategy; 2) compos-

ing and offering an in-company training in IDDT; 3) implementation of IDDT; 4) gathering information about limiting and supporting factors for implementation. The IDDT toolkit appeared to be an satisfactory instrument for treating dual diagnosis patients and the two scales used (the 14item Fidelity Scale and the 12-item General Organisation Index) are adequate instruments for monitoring the implementation of IDDT. The Fidelity Scale measures the extent of application of IDDT by the professionals and the General Organisation Index estimates the possibility of implementing and maintaining an evidence-based practice in an organisation. An important limiting factor is the seriousness of problems and especially the accessibility of the client/target group (Van Rooijen et al. 2007).

One of the participating teams in the above-mentioned IDDT project developed a protocol especially for medical nurses who work with schizophrenia patients who also abuse substances. In the literature on treatment of this target group, descriptions of the role of medical nurses appear to be absent, while especially nurses are playing an important role in daily practice. (De Jonge et al. 2008).

The growing attention for psychiatric co-morbidity is mirrored by conferences on this subject. A brief report of a conference (*"Co-morbidity in psychiatry and addiction care"*) on this subject in September 2007 mentions for instance the increased risk of psychosis for schizophrenia patient when they use cannabis (Heuving 2007). In October 2007 the Trimbos Institute organised a workshop on treatments for psychiatric co-morbidity patients. This workshop was meant as a refreshment course for professionals and initiated by an expert group that worked on strategies for enforced implementation of treatments for these patients. Finally, the International Collaboration on ADHD and Substance Abuse (ICASA) held its 4<sup>th</sup> Meeting in Amsterdam in November 2007, reflecting the growing international attention for this specific subject (Van de Glind et al. 2008).

In 1999, one of the Dutch regional addiction care organisations (Parnassia The Hague) introduced of intensive outpatient treatment for dual diagnosis patients (see also § 6.3). A follow-up study without control group (1999-2006) among 617 patients focussed on changes in that period. In general, the results of this study were unfavourable and showed that: 1) treatment duration was not reduced in that period; 2) the period between admission and the start of treatment was reduced; 3) the period between admission and release did not change; and 4) the risk of readmission had increased. The author suggests that a second study should focus on the most intensive parts of outpatient treatment, i.e. Assertive Community Treatment (Termorshuizen et al. 2007).

## 7.4 Interventions related to other health correlates and consequences

<u>NNIA.</u> Apart from reducing public nuisance, drug consumption rooms and medical heroin prescription (also) aim to improve health-related aspects. These interventions have been described in previous sections of chapter 5 and 7.

# 8 Social correlates and consequences

#### 8.1 Social exclusion

#### General trends in the Netherlands

In the Netherlands, the Social and Cultural Planning Office of the Netherlands (SCP) monitors the general trend in poverty and social exclusion.

- The SCP's 2007 Poverty Monitor reports that, in 2005, about 10% of the Dutch households were living below the low-income threshold. It is expected that this proportion will decrease to 9.3% in 2006 and will further decrease to only 7.9% in 2008 (Vrooman et al. 2007). With regard to the risk groups, it was found that most affected by poverty were "single-parent families, members of non-Western ethnic minorities and households living on benefits other than pensions".
- The SCP's 2007 Integration Report records the status of the integration of ethnic minorities in the Netherlands (Dagevos et al. 2007). On the negative side there is still an "enormous dropout rate of ethnic minority pupils from secondary school and senior secondary vocational education". Moreover, ethnic minorities are "frequently unemployed", the crime rates among young ethnic minorities are alarming, and "little has happened in the last ten years to bridge the social distance between the ethnic and indigenous populations". On the positive side, however, the educational level of ethnic minorities is steadily improving, they are increasingly occupying larger homes, and the proportion of ethnic minorities in employment has increased.
- The SCP's 2007 Discrimination Monitor reports about labour market discrimination against non-Western ethnic minorities (Andriessen et al. 2007). Unfortunately, it is found in several studies that "discrimination against non-Western ethnic minorities on the labour market mainly impedes their access to the labour market (entry) and their ability to secure permanent employment".

#### Social exclusion among drug users

*Trendspotting* monitors the living conditions of homeless addicts in the area of Rotterdam. For 2007, Trendspotting has monitored the living conditions of 118 homeless addicts with regard to housing, income, debts, physical and mental health, social relationships, and the use of substances (Barendregt et al. 2008). In 2007, 30% appeared homeless in its most severe form, but this indicates a decrease of 10% compared to 2003. Key informants explain that, due to a more repressive approach, addicts hang around less on the streets and more often seek social relief. The social exclusion among this group of addicts becomes further visible in that 75% receives a social benefit, 91% has debts, only 57% reports good health compared to 81% in the general population, 35% reports symptoms of depression, 23% reports symptoms of psychosis, and 83% reports loneliness compared to only 52% in the general population.

In the event of a barrier to health care, this barrier will count as a specific aspect of social exclusion among drug users. Within the framework of the YOung Drug users in AMsterdam-study (YODAM-study), a targeted qualitative study was conducted "to explore unmet health care needs and barriers to health care use among young adult problematic drug users in Amsterdam" (Witteveen 2008). The study "started in 2001 and included 50 problematic drug users". The subjects were recruited directly by "street outreach" and "outreach at methadone outposts", and were recruited indirectly by "respondent-driven sampling". They aged between 20 and 30 years, the mean age being 27.2 years, and 72% were male. A majority of 64% were poly drug users at the time of the interview, 92% used cocaine, and 80% used heroin. Some kind of addiction treatment was received by 80% of the respondents.

It was found that, 76% felt a need for social services in the areas of housing, finances and employment, and 54% wanted support for their addiction (mostly to give up hard drug use). Although the "health care services for the respondents were accessible", these services "often were not optimal". The young problem drug users most often complained about "lack of personal supervision", "help not based on client input", "fragmentation of support", "waiting lists", lack of an obligation to complete treatment, and treatments "focusing too much on abstinence". The researchers conclude "that services fail to assume full responsibility for their clients and that service provision is currently not individually tailored". It is recommended that, instead "of being judgmental and using negative stereotypes about young people and their drug use, providers should show greater empathy" by means of "respectful listening".

However, a counterargument of addiction care workers may have it that a basic underlying psychological problem of addicts often is that they avoid their own responsibility, and tend to blame the addiction care for their own shortcomings. The biggest pitfall in giving addiction care therefore is to take over too much of an addict's own responsibility. As an alternative, the addiction care supports addicts, as much as possible, to take their own responsibility again to manage their life.

#### Drug use among socially excluded groups

There is a clear link between social exclusion and the use of drugs. The previous national reports already notified higher prevalences of drug use among socially excluded groups like (ethnic) neighbourhood youth, homeless adolescents, young hard-drug users, female as well as male prostitutes, young people that hang around, problem youngsters, and the homeless in general. New qualitative data are available from the Amsterdam Antenne monitor and additional quanitative data are available on homeless people and prolific offenders.

## Neighbourhood and problem youth

By means of a qualitative panel study among key informants, the Antenna has monitored in 2007 the use of substances among neighbourhood and problem youth in Amsterdam (Nabben et al. 2008). It was observed that the "ethnic Dutch and Surinamese neighbourhood youth drink alcohol more heavily and frequently than their Moroccan or Turkish counterparts". A large majority of the neighbourhood youth has smoked cannabis. A "considerable proportion seems to smoke it almost daily", the adverse effects being that "it can make them passive and cause

mood swings". Ecstasy is less popular than cannabis, and cocaine is less popular than ecstasy. Alcohol and cannabis are also popular among the problem youth, "and the combined high produced by these two substances together is particularly sought after", "either for fun or to help forget personal problems".

## Homeless people

In the area of Rotterdam, the *Trendspotting* monitor in 2007 found that among homeless addicts during the past month 76% had used crack cocaine, 71% had used methadone, 68% had used heroin, 51% had used cannabis, 10% had used amphetamines, 3% had used ecstasy, and 3% had used hallucinogens (Barendregt et al. 2008).

The region of "Gooi en Vechtstreek" is located in the southeast of the province of North Holland and extends over the provincial town of Hilversum and its more rural surroundings. It is estimated that at the beginning of 2007 there were about 240 homeless people lingering around in this area. Interviews were held with 28 of these homeless people who aged 18 to 65 years, their mean age being 37 years. It was found that, during the last month, 14 of the homeless had used alcohol in large quantities, 11 of them had used cannabis, 2 had used methadone, 1 had used crack cocaine, 2 had used sniff cocaine, and 1 had used amphetamines (Biesma et al. 2008).

# 8.2 Drug-related crime

Reported are (a) drug law offences and (b) offences committed by drug users.

- (a) Drug law offences consist of offences as described in law books, like offences against the law for prevention of misuse of chemicals (Wet Voorkoming Misbruik Chemicaliën), organized crime in relation to drugs and offences against the Opium Act (Opiumwet). Offences against the Opium Act form the main category here. In this act, the trafficking, production and cultivation, dealing and possession of drugs are defined as criminal acts. Important to note is that drug *use* is not a criminal offence and possession of small amounts for own use is not prosecuted. These 'small amounts' are specified in prosecution protocols: not over five grams or five plants of cannabis and not over one tablet/ampoule/ball or 0,5 grams of any hard drug (Stc 2000/250;Stc 2004/246). The Opium Act distinguishes between soft drugs (mainly cannabis) and hard drugs (like heroin, cocaine, ecstasy, amphetamines).
- (b) Offences committed by drug users: drug users can commit several types of offences. Amongst these are Opium Act offences – in this respect there is an overlap between (a) and (b) - but the main category of offences committed by users are property crimes (see table 8.7).

# (a) Offences against the Opium Act

In this chapter we use databases from the police, the Public Prosecutor and the judicial documentation system at the Research and Documentation Centre (WODC) of the Ministry of Justice. It should be noted that figures from registrations, that are reported here, always depend for a certain part on the activities and priorities of law enforcement agencies as well as completeness of the registrations. Also, databases are often adapted and improved in the course of time. Later versions may differ from previous ones. We have to deal with 'living systems'. Figures and trends should therefore be interpreted carefully. We present the current updates.

The following political framework is relevant for the interpretation of the data:

- The organized crime with regard to heroin, cocaine and synthetic drugs forms one of the priority areas of the fight against organized crime (T.K.29911/1).
- In December 2007, the Minister of Justice launched a specification called 'Strengthening of approaches against organized crime' (T.K.29911/10). The approaches contain a combination of administrative and preventive measures, criminal justice and repressive approaches and international co-operation. There is a close link with activities against money laundering and other financial-economic crime.
- In addition, the intensification of law enforcement on cannabis cultivation, which was launched in April 2004, is still running (T.K.28192/23;T.K.28192/36). Administrative approaches play an important role here.

The Opium Act was amended in 2006. A paragraph 5 was added to section 11, which concerns the penalty for criminal acts involving large amounts of soft drugs. The maximum penalty now is six years of imprisonment (or a proportionate fine). This amendment had to be made as a consequence of the 2004-EU Framework Decision on Drugs (*Kaderbesluit Drugs*). 'Large amounts' are defined as 500 grams of cannabis, 200 plants of cannabis or 500 units of any other drug listed as a soft drug (Stb 2006/416). This amendment is relevant for the interpretation of data on sanctions for soft drug offences.

# Main findings 2007:

- The general picture for 2007 is one of flattening trends and even decreases in the number of Opium Act cases.
- The influx of Opium Act cases in the criminal justice chain (arrests by police and military police) is in 2007 slightly lower than in 2006: the number of cases registered in 2007 is about 21,250 (preliminary data), whereas in 2006 there were about 22,000 cases (minus 4%).
- Opium Act cases form 7% of the total number of cases that the police dealt with in 2007, which is not different from 2006.
- The Public Prosecutor handled more than 19,200 Opium Act cases in 2007, also less than in 2006 (minus 5%). Opium Act cases form 7% of the total number of cases.
- Despite the small decreases in 2007, the total number of cases handled by police and Public Prosecutor is higher in recent years than it was before 2004.
- The number of Opium Act cases handled by the Court decreased considerably: from 13,000 cases in 2006 to almost 12,000 cases in 2007.
- We also see a decrease in the number of unconditional custodial sentences for Opium Act cases. This decrease in custodial sentences has been going on since 2004. The mean duration of the custodial sentences, however, increased in 2007, after decreasing trends in the years before.
- There is also a decrease of community service sentences for Opium Act offences. These orders were continuously increasing between 2000 and 2006, a trend that stopped in 2007.

- With regards to the fraction of soft drugs, we saw a rising trend over the period 2000-2006 in all parts of the criminal justice chain, but in 2007 this trend discontinued.
- Hard drug cases still form the majority of the Opium Act cases. The difference with the number of soft drug cases, however, is very small in the first parts of the criminal justice chain. Hard drug cases get a clear majority in the final parts, especially in prisons.
- Opium Act cases, especially hard drug cases, still have a relatively high chance of passing through the whole criminal justice chain, which means that a hard drug offence is likely to end up in an imprisonment.
- A considerable proportion (72%) of the investigations into more serious forms of organised crime involve trafficking or production of drugs.

# Opium Act cases in police registrations

- The police registered over 20,000 Opium Act cases in 2007. In general, the figures show a slight decrease compared to 2006.
- The number of soft drug cases, which showed an increasing trend during the last six years, flattened out in 2007: there were about 8,000 cases in 2006 and 7,800 in 2007 (37% of the Opium Act cases 2007).
- The number of hard drug cases leveled off since 2005: there were about 11,000 hard drug cases in 2006 and 10,700 cases in 2007 (50% of the Opium Act cases 2007).
- The number of cases with a combination of soft and hard drugs also levels off in 2007: there were about 2,700 cases in 2006 and 2007 (13% of the total 2007).
- The overall Opium Act suspect profile did not change much.
  - The majority almost nine out of each ten of the over 20,000 Opium Act suspects are male.
  - 42% is a first offender, 58% is a repeat offender. 16% has a criminal record of more than 10 previous offences. Hard drug suspects have a more lengthy criminal record than soft drug offenders.
  - Mean age of Opium Act suspects in 2007 is around 32 years (33 in 2006). Soft drug suspects and suspects involved in offences with combinations of soft and hard drugs are older than hard drug suspects (around 34 years versus 31 years).

# Opium Act cases at Public Prosecutor (table 8.1)

- The Public Prosecutor handled over 19,200 Opium Act cases in 2007, which is a 5% decrease compard to 2006.
- There is a decreasing trend since 2005, 2004 was a 'peak year'.
- The decrease in 2007 holds true for hard drug and soft drug cases and combined cases.
- The proportions in 2007 are 49% (hard drugs), 47% (soft drugs) and 3% (combined cases), which means that there is almost no difference in proportions of hard and soft drug cases.
- Most cases concern production, trafficking or dealing of drugs. Remarkable is that soft drugs form the majority in these categories of offences (54%). The intensified law enforcement on cannabis cultivation might be due to this. About one third of all cases concerns possession of drugs, and this possession concerns hard drugs mostly. As mentioned above, cases of possession will only be recorded if someone possesses more of a drug than the small amount that is considered 'for own use'.

	2001	2002	2003	2004	2005	2006	2007
Hard drugs	7,894	9,502	10,305	11,969	9,904	9,880	9,386
Hard and soft drugs	459	455	612	695	716	819	666
Soft drugs	5,521	6,613	7,283	9,247	9,480	9,519	9,144
Other/unknown	70	47	31	32	60	35	73
Total	13,944	16,617	18,231	21,943	20,160	20,253	19,269
Hard drugs	57%	57%	57%	55%	49%	49%	49%
Hard and soft drugs	3%	3%	3%	3%	4%	4%	3%
Soft drugs	40%	40%	40%	42%	47%	47%	47%
Other/unknown	1%	0%	0%	0%	0%	0%	0%
Total <sup>™</sup>	100%	100%	100%	100%	100%	100%	100%

Table 8.1:Opium Act cases recorded by Public Prosecutor by drug type, 2001-2007<sup>I,II</sup>

Source: OMDATA, WODC. I More than one case may be recorded per suspect and cases may have been 'filtered' at the level of the police (only cases with a reasonable chance of being prosecuted will be sent to the public prosecutor). II Figures are cleaned and adapted every year. The table contains adapted figures, which might be slightly different from figures reported before. III Due to rounding off percentages do not always add up to 100%.

# Organized crime (table 8.2)

Figures on investigations on organised crime come from the Information services of the National Police. They make an annual inventory for Europol, in the framework of European Organised Crime Threat Assessment ('OCTA').

- In 2007, 328 investigations into more serious forms of organised crime were surveyed. 72% of these involve trafficking or production of drugs, 3% less than in 2006. The majority concerns cases with hard drugs (83%); 67% concern cases with soft drugs, and 47% cases with both hard and soft drugs.
- 34% of the hard drug related cases concern only one category of hard drug. All others concern more than one category of hard drug.
- 29% of the soft drug related cases concern one type of drug.
- The proportion of cases with more than one category of hard or soft drugs increased compared to 2006.
- Cocaine is the prevailing drug of the investigations into hard drugs (149 investigations, 77%). There is an increase compared to 2006, when cocaine was involved in 68% of the cases. 40% concerns synthetic drugs (77 investigations; was 43% in 2006) and 20% heroin (39 investigations, less than in 2006, when it was 29%).
- The investigations into soft drugs concern mostly trafficking or growing of Dutch grown weed ('nederwiet', 75%; 118 investigations) or else the trafficking of hashish (25%;40 investigations) (not in table).

# Table 8.2:Investigations into more serious forms of organized crime, percentage of drug<br/>cases, and type of drug involved, 2001-2007<sup>I</sup>

	2001	2002	(II)	2003	2004	(III)	2005	(IV)	2006	2007		
Total number of in- vestigations:	100%	100%		100%	100%		100%		100%	100%		
Ν	146	185		221	289		176		333	328		
- Targeting drugs	62%	63%		66%	69%		72%		75%	72%		
Investigations targeting drugs by hard- and soft drugs:												
Ν	90	117		146	200		127		250	235		
- cases with hard drugs	83%	83%		83%	84%	····	85%		79%	83%		
<ul> <li>cases with soft drugs</li> </ul>	41%	45%		39%	27%		41%		60%	67%		
<ul> <li>only one category of hard drugs</li> </ul>	59%	55%		61%	69%		59%		40%	36%		
<ul> <li>only one category of soft drugs</li> </ul>	17%	17%		17%	11%	····	15%		21%	20%		
- hard- and soft drugs	24%	28%		22%	16%		26%		39%	47%		
Investigations targeting	hard drug	gs by type	e of dr	ug:								
Ν	75	97		121	168		108		198	194		
- Cocaine				60%	57%		54%		68%	77%		
- Heroin				17%	18%		29%		29%	20%		
- Synthetic drugs				54%	39%		44%		43%	40%		

I. Investigations may involve trafficking or production of several drug types, therefore the numbers in the table categories cannot be added up. II. Since 2002 a new format is used; data from 2002 are not fully comparable to later data. III. Data from 2005 concern only the period January-November. IV. In 2006 a larger scope of selection was implemented; as a consequence the number of investigations is substantially higher than in the years before; in particular the number of soft drug trafficking investigations is concerned; therefore the 2006 data can not be compared to the data of the years before. Source KLPD-DNRI, 2007.

Decisions made by Public Prosecutor in Opium Act cases (table 8.3)

- The total number of decisions in 2007 is 18,723, which is less than in 2006.
- The Prosecutor brings most of the cases to court in 2007: 66%. This fraction does not differ from 2006.
- 21% of the cases ends with a transaction imposed by the Public Prosecutor. This does not differ much from 2006, but the fraction increased over the years.

- 5% of the cases is dismissed for policy reasons, which is less than in 2006 and also substantially lower than in 2004-2005. In those years, many cases were dismissed as a policy in cases of hard drug trafficking at Schiphol Airport by drug couriers. Non-prosecution was a policy decision and part of the temporary drug oriented approach of drug couriers at Schiphol. In 2007, all of these type of cases are prosecuted again.
- 5% of the cases is dismissed for technical reasons. This percentage is the same as in 2006.
- The other cases ended with joinder of charges (2%), were dismissed for administrative reasons (1%) or transferred to another court (1%).
- The percentage of hard drug cases submitted to court increases (68%). The percentage of soft drugs cases remains constant the last two years (63%; not in table).
- Opium Act cases make up 7% of the total number of cases dealt with by the Public Prosecutor in 2007. There is no difference with the years before.

	2001	2002	2003	2004	2005	2006	2007
Total Opium Act cases	13,110	16,053	17,978	20,983	19,867	20,590	18,723
Submitted to court	71%	70%	72%	61%	65%	66%	66%
Transaction	15%	19%	18%	20%	19%	21%	21%
Case dismissal for policy reasons	4%	3%	3%	10%	8%	6%	5%
Case dismissal for technical reasons	7%	5%	5%	7%	6%	5%	5%

## Table 8.3: Decisions by the Public Prosecution in Opium Act cases (2001-2007)

Source: OMDATA , WODC.

## Court sentences and sanctions for Opium Act offences (table 8.4)

The Court cases for Opium Act offences usually result in a conviction with a community service order, an unconditional prison sentence or a fine. These sanctions, together with the financial transactions by the Public Prosecutor (which are also considered a sanction) are shown in table 8.4.

- From 2006 to 2007, the total number of Opium Act cases handled by the court decreases from more than 13,000 to 12,000 (not in table).
- All kinds of sanctions show a decrease, in line with the overall decrease.
- The mean number of days of community service sentences is 106 days in 2007, about a week less than in 2006 and also less than in the years before 2006 (not in table).
- Mean number of days of unconditional prison sentences is 321 in 2007, which is a bit longer than in 2006 (309 days), but less than in the years before 2006 (not in table).
- The median amount of money of fines fluctuated in 2001-2006 between 450 and 500 euros, in 2007 it is 400 euros (not in table).
- Financial transactions of the Public Prosecutor increase between 2001 and 2005 and decrease after this year. The median amount of money in financial transactions of the Public Prosecutor fluctuates between 113 and 270 euros; 2007 is no exception (250 euros; not in table).
- Opium Act cases form 8% of the total number of cases handled by the courts in 2007. This fraction did not change very much since 2002 (between 8% and 9%; not in table).

• The number of hard drug cases handled by the court has been decreasing since 2004. In 2007 there also was a decrease. Soft drug cases increased continuously till 2006. In 2007, a decrease is found.

Table 8.4:	Sanctions in Opium Act cases imposed by the courts and financial transactions of
	the Public Prosecutor (2001-2007) <sup>/</sup>

	2001	2002	2003	2004	2005	2006	2007
Community service order	864	1,136	1,727	2,284	2,865	3,202	2,227
Unconditional prison sentence	3,155	4,375	4,844	3,850	3,304	3,331	2,821
Financial transaction	260	390	438	492	540	460	375
Fine	494	652	678	807	739	710	512

I. There can be combinations of sentences. Numbers in table are most recent numbers which can differ from ones reported before. II. This order can consist of work, treatment, education or a combination of these. Source: OMDATA, WODC.

#### Custodial sentences for Opium Act offences (table 8.5)

- The percentage of Opium Act cases of all (partly) unconditional prison sentences is more or less stable since 2002 (16-17%). In absolute numbers, there are less prison sentences in 2007, also for Opium Act offences. These offences follow the general trend.
- The percentage of detention years for Opium Act cases fluctuates between 27 and 33%. In 2007, it is 30%, more than in 2006.
- · Hard drug offenders get more and longer prison sentences than soft drug offenders.
- In recent years the percentage of unconditional prison sentences for hard drug offences fluctuates between 13% and 14%. The fraction of soft drug offences is much lower.
- The fraction of detention years for hard drugs is 26% in 2007. That for soft drugs is 2%.

	2001	2002	2003	2004	2005	2006	2007
Number of prison sentences	28,565	32,089	36,219	32,987	29,519	25,786	22,368
Opium Act total	13%	16%	16%	16%	16%	17%	17%
- hard drugs	12%	14%	14%	13%	13%	13%	14%
- soft drugs	1%	1%	1%	2%	2%	3%	2%
- hard and soft drugs	1%	1%	1%	1%	1%	1%	1%
Number of prison sentences	0%		0%			0%	
All other criminal cases	87%	84%	84%	84%	84%	83%	83%
Detention years	10,025	12,060	13,178	12,985	11,284	9,241	7,577
Opium Act total	29%	33%	32%	29%	27%	27%	30%
- hard drugs	25%	30%	29%	26%	22%	22%	26%
- soft drugs	2%	1%	2%	2%	3%	3%	2%
- hard and soft drugs	2%	2%	1%	2%	2%	2%	2%
Detention years	0%		0%			0%	
All other criminal cases	71%	67%	68%	71%	73%	73%	70%

 Table 8.5:
 Prison sentences and detention years for Opium Act offences; 2001-2007

I. Excluding youth detention. II. Detention years are calculated by adding all unsuspended parts of sentences and deducting early releases. III. Other criminal cases' contain the sentences/detention years for all crimes except Opium Act crimes. Source: OBJD, WODC.

#### Drug offences committed abroad by Dutch citizens (table 8.6)

A high proportion of Dutch detainees in foreign prisons (83% on 1-1-2007), committed drug offences, mainly the smuggling of drugs (Miedema et al. 2008).

- 80% of all Dutch detainees in foreign prisons in 2007 (1<sup>st</sup> of January) were sentenced because of a drug offence. This is a relatively high proportion compared to Belgian (50%), French (60%), British (73%) and German (75%) drug-related foreign imprisonments.
- Most of the drug offenders (trafficking and smuggling) are imprisoned in Germany, Spain and France.
- 43% is detained because of cocaine trafficking or smuggling, 11% is related to cannabis, 6% to ecstasy, 3% to heroin and 1% to amphetamines. In 19%, the kind of drug is not registered.
- 70% of all detainees was sentenced before in the Netherlands, 20% of them was sentenced for a drug offence before.
- Most Dutch prisoners abroad are male, mean age is 41 years. More than half was not born in the Netherlands and 30% has another nationality besides the Dutch. 64% of these drug offenders has children.
- The most important reason for the drug offence is, not surprisingly, to earn money in a quick way, partly to pay off debts. Only 4% had or has an addiction.
- In general, the imprisoned drug offenders estimate the risks of being caught with the drugs as being (very) low and they are not informed about the sanctions for drug offences in the country of destination.

Country	Number of Dutch detain- ees	Detained because of a drug offence		
Germany	417	317 (76%)		
Spain	245	136 (56%)		
France	228	194 (85%)		
UK	163	147 (90%)		
Dominican Republic	141	135 (96%)		
Portugal	88	82 (93%)		
US	86	56 (65%)		
Belgium	83	45 (54%)		
Peru	77	76 (99%)		
Italy	69	60 (87%)		
Other countries	1,597	1,248 (78%)		
Total	2,365	1,894 (80%)		

## Table 8.6: Dutch detainees in foreign prisons for drug offences per 1-1-2007<sup>l</sup>

I.Top-ten of countries. Source: Prison, Ministry of Foreign Affairs, in: (Miedema et al. 2008)

#### Opium Act crimes in the criminal justice chain

- Opium Act cases have a relatively high chance of passing through the full criminal justice chain.
- The fraction of Opium Act cases of all registered cases at the Police and the Public Prosecutor is 7%. The fraction at Courts is 8%. The fraction of all prison sentences is 17% and of all detention years 30%.
- Between 2001 and 2007 the percentage of Opium Act cases registered by the Police and the Public Prosecution Office fluctuates between 6% and 8%, at courts it fluctuates between 7% and 9% and in prison between 13% and 17%. Most fluctuation is seen in the number of detention years applied for Opium Act offences: between 27% and 33% percent. 2007 is not exceptional.
- In 2007, there are almost as much hard- and soft drugs cases in the earlier links of the criminal justice chain. Hard drug cases gain the upper hand in the later links of the chain.
- In general, the proportion of soft drug cases has increased in the years between 2001-2007 in all links of the chain. The only exception are seen in the proportions of prison sentences and detention years in 2007: here the proportions for soft drugs have decreased.

## (b) Offences by drug users

The Police Records System includes a classification 'drug user'. It is important to note that in the Netherlands drug use as such is not illegal. The designation 'drug user' is accorded by the Police to a suspect only if he/she may constitute a danger to others due to his or her drug use, if he/she indicates being a drug user or if he/she asks for methadone. The classification is made by the police, but because drug use is not assessed systematically, its validity is disputable. A considerable proportion of the drug using offenders seems to be missing in the classification.

- In 2007 the police arrested more than 8,000 suspects classified as a 'drug user' once or more (preliminary figures). This is less than in 2006, when there were almost 8,900 drug using suspects.
- Police statistics show the following profile for registered drug using suspects (not in table):
  - 90-91% is male. The male/female distribution remained stable between 2001 and 2007.
  - The group of registered drug users is an ageing population. The mean age increases from 35 years in 2001 to 39 years in 2007. In 2007 94% is over 24 years old.
  - The percentage living in the largest cities (250 000 or more inhabitants) decreases from 45% to 38%. 12% is living abroad in 2007, which is the same as in 2006.
  - Many of them are repeat offenders: 78% was arrested more than ten times before and 22% more than 50 times.
- Most of them committed property crimes without violence (table 8.7). This fraction decreased in the period 2001-2007. The percentage of drug users suspected of property crimes with violence also shows a slowly decreasing trend over the years. The percentage of drug users suspected from other violence (against persons), however, increases. And so does the percentage of drug users suspected of vandalism and traffic offences.

	2001	2002	2003	2004	2005	2006	2007
Property crimes without violence	63%	63%	58%	56%	53%	50%	49%
Property crimes with violence	11%	12%	11%	10%	8%	8%	8%
Other violence (against persons)	20%	22%	23%	24%	25%	26%	29%
Opium Act offence	18%	19%	22%	22%	24%	25%	21%
Vandalism, disturbance of public order	21%	23%	23%	23%	22%	23%	24%
Traffic offence	10%	10%	10%	11%	11%	11%	12%
Sexual offence	1%	1%	1%	1%	1%	1%	1%
Other	10%	10%	11%	11%	11%	11%	11%

Table 8.7: Type of crime of suspects classified by the Police as drug users, 2001-2007

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

- Property crimes without violence are often committed by problematic opiate users (defined as: opiates as main drug used in the year before detention) (Oliemeulen et al. 2007).
- Qualified property crimes are relatively often committed by problematic cocaine users or problematic gamblers.
- Offences against the Opium Act are often committed by problematic cocaine users.

## Regional study on prolific offenders

"Twente" is a region within the province of Overijssel. Its largest municipalities are Enschede, Almelo, and Hengelo. In this region, Bureau Intraval monitors the vicissitudes of the present prolific offenders. These offenders are defined as those offenders, ageing 18 years and above, who have been served with more than ten summons during their whole criminal career. At least one summon must have been served during the year of observation (Kruize et al. 2008). Applying this definition, the police have listed a total of 863 prolific offenders in 2006. It was found that 27% of these prolific offenders were registered at the local institute for addiction care for a primary problem with either alcohol, heroin, cocaine, or methadone. From these offenders known by the addiction care, 54% had a primary problem with heroin and 22% with cocaine.

#### Drugs and violent crimes

- The Dutch Government wants to reduce violence related to substance use (T.K.28684/65). Therefore, three pilots were carried out, in which information would be gathered about substance use in cases of violent crimes. Goal of this information was to support the police in choosing the right judicial and preventive measures for violent offenders. For this aim, the police experimented with testing alcohol and drug use by suspects who committed a violent crime. The police investigated possible use verbally during the interrogation and used its own observations; in addition a breath test for alcohol (Alcosensor IV) and a sweat or saliva test for drugs (Drugwipe®5) was administered on those who were caught 'in flagrante delicto'. This test was given on a voluntary basis. The pilots will be evaluated in research.
- At the moment, we still do not know much about substance use in relation to violent crimes.

## 8.3 Drug use in prison

<u>NNIA.</u> In the National Report 2007, results of a prevalence study in 2006/2007 on problematic drug and alcohol use and gambling amongst prison inmates was described (Oliemeulen et al. 2007). The main findings were that 60% of the inmates reported problematic use of alcohol or drugs and/or problematic gambling. More specifically, 30% were problematic user of alcohol, 33% were problematic users of cannabis; 24% had a problem with the use of hard drugs: co-caine (19%) or opiates (12%). Problematic use of sedatives (without prescription) was found in 15% of the detainees and 6% were problematic gamblers.

#### 8.4 Social costs

NNIA. For more information on this topic: see § 1.4.

# 9 Responses to Social Correlates and Consequences

#### 9.1 Social reintegration

#### National plan

In the Netherlands, the social reintegration of addicts in general targets issues like housing, income, and daily activities. Especially the social reintegration of homeless addicts, is now embedded within the "Plan van aanpak maatschappelijke opvang", which can be translated as the Plan of approach for social relief. Reporting the progress of the Plan to the Lower House, the State Secretary concluded that, in 2007 in the four largest cities, it had succeeded in pushing back homelessness with 25% (Ministerie van Volksgezondheid 2008a). In these cities, every client in need of social relief had received a personal plan to set reintegration targets for housing, treatment, income, and daily activities.

For stabilised addicts, hostels and other types of protected livings (*beschermde woonvormen*) were established in the past years in many cities. Despite apparent resistance among the neighbourhood dwellers, the number of these facilities for drug users increased from 176 in 2006 to 413 in 2008. Besides, new requests are to be approved in due course (T.K.24077/224).

#### Recent local initiatives

Implementing the Plan of approach for social relief in the city of Amsterdam, the Municipal Health Service Amsterdam (GGD Amsterdam) in 2007 targeted about 3,000 clients for the public mental health care. In the Netherlands, public mental health care is the form of mental health care that especially targets people in a socially excluded position. It is estimated that about 80% of the clients in Amsterdam was addicted to drugs (Van Wifferen et al. 2007). JellinekMentrum, the institute for addiction care and mental health care in the region of Amsterdam, has started the project *Discus*. The project is implemented in co-operation with HVO-Querido, an institute for housing guidance (Van der Kam 2008). Following the "New York approach" to give a house first, 36 addicts with a psychiatric background are guided at the moment. The target is to have housed seventy clients by the end of 2008, and a hundred clients by 2009 (HVO-Querido 2008).

The city of Rotterdam has set the target to have reached 2,900 homeless people by means of an individual treatment plan by the year 2009. At the end of 2007, the thousandth homeless person received his treatment plan including an on-the-job training (GGD Rotterdam-Rijnmond 2007).

Experience shows that "it is hard to create continuity of care in the public mental health care system" (Van der Plas et al. 2008). Therefore, the city of The Hague is now experimenting with *Critical Time Intervention (CTI)*, an evidence-based "case management method that can improve the link between the care system and the patient in six to twelve months". CTI especially supports public health care clients to make the transitions within the care system, for example from inpatient care to outpatient care.

The city of Utrecht extended its investments in "Bureau Dagloon", which is a daily wage project. In this project, homeless addicts can earn a daily wage, cash on the nail, by cleaning public spaces or doing production work like welding fencing (<u>www.bureaudagloon.nl</u>). The number of addicts participating in this project increased from about 235 in 2004 to 280 in 2006 (Ros 2007). "Mode met een Missie", which can be translated as "Fashion with a Mission" targets the female population among the homeless (<u>www.modemeteenmissie.nl</u>). Fashion with a Mission runs four studios in the cities of Arnhem, Nijmegen, Apeldoorn, and Tilburg. In these fashion studios, homeless women participate in the production of high quality fashion clothes. It is estimated that about 10% of the women who participate in the fashion studios are coping with an addiction problem (Compiet, 26-03-2008, personal communication). The fact that addicted women work together with women who are not addicted, can be viewed as a form of social reintegration in itself.

To finance their addiction, some female addicts prostitute themselves. To target prostitutes who want to start a new life outside the prostitution scene, and following the examples of Amsterdam and Rotterdam, the city of Utrecht has developed a step out program (Van Amelsfort 2008). First, the program invests much effort in outreaching field workers who persist in making contact with and gaining the trust of the prostitutes who consider stepping out. Next, the program offers integrated treatment, ranging from settlements of debts to addiction care. Compared to Rotter-dam, Utrecht has adopted a less repressive approach in which a minimal amount of repression is combined with prevention, treatment and social relief (Timmerarends, 12-03-2008, personal communication). Following the example of Amsterdam, the city of Utrecht is also setting up a "Skaeve huse project" (Sakkers 2008). Projects like these originated in Denmark, "skaeve huse" being Danish for "queer house". These queer houses are a kind of garden houses that will offer supervised living for homeless people who are not able to live in conventional accommodation. In a regular neighbourhood the lifestyle of this target group would be experienced as causing nuisance.

Located in the city of Dordrecht but operating at a national level, The Hoop Foundation (De Hoop) is a centre for Christian addiction care and psychosocial care. In April 2008, the Hoop Foundation started a network of companies to promote the social reintegration of addiction clients who finished a treatment program. The companies that participate in the network create vacancies for these former clients and thus support them to start a new life (De Hoop 2008).

In the province of Gelderland, located in the middle east of the Netherlands, former institutes for social relief and the institute for addiction care merged in 2007 into the new institute called "IrisZorg" (IrisZorg 2008). As a result of this alliance, the addiction care can now refer its clients smoothly to a broad range of housing and work services within one and the same institute.

In a Northern region, a long-stay home for addicts and psychotic patients has been started to offer these people an opportunity, far from the daily hassles of street life in a big city, to "start a new life".

#### Evaluation research

The Verwey-Jonker institute has evaluated the prerequisites for a work project to become a success. It was found that a successful work project for homeless addicts "supports these people in restoring their self-respect and discovering their qualities", and provides "an identity" (Davelaar et al. 2006). Conditions for success appeared to be factors like "a real work setting", "long-term
contact between participant and supervisor", "a reasonable reward", "results and impacts on all levels", that is the "individual level", the "group level", and the "level of people in the surround-ings".

In some institutes for addiction care, work projects are offered within the framework of aftercare. By interviewing clients as well as managers, the Addiction Research Institute Rotterdam (IVO) in 2008 evaluated the aftercare in 11 institutes (Oliemeulen et al. 2008b). It was found that one institute in particular was successful in offering aftercare. The key to the success was that the aftercare was already arranged before the clinical care was finished. In general, clients as well as managers agreed that a certain level of quasi-compulsion can be helpful to enrol clients in aftercare. Among the homeless addicts in Rotterdam, the percentage receiving income from a daily wage project doubled between 2003 and 2007 to 53% (Barendregt et al. 2008).

In Amsterdam it was found that offering integrated care within the context of supervised living reduced criminal and nuisance incidents among the public mental health clients with 66%.(Van Wifferen et al. 2007) In 1996, the city of Rotterdam started the project *(z)Onderdak,* meaning *Roof(less)*. By 2006, this project succeeded in accommodating about 350 homeless people by means of supervised living. The ultimate goal is to house 500 homeless people this way. The participants have to sign a support agreement stating that they are willing to receive support and that they will be suspended when they offend the house rules (Barendrecht et al. 2008). The housing supervisors have made a conjecture that about half of the clients has a primary drug problem, whereas 58% of the clients themselves reported to use drugs. Among the drug users who were accommodated in the supervised living, lower last-month prevalence rates were found for the use of hard drugs compared to the drug users recruited on the streets in 2003. For co-caine the last-month prevalence was 62% compared to 96%, and for heroin the last-month prevalence was 64% compared to 80% among the users on the streets. Moreover, among the supervised hard drug users only 17% showed a first or second preference to use the hard drugs in public places, compared to 46% among the hard drug users that were not supervised.

"Verslavingszorg Noord Nederland (VNN)" is the institute for addiction care that is located in the three northern provinces of Groningen, Friesland, and Drenthe. VNN runs a program for employment-finding that consists in four stages: 1) investigating the ambitions and the abilities of the client, 2) orienting on the professional ambitions, 3) supporting finding work placement, and 4) coaching for rehabilitation and professional skills (Harms et al. 2008). In April 2008, VNN evaluated the program. It was found that, during the past years, the program succeeded in finding work placement for 95% of the clients who entered the program. Moreover, 35% of the placed clients managed to find a regular job (Verslavingszorg Noord Nederland 2008). A total of 118 clients had entered the program (Baks 28-05-2008, personal communication).

#### 9.2 Prevention and reduction of drug-related crime

#### Prevention and reduction of crimes committed by drug users

A considerable fraction of crime and recidivism in the Netherlands is attributable to drug (or alcohol) users (T.K.23760/14). A substantial reduction of this type of crime can only be realised by offering them help for their problems and their addiction, is the Dutch viewpoint. This viewpoint was confirmed in a policy document in July 2007 (T.K.23760/14) and again in August 2008 (T.K.23760/14).

The approach should be fine tuned to the individual criminogenic factors, and should consist of effective diagnosis, behavioural interventions, care and treatment in a judicial framework (T.K.23760/14). Quasi-compulsory treatment is strongly advocated and stimulated. Supervision of probation services on compliance will be intensified. A gradual return into society and a well-organised connection between detention and after care should lead to a continuous approach. Co-operation between municipalities, schools, care agencies, housing corporations and justice agencies is demanded.

Since 2004, the measure of Placement in an Institution for Prolific Offenders ISD) is in force (T.K.23760/14). This is a judicial measure for prolific offenders of over 18 years old. An estimated 95% of ISD-detainees is a hard drug user (T.K.23760/14). ISD can be applied for a maximum of two years. The aim of the measure is to safeguard society from the frequent offences committed by prolific offenders. Also, behavioural interventions are offered to the offenders, in order to reduce their recidivism. These can be given inside the penitentiary institutions or outside in regular care facilities. They should be motivated to participate in these interventions are available, will stay in a basic detention regime. ISD is executed in eight penitentiary institutions which are especially equipped for ISD-detainees.

In July 2008, the new law for conditional release from prison came into force (T.K.23760/14). Under this law special conditions for release (like referral to care) can be imposed by the Public Prosecutor, and which's compliance can be supervised by probation agencies (T.K.23760/14).

The following services and judicial measures are applicable for drug users (and other offenders) in the criminal justice system in 2007/2008:

- · basic medical and mental health care
- addiction probation services
- (reintegration) programmes and facilities in prisons
- · participation in (addiction) care programmes as an alternative to imprisonment
- the Measure of Placement in an Institution for Prolific Offenders (ISD)
- aftercare.

#### Addiction Probation Services

Addiction Probation Services saw 17,103 clients in 2007 (10,360 unique persons). This number is higher than in the years before (see table 9.1). The general picture 2007-2008 did not change much.

- The mean age of clients is 37,6 years.
- 92% is male and 47% is single.

- Most of them were born in the Netherlands (75%). 6% was born in Surinam, 5% in Morocco and 4% on the Netherlands Antilles. The majority has the Dutch nationality.
- The addiction problems have lasted more than five years for 62% of them. Most of them have primary problems with alcohol (47%).
- 64% has problems with one substance, the others have problems with more than one substance.
- Amongst drug users cocaine problems are more prevalent than heroin or cannabis problems (23% 1% crack against 11% and 9%). The fraction of clients with primary opiate problems is decreasing. Since 2002, there is an increasing trend in alcohol clients (from 38% to 47%) and a decreasing trend in opiate clients (from 25% to 14%). Cocaine/crack clients show a slight decrease (from 26% to 23%) and cannabis clients a slight increase (from 6% to 9%). Crack forms only a very small proportion of the cocaine clients over the years.

Clients:	2002	2003	2004	2005	2006	2007
Total number	12,399	14,579	14,875	15,574	16,385	17,103
Mean age <sup>ll</sup>	35	35,3	35,6	36,1	36,5	37,6
Male	92%	92%	92%	92%	91%	91,9
Primary problem is alcohol	38%	40%	43%	46%	47%	47%
Primary problem is opiates	25%	21%	18%	16%	15%	14%
Primary problem is cocaine/crack	26%	27%	25%	24%	24%	23%
Primary problem is cannabis	6%	6%	7%	8%	8%	9%

#### Table 9.1: Clients of addiction probation services 2002-2007

Source: Information Services for Addiction Care/SIVZ, 2008.

The activities of Addiction Probation Services 2002-2006 are shown in table 9.2. Most remarkable findings are:

The general picture in 2007 resembles that of 2006.

- The biggest changes can be seen in supervisory activities (now more than in 2006) and in interventions (now less than in 2006). There are more referrals to care programmes than in the years before.
- Supervisory and diagnostic activities are carried out most frequently: both more than 9,700 times in 2007.
- The function of supervision is subject of redesign (T.K.23760/14). Supervision means controlling the (ex)offender, but it also should be aimed at motivating and stimulating the (ex)offender and at support of behavioural changes (T.K.23760/14).
- Diagnoses are carried out partly by using the former procedures and partly by using the standard instrument RISc (Risk Assessment Scales/Risico Inschattings Schalen). RISc's were applied much more often: 3,664 times in 2006 and 5,445 in 2007.

Type of assistance	2002	2003	2004	2005	2006	2007
First visit to arrestee/prisoner in remand	3,629	4,305	4,110	3,962	4,400	4,123
Report to judge with advice regarding continuation of re- mand custody	995	922	889	1,152	1,494	1,408
Referral to care programmes	1,568	2,115	2,254	2,081	3,226	3,684
Supervision of clients in the framework of a judicial decision	2,407	3,726	4,919	5,454	7,880	9,728
Interventions/Reintegration programmes	1,696	2,566	2,929	2,806	2,624	1,948
Supervision of working sen- tences	3,382	4,098	4,650	4,904	5,293	5,267
Supervision of learning sen- tences	139	217	241	286	360	294
(Advisory) reports	7,587	8,746	8,369	8,454	8,931	8,658
Diagnoses <sup>II</sup>		10,615	10,605	11,504	9,935	9,719
Total number of activities	31,451	43,900	39,994	40,603	44,143	44,829

Table 9.2:Types of assistance offered by addiction probation services and number of times<br/>the service was provided, 2002-2007<sup>I</sup>

I. No figures on case level, no specification for type of drug/alcohol/gambling II. RISc's included (5,445). Source: Foundation of Addiction Probation Services, 2008 (www.svg.nl).

#### Treatment as an alternative to imprisonment

In 2007, referral to care programmes from the criminal justice system took place more than 3,600 times. Most referrals concern non-clinical addiction care (1,480 times in 2007, more than in 2006). Clinical addiction care was chosen 809 times in 2007, less than in 2006. Non-clinical psychiatric care was chosen 448 times and social care 329 care. Most important changes compared to 2006 are the increase of referrals to non-clinical psychiatric care in regular psychiatric hospitals (www.svg.nl).

Referral is a priority in the approach of offenders with alcohol- or drug problems (T.K.23760/14).

#### Measure of Placement in an Institution for Prolific Offenders (ISD)

This measure is in force since October 2004. It replaced the (experimental) Judicial Placement of Addicts (SOV).

• The number of participants in ISD/SOV in 2007 was between 629 and 679 per month, mean: 662 persons per month. In 2008 (January-June) the number is lower: between 607 and 636, mean: 624 persons per month.

- The number constitutes about 5% of the total number of occupied places in penitentiary facilities in the Netherlands. This percentage stayed more or less constant (range 4,9% to 5,1%). Less places were occupied in the course of 2007 and 2008.
- Most persons under ISD/SOV stay in detention. A part of them stays outside prison in the outpatient phases of the measure. This part ranges from 13,4% to 21,5% in 2007 (figure 9.2).
- Most of the persons in detention have some kind of behavioural intervention trajectory (trajectory regime). About one third of the persons in detention stay in regular basic detention regime (figure 9.2).
- Most persons under ISD/SOV are between 35 and 40 years old. In general, they are older than the rest of the prison population.

*Figure 9.1:* Number of participants per month in Institutions for Prolific Offenders (ISD) and Judicial Placement of Addicts (SOV), January 2007-June 2008



Source: Service for Judicial Facilities/Dienst Justitiële Inrichtingen, 2008

*Figure 9.2:* Number of participants ISD/SOV per month in regular, trajectory or extramural regime, January 2007-June 2008



Source: Service for Judicial Facilities/Dienst Justitiële Inrichtingen, 2008

Serious problems in the implementation of the ISD measure have been identified (T.K.23760/14). In 2008, new information on the implementation became available:

- The Inspectorate of Implementation of Sanctions (*Inspectie voor de Sanctietoepassing*) conducted on-site inspections in six ISD-institutions (Inspectie voor de Sanctietoepassing 2008). Their report was critical of the implementation of the ISD and it confirmed earlier findings.
  - Persons convicted to an ISD suffered from more often serious psychiatric diseases, sometimes in combination with intellectual handicaps, than was expected beforehand.
  - The Courts should be informed about ISD-candidates by diagnostic reports. These, however, are not always sufficient, leading to convictions for persons who are not suitable for ISD.
  - Within a month after entry into ISD, there should be a plan for the individual ISD-trajectory. ISD-institutions do not always manage this.
  - The ISD-regimes in the different institutions differ too much.
  - The behavioural interventions are not well implemented. The options for the persons with serious psychichiatric problems and limited intellectual abilities are not adequate.
  - The motivational efforts are not well implemented and the climate does not always support the behavioural interventions.
  - Referral to care and cure outside the penitentiary institution is tough going. Co-operation with municipalities is different, but needs improvements.
  - The assumption that most ISD-detainees would stay in a basic detention regime, did not come true. Most are directed towards behavioural interventions.
  - An important change was signalled with regards to the aims of the ISD-measure. When the measure was introduced in 2004, it had a strong focus on safeguarding society by long-term detention of prolific offenders. Gradually however, and under the influence of decisions of the Courts in ISD-cases, the content of ISD now almost always contains a rehabilitation trajectory.
  - A very important finding was that, whereas the ISD was introduced in 2004 as a measure that should improve safety by incarceration of prolific offenders, the focus changed towards rehabilitation. This was a consequence of decisions of the Courts. In 2008, there is almost always a rehabilitation trajectory connected to the ISD-measure.
- The Inspectorate gave several recommendations to improve the bottlenecks in the implementation of the ISD. In his reaction to this report in June 2008, the Minister of Justice announced several measures to improve the ISD-measure:
  - Improvement of the diagnostic procedures, the programme and the intervention plans.
  - Improvement of the quality of the staff.
  - Improvement of judicial supervision of probation workers.
  - More referrals to facilities outside detention.
  - Better co-operation with municipalities in implementing aftercare.
  - Also, it is intended to implement a 'half-open' phase between detention and return into society (T.K.31110/4)

In the same plan, the Ministry announces its intention to broaden the target group for ISD, including prolific offenders who stay illegally in the Netherlands. They will be incarcerated without the perspective of rehabilitation in the Dutch society.

ISD can only be imposed on requisite of the Prosecutor. In February 2008, the criteria for requisiting the measure were newly described in directions for criminal proceedings (T.K.23760/14).

#### Aftercare

Since 2006 there is a special aftercare procedure in prisons. Detainees are screened by special penitentiary workers (social service workers, *medewerkers maatschappelijke dienstverlening*) and problems in the field of identity cards, housing, income and care are identified. If there exists a problem in these fields, a signal is given to the municipality where the detainee will go to after his release. This municipality can take appropriate measures, to stimulate a smooth return into society. Most municipalities assigned a contact person for the penitentiary institution. Information for the municipalities is provided by a special digital platform, per e-mail, fax or regular mail. Municipalities are responsible for the aftercare. Research showed that data on the problems of detainees are badly documented in the registration systems and files (T.K.23760/14). The procedure is new and not crystallized out yet and the social service workers are not well embedded in the organization of the penitentiary institutions. The Inspectorate of Implementation of Sanctions (*Inspectie voor de Sanctietoepassing*) also reports problems in information sharing (Inspectie voor de Sanctietoepassing 2008). In addiction, they report that municipalities often only take action in the case of a repeat offender or an offender with psychiatric problems.

#### New developments

With regards to (Addiction) Probation Services there were important changes in recent years. These have been described before. New in 2008 is that the Ministry of Justice expressed intentions for a small-scale experiment with a more open budget and more autonomy for probation services, which are very tightly bound to production guidelines and output-finance systems (T.K.23760/14). The intention came forth from a motion in Parliament, which got support from a majority of representatives, and was also influenced by Addiction Probation Services themselves, who pleaded for more space to move (T.K.23760/14). Improvements in ISD will be carried out in 2008.

In 2008, a pilot will start in the South of the Netherlands (in Maastricht), which aims at strengthening quasi-coercive referrals to addiction care programmes from detention. Targets for the coming years are:

- in 2008, there should be 3,500 referrals to addiction care, of which 300 trajectories will be bought as extra facilities by the Ministry of Justice;
- in 2009, there must be 4,000 referrals (of which 400 extra places will be bought by the Ministry of Justice);
- in 2010, the number of referrals must be increased to 5,000 (of which 700 extra places);
- in 2011, the number must have risen to 6,000 (1,150 extra). (T.K.23760/14)

In July 2008, the Ministry of Justice has formulated a general perspective on addiction care in the judicial framework (T.K.23760/14). With regards to the care for addicts in detention, it states that the main strategy is to refer addicts to regular care facilities outside detention. This can happen on a voluntary or on a quasi-compulsive basis. Besides this, medical care is given in detention, and methadone is provided in certain cases. Guidelines for provision of methadone are in development; they will be in line with guidelines in medical care outside detention.

Since January 2008, the Ministry of Justice has a budget to buy addiction care in external facilities for addicts who are referred from detention and who get care in a judicial framework (T.K.23760/14).

#### 10 Drug Markets

#### 10.1 Availability and supply

According to the Dutch National School Survey in 2007, the proportion of pupils of 12-18 years who perceive a drug as being easily or very easily available is largest for cannabis (28%), followed by both ecstasy (11%) and cocaine (11%) (Monshouwer et al. 2008). More boys than girls rate these drugs as being easily or very easily available, and this percentage also strongly increases with age.

Most information on sources where cannabis users actually obtain drugs is available for cannabis. In the 22% of all municipalities where coffee shops are present (see later this paragraph), the threshold to obtain cannabis is generally low, especially in the big cities with a relatively high 'coffee shop density" (e.g. number per 10.000 inhabitants). Other sources may be more relevant for those not living in municipalities with coffeeshops (see later this paragraph) or for young people until 18 years, who are not allowed to enter coffeeshops.

Table 10.1 shows data from the Dutch National School Survey 2007 on sources where pupils from secondary education (current cannabis users) report to obtain their cannabis (Monshouwer et al. 2008). Note that the school age ends at 16 years in the Netherlands and data are representative for the youth population of 12-16 years. Pupils of 17-18 years are mainly recruited from the higher level school types, which have a higher number of school years compared to lower level education.

In 2007 ten percent of the pupils that had used cannabis during the last month indicated to buy cannabis always themselves. One in four reported they always asked friends and others to buy their cannabis. The largest category (38%) says to get cannabis always offered by others or to share a joint obtained by others. This group largely falls within the first category in table 10.1 (due to differences in questioning percentages are slightly different, i.e. 35% and 38%). The remainder of the pupils (27%) obtains cannabis either by buying it themselves or getting it from or through others. Table 10.1 lists all sources where pupils buy cannabis (more than one answer per pupil was possible).

Coffee shops are the most common place to buy cannabis reported by 40% of all pupils. Although percentages are highest among pupils of 18 years, a surprising number of pupils between 12 and 17 years reported buying cannabis in a coffee shop, although the age limit for entrance to a coffee shop is 18 years. However, it is possible that some pupils indicated this source, while in fact they meant that others had bought cannabis for them in a coffee shop. This possibility was investigated by asking recent users whether they had bought cannabis in coffeeshops themselves in the past 12 months. This time, the large majority of pupils among last year cannabis users between 12 and 17 years indicated that they had *not* bought cannabis in coffeeshops themselves (e.g. 80% among boys and 86% among girls aged 12-15 years; 75% among boys and 85% among girls aged 16-17 years). In other words, about one in five last year cannabis users from 12-17 years had bought cannabis at least once in a coffeeshop in the past 12 months. This is 3% of *all* pupils in this age group. Buying cannabis in a park/at street or at a dealer's home were mentioned by 18% and 16%, respectively, of the current users. These sources are appreciably more often mentioned by boys than girls (see table 10.1). Moreover, one in ten (10%) current cannabis users buys cannabis at someone else's home and a similar percentage indicates to buy cannabis in or around school. Other sources were mentioned by 3% of the current cannabis users or less.

	12-15 years		16-17 years		18 years		All ages	
	boys	girls	boys	girls	boys	girls	boys	girls
I never buy cannabis	29%	41%	35%	46%	15%	17%	30%	35%
Coffeeshop	39%	22%	45%	42%	82%	67%	46%	31%
At a dealer's home	24%	11%	18%	6%	14%	35%	20%	10%
At someone else's home	12%	11%	9%	12%	3%	0%	10%	11%
In or around school	14%	13%	10%	3%	3%	0%	11%	9%
On the street, park etc.	28%	12%	19%	2%	11%	19%	23%	9%
Cafe	3%	3%	2%	1%	3%	0%	2%	2%
Discotheque	4%	2%	3%	1%	3%	0%	3%	2%
Tea or coffee house	1%	1%	2%	0%	0%	0%	1%	1%
Community or youth centre	4%	2%	1%	0%	3%	0%	3%	1%
Other	1%	1%	1%	1%	0%	0%	1%	1%

Table 10.1: Sources where last-month cannabis users (among pupils of 12-18 years) buy cannabis\*

\* More answers are possible. Data are representative for Duth youth until age 16 (school age). Pupils of higher level education are mainly represented in age group 17-18. Source: Dutch National School Survey 2007 (Monshouwer et al. 2008)

Due to differences in the phrasing of questions, trends in the sources where (young) people obtain cannabis can not be determined from the National School Surveys. However, data from repeated school surveys in Amsterdam show a strong decrease between 1997 and 2007 in the proportion of last month cannabis users among pupils (average age 13 years or 15 years) who buy cannabis in coffeeshops, either by themselves or through others (Nabben et al. 2008). In contrast, the proportion of last month users buying or getting cannabis from others strongly increased.

#### Coffee shops

Cannabis can be obtained in coffee shops that adhere to certain criteria (AHOJ-G; see chapter 1). From 1995 onwards, Dutch policy has focused on controlling the public nuisance problems associated with coffee shops. Table 10.2 shows the trend in the number of coffeeshops between 1997 and 2007.

- As a result of strict enforcement and various administrative and judicial measures, the number of officially tolerated coffee shops has decreased since 1997 (see § 1.1 for other measures and developments to curb nuisance related to coffee shops).
- This trend was most pronounced between 1997 and 1999 (-28%), especially in the smaller towns and in Rotterdam.
- Since 1999, the annual reduction in the number of coffee shops is smaller (between 1% en 4%).
- In 2007, coffee shops were present in 106 municipalities. This is 24% of all municipalities, reflecting about the same level as in previous years. Thus, almost three quarters of the municipalities do not have any coffee shop.
- The majority of all coffee shops (53%) were located in the six largest cities with more than 200,000 inhabitants; some 12% were present in the smaller municipalities with less than 50,000 inhabitants.

Number of in- habitants	1997*	1999	2000	2001	2002	2003	2004	2005	2006	2007
< 20,000	±50	14	13	11	12	12	10	10	10	10
20-50,000	±170	84	81	86	79	73	77	75	71	71
50-100,000	±120	±115	109	112	106	104	101	103	105	105
100-200,000	211	190	168	167	174	168	166	161	148	143
>200,000 (total)	628	443	442	429	411	394	383	380	385	373
- Amsterdam	340	288	283	280	270	258	249	246	238	229
- Rotterdam	180	65	63	61	62	62	62	62	62	62
- The Hague	87	70	62	55	46	41	40	40	40	40
- Utrecht	21	20	18	17	18	18	17	17	17	14
- Eindhoven** - Tilburg**			16	16	15	15	15	15	15 13	15 13
Total	1,179	846	813	805	782	754***	737	729	719	702

Table 10.2: Number of coffee shops in the Netherlands

\* Estimated number of coffee shops. \*\* Eindhoven exceeded the category of 200,000 inhabitants in 2000, and Tilburg in 2006. This partly explains the slight decreases in the number of coffee shops in cities with 100-200,000 inhabitants. \*\*\*In 2003, 3 coffee shops were not allocated to a municipality. Source: {Bieleman, Beelen, et al. 2008 2196 /id}

#### Non-tolerated cannabis markets

As indicated above, not all cannabis users obtain their cannabis in or through officially tolerated coffee shops. According to a study of the University of Amsterdam, there are two main categories of non-tolerated sales points: 1) fixed sales points, such as home dealers and under-the-counter dealers primarily at clubs or pubs, and 2) mobile sales points, including home delivery after cannabis has been ordered by phone (06-dealers), and sales in the street and at spots where people hang around (street dealers) (Korf et al. 2005). It has been estimated that in the municipalities with officially tolerated coffee shops, about 70% of the local cannabis sales goes *directly* through the coffee shops. This is about twice as much compared to municipalities with-

out coffee shops. In addition, coffee shops are indirect suppliers of cannabis, through friends of users but also through non-tolerated sales points.

#### Smart shops

<u>NNIA.</u> Fresh hallucinogenic mushrooms and other non-traditional psychoactive substances can still be bought in so-called smart shops, although the Minister of Health has decided to add hallucinogenic mushrooms (fresh and dried) to Schedule II of the Opium Act as of the first of December 2008. Reliable figures on the number of smart shops are not available. According to the police there are 35 smart shops in Amsterdam and 9 elsewhere in the country. However, according to other sources, estimates vary between 100 and 200 (Coördinatiepunt Assessment en Monitoring nieuwe drugs 2007). Hallucinogenic mushrooms can also be bought on the internet.

#### Supply situation 2006/2007

Cannabis:

- In November 2007, the Dutch Parliament asked the Government to consider a ban for socalled grow shops, because these shops are portals for organized crime (T.K.23760/14). In the same motion, an increase of the maximum penalty for soft drug offences was requested (from six to eight years).
- In June 2008, the Minister of Justice responded to an appeal of the chairman of the Dutch Police Union to legalize soft drugs and to supply hard drugs on a controlled basis, by stating that legalization is not possible in the framework of international treaties, and that supply of hard drugs other than medical co-prescription of heroin is not intended by the Government (T.K.23760/14).

### Cocaine:

- With regard to the import of cocaine by swallowers and body packers at Schiphol Airport, there is now command of the situation. All activities of the programme are now part of the regular activities of the Royal Police Forces at Schiphol Airport. The number of cocaine couriers at Schiphol Airport still seems to be decreasing in 2007 (T.K.23760/14).
- The trafficking routes of cocaine changed. More cocaine is smuggled via Western Africa to Europe. This poses especially a problem for Spain, Portugal and the Netherlands, who became the most important import states for cocaine because the internal European borders ceased to exist. An important target of the policy is to improve international collaboration within the European Union. In September 2007, a treaty was concluded in Lisbon, between the Netherlands, Spain, Italy, Portugal, France and the UK, in which the countries establish a Maritime Analysis and Operations Centre for narcotics (MAOC-N) (T.K.23760/14). Aim of this treaty is the combat of drug trafficking, especially cocaine, over sea and via air over the Atlantic ocean into Europe and West Africa.
- In February 2008, a proposal for amendment of the Law of State was sent to the Parliament, to get formal approval from the Parliament for the treaty of 10<sup>th</sup> of April as agreed in San José, which aims at co-operation in the combat of illegal drug trafficking over sea and by airplanes in the Caribbean area, which is an important transit region for drugs from Latin-America to the US and Europe (T.K.23760/14).

#### Heroin: NNIA

Synthetic drugs:

- Organised crime with regards to synthetic drugs is still a priority area in the fight against organized crime (T.K.23760/14). A three-way approach is applied: (1) administrative and preventive measures, (2) judicial approaches and (3) international co-operation (T.K.23760/14). The first approach is the responsibility of local authorities, mainly mayors. They will be supported. Also, financial-economic approaches are used.
- Once every two years, a Synthetic Drugs Enforcement Conference is organised on the initia-• tive of the Netherlands. All countries which are involved with the production or trafficking of synthetic drugs or precursors are invited to this conference, the last one of which (Syndec III) took place in November 2007. Themes of the workshops were: BMK in Eastern Europe and Russia, transport and borders, projects and programmes as a form of international cooperation, financial investigation, the globalisation of the trade in PMK and the global approach to this trade, and multidisciplinary cooperation.
- In 2007, 15 dismantlements of production locations were reported by the Dutch Centre of Expertise on Synthetic Drugs and Precursors (T.K.23760/14) (table 10.4). This is the lowest number since 2000. Five locations were for amphetamine production, two were for MDMA and two for other synthetic drugs. Six were tablet production places. There were 50 reports of waste dumpings related to synthetic drugs (table 10.3). The figures could be incomplete because not all dismantlements are reported to a central point. The general trend seems to be more or less downward since 2004. Most production locations and waste dumpings are reported from the south and also from the west of the Netherlands.

Table 10.3:	Number of production locations for synthetic drugs that were dismantled 2000-
	2007

	2000	2001	2002	2003	2004	2005	2006	2007
Production locations	37	35	43	37	26	18	23	15
Waste dumpings	101	127	105	97	81	51	42	50
Source: Centre of Expertise on Synthetic Drugs and Precursors, 2008								

Source: Centre of Expertise on Synthetic Drugs and Precursors, 2008

- The number of MDMA-tablets that were confiscated increased to 8.1 million. There were 2 big confiscations of 1,1 and 2,5 million tablets, respectively. In 2005, the number was low, but in 2006 and 2007, there was an increase again. Confiscations of MDMA-powders also increased again, from 219 in 2005 to 664 in 2006 and 1,319 in 2007.
- In 2006 a new form of consumption of MDMA a liquid in a tube was discovered: Original 69. In 2007, new labels were found again, with names like Dance, Love and Sex.
- The number of amphetamine tablets decreased to 1,391, which is less than in 2006 (38,077). This numbers varies each year. Amphetamine powder is traditionally more prevalent. Confiscations reached a record in 2007 (2,875 kilos).
- 50 depots of hardware and precursors were dismantled.
- Like in 2006, there were almost no confiscations of BMK and PMK. The Centre of Expertise has signals, however, that both precursors are well available for production. According to the

Centre of Expertise, there must be new smuggling routes of these precursors, with methods that are still unknown by law enforcement agencies (Expertisecentrum, 2008).

- Other synthetic drugs that were confiscated in 2007 concern 2 C-B (one confiscation), mCCP and methamphetamines.
- According to the Analysis Report Synthetic drugs 2007 the Netherlands will continue to play an essential role in MDMA-production, due to the high quality of MDMA, the good infrastructure and geographical situation, in combination with the mild sanctions.

#### New developments in 2008

#### Cannabis:

- Implementation of intensified enforcement of cannabis production is ongoing (T.K.23760/14).
- As a consequence of the plans to strengthen local administrative approaches, a Task Force was installed in July 2008 by the Ministers of Justice and Interior Affairs, which focuses especially on organized cannabis cultivation. Representatives of the Ministries, the police, the prosecutor, tax authorities and mayors will participate in the Task Force. Their work should result in "a visible reduction of large-scale cannabis cultivation in the Netherlands" and in "stopping the process of normalization of cannabis cultivation" (T.K.23760/14).
- The Government expressed to have no intentions to legalize soft drugs (T.K.23760/14).

#### Cocaine:

• The 100% controls of risky flights will be continued. The number of passengers with drugs decreases. The controls at the airport of Paramaribo (Surinam) are extended.

#### Synthetic drugs:

- In 2006, a project started which aims at financial investigation and financial sanctions in the field of precursors (*project Winstpakker*) (T.K.23760/14). It is a co-operation between financial investigation and control agencies, taxes, police and Prosecutor. The aim is to take away financial profits in 80% of all investigated cases, for instance by corrections for taxes. By doing this, there have been five cases concerning precursors until 2008 in which amounts ranging from 16,000 to 60,000 euro were taken away from offenders. This strategy will be pursued.
- Another strategy are the information visits to glass works, in which these were informed that
  providing assistance to production of drugs (by adapting certain glasses for the production of
  synthetic drugs) is a criminal act and that suspicious orders should be reported to the police.

#### 10.2 Seizures

Figures about seizures in 2007 are reported by the National Police Force (see Standard Table 13). Figures include seizures by police forces, Royal Military Police, Customs and Fiscal Information and Investigation Service (the tax authorities). For 2007, 23 of the 29 agencies reported all the data. Registration methods and definitions differ per police region, which leads to unreliability in the information and makes it difficult to interpret the figures. We truncate the figures and seizures less than a total of 10 kg/litres are not reported. Figures do not permit conclusions

about developments and trends. They must be seen as a minimum estimate of seized drugs in the Netherlands.

The following seizures are reported by the National Police Force for 2007 (T.K.23760/14):

- Cannabis resin: 9,950 kilos
- Herbal cannabis/nederwiet: 5,470 kilos
- Cannabis plants (including cuttings): 163,400
- Heroin: 520 kilos
- Cocaine: 10,500 kilos
- Amphetamine: 2,800 kilos, 1,400 tablets, 240 litres of oil and 40 kilos of pasta
- Methamphetamine: 10 kilos
- Ecstasy MDMA/MDA/MDEA: 1,300 kilos and 8,430.000 tablets
- LSD: 20,000 trips and 200 tablets
- GHB: 124 litres
- Methadone: 10 kilos and 4,750 tablets
- · Hallucinogenic mushrooms: 13 kilos
- mCPP: 495,000 tablets
- PMK: 20 litres
- Remarkable is the report of dismantlements of cocaine laboratories (9 times in 2007).<sup>1</sup>
- No BMK was seized.

#### 10.3 Price/purity

The Drug Information and Monitoring System (DIMS) of the Trimbos Institute provides detailed information on the quality of 'ecstasy' and other drugs submitted by consumers at test locations of drug treatment services. Some of the submitted tablets can be identified visually on the basis of comparing specific characteristics (colour, logo, weight, diameter etc.) and reaction in the Marquis test with previously analysed tablets. All other samples are sent to the laboratory for chemical analysis.

#### Ecstasy

Table 10.4 shows the percentage of analysed tablets containing certain substance(s), or a combination of substances (See also Standard Table 15). These categories are mutually exclusive.

- The total percentage of ecstasy tablets containing only MDMA (or an MDMA-like substance, such as MDEA, MDA) as the only scheduled drugs has decreased between 2004 and 2007, while the percentage of tablets containing miscellaneous substances has increased. This was mainly due to an increase of tablets containing mCPP, either with or without an MDMAlike substance.
- (meth)amphetamine was detected in about 2% of the samples (both with and without an MDMA-like substance).

<sup>&</sup>lt;sup>1</sup> Places where cocaine is extracted from materials that are impregnated with cocaine.

#### Table 10.4: Content of tablets sold as 'ecstasy' based on laboratory analyses

	2004	2005	2006	2007
Number of tablets analysed				
- MDMA-like substances	96.60%	90.60%	88.60%	89.40%
- (Meth)amphetamine	0.90%	3.60%	1.70%	1.20%
<ul> <li>MDMA-like substances and (meth)amphetamine</li> </ul>	0.50%	1.90%	1.90%	1.00%
- Others	0.20%	0.30%	0.90%	0.70%
- Miscellaneous	1.80%	3.60%	6.90%	7.70%

Source: DIMS, Trimbos Institute

- Figure 10.1 illustrates that the concentration of MDMA in tablets has always shown a wide variation. Nonetheless, the proportion of high dosed (>140 mg) MDMA tablets increased from 1% in 1998 to 10% in 2004. In 2005, this proportion again dropped from 9% to 3% in 2006 and 5% in 2007.
- The proportion of relatively high dosed tablets (106-140 mg), however, shows a clear increase over the last few years: from 13% in 2005 to 25% in 2007.
- The average amount of MDMA was higher in 2007 (82 mg) compared to 2006 (74 mg). The highest dose detected in 2007 was 199 mg (173 mg in 2006).



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

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

#### Amphetamines

In 2007, 771 powder samples sold as speed were analysed in the laboratory, which is a substantial increase to 2006 (553) and previous years (551 in 2005, 490 in 2004). The amount of powders containing methamphetamine remained low: only 4 samples in 2007 compared to 10 samples in 2006. As a whole, there were no major changes in composition.

- The majority (97%) of the powders contained amphetamine, with an average concentration of 34%; only 0.5% (also) contained methamphetamine, with an average concentration of 57%.
- 1.8% contained another psychoactive substance and 0.8% contained no psychoactive substance at all.
- Over half (60%) of the powders sold as speed contained caffeine, about the same as in 2005 and 2006 (56% and 59%, respectively).

#### Cocaine

The number of cocaine (powder) samples analysed by DIMS increased from 630 in 2006 to 721 in 2007.

- In 2007, a large majority (93%) of samples did indeed contain cocaine (among other substances), with an average concentration of 57% (no substantial change from previous years).
- 4% of the samples solely contained another psychoactive substance(s) and 3% contained no psychoactive substance at all.

#### Adulterants or diluants in cocaine

The increase in the past years in the overall proportion of cocaine samples with pharmacologically active adulterants or diluents in cocaine powders did not continue in 2007 (see figure 10.2). However, there were some marked changes related to specific adulterants.

- The still most commonly detected mixing agent is phenacetin, an analgesic withdrawn from the medical market because of serious kidney damage in chronic use with high therapeutic doses. The number of cocaine powders containing phenacetin has decreased from 46% in 2006 to 41% in 2007.
- In the first week of August 2007, atropine appeared on the cocaine market. DIMS recorded 15 cases in which people presented with clinical symptoms of a cocaine/atropine intoxication. A red alert warning campaign was launched to inform a wide network of medical and addiction care professionals, policy makers and general public about the health dangers related to atropine/cocaine. The red alert was ended at the end of August 2007.
- The frequency of adulterants phenacetin (41%), procaine (8%) and lidocaine (6%) decreased in 2007 compared to 2006 (48%, 12% and 8% respectively). In contrast, the appearance of other adulterants increased in 2007: caffeine (10% and 16%, respectively), diltiazem (6% and 12%, respectively) and levamisol (8% and 12%, respectively). Diltiazem is a calcium channel antagonist prescribed for heart conditions, such as angina and hypertension, levamisol is an anthelminticum and anti-cancer drug.



Figure 10.2: Percentage of cocaine samples containing medicines

Source: DIMS, Trimbos Institute.

Other substances.

- The total number of drug samples containing mCPP has stayed at about the same level in 2007 (230 times) compared to 2006 (249 times). The substance mCPP has mainly been found in tablets sold as 'ecstasy'.
- There is a marked increase in the number of samples containing GHB and/or GBL (mostly liquids) delivered at DIMS: 133 during 2006 compared to 214 in 2007. The average percentage of GBL has also increased markedly: 55% in 2006 to 85% in 2007.
- The number of ketamine samples was higher in 2007 (79) compared to 54 samples in 2006 and 17 in 2005.
- Whether these figures point at increasing popularity of GHB and ketamine is not known. Qualitative data from key informants interviewed in the national Trendwatch monitor and Amsterdam Antenna monitor suggest a slight increase in popularity of GHB and ketamine in some networks in Amsterdam and some other regions of the country (see also § 2.4) (Nabben et al. 2007;Nabben et al. 2008). However, their popularity lags far behind that of drugs like cocaine and ecstasy.

#### Cannabis

Since 1999 the Trimbos Institute also monitors THC content and prices of cannabis (THCmonitor) (Pijlman et al. 2005). Samples of different cannabis products (about 1 gram each) are regularly procured from a random sample of 50 coffee shops and chemically analysed. Figure 10.3 shows the average concentration of THC in Dutch marihuana ('nederwiet'), imported marihuana and imported hashish (see also Standard Table 14). Two types of samples of Dutch marihuana were bought: the most "favorite" variety (normally reported here, unless mentioned otherwise) and the most "potent" variety, according to the perception of owners of coffee shops.

- Dutch marihuana contains about three times more THC than imported marihuana.
- Between 2000 and 2004, the percentage of THC in Dutch marihuana increased significantly. However, from 2004 to 2005, a marked decrease occurred. In 2006 the average THC concentration (17.5%) remained at the same level as in 2005 (17.7%) and dropped again in 2007 (16.0%). In 2008, the average concentration THC in Dutch marihuana has not altered markedly (16.4%). Since 2001, the average concentration of THC in the most favorite variety is not significantly different from that of the most potent variety (16.5% in 2007 and 17.7% in 2008).
- The THC concentration in imported marihuana shows no significant alteration over the years.
- The most remarkable finding concerned the drop in the percentage of THC in imported hashish from 18.7% in 2006 to 13.3% in 2007. This finding is not easy to interpret. Figures from 2008 show a partial 'recovery' in the percentage of THC to 16.2%. Perhaps the harvest conditions of 2006 to 2007 were unfavourable for the marihuana plants in the oriental countries were the hashish is imported from.
- THC concentrations are highest in hashish derived from Dutch hemp ('nederhashish'), a relatively unpopular and uncommon cannabis variety. The annual number of samples is low (14 in 2007), which contributes to the variability of results across years. The average THC concentration was 28% in 2008, and varied between 33 and 26% in the previous four years.



Figure 10.3: Average THC percentage in cannabis products

Source: THC-monitor, Trimbos Institute (Niesink et al. 2007).

• The relatively high THC content in Dutch hemp is probably due to highly professional cultivation methods. • As a result of intensified law enforcement in the area of marihuana cultivation (see National Report 2006, §1.2; and § 8.2 of this report), it might have become more difficult to obtain marihuana with a good quality standard in Dutch coffee shops. Retail prices have risen (see section "Prices" below) and there are indications that this could have contributed to adulterating of Dutch cannabis products in recent years, to increase their weight and thus to maintain the profit. Although this has not resulted in dangerous intoxications yet, the Dutch government is very much alerted by this existence of adulterated cannabis. In Germany, adulterated cannabis with led has caused serious intoxications and hospitalisation (Busse et al. 2008). In The Netherlands various 'suspected' samples were examined (Van Amsterdam et al. 2007). Some did indeed contain adulterants, such as glass beads or sand, but further research showed that this was not the case with samples that were sold in Dutch coffee shops.

#### Prices

- According to the THC-monitor, the average retail price of a gram of imported marihuana is consistently lower compared to other cannabis products (table 10.5; see also Standard Table 16).
- The retail price of Dutch marihuana increased significantly from 2006 to 2007 (+18%). 2008 shows a further increase in the retail prices of Dutch marihuana products, especially of the most potent variant of Dutch-grown marihuana (€ 9.8 per gram compared to € 8.5 in 2007 and €7 in 2006; not in table).

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Dutch marihu- ana	5.8	5.9	6.1	6.4	6.0	6.2	6.2	7.3	7.7
Imported marihuana	3.9	4.0	4.2	4.3	4.9	4.1	4.4	4.3	5.2
Imported hashish	6.3	6.4	7.1	7.6	6.6	6.8	7.3	7.7	8.1

Table 10.5:	Average retail price p	per gram of cannabis	products (in €)
	5 1 1		

Source: THC-monitor, Trimbos Institute (Niesink et al. 2007).

Retail prices of other drugs did not change much over the past three years (see Standard Table 16). In 2007, the price of an ecstasy tablet varied between 1 and 5 euros and one gram of cocaine between 40 and 60 euros. Amphetamine is much cheaper than cocaine - one gram will cost between 1 and 15 euros - which is sometimes mentioned as a reason to use it as a substitute for cocaine (Van der Poel et al. 2005). The prices that were found for ecstasy, cocaine, and amphetamine by the DIMS resemble the prices that were found by Trendwatch {Nabben, Koet, et al. 2007 2017 /id}.

## Part B: Selected Issues

## 11 Sentencing Statistics

#### 11.1 Introduction

This paragraph describes the registered drug law offences in the Netherlands in main lines. The most important drug law is the Opium Act, which contains prohibitive rules on (amongst others) smuggling, trafficking and production, and personal possession of illicit drugs. We categorized these in two categories, namely a) personal possession and b) dealing, trafficking, smuggling, production of illicit drugs. Drug use is not a criminal act.

We cannot present the category drug driving because a sufficiently comprehensive and integrated data collection on this point is lacking at the moment. In order to improve this situation the debit registration database - with registrations of financial transactions - and the databases of the police and prosecutor / court have to be integrated. Moreover driving after taking drugs offences and treatment orders can only be broken down in two categories, 'alcohol' (vast majority) and 'other' (some) cases. There are no data about eventual other drugs involved with these cases. It is necessary to do some further research on - and to integrate - the data about driving after taking drugs in order to be able to get a more complete and reliable picture. The Dutch Opium Law distinguishes between illicit drugs with an unacceptable risk for public health ("hard drugs") and illicit drugs with less risks ("soft drugs"). What kind of drug should be regarded as "hard" or "soft" is specified on lists that are attached to the law. List I contains hard drugs, list II soft drugs. The most important soft drug is cannabis.

Before presenting the results we will describe briefly the data collection approach and the data. The paragraph is prepared by the Research and Documentation Centre (WODC) of the Dutch Ministry of Justice under the flag of the National Drug Monitor / Focal point of the Netherlands.

#### 11.2 Options available

Penal code in the Netherlands provides in a complete scope of possible sanctions. The Opium Law is the most specific drug related law. It specifies the following possible sanctions for the main categories of smuggling, trafficking and production en personal possession of drugs (OW art. 10, 10a, 11 and 11a):

- Smuggling of hard drugs: max. 12 years of imprisonment or a fine of max. € 74,000
- Production of hard drugs: max. 8 years of imprisonment or a fine of max. € 74,000
- Possession of hard drugs: max. 6 years of imprisonment of a fine of max. € 74,000
- If possession or smuggling concerns small amounts for own use, the sanctions are lower: max. 1 year of imprisonment or a lower fine
- Smuggling of soft drugs (mainly cannabis): max. 4 years or a fine of max. € 74,000
- Trafficking, production and possession of soft drugs: max. 2 years or a fine of max. €
   18,500; if large amounts are involved: max. 6 years or a fine of max. € 74,000; if small amounts are involved: no sanctions
- Professional production of soft drugs: max. 6 years, fine of max. € 74,000

- Smuggling: 4 years, 5<sup>th</sup> category; if large amounts are involved: 6 years of imprisonment or a fine of max. € 74,000; if small amounts are involved: no sanctions

Preparation or stimulation of smuggling, trafficking and production can be sanctioned with max. 6 years of imprisonment or a respective fine (OW art. 10a).

Smuggling, trafficking and production, and possession of drugs (soft and hard) in the framework of a criminal organization can be sanctioned with max. 8 years of imprisonment or a high fine (OW art. 11a).

Besides imprisonment and fines, the courts have options to impose community service orders. The Public Prosecutor also has several options available. The Public Prosecutor decides not only whether a case will be brought to court, will be dismissed, or whether there will be joint charges, but he also has the competence to impose a financial transaction.

In the following we concentrate on the major sanctions, namely financial sanctions – financial transactions by the Public Prosecutor and fines imposed by the court -, community service orders and prison sentences.

### 11.3 Data collection systems

The Research and Documentation Centre (WODC) of the Dutch Ministry of Justice contributes to several quantitative national and supranational reports containing information or data about registered drug related crime in the Netherlands. These include monitoring reports, annual questionnaires, questions coming from the information desk and research projects. Most of the information products are made under the flag of the National Drug Monitor (NDM). The NDM was initiated in 1999 by the Dutch Ministry of Health, Welfare and Sports and is also supported by the Dutch Ministry of Justice. They are used by policy makers to update the drugs policy in the Netherlands.

The WODC uses three national databases – all with a national coverage – in reporting about registered crime in general and registered drug related crime in particular: the 'Police Records System' (acronym in Dutch: 'HKS') of the Police, the 'Public Prosecutions Department Data' ('OMDATA') and the 'Dutch Offenders Index' ('OBJD'). HKS is the national identification system of suspects for the police. It is conducted by the National Criminal Intelligence Service of the National Police Agency (NRI/KLPD). OMDATA is the national registration system of criminal cases registered at the county court districts. It is conducted by the National Office of the Public Prosecution. Finally, OBJD is a copy of the national registration system of judicial documentation from the National Justice Information Service, for policy research purposes. It is conducted by the Research and Documentation Centre (WODC) of the Dutch Ministry of Justice.

The WODC implemented a data warehouse and data mart approach. This in order to improve the collection of data from the different databases, to improve the management of (NDM) definitions and the implementation of the changes in those (NDM) definitions. Moreover the data mart approach was implemented to be able to manage the history of updating the databases. This is described in detail by Meijer, van Dijk et al. (Meijer et al. 2008). The WODC started developing an offender oriented data warehouse in 2005. A first version of this so called Criminal Data Warehouse was delivered at the end of 2007. It provides a uniform view on the data that are extracted from the different databases HKS, OMDATA, and OBJD. Issues such as data redundancy, inconsistencies between databases and data integration were taken care of during the development of the data warehouse. The content of the databases, the conceptual schemes and domain knowledge of experts were exploited to increase the quality of the data in the data warehouse. Another useful property of the data warehouse is the maintenance of the history of loaded data. The data mart for the NDM projects - the Drug Crime Data Mart - is connected to the Criminal Data Warehouse. It consists of a set of data from the offender oriented data warehouse and a collection of programs to manipulate those data, such that it meets the information need of the different NDM projects. For the different NDM projects, the Drug Crime Data Mart serves as source. In figure 11.1, the relationships between the different operational databases, the Criminal Data Warehouse, and the Drug Crime Data Mart is depicted in figure 11.1.

# *Figure 11.1:* Streamlining police and criminal justice data (DM represents the Drug Crime Data Mart)

The Drug Crime Data Mart integrates the existing NDM projects. Although the NDM projects can, from a research agenda view, still be seen as individual projects, the implementation of the underlying data mart is managed as one project. The data collection is performed periodically for all NDM projects and data updates are performed automatically. The documentation of related projects is now kept in one central place, enhancing the accountability and facilitating changes in definitions, if necessary. Query programs that were formerly written in different languages/syntaxes, such as SQL or SPSS, and distributed among different projects are now transformed into standard SQL and are brought under a central activity. This simplifies the maintenance of the programs and increases the efficiency (Meijer et al. 2008).

#### 11.4 Data collected

The data used for analysis are extracted from the Drug Crime Data Mart. The major part of the reported data concerns all cases of Drug Law offences enrolled in prosecution files and also offences against the Law against Abuse of Chemicals (WVMC). Each of these cases concern one suspected/convicted person. Also some of the data presented are on the level of Police. Data collection systems of police and prosecutor / court are not linked. The different statistical units used in the criminal justice chain (offender / offence registered by the police and prosecutor / court cases) cannot be integrated at the moment. In interpreting the data it is therefore necessary to take into account the varying statistical units throughout the criminal justice chain. Moreover it should be mentioned here that it is not always possible to get a clear cut view of the outcomes where multiple offences are registered in one prosecutor / court case. This is a consequence of registration errors.

Two main drug types can be discerned, as information per substance type is lacking: only cannabis can be specified. Therefore a distinction is made between cannabis - soft drugs - and all other illicit drugs - hard drugs - involving heroin, cocaine, amphetamines, ecstasy, LSD and other illicit drugs. Two main offence types are discerned: dealing / trafficking / production, which contains all offences concerning smuggling of drugs in and out of the country, production of drugs, any form of preparation of drugs, transporting of drugs, dealing of drugs etc. The category possession / use is transformed to possession, because use is not an offence in the Netherlands. The following counting rules apply in order to be able to categorize each case uniformly when underlying multiple offences of different types are concerned. In general counting priority is given to 'dealing / trafficking / production", before 'possession' and to 'hard drugs' before 'soft drugs. So, in cases when 'dealing / trafficking / production' is involved and also 'possession', the case is reported as 'dealing / trafficking / production'. Moreover when possession of cannabis soft drugs – and on the same time any other illicit drug – hard drugs – is involved, the case is reported as 'possession hard drugs'. In cases when 'dealing / trafficking / production' of soft drugs is involved and also 'possession' of hard drugs, the case is reported as 'dealing / trafficking / production soft drugs'. In cases when 'dealing / trafficking / production' concerning soft drugs and also of hard drugs is involved, the case is reported as 'dealing / trafficking / production hard drugs'.

Data may differ due to adaptation and improvements of underlying databases in the course of time. Current updates are presented

#### 11.5 Results available

Figure 11.6 shows the Opium Act cases in the criminal justice chain. Although these data do not provide an insight in the production and trade as a whole, they do show the pressure which drug offences put on the criminal justice system. From 2000 up to 2004 there has been a marked increase in the number of cases at the Public Prosecutor, which mostly concerned the production and trade - 'dealing, trafficking and production' - of as well hard drugs and soft drugs (cannabis) and, to a lesser degree, possession of hard drugs (figure 11.2). The decline in 2005 and 2006 concerns only hard drug cases and in 2007 also soft drugs (not in figure). The same pattern is observable in police registrations.





Source: national database of the prosecution services OMDATA. Analysis: WODC, 2008.

Comparing 1995 with 2007, it becomes clear that production and trade of drugs became more important categories of Opium Act cases, especially with regards to soft drugs (cannabis) (figure 11.3). This might be a consequence of the intensified law enforcement efforts targeting cannabis production, but it also could be due to an increase in cannabis production. Cannabis production in the Netherlands became more commercial and home-grown production assumed high proportions, a trend which does not differ from other Western countries.

Figure 11.3 Opium Act cases received by the Public Prosecution Office, 1995 versus 2007

Source: national database of the prosecution services OMDATA. Analysis: WODC, 2008.

From 1993 to 2004 financial transactions by the public prosecutor and fines imposes by the judge increased, both for possession and dealing and dealing / trafficking / production. In 2005 – 2007 a decrease is found (figure 11.4).

Figure 11.4 Number of financial sanctions: fines and transactions for Opium Act offences, 1993-2007



#### 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007

— — fine+transaction possession — fine+transaction dealing/trafficking/production

Source: national database of the prosecution services OMDATA. Analysis: WODC, 2008.

The number of prison sentences for Opium Act offences decreased since 2004, after a sharp increase between 2000 and 2003 (figure 11.5). The decrease is due to hard drugs dealing, trafficking and production. Sentences for cannabis dealing, trafficking and production doubled in 2003-2006 (not in figure). Total number of community service orders increased to 2006, mainly for dealing, trafficking, production. In 2007 for the first time in years a decrease was found.

*Figure 11.5* Number of prison sentences and community service orders imposed by the judge for Opium Act offences, 1993-2007





Source: national database of the prosecution services OMDATA. Analysis: WODC, 2008.

Comparing 1995 with 2007, it becomes clear that prison sentences and community service orders for production and trade of drugs became more important categories of Opium Act cases, especially with regards to soft drugs (cannabis) (figure 11.6). Community service orders for soft drugs dealing, trafficking and production dominate this sanction category.





Source: national database of the prosecution services OMDATA. Analysis: WODC, 2008.

Opium Act offenders have a relatively high chance to 'flow' through the entire criminal justice chain and to end up with a prison sentence (fig. 6). In 2007, the police reports 7% of Opium Act cases, the prosecutor 7% and the courts 8%. 17% of the prison sentences and 30% of all detention years concern Opium Act cases. Between 1997 and 2007 the overall percentage of Opium Act cases increased. In most EU-countries, an increasing trend was observed in reported drug offences between 2001 and 2006. The Netherlands is no exception to this trend. In 2006, there is a stabilization in the Netherlands.



Figure 11.7. Opium Act cases in the criminal justice chain, in % of all cases ,1997-2007

#### 11.6 Conclusion

Although soft drug/cannabis offences are on the increase, hard drugs are still predominant overall. This is in contradiction with the situation in most EU-countries, where cannabis is the drug most often involved in reported drug law offences.

With regard to the production and trafficking of drugs special law enforcement programmes have repeatedly been launched. The growth of import of cocaine by body packers through the main airport called for extra measures (T.K.28192/1). By taking several measures, like intensifying controls of passengers, the justice department controlled the situation at the airport. Extra efforts were also required in the case of production and export of ecstasy (T.K.23760/14). Industrial production of cannabis is another problem (T.K.24077/125). Production and trafficking of ecstasy in and from the Netherlands now seems to be falling, although the Netherlands are still considered as a major source country (Neve et al. 2007;United Nations Office on Drugs and Crime 2007). These problems, although they improved considerably, still place a heavy burden on the criminal justice system.

Source: national database of police, prosecution services, database judicial documentation. Analysis: WODC, 2008.

Part C: Bibliography, Annexes

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#### 14.2 Alphabetic list of relevant data bases

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

Antenne (Amsterdam Antenna)

Local monitor of the use of alcohol, tobacco, and drugs by school-goers and socialising young people in Amsterdam, conducted by the Bonger Institute of the University of Amsterdam (UvA). Homepages: www.jur.uva.nl & www.jellinek.nl

Causes of death statistics

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

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

Cliënt Volg Systeem Amsterdam, Client Monitoring System, Amsterdam Local registration system of treatment given by the Municipal Health Service, Addiction Care, and Public Mental Health Care, including treatment for drug users. Homepage: www.ggd.amsterdam.nl

Cliënt Volg Systeem van Stichting Verslavingsreclassering Nederland, Client Monitoring System of the Foundation of Addiction Probation Services National registration of probation services offered to drug using offenders, conducted by the Foundation of Addiction Probation Services. Homepage: www.ggznederland.nl

CMR, Centrale Methadon Registratie, Central Methadone Register (CMR) Local registration of methadone substitution treatment, conducted by the Municipal Health Service Amsterdam. Homepage: www.ggd.amsterdam.nl

CPA, Centrale Post Ambulancevervoer, Central Post for Ambulance Transports (CPA) Local registration of ambulance transports, including transport due to problem use of alcohol and drugs, conducted by the Municipal Health Service Amsterdam. Homepage: www.ggd.amsterdam.nl

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

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

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

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

#### Educare monitor

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

#### Haags Uitgaansonderzoek

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

#### HBSC, Health Behaviour in School-Aged Children

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

#### HIV/aids-registratie, HIV/AIDS Registration

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

#### HIV-surveillance among drug users

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

#### Inbeslagnames drugs, Drug Seizures

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

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

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

Landelijke Jeugdmonitor CBS-SCP (POLS), National Youth Monitor CBS-SCP (POLS) National monitor on the living conditions of young persons (12-29 years), including drug use, conducted by Statistics Netherlands (CBS) and the Social and Cultural Planning Office of the Netherlands (SCP). Homepage: www.cbs.nl LIS, Letsel Informatie Systeem, Injury Information System (LIS)

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

LMR, Landelijke Medische Registratie, Dutch Hospital Registration (LMR) National registration of admissions to hospitals, including admissions due to problem alcohol and drug use, conducted by Prismant. Homepage: www.prismant.nl

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

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

National Security Monitor, Veiligheidsmonitor Rijk (VMR) National monitor on the experiences of citizens with crime and security and their opinion about

police action, conducted by the Ministry of the Interior and Kingdom Relations (BZK). Homepage: www.minbzk.nl/

NEMESIS II, Netherlands Mental Health Survey and Incidence Study Second national cohort study on the general population (16-64 years) focussing on mental disorders including the abuse of and dependence on alcohol and drugs, conducted by the Trimbos Institute. Homepage: www.trimbos.nl

### NL.Trendwatch

National qualitative panel monitor on the use of alcohol and drugs by young people in the nightlife scene, conducted by the Bonger Institute of the University of Amsterdam (UvA). Homepage: www.jur.uva.nl/criminologie

NPO, Nationaal Prevalentie Onderzoek, National Prevalence Survey (NPO) National survey on the use of alcohol and drugs in the general population aged 12 years and older, conducted by the Addiction Research Institute Rotterdam (IVO). Homepage: www.ivo.nl

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

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

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

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

#### OCTA, Organised Crime Threat Assessment

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

OGGZ Monitor Amsterdam, Public Mental Health Care Monitor Amsterdam Local monitor on marginalized inhabitants of Amsterdam including problem drug users, conducted by the Municipal Health Service Amsterdam (GGD Amsterdam). Homepage: www.ggd.amsterdam.nl

OMDATA, Openbaar Ministerie Data, Public Prosecutions Department Data (OMDATA) National registration of criminal cases registered at the district courts, including offences against the Opium Act, conducted by the Office of the Public Prosecutions Department. Homepage: www.wodc.nl/

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

### Police Records System (HKS)

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

### THC-monitor

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

TULP/GW, Ten UitvoerLegging van vrijheidsbenemende straffen en maatregelen in Penitentiaire inrichtingen, Execution of detentions in penitentiaries (TULP/GW) National registration of detentions, including detentions for offences against the Opium Act, conducted by the Judicial Detention Service (DJI). Homepage: www.dji.nl/

# 14.3 List of relevant Internet addresses

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

Website	Contents
http://www.trimbos.nl/	Netherlands Institute of Mental Health and Addiction
http://www.minvws.nl/	Ministry of Health, Welfare and Sport
http://www.justitie.nl	Ministry of Justice
http://www.wodc.nl	Research and Documentation Centre of the Ministry of Justice
http://www.drugsinfoteam.nl/	Drugs and Alcohol Info Team of Brijder Addiction Care
http://www.unitydrugs.nl	Unity: educational peer project in Amsterdam
http://www.jellinek.nl	Jellinek Addiction Care Amsterdam
http://www.cedro-uva.org	Centre for Drug Research, University of Amsterdam
http://www.intraval.nl	Intraval. Bureau for Research and Consultancy
http://www.aiar.nl/	Amsterdam Institute for Addiction Research

http://www.drugsinfo.nl/	Objective information on drugs for the general public
http://www.ivo.nl/	Addiction Research Institute Foundation, Rotterdam
http://www.ggd.amsterdam.nl/	Municipal Health Service of Amsterdam
http://www.cbs.nl/	Statistics Netherlands
http://www.ggznederland.nl/	Netherlands Association for Mental Health Care
http://www.rivm.nl/	National Institute for Public Health and the Environment
http://www.sivz.nl/	Care Information Systems Foundation
http://www.hiv-monitoring.nl/	HIV Monitoring Foundation (HMF)
http://www.politie.nl/KLPD/	National Police Agency
http://www.prismant.nl/	Prismant: Consultancy agency for the Social Care Sector
http://www.scp.nl/	Social and Cultural Planning Office of the Netherlands
http://www.nispa.nl/	Nijmegen Institute for Scientist-Practitioners in Addiction

http://www.zonmw.nl/	Netherlands Organisation for Health Research and De- velopment
http://www.boumanhuis.nl/	Bouman GGZ (Addiction Care Rotterdam)
http://www.brijder.nl/	Brijder verslavingszorg (Addiction Care North Holland)
http://www.centrummaliebaan.nl/	Centrum Maliebaan (Addiction Care Utrecht)
http://www.vnn.nl/	Verslavingszorg Noord Nederland (Addcition Care North- ern Netherlands)
http://www.parnassia.nl	Parnassia, psycho-medisch centrum (Addiction Care The Hague)
http://www.novadic-kentron.nl/	Novadic-Kentron, netwerk voor verslavingszorg (Addic- tion Care North Brabant)
http://www.tactus.nl/	TACTUS, Instelling voor verslavingszorg (Addiction Care Gelderland and Overijssel)
http://www.ggznml.nl/	
	GGZ Noord- en Midden-Limburg (Addiction Care North- ern and Central Limburg)
http://www.mondriaanzorggroep.nl/	
	Mondriaan Zorggroep (Addiction Care Southern Limburg)
nttp://www.emergis.nl/	

Emergis – Centrum voor Geestelijke Gezondheidszorg (Addiction Care Zeeland)

http://www.om.nl/english/

Public Prosecution Service (English section)

http://www.intraval.nl/

Intraval-Bureau voor onderzoek en advies (Social Scientific Research Institute)

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# List of Abbreviations used in the text

2C-B	4-bromo-2,5-dimethoxyphenethylamine
4-MTA	4-methylthioamphetamine
ACS	Amsterdam Cohort Studies
ADHD	Attention-Deficit/Hyperactivity Disorder
AIAR	Amsterdam Institute for Addiction Research
AIDS	Acquired Immune Deficiency Syndrome
ASI	Addiction Severity Index
BIBOB	Public Administration Probity Screening Act
BMK	Benzyl-Methyl-Keton
BZK	Ministry of the Interior and Kingdom Relations
CAM	Coordination Centre for the Assessment and Monitoring of New Drugs
CAPI	Computerised Assisted Personal Interview
CBS	Statistics Netherlands
CBT	Cognitive Behavioural Treatment
СВО	Dutch Insitute for Health Care Improvement
CBZ	Board of Construction of Facilities for Hospitals
CCBH	Central Committee on the Treatment of Heroin Addicts
CCV	Netherlands Centre for Crime Prevention and Community Safety
CEDRO	Centre for Drug Research
CMR	Central Methadone Registration
COFOG	Classification of the Functions of Government
CPB	Netherlands Bureau for Economic Policy Analysis
CRA	Community Reinforcement Approach
DBC	Diagnosis Treatment Combinations
DIMS	Drugs Information and Monitoring System
DNR	National Crime Squad
DOB	2,5-dimethoxy-4-bromoamphetamine
DSM	Diagnostic and Statistical Manual of Mental Disorders
E.K.	Senate
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EU	European Union
FIOD	Fiscal Intelligence and Investigation Department
GGD	Municipal Health Service
GG&GD	Area Health Authority
GGZ	Mental Health Service
GGZ Nederland	Netherlands Association for Mental Health Care
GHB	Gamma-hydroxy-butyrate
GMR	General Mortality Register
HAART	Highly Active Anti-Retroviral Treatment
HAVO	Secondary education at middle level
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
IDDT	Integrated Dual Disorder Treatment
IDUs	Injecting Drug Users
IGZ	Health Care Inspectorate
IMC	Inpatient Motivation Centre
ISD	Institution for Prolific Offenders
IVO	IVO, scientific bureau on lifestyle, addiction and related social developments
IVV	Foundation of Information on Addiction Care
IVZ	Care Information Systems Foundation
KLPD	National Police Agency
LADIS	National Alcohol and Drugs Information System
LCI	National Coordination Structure on Infectious Diseases
LIS	Injury 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
MATE	Measurement of Addiction for Triage and Evaluation
MBDB	N-methyl-1-(3,4-methylenedioxyphenyl)-2-butanamine
mCCP	Meta-chloro-phenyl-piperazine
MDA	Methylene-dioxyamphetamine
MDEA	Methylene-dioxyethylamphetamine
MDFT	Multi Dimensional Family Therapy
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
NIVEL	Netherlands Institute for Health Services Research
NNIA	No new information available
NPO	National Drug Use Survey/National Prevalence Survey
NVIC	National Poisons Information Centre
OBJD	Justice Documentation Research Database
OMC	Office of Medicinal Cannabis
OMDATA	Public Prosecution Department Data
PMA	Paramethoxyamphetamine
PMK	Piperonyl-Methyl-Keton
RISc	Risk Assessment Scales
RIVM	National Institute for Public Health and the Environment
SCP	National Institute for SocioCultural Studies
SHM	HIV Monitoring Foundation
SOV	Judicial Treatment of Addicts

SRM	Criminal Justice Monitor
STI	Sexually Transmitted Infections
SVO	Steering Committee for the Reduction of Nuisance
TBC	Tuberculosis
TDI	Treatment Demand Indicator
THC	Tetrahydrocannabinol
T.K.	Lower House of Parliament
ТМ	Treatment Multiplier
USD	Synthetic Drugs Unit
VBA	Drugfree Addiction Support Unit
VMBO-p	Secondary practical education at the lower level
VMBO-t	Secondary theoretical education at the lower level
VVGN	Dutch Association of Addiction Physicians
VWO	Secondary education at the higher level, pre-university education
VWS	Ministry of Public Health, Welfare and Sport
WHO	World Health Organisation
WODC	Research and Documentation Centre of the Dutch Ministry of Justice
XTC	Ecstasy
ZonMw	Netherlands Organisation for Health Research and Development
ZORG-IS	Registration System for Mental Health Care

## Map of the Netherlands: provinces and major cities

# The Netherlands

