

Margriet van Laar, Guus Cruts, Marianne van Ooyen-Houben,  
Esther Croes, Peggy van der Pol, Ronald Meijer, Toine Ketelaars

# REPORT TO THE EMCDDA by the Reitox National Focal Point

THE NETHERLANDS  
DRUG SITUATION 2013



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DRUG SITUATION 2013**

**REPORT APPROVED BY THE  
SCIENTIFIC COMMITTEE  
OF THE NETHERLANDS NATIONAL DRUG MONITOR**

## Colophon

This National Report was supported by grants from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), the Ministry of Health, Welfare and Sport (VWS), and the Ministry of Security and Justice.

*This report was written by*

Margriet van Laar<sup>1</sup>

Guus Cruts<sup>1</sup>

Marianne van Ooyen-Houben<sup>2</sup>

Esther Croes<sup>1</sup>

Peggy van der Pol<sup>1</sup>

Ronald Meijer<sup>2</sup>

Toine Ketelaars<sup>1</sup>

<sup>1</sup>Trimbos Institute (Netherlands Institute of Mental Health and Addiction).

<sup>2</sup>Research and Documentation Centre (WODC), Ministry of Security and Justice.

*Lay-out*

Gerda Hellwich

*Cover Design*

Canon Nederland N.V.

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## Disclaimer

This 2013 report of the Netherlands drug situation to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has been written for a broad public of readers. With regard to drug legislation and drug policy, for reasons of comprehensibility, the original legal and policy texts were not always reviewed literally in this report. For a literal review, the readers of this 2013 report about the drug situation in the Netherlands will have to consult the original legal and policy texts.

**Members of the Scientific Committee of the Netherlands National Drug Monitor (NDM)**

Mr. prof. dr. H.F.L. Garretsen, Tilburg University (chair)

Mr. dr. P.G.J. Greeven, Novadic-Kentron

Mr. drs. A.W.M. van der Heijden, Public Prosecution Service (OM)

Mr. prof. dr. R.A. Knibbe, Maastricht University

Mr. dr. M.W.J. Koeter, Amsterdam Institute for Addiction Research (AIAR)

Mr. drs. W.G.T. Kuijpers, Foundation for the Provision of Care Information (IVZ)

Mr. prof. dr. D.J. Korf, Bongers Institute of Criminology, University of Amsterdam

Mrs. prof. dr. H. van de Mheen, Addiction Research Institute Rotterdam (IVO)

Mr. dr. C.G. Schoemaker, National Institute for Public Health and the Environment (RIVM)

*Observers*

Mrs. mr. drs. M. van der Klaauw, Ministry of Security and Justice

Mrs. drs. W.M. de Zwart, Ministry of Health, Welfare and Sport









## **Preface**

The Report on the Drug Situation in the Netherlands 2013 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 "European Drug Report" 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 2013 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 Research and Documentation Centre (WODC) of the Ministry of Security and Justice. The NDM was established in 1999 on the initiative of the Ministry of Health, Welfare and Sport. The Ministry of Security and 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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## Executive summary

### *Developments in drug law and policies (chapter 1)*

This National Report reviews the developments in the drug policy of the Netherlands up to the 7<sup>th</sup> of November 2013. The Dutch Opium Act places drugs with an unacceptable risk on Schedule I and places other drugs on Schedule II. The Opium Act, the Opium Act Directive and other drug-related Acts and Codes have been subject to changes:

- Since January 2013 qat is placed on schedule II of the Opium Act. The sale of qat is not tolerated.
- A new article to the Opium Act is in preparation (article 11a), which aims at criminalisation of activities that prepare or facilitate the large-scale professional illegal cultivation of cannabis. This bill was approved by the House of Representatives on 11 October 2013.
- In 2011, an advisory committee advised to classify cannabis with a THC concentration of more than 15% as a hard drug. Implementation was announced in the plans of the new Cabinet (Rutte II) of November 2012. The procedure is still pending.
- On 1 January 2012 two new criteria to which coffee shops must adhere were added to the Opium Act Directive: the private club [B] club criterion and the residence [I] criterion. The Directive stipulated that the enforcement of these criteria should start in May 2012 in the southern provinces of Limburg, North-Brabant and Zeeland. The enforcement of these criteria in the rest of the country should start on 1 January 2013. In November 2012 the new government cancelled the private club criterion. The Opium Act Directive was changed. On 1 January 2013 the residence criterion is in force for the whole country. The enforcement of this criterion at local level may be implemented in phases. The number of drug tourists strongly decreased in the southern provinces of the Netherlands where the criterion was enforced as of 1 May 2012.
- A change in the Code of Criminal Procedure is in preparation which will make it possible for the police to apply compulsory tests of alcohol and drug use on suspects of violent crimes. The use of substances can be an aggravating factor in the sentencing of these cases.
- The Evaluation and Extension Act BIBOB (Public Administration Probity Screening Act) came into force on 18 April 2013.
- A new bill to regulate structural funding of anonymous e-mental health is in preparation.
- Traders in new precursors of synthetic drugs (APAAN and GBL) were for the first time convicted and the combat against organised crime will be tightened.

### *Developments in drug use in the population and specific target groups (chapter 2)*

There are no new data on drug use in the general population. Using cannabis prevalence data from the 2009 population, the total amount of cannabis consumed in the Netherlands per year was estimated between 44 and 69 tons (excluding consumption by drug tourists). The smallest group of intensive (daily or almost daily) users was found to be responsible for the largest part of this amount (77%).

Overall, prevalence rates of cannabis and other drug use among pupils of secondary schools of 12-18 years peaked in 1996, decreased afterwards and remained stable between 2007 and 2011.

A web survey in spring 2013 among a convenience sample of visitors of parties or festivals and clubs revealed fairly high levels of substance use compared to their age peers (15-35 years) in the general population (2009 data). For example, last year prevalence rates were about three times higher for cannabis (52% versus 14%), about ten times higher for cocaine (27% versus 2.4%) and about twenty times higher for ecstasy (61% versus 3%). Prevalence of drug use was associated with the frequency of attending parties and festivals, e.g. recent use of ecstasy increased from 10% among those who had not attended a party/festival (but did attend clubs) in the past year up to 78% among those who attended these locations weekly. It is not known which proportion of the total population of young people from 15 up to including 35 years visits parties, festivals, or clubs as much as the young people in the convenience sample.

Several surveys suggest that ketamine is on the rise. New psychoactive substances, such as mephedrone<sup>1</sup>, methylone, methoxetamine, 6-APB ("BenzoFury"), spice and 4-fluoramphetamine, are used appreciably less often among partygoers, with the exception of the latter substance (last year prevalence 8.5% in the web survey).

### *Developments in prevention (chapter 3)*

Dutch drug prevention policy is part of a broader scope of public health prevention, co-ordinated by the Ministry of Health, Welfare, and Sport (VWS) and implemented by local government. Recently, a new National Prevention Program (NPP) 2014-2016 was formulated. The main focus remains on prevention among young people. Also central to the NPP are the integration of prevention efforts and cooperation between stakeholders such as health care, employers, schools and local government. Specifically regarding substance use, the NPP focuses on healthy and safe nightlife regarding alcohol, drugs, and tobacco. The minimum age to buy alcohol and consume alcoholic beverages in public spaces is increased (16 to 18 years) as of January 2014. A similar increase in the legal age for buying tobacco is foreseen on 1 January 2014. Also, the smoking ban is extended to bars without personnel (except the owner). Finally, an additional school doctor/nurse visit in adolescence is implemented, to facilitate early identification of problems, including substance abuse.

Drug prevention activities aim to discourage drug use, support early detection, facilitate referral to regular treatment and reduce drug-related health risks. They are focused on young people at school or in nightlife and high risk groups. Examples that were recently updated include the project Healthy School and Drugs and the program Open and Alert in the residential child care, youth work, youth custodial institutions, and facilities for people with mild or borderline intellectual disabilities. The anonymous drug test service of the Drug Information and Monitoring System (DIMS) still exists, as well as the monitor for drug-related emergencies (MDI), which directly communicate public health risks within their networks to enable fast prevention responses (see also chapter 7). First Aid services at large dance parties also still exist (and provide data for the MDI), as well as the national alcohol and drug information lines. The 'Wiet Check' is a website at which users of cannabis can find information and advice about their cannabis use ([www.wietcheck.nl](http://www.wietcheck.nl)). After a randomized controlled trial evaluating the effectiveness of the Dutch 'Wiet Check', it was implemented in several addiction care facilities and made available online. This preventive intervention is

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<sup>1</sup>Strictly speaking, mephedrone is not a new psychoactive substance after its listing on May 2012 on Schedule 1 of the Opium Act.



based on the Australian Adolescent Cannabis Check-up (ACCU) for young cannabis users (14-21 year).

The new age limit of 18 years for the sale of alcohol and tobacco and the use of alcohol in public spaces will be communicated through governmental mass media and local campaigns. Moreover, a long term mass media campaign aiming to denormalise alcohol use and smoking under age 18 is funded and implemented by a joint action of health charities, (alcohol) retailers' associations, and national health promoting institutes. This campaign will propagate that alcohol and tobacco use is 'not done' for people under 18.

By 1 July 2014, municipalities must have formulated their local alcohol prevention and law enforcement policy. Local authorities may link age restrictions to opening hours, impose restrictions on happy hours and special alcohol offers, and regulate sales of alcohol in sport club canteens and other such venues by local ordinance.

To support coherent and effective local health promotion, the website

"[www.loketgezondleven.nl](http://www.loketgezondleven.nl)" provides information on effective public health interventions for municipalities, schools, and healthcare workers. With regard to the name of the website, "loket gezond leven" means "office or counter healthy living". This website is maintained and updated by the Centre for Healthy Living (Centrum Gezond Leven) of the National Institute on Public Health and the Environment. It includes a database of lifestyle interventions and guidelines, such as the Guideline Healthy Municipality (Handreiking gezonde gemeente), to support municipalities with their prevention policy.

#### *Developments in problem use (chapter 4)*

The number of problematic opiate users has been estimated in 2013 at 14,000, implying a decrease of 21% compared to the previous estimate for 2008-2009. This decrease is consistent with other indicators, including a decrease of opiate users in treatment and overall ageing population with low levels of new users recruited.

A very rough national estimate of the number of (dependent) crack users, based on extrapolation of data from three cities to national level, arrives at a number 17 and 24 thousand. This population may overlap to a considerable extent with the population of opiate users as 50% to 80% of the crack users may also consume opiates.

While health and treatment indicators point at an increase in the number of problem (dependent) GHB users, the size of this population is not known.

#### *Developments in treatment (chapter 5)*

On the 18<sup>th</sup> of June 2012, the Ministry of Health, Welfare, and Sport (VWS) and the providers of mental health care and addiction care signed an agreement aimed to secure the future of mental health care and addiction care in the Netherlands. To keep the mental health care and addiction care affordable in the near future, it was agreed to reduce the number of inpatient units (slots) by a third in 2020 compared to 2008. A third of the inpatient care will then have to be replaced by outpatient care, which will require more self-management from the clients. To put the agreement with the ministry into practice, the National Branch Organization for Mental Health Care and Addiction Services (GGZ Nederland) has issued a vision document that targets a more assertive prevention of drug use; focuses on youth, vulnerable groups, and neighbourhoods at risk; and aims to consolidate the care for chronic addicts.

In 2012, the regular addiction care was provided by thirteen institutes and registered anonymously in the National Alcohol and Drugs Information System (LADIS). During the past decade, about half of the institutes for addiction care had merged with an institute for general mental health care. With regard to the number of treated clients, the fusions have had no large impact on substance abuse treatment. The total number of drug clients in a year is given by the number of clients that already started treatment in a previous year (the old clients) and the number of clients starting treatment in that year (the new clients). Between 2011 and 2012 the total number of old and new drug clients decreased with 4% from 32,871 to 31,605 drug clients. In the same order of magnitude, the number of new drug clients, as defined by the EMCDDA's Treatment Demand Indicator (TDI), decreased with 5% from 11,341 new drug clients in 2011 to 10,801 new drug clients in 2012. Only the number of GHB clients had increased. The overall small decrease in the number of drug clients in the addiction care might have resulted from the own private contribution which the clients were to pay in 2012. It parallels the stabilization of the number of drug patients in the hospitals during the past three years. All in all, the figures from the addiction care and the hospital care suggest a stabilization of the number of problem drug users.

By 2011, the quality management program Scoring Results had established 27 products, and for 24 of these products it was found that the implementation rate was high for 10 products, moderate for 7 products, and low for 7 products. Based on cognitive behavioral therapy, the protocols for the life-style trainings reached an implementation rate of not less than 100%. Several products which Scoring Results in 2013 added to its quality management products are the "Practice-based recommendations for GHB detoxification", the advisory report "Elderly and addiction", and the quick scan "Scoring results around recovery".

### *Health correlates and consequences (chapter 6)*

The incidence of HIV and hepatitis B and C among (ever) injecting drug users remains low since many years. Risk behavior (injecting and exchange of injecting material) is (very) low. HIV is mainly transmitted through sexual contact (both through men who have sex with men (MSM) and heterosexuals) and drug users only play a marginal role in new infections. The disease outcome of HIV in IDUs is however worse than in the other risk groups and the proportion of AIDS patients dying is highest in the risk group IDUs. Also the burden of chronic hepatitis C infection stays high among (current and former) IDUs.

Data on drug-related health emergencies show two trends which are reason for concern. First, there is a substantial increase in the number of people seeking medical treatment at emergency posts at large events for ecstasy-related emergencies. Data from DIMS already showed that the average MDMA concentration in ecstasy tablets has also increased in recent years. In addition, there are indications for a "normalization" of ecstasy use, which may result in less precautions taken while using the drug. Second, we see a general increase in the level of intoxication of emergencies presented, which also points to a more easy use of recreational drugs without taking into account possible consequences. Emergencies related to GHB use are also still relatively frequent. In the hospitals, an increase in the GHB-related emergencies was observed, but not in the other settings (ambulance transportation services, the forensic doctors, and the emergency posts at parties). The level of intoxication in GHB-emergencies is high compared to the other drugs.

New data showed that the prevalence of several mental health disorders (childhood and adult ADHD, externalising disorders, mood, anxiety) is higher among dependent drugs

users than in the general population. The mental health condition in non-dependent, but frequent users of cannabis was shown to be similar to that of the general population, with the exception of externalising disorders. The existence of mental health problems was higher among cannabis dependent patients seeking treatment in addiction care.

The number of acute drug-related deaths remained low. Between 1996 and 2011, the annual number of recorded drug-related deaths among residents fluctuated between a minimum of only 94 cases in 2010 and a maximum of 144 cases in 2001. In 2011, 103 cases were recorded, including 33 cases relating to opiates, 19 to cocaine and 51 to unspecified substances. The latter category mainly includes death due to multiple substance use, commonly including illicit substances as well as combinations with alcohol and/or medicines. The ageing of the population of problem drug users is reflected in an increasing percentage of the deceased aged 35 years and above, from 40% during the period 1991 up to including 1995 to 71% during the period 2006 up to including 2012.

### *Responses to health correlates and consequences (chapter 7)*

The monitor for drug-related emergencies (MDI) collects, in a standardized format, information of the incidence and type of acute emergencies related to drug use, and uses this information as direct input for preventive measures, both at the level of the professionals in the field as for policy makers. In recent years, the close collaboration with the Drugs Information and Monitoring System (DIMS) has proven to be very fruitful in the recent disturbances on the ecstasy and speed market (PMMA, 4-MA, high MDMA concentrations). Several other initiatives have provided information to professionals with a public task to inform them about strategies to handle aggression of persons under the influence of drugs, to provide guidelines regarding the "excited delirium", etc.

With regard to the prevention and treatment of drug-related infectious diseases, a strong decrease in the number of exchanged needles and syringes has been reported between 2000 and 2012, although all available signs indicate that those drug users in need of these harm reduction measures have access to them. Injecting drugs is no common practice in the Netherlands at the moment.

Several scientific studies assessed the impact of harm reduction on the prevalence of hepatitis C and HIV. They concluded that harm reduction measures could partly explain the marked decreases in HIV and HCV, but that the impact of the natural epidemic progression and demographic changes should also be taken into account when the benefits of harm reduction interventions are assessed. Another study concluded that the potential for targeted intervention depends on the actual existence and identification of different risk types, but also the willingness of individuals to enroll in intervention programs. These authors found that different strategies have to be applied to effectively minimize the spread of HCV and HIV in IDUs.

Treatment for HCV in IDUs is not yet common practice. However, in 2013 a project was started in which 6 of 11 addiction care institutions participate. The project aims to give a boost to hepatitis C screening and treatment.

### *Social correlates and social reintegration (chapter 8)*

Up to 2011, the Netherlands was still the best-performing economy on the European continent. Nonetheless, in that year Dutch citizens started to notice the consequences of the worldwide economic crisis that started in 2008. Unfortunately, policy interventions targeting

social inequality in deprived neighbourhoods had no effect. Nonetheless, together with Finland, the Netherlands was still the only Member State of the European Union in which homelessness had decreased in the past five years. However, the European Committee on Social Rights had to remind the Netherlands to ensure nationwide access to shelters for homeless people. Access to social relief is a legal right of all homeless people. However, being under the influence of drugs or alcohol was put forward in some shelters as an excuse to refuse social relief.

Although the Netherlands had to be reminded this way about the rights of homeless people, the Strategy Plan for Social Relief did show a success ratio of not less than 64% in 2011. By that year, more than 9,100 former homeless adults had now reached a stable mix of housing, income, and treatment. With regard to finding employment, some former addicts were successfully trained as an Expert By Experience and were employed this way at an institute for addiction care.

### *Drug-related crime, prevention of drug-related crime and prison (chapter 9)*

The number of Opium Act cases dealt with by the police, the Public Prosecution Service and the Courts increased in 2012. Around 8% of all cases in the criminal justice system concerns Opium Act offences. This percentage increased in recent years. There is a decreasing trend in the proportion of cases with hard drugs and an increasing trend in the proportion of cases with soft drugs. This might be related to the intensified enforcement efforts directed at cannabis production and the increased focus of the police on soft drugs dealing outside coffee shops within the framework of the tightened coffee shop policy in 2012.

The majority of the Opium Act cases is submitted to court. There is, however, a decrease in the proportion that is submitted to court. This seems to be caused by the implementation of the disposal of the Public Prosecution Service to impose sentences for certain crime types without referring them to the court, in combination with the increasing number of case dismissals due to policy reasons in 2012.

Court sentences in Opium Act cases constitute mainly of community service orders and/or unconditional prison sentences. In 2012 there are slightly less prison sentences for Opium Act cases and more community service orders than in 2011. Fifteen percent of the detainees on September 30, 2012, were convicted for an Opium Act offence.

The number of arrestees that was classified as a 'drug user' in the police registration decreased again in 2012. Their mean age is 42 years. A substantial proportion is a frequent offender. The majority is suspected of a property crime. This picture did not change in 2012 compared to 2011.

In 2012, the private club and the residence criterion for coffee shops were introduced in the Opium Act Directive and enforced in the three southern provinces from May 2012 until 19 November 2012. One of the aims was a reduction of drug tourism and related nuisance. An evaluation study showed that indeed drug tourism had decreased drastically. The degree of the nuisance experienced by people living in the direct vicinity of coffee shops had not changed significantly until November 2012. The nature of the nuisance had changed. It had shifted in nature from nuisance experienced in relationship to coffee shops and coffee shop visitors to nuisance due to drug dealing on the streets. The private club criterion was abolished per 19 November 2012.

Expenditures for Opium Act offences in 2011 are estimated at 395 million euros, of which 287,9 million is spend on hard drug related activities and an estimated 107,2 million on soft drug related activities. Expenditures for Opium Act offences account for 3.1% of the total expenditures for all kinds of offences. Most of the money is spend to the execution of sentences.

The organized crime in relation to cocaine, heroin, synthetic drugs and the large-scale professional cultivation of cannabis are defined as priority areas for enforcement by the police for the period 2013-2017. In the combat of organized crime the 'barrier' model is applied, which aims at disturbance of the logistic organization and the central processes in the criminal organizations. The confiscation of criminal revenues is a central element in the approach. The combination of administrative and criminal law enforcement and the co-operation of local and regional institutions like the Public Prosecution Service, the municipalities, the police, the Fiscal investigation unit, and the Tax Authorities is an important aspect in the approach. These institutions also organize support from the public and civil society. For municipalities, the main priority is to attack the cultivation of cannabis.

Problematic drug users/drug addicts in the Dutch criminal justice system are subject of case meetings in Safety Houses, where trajectories are set out for them; forensic care and behavioural interventions are offered to them, and Addiction Probation Services carry out several types of assistance. They are a target group for the measure of Placement in an Institution for Prolific Offenders.

### *Drug markets (chapter 10)*

The number of coffee shops, where the sale of cannabis is tolerated under strict conditions, shows a decreasing trend. In 1999 there were 846 coffee shops and in 2011 there were 651 coffee shops. At the end of 2012 there were 617 coffee shops, located in 103 of the 415 municipalities in the Netherlands. In April 2013 there were 614 coffee shops.

In addition to the national criteria the coffee shops have to adhere to in order to be tolerated, the majority of the municipalities with coffee shops applies additional local criteria as well, mostly with regard to the location of the coffee shop (like: not near schools or near youth facilities). Adherence to the tolerance criteria is controlled by municipalities and/or police. In 2012 a total of 56 violations of criteria were recorded (in 2011: 51). Two-thirds (64%) of the municipalities with coffee shops do not experience problems with the coffee shops.

In 2012 5,773 dismantlements of cannabis cultivation sites were reported to the National Police Forces. This number ranges over the years between 5,000 and 6,000 and the number for 2012 does not deviate from this pattern.

In 2012, 42 dismantlements of production locations of synthetic drugs are reported, more than in 2011. Sixty-six storage places of hardware, chemicals or both were discovered by the police and 68 dumpings of chemicals, more than in 2011.

The trend towards increasing purity of tablets sold as ecstasy at retail level increased in 2012. In this year, laboratory analyses revealed an average dose of 107 mg of MDMA per tablet (against 66 mg in 2009). Amphetamine purity strongly fluctuated in the past decade, which may be due to variations in precursor availability. When levels decrease, a compensatory increase in the concentration of caffeine can be observed.

Occasionally (potentially) dangerous substances are detected in samples sold as ecstasy and amphetamine (e.g. PMMA, 4-MA). In 2012 1.4% of the ecstasy samples

contained PMMA and this proportion showed a worrying increase to 2.7% in the first half of 2013. The increased MDMA concentration and dangerous 'adulterants' in ecstasy, together with observations of increased risk behaviour among some subpopulations of (young) drug users, increased the severity of non-fatal emergencies related to ecstasy use (§ 6.3).

Notifications of several fatal emergencies related to 'ecstasy' use were the reason for seven local and four national warning campaigns.

Several "new psychoactive substances" (or research chemicals) were notified in 2012 in consumer samples. Most common were 4-fluoramphetamine, followed by mephedrone, methylone, methoxetamine and 6-APB (BenzoFury). The number of samples containing 4-methylamphetamine, which was brought under control of the Opium Act in June 2012, dropped from 2012 to the first half of 2013.

The majority of the cocaine samples from consumers still contain medicines, especially levamisole (65% of the samples in 2012). In 2012 the purity of cocaine was higher than in 2011 (58% against 49%).

Between 2005 and 2012 the average concentration of THC in Dutch weed sold as most popular type fluctuated on average between 15% and 18%. A significant decrease was found from 15.5% in 2012 to 13.5% in 2013.

## ***Part A: New developments and trends***





# 1 Drug policy: legislation, strategies and economic analysis

## 1.1 Introduction

This National Report reviews the developments in the drug policy of the Netherlands up to November 2013.

In 2012 and 2013 several changes in legislative measures and law enforcement can be discerned in the Netherlands. On 1 January 2012 two new criteria to which coffee shops must adhere were added to the Opium Act Directive: the private club [B] club criterion and the residence [I] criterion. The Directive stipulated that the enforcement of these criteria should start in May 2012 in the southern provinces of Limburg, Noord-Brabant and Zeeland. The enforcement of these criteria in the rest of the country should start on 1 January 2013. In November 2012 the new government cancelled the private club criterion. The residence criterion was continued. The Opium Act Directive was changed. Since 1 January 2013 the residence criterion is in force for the whole country. The decision about when to start the actual enforcement of this criterion is taken at local level and it may be implemented in phases. Many drug tourists disappeared in the southern provinces of the Netherlands where the criterion was enforced as of 1 May 2012. A substantial proportion of residents, however, turned away from the coffee shops because of the required registered membership and the illegal cannabis consumer market increased. In November 2013 the Minister of Security and Justice therefore announced that the private club criterion would be cancelled.

The procedure to place cannabis with a THC-concentration of more than 15% on Schedule I of the Opium Act is still pending. The same is the case for the penalization of preparative or facilitating activities for professional large-scale cannabis cultivation. The mayors of the eight municipalities of the province of Limburg presented an elaborate plan for a pilot to regulate the cultivation of cannabis. Furthermore, the substance qat was placed on Schedule II of the Opium Act. Traders in new precursors of synthetic drugs were convicted for the first time and the combat against organised crime will be continued and tightened. Finally, the funding of anonymous e-mental health will be legally regulated.

All recent policy documents state that the Dutch drug policy has two cornerstones - and this was confirmed by the Minister of Health, Welfare and Sport during the major drug debate in the House of Representatives in March 2012: to protect public health and to combat public nuisance and drug-related crime (T.K. 24077-259; T.K. Handelingen 2011-2012-69). In the current Opium Act Directive the objective of the drug policy is described as: 'The [new] Dutch drugs policy is aimed to discourage and reduce drug use, certainly in so far as it causes damage to health and to society, and to prevent and reduce the damage associated with drug use, drug production and the drugs trade' (Stc 2012-26938).

## 1.2 Legal framework

### *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 Directive (Directive of the Public Prosecution Service)
- Victor Act (Wet Victor) – (administrative law)
- Regulation Heroin Treatment – (ministerial regulation)
- Regulation Opium Act Exemptions (ministerial regulation)

### *Laws and regulations with a broader scope but important for illegal drugs*

- Prisons Act (Penitenciaire 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)
- Directive for Criminal Proceedings for Adult Prolific Offenders (Richtlijn voor strafvordering bij meerderjarige veelplegers)
- 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)
- General Exceptional Medical Expenses Act (Algemene Wet Bijzondere Ziektekosten) - (health law)
- Community Support Act (Wet Maatschappelijke Ondersteuning - WMO) (health law)
- Plan of approach for social relief (Plan van aanpak maatschappelijke opvang) (policy letter)
- Forensic Care Act (Wet Forensische Zorg) – (criminal law)
- Compulsory Mental Health Care Act (Wet Verplichte Geestelijke Gezondheidszorg) – health care
- Road Traffic Act (Wegenverkeerswet)
- Admittance of Care Institutions Act (Wet Toelating Zorginstellingen (WTZi) (health care law)

In addition, there are policy letters with regards to the combat of organized crime (Bestrijding Georganiseerde Misdad) and with regards to the drug policy (TK 29911-1-85). These letters give the strategic framework for laws and regulations.

### *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 Netherlands has made the following reservation concerning the United Nations Convention of 1988: "The Government of the Kingdom of the Netherlands accepts the provisions of article 3, paragraph 6, 7 and 8, only in so far as the obligations under these provisions are in accordance with Dutch criminal legislation and Dutch policy on criminal matters."<sup>2</sup>

The Dutch Opium Act (1928), or Narcotics Act, defines the illegal drug-related activities and the sanctions that can be applied. It was fundamentally changed in 1976, when a distinction was made between drugs presenting unacceptable risks (Schedule I) and drugs like cannabis (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.

There are two procedures to place substances on the Opium Act Schedules: the 'normal' procedure by way of a governmental decree (*algemene maatregel van bestuur*) - which takes at least a few months- and an emergency procedure, giving the Minister of Health the possibility to place a substance immediately on an Opium Act Schedule.

### *New developments in the Opium Act*

By way of an emergency procedure, 4-methylamphetamine (4-MA) was placed on Schedule I on 13 June 2012, after it became clear that four people had died by using amphetamines which were mixed with 4-MA (Stc 2012-12249). Eventually, 4-MA was placed on Schedule I of the Opium Act by way of a governmental decree on 31 May 2013 (Stb 2013-207).

Qat was placed on Schedule II of the Opium Act on 4 January 2013 (Stb 2013-1). Qat is mainly used by the Somali community in the Netherlands and 11% of the users can be called problematic users. The reasons to place qat on the Schedule II of the Opium Act were that qat is bad for the health, and that qat causes social and societal damage and public nuisance. Another reason is that the trade and possession of qat is forbidden in most other European countries (Stb 2013-1). The Ministry of Security and Justice announced that the enforcement of qat will be primarily directed to the trade of this substance. Because qat is placed on Schedule II, like cannabis, some confusion arose whether the sale of qat was also tolerated. The Minister of Security and Justice made it clear that the toleration of Opium Act substances is confined to cannabis sold by formally tolerated coffee shops. Qat for personal use does not have a high enforcement priority, but will be confiscated when found on a person (T.K. Aanhangsel-2549).

In 2011 an advisory committee advised to categorize cannabis with a THC-concentration of more than 15% as a hard drug (Schedule I of the Opium Act) (Expertcommissie Lijstensystematiek Opiumwet 2011). According to the committee, cannabis and hashish with a THC content in excess of 15 percent increases the risks for public health. Transferring high potency cannabis to Schedule I means that the punishments for trafficking and cultivating heavy cannabis will be increased and that coffee shops can only sell less potent varieties of cannabis. In the plans of the new Cabinet (Rutte II) of October 2012 the intention to introduce a legal limit for the percentage of active ingredients in soft drugs was repeated (VVD en PvdA 2012; see also T.K. 24077-293).

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<sup>2</sup>(<http://www.minbuza.nl/producten-en-diensten/verdragen/zoek-in-de-verdragenbank/1988/12/003363.html>; voorbehoud Koninkrijk der Nederlanden, 10 maart 1999).

The procedure to place cannabis with a THC-concentration of more than 15% on Schedule I (hard drugs) started on 26 March of 2013 by sending this decision for advice to the Council of State. In September 2013, special advices of some relevant stakeholders, which were prepared for the Minister of Security and Justice, were finally published after specific questions of a Member of Parliament (T.K. Aanhangsel-78). The procedure is still pending.

In July 2011, a bill to add a new article to the Opium Act was published, including the advice of the Council of State (Stc. 2011-13125; T.K. 32842-2 and 3). The new article 11a aims at penalization of preparative and facilitating activities for illegal professional large-scale cultivation of cannabis. The grow shops are an example of such facilitators of illegal professional and large-scale cannabis cultivation. Until now it was difficult to prosecute these preparatory acts if a connection with criminal organisation could not be proved. There may still be, however, practical problems, for example, the fact that many products sold by grow shops are normal products which are also sold at garden centres and other 'normal' shops. The bill was approved by the House of Representatives on 10 October 2013 and is now (November 2013) discussed in the Senate (E.K. 32842-B).

#### *Other new legislative initiatives in relation to drug law offences and substance use*

The BIBOB Act (Public Administration Probity Screening Act) gives local authorities the power to screen certain new applications for permits, operating licenses, tenders or grants in order to prevent them from unwittingly facilitating organized crime. A bill to enlarge the scope of this Act, to improve the information position of the administrative bodies, to improve the legal protection of the screened persons and to extend the advice period was sent to Parliament in March 2011. The most important proposed change is that also the real estate sector, the branches of games of chance and head shops, and firework importers will be brought under the scope of the BIBOB Act. The Evaluation and Extension Act BIBOB came into force on 18 April 2013 (E.K. Handelingen 2012-2013, 22-3).

According to the Road Traffic Act it is forbidden to drive under the influence of a (illegal) substance affecting one's driving ability. The Ministers of Security and Justice and Transport have prepared a bill to change this Act in order to be better able to detect these drivers. This bill is still in discussion in the House of Representatives (T.K. 32859-9).

For more information see § 9.2

A bill to change the Code of Criminal Procedure was announced on 17 August 2012. The change aims at pushing back acts of violence under the influence of substances and would, if accepted, give a legal basis for the police to force violent offenders to a check up with an alcohol and/or drug test to prove the use of substances. Committing an act of violence under the influence of substances could raise the sentence. In 2013 this bill was approved by the Cabinet and sent to Parliament.<sup>3</sup> Only when the threshold values exceed 1.0 milligram alcohol per liter blood and for drugs (cocaine or amphetamines) 0.05 milligram per liter blood, raising a sentence may be considered by the Public Prosecution Service.

#### *Forensic Care*

The Forensic Care Act, which creates an new system of forensic care, is approved in the House of Representatives and is now (November 2013) discussed in the Senate (E.K. 32398-F). The Act creates an new system of Forensic Care. On request of the government several agencies, amongst which the Council for Public Health and Care, wrote an advice on

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<sup>3</sup><http://www.rijksoverheid.nl/regering/nieuws/2013/06/21/hogere-straf-voor-geweld-onder-invloed-van-drugs-of-alcohol.html>.

how to implement this Act successfully. Because the core of the new system is to strengthen the connection between the judicial system, forensic care and the regular mental health care, both the Minister of Security and Justice and the Minister of Health, Welfare and Sport should propagate the same vision on the care for persons with a severe mental illness who are also offenders (RVZ 2012). The most controversial part of this Act is a regulation stipulating that in certain cases the medical records of suspects who refuse to participate in a Pro Justitia investigation can be obtained without consent of the suspect (E.K. 32398-F).

#### *Medicinal cannabis*

Since 2001, the Office for Medicinal Cannabis (OMC) is the Dutch government office which is responsible for the production of cannabis for medical and scientific purposes and only delivers the raw material (<http://www.cannabisbureau.nl/en/>). Four types of medicinal cannabis are available through pharmacies: Bedrocan, Bedrobinol, Bediol and Bedica. There is still no official “cannabis medication” produced and registered by a pharmaceutical company. The OMC was exploited cost-effective in 2010. Some Dutch health insurance companies reimburse medicinal cannabis in certain circumstances (T.K. Aanhangsel-2461). According to the Dutch Foundation for Pharmaceutical Statistics medicinal cannabis was in 2012 11,000 times supplied to 2,000 different patients. That was an increase of about 30 per cent in comparison with 2011<sup>4</sup>. The last years about 100 kilo of medicinal cannabis is exported to Italy, Finland and Germany ([www.sargasso.nl](http://www.sargasso.nl)).

#### *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) (see also § 9.3). This act refers to all prolific offenders, not only addicts. One can be confined to ISD for at most two years. The primary objective of the ISD Order is to safeguard society from the frequent offences committed by prolific offenders.

Another objective is to reduce recidivism by offering treatment and rehabilitation. In order to investigate the effects of the ISD a (retrospective) quasi-experimental research was set up: for four years 554 offenders with an ISD Order were compared with a comparable group of prolific offenders without an ISD Order. Although the recidivism of the ISD-group was very high (72%), it was less high than the recidivism of the control group with regular detention (recidivism rate between 84% and 88%) (Tollenaar and Van der Laan 2012). The implementation of the ISD Order by the Custodial Institutions Agency was investigated by the Security and Justice Inspectorate (Inspectie Veiligheid en Justitie 2013). The trajectory of an ISD-conviction includes an intramural, a half-open and an extramural phase. Most of the ISD convicted are placed in a special unit of a jail or in a penitentiary psychiatric unit. In August 2012 there were in total 467 ISD convicted on 14 different locations. Most of them attend group behavioural interventions. In general, the Inspectorate is satisfied with the way the ISD Order is executed.

For more detailed information on this subject: see § 9.3.

#### *Medical heroin prescription*

In 2013 there are still 740 treatment places for medical heroin prescription operational at 18 units in 16 different municipalities (Regulation Heroin Treatment). Since 15 October 2009

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<sup>4</sup><http://www.pw.nl/rubrieken/sfk/apotheken-verstrekken-meer-cannabis>.

heroin (diamorphine) can be prescribed by physicians working at municipal treatment units for treatment resistant heroin addicts to addicts who are registered at that units

#### *New bill to regulate structural funding of anonymous e-mental health*

Since 2013 the funding of the treatment of mental health and addiction care is directly linked to insured individuals, meaning that health insurance companies only reimburse costs which are traceable to concrete persons. Neither the Health Insurance Act nor the General Exceptional Medical Expenses Act allow the funding of 'prevention and services' in a more general sense. However, there is a group of clients with substance use problems or who need psychological treatment and who are not likely to contact regular care providers. They may be treated with anonymous e-mental health interventions. To treat these clients with evidence-base e-mental health interventions can be cost-effective. There is also a group of seriously endangered clients (mostly women) who can better be treated in such a way that they cannot be traced. Too often women from ethnic minorities are the victim of honor killings. Also, certain kind of girls are the victim of lover boys. The government want to protect these vulnerable groups. If they receive treatment they may not be traceable for their offenders. The reimbursement of their treatment cannot be funded with the existing Health Insurance Act. The structural funding of both anonymous e-mental health and the anonymous funding of the care for seriously endangered clients will be regulated by changing the Health Insurance Act and the General Exceptional Medical Expenses Act (T.K. 33675-3). In order not to interrupt the ongoing subsidies for anonymous e-mental health, the Minister of Health decided to order a policy framework which will be valid until the bill is passed (Stc 2013-26229). Care providers can, under certain conditions, apply for grants to offer anonymous online psychological treatment to individuals. The grants range from a minimum of € 100,000 to a maximum of €700,00 by care provider per year.

#### *Repairing a flaw in the addiction care funding system*

Until 2008, the funding of the care and cure of persons with problematic substance use was based on the General Exceptional Medical Expenses Act. Since then the cure is funded through the Health Insurance Act and the care through the General Exceptional Medical Expenses Act. The regulations to enter the more or less free market of addiction care were relaxed. Many new private providers of addiction care were authorized to deliver insured care through the Admittance of Care Institutions Act. After the investigation of a health insurance company (DSW) it became clear that the newly admitted addiction care institutions had claimed only the most expensive possibilities. The investigators also concluded that the admittance procedure to start a new mental health or addiction care institution is too simple, that the claims for insured addiction care are not clear and that it is complicated to check whether the claims are appropriate. The Minister of Health announced to change the Admittance of Care Institutions Act (T.K. 24077-308; T.K. Aanhangsel-1136).

#### *Implementation of Laws*

##### *Changes in the Opium Act Directive*

The Dutch coffee shop policy became more restrictive on 1 January 2012. Two new criteria that coffee shops must adhere to in order for them to be tolerated were added to the Opium Act Directive for the Public Prosecution Service: the private club [B] criterion and the residence [I] criterion. The B-criterion stipulated that coffee shops could only permit access to, and sell to, registered coffee shop members. Coffee shops could furthermore only have a

maximum of 2,000 registered members per calendar year. The members had to be documented in a verifiable membership list. The I-criterion stipulated that only residents of the Netherlands would be allowed to become coffee shop members and hence to enter the Dutch coffee shops. The criteria were enforced from May 2012 onwards, only in the southern provinces of Limburg, Noord-Brabant and Zeeland. On 1 January 2013, the Opium Act Directive of the Public Prosecution Service was expanded with the residence criterion (Stc. 2012-26938). The enforcement of this residence criterion is in close consultation with the municipal authorities and may be implemented in phases (Stc. 2012-26938). The private club criterion had been abolished on 19 November 2012, and was not included in the Opium Act Directive.

*Public Administration Probity Screening Act (Wet BIBOB) (see also chapter 9)*

The scope of the BIBOB Act relates to: 1. The licensing system under the Licensing and Catering Act; 2. Environmental licenses and building permits; 3. Operating licenses for among others hotel and catering establishments, including coffee shops, sex establishments, smart shops and grow shops; 4. Licenses for persons and goods transports by road, opium exemptions, and licenses for the sale of real estate by housing associations. In the near future the scope of this act will be enlarged. 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 central BIBOB-office cooperates closely with the Regional Centres for Information and Expertise (RIEC's). 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 2011 the BIBOB-office received an order of the Minister of Security and Justice to carry out a national screening of coffee shops. In 2012 46 existing coffee shops were screened and 42 of them were judged to be 'very dangerous' (Landelijk Bureau Bibob 2012). See also chapter 9.

*Combating organised crime in the Netherlands*

According to the Minister of Security and Justice, combating organised crime has a top priority in the Netherlands (TK29911-84). Production of and importing or exporting of drugs (cocaine, heroin and synthetic drugs and the professional large-scale cultivation of cannabis) is one of the priority areas of the combat against organised crime. In December 2012 both the quadrennial National Threat Assessment Organised Crime (NDB) (see National Report 2012) and the Monitor Organised Crime in the Netherlands were published. Besides trade and production of drugs, the NDB analyses trafficking in human beings, child pornography, illegal trade of firearms, the production of counterfeit money, and has a focus on money laundering, fraud and property crime. The NDB describes and analyses the trade and smuggling of cocaine and heroin, and the production and trade of synthetic drugs and cannabis. The harbours of Antwerp and Rotterdam and Schiphol Airport are still important import hubs for cocaine and heroin. The Netherlands remained an important distribution country for these substances. The organisation of these markets (both the demand and the supply side) is stable, only sometimes smuggling routes are changed. Many Dutchmen are involved in the smuggling of hard drugs (T.K. Aanhangel-1189). For synthetic drugs (amphetamines and MDMA—ecstasy) and cannabis, the Netherlands remained a major production and distribution country. New precursors were discovered to produce synthetic drugs.

In 2012 about 70 million euro was confiscated from criminals, against 44 million euro in 2009. Most of the municipalities are aware of the (potential) presence of organised crime and value the Regional Centres for Information and Expertise (RIEC's) (T.K. 29911-84). The combat against organised crime will be tightened: in 2014 40 per cent of the criminal partnerships must be under investigation by the police and the Public Prosecution Service. Organised crime will be opposed by an increasing organised government. The integrated approach consists of a close connection of administrative, criminal justice, fiscal and private law instruments, and will be intensified (T.K. 29911-79).

A study on organised crime states that most current research to criminal networks fail to take into account the state of flux that is characteristic of organised crime. The mapping of organised crime is useful but is always one step behind – a shortcoming which could be a problem against a threat that changes rapidly and constantly. The authors suggest to direct criminal research to detecting the emergence of criminal networks in its preventive and early warning phase. Research is needed to identify and address legal obstacles to the sharing of information between and within governments needed to detect criminal networks or make vulnerability assessments (Van Dongen et al 2012).

#### *Action against synthetic drugs*

Organised crime with regards to synthetic drugs is still a priority area for the police and the Public Prosecution Service (T.K. 29911-79).

In March 2012 the National Crime Squad published its quadrennial analysis of the criminal developments concerning synthetic drugs in the Netherlands. (For the reported trends see NR 2012).

Probably as a consequence of the intensified investigation to BMK, the precursor for amphetamines, the illegal producers of these profitable drugs switched to the pre-precursor alpha-phenylacetoacetonitrile (APAAN). In conversion laboratories APAAN is converted to BMK. Since 2010 an increasing amount of APAAN was confiscated, in the Netherlands as well as in other European countries (T.K. Aanhangsel-2463). APAAN is not (yet) an “registered substance” as defined by the EC Regulation 273/2004 (Precursors) and the Dutch Abuse of Chemical Substances Prevention Act. However, it is on the “Voluntary Monitoring List”. The trade of these substances are being monitored by the authorities. In December 2012 the Court of Den Bosch convicted a person who was caught with many kilos of APAAN, with the motivation that the use of APAAN is considered as a preparatory act for the production of hard drugs. This was the first time that a person in the Netherlands was convicted on this charge. According to the judge APAAN is not a psychoactive substance as defined by the Opium Act, section 3a (T.K. Aanhangsel-2463).

Since GBH was placed on Schedule I of the Opium Act in 2012, the Public Prosecution Service focused on the trade in its precursor GBL (gamma-butyrolacton). GBL is on the “Voluntary Monitoring List” of the EC Regulation 273/2004. In August 2013 the Court of The Hague convicted a person, for the first time in the Netherlands, on the charge of trading in GBL (rechtbank.nl ecli:nl:rbdha:2013:9948).

Especially in the province of Noord-Brabant there was a rise of discharges of chemical waste left over from the production of synthetic drugs.

#### *Local coffee shop policy initiatives*

In the past year a number of municipalities have expressed their interest in developing a pilot regarding the regulation of cannabis cultivation for recreational use. After a request from Parliament the Minister of Security and Justice agreed to make an inventory of all the municipalities who have expressed such an interest, and the content of their plans. The



Minister of Security and Justice has however repeatedly stated that under existing legislation such a pilot is not possible in legal terms, and also undesirable from a policy perspective. Two of the most elaborate plans come from the eight coffee shop municipalities in the province of Limburg and from the municipality of Utrecht. In addition, the municipality of Utrecht has proposed a special treatment experiment for about 80 chronic psychotic patients with cannabis dependence. This population now predominantly consumes cannabis from coffee shops including types of cannabis which may provoke psychoses, i.e. Dutch weed with high THC content and low cannabidiol (CBD) content (see also chapter 10). With a special type of cannabis from the Office of Medicinal Cannabis the plan of the municipality is to investigate whether these patients can be persuaded to use other kinds of cannabis and whether this will reduce psychotic symptoms. In case this treatment experiment will be approved and carried out, it will be carried out by addiction care institutes (Gemeente Utrecht 2013).

There seems to be confusion about the legal status of municipal cannabis smoking bans. Although the Council of State ruled in 2011 that municipal byelaws banning the smoking of cannabis in public places is a duplication of article 3 of the Opium Act and as such not valid, the Court of Amsterdam ruled in October 2012 that the Council of State is wrong in their judgment. The municipal byelaw is motivated by public nuisance whereas the Opium Act is primarily concerned with health care interests (rechtspraak.nl: eclli:nl:rbams:2012:by1098). However, the Court of Rotterdam repeated in February 2013 the judgment of the Council of State and prohibited the local byelaw banning smoking of cannabis in Rotterdam (rechtspraak.nl: eclli:nl:rbrot:2013:bz0314). In the meantime, cannabis smoking bans on schoolyards were ordered in Amsterdam.

#### *Other drug related societal questions*

The Rutte I Administration (2010-2012) decided for a fundamental reorganization of the Dutch police. In 2013 one National Dutch Police organization was realized, centrally managed by the Chief Constable. The operational strengths of the police force of 49,500 fte is divided between 10 regional units, 43 districts and 167 basic units. Locally, the role of the mayor and the Public Prosecutor will not change, though it is not unthinkable that the influence of the Minister of Security and Justice and the (new) police chiefs of the regional units will become greater in the new National Police Organization.<sup>5</sup> The implementation of the structural changes is still in full course (T.K. 29628-421).

One of the items of the yearly Integral Security Monitor of Statistics Netherlands is to measure the experienced drug related nuisance. Although 24 per cent of the respondents reported that drug use or drug trade occurred in their own neighbourhood, in 2012 only 4 per cent of the respondents reported drug related nuisance. That is less as in the previous years. Most nuisance in the neighbourhoods is reported in association with kids hanging around (CBS 2013). See also Chapter 9.

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<sup>5</sup><http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2012/06/27/samenvatting-concept-inrichtingsplan-nationale-politie.html>.

## **1.3 National action plan, strategy, evaluation and coordination**

### *1.3.1 National Drug Strategy*

In May 2011, the government announced its objectives for the near future in a special drugs policy letter (T.K. 24077-259). The following advices of the Advisory Committee on Drugs Policy from 2009 were endorsed (Adviescommissie Drugsbeleid 2009):

- Use of drugs and alcohol by minors must be tackled far more rigorously.
- Coffee shops need to return to their original purpose: small scale points of sale for adult local users
- Reinforcing the combat against organized crime.

The agreements on a new drug policy of the Coalition Agreement of the Rutte I Administration were specified in a policy letter. Most of the measures were continued by the new Administration (Rutte II) from November 2012 onwards (except for the Closed club criterion and the obliged Distance criterion for coffee shops):

1. The government intends to bar non-residents from the Dutch coffee shops.
2. The Rutte II Administration decided that the Distance criterion is no longer obliged and will not become one of the national toleration criteria for coffee shops in the Opium Act Directive. However, the coffee shop municipalities are recommended by the government to implement a distance of 250 or 350 metres between a coffee shop and a school (T.K. Handelingen 2012-2013, 41-8).
3. The use of drugs will be discouraged on schools (T.K. 24077-259).
4. The government will propose a bill to compel schools to register safety incidents, including incidents with drugs.
5. The Public Administration Probity Screening Act (Wet BIBOB) will be used more intensely to screen owners of coffee shops in order to detect connections with criminal organisations.
6. The new Opium Act Directive and a new article 11a of the Opium Act are proclaimed (see § 1.1)
7. Combating organized crime will be intensified: the proportion of criminal organisations against which judicial proceedings will start after investigation shall double from 20% to 40% in 2014. An integrated approach against organised cannabis cultivation is prioritized in Central-Brabant, Amsterdam and Maastricht.
8. The prevention policy of this government will target early detection and treatment of problematic behaviour of young people, including substance use
9. In the field of addiction care the new government will give more emphasis to e-health interventions, to more coherence in the approach of multi problem addicts and to the aftercare and reintegration of addicts finished with treatment (T.K. 24077-259).

### *1.3.2 New drug-related policies*

#### *Inventory of drug trafficking through the Internet*

In spring 2012 the Minister of Security and Justice commissioned an investigation to the size of the trading of drugs through the Internet. This research was carried out by the police (T.K. 24077-295). The main conclusions were:

- Through several Dutch language websites all kinds of drugs are regularly offered: these are targeted to Dutch speaking users.
- It is possible that large quantities of drugs are being sold by the Internet.
- On the Internet there is supply of New Psychoactive Substances, of the precursor GBL and of cannabis cultivation requirements for cannabis nurseries.
- Two pathways to offer drugs were discerned: suppliers who use public accessible websites and suppliers using anonymous TOR networks.
- The Netherlands is a country of origin of supplying drugs through the Internet.

The investigators were unable to pronounce on the real size and nature of the drug trade through the Internet. However, it is clear that the Internet is used by drug traffickers and should be watched by crime investigators. The inventory will be followed by a pilot criminal investigation to persons supplying drugs through the Internet and the Minister of Security and Justice announced investments to augment expertise on this subject w (T.K. 24077-295).

#### *New comprehensive Prevention Policy Paper (Alles is Gezondheid)*

A new comprehensive National Prevention Programme ('Everything is Health') will be rolled out from 2014 to 2016. The priority themes are diabetes, obesity, smoking, alcohol use, depression and doing exercises. One of the many targets is to stimulate the participation of people with mental health and/or addiction problems on the labour market. Another target is to strengthen the healthy and safe entertainment areas and neighbourhoods for young people and to drive back the use of alcohol, drugs and tobacco (Ministerie van VWS 2013) (see also chapter 3).

#### *1.3.3 The Dutch coffee shop policy*

The implementation and consequences of the private club- and the residence criterion between May and November 2012 in the three southern provinces has been evaluated (Van Ooyen et al. 2013). The evaluation revealed that this intervention required activities of various parties – the national government (in particular the Ministry of Security and Justice), the Board of Procurators General, the municipalities, the police, the district offices of the Public Prosecution Service, and the coffee shop owners. The municipalities differed in their implementation of the new criteria; some municipalities responded with some reluctance and restraint, whereas others were more proactive (Van Ooyen and Van der Giessen 2013). Considerable changes have taken place on the cannabis consumer market in the south of the Netherlands between 1 May (the start of the enforcement of the B- and I-criteria) and October-November 2012:

- Drug tourists mostly disappeared.
- The number of visits to coffee shops decreased drastically (Nijkamp and Bieleman 2013).
- Cannabis users were purchasing their cannabis on the illegal market significantly more often. The cannabis users in the sample of the street survey purchased their cannabis less often from coffee shops and more often from mobile phone dealers, dealers selling from the street or buildings other than coffee shops and from or through friends (Korf et al. 2013). According to Van der Torre et al. (2013) the abolishment of the closed-club

criterion in November 2012 has caused a return of clients to the coffee shops. Clients of coffee shops turned their back to the illegal market.

- The degree and frequency of the nuisance experienced by people living in the direct vicinity of coffee shops changed little, but there was a shift in the nature of the nuisance. Prior to 1 May 2012, local residents who lived in the direct vicinity of coffee shops attributed the nuisance they experienced mostly to the coffee shops. After six months, the nature of the nuisance had shifted to nuisance due to drug dealing on the streets (Snippe and Bieleman 2013).
- These changes became apparent quickly in the southern provinces after the implementation of the new criteria, but were not observed in the comparison group.

Three factors seem to have contributed to the disappearance of the drug tourists:

- Coffee shops barred access to non-residents of the Netherlands, regardless of local variations between municipalities in the frequency and method of coffee shop inspections. This limited the availability of cannabis to non-residents as intended by the new policy.
- The parties participated in a coordinated communication campaign before and during the implementation of the new criteria. The target audience became well aware of the new rules through the joint efforts of the parties.
- The police concentrated its efforts on law enforcement and the investigation of the illegal market (taking into account local priorities for enforcement). Because of the police effort, the opportunity to purchase cannabis (illegally) in the Netherlands was limited.

The drastic drop in the number of visits to coffee shops is also due to the fact that, more so than anticipated, many residents of the Netherlands declined to register as coffee shop members. This can be attributed to resistance against and distrust of the registration system. Particularly younger coffee shop visitors aged 18 to 23 refused to become registered coffee shop members (Nijkamp and Bieleman, 2013). This is the main reason why, in November 2013, the Minister of Security and Justice announced that the private club criterion would be abolished. According to Van der Torre et al. (2013), this has caused a return of clients to the coffee shops and a decline of the illegal retail market.

The shift in cannabis purchasing behavior amounts to a serious adverse side effect in light of the public health goal of the coffee shop policy (to keep separate the user markets for hard drugs and soft drugs and to provide adult consumers with a safe and non-criminal environment to purchase and use their cannabis) because the illegal drug market poses an increased risk of merging the hard drug and soft drugs markets.

The private club- and the residence criterion were originally slated to go into effect nationally 1 January 2013. However, the private club criterion was abolished on 19 November 2012. Coffee shops were no longer required to be private clubs with registered members. The residence criterion has been continued in a modified form, and has been in effect nationally since 1 January 2013. The final report, to be published in 2014, will evaluate the further developments.

The study of Van Ooyen et al.(2013) took place on a national level. There was also local research into the consequences of the new criteria for coffee shops:

Three local studies were conducted as well.

- Snippe and Bieleman (2012) conducted research in Dordrecht, a medium sized city with 8 coffee shops which was located right outside the southern provinces. Dordrecht decided to introduce the two new criteria in July 2012 (although it was officially not obliged to do this), because of the risk of displacement of coffee shop visitors from the southern provinces to Dordrecht. Snippe and Bieleman conducted interviews with different groups of stakeholders; in addition they conducted field research and collected police registration data. The experiences in two cities nearby were also assessed. The study was carried out in September-November 2012 and covers the period July-November 2012.
- Van der Torre et al. (2012) conducted research in the city of Tilburg in 2012. Tilburg is a city in one of the 3 southern provinces, which enforced the new criteria per 1 May 2012. It has 11 coffee shops. Van der Torre et al. conducted interviews and field research, and collected police registration data. Tilburg had an estimated 18-20% of non-resident coffee shop visitors before the introduction of the new criteria.
- Van der Torre et al. (2013) report about the situation in 2012 and 2013 in Maastricht. This city is located close to the Belgian and German border. It has 14 coffee shops which attracted a lot of non-resident visitors. Maastricht's citizens suffered from the nuisance related to the drug tourism. Maastricht combined the introduction of the new criteria with an intensive communication campaign towards drug tourists and it encouraged its citizens to report drug nuisance on a special phone number or (anonymously) on a website. The police reacted actively on these reports. Most coffee shops closed their doors out of protest per 1 May 2012, but one after the other opened again in the course of the months. Coffee shop exploitants in Maastricht chose an activist approach against the new measures. Van der Torre et al. conducted interviews and field research and collected police registration data.

Most results of these three studies confirm those of Van Ooyen et al. (2013):

- The number of coffee shop visitors decreased substantially after the introduction of the new criteria. Coffee shop exploitants in Dordrecht reported 30 to 70% less visitors (Snippe and Bieleman 2012; Van der Torre et al. 2012; 2013).
- Especially young adults stayed away from the coffee shops (Van der Torre et al. 2012).
- The number of drug tourists also decreased substantially (Snippe and Bieleman 2012; Van der Torre et al., 2012; 2013). According to Van der Torre et al. (2013) this lead to less trafficking towards and from the coffee shops.
- The illegal retail market for cannabis increased and more drug incidents (drug dealing, drug running) were reported by the police (Snippe and Bieleman 2012; Van der Torre et al. 2012; 2013). The illegal market is partly invisible because it takes place out of the sight of citizens or the police (Van der Torre et al., 2012) or it dispersed to different parts of the city (Snippe and Bieleman, 2012). According to Snippe and Bieleman, this was a short-term effect which disappeared after a while, probably due to alert enforcement by the police. According to Van der Torre et al. (2013) the abolishment of the closed-club criterion in November 2012 has caused a return of clients to the coffee shops. Clients of coffee shops turned their back to the illegal market.
- The nuisance around the coffee shops as reported by neighbours stayed the same (for half of them), increased (for one quarter) or decreased (for 9%) (Van der Torre et al. 2012).

Snippe and Bieleman (2012) and Van der Torre et al. (2012) also report that:

- After a while, when the rules with regards to membership were implemented more flexible and controls of coffee shops were reduced, residents returned to the coffee shops again. They also reported to return to the coffee shops because of their bad experiences on the illegal market and because they used up their stashes of cannabis.
- There were some displacement effects from coffee shops in cities where the criteria were implemented to coffee shops cities in areas where the new criteria were not implemented (yet). A 20% to 30% increase in the number of visitors (residents as well as non-residents) was reported, but there was no hindering increase in nuisance.
- It was concluded that the cannabis retail market in Dordrecht did not change much.
- Van der Torre et al. (2013) report displacement of the cannabis retail market from the south of the Netherlands (i.c. Maastricht) to Belgium.

In 2013, the residence criterion was continued. Some municipalities enforced with high priority in 2013 (like Maastricht), others gave it low priority (like Amsterdam and Rotterdam), which in practice means that non-residents still can enter a coffee shop and buy their cannabis in a coffee shop.

## 1.4 Economic analysis

This paragraph reviews the information that is available for the Netherlands about drug-related expenditures. No integrated studies have been conducted recently into drug-related public expenditures. Moolenaar et al (2013) show that in 2011 expenditures for Opium Act offences are estimated at € 395,0 million (in nominal amounts), of which € 287,9 million is spent on hard drugs and € 107,2 million on soft drugs (see § 9.1).

Nonetheless, new (albeit fragmentary) information is available about the expenditures that are made by the regular institutes for addiction care, some private addiction clinics, and about some medical expenditures.

### *Public expenditures on addiction care*

In the Netherlands, institutes for addiction care are financed in a complex way from different resources. As a rule, they receive their funding from the Ministry of Health, Welfare, and Sport; the Ministry of Social Affairs and Employment; the Ministry of Security and Justice; the provinces; the municipalities; the health insurance companies; additional temporary funds; and some private funding. For all these funding sources, it is not clear beforehand which part of the funding will ultimately be spent on addiction care. In 2011, the health insurance companies reimbursed 254 million euros for the treatment of alcohol addiction and 250 million euros for the treatment of other addictions.<sup>6</sup> However, the health insurance companies only finance a part of the total addiction care. Therefore, there is no direct information about the total public expenditures on addiction care. However, by means of the annual accounts of institutes for addiction care, an indirect estimation can be made of the total expenditures.

In the Netherlands in 2012 there were still seven regular institutes for addiction care that had not merged yet with an institute for mental health care. In 2012, these seven institutes had spent a total of about 461,182,000 euros.<sup>7</sup> According to the National Alcohol

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<sup>6</sup><http://www.vektis.nl/index.php/nieuws/cijfers-en-feiten/364-kosten-verslavingszorg-stijgen-licht-in-2011>.

<sup>7</sup>[www.jaarverslagenzorg.nl](http://www.jaarverslagenzorg.nl).

and Drugs Information System (LADIS), in which all these seven institutes participate, these institutes had given treatment to 63% of all the addiction clients (IVZ, personal communication 28-08-2013). The remaining 37% of the addiction clients had been treated in an institute that merged with mental health care. For these merged institutes, it is not clear which part of their budget was spent on addiction care and which part on mental health care. Nonetheless, by extrapolating figures of the non-merged addiction care, it can be estimated that the total expenditures on addiction care in 2012 will have amounted to about 732,035,000 euros. The proportion of the drug clients being 47.8% (Wisselink et al. 2013), it can be estimated that a total of 349,913,000 euros has been spent on treating drug addiction. It should be noticed that this amount also includes funding of the drug addiction care by the Ministry of Security and Justice.

This estimation does not yet include the costs of the care and treatment that addicts receive outside the regular addiction treatment, the costs of addiction treatment in institutes for mental health care only, and the costs of addiction treatment given by private clinics.





## **2 Drug use in the general population and specific targeted groups**

### **2.1 Introduction**

Drug use in the general population has been assessed in the National Prevalence Survey on substance use every four years between 1997 and 2009 (for data see previous national reports). Since then, changes in data collection methods precluded reliable estimates of drug use. However, in the framework of the national coordination and integration of monitoring systems on lifestyle behaviors, core data on drug use will be collected annually as of 2014 in the General Health Questionnaire by Statistics Netherlands, without suffering from the limitations of the prior assessments (e.g. low sample size and low net response rate). New prevalence data are expected in 2015. Moreover, every four years a more detailed assessment on substance use, including drug use, will be carried out in the context of an additional Lifestyle Monitor.

In the current report, new data are presented on estimates of the total amount of cannabis consumed in the population. The estimates incorporate data from the latest (2009) population survey.

There are several sources to monitor substance among pupils in the Netherlands (HBSC, ESPAD, Dutch School Surveys). The latest data, described in the previous National Report, refer to the Dutch School Survey in 2011 and the ESPAD study in 2011. The key findings will be briefly summarized in the current report.

In previous reports, additional information has been included on drug use in a variety of targeted populations. In the current 2013 report, findings from a web survey on substance use among frequent visitors of parties and festivals will be described, as well as qualitative data from the Amsterdam Antenna survey 2012 on trends in drug use among nightlifers and neighbourhood youth.

### **2.2 Drug use in the general population**

There are no new data on drug use in the general population (ST01). General population surveys showed that recent and current drug use remained overall stable between 1997 and 2005. A change in data collection method in 2009 (shift from CAPI to CASI) precluded the determination of trends between 2005 and 2009, and in subsequent years. As indicated new data will be available in 2015.

#### *Estimation of cannabis consumption*

Estimates of the amount of cannabis consumed annually usually do not take into account differences in consumption patterns by different types of users and variations across countries. In a project on the European drugs markets commissioned by the European Commission, it was aimed to describe and compare characteristics of different types of cannabis users and their consumption patterns in seven EU Member States, including the Netherlands, and to estimate the amount of cannabis consumed annually per user group (Van Laar et al. 2013). Data were collected by means of a web survey which was launched in spring 2013. The final net sample consisted of 4,126 persons who had consumed cannabis at least once in the past year. They were classified on the basis of their number of cannabis use days in the past 12 months into four groups: infrequent users or chippers (<11

days), occasional users (11-50 days), regular users (51-250 days) and intensive users (>250 days). For the Netherlands, it was found that from the cannabis users 44% were chippers, 15% were occasional users, 25% were regular users, and 17% were intensive users. The total amount of cannabis consumed per year for the Netherlands was estimated between 44 and 69 tons. This amount excludes cannabis consumption by drug tourists. As for all countries, the relatively small group of intensive users was found to be responsible for the largest part of the total amount of cannabis consumed: 77%, against 21% for the regular users, 1% for the occasional users and less than 1% for the chippers (data for the Netherlands).

The total amount is within the range of an estimate of the Netherlands Police Agency reported to range from 58 to 143 tons of cannabis consumed per year, including 36 to 102 tons of Dutch weed (Jansen 2012). Both estimates used general population data from 2009 to estimate the number of cannabis users, but the KLPD based their estimate primarily on the number of current users, while the estimate in the EU study took consumption patterns of four different user types into account.

## 2.3 Drug use in the school and youth population

### *Drug use among pupils*

Since 1988, substance use is monitored every four years among pupils of primary education (7<sup>th</sup> and 8<sup>th</sup> grade) and all grades of 'mainstream' secondary education. The most recent survey was conducted in 2011. Among pupils from primary education, questions on illegal drug use were restricted to cannabis. Methodological details have been described in the 2012 National Report and in the Standard Table ST2\_2012\_NL\_01.

The results showed that primary-school children (7<sup>th</sup> and 8<sup>th</sup> grade) had little experience with cannabis. In 2011 only 0.3% of them had ever smoked a joint.

- Table 2.3.1 shows the trends in lifetime prevalence and table 2.3.2 the last month prevalence of drug use rates among pupils of secondary education of 12-18 years (see also ST02).
- The percentage of last month cannabis users declined gradually between 1996 and 2003, and remained stable in 2007 and 2011.
- Both lifetime and last month use was higher among boys than girls (lifetime 20.7% and 13.9%, respectively; last month: 10.5% and 4.8%, respectively). No differences were found between the various school levels.
- Overall, prevalence rates of the other drugs peaked in 1996, decreased afterwards and remained stable between 2007 and 2011. Lifetime use of ecstasy remained highest and use of heroin remained lowest over all years (2.6% and 0.6%, respectively in 2011).

Note, however, that even a lifetime prevalence of heroin use as low as 0.6% seems to be questionable given the unpopularity of this substance, especially among young people. This issue, which also appears from the ESPAD survey, has been discussed in the Scientific Committee of the Dutch National Drug Monitor. In the Amsterdam Antenna Monitor, heroin prevalence rates drop to (almost) zero after removing data from pupils with inconsistent and highly unlikely answers to other questions, and those also responding positively to a question on use of a fake drug (Nabben et al. 2012). It will be analysed for the national school surveys whether pupils who respond positively to questions on heroin use provide

deviant or extreme answers as well, and/or whether they may indeed form a high risk population, which could, among others, be indicated by early onset substance use or other characteristics.

*Table 2.3.1: Lifetime prevalence of drug use among pupils of secondary education (12-18 years)*

| Substance           | 1988 | 1992  | 1996  | 1999  | 2003  | 2007  | 2011  |
|---------------------|------|-------|-------|-------|-------|-------|-------|
| Cannabis            | 8.6% | 15.2% | 21.6% | 19.5% | 18.7% | 16.7% | 17.4% |
| Cocaine             | 1.2% | 1.6%  | 3.0%  | 2.8%  | 2.2%  | 1.7%  | 1.7%  |
| Ecstasy             | n.a. | 3.4%  | 5.8%  | 3.8%  | 2.9%  | 2.4%  | 2.6%  |
| Amphetamine         |      | 2.2%  | 5.3%  | 2.8%  | 2.2%  | 1.9%  | 1.8%  |
| Heroin <sup>1</sup> | 0.7% | 0.7%  | 1.1%  | 0.8%  | 1.1%  | 0.8%  | 0.6%  |

Source: Dutch National School Survey (Verdurmen et al. 2012). 1. See text for an explanation.

*Table 2.3.2: Last month prevalence of drug use among pupils of secondary education (12-18 years)*

| Substance   | 1988 | 1992 | 1996  | 1999 | 2003 | 2007 | 2011 |
|-------------|------|------|-------|------|------|------|------|
| Cannabis    | 3.7% | 7.8% | 11.1% | 9.3% | 8.6% | 8.1% | 7.7% |
| Cocaine     | 0.4% | 0.4% | 1.1%  | 1.2% | 0.8% | 0.8% | 0.8% |
| Ecstasy     |      | 1.0% | 2.3%  | 1.4% | 1.2% | 0.8% | 0.9% |
| Amphetamine |      | 0.6% | 1.9%  | 1.1% | 0.8% | 0.8% | 0.6% |
| Heroin*     | 0.3% | 0.2% | 0.5%  | 0.4% | 0.5% | 0.4% | 0.2% |

Source: Dutch National School Survey (Verdurmen et al. 2012).

In 2011, the Netherlands also participated in the ESPAD survey among pupils of 15 and 16 years. Table 2.3.3 shows that in this age group, lifetime cannabis use remained at the same level between 2003 and 2011. The prevalence of last month cannabis use (table 2.3.4) was about twice the (unweighted) European average (15% against 7%).

Lifetime use of any other drug (ecstasy, amphetamine, cocaine, heroin, GHB, crack, magic mushrooms) was 5%, which is slightly lower compared to the European average of 6%. After cannabis, ecstasy seemed to be the most common illegal drug. Lifetime use of cocaine decreased between 2003 and 2011. Use of amphetamine remained lowest in all these years.

*Table 2.3.3: Lifetime prevalence of drug use among pupils of 15 and 16 years of secondary schools in 2011*

| Substance   | 2003 | 2007 | 2011 |
|-------------|------|------|------|
| Cannabis    | 28%  | 28%  | 27%  |
| Cocaine     | 6%   | 4%   | 2%   |
| Ecstasy     | 5%   | 4%   | 4%   |
| Amphetamine | 1%   | 2%   | 1%   |

Source: ESPAD (Monshouwer et al. 2012).

*Table 2.3.4: Use of cannabis among pupils of 15 and 16 years of secondary schools in 2011*

|   | 2003 | 2007 | 2011 |
|---|------|------|------|
| Last month use                                    | 13%  | 15%  | 14%  |
| Use of cannabis 6 times or more in the past month | 6%   | 6%   | 5%   |

Source: ESPAD (Monshouwer et al. 2012).

## 2.4 Drug use among targeted groups

In previous national reports, higher levels of drug use, especially more intensive patterns of drug use, have been reported among various subpopulations, including socially excluded groups like problem youth, homeless people (see also chapter 8) and the prison population. Apart from these marginalised groups, drug use is usually also higher among partygoers and other subpopulations of young people and young adults in the nightlife scene. In this paragraph, findings will be presented from a websurvey among party and clubgoers and a local monitor describing trends in substance use among nightlifers, neighbourhood and problem youth and clients from youth services in Amsterdam.

It should be noted that (trends in) illegal drug use may differ between geographic regions in the Netherlands, and results from local studies, such as Amsterdam, cannot be interpreted as being representative for the Netherlands as a whole.

### *Visitors of parties, festivals and clubs*

A recent web survey among (frequent) visitors of parties, festivals and clubs showed that substance use was much more prevalent in this population compared to the age matched general population, and the more often people attended parties, the higher the risk of having used tobacco and drugs (Goossens et al. 2013).

In Spring 2013, 3,335 respondents between 15 and 35 years, who visited at least once a party, festival or club in the past year, were recruited through an online community Partyflock and by advertisements on websites for nightlifers, students unions and a variety of social media (e.g. Facebook pages related to parties and festivals). Note that this is a convenience sample, which may be self-selected and not representative for all young people attending the nightlife scene. It is not known which proportion of the total population of young people from 15 up to including 35 years visits parties, festivals, or clubs as much as the young people in the convenience sample. Since a sampling frame of partygoers is lacking, it is not possible to determine in what ways the sample may be biased. Nonetheless, demographic characteristics resembled to a large extent those from a prior study in 2008/2009, in which respondents were sampled on-the-spot. Only the proportion of males was higher in the 2013 survey (56% compared to 48% in 2008/2009). Moreover, the current sample seems to represent more frequent partygoers (44% attended 12 or more parties in the past year against 23% in the 2008/2009 survey), which may explain to some extent the fairly high overall levels of substance use, given the reported associations in this study between frequency of visiting parties and substance use.

In the current survey over half (56%) of the respondents were male and the average age was 23 years. Half of the respondents attended a party or festival at least once a month in the past year, and a similar proportion attended a club or discotheque at least once a month, and two thirds visit a bar at least monthly. Techno, hardhouse and hardcore were the most commonly mentioned preferred music types.

Table 2.4.1 shows the lifetime, last year and last month prevalence rates of substance use. Compared to the general population of 15-34/35 years, the last year prevalence of tobacco and drug use (see chapter 2.1) is much higher, i.e. over two times higher for tobacco (cf. 29.6%), about three times higher for cannabis (cf. 13,7%), about ten times higher for cocaine (cf. 2.4%) and about twenty times higher for ecstasy (cf. 3.1%). For alcohol, last year prevalence is high both among party visitors and the general population (98% and 84%, respectively).

Table 2.4.1 also reveals a fairly high proportion of users having experience with laughing gas, and about a quarter had used this substance in the past year, which is almost similar to the prevalence of recent cocaine use. The increased popularity of laughing gas has also been reported in the Amsterdam Antenna monitor (see later this chapter).

Moreover, the 'anesthetic' substances GHB/GBL and ketamine are used by about similar proportions of partygoers. Nonetheless, it is only GHB/GBL that has attracted quite a lot of (media) attention in the past years, due to its highly addictive properties, increased treatment demand (see chapter 5) and severity of health related emergencies (see chapter 6). Further, separating out GHB from GBL shows that nine in ten recent GHB/GBL users only consume GHB; about 5% takes GHB most of the times and 4% reported to use both. None of the respondents only consumed GBL. These findings suggest that after listing GHB on Schedule I of the Opium Act in May 2012, did not cause a major switch among recreational users to the direct consumption of GBL, the precursor of GHB, which is not a controlled substance in the Netherlands<sup>8</sup>.

'New psychoactive substances' or research chemicals, such as mephedrone<sup>9</sup>, methylone, methoxetamine, 6-APB ('BenzoFury'), spice and 4-fluoramphetamine, are used by appreciably less partygoers, with the exception of the latter substance. One in ten respondents had experience with this substance. Multivariate regression analysis showed that the recent and current use of new psychoactive substances use is associated with being male and the frequency of attending parties and festivals (increased risk with increasing frequency), while frequency of visiting pubs seems to decrease the odds of using NPS.

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<sup>8</sup>Data from other sources, i.e. addiction care and police, does not suggest a major shift towards the use of GBL either, also use of this substance had been reported among heavy users of GHB and problem users in contact with the police (CAM, 2013).

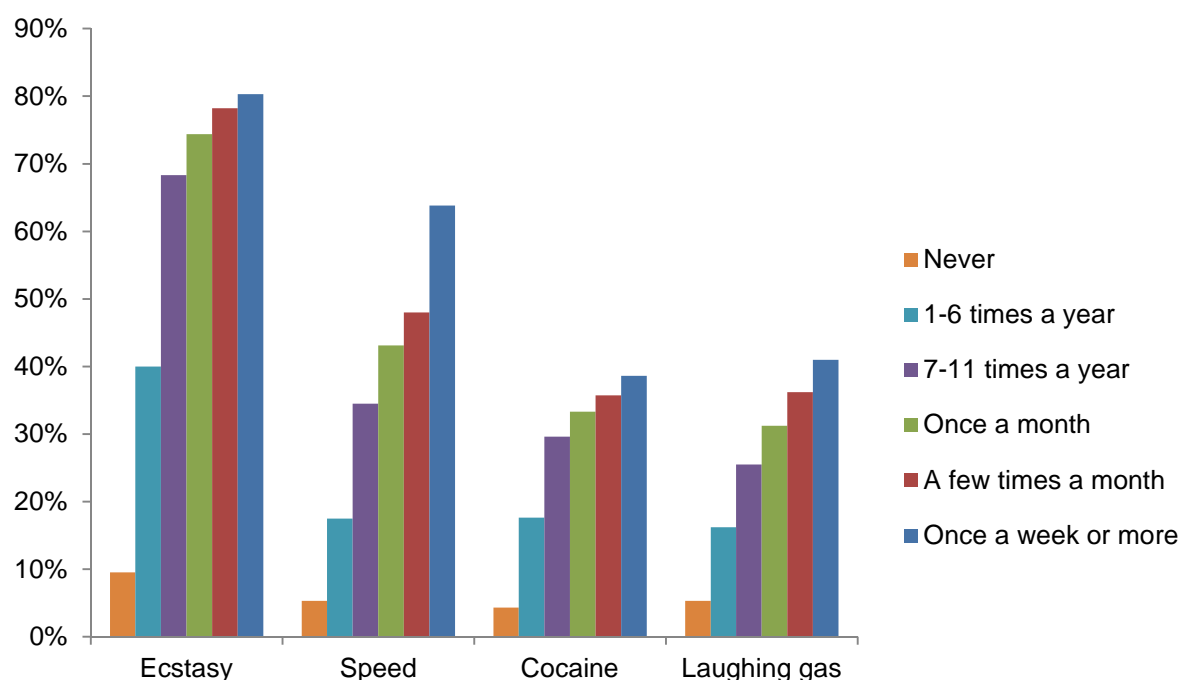
<sup>9</sup>Strictly speaking, mephedrone is not a new psychoactive substance after its listing on May 2012 on Schedule 1 of the Opium Act.

*Table 2.4.1: Prevalence of substance use among visitors of parties and clubs in 2013*

| <b>Substance</b>                  | <b>Lifetime (%)</b> | <b>Last year (%)</b> | <b>Last month (%)</b> |
|-----------------------------------|---------------------|----------------------|-----------------------|
| Alcohol                           | 99.3                | 97.6                 | 92.8                  |
| Tobacco                           | 79.3                | 67.5                 | 58.9                  |
| Cannabis                          | 76.7                | 52.0                 | 32.8                  |
| Ecstasy                           | 69.6                | 60.6                 | 34.8                  |
| Amphetamine                       | 45.2                | 33.4                 | 19.0                  |
| Cocaine                           | 40.5                | 27.1                 | 12.7                  |
| Laughing gas                      | 39.9                | 25.5                 | 7.2                   |
| Hallucinogenic mushrooms/truffles | 28.4                | 10.5                 | 1.6                   |
| GHB/GBL                           | 21.8                | 11.9                 | 5.1                   |
| Ketamine                          | 19.3                | 12.8                 | 5.0                   |
| LSD                               | 8.6                 | 3.8                  | 0.7                   |
| 2C-B                              | 15.8                | 9.4                  | 2.4                   |
| 4-Fluoramphetamine                | 9.9                 | 8.5                  | 3.8                   |
| Mephedrone                        | 5.2                 | 2.5                  | 0.7                   |
| Methylone                         | 4.2                 | 2.2                  | 0.5                   |
| Methoxetamine                     | 3.0                 | 2.3                  | 0.3                   |
| 6-APB                             | 2.9                 | 2.1                  | 0.6                   |
| Spice                             | 2.3                 | 1.3                  | 0.6                   |

Note that the data refer to a target sample and may not be representative for the total population of (young) people attending nightlife venues. Respondents can be generally characterised as relatively frequent party visitors with a preference of dance music.

Figure 2.4.1: Last year prevalence of the use of ecstasy, amphetamine, cocaine and laughing gas as a function of frequency of attending parties and festivals



Prevalence among respondents who attended a party/festival and/or club at least once in the past 12 months. Respondents in the category 'never' had only visited clubs but no parties/festivals in the 12 months. Source: Trimbo Institute (Goossens et al. 2013).

Moreover, in multivariate analyses, the last year and last month use of all substances, except for tobacco, was associated with the frequency of attending party's. This is illustrated for some substances in figure 2.4.1. Also being a male, was associated with the use of cannabis, ecstasy and cocaine. Moreover, a younger age increased the odds of cannabis use, while it decreased the odds of cocaine use. Education level was also associated with cannabis, cocaine and amphetamine use (higher level reduced the odds of last year and last month prevalence).

The fairly high levels of ecstasy and amphetamine are not surprising, given the high proportion of respondents indicating that parties and festivals as a preferred location of use (93% and 91%, respectively), while this was only mentioned by 59% of the cocaine users and 45% of the GHB users. For cocaine, a home party (51%) or pub (34%) were also commonly mentioned, while these locations were preferred by only 26% and 2% of the ecstasy users, respectively. Over half (51%) of the GHB users reported 'at home after going to a party or club' as a location of preference.

*Table 2.4.2: Main locations of use of ecstasy, amphetamine, cocaine and GHB among recent users*

| Substance   | Party / Festival | Club/Disco theque | Pub   | Home party | At home before going a night out | At home after going a night out |
|-------------|------------------|-------------------|-------|------------|----------------------------------|---------------------------------|
| Ecstasy     | 93.3%            | 35.1%             | 2.3%  | 27.7%      | -                                | -                               |
| Amphetamine | 90.6%            | 37.0%             | 12.4% | 35.3%      | -                                | -                               |
| Cocaine     | 58.9%            | 44.7%             | 34.1% | 50.9%      | -                                | -                               |
| GHB         | 45.2%            | 25.8%             | 3.2%  | 37.4%      | 13.9%                            | 50.7%                           |

Source: Trimbos Institute, Goossens et al. (2013).

In the next National Report data will be presented on risk behaviour and problems associated with going out (like being aggressive or violent, involvement in fights, sexual risk behavior; daily functioning after a night out and health emergencies) and whether respondents had consumed alcohol and drugs at those occasions.

### *Nightlifers in Amsterdam*

Since 1993, the Amsterdam Antenna combines qualitative and quantitative research methods to monitor drug use in the city of Amsterdam among young people aging 12 to 35 years. The Antenna counts as "a mixed method monitoring scheme" (Benschop et al. 2013). The qualitative panel study of the Antenna focuses on nightlifers and neighbourhood youth. With regard to the nightlife, Amsterdam in 2012 saw a "wide array of new party scenes emerging beyond the usual clubbing circuits", including a "proliferation of illicit and semi-illegal raves that acted as magnets on the young nightlife crowd". Against this background, "a growing number of panel members have discerned an increasing 'partying madness' in Amsterdam nightlife scenes. This means that "getting spaced out is not much to be ashamed of any more".

The panel from the Amsterdam Antenna observed the following with regard to the use of the main drugs in the nightlife of 2012:

- The number of cannabis users continued to decline, not only because of the smoking ban in clubs, but also because "cannabis has acquired a more negative image".
- Consumers of ecstasy were seeking high-strength pills and ecstasy users "taking two tabs of ecstasy today basically receive a double dose in comparison to several years ago".
- After having "drifted somewhat out of the picture in recent years", cocaine "continues to be popular in the above-25 age group, the working segment in the panel networks".
- Amphetamine has seen a revival, and according to some panel members "speed is a perfect match for the current Zeitgeist of austerity and no-nonsense partying at raunchy raves, vast festivals and afterparties".
- There seems to be a swift spread of the use of nitrous oxide or laughing gas, especially outside the mainstream club circuit, at parties and dance events or private settings. Remarkably, laughing gas has also spread to new groups of users, like young clients of youth services reporting higher levels of lifetime laughing gas use compared to ecstasy. Laughing gas is typically inhaled by using whipped cream canisters, chargers or balloons, while larger canisters have been observed at large-scale parties.
- The use of psychedelics, like LSD, hallucinogenic mushrooms or truffles remains marginal in the Amsterdam nightlife, although a slight increase in LSD use has been observed, particularly at outdoor festivals and raves.



- New psychoactive substances ('research chemicals') are increasingly spreading in certain trendsetting nightlife niches, mainly among well educated and white users, although the level of use remains much lower compared to the classical drugs.

*Neighbourhood youth and young clients from youth services in Amsterdam*

Apart from the nightlifers, the qualitative panel study of the Amsterdam Antenna also monitors "groups of young people who hang out in neighbourhoods". In 2012 it was again observed that, being "strongly tied to the street culture", cannabis is smoked in considerable amounts among the neighbourhood youth. Nonetheless, a quantitative survey among clients from youth services showed a clear decrease in the use of cannabis between 2006 and 2012 (Benschop et al., 2013). In this study, due to changes in the organization and functioning of youth services, certain age groups (12-13 year old) and clients (homeless, delinquents) were excluded to make samples more or less comparable. In the final samples, average age was comparable (slightly over 16) but the proportion of males was higher in 2012 compared to 2006 (55% against 40%). Moreover, in 2012 the proportion of school-going youth was higher (92% against 88%) and the proportion of regular nightlife visitors was lower (8% against 21%) compared to 2006. Trend analyses (not correcting for these differences) showed a decrease in the prevalence of current tobacco smoking (60% in 2006, 46% in 2012), current alcohol use (54% in 2006, 38% in 2012) and current cannabis use (45% in 2006, 29% in 2012). Lifetime use of ecstasy, amphetamine and cocaine was not significantly changed (12%, 5% and 4%, respectively in 2012). Lifetime use of heroin and crack remained rare (0.6% for each of these substances in 2012).



## 3 Prevention

### 3.1 Introduction

The Netherlands' drug policy aims to discourage and reduce drug use, certainly in so far as it causes damage to health and to society, and to prevent and reduce the damage associated with drug use, drug production and the drugs trade' (Stc 2011-11134). Drug use prevention policy is embedded in a broader public health prevention policy and co-ordinated by the Ministry of Health, Welfare, and Sport (VWS). Local authorities further develop and implement these prevention policies.

The most recent Dutch policy papers on health prevention advocate a more central role for prevention in health care ("Health close to people ", T.K. 32793-2 and the National Prevention Program (NPP) 2014-2016 "Alles is gezondheid..." (Ministerie van VWS 2013). The policy papers identify several prevention priorities: diabetes, depression, tobacco use, harmful alcohol use, obesity and sedentary lifestyle. As these priority illnesses and risk factors often co-occur, the integration of prevention efforts is central to the NPP. A key element is therefore cooperation between all relevant stakeholders, including health care, employers, schools and local government. In fact, the NPP was formulated by the Ministry of Health, Welfare, and Sport (VWS) in dialogue with these stakeholders, and prevention of the priority diseases and risk factors are jointly addressed around the fields health care, school, work and neighborhoods. The NPP outlines commitments and output goals for 2016 and long term aims for 2030. As negotiations are ongoing, agreements will partly take shape next year.

The NPP states that healthy behavior is considered the responsibility of individual persons, and not a primary task for national government. Still, responsibility to provide professionals and citizens with reliable, accessible information is taken. The Ministry of Health, Welfare, and Sport primarily takes on a facilitating and coordinating role to stimulate prevention through co-operation between a wide variety of stakeholders. In addition to previously mentioned stakeholders, these also include other ministries, national health promotion institutes, researchers, insurance, housing corporations, sports clubs, industry and retail.

Providing information for targeted groups is prioritized over generic mass media campaigns. Specific aims are targeting young high-risk groups and the reduction of socioeconomic health differences. This is in line with the report 'The future of health care' ('Toekomst voor de zorg') by the Netherlands Bureau for Economic Policy Analysis (Van Ewijk et al. 2013). This report emphasizes the importance of a healthy lifestyle for a healthy economy; stresses that lack of financial resources, information, social norms and short-sighted behavior are important underlying causes of unhealthy lifestyles. Moreover, it is concluded that particularly targeting prevention at youth is necessary to provide equal chances in society, because unhealthy lifestyles are often acquired at a young age. Specifically regarding substance use, the NPP mentions the following, which is discussed in detail in subsequent paragraphs:

- As of 1 January 2014, the minimum age will increase from 16 to 18 years to buy alcohol and tobacco, and to consume alcoholic beverages in public spaces.
- Extension of the smoking ban to bars without personnel (except the owner).
- An additional school doctor/nurse visit in adolescence to facilitate early identification of problems.

- Healthy and safe nightlife regarding alcohol, drugs, and tobacco.

Whereas the national government co-ordinates prevention policy, it is executed by municipalities (Public Health Act 2008, T.K. 31316-3), mostly in co-operation with prevention departments of institutes for addiction care, municipal health services, schools, neighborhood centers, and national health promoting institutes. By 1 July 2014, municipalities must have formulated their local alcohol prevention and law enforcement policy (artikel 43a Drank- en Horeca Wet). To support coherent and effective local health promotion, [www.loketgezondleven.nl](http://www.loketgezondleven.nl) provides information on effective interventions for municipalities, schools, and healthcare workers. This website is maintained and updated by the Centre for Healthy Living (Centrum Gezond Leven) of the National Institute on Public Health and the Environment. It includes a database of lifestyle interventions and guidelines, categorized around the (NPP) fields school, neighborhood, and work. It also includes the Guideline Healthy Municipality (Handreiking gezonde gemeente), published in 2010. Every four years, local governments revise their prevention policy. The guideline can support municipalities in this policy cycle from evaluation to implementation. It includes interventions, examples of best practices, checklists, and advices. In addition to municipalities' current prevention partners, co-operation with employers and health-insurances will be intensified according to the Program agenda.

### **3.2 Environmental prevention**

Environmental prevention strategies aim at altering the immediate cultural, social, physical and economic environments in which people make their choices about drug use.

#### *Alcohol*

The Dutch government aims to tackle alcohol abuse and diminish social and personal costs of alcohol abuse, including harmful effects of excessive alcohol consumption on health, aggression in pubs and clubs, and traffic accidents as a result of drunken driving. The focus on young people's alcohol use, stated in the National Prevention Program, is reflected in recent alcohol legislation developments, implementing higher age limits, stricter laws, and more excise duty.

Currently, alcoholic beverages may not be sold to anyone under the age of 16. Since 1 January 2013, possession of alcohol in a public place by people under 16 can be fined. Until 1 January 2014, beer, wine and spirits with less than 15% alcohol may still be sold to people over 16, whereas distilled beverages with an alcohol content of 15% or more may be purchased only from the age of 18. As of 1 January 2014, the minimum age for the sale and public possession of any alcoholic drinks will be raised to 18. The Licensing and Catering Act has been changed accordingly (Stb 2013-380). This will be accompanied by an intensive education and information campaign (see paragraph 3.5) and law enforcement.

Anyone selling alcohol is obliged by law to request identification to verify the age of the purchaser. A vendor may not sell alcohol to anyone who is clearly planning to pass it on immediately to someone who is underage. Supermarkets and other retailers caught selling alcohol to under aged people three times within a year will be forbidden to sell alcohol for a period of time ('three strikes out'). Local authorities may link age restrictions to opening hours, impose restrictions on happy hours and special alcohol offers, and regulate sales of alcohol in sport club canteens and other such venues by local ordinance. The enforcement of the new law will be transferred from the Netherlands Food and Consumer Product Safety

Authority (Nederlandse Voedsel en Waren Autoriteit, NVWA) to municipalities. A new provision of the Criminal Code also bans the serving of alcohol to anyone who is manifestly intoxicated. The Road Traffic Act sets a maximum blood alcohol content of 0.5 mg/ml for drivers. The limit for new drivers is lower, at 0.2 mg/ml. The Media Act 2008 bans alcohol advertising on television and radio between 06.00 and 21.00.

Public drunkenness and disorderly conduct were made offences under the Criminal Code (articles 453 and 426). Alcohol- and drug tests are planned to be made compulsory in violent offences, and a bill to increase sentences for violent offences under the influence of alcohol or drugs awaits parliamentary approval.

Excise duty increases are another instrument to discourage alcohol use. In January 2013 the excise duty increased with 10% for beer (0.01€ per bottle of 0.33 liter), 15% for wine (0.08€ per bottle), and 6% for other alcohol containing beverages (0.32€ per bottle liquor). Instead of the previously reported intended additional increase of 14% for beer and wine and 5% for spirits, a 5.75% increase for all types of alcohol containing drinks is planned for 1 January 2014.

### *Tobacco*

Dutch tobacco policy aims to decrease the number of smokers, support people who want to stop smoking, protect non-smokers from passive smoking, and prevent youth to start smoking and change their attitude towards smoking (NPP)<sup>10</sup>.

A new development concerns the increase in the legal limit to buy tobacco from 16 to 18 years on 1 January 2014<sup>11</sup>. In addition, excise duty increased with 0.35€ for a packet of 19 cigarettes and 0.60€ for a 40g packet of rolling tobacco in June 2012. The additional 0.09€ increase for both cigarettes and rolling tobacco has been postponed from 1 March 2014 to probably 1 January 2015, due to the potential costs of a 'border effect': when tobacco is more expensive in the Netherlands compared to neighboring countries, people may go abroad to evade the excise duty. Smoking advertisements have been prohibited since 2002 (Stb 2002-201).

The tobacco act gives employees the right to work in a smoke-free environment, hence smoking is banned in government buildings, public buildings, hospitals, public transport, schools, cultural- and sport facilities, and most pubs, clubs and restaurants. Although small bars ran by their owner without staff are currently exempt from the smoking ban, they will have to be smoke-free in the near future (planned for 1 July 2014). Not only protection for passive smoking for employees, but also for costumers will be the basis for this revised legislation.

Adherence to the smoking ban has somewhat improved from 56% of smoke(r) free cafés or clubs spring 2011, to 73% in 2013. The Netherlands Food and Consumer Product Safety Authority (Nederlandse Voedsel en Warenautoriteit, NVWA) can impose penalties for Tobacco Law violations. The maximum fine for repeated violation of the smoking ban is planned to be increased from 4,500€ to 19,500€ (T.K 33738-2).

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<sup>10</sup><http://www.government.nl/issues/health-issues/smoking>.

<sup>11</sup><http://www.rijksoverheid.nl/onderwerpen/roken/nieuws/2013/11/12/leeftijdsgrens-tabaksverkoop-naar-18-jaar-vanaf-1-januari-2014.html>.

## *Cannabis*

Although the health perspective remains an important aspect of Dutch drug policy, the national policy measures in the 2011 drugs policy letter (T.K. 24077-259) announced a shift towards stricter legal measures against cannabis-related criminality and a stricter policy against nuisance associated with coffee shops. Not all announced measures were continued in the Coalition Agreement of October 29th 2012 for the Rutte II administration (see chapter 1 policy).

The government sees high-potency cannabis as carrying an unacceptably high risk because it is a contributory factor in increasing damage to health, especially when used at a young age (see chapter 1). This is one of the arguments underlying the plans to place cannabis with a THC-percentage of more than 15% on Schedule I (hard drugs) of the Opium Act (T.K. 24077-293), making high-potency cannabis a hard drug. Thus, coffee shops would no longer be allowed to offer cannabis with a THC level above 15%, and higher penalties will be imposed for trafficking, importing and exporting high-potency cannabis.

### **3.3 Universal prevention**

#### *School*

To ensure that young people are well-informed and can resist peer pressure to use substances, school-based drug education remains a central part of the Dutch approach to universal drug prevention. Throughout most of the Netherlands, drug prevention is part of the curriculum and the majority of schools have a drug education policy and guidelines for dealing with drug incidents. The website [loketgezondleven.nl](http://loketgezondleven.nl) informs schools on drug education kits, online programs and interventions aimed at young people.

The Healthy School and Drugs is the oldest school-based drug prevention program, with specific programs for primary schools, secondary schools, and intermediate vocational education. These programs consist of four parts: knowledge transfer, parental involvement, identification of and support for problem use, and preparation and communication of school drug policy. Local Public Health Services and addiction care support schools with the program implementation. In 2012, approximately a third of primary schools and 75 percent of secondary schools used (parts of) this program. Effectiveness of the secondary school module of the Healthy School and Drugs was investigated in 2012. Results are expected to be available by the end of 2013.

In addition, to assist youth in the physical and psychosocial transitions of adolescence, and to identify youth at risk for targeted prevention, the preventive care provided by specialized doctors and nurses is extended with an additional adolescent (15/16 years) school screening (BZ/2012/283M). With the aim to prevent escalation of problems, 15 million euro has been reserved for this additional screening. Adolescents are given support and answers to questions regarding sexuality, substance use, nutrition, obesity and social wellbeing, and referred to appropriate care when needed. Currently, schools worrying about pupils with complex problems, including substance use problems, can call in assistance from a multidisciplinary Care and Advice Team (ZAT, zorg- en adviesteam).

#### *Family*

Prevalence of alcohol, tobacco and cannabis use in Dutch children under 16 has decreased between 2007 and 2011. A link with stricter parental rule setting has been suggested as in recent years, several prevention strategies were developed to prevent or postpone the onset

of substance use by supporting parenting regarding substance use (De Looze, 2013). For example, in a 2011 lifestyle campaign "How Can I Help My Kids Say No to Tobacco, Alcohol and Cannabis?" mass media messages at key moments (e.g. holidays) were combined with a website containing practical guidance for parents ([hoepakjijdataan.nl](http://hoepakjijdataan.nl)). Although mass media campaigns have been mostly abandoned by the government (see 3.4 and 3.5), the website is still available.

In addition, a guideline with information on interventions and recruitment methods was made available for professionals of Public Health Services and Addiction clinics, to organize local provision of interventions for parents about substance use.

### *Community*

For more than 16 years, the Drugs Information Line (Drugs Infolijn) has aimed to provide neutral, objective information on drugs to the general public and professionals. This service operated by the Trimbos Institute is not just a telephone line, but also uses online chat and e-mail. In addition, information is disseminated via Twitter, Facebook, online forums, and the evidence-based website [www.drugsinfo.nl](http://www.drugsinfo.nl). This website contains information on drugs, drug treatment, the law, health, parental issues, risks of drug use, and a question & answers section. Services are also dedicated to alcohol since 2007 and to tobacco as of January 2013. In 2012, the Drugs Information Line was contacted 4.043 times. Most calls were about risks of drug use (12.8%), effects of drugs (6.6%), withdrawal or desistence of drug use (6.2%), dealing with someone else's drug use (9.7%) and traceability of drugs (9.8%). Most commonly, calls were with regard to cannabis (21.8%), XTC (15.9%), cocaine (12.0%), or drug use in general (22.4%). Questions on GHB (5.2%) and amphetamines (5.4%) were less common. In addition to information provision, people were referred to specialized addiction care 630 times and to their general practitioner 329 times.

Various e-health interventions exist (see national report 2011), which are relied upon to be useful low cost instruments for (selective) prevention.

## **3.4 Selective and indicated prevention in at risk groups and settings**

With the abandoning of governmental media campaigns in 2011 (which is partly reconsidered with regard to alcohol and tobacco, see 3.5), the focus has shifted towards indicated and selective prevention. The distinction between selective and indicated prevention is, however, somewhat artificial in the Netherlands, as early identification of drug use and drug related problems are often part of a comprehensive (or stepwise) intervention program. Therefore both types of prevention are taken together in this paragraph.

### *Youth*

An overview of Dutch addiction prevention programs for youth is given in the report 'Investing in addiction prevention' (Oudejans and Spits 2013). In this report, a framework for addiction prevention was formulated in cooperation with prevention experts in the addiction field. The framework lists minimum requirements for youth substance use prevention: the experts considered whether a prevention program should be available for each combination of prevention level and setting<sup>12</sup>. Based on this framework and a survey of the currently

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<sup>12</sup>Prevention levels: education, facilitation, screening, consultation, intervention. Settings: leisure, school, home, health care, safety and justice.

available prevention interventions, gaps and redundancies in the addiction prevention field were identified. There were 157 implemented prevention products. No youth prevention products had received the label 'effectiveness proven' from the Centre for Healthy Living (Centrum Gezond Leven). Only 37/157 products were found fit to be included as minimum requirement, because they had sufficient evidence base (i.e. labeled 'probably effective' or 'sound theoretical basis') or were already widely implemented. The main conclusion was that there are many products covering most prevention levels and settings, but there is a lack of documentation, uniformity and proven effectiveness. However, there was considerable overlap, for example of educational interventions in the school setting (e.g. Healthy school and drugs, Tripspel, SportMPower, Cannabis show). In addition, despite the multitude of products, there are gaps for several vulnerable groups (identified in Snoek et al. 2010). 'Scoring Results' (Resultaten Scoren) commissioned this report, and will use the report 'Investing in addiction Prevention' in future projects to improve transparency and uniformity of products within the framework, in collaboration with the addiction field.

Scoring Results is a foundation that originated from a quality management program, funded by the Ministry of Health, Welfare, and Sport (VWS) since 1999. With the aim to improve quality in drug prevention and addiction care, various protocols and guidelines were developed and implemented. With the aim to improve professional training and education in addiction, they also recently commissioned a digital educational program for students in higher professional education: 'Learnt in the cradle hooked till the tomb' (Jong geleerd, Oud verslaafd). Through training of future youth welfare professionals, this program aims to improve identification and management of addiction problems in children in youth care.

Moreover, the existing program aimed at youth welfare profession in at risk settings, Open and Alert, has been updated by the Trimbos Institute. It will be available as an online course in addition to the already available course material and (implementation) manuals. At risk settings include residential child care, youth work, youth custodial institutions, and facilities for people with (mild) intellectual disabilities.

## *Nightlife*

Several selective prevention initiatives exemplify the focus on collaboration between stakeholders from various fields, and stricter legislation regarding substance use and violence (see 3.2.1). The Centre Safe and Healthy Nightlife (Centrum Veilig en Gezond Uitgaan, CVGU2, [www.cvgu.nl](http://www.cvgu.nl)) aims to reduce the risk for incidents and improving nightlife, by implementation of safety measures and reduction of harms caused by alcohol and drug use. Since 1998, a variety of interventions and preventive instruments were developed, including a quick-scan to detect drug problems, first aid courses for personnel in recreational settings (EHBDu) and a course for prevention professionals to educate personnel in recreational settings (bar smart), factsheets, a website for nightlife public ([drugsenuitgaan.nl](http://drugsenuitgaan.nl)), and a help desk. Currently, the focus is on implementation of these interventions to increase the safety in recreational settings by reducing drug and alcohol use. As municipalities are required (since 2011) to develop local prevention policy, the CVGU supports them as centre of expertise to implement evidence-based interventions and practice- or experience-based activities in this domain.

A recent study suggests that substance related aggression in night life settings towards public service professionals such as policemen, door men, ambulance staff, may partly be prevented by dissemination of knowledge on the effects of alcohol and drugs, identification of substance use and on handling intoxicated people (Ferwerda 2012). In this



context, a course on how to recognize and deal with excited delirium syndrome is being developed for the police. In addition, a local initiative to increase knowledge on effects of drugs is the 'door men app' by the city of Utrecht. This mobile phone application contains information on the effects of substances and enables authorities (police) to send ad hoc messages to door men throughout the city.

Since the early nineties, the Drugs Information and Monitoring System (DIMS) monitors the chemical content of drugs, brought in by users at regional addiction prevention facilities affiliated with the DIMS (see also chapter 10). The collected data are used for drug policy, and users are informed about the composition of the drugs and warned about risks (education and prevention). Additional health risks of substance use, for example when extra harmful substances are detected, are communicated locally or nationally. In 2013 so far, there were seven local and four national warnings. The first national warning regarded high doses of MDMA in ecstasy tablets and reckless drug use behavior among ecstasy users, the other three warned for specific tablets contaminated with PMMA (para-Methoxy-N-methylamphetamine). As of 2012, DIMS has also been assigned by the Minister of Health, Welfare and Sports the task to monitor and report on new psychoactive substances, user characteristics, and potential health risks: Reporting Desk New Drugs, 'Meldpunt Nieuwe Drugs, MND'. Data are derived from the DIMS laboratory, custom's, Netherlands Forensic Institute. On a website ([www.meldpuntnd.nl](http://www.meldpuntnd.nl)), users anonymously report new drugs and describe their experiences using these drugs.

The Monitor Drug-related Emergencies (Monitor Drugsincidenten, MDI) was set up in 2009, to provide an indicative overview of acute adverse effects of substance use, in addition to the pharmacological characteristics of substances monitored by DIMS (see also § 6.3). The MDI monitors the nature and extent of drug-related health emergencies in 28 ambulance transportation services, hospital emergency departments and forensic doctors in eight regions in the Netherlands, and national operating first-aid services at large-scale festivals. In addition to monitoring, risks identified by the MDI and DIMS are directly communicated within their networks to enable fast prevention responses. Since 2009, the proportion of drug-related emergencies involving ecstasy increased. Moreover, the proportion of moderate and severe drug-related emergencies increased (Vogels and Croes 2013).

Peer education in nightlife (mostly large scale events) is facilitated by volunteers of Unity in co-operation with the addiction care facilities. Young volunteers are trained to as peer educators to provide information in nightlife settings with the aim to reduce risks of recreational drug use.

On a regional level, addiction care facilities cooperation with public health services, municipalities, and other stakeholders to develop regional projects and campaigns. For example, a local addiction facility (Iriszorg) initiates the 'IRIS in the neighborhood' (IRIS in de buurt) prevention initiative, with the aim to prevent or reduce alcohol and drug use and related social problems. This program supports local residents and professionals with accessible advice, consultation and referral when needed. This community approach requires close cooperation with other stakeholders, including general practitioners, social work, housing corporations, and youth work.

### *Research*

Dutch addiction research depends for an important part on funding of the Netherlands Organisation of Health Research and Development (ZonMw) through financing from the Ministry of Health, Welfare, and Sport (VWS). In the past decades, ZonMw funded two five-

research programs specifically for addiction, which have not been continued after 2010. Nonetheless, there have been four general (not specifically substance related) ZonMw prevention programs and the fifth program is yet to be formulated. ZonMw also coordinates the European Research Area Network on Illicit Drugs (ERANID), which is a network of eleven funding organizations from six EU-member states working together on an ERA-NET about Illicit Drugs.

The National Prevention Program (NPP, see first paragraph of this chapter) states a preference to connect and analyze existing studies rather than conduct new studies, and announces that priorities of the NPP will be the starting point for the fifth prevention program: implementation of existing knowledge and monitoring of activities formulated in the NPP.

An example of recent results from the fourth ZonMw general prevention program is a study into the effectiveness of the Wiet Check, an intervention based on the Australian Adolescent Cannabis Check-up (ACCU). In a randomized controlled trial, young cannabis users (14-21 year) were seduced to participate in a preventive intervention (non-offending motivational enhancement technique) to think about the pros and cons of their cannabis use. After three months, the Wiet-Check intervention was found to be effective in a subpopulation of heaviest users (consuming more than 15 cannabis joints per week) only. The Wiet-Check is implemented in several addiction care facilities and available online. Also in the fourth prevention program, cost effectiveness of an online intervention for children with parents with mental disorders or addiction, 'kopstoring.nl', is currently under investigation.

### **3.5 National and local media campaigns**

Due to cuts and a fundamental revision of lifestyle policy and interventions, the funding of the Ministry of Health, Welfare and Sport (VWS) for campaigns on smoking, drinking, and cannabis use and other mass media health campaigns have been withdrawn since the end of 2011. (T.K. 32793-2). Nonetheless, the policy changes regarding the fine for public alcohol possession by under aged people and the minimum age raise to buy tobacco any type of alcohol to 18 years will be accompanied by a government information campaign using flyers in supermarkets and free local papers. Moreover, a long term (mass media) campaign propagating that alcohol use is 'not done' for people under 18 starts in November 2013. This 'denormalising' campaign is funded and implemented by a cooperation including health charities, (alcohol) retailers' associations, national health promoting institutes, and the NVWA. This will be co-ordinated by national government.

## 4 Problem drug use

### 4.1 Introduction

New data are available on the number of problem opiate users (in 2013), estimated with the treatment multiplier method, which was also applied in the estimate of 2008. Since it was not clear whether the in-LADIS rate (the proportion of opiate users registered in LADIS) as found in the field study of 2008 would still apply to the situation in 2013, a new field study was conducted in five cities (§ 4.2). The interviews held among opiate users in this study also provided insight into use patterns and other characteristics of the population of opiate users (see § 4.3). Finally, data on characteristics (including use habits and mental health) between frequent, dependent en non-dependent cannabis users, collected in the framework of the longitudinal study CanDep, are described in § 4.4.

### 4.2 Prevalence and incidence estimates of problem drug users

#### *Prevalence estimate of problem opiates users*

The previous estimate of the total number of problem opiates users in the Netherlands pertained to the period 2008-2009. For that previous period, it was estimated that there were about 17,700 more or less problematic opiates users (Cruts and Van Laar 2010). This estimate has now been updated for the year 2012. It is estimated that in this year there were about 14,000 more or less problematic opiates users, a decrease of about 21% compared to 2008-2009 (Cruts et al. 2013). This updated estimate has been reported to the EMCDDA by means of the Standard Table ST7\_2013\_NL\_01.

For both estimates, the method of the treatment multiplier was applied. From February until June 2013, a total of 401 more problematic opiates users were recruited in five Dutch cities to obtain the field sample required to perform the treatment multiplier. The 401 respondents were recruited in the cities of Amsterdam (100 respondents), Rotterdam (100 respondents), Utrecht (71 respondents), Eindhoven (70 respondents), and Haarlem (60 respondents). Their mean age was 47.7 years within a range of 23 to 74 years, 86% was male and 14% was female. These more problematic opiates users were contacted, recruited, and interviewed by experienced field workers who applied a structured questionnaire (Schaap and Kools 2013). The respondents used heroin (81.8%) or methadone (88.8%), or both substances.

Similar to the previous estimate, a more problematic opiates user was defined as someone who used opiates at least three days a week during the past month, and also showed criminal activities, psychiatric symptoms, public nuisance, or an instable housing situation. On the contrary, opiates users who were stabilized successfully by means of Methadone Maintenance Treatment (MMT), and no longer showed criminal activities, psychiatric symptoms, public nuisance, or an instable housing situation were considered less problematic.

Also similar to the previous estimate, the LADIS, the National Alcohol and Drugs Information System (Wisselink et al. 2013) was applied as the treatment benchmark. The LADIS not only contains anonymous registrations from more problematic opiates users but also from less problematic opiates users. The proportion of more problematic opiates clients in the LADIS is estimated at 60%. In 2012, a total of 12,313 clients were registered

anonymously in the LADIS for either a primary, a secondary, or a tertiary problem concerning opiates (Wisselink, Foundation IVZ, personal communication 23-10-2013). Therewith, 7,388 opiates clients (60%) are considered more problematic and 4,925 opiates clients (40%) are considered less problematic.

It was found that, from the 401 respondents recruited in the field sample, 75.6% were represented in the LADIS. Correcting this so-called "in-LADIS rate" for the larger proportion of opiates clients living in the largest cities, the weighed in-LADIS rate was estimated at 79.2%. There was a risk of overestimating the in-LADIS rate due to biased sampling too close to treatment centers. To correct for this possible bias, the field workers recruited the problem opiates users as much as possible outside those treatment locations that deliver data to the LADIS. This could be done because not all addiction care and not all forms of care for problem drug users are registered in the LADIS. This all depends on whether or not a care-giving institute, or a specific location, sends its treatment data to the LADIS. Further inquiries by the field workers revealed that, in case a respondent was not represented in the LADIS, such a respondent did receive some form of care from at least one other institute. Those other institutes did not (yet) deliver their data to the LADIS. If all institutes would have delivered their data to the LADIS, the in-treatment rate would have reached the full 100%. Nonetheless, for purposes of estimating the total number of problematic opiates users by means of the treatment multiplier, the in-LADIS rate comes down to 79.2%, implying a multiplier value of 1.26. Applying this multiplier to the 7,388 more problematic LADIS-clients results in an estimated number of 9,309 more problematic opiates users, which in combination with the 4,925 less problematic clients results in a total estimate of about 14,000 more or less problematic opiates users. This implies a decrease of 21% compared to the previous estimate for 2008-2009.

Although a decrease has been found at national level in the number of problem opiates users, a stabilization has been found at regional level for the region of Oost-Veluwe (Boendermaker and Bieleman 2013). This regional estimate has been reported to the EMCDDA by means of the Standard Table ST7\_2013\_NL\_02. The region of Oost-Veluwe includes the municipalities of Apeldoorn, Brummen, Epe, Heerde, and Voorst. Having corrected for double counting the registrations that were linked from 11 treatment centres in this region, it was found that the number of problem opiates users from 2009 up to including 2012 remained stable at respectively 214, 231, 224, and 223 problem opiates users per year. However, combining the treatment data with police data, a larger number of 292 problem opiates users was now found in 2012.

The estimate of the number of problem opiates users does not include those problem users of crack cocaine who do not use opiates. It is estimated that in the three largest cities of the Netherlands (Amsterdam, Rotterdam, and The Hague) there are about 6,659 drug users showing dependence on crack cocaine. This amounts to 0.51% of the population aged 15-64 years in the three largest cities (Oteo Pérez et al. 2013). Generalizing this estimate for the three largest cities to the whole country, a preliminary estimate indicates that there are between 17,437 and 23,904 dependent crack users in the Netherlands (Wisselink 2013). Some of these problem crack users also use opiates and are therewith already included in the estimated number of problem opiates users. Between 49% and 72% of the respondents in the three-city study who were recruited by respondent driven sampling had used heroin in the past month.

### **4.3 Data on problem drug users from non-treatment sources**

#### *Field sample of problem opiates users*

Above (see § 4.2), it was described how a field sample of 401 problem opiates users was established in five Dutch cities between February and June 2013. This field sample was applied in a treatment-multiplier research to estimate the total number of problem opiates users in the Netherlands. In principle, the field sample also counts as a source of information on problem opiates users from 'non-treatment sources'. As already mentioned in the paragraph above, to avoid overestimation of the in-LADIS rate, the problem opiates users were sampled as much as possible outside treatment locations delivering data to the LADIS. Although the LADIS covers much of the regular specialized addiction care, not all addiction care and not all forms of care given to addicts is registered in the LADIS.

In the smaller cities, a higher in-LADIS rate was found compared to the larger cities. In the smaller cities of Eindhoven and Haarlem in-LADIS rates were found of respectively 87.1% and 83.3%, compared to only 65.0% and 70.0% in the larger cities of Amsterdam and Rotterdam. This difference can be explained by the fact that in larger cities like Amsterdam and Rotterdam there are more alternative treatment facilities. Problem opiates users living in these larger cities have more opportunities to choose for a treatment facility that does not deliver data to the LADIS.

In the field sample it was found that nearly all problem opiates users (99.8%) had received at least one form of treatment during 2012. Treatment was received most often in the form of medical care from a physician (72%) or in a hospital (37%), methadone maintenance treatment (69%), day care (65%) or night shelter (33%), social work (58%), debt counseling (46%), access to a safe user room (44%), supported living (42%), or probation (25%). Those problem opiates users who only received a form of treatment not registered in the LADIS most often received day care (68%), medical care from a physician (63%) or in a hospital (30%), access to a safe user room (48%), social work (47%), night shelter (36%), debt counseling (33%), or supported living (30%).

Apart from using heroine (82%) or methadone (89%), it was found that a majority of 82% of the problem opiates users also used crack cocaine. With regard to intravenous drug use, it was found that 40% had ever injected a drug, 13% had injected a drug during the past six months, and 10% had injected a drug during the past four weeks.

With regard to psychological problems, symptoms of depression were reported most often, especially having less fun in daily activities (61%), needing more time to do things (54%), having the feeling that life is meaningless (47%), or wanting to be dead (31%). Symptoms of psychosis were reported less often, for example feeling that thoughts are being influenced (27%), thinking that others want to do harm (21%), or hearing voices (17%).

### **4.4 Intensive, frequent, long-term and other problematic forms of use**

#### *Dependent versus non-dependent frequent cannabis use*

Examination of problem drug use is difficult as general population surveys provide limited information on problematic forms of substance use, whereas treatment samples typically include relatively severe cases (Birkson's bias). The Dutch cannabis dependence (CanDep) study therefore zooms in on 600 young adult frequent cannabis users in the community, who used cannabis at least three times per week for twelve months. These frequent users were

recruited from 'coffee shops' (officially tolerated shops where most Dutch cannabis users buy cannabis) and through chain referral. They were compared with samples (of non-users and non-frequent users) from the general population on the one hand and patients in treatment for cannabis problems on the other (Van der Pol et al. 2011). A main element in these comparisons is the distinction between dependent and non-dependent frequent cannabis use.

Roughly, 20-50% of (nearly) daily cannabis users are dependent, and both frequent use and dependence are thought to increase the risk for mental health problems such as depression, anxiety and externalizing disorders (attention deficit hyperactivity disorder and conduct disorder). However, most research includes either a measure of dependence or frequency of use, but rarely both. Therefore, health risks associated with frequent use without dependence are not well described and may be overestimated. Moreover, most studies disregard quantity of cannabis use, while it can vary widely among frequent users, which may help explain why some frequent users are dependent or have mental health problems while others do not.

### *Cannabis use habits*

Apart from their frequent cannabis use, CanDep participants from the community lived rather conventional lives, for example regarding work/school and leisure (Liebregts et al. 2013b), and they were relatively highly educated compared to the general population (Van der Pol et al. 2013a). While a majority had also used in daytime (Van der Pol et al., 2013a), users do not use cannabis just anytime and anywhere. Cannabis use is mostly restricted to leisure time, at the end of the day when daily tasks are finished, to enhance several leisure activities. Most participants carefully select settings for use, often at home and preferably not in the company of non-users. Moreover, participants often assimilate their cannabis use to others, in particular to those with whom they spent most time (Liebregts et al. 2013a).

Rather unexpectedly, cannabis use of dependent users barely differed from non-dependent frequent users in the community, despite notable individual differences. Both groups had roughly used cannabis for 7 years and a third used cannabis daily. On average on a typical cannabis using day, both groups reported to be 'stoned' for 5.5 hours, consumed 3.3 joints, which contained a third of a gram cannabis (Van der Pol et al. 2013a). In contrast, patients in treatment used twice as much cannabis on average than dependent cannabis users in the community (see paragraph 5.3.1) (Van der Pol et al. 2013a;d). However, although the cannabis use was assessed in detail, these results are based on self-report. These showed to be imprecise and at best weakly associated with objective measures of dose and potency in a naturalistic experiment among 106 CanDep participants (Van der Pol et al. 2013d).

Not related with cannabis exposure but rather with setting of use, dependent frequent cannabis users more often used cannabis alone and to cope with problems. These and other factors were further assessed as potential predictors of the onset of cannabis dependence. Overall, 37 percent of frequent cannabis users became dependent within three years (Van der Pol et al. 2013b). Coping motives also prospectively predicted the first onset of dependence, and cannabis exposure variables and stable vulnerability factors did not. In addition, living alone, number and type of recent negative life events (major financial problems), and number and type of cannabis use disorder symptoms (impaired control over use) were also predictors. Prevention targeted at frequent cannabis users with these additional characteristics may improve intervention effectiveness.

## *Mental health*

A gradient in the prevalence of mental disorders was expected: increasing from the general population, non-dependent frequent users, dependent frequent users, and being highest among patients in treatment. Mental disorders are differentiated in *externalizing* disorders, that are apparent in outward behaviour like conduct disorder, and in *internalizing* disorders like anxiety and depression, that are present in inner emotions. For externalizing disorders, the expected pattern was confirmed. However, for internalizing disorders this was only partly the case, as non-dependent frequent users were comparable with the general population. These results were not attributable to differences in socio-demographic and vulnerability factors (other substance use, childhood adversity) and cannabis consumption behaviors.

## *Prevalence estimation problematic cannabis use*

In search of a short screener to identify problematic cannabis users in a population of frequent users, the CanDep study validated the Severity of Dependence Scale (SDS) against the Composite International Diagnostic Interview (CIDI) 3.0 DSM-IV diagnosis cannabis dependence. Although reliability of the SDS total score was good (Cronbach's  $\alpha=0.70$ ), criterion validity was low: area under curve was 0.68 and at the optimal differentiating cut-off ( $SDS \geq 4$ ), sensitivity was 61.3% and specificity 63.5%. Therefore, its use as a screener to differentiate between dependence and non-dependence within populations of young adult frequent cannabis users is not recommended (Van der Pol et al. 2013c).





## **5 Drug-related treatment: treatment demand and treatment availability**

### **5.1 Introduction**

#### *Addiction care in the Netherlands*

In the Netherlands, regular addiction care is provided by thirteen institutes, of which seven institutes have merged with an institute for mental health care and one institute has merged with an institute for social relief. The remaining five institutes did not merge, but remained a categorical institute for addiction care and treatment. All the thirteen regular institutes deliver anonymous data about treatment demand to the National Alcohol and Drugs Information System, the LADIS (Wisselink et al. 2013). The LADIS therewith does not yet contain data from addiction care offered by the other, non-merged, mental health care and by private addiction clinics. The share of the private addiction clinics and the non-merged mental health care in the total addiction care is not known exactly. It is estimated that the LADIS does not yet include about 5% of the total addiction care. Neither are other forms of care that are given to addicts outside the addiction care, for example supported living offered by the Salvation Army, registered in the LADIS. Moreover, although the LADIS still contains the data about the probation care for addicts, the quality of these data has decreased. Therefore, since 2011, the LADIS no longer reports the data from the probation care.

Together with the institutes for mental health care, all the regular institutes for addiction care have organized themselves in the National Branch Organization for Mental Health Care and Addiction Services (GGZ Nederland), which is a member of Mental Health Europe. GGZ Nederland supports the quality management of the addiction care through the program Scoring Results (Resultaten Scoren) that started in 1999.

### **5.2 General description, availability and quality assurance**

#### *Own private contribution for addiction care*

As a consequence of the Government spending cuts, clients starting treatment in an addiction care institute in 2012 had to pay an own private contribution. For inpatient addiction treatment, the own private contribution amounted to 145 euros after the first month. For outpatient addiction treatment, the own contribution amounted to a maximum of 200 euros a year. The own private contribution may have been one of the reasons why for the first time in 2012 the number of unsubscriptions exceeded the number of admissions (Van Laar et al. 2013). However, some institutes for addiction care decided to reimburse their clients for having to pay their own private contribution.

The total number of addiction clients, as registered in the LADIS, had decreased with 6% between 2011 and 2012 (Wisselink et al 2013). This decrease refers to the total of clients receiving treatment for addiction to alcohol, drugs, other substances, or gambling. The number of drug clients decreased with 4% from 32,871 drug clients in 2011 to 31,605 drug clients in 2012. As part of the Coalition Agreement for the Rutte II Administration, that was presented on the 29th of October 2012, the own private contribution was abandoned.

### 5.2.1 Strategy/policy

#### *Political agreement*

On the 18<sup>th</sup> of June 2012, the Ministry of Health, Welfare, and Sport (VWS) and the providers of mental health care and addiction care signed an agreement aimed to secure the future of mental health care and addiction care.<sup>13</sup> To keep the mental health care and addiction care affordable in the near future, it was agreed to reduce the number of inpatient units by a third in 2020 compared to 2008. A third of the inpatient care will then have to be replaced by outpatient care. This will require more self-management from clients.

The National Branch Organization for Mental Health Care and Addiction Services (GGZ Nederland 2013) has put the agreement between the care providers and the Ministry into practice by means of a vision document.<sup>14</sup> The starting point for the vision document is that, due to the replacement of inpatient care by outpatient care, addiction clients themselves are in charge of their own treatment. The treatment focus will shift towards empowerment, reintegration and self-regulation of the addiction clients, with assistance of expert by experience. Overall, the vision document targets five themes:

- a more assertive prevention of drug use and abuse, also of tobacco use;
- a focus on youth, including prevention of the transfer of problems between generations;
- a focus on vulnerable groups for which drug use involves great risks;
- a focus on neighbourhoods at risk;
- a consolidation of the care for chronic addicts.

To keep the health care in the Netherlands affordable, the Council for Care Insurance (CVZ) will further investigate which forms of alleged health care are actually inappropriate. On the 30<sup>th</sup> of September 2013, the minister of Health, Welfare, and Sport announced that the CVZ will pay special attention to inappropriate 'treatments' that occur in the addiction care.<sup>15</sup> Inappropriate treatments are treatments for which reimbursement is requested at a health insurance company, although such treatments are not necessary for good addiction treatment. Especially luxury facilities are not required for good addiction care.

For the developments with regard to e-health interventions in the addiction care, see paragraph 1.2.1 of this report.

### 5.2.2 Treatment systems

#### *Merges with mental health care*

About half of the institutes for addiction care have merged with an institute for general mental health care during the past decade. It has been recently investigated whether these mergers have improved the addiction care with regard to reaching addicts and increasing the number of treated addicts (Rutten and Schippers 2013). Based on registration data from the National Alcohol and Drugs Information System (LADIS), the client cohorts 1995-1997 were compared to the client cohorts 2009-2011.

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<sup>13</sup><http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2012/06/18/bestuurlijk-akkoord-toekomst-ggz-2013-2014.html>.

<sup>14</sup>[http://www.ggznederland.nl/ggz1315-01-visiedocument-verslavingszorg\\_web.pdf](http://www.ggznederland.nl/ggz1315-01-visiedocument-verslavingszorg_web.pdf).

<sup>15</sup>[http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2013/09/30/kamerbrief-over-buitenhof-oproep-aanpak-doorlichting-pakket-en-reactie-op-twee-cvz-rapporten-geneeskundige-geestelijke-gezondheidszorg-deel-2-en-kosteneffectiviteit.html?ns\\_campaign=kamerstukken-ministerie-van-volksgesondheid%2C-welzijn-en-sport&ns\\_channel=att](http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2013/09/30/kamerbrief-over-buitenhof-oproep-aanpak-doorlichting-pakket-en-reactie-op-twee-cvz-rapporten-geneeskundige-geestelijke-gezondheidszorg-deel-2-en-kosteneffectiviteit.html?ns_campaign=kamerstukken-ministerie-van-volksgesondheid%2C-welzijn-en-sport&ns_channel=att).

For the addiction care in general the number of treated clients had increased with about 55%, irrespective of merging or not with the mental health care. Especially more women and older people were treated. Only the number of opiates clients had decreased. However, hardly any difference was found between the merged and the non-merged addiction care. From this finding the authors conclude that "integration in mental health had no large impact on substance abuse treatment, for the better, nor for the worse" (Rutten and Schippers 2013).

#### *Evaluation of quality management*

The quality management program for the addiction care, Scoring Results (Resultaten Scoren), has been evaluated for the fourth time in 2011 (Spits and Schippers 2012). In that year, Scoring Results had established 27 products consisting of 12 protocols, 4 helping hands, 8 guidelines, and 3 manuals. The level of implementation was investigated for 10 regular institutes for addiction care. For the 24 assessed products, the level of implementation at the 10 institutes was high for 10 products, moderate for 7 products, and low for 7 products. An implementation rate of 100% for all institutes was reached for the protocols "Life-style training 1", "Life-style training 2", "Life-style training 4", and for the guideline "Opiates maintenance treatment (RIOB)". A life-style training is a form of cognitive behavioral therapy that targets three forms of learning to treat addiction behaviour: social learning, operant conditioning, and classical conditioning. The life-style trainings 1 and 2 are given in an individual setting, whereas the life-style trainings 3 and 4 are given in a group setting.

#### *Examples of new products from Scoring Results*

Examples of new products from Scoring Results<sup>16</sup> are the "Practice-based recommendations for GHB detoxification" (Resultaten Scoren 2013), the advisory report "Elderly and addiction" (Bovens et al. 2013), and the quick scan "Scoring results around recovery" (Van der Stel and Van Gool 2013).

The first product includes three protocols: for the detoxification from GHB in an inpatient setting, one for an outpatient setting, and the GHB-withdrawal syndrome in a hospital setting. The outpatient protocol includes a checklist for the strict conditions under which a GHB client can be treated in an outpatient setting. Outpatient detoxification is ill only feasible when a fulltime coach is available in the home situation, a physician can see the client at least three times a week, admission to a detoxification department can be arranged immediately, and the client lives in a stable housing situation.

The advisory report "Elderly and addiction" (Bovens et al. 2013) was issued because most of the new treatment admissions in the addiction care are older clients (over the age of 55 years). This report provided a profile of the older addiction clients: they are mostly in treatment for addiction to alcohol, medicines, or gambling. Regarding drugs, there the treatment population is also ageing. Moreover, older clients show specific mental, physical, and cognitive vulnerabilities, and therefore require an adjusted treatment approach. It was found that, from a total of 19 treatment departments, 8 departments had already amended their standard treatment programs to the needs of older clients, especially with regard to the Life-style trainings.

Recovery has always been one of the, more or less explicit, goals of the Dutch addiction care. However, it has become increasingly important in recent years (Van der Stel

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<sup>16</sup><http://www.resultatenscoren.nl/publicaties/>.

and Van Gool 2013). Therefore, the quick scan "Scoring results around recovery" was published combining scientific knowledge with knowledge from professionals and paraprofessional experts by experience. The scan aimed to improve clarity about the concept "recovery". Apart from "clinical recovery" (defined as the reduction of symptoms of addiction), which until now has received the most attention, there is a need for "functional recovery", "social recovery", and "personal recovery". Among these aspects of recovery, the personal recovery (recovery as a human person) is seen as central for the other aspects of recovery. Notwithstanding the ongoing discussion about what "recovery" actually means, there is consensus about the six principles needed for 'strength-based recovery':

- (1) a focus on client's strengths rather than their pathology;
- (2) when possible, engaging clients in existing normal services instead of specialized addiction care alone, since the client's wider community is the foundation for mental health;
- (3) interventions based on the principle of clients' self-determination;
- (4) give priority to a good supporting relationship between the case manager and the client;
- (5) a preference for assertive outreach as a mode of intervention; and
- (6) ascertain that people with serious mental illness continue to grow, to learn, and to change.

#### *Screener for ADHD*

Given the high rates of comorbid attention deficit hyperactivity disorder (ADHD) among patients in addiction treatment (see also § 6.3.2), recently estimated at 13% in an international sample of treatment seeking substance use disorders patients, the quality of addiction care may be improved by implementing a valid screener for ADHD detection in addiction care. This international study also found that the Adult ADHD Self-Report Scale V 1.1 (ASRS) is a sensitive screener to identify ADHD cases (Van de Glind et al. 2013). With only 6 items, the ASRS is the shortest available instrument. Initially, it was argued that "the ASRS should not be administered in acute wards or detoxification centers because the positive ADHD symptoms can easily overlap with withdrawal symptoms and the direct effects of substances of abuse". Contrary to this expectation, however, it was found that the ASRS is a sensitive screener "regardless of whether the patients are screened during the admission process or after 1 – 2 weeks stabilization following treatment entry". However, although the sensitivity of the test was appropriate (0.84 at admission) the specificity of the ASRS was moderate (0.66 at admission).

### **5.3 Access to treatment**

#### *5.3.1 Regular addiction treatment*

As mentioned above, the National Alcohol and Drugs Information System (LADIS) is the most comprehensive information system about clients in the regular addiction treatment in the Netherlands. Up to including 2010, the LADIS also contained data from the probation services for addicts, but due to a decreasing quality the probation data were no longer reported since 2011. Although the LADIS has a wide coverage of clients receiving treatment for their addiction problems, some private clinics, non-merged mental health care institutes, and addiction units in general psychiatric hospitals are not yet represented in the LADIS.

The data in this paragraph are based on the protocol for the Treatment Demand Indicator (TDI) as established by the EMCDDA (Standard Table TDI\_2013\_NL\_02). This

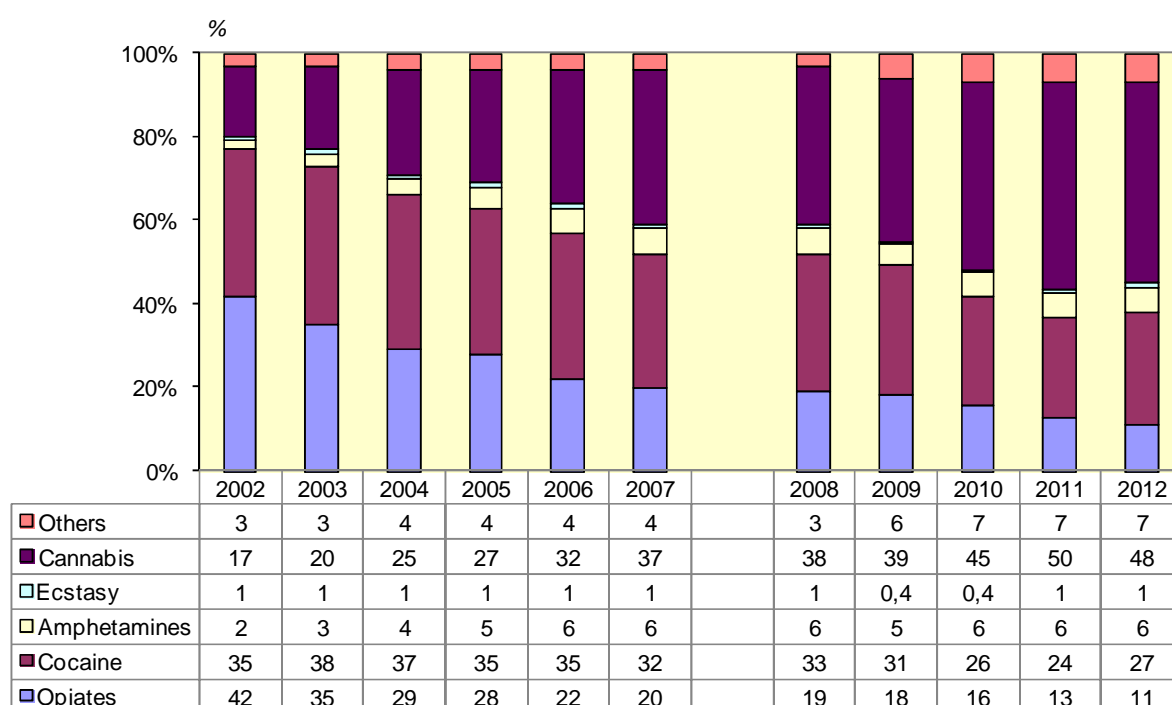
means that only those clients who have had more than one face-to-face contact with an addiction counselor are included.

Moreover, the TDI only includes clients who subscribed in the year of registration, not those who already registered the previous year and were still in treatment. However, it includes both clients subscribed for the first time in their life for a drug problem (first treatments), and clients that re-subscribed in the registration year. The TDI controls for double counting of persons. These criteria are more restrictive than the criteria applied by the holder of the LADIS, the Foundation for the Provision of Care Information (IVZ), to assess the annual LADIS Key Figures. Therefore, the figures presented below deviate from those reported in paragraph 5.2 and elsewhere (Wisselink et al. 2013).

### Trends

From 2002 up to including 2010, the annual number of new clients applying for help at the drug treatment services (including probation) varied between eight and eleven thousand, with no clear trend over the past years. In 2011 there were 11 341 new clients (excluding probation) and in 2012 there were 10 801 new clients (excluding probation). Figure 5.3.1 shows the distribution of the new clients from 2002 up to including 2012 by primary drug of abuse.

Figure 5.3.1: Proportion of clients subscribed in the registration between 2002 and 2012 at the institutes for addiction treatment by primary drug<sup>1</sup>



<sup>1</sup> Selection of clients based on the EMCDDA TDI protocol. Probation clients are excluded since 2008. Source: LADIS, IVZ.

Figure 5.3.1 shows the following:

- The percentage of opiates clients among the new drug clients decreased from 42% in 2002 to only 16% in 2010.
- Since 2003, the proportion of cocaine clients (including crack clients) exceeds the proportion of opiates clients. However, it should be noted that these percentages differ

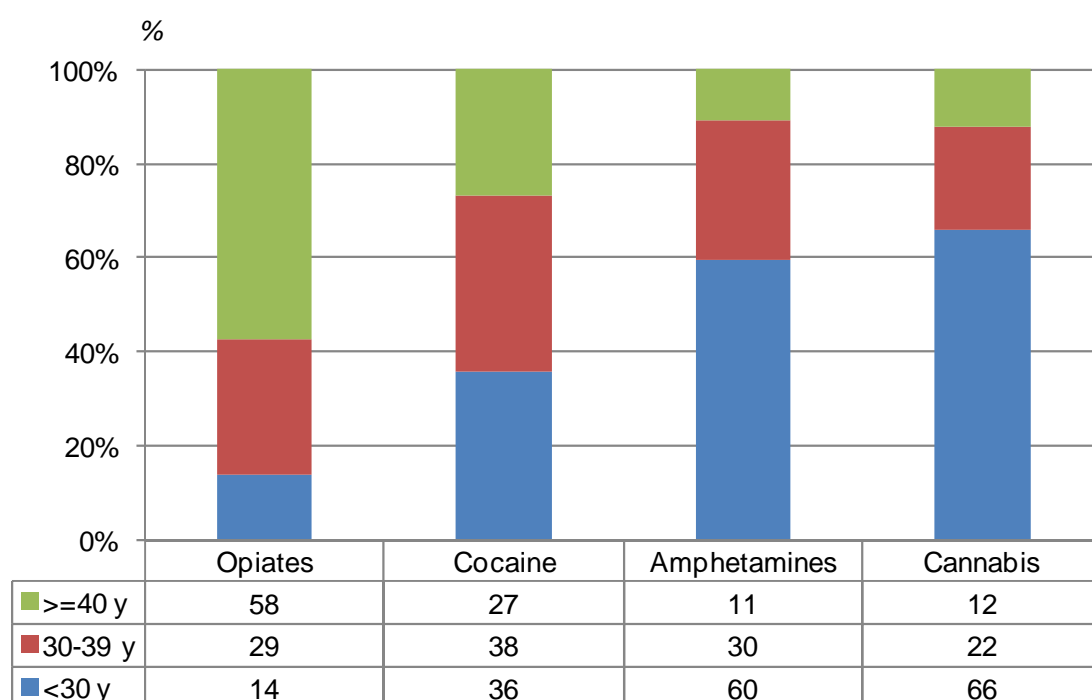
from the overall number of clients including the clients who were already registered in the year before the reporting year.

- The proportion of cannabis clients steadily increased from 17% in 2002 to 45% in 2010.
- The ecstasy and amphetamines clients never accounted for more than 6% of the new drug clients.

### Age

Figure 5.3.2 shows the age distribution in 2012 by primary drug of abuse. Clients seeking treatment for problem use of opiates most often fall in the older age groups. On the contrary, clients who have a primary problem with amphetamines or cannabis, most often fall in the youngest age groups.

*Figure 5.3.2: Clients subscribed in 2012 at addiction treatment centers by primary drug and age group<sup>I</sup>*

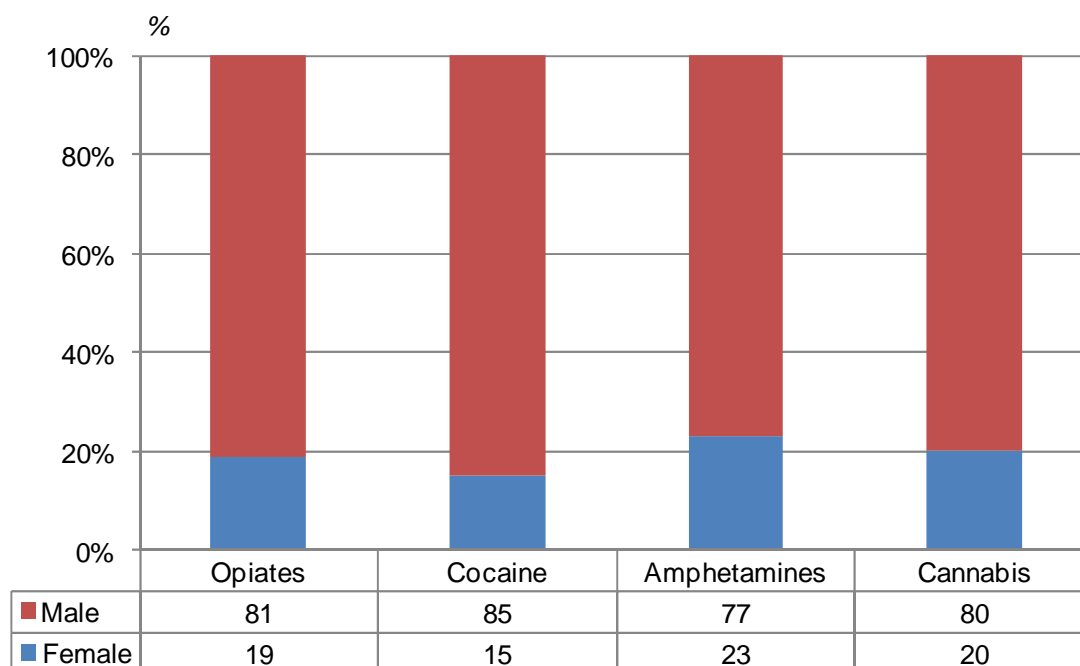


I. Selection of clients based on the EMCDDA TDI protocol, excluding probation clients. Source: LADIS, IVZ.

### Gender

The percentage of females among all the new drug clients varied over the years between 12% and 21%. Figure 5.3.3 shows the gender distribution by primary drug in 2012. The proportion of females was highest among amphetamines clients (23%), and lowest among cocaine clients (15%).

Figure 5.3.3: Gender distribution by primary drug of clients subscribed in 2012 at centers for addiction treatment<sup>†</sup>



<sup>†</sup>. Selection of clients based on the EMCDDA TDI protocol, excluding probation clients. Source: LADIS, IVZ.

#### *Treatment seeking for GHB dependence*

As a new product from Scoring Results, paragraph 5.2.2 above described the Practice-based recommendations for GHB detoxification. Currently, GHB is still included among the category "other substances" within the TDI and has not yet been specified separately. Nonetheless, the number of GHB clients in the addiction care in the Netherlands has increased over the past years. From 2007 up to including 2012, the total number of old and new GHB clients (excluding probation) increased from 59 to 761 GHB clients (Van Laar et al. 2013).

#### *Treatment seeking for cannabis dependence*

With regard to cannabis dependence, the determinants of treatment seeking have been investigated by comparing 70 cannabis clients to 241 non-treatment seeking cannabis dependent community subjects (Van der Pol et al. 2013a).

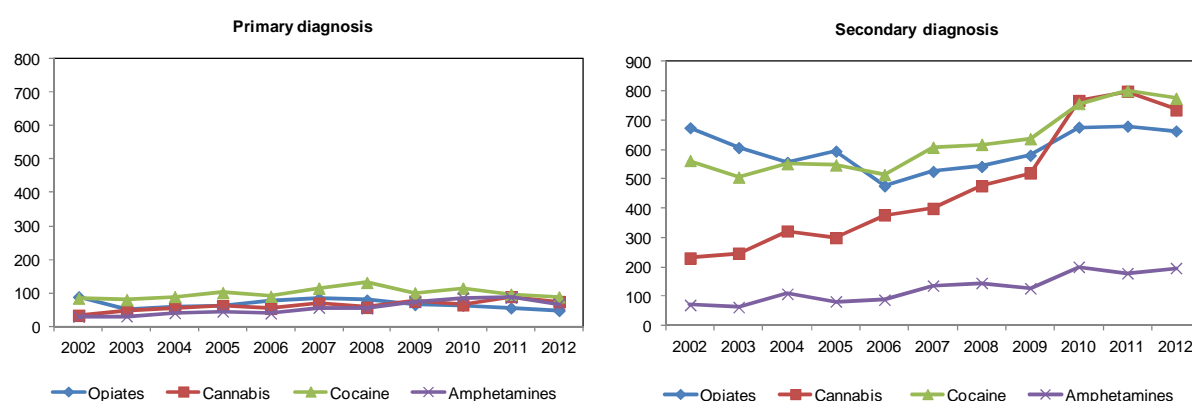
- It was found that clients in treatment for cannabis dependence use approximately twice as much cannabis, compared to cannabis dependent people in the community who do not seek treatment.
- The cannabis dependent treatment seekers also experience considerably more functional impairment and comorbid mental disorders, which facilitates treatment seeking.
- Barriers to seek treatment for cannabis dependent community subjects are "desire for self-reliance", "preference for informal help", and "absence of the need for treatment". In case of a subjective treatment need the main barriers to seek treatment are "desire for self-reliance", "treatment ineffectiveness", and "avoiding stigma".

### 5.3.2 General hospital admissions

Admissions to general hospitals in the Netherlands are recorded via the Dutch Hospital Registration (LMR) held by the Foundation Dutch Hospital Data (DHD). Figure 5.3.4 shows the number of clinical admissions to a general hospital because of drug dependence or abuse as a primary or a secondary diagnosis for opiates, cannabis, cocaine, and amphetamines.

- In 2012, the Dutch Hospital Registration (LMR) recorded almost two million clinical hospital admissions.<sup>17</sup> In that year, drug dependence and drug abuse were recorded only 538 times as a primary diagnosis and 2,938 times as a secondary diagnosis (ICD-9 codes 304 and 305.2-9).
- Within the category of admissions related to drug abuse and dependence, opiates made up 9% of the primary and 23% of the secondary diagnoses. Cocaine made up 16% of the primary and 26% of the secondary diagnoses. Cannabis made up 14% of the primary and 25% of the secondary diagnoses. Amphetamines made up 12% of the primary and 7% of the secondary diagnoses.

*Figure 5.3.4: Number of admissions to general hospitals related to dependence or abuse for opiates, cannabis, cocaine, and amphetamines, as primary diagnosis (left panel) or secondary diagnosis (right panel), from 2002 to 2012*



Source: Dutch Hospital Registration (LMR), Dutch Hospital Data (DHD).

#### Trends

The number of admissions related to drug abuse or dependence as a primary diagnosis remained rather low over the past years and there were only some minor fluctuations. Stronger increases have been observed for the number of admissions with drugs as a secondary diagnosis. Between 2006 and 2012 the number of secondary admissions increased from 514 to 774 for cocaine, from 476 to 663 for opiates, from 377 to 735 for cannabis, and from 88 to 196 admissions for amphetamines. However, when looking at the past three years, the number of secondary admissions has stabilized for cocaine, as well as cannabis, opiates, and amphetamines.

Table 5.3.1 summarizes the precise numbers for 2012 for the main drugs of abuse and gives the number of drug patients after correction for double counting. The mean age was highest for opiates patients (48 years), followed by cocaine patients (40 years). The cannabis and amphetamines patients were youngest, their mean age was 33 years.



*Table 5.3.1: Clinical admissions to general hospitals in 2012 related to abuse and dependence for cannabis, cocaine, opiates, and amphetamines<sup>I</sup>*

|                                       | <b>Cannabis</b> | <b>Cocaine</b> | <b>Opiates</b> | <b>Amphetamines</b> |
|---------------------------------------|-----------------|----------------|----------------|---------------------|
| Primary diagnoses                     | 74              | 88             | 47             | 67                  |
| Secondary diagnoses                   | 735             | 774            | 663            | 196                 |
| Total number of persons <sup>II</sup> | 733             | 777            | 609            | 253                 |
| Mean age                              | 33 years        | 40 years       | 48 years       | 33 years            |
| Percentage male                       | 73%             | 80%            | 72%            | 73%                 |

I. 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. II. After correction for double counting: number of unique persons who were clinically admitted at least once because of a drug-related disorder assigned as a primary or secondary diagnosis. Source: Dutch Hospital Registration (LMR), Dutch Hospital Data (DHD).

### 5.3.3 Conclusion

The total number of old and new drug clients in the addiction care decreased with 4% from 32,871 drug clients in 2011 to 31,605 drug clients in 2012. The number of new clients (TDI definition) decreased with 5% from 11,341 drug clients in 2011 to 10,801 drug clients in 2012. These small decreases in the addiction care parallel the stabilization of the number of drug patients in the hospitals during the past three years. The small decrease in the number of drug clients in the addiction care could have resulted from the own private contribution which the clients would have to pay initially in 2012. However, no such own private contribution was announced yet for the hospital care. All in all, these findings suggest a stabilization of the number of problem drug users.



## **6 Health correlates and consequences**

### **6.1 Introduction**

This chapter describes the fatal and non-fatal consequences of drug use. The focus of this chapter is on problematic drug use. The Netherlands has a long standing tradition on harm reduction and a large package of harm reduction measures is available since the eighties, reaching the very majority of those problematic drug users in need of it. As a result, the incidence of drug-related infectious diseases (§ 6.2) as well as overdose death (§ 6.4) has been substantially reduced. The prevalence of all drug-related infections, however, are still (substantially) higher than in the general population.

To a lesser extent, this chapter pays attention to recreational drug users. Information is provided on medical emergencies after (most often recreational) drug use (§ 6.3.1). We see an increase in ecstasy related problems. Further the proportion of intoxications with GHB is high, especially when seen in relation to the limited use in the general population. We also present findings from the CANDEP study which found that internalising disorders were more common in dependent frequent cannabis users, but not in frequent non-dependent cannabis users, when compared to the general population (§ 6.3.2). The same study described a relation between the existence of mental health disorders and treatment seeking in dependent cannabis users. We further describe results from the IASP study, which found that the prevalence of both childhood ADHD and adult ADHD is much higher in adult treatment seeking substance use disorders (SUD) patients than in the general population. They further described that treatment seeking SUD patients with ADHD are at a very high risk for additional externalizing disorders.

### **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 incidence, i.e., the number of new diagnoses, of HIV, hepatitis B and C among injecting drug users is low since many years. The data of the current reporting year point into the same direction. However, there are still indications that the number of chronically infected drug users (i.e., prevalence), and thereby the burden of these diseases, is higher, especially for hepatitis C.

In this paragraph we present prevalence and incidence data on HIV, hepatitis C and B among (injecting) drug users based on the results from the national HIV/ AIDS registry, the Amsterdam Cohort Studies among drug users, regular screening data from drug treatment centres, and notification data on hepatitis B and C. As described in previous reports, the (HIV) sentinel surveillance system among (ever) injecting drug users (IDUs) of the National Institute of Public Health and the Environment (RIVM) has been discontinued and no recent data from national IDU surveillance systems are available. Also, the hepatitis B vaccination campaign has been discontinued for drug users since January 1, 2012 and is no longer

available as source for new data. See National Report 2012 for an overview of the hepatitis B vaccination campaign results.

### 6.2.1 HIV

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 26 collaborative HIV treatment centres 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](http://www.hiv-monitoring.nl)). The latest available report of the SHM shows again that men who have sex with men (MSM) still account for the largest number of HIV diagnoses annually (Van Sighem et al. 2012). The number of new diagnoses is still increasing in MSM of 55 years or older. A steady decline, though, is now seen in younger MSM and in patients infected through heterosexual contact, which is attributable to the reduction of immigration from HIV-endemic countries. Since several years, the contribution of injecting drug users to new HIV diagnoses is less than 1%.

- In 2012, 843 new HIV diagnoses were reported in the treatment centres. In 4 men and 0 women injecting drug use was the most likely route of transmission (table 6.2.1) (Soetens et al. 2013).
- Up to December 2012 a cumulative total of 20,528 HIV-infected individuals were registered by the treatment centres and the HIV Monitoring Foundation (Soetens et al. 2013). The percentage of patients infected with HIV through injecting drug use is 3.6 (737 patients). Up to 2000, 8% of all new HIV-diagnoses was associated with injecting drug use, but since 2000 this has declined sharply. The main route of HIV-transmission in the Netherlands is sexual: through MSM contact in 57% of cases and through heterosexual contact in 31%.
- 72% of HIV-positive IDUs originated from the Netherlands and 23% from other Western European countries.

Table 6.2.1: Number and characteristics of recorded HIV infections by route of transmission <sup>I</sup>

| Transmission group              | HIV cases diagnosed in 2012 | Cumulative HIV diagnoses (up to 2012) | Gender: percentage males (of cumulative number in transmission group) |
|---------------------------------|-----------------------------|---------------------------------------|---|
| Total                           | 843                         | 20 528                                | 80%   |
| Percentage IDU                  | <1%                         | 4%                                    | 73%   |
| Percentage MSM                  | 67%                         | 57%                                   | 100%  |
| Percentage heterosexual contact | 28%                         | 31%                                   | 44%   |
| Percentage other                | 5%                          | 8%                                    | 75%   |

I. Figures are adjusted constantly because of reporting delays. IDU: injecting drug use; MSM: men who have sex with men. The group "other" includes receivers of a blood product, needle stick injuries, mother-to-child transmission and unknown causes. Source: HIV Monitoring Foundation/ RIVM (Soetens et al., 2013).

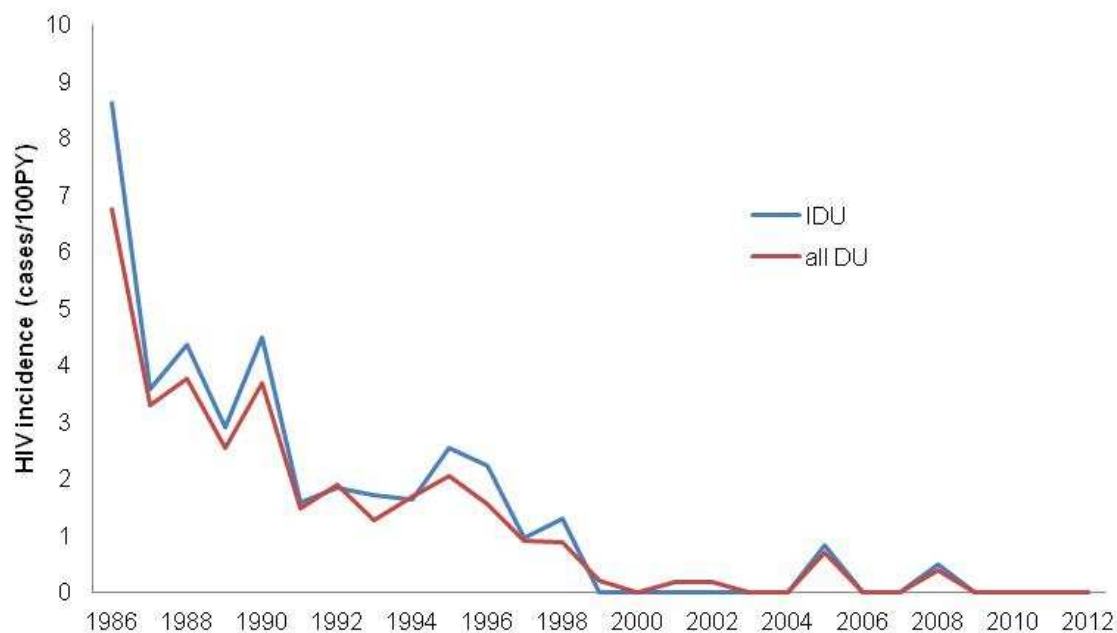
b. The prospective Amsterdam Cohort Studies (ACS) are a collaboration between the Amsterdam Health Service, the Academic Medical Centre of Amsterdam, the Sanquin Blood Supply Foundation and the University Medical Centre Utrecht ([www.amsterdamcohortstudies.org](http://www.amsterdamcohortstudies.org)). The 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). From July 2009 on, also recent injecting drug users (irrespective of their age) are invited to participate. The latest available data show that as of December 2011, 1658 (injecting) drug users were included in the ACS (Van Sighem et al. 2012). Drug users are recruited at methadone posts, the STD-clinic for drug-using prostitutes and by word of mouth. The enrolment and follow-up (every four to six months) are facilitated by the well organised health care system for drug users in Amsterdam. Research in the ACS ranges from epidemiology and social science to virology, immunology and clinical medicine.

- At study entry, 322 of the 1658 drug users were HIV-positive (19%) and 98 seroconverted during follow-up (Van Sighem et al. 2012). For comparison, of the 2473 MSM in the ACS 614 were HIV-positive at study entry (25%) and 228 seroconverted during follow-up.
- In 2011, 327 drug users were still followed, of whom none had their first study visit in 2011, although the cohort is open and efforts were made to include new participants. The unpopularity of injecting drugs may explain this. Of the 327 drug users followed in 2011, 24 were HIV-positive at entry and 15 seroconverted during follow-up (Van Sighem et al., 2012).
- 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 (Figure 6.2.1). Apart from one positive case in 2008, no new HIV infections were diagnosed in drugs users (injecting and non-injecting) from 2006 to 2012 (Soetens et al. 2013). For comparison: the HIV incidence rate in MSM participating in the ACS fluctuated during the last decade between 1-2/ 100 person-years.
- The reduction in HIV transmission in IDUs can be partly explained by the decline in injecting and needle sharing (see also § 7.3), although sexual risk behaviour is still occurring. This was also underscored in a recent study characterizing epidemiological

networks of MSM and DUs (Lukashov et al. 2013). This study showed with phylogenetic analysis of the HIV-1 virus that MSM and IDU have distinct virus strains clustering and circulating in each of the two networks. During the observation period of more than 30 years, only 6% of viruses (4 of MSM and 14 of DU) clustered with the other risk group. The 4 MSM with DU-specific viruses occurred in the 1980s and early 1990s. In contrast, the viruses non-specific for the DU had a limited impact in the early years (causing 20% of new infections), but replaced the DU-specific strains among new infections after 2002. This is the same period in which DU switched to low-harm drug practices, but male DU remained involved in commercial and non-commercial sex with men (Lukashov et al. 2013).

- Unprotected sex was already 15 years ago identified as the major route of HIV transmission from Dutch DU to heterosexually infected individuals: 40% of individuals in the Netherlands infected by HIV-1 subtype B viruses via heterosexual contacts harboured DU-specific strains (Lukashov et al. 1998).

*Figure 6.2.1: Yearly HIV-incidence of injecting drug users (IDU) ( $\leq 30$  years at entry) and all drug users (DU) included in the Amsterdam Cohort Studies, 1985-2012*



Source: Amsterdam Cohort Studies/ RIVM (Trienekens et al. 2012).

c. Regular screening of infectious diseases among drug users in treatment settings is recommended in several guidelines and this recommendation is regularly followed, but the test results are not available for monitoring purposes, as the data are stored in individual patient files.

- In Amsterdam, the Public Health Service (GGD) runs most of the low threshold methadone treatment locations. As part of the treatment, patients are regularly offered tests for drug related infectious diseases. However, in practice not all clients are tested. The results may be biased in two directions. First, professionals are more insistent on the screening in case of new clients and those with higher risk behaviour (usually prostitutes), which may result in a slight over-estimation. On the other hand, drug users

who are already in HIV (or hepatitis C) treatment will not be tested again. The effect hereof is expected to result in a significant underestimation.

- In 2012, 78 of 95 ever IDUs in methadone treatment were tested for HIV antibodies; in 1/78 ever IDUs (1.3%) HIV antibodies were found (source: M. de Wit, GGD Amsterdam). See also Standard Table 09 (ST09P2).

### 6.2.2 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 2012, the cumulative total of reported AIDS diagnoses was 8,875 and 5,442 HIV infected individuals had died (Soetens et al. 2013). The annual number of new AIDS diagnoses peaked in the first half of the nineties (around 500 cases per year) and then gradually dropped, to 154 cases in 2012 (Soetens et al. 2013). The observed decrease since 1996 is related to the availability of HAART, which slowed progression from HIV to AIDS.
- Of the 154 new AIDS diagnoses in 2012, 3 (1.9%) were among injecting drug users (table 6.2.2). In the same year, 131 AIDS patients died, among whom were 16 (12.2%) injecting drug users. Note that the data for 2012 are incomplete due to reporting delay (Soetens et al. 2013).
- Up until December 2012, 720 registered AIDS patients (8.1% of the total AIDS diagnoses) belonged to the transmission risk group of injecting drug users. The number of diagnosed AIDS cases related to injecting drug use peaked in 1995 (74), but remained at or below 15 cases per year since 1999, with the exception of 2005 (24 cases).
- Note that the percentage of IDUs among the total population of AIDS patients (8.1% over all years) is higher than the percentage of IDUs in the total population of HIV patients (3.6%), but that the percentage of IDUs among the AIDS deaths is even higher: 11% or over in the last decade (except for 9.4% in 2011). This indicates that the disease course in injecting drug users is less favourable than in other risk groups.

Table 6.2.2: Number and percentage of recorded AIDS patients and deaths, by route of transmission

| Transmission group   | AIDS patients diagnosed in 2012 <sup>I</sup> | Cumulative AIDS patients diagnosed <1987-2012 | Deaths among HIV/AIDS patients in 2012 <sup>I</sup> | Cumulative deaths 2002-2012 |
|----------------------|--|---|---|-----------------------------|
| Total                | 154  | 8875  | 131   | 1558                        |
| Injecting drug use   | 3<br>2%                                      | 720<br>8%                                     | 16<br>12%   | 208<br>13%                  |
| MSM                  | 73<br>47%                                    | 5190<br>58%                                   | 77<br>59%   | 767<br>49%                  |
| Heterosexual contact | 62<br>40%                                    | 2252<br>25%                                   | 26<br>20%   | 389<br>25%                  |
| Other/ unknown       | 16<br>10%                                    | 713<br>8%                                     | 12<br>9%  | 194<br>12%                  |

AIDS cases were registered by the Health Inspectorate before 1999 and from 1999 onwards by the HIV Monitoring Foundation. Figures are adjusted constantly because of reporting delays. I. Incomplete data for 2012. Note the different time periods for cumulative AIDS diagnoses (<1987-2012) and cumulative deaths (2002-2012). Source: HIV Monitoring Foundation/ RIVM (Soetens et al. 2013).

### 6.2.3 Hepatitis B and C

#### *Prevalence in the population*

The Netherlands is a low hepatitis B and C endemic country. In the “Pienter studies” (national representative serological surveys held in 1995/1996 (Pienter 1) and 2006/2007 (Pienter 2) in the Dutch population aged 0-79 years), the prevalence of hepatitis B and C infection was established (Hahné et al. 2012; Vriend et al. 2012). These studies are the main source of information on the prevalence of HBV and HCV infection in the general Dutch population.

#### *Hepatitis B*

- In 2007, the weighted anti-HBc prevalence was 3.5% (95% CI 2.2-5.5).
- The HBsAg prevalence was 0.2% (95% CI 0.1-0.4).
- The HBV prevalence estimates probably underestimate the true population prevalence, as high risk groups, such as injecting drug users, are likely to be underrepresented. In indigenous Dutch participants, the only risk factors identified were older age and having received a blood transfusion before 1990. A history of injecting drug use was only found in second generation migrants as a risk factor for anti-HBc positivity. However, there was only one second generation migrant reporting injecting drug use and this participant was anti-HBc positive. The power of the study to identify risk factors for chronic HBV was limited because in 2007 only 16 chronically infected individuals were found.

#### *Hepatitis C*

- The PIENTER-2 study found a weighted national HCV seroprevalence of 0.30% (95% CI 0.05-0.55%) (Vriend et al. 2012).
- The study described that most HCV-positive persons (70%) were born in a HCV endemic country. Eight of the 6386 participating individuals reported having injected drugs and three of eight ever injectors were HCV-positive. However, the study concludes that



“limited information was obtained on the HCV prevalence among high-risk groups like IDU and HIV-positive MSM. Despite the high number of total participants, the number of HIV-positive MSM and of participants reporting IDU was very small. Moreover, information on (former) IDU and HIV status was missing in 3-10% of the total study population. A possible underrepresentation of these groups could have resulted in an underestimation of the national HCV seroprevalence.” (Vriend et al., 2012)

- Based on the HCV prevalence from the PIENTER studies and recent HCV data from specific risk groups (migrants, MSM and IDUs), a new HCV estimation was made using mathematical modelling, which took into account the changes in HCV dynamics in several risk groups (lower numbers of HCV infection in the “usual” HCV risk groups: IDUs and haemophilia patients; and more acute HCV infections in MSM) (Vriend et al., 2013). The estimated national HCV seroprevalence was 0.22% (min 0.07%; max 0.37%), equivalent to 28,100 HCV infected individuals (min n=9,600; max n= 48,000).
- This is lower than the estimate of the Dutch Health Council in 1997, which ranged from 0.1-0.4% (in absolute numbers: 15,000 – 60,000 HCV infected individuals) (Health Council of the Netherlands, 1997). An explanation may be the decrease in new HCV infections in IDUs and haemophilia patients, and natural deaths, which is however accompanied by an increase in HCV incidence in MSM and growing numbers of first-generation migrants (Vriend et al. 2013).
- Vriend et al. (2013) estimated the number of IDUs living with HCV -antibodies at 7,752 (759 HIV-positive IDUs (range 603-1,017) and 6993 HIV-negative IDUs (range 7009-15,263)). In their estimate, IDUs were the second largest group of HCV-positive individuals.
- First-generation migrants from HCV-endemic countries were found to have the highest HCV prevalence rate, accounting for more than half of all HCV-positive persons in the Netherlands. MSM were the third largest group. They noted however that estimates for hidden populations like IDUs and MSM are difficult to make, as their population size is unknown (Vriend et al. 2013).

#### *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 remain asymptomatic. However, they may (in the long run) give indications of trends on the incidence of these infectious diseases.

#### *Hepatitis B*

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. The data show that from 1976 to 1981 the incidence of hepatitis B in the population increased (probably due to the introduction of the obligation to notify the disease, the large-scale availability of serological tests and the screening programs among blood donors). Since 1981 the incidence has decreased again, which can be attributed to the availability of a vaccine and the decrease in sexual risk behaviour as a reaction to the aids-epidemic (Rijlaarsdam 1999). In 1995, the number of acute hepatitis B cases among people with injecting drug use peaked with 24 cases, but a sharp decrease has taken place since

then. In recent years, injecting drug use plays only a marginal role in newly diagnosed acute and chronic hepatitis B infections.

- In 2012, 171 acute cases of hepatitis B infection were notified (see also ST09 part 4). In the 88 cases with known route of infection, no notifications of acute hepatitis B in injecting drug users were seen. Also in the preceding years notifications of acute hepatitis B among injecting drug users were rare: 0 cases in 2011, 1 case in 2010, 0 cases in 2009 and 2008. Unprotected sexual contact (including MSM and heterosexual) was found to be still the most important risk factor (source: F. Koedijk, RIVM).
- Chronic infections with hepatitis B were reported in 1,317 cases in 2012. In 9 of the 1,004 (0.9%) chronic infections with known route of infection, injecting drug use was regarded as the vector, comparable with previous years (2011: 3 of 1092; 2010: 13 of 1,112; 2009: 6 of 1,251; 2008: 3 of 1,108) (source: F. Koedijk, RIVM).

### *Hepatitis C*

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 diagnoses and underreporting is possible. Up to 2004, IDUs were the main risk group for acquiring an acute HCV infection, but since 2006, most acute HCV infections are found in MSM, especially HIV-positive MSM (source: RIVM).

- In 2012, 56 cases of acute hepatitis C infection were notified. The transmission route of 54 of these 56 cases was reported; in 3 cases (6%) injecting drug use was the most likely route of transmission (see ST09 part 4) (source: F. Koedijk, RIVM). In previous years, the contribution of the transmission group IDU in the total number of acute HCV infections with known route of infection fluctuated between 2 and 16%.

### *Treatment data and other sources*

Screening of drug users in drug treatment on infectious diseases is increasingly part of routine care but test results are only available for a few treatment centres. Note that recruitment site can influence the prevalence point estimates. It has been shown that, among others in the Netherlands, HCV prevalence is significantly higher in IDUs recruited in drug treatment centres, compared with low threshold services and other settings (Rondy et al. 2012).

HIV Monitoring Foundation. A rather substantial data source on hepatitis infections in (former) IDUs is the database of the national HIV/ AIDS registration of the HIV Monitoring Foundation (SHM). In total 17,986 HIV-infected patients were tested for a co-infection with HBV and 17,500 for a co-infection with HCV (Van Sighem et al. 2012). In this cohort, the overall prevalence of HBV (defined as presence of HBsAg antibodies) was 8% and of HCV (HCV RNA positive) also 8%.

- The distribution of HBV infections was equal over the behavioural risk groups. I.e., while 58% of the total HIV cohort was from the risk group MSM, a comparable amount (59%) of all HBV infections was in MSM. The second largest group, heterosexuals, comprised 31% of the HIV cohort, and in heterosexuals 28% of HBV infections were found. Drug

users were 4% of the total HIV cohort, and 6% of the HBV infections was found in IDUs (Van Sighem et al. 2012).

- The distribution of HCV infections, however, was not equal over the behavioural risk groups, with the IDUs heavily affected. Of all 1388 patients with positive HCV RNA test results, 400 (29%) were in IDUs. A substantial number of HIV positive IDUs also had a positive HCV antibody test result, without HCV RNA, indicating that they had cleared the infection. Previously, it was already shown that injecting drug use was by far the largest risk factor for HCV co-infection (multivariate odds ratio 97.9, 95% CI 70.5-136.0; the reference group is MSM) (Gras et al 2010). In absolute numbers, the IDU population in this HIV cohort was the second largest group with HCV (400 HCV co-infected in the total group of 707 drug users), after MSM (684 HCV co-infected in the total group of 11,085 MSM) (Van Sighem et al. 2012).
- Among the HIV-infected women followed in care, 6% (n=219) were co-infected with chronic HCV. Among these HIV-HCV co-infected women, the transmission route was in 43% injecting drug use and in 35% heterosexual contacts (Van Sighem et al. 2012).
- Treatment for HBV is offered with the aim to suppress virus production, thereby delaying progression to liver fibrosis and cirrhosis. In the SHM cohort, 57 (of 76) HBV positive drug users received anti-HBV treatment and 19 remained untreated. This is a larger proportion of HIV-HBV coinfecting drug users being treated for HBV than in the total SHM database, where 58% of co-infected patients received an agent that was active against HBV (Van Sighem et al. 2012).
- Data were available in the SHM database on HCV treatment for 461 chronically HCV co-infected patients, of whom 87 IDUs. A sustained virologic response (SVR, an undetectable HCV RNA level 6 months after completion of the treatment) was obtained in 40% of all patients who started anti-HCV treatment. In IDU the results were slightly less: SVR was obtained in 30 of 87 patients (34%) (Van Sighem et al. 2012).
- Earlier data from the SHM already showed that progression to liver disease is highest among HIV/HCV co-infected patients (hazard ratio 2.6 (12.4-32.2), and followed by HBV co-infected patients (hazard ratio 10.0 (5.4-18.6), compared to the reference group of HIV mono-infected patients ( $p < 0.0001$ ) (Van Sighem et al. 2011). Lately, a slow but steady increase is observed in HIV-infected patients with a chronic HBV or HCV co-infection developing a hepatocellular carcinoma. Despite the protective effect on progression to liver fibrosis of HIV treatment (cART), these medications may also enhance liver disease by drug-related hepatotoxicity (Van Sighem et al. 2012).

The Public Health Service of Amsterdam (GGD Amsterdam) collects information on hepatitis B and C infections in methadone clients participating in low threshold services. Patients are tested exhaustive, but not every year. A selection bias in those being tested might be the case, e.g., because testing is voluntary and mostly patients are tested with unknown test result (see also 6.2.1). However, the data of 2012 also show that some patients with a known positive test result are nevertheless tested repeatedly, suggesting that a more or less random sample is achieved (personal communication M. de Wit, GGD Amsterdam). The HCV and HBV prevalence data of GGD Amsterdam are also presented in ST09 part 2.

- In 2012, HBsAg was not found in any of the 38 IDUs tested.
- In 38 IDUs tested, 7 (18%) were positive for antiHBc.
- Anti HBs was found in 9 of 28 ever IDUs (32%).

- HCV antibodies were detected in 8 of 81 (10%) tested ever injecting drug users, 5 females and 3 males; they were all aged 34 years or over (source: M. de Wit, GGD Amsterdam).

The open and ongoing Amsterdam Cohort Studies (ACS) among drug users (see above) focuses among others on hepatitis C. The study generates a wealth of information, which is also described in the previous National Reports and in § 7.3.

- The HCV incidence has strongly declined in the last years, both in ever-injectors and in never-injectors. Since 2005, the incidence rate is 0.35 cases/ 100 person years (Grady et al 2012). In 2010 (latest data available) the HCV incidence amongst injectors as well as in the total group, was 0/100 person-years (van Sighem et al, 2011).
- However, the HCV prevalence is substantial. The modelled prevalence of chronic HCV infection in (ever) injecting drug users in Amsterdam (n=4353) is 80,7% (Matser et al. 2011).
- An international collaboration of nine prospective cohort studies, including data from the ACS, studied the factors associated with spontaneous clearance of acute HCV infection (Grebely et al. 2013). The study found that 25% of 632 participants spontaneously cleared the virus within one year following infection. Female sex, IL28B CC genotype (versus CT/TT; coding for interferon, which is involved in viral control) and HCV genotype 1 (versus all other viral genotypes), were independently associated with time to spontaneous clearance.
- In 2013, also a PhD thesis on HCV based among others on data from the ACS was published (Urbanus A. Hepatitis C virus infection: spread and impact in the Netherlands). A second PhD thesis from GGD Amsterdam assessed innovative methods for screening and detection (Zuure F. Screening for hepatitis C virus infection of individuals at risk hidden among the general population). Relevant results of these theses were already described in the previous National Reports.

#### 6.2.4 Sexually transmitted infections (STIs)

In total 26 low-threshold STI centres, mostly within the public health services, provide free-of-charge STI/HIV testing and care, targeted at several high risk groups (Soetens et al., 2013). Although injecting drug use is not among the 8 formulated criteria for high risk, data are available for ever and past 6 months injecting drug use. All attendees are mandatorily offered testing for Chlamydia, gonorrhoea and syphilis, except for attendees aged 25 or younger, who are first only tested for Chlamydia. For HIV testing an opt-out policy is in place (Soetens et al. 2013). The reporting of this national STI surveillance system has been organised in eight regions since 2006 and is coordinated by the RIVM.

- In 2012, 121,278 new STI consultations were registered, an increase of 7% compared to 2011. Also the proportion of positive tests increased, from 14 to 15%. Ever injecting drug use was reported by only 362 cases (126 women; 119 heterosexual men; 117 homosexual men). Another 210 persons indicated they had injected drugs in the past 6 months (65 women; 55 heterosexual men; 90 homosexual men).
- The percentage of positive STI tests among those with ever injecting drug use was relatively low compared to other risk behaviour (such as sexual risk factors and previous positive STI or HIV diagnosis). The test result in women reporting ever injecting drug use

was positive in 11% of cases, in ever injecting drug using heterosexual men in 14% of cases and in MSM with ever IDU 23%.

In Amsterdam, there are two data sources providing information on STIs.

- The Amsterdam Cohort Studies (ACS, see above) has monitored STIs among their participants since the start of the study in 1986. Although in the first years of the study STIs were found in up to 10% of participants, reports of STI have remained relatively stable at around 5% since the mid-nineteens (Van Sighem et al. 2011).
- The Public Health Service of Amsterdam (GGD Amsterdam) collected in 2012 information on syphilis in methadone clients participating in the low threshold services. Syphilis was confirmed in 1 of 92 tested clients (see also ST09 part 2) (source: M. de Wit, GGD Amsterdam).

#### 6.2.5 Risk behaviour

The latest figures from the addiction care show that 40% of opiate users who are client at an addiction care institute ever injected. Last month injecting among opiate users in addiction care was less than 9% in 2012 (Wisselink et al., 2013).

The ACS has been monitoring risk behavior among drug users in the past 25 years.

- In HIV-negative drug users, injecting and borrowing of needles significantly declined between 1985 and 2010 (van Sighem et al 2011). While more than 55% of drug users visiting the ACS in 1986 reported injecting, this declined to less than 15% in 2010. In line with that, use of needle exchange also decreased to less than 10% and borrowing was reduced to virtually zero.
- Reports of high sexual risk behaviour decreased before 1996, remained relatively stable until 2005 and further decreased to approximately 35% (of drug users visiting the ACS) in 2010 (van Sighem et al. 2011).
- Interesting data were published in 2013 on the relation between ongoing risk behaviour and the presence of HCV-RNA on the HCV-specific CD4 T cell response (Van den Berg et al., 2013). The study suggested that the T cell response to HCV is differently affected by repeated exposure versus persistence of HCV-RNA. Frequent injecting and a high level of needle sharing (indicating repetitive exposure to HCV) was found to affect the height of the HCV specific immune response, which may indicate boosting of the immune system. This is relevant information for vaccine development. On the other hand, presence of HCV-RNA (a sign of active viral replication) may specifically affect the HCV-specific CD4 T cell response. This response is important in viral clearance, but less useful for vaccine development (Van den Berg et al. 2013).

### 6.3 Other drug-related health correlates and consequences

In this paragraph new data are presented on drug-related emergencies (§ 6.3.1), and psychiatric comorbidity (§ 6.3.2).

#### 6.3.1 *Drug-related emergencies*

In contrast to previous years, this report restricts itself to one source for trend data on drug-related emergencies, being the Monitor drug-related emergencies, which collects information in a selected number of regions. The ambulance transportation data in Amsterdam, providing trends since many years, has been unable to report data from 2012 due to a reorganization, but may be able to produce the 2012 figures at a later stage; for the data of earlier years see the previous National Reports. The most important trend seen in 2012 is an increase in both the number of ecstasy-related emergencies, as well as in the level of intoxication in these emergencies.

##### *Monitor drug-related emergencies*

Since 2009, data on drug-related emergencies are collected from a selected number of regions as well as from several (nationwide operating) emergency posts on dance events by the Monitor drug-related emergencies (Monitor Drugs Incidenten, MDI). The number of participating regions increased from four in 2009 to six in 2010 and eight since 2011. The regions are selected in such a way that they are indicative for the situation in the country. Note however, that they only cover a part of the country and the monitor does not provide an overview of all drug-related emergencies that occur in the Netherlands. Cases are reported by ambulance transportation services, emergency departments in hospitals, forensic doctors, and organisations with a first aid medical post at dance parties. In 2012, a total of 28 local institutes participated. As mentioned above, data from the ambulance transportation service Amsterdam and also Purmerend are not yet available and for comparability over the years, the data from these ambulance transportation services from previous years are also not reported. The collected information includes data on the drugs used, level of intoxication, and demographics. Information of alcohol use is only collected when this took place in combination with drug use. Since the type of emergencies may substantially differ between the participating medical services, data are reported separately where necessary.

- In 2012 2,961 emergencies were reported by the participating institutions in the selected regions (Vogels and Croes 2013) (tables 6.3.1 and 6.3.2). Between 2009 and 2012, the cumulative number of reported cases was 8,661 (excluding the data from ambulance transportation services Amsterdam and Purmerend).
- Patients were predominantly male and the majority of patients was 25 years or older.
- Characteristics of the patients and sort of emergencies differed between the various services. The majority of patients consulting the medical posts at large parties reported an ecstasy-related problem. Further, level of intoxication was mildest in the patients consulting these medical posts. Ambulance transportation services were relatively often confronted with problems after GHB use. In contrast, forensic doctors saw relatively frequent patients after use of stimulant drugs, as well as problems after combination use of several drugs or drugs and alcohol.
- In Amsterdam, tourists had a substantial contribution in the emergency cases. Their problems occurred predominantly after using cannabis or magic mushrooms. It has to be

acknowledged that, in general, drug-related emergencies at the capital differ from those in other cities.

- Between 2009 and 2012, the average level of intoxication in the registered emergencies increased. Level of intoxication is defined as “light” when the use of drugs is noticeable, but the patient is more or less adequately reacting; a “moderate” intoxication refers to the state in which the patient is inadequately reacting and clearly under the influence; and “severely” intoxicated are those patients with whom communication is not possible (either because they are in a (sub)coma, or they are highly agitated and aggressive), which may be combined with disturbance of the vital parameters.
- The proportion of patients with moderate and severe levels of intoxications increased mainly at the emergency departments of the participating hospitals (from 45% in 2009 to 68% in 2012) and at the first aid medical posts at large events (from 17 to 29%).
- Most patients with a severe level of intoxication used a combination of two or more drugs or used GHB. The increase at the first aid medical posts at events was mainly due to an increase in severe ecstasy intoxications.
- In 2012, 20 patients registered in the monitor died. The most likely causes of death were GHB overdose in two patients, cardiac arrest after amphetamine use (3 patients) and cocaine use (4 patients), hyperthermia after ecstasy consumption (1 patient), overdose of heroin or methadone (6 patients), and in the remaining four cases combination use of drugs in addition to individual circumstances was fatal.

Table 6.3.1.: Characteristics of emergencies registered by the Monitor drug-related emergencies (MDI) by medical service, 2012

|                                 | Ambulance transportation service<br>N=843 | Hospital emergency dept<br>N=440 | Forensic doctors<br>N=417 | Emergency posts at parties<br>N=1261 |
|---------------------------------|---|----------------------------------|---------------------------|--------------------------------------|
| <b>Sex</b>                      |   |                                  |                           |                                      |
| Male                            | 73  | 77                               | 90                        | 64                                   |
| Female                          | 27  | 23                               | 10                        | 36                                   |
| <b>Age</b>                      |   |                                  |                           |                                      |
| 0-24 years                      | 40  | 45                               | 26                        | 63                                   |
| 25+ years                       | 60  | 55                               | 74                        | 37                                   |
| <b>Level of intoxication</b>    |   |                                  |                           |                                      |
| Light                           | 20  | 32                               | 43                        | 71                                   |
| Moderate                        | 46  | 37                               | 44                        | 22                                   |
| Severe                          | 21  | 32                               | 13                        | 7                                    |
| Unknown                         | 13  | 0                                | 0                         | 0                                    |
| <b>Type of incident</b>         |   |                                  |                           |                                      |
| Intoxication                    | 96  | 86                               | 91                        | 100                                  |
| Trauma                          | 4   | 14                               | 9                         | 0                                    |
| <b>Deceased</b>                 | 1 patient                                 | 1 patient                        | 17 patients               | 1 patient                            |
| <b>Combination of drugs</b>     |   |                                  |                           |                                      |
| Yes                             | 16  | 24                               | 24                        | 14                                   |
| No                              | 84  | 76                               | 76                        | 86                                   |
| <b>Combination with alcohol</b> |   |                                  |                           |                                      |
| Yes                             | 40  | 53                               | 39                        | 46                                   |
| No                              | 45  | 24                               | 60                        | 54                                   |
| Unknown                         | 15  | 23                               | 1                         | 0                                    |
| <b>Tourist</b>                  |   |                                  |                           |                                      |
| Yes                             | 2   | 26                               | 5                         | 15                                   |
| No                              | 43  | 72                               | 42                        | 82                                   |
| Unknown                         | 55  | 2                                | 53                        | 3                                    |

In percentages. Due to rounding, percentages do not always exactly sum up to 100. Not including the data from the ambulance transportation services of Amsterdam and Purmerend. Note that this table includes all drugs and that the distribution of drugs used is not comparable across the medical instances (see next table). Source: Monitor drug-related emergencies, Trimbos Institute, Netherlands Institute of Mental Health and Addiction (Vogels and Croes 2013).



Table 6.3.2 summarizes the contribution of the separate drugs to the total drug-related emergencies. Note that the figures refer to single drug use, except for the category “combination of drugs”. Some additional remarks:

- Cannabis: a severe level of cannabis intoxication is often accompanied by high alcohol consumption. No emergencies related to the use of synthetic cannabinoids (spice) were reported.
- Ecstasy: there are indications for an increase in the level of intoxication in ecstasy-related emergencies. Several factors may contribute to this trend, including an increase in the average MDMA concentration in ecstasy pills as well as an increase in the proportion of pills with a high dose (data from DIMS). In addition, the use pattern of consumers is changing and the attitude in the night life setting is increasingly “normalising” ecstasy-use. The instability of the ecstasy market in the Netherlands was earlier found to boost the number of ecstasy users handling in tablets at a test service because of health concerns, but not to reduce the pattern of ecstasy use (Brunt et al, 2012). Further, in the Netherlands, more incidental reports of excited delirium after ecstasy use are being published, often in the local press. There is also an increased awareness of this syndrome, which may partly explain the high media attention. Several cases of hyperthermia and/ or hyponatremia were reported.
- GHB: Compared to the relatively limited use of GHB in the general population, the number of emergencies after use of this drug is remarkably high. One fifth of reported emergencies is related to GHB use, as only drug or in combination with another drug. In the hospitals, an increase in GHB-related emergencies was observed, but not in the other settings. The level of intoxication is moderate to severe in 50 (medical posts at parties) to 90% (ambulances) of cases, which is higher than in the other drugs monitored. However, this may in part be explained by the definition of level of intoxication used, which highly depends on the level of consciousness, which is easily affected in GHB users.
- Cocaine-hydrochloride: use of cocaine-HCl is often combined with alcohol use. The reported cases of severe intoxications often had cardiac symptoms or were aggressive or delirious.
- Amphetamine: use of amphetamine causes only a limited number of emergencies; nevertheless, several cases with fatal outcome were reported in the monitor.
- Heroin and cocaine base: a limited number of reported emergencies is related to the use of these drugs, which are traditionally associated with the “problematic” hard drug scene.
- Magic mushrooms: emergencies after use of magic mushrooms are a local phenomenon almost limited to Amsterdam and often involving tourists. There is no differentiation in the monitor between the since December 2008 illegal forms (in Dutch: “paddo’s”) and the legal substitutes (sclerotia), because the distinction between these is (too) complex to make for health care workers treating the patients.
- Combination use of two or more drugs is associated with more severe levels of intoxication. Data from the monitor show that the more drugs (and alcohol) are used, the higher the level of intoxication.

*Table 6.3.2: Types of drugs involved in the emergencies documented by the Monitor drug-related emergencies (MDI), 2012*

|                      | <b>Ambulance<br/>transportation<br/>service<br/>N=843</b> | <b>Hospital<br/>emergency<br/>dept<br/>N=440</b> | <b>Forensic<br/>doctors<br/>N=417</b> | <b>Emergency<br/>posts at parties<br/>N=1261</b> |
|----------------------|---|--|---------------------------------------|--|
| Cannabis             | 16  | 27   | 17                                    | 6  |
| Ecstasy              | 7   | 11   | 6                                     | 61   |
| GHB                  | 26  | 17   | 12                                    | 10   |
| Cocaine-HCl          | 12  | 6  | 21                                    | 2  |
| Amphetamine          | 5   | 3  | 8                                     | 3  |
| Opiates              | 4   | 0.5  | 6                                     | 0  |
| Magic-Mushrooms      | 0.5   | 1  | 4                                     | 0  |
| Other/unknown drug   | 13  | 9  | 1                                     | 3  |
| Combination of drugs | 16  | 24   | 25                                    | 13   |
| <b>Total</b>         | <b>100</b>  | <b>100</b>                                       | <b>100</b>                            | <b>100</b>                                       |

In percentages. Note that the drugs mentioned refer to single drug use, except for the row "combination of drugs". However, in all drug categories, drug use in combination with alcohol is possible. Because of small absolute numbers, the percentages for basecoke, ketamine en LSD are not included. Source: Monitor drug-related emergencies, Trimbo Institute, Netherlands Institute of Mental Health and Addiction (Vogels and Croes 2012).

Another source for drug-related emergencies is a recent PhD thesis (Krul 2013). Krul studied the characteristics of visitors attending the first aid station on scene at raves in the Netherlands, and how many of them presented with substance-related health problems. He concluded that:

- During 249 raves with approximately 3.8 million visitors in the period 1997-2008, 27,897 patients visited the first aid station, of whom 10,100 reported having a substance use related problem, including alcohol problems. Most substance related problems were associated with ecstasy use. The far majority of presentations were for mild conditions. Among the 10,100 patients, 515 required professional medical care and 16 were life threatening. Specific serious problems related to the use of depressants (alcohol and GHB) included unconsciousness, airway at risk (due to vomiting) and respiratory insufficiency. Specific problems after use of stimulants (ecstasy, cocaine, amphetamine) were threatened airway (due to trismus), seizures, excited delirium, hyperthermia and circulatory insufficiency.
- In a sub sample of 202 rave parties held between 2000-2008 GHB related health problems were studied. Approximately 3 million visitors attended the raves, and 22,604 patients were treated at the first aid station, of whom 771 reported a GHB related problem (33% reported only the use of GHB; 48% used GHB in combination with ecstasy, alcohol or cannabis; 19% used GHB in combination with other drugs or used more than 2 drugs). Most problems were mild, but 202 cases required further medical care and 1 case was considered to be life threatening (in total 43 patients needed hospital care) (Krul 2013).

In the scientific literature, several Dutch studies were published regarding risk factors for drug-related emergencies.

- In ecstasy users, sodium plasma concentrations were measured in 63 MDMA users and 44 controls to study the incidence of hyponatraemia in individuals using MDMA at an indoor rave party (Van Dijken et al. 2013). The results showed that a mild hyponatraemia has a high incidence in women (25%) during MDMA use, but not in men (3%). This explains the finding that mainly women develop a severe hyponatraemia after ecstasy use. The hyponatraemia was not depending on dose used. It is hypothesised that the predisposition of women to develop hyponatraemia results from the increased susceptibility of women to the effect of MDMA on ADH secretion. Also, women seem to be more susceptible to other serotonergic effects of MDMA (they report more thirst and the sensation of dry mouth). Possibly, the phase of the menstrual cycle affects MDMA metabolism or the pituitary sensitivity to the ADH secreting effects of MDMA (van Dijken et al., 2013).
- Another Dutch study described a relatively uncommon complication of ecstasy use, being the hallucinogen persisting perception disorder (HPPD) (Hanck and Schellekens 2013). Although the prevalence of HPPD is probably low and few patients seek medical help, the disorder is widely discussed on internet fora by drug users. The authors conclude that patients with HPPD and anxiety or depression complaints should best be treated with citalopram, but further research into treatment options is necessary.
- Risk factors of GHB overdosing were studied in 45 experienced GHB users (Korf et al. 2014). The participants who had overdosed on GHB had used GHB more often during their lifetime and scored highest on risk factors as age at first time use of GHB, past 12 months and past 30 days frequency of GHB use, GHB dependence, number of GHB doses per occasion, duration of GHB 'session', and largest single dose. An overdose occasion was associated with more GHB use than usual or doses too closely together. An important finding was that GHB was hardly used in public settings and that the majority of overdose occasions happened in private settings, where medical assistance was not sought (Korf et al. 2014). This may lead to the conclusion that the recorded number of overdoses in monitors such as the MDI gives a large underestimation of the actual number of GHB overdoses.
- (Recurrent) GHB overdosing is however likely to be harmful, as was described in a recent Dutch literature study (Van Amsterdam et al. 2012). In this article, it was concluded that GHB overdosing is likely to result in brain damage, especially when use repeatedly leads to coma, just like binge drinking and use of high doses of ketamine. The GHB induced coma's will lead to temporary hypoxia, for which especially the hippocampus is vulnerable, which theoretically, could result in dysfunction of the memory and learning capacities (Van Amsterdam et al. 2012).
- Also withdrawal of GHB can be considered a medical emergency (Brunt et al 2013). Detoxification with pharmaceutical GHB proved to be successful, although relapse is frequent.
- Scientists from the National Poisons Information Centre studied the effects of combinations of commonly used stimulant drugs (cocaine, MDMA, MDA and mCPP) on the GABA function in a frog model (*Xenopus*) (Hondebrink et al, 2013). GABA receptors are the main inhibitory input on dopaminergic and serotonergic neurons. They found that at drug concentrations relevant for clinical toxicology, co-exposure of two or more drugs leads to a reduction of the inhibitory GABA-ergic input, which is likely to result in higher

dopamine brain levels, and thus an increased risk for drug-induced toxicity. They argue that the optimal treatment for drug-intoxicated patients should enhance GABA-ergic input.

### 6.3.2 *Psychiatric comorbidity*

As described in previous National reports, drug use disorders are commonly associated with other mental health disorders.

In the CANDEP study (see also § 4.4), the prevalence of mental disorders was compared between frequent cannabis users with (n=252) and without (n=269) dependence and the general population (n=1072) (Van der Pol et al. 2013b).

- The mental health condition of nondependent frequent cannabis users was similar to that of the general population, with the exception of more externalizing disorders (OR = 8.91,  $P < 0.001$ ). In contrast, the mental health condition in dependent frequent cannabis users was worse when compared to that of the general population (externalizing disorders: OR = 17.75,  $P < 0.001$ ; mood: OR = 4.15,  $P < 0.001$ ; anxiety: OR = 2.20,  $P = 0.002$ ).
- It is of note that the cannabis use patterns were remarkably similar among dependent and non-dependent frequent cannabis users. Also childhood adversity and the use of other substances was similar in both groups and cannot explain the observed differences (Van der Pol et al., 2013b).
- In a sub study of CANDEP, it was also found that mental health problems in cannabis dependent subjects were much more prevalent among treatment seekers compared to dependent cannabis users not in treatment (Van der Pol et al., 2013d; see also chapter 5).

In a sample of 70 DSM-IV cannabis dependent patients (in addiction care) and 241 non-treatment seeking DSM-IV cannabis dependent community subjects, more mental health problems (internalising disorders 57.1% versus 24.5%; externalising disorders 52.9% versus 35.3%) were found in the treatment seeking patient group than in the cannabis dependent community subjects.

The International ADHD in SUD Prevalence (IASP) study is a collaboration of seven countries studying the prevalence of attention deficit hyperactivity disorder (ADHD) in adult treatment seeking substance use disorders (SUD) patients (Van de Glind 2013).

- They found that in 454 outpatients drugs clients, prevalence of both childhood ADHD (26%, 95% CI 21-30) and adult ADHD (18%, 95% CI 15-22) was much higher than in the general population, and also higher than in the 351 outpatient alcohol clients: childhood ADHD 14% (95% CI 11-18) and adult ADHD 9% (95% CI 7-13). For comparison, the prevalence of ADHD in the general population is 6-9% for childhood ADHD and 2.5% for adult ADHD (see Van de Glind 2013).
- Comparing data from all participating countries, the study found a large variability in prevalence rates of ADHD in SUD patients, which followed a Nordic (high prevalence) – non-Nordic gradient, and was also dependent on primary substance of abuse. In the 50 outpatient drugs clients included from the Netherlands, the prevalence was slightly lower than the prevalence found in all countries combined: childhood ADHD 17% (95% CI 7-32) and adult ADHD 10% (95% CI 3-22).

In 1,205 treatment seeking SUD (alcohol and drugs) patients from 10 countries, the IASP study collaborators assessed the presence of co-morbid psychiatric disorders. Note that the numbers presented here refer to all 10 countries combined, including but not separately available for the Netherlands (Van de Glind 2013).

- The main conclusion of this study was that treatment seeking SUD patients with ADHD are at a very high risk for additional externalizing disorders.
- 13.5% of patients were diagnosed with adult ADHD in this sample. Significantly more subjects in the ADHD+ group reported stimulants and cannabis as primary drug of abuse, and significantly less subjects reported alcohol as their primary substance of abuse (all  $p < .001$ ).
- All comorbid disorders (antisocial personality disorder, major depression, (hypo)manic episode and borderline personality disorder) were more frequently present in the ADHD+ group compared to the non ADHD-group, with an exception for current depression in SUD patients with illicit drugs as their primary substance of abuse.
- SUD patients with primary alcohol problems had increased levels of borderline personality disorder and major depression compared to SUD patients with drugs as primary substance of abuse.

Hotho (2013, see also §7.3.4) studied the risk of interferon (IFN)-induced depression in HCV-infected patients with a history of depression and found that IDU are most vulnerable for the development of IFN-induced depression (odds ratio: 12.60; 95% confidence interval 2.47-64.34,  $p < 0.01$ ). She concluded that HCV-infected patients with history of depression and IDU carry the highest risk to develop IFN-induced depression and might benefit from SSRI prophylaxis.

## **6.4 Drug-related deaths and mortality of drug users**

### *National level*

In the Netherlands, statistics on drug-related deaths at national level come available each year from the General Mortality Register (GMR), or Causes of Death Statistics, held by Statistics Netherlands (CBS). In this national register the causes of death are classified according to the International Classification of Diseases, Injuries and Causes of Death (ICD). The 10th edition of the ICD has been in use in the Netherlands since 1996. Although the register has national coverage, in its standard form it 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.

Some cases related to substances sold as 'ecstasy' have received attention in the media, but this far there is no complete registration of these cases. Some cases are still under investigation at the Netherlands Forensic Institute (NFI). The DIMS detected the harmful substance PMMA in a number of ecstasy tablets (see chapter 10). The use of PMMA was associated with several fatal emergencies in 2010 and 2011 (4 with use of PMMA verified, one non-verified), and one in 2013, although other substances might also have contributed to death. The number of nonfatal emergencies is not known. Apart from PMMA, several fatal incidents have been observed in 2011 and 2012 related to 4-Methylamphetaime (4-MA) in combination with amphetamine (Blanckaert et al. 2013). These fatal cases were not only observed in The Netherlands but also in Belgium and the United Kingdom.

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 EMCDDA standard definition of acute drug-related death, as reported for the Netherlands in the Standard Tables ST5\_2013\_NL\_01 and ST6\_2013\_NL\_02.

#### *Overall trend*

Figure 6.4.1 shows the number of cases recorded from 1996 up to including 2012. These cases are selected according to the EMCDDA standard selection of ICD-codes. The figure only includes cases from residents that were registered at a municipal register. Among non-residents, an additional 16 cases were registered in 2012 in a separate archive. Between 1996 and 2012, the total number of recorded drug-related deaths among residents fluctuated between a minimum of only 94 cases in 2010 and a maximum of 144 cases in 2001.

Despite some fluctuations over the years, the total number of drug-related deaths in the Netherlands has remained relatively low. This might be explained by a low number of socially marginalized problem drug users, successful harm reduction measures among the problem drug users, and protective factors, such as the nationwide availability of methadone-maintenance treatment, heroin-assisted treatment, and a low rate of intravenous drug use.

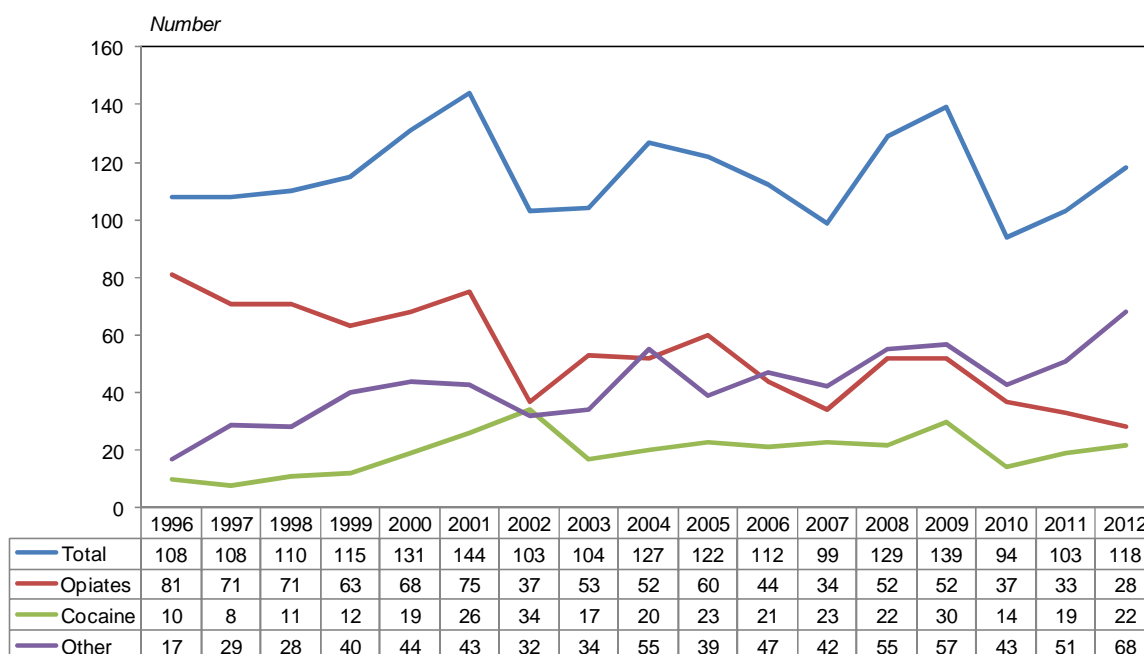
#### *Opiates and cocaine*

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. From 1996 up to including 2001, opiate intoxications were the most common causes of drug-related death recorded among Dutch residents. In this period, the casualty rate fluctuated between 81 and 75 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 trends have diverged again and each year there were more opiates deaths than cocaine deaths. However, in 2012 the number of opiate cases (28) came close again to the number of cocaine cases (22).

#### *Psychostimulants*

In 2012, there were only 3 cases that were coded to poisoning by psychostimulants (other than cocaine), compared to just four cases in 2009, two cases in 2008 and 2011, and only one case in 2007 and 2010. Whether these fatal intoxications concerned amphetamines, MDMA, or other psychostimulants is not known.

Figure 6.4.1: Number of acute drug-related deaths in the Netherlands according to the EMCDDA selection of ICD-10 codes from 1996 up to including 2012<sup>I</sup>



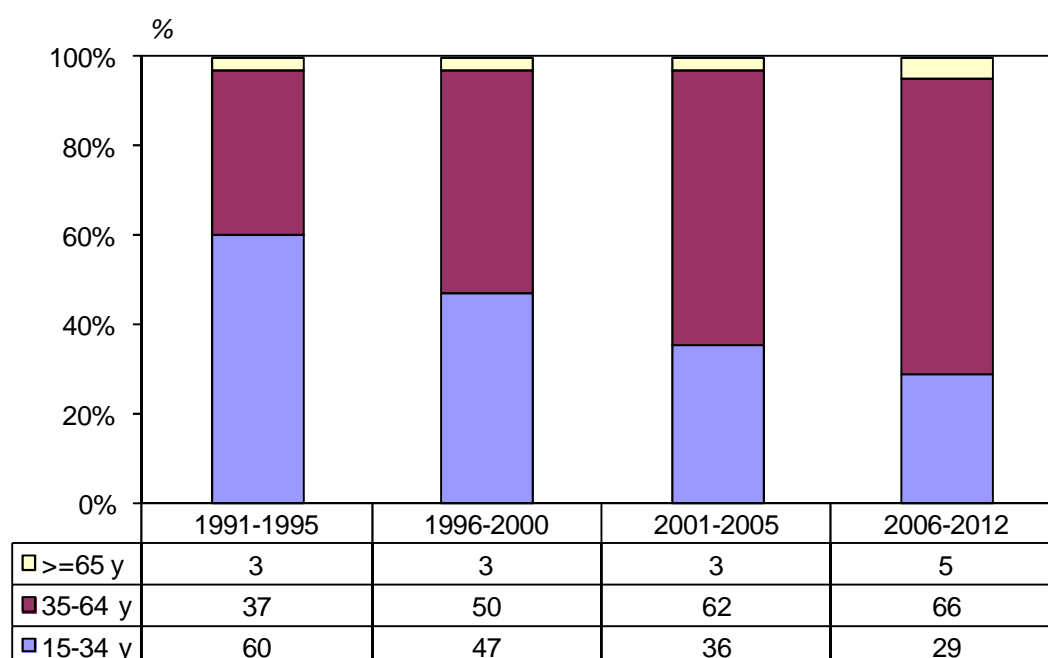
I. Only residents that were registered at a municipal register in the Netherlands are included. Among non-residents, an additional 16 cases of acute drug-related deaths were registered in 2012. EMCDDA selection of ICD-10 codes: F11-F12, F14, F16, F19; and X42, X41, X62, X61, Y12, Y11 (selected in combination with T40.0-9 or T43.6). Source: Causes of Death Statistics, Statistics Netherlands (CBS).

### Age and gender

The population of problem drug users is ageing, and this trend is reflected in the increasing age of drug users that have died from drugs. Figure 6.4.2 shows that the percentage of deceased aged 35 years and above increased from 40% during the period 1991 up to including 1995 to 71% during the period 2006 up to including 2012.

Between 1996 and 2012, the percentage of female cases varied from 15 to 28% per year, without showing a clear trend. In 2012, the proportion of female cases was 19%.

Figure 6.4.2: Trends in the age distribution of cases of acute drug-related deaths in the Netherlands, according to the EMCDDA definition, from the period 1991-1995 up to including the period 2006-2012



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

#### Regional level: Amsterdam

The Public Health Service of Amsterdam (GGD Amsterdam) traces drug-related deaths by means of the Central Methadone Register. This regional monitor is part of the Public Mental Health Care monitor (OGGZ monitor) of Amsterdam (Buster and Van Brussel 2011). The data on the fatal poisonings ('overdoses') from the Amsterdam coroners also include non-residents who are not included in the Population Registry. Figure 6.4.3 gives the number of acute deaths (overdoses) that were found according to this procedure among the drug users in Amsterdam. Between 2001 and 2011 the number of acute deaths fluctuated around an average of 25 acute deaths per year. The number of 18 cases in 2011 is the lowest number since 1978. Cases of drug swallowers who smuggle drugs by swallowing them (4 cocaine cases in 2011) are not included in these figures.

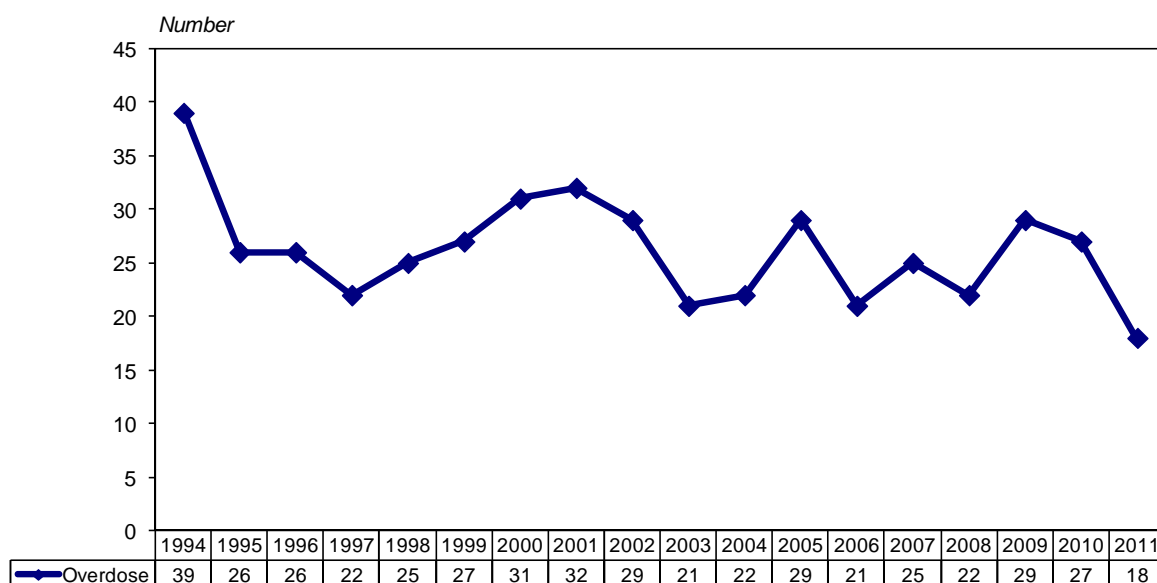
From the 18 cases in 2011, 4 were female, 14 were male, and the age ranged from 26 to 67 years, the average age being 42 years. The following substances were found: cocaine (10 times), opiates (10 times), amphetamines/MDMA (8 times), and GHB/GBL (5 times).

There were indications of suicide in 9 cases. In 2 suicide cases, among other substances, GHB/GBL was used.

Apart from the fatal poisonings ('overdoses'), no new data have become available from the mortality cohort study in Amsterdam (ST18\_2012\_NL\_01).



Figure 6.4.3: Number of acute deaths (overdoses) among drug users in Amsterdam from 1994 to 2011



Source: Public Health Service of Amsterdam (GGD Amsterdam).

#### *Regional level: Rotterdam*

For the city of Rotterdam, the mortality has been studied in a cohort of 2,096 adult homeless people who were followed from 2001 up to including 2010 (Nusselder et al. 2013). Some of these homeless people were addicted to alcohol or other drugs. The mean age of the homeless people in the cohort study was 40.6 years and 88% were male. It was found that, compared to the general population of Rotterdam, the "mortality rates were 3.5 times higher in the homeless cohort".



## 7 Responses to health correlates and consequences

### 7.1 Introduction

In this chapter information is provided on prevention of health consequences related to both recreational and problematic drug use. We describe several actions in the prevention of emergencies related to recreational drug use and the escalation into aggression and violence (§ 7.2). § 7.3 gives new information on needle and syringe exchange (numbers are still declining; however, it is likely that most people in need are being reached) and drug consumption rooms. In § 7.3.3 we present some scientific studies assessing the impact of harm reduction interventions on the HCV and HIV epidemic in IDUs. Harm reduction measures could partly explain the marked decreases in HIV and HCV in Amsterdam since 1990, but the impact of the natural epidemic progression and demographic changes should also be taken into account when the benefits of harm reduction interventions are assessed. Another study showed that reduction of the spread of HIV and HCV may be much enhanced when the intervention effort is concentrated on certain behavioural subgroups. Finally, a study comparing the availability of harm reduction interventions in Rotterdam and Stockholm and the prevalence of HCV, strongly supports the notion that harm reduction measures can decrease the transmission of HCV among IDUs. § 7.3 finishes with the description of a recently started project that aims to give a boost to hepatitis C care in the addiction care centers. Paragraph 7.4 briefly comments on activities on other health correlates (psychiatric and somatic).

### 7.2 Prevention of drug-related emergencies and reduction of drug-related deaths

#### *Drug-related emergencies*

In 2008, the "Monitor drug-related emergencies" (Monitor drugsincidenten) was set up with a two-fold aim: (1) to monitor trends in drug-related emergencies (via a basic registration), which can be used for informed policy making, and (2) to pick up acute life-threatening situations (via case reports) which are used to inform the network of participating (para)medical institutions and can be used for acute actions, like a "red alert" (Vogels and Croes 2013).

The 'Monitor drug-related emergencies' works closely together with the DIMS project, which besides having a monitoring function also aims to prevent drug-related health problems (for more information: see § 3.3). This collaboration has proven to be very useful in recent disturbances on the ecstasy and speed market (PMMA, 4-MA, high MDMA concentrations), and have resulted in several concerted actions.

Under the influence of drugs, aggression and violence may more easily develop. A recent factsheet targeted at professionals with a public task (police, security, ambulance) summarised the factors involved in the development of aggression (the well known triangle drugs, set and setting) and provided guidelines to prevent escalation of aggression and violence (Voorham and Van Hasselt 2012). In addition, a factsheet has been produced for the police describing "excited delirium" and offering methods to reduce the risk of escalation and fatal outcomes (Trimbos Institute, projectteam uitgaan alcohol en drugs, 2013). GGD

Amsterdam also produced a guideline on excited delirium for all professionals involved including police, pre-hospital care and hospital care (GGD Amsterdam 2013).

A recent article in Dutch asked attention for doping use (Pieters and de Hon 2013). Physicians should be aware of the side effects of stimulants such as amphetamines, ephedrine and cocaine, which can be used to lead to fat loss and increased alertness, but have side effects such as cardiac problems, behavioural changes and addiction. In addition, anabolic steroids, erythropoietin, growth hormone, diuretics and glucocorticoids are regularly used to improve sport performance, but can have acute and chronic health consequences. The authors argue that specific diagnostic and pharmacotherapeutic skills are needed to recognise symptoms associated with doping use.

#### *Drug-related deaths*

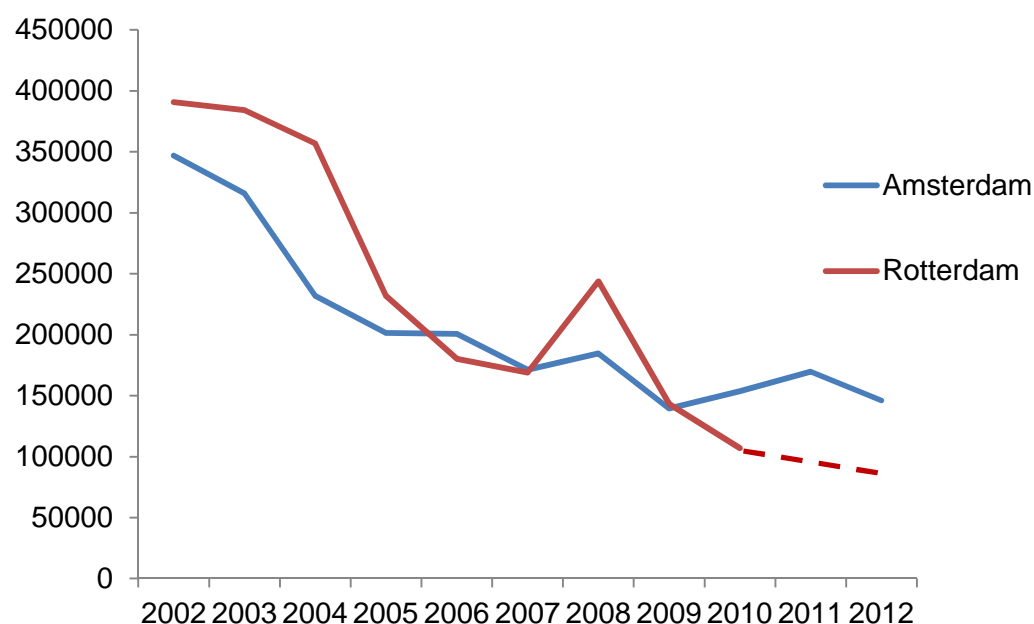
Within the framework of its harm reduction policy, the Netherlands has consolidated in 2010 the prevailing practices to prevent drug-related deaths. There is no specific new information available in addition to the prevention measures that have been reported already in the previous national reports.

### **7.3 Prevention and treatment of drug-related infectious diseases**

#### *7.3.1 Needle/syringe exchange*

Estimates from Mainline (a grassroots organisation for drug users in Amsterdam) and the Trimbos Institute suggest that there are approximately 150 needle/syringe exchange programs in the Netherlands. This is a rough estimate because for some cities it has been reported that pharmacists are also exchanging syringes. There are also reports of merging of several sites as well as closure, which may cut down the estimated number, however, new estimates are not available. In Amsterdam and Rotterdam trend data on the numbers of syringes that were exchanged are available from the municipal health services. In both cities, a decreasing trend in the number of exchanged syringes is observed since many years (see figure 7.3.1). The small and unexplained increase observed in 2008 was not continued afterwards.

Figure 7.2.1: Number of syringes exchanged in Amsterdam and Rotterdam 2002-2012



Source: GGD Amsterdam and GGD Rotterdam. For 2011, no data are available from Rotterdam.

- In Amsterdam, figures are available since 1990. After a steady increase until 1993 (1,082,880 syringes were exchanged in that year), the number of exchanged syringes declined and slightly fluctuates below 200,000 syringes per year since 2007 (146,000 in 2012) (source: M. Buster, GGD Amsterdam).
- In Rotterdam, figures are available since 2000. The number of syringes ordered by the local distribution centres was reduced between 2000 and 2012 from 422,400 to 91,400 (source: R.A. Wolter, GGD Rotterdam). Data for 2011 are not available due to a change in the registration system. It is noteworthy that in Rotterdam during evening and nightly hours drug users can exchange needles and syringes at several police stations.
- The decline during many years in the number of syringes exchanged can be explained by several factors: a reduction of injecting heroin users in general; a reduction of drug users, often injectors, from neighbouring countries; a reduced popularity of injecting resulting from experienced health problems, in combination with an increase in the use of crack; and mortality among injectors. It is assumed that the far majority of drug users in need of clean needles are being reached with the current efforts.
- The municipal health service of Rotterdam also collects information on the distribution of other (clean) paraphernalia and condoms. In 2012, they distributed 25,000 condoms, 900 pocket containers (for needle and syringe disposal) and 10,550 stericups. Based on the assumption that the average drug users exchanges 10 syringes a week, this comes to a total of 176 injecting drug users reached (and probably present) in Rotterdam, a steady decline from the estimated 812 injecting drug users in 2000 (source: R.A. Wolter, GGD Rotterdam).

### 7.3.2 Drug consumption rooms

The first formal drug consumption room in the Netherlands opened in 1994 and since the beginning of this century the number has rapidly increased. An inventory in 2010 among a

network of infectious disease experts in all addiction care institutions in the Netherlands identified 37 drug consumption rooms, located in over 25 cities in the Netherlands (Havinga and Van der Poel 2012). In the last decade, due to several developments, the organisation of these locations and the population using them changed. A major impact has had the decrease in homeless drug users. The majority of them is now living in social housing projects, which has reduced drug use on the street and the associated nuisance, including that of drugs dealing. Another important factor has been the decrease in injecting drug use, which further reduced the population using the drug consumption rooms. While in 2003 the average number of visitors per drug consumption room was 36, this has decreased to 22 in 2010 (Havinga and Van der Poel 2012). Since 2010, the number of drug consumption rooms has further decreased, but there is no new overview of the current number. Personal communications point to a shift towards an organisation of the consumption rooms more based on security and less on medical support. An increasing number of consumption rooms have an entrance guarded by security personnel behind a glass wall, with whom it is not easy to discuss medical problems. For further information on the organisation of drug consumption rooms: see our National Report 2012.

### *7.3.3 Effect of harm reduction on hepatitis C and HIV prevalence*

The Netherlands has a long standing tradition on harm reduction in drug users. Several recent studies assessed the impact of harm reduction on the prevalence of HCV and HIV.

- De Vos et al (2013) examined possible explanations for the decline of HCV and HIV incidence and prevalence in Amsterdam. Using data from the Amsterdam Cohort Studies (ACS, see also chapter 6) and an individual-based model including changes in inflow of new IDUs and death rates, they simulated HIV and HCV incidence and prevalence in different scenarios of risk behavior. They concluded that harm reduction measures could partly explain the marked decreases in HIV and HCV in Amsterdam since 1990, but also that changes in the IDU population had a large impact. For example, high-risk taking IDUs were the first to become infected and the first to die from HIV, leaving a population with a lower average risk level. Also higher mortality unrelated to HIV in the high-risk population may have enhanced the decreasing trend. The authors argue that the impact of the natural epidemic progression and demographic changes should be taken into account when the benefits of harm reduction interventions are assessed (De Vos et al. 2013).
- De Vos and Kretzschmar (2013) also studied how the spread of blood borne infections in IDUs most effectively can be minimized. They used a mathematical model to explore the effects of two types of intervention: (1) removal of individuals from the injecting population and (2) risk decrease at group level, for example by needle and syringe programs. An important conclusion was that for HCV and HIV different strategies are optimal. HIV could be substantially reduced by targeting high risk IDUs only, while high reductions for HCV were reached in the scenarios targeting low risk IDUs. For a very infectious disease such as HCV, higher risk individuals are often already infected and decreasing the risk for non-infected individuals is likely to only delay rather than prevent infection. The authors especially stressed the importance of replacement borrowing: “when we prevent one IDU from sharing syringes, remaining IDU will borrow from other IDU instead. This makes prevention of secondary infections much less likely, especially for a highly prevalent infection like HCV. Intervention efficiency is mostly determined by the potential for preventing primary infection”. The authors conclude that the potential for targeted intervention depends on the actual existence and identification of different risk

types, but also the willingness of individuals to enroll in intervention programs. Intervention effectiveness may be further enhanced by testing for infection status and targeting specifically those IDUs not yet (HCV) infected (De Vos and Kretzschmar, 2013).

- The association between risk behavior, availability of harm reduction measures and the prevalence of HCV was assessed in Rotterdam and Stockholm, two cities with different drug policies (Norden et al., 2013). The prevalence of HCV infection was almost two times higher in IDUs from Stockholm than in Rotterdam. Sharing of needles, syringes and other paraphernalia was also significantly higher in Stockholm, which suggests that an association exists between HCV prevention policies, and risk behaviour on one side and HCV prevalence on the other. Although the study is hampered by several methodological limitations (such as different methods of data collection in the two cities, which reduced comparability), the findings suggest that harm reduction interventions such as needle and syringe exchange programs and well developed OST can have an impact on the HCV infection in IDUs (Norden et al. 2013).

#### *7.3.4 Hepatitis C treatment*

Some locations of the addiction care have a well organised hepatitis C treatment support trajectory. However, in the majority, still little attention is paid to hepatitis C care. A number of reasons have been identified and reported in the previous National Reports (see also Croes and Van der Veen 2012). To give a boost to hepatitis C treatment in the addiction care, a project has been launched called Break through in hepatitis C in the addiction care. The central coordination is at the Trimbos Institute and 6 of 11 addiction care institutions participate with local team(s). The project aims to have local teams organise a HCV trajectory that fits the local circumstances and that will end in the description of this organisation and embedding it in regular care. The local teams are supported by an expert group with members that have experience with best practices of hepatitis C care, both from the addiction care side as from the hospital side. The project will take one year and is expected to end September 2014.

D. Hotho published her PhD thesis on hepatitis C treatment for (injecting) drug users (Hotho, 2013). She studied the effects of active substance use on IFN-responsiveness, as they are not well understood. Hotho concluded that active substance use in chronic HCV-infected patients did not affect the immune responsiveness to IFN early after initiation of treatment and that PEG-IFN/RBV therapy is not hampered by active substance use by itself.

She also assessed the diameter of the common bile duct (CBD) in patients referred for abdominal ultrasonography at the gastroenterology and hepatology outpatient clinic and demonstrated that methadone is associated with common bile duct dilatation (CBDD), a finding that is known as a first sign of biliary or pancreatic malignancy. Whereas CBDD was only seen in 7% of subjects referred for abdominal ultrasonography in general, asymptomatic CBDD was present in 56% of methadone users. However, after a median follow-up of 16 months (range: 1-17 months), there were no signs of clinical worsening. Therefore, it was concluded that CBDD should be considered a side effect of methadone without underlying pathology. This is of clinical relevance because cost and risk of unnecessary further investigation and unnecessary delay of HCV antiviral therapy can be prevented (Hotho 2013).

### 7.3.5 *Other prevention activities*

The Ministry of Health, Welfare, and Sport (VWS) finances the program Infectious Diseases and Drug Use, a collaborative project of the grassroots organisation Mainline Foundation and the National Support Function Prevention in Mental health and addiction care (Dutch abbreviation: LSP) of the Trimbos Institute. The focus of the program is on education and implementation of harm reduction measures. The program is in close contact with the functionaries at the addiction care institutions whose task is dedicated to infectious diseases. These functionaries, usually nurses, assemble every two months in a network to exchange information. The program developed several websites (e.g., [sickofit.nl](http://sickofit.nl), [hepikhepatitis.nl](http://hepikhepatitis.nl), both for drugs users with hepatitis C) and a team site for information exchange. Further, it yearly writes comprehensive guidelines and Factsheets on infectious disease and related topics.

## **7.4 Responses to other health correlates among drug users**

As described in previous National reports, drug use disorders are frequently associated with other mental health disorders. In the past decade the number of facilities for the treatment of comorbidity in institutes for mental health care, addiction care, and supported living has increased. Since 2009, a national centre for expertise and implementation has been in operation which offers basic and follow-up training courses in professional development and in-depth courses. The national centre boosters on specific aspects of integrated treatment, and offers advice and coaching on implementation on-the-spot. The centre is called Landelijk Expertisecentrum Dubbele Diagnose (LEDD), which can be translated as: National Centre of Expertise on Double Diagnosis.

Drug use is also associated with a range of somatic disorders. Most of the somatic problems associated with drug use are not unique for drug users but are common in other risk groups as well or are associated with the aging population in general. Therefore, most interventions are not exclusive for drug users. As a result, it is often unclear whether the treatment of somatic problems is the responsibility of the addiction care, the general practitioner or whether they should take place in hospital. In general, the attention for somatic co-morbidity in problematic drug users in the Netherlands is rather low.

However, there are some indications for a reversal. For example, the Dutch association of addiction care physicians (VVGN) has organised several symposia in 2012 and 2013 on drug-related emergencies and somatic disorders, including a symposium “liver”.



## 8 Social correlates and social reintegration

### 8.1 Introduction

#### *The social situation in general*

The social state of the Netherlands in general is monitored by The Netherlands Institute for Social Research (SCP). Its most recent report states that the direct consequences of the worldwide economic crisis since 2008 only became apparent for the life situation of most Dutch citizens in 2011 (Bijl et al. 2012). This was explained by the fact that economic changes have a delayed impact on people's life situation. The SCP also concludes that, unfortunately, precisely those groups already living in less favourable circumstances will be confronted with the cumulative effect of a whole series of austerity measures.

Nonetheless, up to 2011, the Netherlands was the best-performing economy on the European continent, recording the highest GDP per inhabitant in 2010, at 35,600 euros, and the lowest score on the 'misery index'. Unemployment, inflation and the budget deficit were all among the lowest in Europe. Moreover, although still considerable differences in the quality of life existed between various population groups, they converged.

The Netherlands still has a favourable Gini coefficient, which is a measure of social inequality. "A Gini coefficient of zero expresses perfect equality, where all values are the same (for example, where everyone has an exactly equal income). A Gini coefficient of one (100 on the percentile scale) expresses maximal inequality among values (for example where only one person has all the income)."<sup>17</sup> The Gini coefficient being 0.278 in 2000 and 0.276 in 2011, the Netherlands has remained low on inequality in the past years.<sup>18</sup>

Social inequality is most visible in deprived neighbourhoods. Therefore, during the past years, a special "empowered neighbourhoods" policy was implemented to improve these deprived neighbourhoods. Unfortunately, the policy interventions in the priority neighbourhoods did not have a differentiating influence on social advancement, income levels, safety and liveability according to the policy evaluation by the Netherlands Institute for Social Research (SCP) (Permentier et al 2013).

### 8.2 Social exclusion and drug use

#### 8.2.1 *Social exclusion of drug users*

Compared to the previous Netherlands National Report (Van Laar et al. 2013), no new information has become available about social exclusion of drug users.

#### 8.2.2 *Drug use among socially excluded groups*

Drug use among socially excluded groups is especially monitored among homeless people in the four largest cities of the Netherlands given by Amsterdam, Rotterdam, The Hague, and Utrecht. In the previous Netherlands National Report (Van Laar et al. 2013) it was reported that in 2012, during the past month, 11% of the homeless people in the four largest cities has used cannabis almost daily, 6% had used cocaine, and 11% had used opiates. No

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<sup>17</sup>[http://en.wikipedia.org/wiki/Gini\\_coefficient](http://en.wikipedia.org/wiki/Gini_coefficient).

<sup>18</sup><http://statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=71512NED&D1=4&D2=0-2&D3=a&VW=T>.

new information has become available about drug use among these adult homeless people in the four largest cities. However, some new information has become available about drug use among homeless youths in the cities of Amsterdam and Utrecht.

### *Homeless youths in Amsterdam and Utrecht*

The Mainline Foundation has explored the use of substances among homeless youths in 2012 in the cities of Amsterdam and Utrecht by interviewing 10 professional key informants and 28 homeless youths (Roberts et al. 2013). The homeless youths aged between 19 and 25 years, their mean age was 21 years. Key informants reported that between 20% and 99% of the homeless youths under their care used cannabis regularly, depending on the institute they were affiliated with. While according to the key informants cannabis was often found to be used in a problematic way, ecstasy and amphetamines were usually used recreationally and less problematically. Nonetheless, some homeless youths regularly used amphetamines, cocaine, and sometimes heroin. These homeless youths were found to deteriorate rather quickly. Almost all the homeless youths confirmed they (had) used cannabis, many of them used cannabis daily.

Unfortunately, the total number of homeless youths in the four largest cities is not known for all the four cities but only for the city of The Hague. For this city, the number of homeless youths was estimated at about 827 in 2011 (Tuynman and Planije 2012).

## **8.3 Social reintegration**

### *Housing*

In the Netherlands, the social reintegration of (former) addicts is part of the more general Strategy Plan for Social Relief that targets all kinds of vulnerable people. On the 16<sup>th</sup> of January 2013, the Secretary of State from the Ministry of Health, Welfare, and Sport (VWS) informed the House of Representatives about the progress of the Strategy Plan. The Secretary of State remarked that, together with Finland, the Netherlands is the only Member State of the European Union in which homelessness decreased in the past five years (T.K. 29325-61).

Nonetheless, on the 1<sup>st</sup> of July 2013, the European Committee on Social Rights has found a collective complaint against the Netherlands admissible.<sup>19</sup> The European Federation of National Organisations Working With the Homeless (FEANTSA) has issued three complaints against the Netherlands:

- In the Netherlands, access to (emergency) shelter is given on the condition that the person has a 'local connection' to the area, and other criteria;
- The availability and quality of (emergency) shelters is inadequate;
- Due to a lack of coordination between the 43 responsible municipalities, improvement in the housing situation of homeless people is significantly hindered.

Research by means of mystery guests confirmed that it does occur that homeless people are refused social relief. Also in cases of emergency, when they have an official right to receive it, some homeless people have been refused social relief (Tuynman et al. 2013). In some cases, being under the influence of drugs or alcohol is put forward as an excuse to refuse social relief. On the 25<sup>th</sup> of October 2013, the European Committee on Social Rights

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<sup>19</sup><http://feantsa.org/spip.php?article1019&lang=en>.

indeed requested "an immediate measure against The Netherlands to ensure nationwide access to shelters for homeless people".<sup>20</sup>

The progress of social relief in the Netherlands is yearly monitored by the Strategy Plan for Social Relief Monitor in the four largest cities in the Netherlands: Amsterdam, Rotterdam, The Hague, and Utrecht. In 2011, 1,800 adults received an individual plan for social reintegration of a total of 14,300 adults since the start of the Strategy Plan in 2006, which was an increase of 15% compared to 2010. In total, more than 9,100 adults have now received a stable mix of housing, income, and treatment, indicating a success ratio of 64%. In addition to these adults, a total of 1,093 homeless youths in the four largest cities also received an individual route plan in 2011. In the cities of Rotterdam, The Hague, and Utrecht, 36% of the homeless youths have already reached the stable mix.

Assertive Community Treatment (ACT) is a commonly applied method by institutes for addiction care to work on the social reintegration of homeless addicts and addicts at risk to become homeless. A systematic review conducted to compare the effects of Standard Case Management (SCM), Intensive Case Management (ICM), Assertive Community Treatment (ACT), and Critical Time Intervention (CTI) found that ACT improved housing stability and was cost-effective for mentally ill and dually diagnosed persons (De Vet et al. 2013).

From 2005 to 2008, twenty ACT-teams serving patients with severe mental illness were followed that were located in different regions of the Netherlands (Van Vugt et al. 2013). The study included 530 patients, with a mean age of 42 years and 71% was male. It was found that the substance use problems showed improvement over time and "that investment by teams to improve a patient's psychosocial situation can lead to improvements on substance problems".

### *Employment*

Some former addicts can be trained and find employment in the addiction care as a Peer Provider (in Dutch: ervaringsdeskundige). For the mental health care in general, which includes addiction care, a first manual has been developed which offers some guidelines about how to appoint Peer Providers (Boertien and Van Bakel 2013). Specifically for the addiction care, the appointment of Peer Providers was evaluated for four projects conducted in several regions of the Netherlands (Barendregt et al. 2013). Each of these four projects was embedded in a Community of Learners (COL) in which the Peer Providers share and consolidate their expertise, and work together democratically with professional addiction counsellors.

The results of the evaluation of the four projects are as follows:

- In the first project, 20 of the 25 included clients were successfully trained to become an Expert By Experience.
- In the second project, Peer Providers proved successful to contact addicts who avoid treatment and served as a role model, providing hope that addiction can be cured.
- In the third project, it is expected that 10 of the initially interested 24 former clients will be successfully trained to coach professional counsellors on how to approach their clients.

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<sup>20</sup><http://www.feantsa.org/spip.php?article2050&lang=en>.

- In the fourth project, former clients showed to cope adequately with the stress of having responsibilities, instead of falling back into substance abuse, by taking up responsibilities for the project.

## 9 Drug related crime, its prevention, and prison

### 9.1 Drug related crime

#### 9.1.1 *Drug law offences*

The most important act with regard to drug law offences is the Opium Act, which defines the trafficking, production, cultivation, dealing and possession of illegal drugs as criminal acts, when these activities take place outside of the conditions mentioned in the Opium Act Decision and the Regulation Opium Act Exemptions. Preparative or facilitating activities for the illegal production, sale or export of hard drugs are also criminal acts according to the Opium Act (article 10a). These imply also possession of substances which are meant to be used for the illegal production of hard drugs (see for instance LJN: BW8614 2012). A proposal for a law that defines preparative or facilitating activities for large-scale professional cannabis production as an offence was accepted by the Lower House in 2013 and is in 2013 under discussion in the Upper House (T.K. Handelingen 2012-2013, 67-9; E.K. 32842-A, 2013).

The Prevention of Abuse of Chemicals Act is also of importance for the combat of drug-related crime, especially with regard to precursors of synthetic drugs. In addition, administrative law plays an increasing role in the combat of drug-related crime and nuisance on the local and regional level.

Paragraph 9.1.1 reports about Opium Act offences. In these paragraphs, data are presented from registrations of Police Forces, the Public Prosecution Service and the Custodial Institutions Agency.

With regard to registration data of law enforcement agencies the following should be noted:

- The figures cover offences that came to notice of the police. They should not be interpreted as a supply indicator or an indicator for the success of supply reduction efforts.
- Registration data always depend for a certain part on the activities, priorities and skills of law enforcement agencies. In the observed period (2012) there were several intensified law enforcement activities running with regards to drug crime. The production and/or import and export of cocaine, heroin, synthetic drugs and the cannabis cultivation are priority areas in the combat of undermining and organized crime since 2008 (T.K. 2012-1013, 29 911, nr. 79). These enforcement priorities influence the numbers of reported offences.
- Databases are adapted and improved in the course of time and figures are cleaned and adapted every year. As a consequence, later versions may differ from former ones. The most recent (preliminary) updates over 2012 are presented in this chapter.
- In 2008, major changes in information systems and underlying databases of the police and the Public Prosecution Service were introduced. The National Audit Office concluded in 2011 that the new police registration system of crime reports (BVH, Basisvoorziening Handhaving) was not implemented in a consistent way (TK 29350-10). According to the National Audit Office, figures might be incomplete. Whether this is really the case, and if so, to what extent figures are incomplete, is not known. The problem could affect the figures of the Public Prosecution Service as well. In September 2011, the minister of Security and Justice announced improvements of the ICT-systems of the police forces in a programme that will be implemented in 2011-2017 (TK 29628-269,

attachment, Aanvalsprogramma Informatievoorziening Politie 2011-2014). This improvement programme was running in 2012.

- The national registration systems of police and Public Prosecution do not contain specific information about types of drugs or specific types of drug offences. Only 'hard drugs' (schedule I) and 'soft drugs' (schedule II) can be distinguished. This general distinction between hard and soft drugs will be made in this chapter whenever possible. Categories of offences (production, trafficking or dealing) cannot be distinguished either in a valid way. It is not possible to distinguish between offences related to personal use and offences related to supply.

Since 2008, the jurisdiction of the Public Prosecution Service to apply sanctions were expanded (Stc 8299, 2012; Openbaar Ministerie 2012). The data presented below include the facts which were handled by the Public Prosecution Service on the basis of this expanded jurisdiction.

#### *Opium Act reports by the Police Forces (table 9.1.1)*

- There is an increase in the total number of police reports of Opium Act offences increases in 2012.
- There is a slightly higher percentage of soft drugs reports than in 2011. In the longer term, there is a decrease of the percentage of hard drug reports and an increase of the percentage of soft drug reports. The number of reports of combinations of both hard and soft drugs decreases in 2012. This type of cases is a minority.
- In 2012 the soft drugs reports of the police outnumber the hard drugs reports. This was already the case in 2011. In 2012, the difference between soft drugs and hard drugs reports is enlarged. The increase in the percentage of soft drugs offences is confirmed by the Netherlands Police Agency, who assume that the increase is a result of the intensified enforcement efforts directed at cannabis production (Nationaal Netwerk Drugsexpertise 2012). It might also be related to the increased focus of the police on soft drugs dealing outside coffee shops within the framework of the tightened coffee shop policy (Van Ooyen et al. 2013).
- In 2012, 7.8% of all the police reports concern the Opium Act. The percentage of Opium Act reports increases in recent years, which is in contrast to the decreasing trend of the total number of police reports. The increase is mainly caused by the increase of the number of soft drug reports.
- Most arrestees for Opium Act offences are male. Most of the arrestees have more than one criminal report. For 43%, the 2012 offence is the first registered offence (of all possible offences, not only Opium Act offences; not in table).

Table 9.1.1: *Opium Act reports by the Police Forces by drug type (hard-soft), 2004-2012<sup>I</sup>*

|  | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012 <sup>II</sup> |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------------------|
| Hard drugs                                 | 12,035 | 11,084 | 10,978 | 10,682 | 9,524  | 7,774  | 7,799  | 7,946  | 8,005              |
| Soft drugs                                 | 7,433  | 8,274  | 7,973  | 7,860  | 7,559  | 8,176  | 7,705  | 8,368  | 8,855              |
| Hard and soft                              | 2,105  | 2,157  | 2,708  | 2,801  | 2,718  | 1,916  | 1,468  | 1,563  | 1,427              |
| Other/unknown                              | 696    | 380    | 349    | 93     | 57     | 21     | 10     | 17     | 40                 |
| Total                                      | 22,269 | 21,895 | 22,008 | 21,436 | 19,858 | 17,887 | 16,982 | 17,894 | 18,327             |
|  |        |        |        |        |        |        |        |        |                    |
| Hard drugs                                 | 54%    | 51%    | 50%    | 50%    | 48%    | 43%    | 46%    | 44%    | 44%                |
| Soft drugs                                 | 33%    | 38%    | 36%    | 37%    | 38%    | 46%    | 45%    | 47%    | 48%                |
| Hard and soft                              | 9%     | 10%    | 12%    | 13%    | 14%    | 11%    | 9%     | 9%     | 8%                 |
| Other/unknown <sup>III</sup>               | 3%     | 2%     | 2%     | 0%     | 0%     | 0%     | 0%     | 0%     | 0%                 |
| Totall                                     | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%               |
|  |        |        |        |        |        |        |        |        |                    |
| % drug related of total number of offences | 7.5%   | 7.3%   | 7.3%   | 6.9%   | 6.8%   | 6.6%   | 6.7%   | 7.0%   | 7.8%               |

I. More than one offence may be reported per suspect. Due to rounding numbers, percentages do not always add up to 100. II. Numbers for 2012 are preliminary. III. 0% is <0,5% in cases where the number of other/unknown is >0. Source: HKS, KLPD/IPOL, extraction from the WODC-Datamart Drugs, 2013.

#### *Opium Act cases registered by the Public Prosecution Service (table 9.1.2)*

The next phase in the criminal justice chain is the Public Prosecution Service. Note that a police report is a different administrative unit than a case registration of the Public Prosecution Service.

- The number of Opium Act cases registered by the Public Prosecution Service also increases in 2012. The increase concerns hard drugs cases as well as soft drug cases and cases with hard and softdrugs combined. But, similar to the developments in police reports (see table 9.1.1), it is particularly the number of soft drug cases which increases.
- Although the percentages of hard drugs cases and soft drug cased did not change in 2012 when compared to 2011, there is a clear trend in the longer term, which shows a decrease in hard drug cases and an increase in soft drug cases. In 2012, 54% of the cases concerns soft drugs and 42% hard drugs.
- In 2012, 8.0% of all cases concerns Opium Act cases. The percentage of Opium Act cases increases recent years. This increase is mainly caused by the increase of the number of soft drug cases.

*Table 9.1.2: Opium Act cases registered by the Public Prosecution Service by drug type (hard-soft), 2004-2012<sup>I</sup>*

|   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Hard drugs                              | 11,972 | 9,919  | 9,902  | 9,463  | 9,081  | 7,421  | 6,890  | 7,374  | 7,574  |
| Soft drugs                              | 9,250  | 9,500  | 9,544  | 9,206  | 9,058  | 8,969  | 7,379  | 9,318  | 9,860  |
| Hard and soft                           | 697    | 720    | 833    | 686    | 674    | 651    | 595    | 679    | 693    |
| Other/unknown                           | 31     | 59     | 34     | 53     | 53     | 40     | 57     | 38     | 44     |
| Total                                   | 21,950 | 20,198 | 20,313 | 19,408 | 18,866 | 17,081 | 14,921 | 17,409 | 18,171 |
|   |        |        |        |        |        |        |        |        |        |
| Hard drugs                              | 55%    | 49%    | 49%    | 49%    | 48%    | 43%    | 46%    | 42%    | 42%    |
| Soft drugs                              | 42%    | 47%    | 47%    | 47%    | 48%    | 53%    | 49%    | 54%    | 54%    |
| Hard and soft                           | 3%     | 4%     | 4%     | 4%     | 4%     | 4%     | 4%     | 4%     | 4%     |
| Other/unknown <sup>II</sup>             | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     |
| Total*                                  | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   | 100%   |
|   |        |        |        |        |        |        |        |        |        |
| % drug related of total number of cases | 8.0%   | 7.5%   | 7.5%   | 7.1%   | 7.1%   | 7.3%   | 7.0%   | 7.5%   | 8.0%   |

I. More than one case may be recorded per suspect; due to rounding numbers, percentages do not always add up to 100. II. 0% is <0,5% in cases where the number of other/unknown is >0. Source: OMDATA, extraction from the WODC Datamart Drugs, 2013.

### *Decisions made by the Public Prosecution Service in Opium Act cases (table 9.1.3)*

The majority of Opium Act cases are submitted to court. However, the percentage decreased substantially in 2012 when compared to 2011.

- The percentage of hard drugs cases submitted to court in 2012 is 60%. This is still higher than that for soft drugs cases (57% in 2012) (not in table).
- The decrease of the percentage of cases submitted to court seems to be caused by the rise of the so called “*strafbeschikking*” (disposal to impose sentences) and the substantial increase of the number of case dismissals due to policy reasons in 2012.
- Since February 2008, the Public Prosecution Service has the disposal to impose sentences for several crime types without referring to the Court. This is the so called “*strafbeschikking*” (disposal to impose sentences) and it may imply several sanctions like fines, community service orders and disqualification from driving. This disposal is gradually being implemented. It is meant to replace the transaction entirely in a couple of years. In 2011 the first “*strafbeschikkingen*” in relation to Opium Act offences can be found. They constitute 2% of the total number of Public Prosecution Service decisions, in 2012 5%.
- The number of case dismissals due to policy reasons increases substantially in 2012. The percentage of dismissals for policy reasons for Opium Act cases was 6% in 2011 and 9% in 2012 (it was 5% percent in 2010).
- The increase of the number of dismissals for policy reasons is highest for soft drugs cases: in 2011 this increases to 5.7% (3.5% in the year before) and in 2012 it is 10.4%. In 2012, this is almost three times as high as in 2010 (plus 288%).
- The percentage of dismissals due to policy reasons was high in 2004 because many cases were dismissed in cases of hard drug trafficking at Schiphol Airport by drug



couriers. Non-prosecution was a policy decision then; it was part of the temporary drug oriented approach of drug couriers at Schiphol Airport. Since 1-1-2006, all of these types of cases are prosecuted again.

- Disposals to impose sentences now seem to replace partly the transactions of the Public Prosecution Service. The percentage of transactions in 2010 still was 21%. This proportion is decreasing: 18% in 2011 and 16% in 2012. Transactions include community service orders and financial transactions.
- Most of the transactions concern financial transactions. Since the introduction of the disposals to impose sentences this number decreased substantially. Between 2004 and 2008 there were about 4,000 transactions each year. This number has decreased to 2,523 in 2011 and 2,213 in 2012.
- The median amount of money in financial transactions of the Public Prosecution Service is €295 in 2012, this is €65 higher than in 2011. In the period 2004 – 2012 the median amount of money in financial transactions of the Public Prosecution Service fluctuates between €320 and €250 (not in table).
- Ten percent of the Opium Act cases are dismissed due to technical reasons. There seems to be an increasing trend in the longer term. The other cases ended with joinder of charges, were dismissed for administrative reasons or transferred to another court (the last two types are not in the table).

*Table 9.1.3: Decisions by the Public Prosecution in Opium Act cases, 2004-2012*

|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|------|------|------|------|------|------|------|------|------|
| Submitted to court <sup>I</sup>          | 61%  | 65%  | 66%  | 66%  | 62%  | 62%  | 67%  | 65%  | 59%  |
| Transaction                              | 20%  | 19%  | 21%  | 22%  | 24%  | 24%  | 21%  | 18%  | 16%  |
| Sentence disposal                        | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 2%   | 5%   |
| Case dismissal due to policy reasons     | 10%  | 8%   | 6%   | 5%   | 6%   | 6%   | 5%   | 6%   | 9%   |
| Case dismissal due for technical reasons | 7%   | 6%   | 5%   | 5%   | 6%   | 7%   | 7%   | 9%   | 10%  |

I. Excluding 1-2% cases with joinder of charges. Source: OMDATA, extraction from the WODC Datamart Drugs, 2013.

### *Court sentences in Opium Act cases (tables 9.1.4 and 9.1.5)*

- In 2012 the number of court sentences in Opium Act cases is around 9,000. There is a slight increase when compared to 2011.
- The percentage of soft drugs cases sentenced by the courts increased. In recent years, around half of all Opium Act cases concerned soft drugs crimes. In 2012 it was 51%.
- The percentage of hard drugs cases is decreasing. In 2012 it was 44%.
- A relatively small part of the cases – around 5% - concerns cases with hard- and soft drugs.
- In 2012, Opium Act cases constituted 8.5% of the total number of cases sentenced by the courts. This is an increase compared to 2011. This upward trend is caused mainly by the rising number of soft drugs cases.

*Table 9.1.4: Number of court sentences for Opium Act cases by drug type, 2004-2012<sup>I</sup>*

|   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010  | 2011  | 2012  |
|---|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| Number of Opium Act cases               | 12,346 | 12,288 | 13,104 | 11,926 | 11,499 | 10,599 | 9,413 | 9,100 | 9,388 |
| Type of drug:                           |        |        |        |        |        |        |       |       |       |
| - Hard drugs                            | 57%    | 52%    | 50%    | 51%    | 50%    | 48%    | 47%   | 48%   | 44%   |
| - Soft drugs                            | 38%    | 43%    | 45%    | 45%    | 45%    | 46%    | 48%   | 47%   | 51%   |
| - Hard- and softdrugs                   | 4%     | 5%     | 5%     | 5%     | 4%     | 5%     | 5%    | 5%    | 5%    |
| - Other/unknown <sup>II</sup>           | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     | 0%    | 0%    | 0%    |
| % drug related on total number of cases | 8.3%   | 8.4%   | 8.9%   | 8.5%   | 8.1%   | 7.6%   | 7.8%  | 7.8%  | 8.5%  |

I. There can be more than one case per person. II. 0% = <0.5% in cases where the number of other/unknown is >0. Source: OMDATA, extraction from the WODC Datamart Drugs, 2013.

Sentences in Opium Act cases by the courts in first instance consist of community service orders, imprisonment or fines. These sentences can be conditional or unconditional, or partly (un)conditional.

In 2012 the community service orders applied by the courts outnumber the unconditional prison sentences. This is a change compared to 2011. A trend towards less prison sentences is clearly visible in the longer term.

The number of community service orders increases in 2012 compared to 2011.

The mean number of hours of a community service order in 2012 is more than 90 hours.

This mean number of hours has decreased since 2004 (not in table).

In 2012 the courts applied unconditional prison sentences in more than 3,200 Opium Act cases. The mean number of days of (partly) unconditional prison sentences is 255 days in 2012 (this was 296 days in 2011), which implies a decrease. Since 2004 the mean number of days has decreased. Compared to 2012 this decrease amounts to four months (2004: 376 days; not in table).

In 2012 the courts applied about 1,000 fines, less than in 2011. In the longer term there is a decreasing trend. The median amount of money of fines is €500 in 2012, €50 lower than in 2011 (not in table).

*Table 9.1.5: Types of sanctions in Opium Act cases imposed by the Courts, 2004-2012<sup>I</sup>*

|  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Community service order                | 4,130 | 4,818 | 5,645 | 4,695 | 4,283 | 3,891 | 3,491 | 3,244 | 3,613 |
| (Partly) unconditional prison sentence | 5,520 | 4,854 | 4,674 | 4,407 | 4,203 | 3,677 | 3,351 | 3,293 | 3,214 |
| Fine                                   | 2,056 | 1,837 | 1,816 | 1,585 | 1,660 | 1,609 | 1,379 | 1,213 | 1,041 |

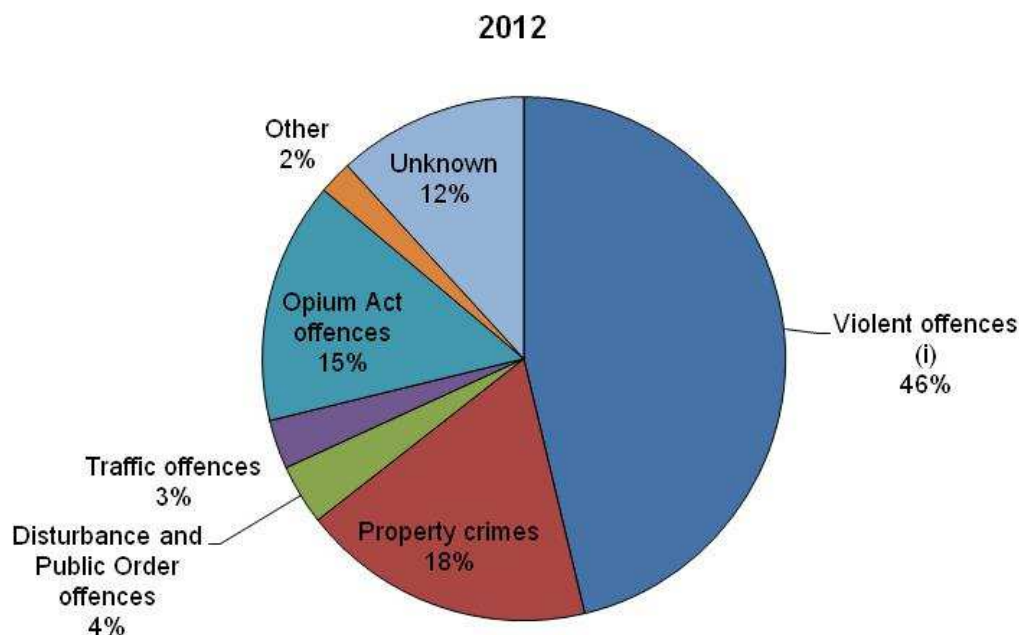
I. There can be combinations of sanctions. Source: OMDATA, extraction from the WODC Datamart Drugs, 2013.

### *Opium Act offenders in prisons (figure 9.1.1)*

15% of the detainees in the prison system on September 30 2012 were convicted for an Opium Act offence. Most detainees are convicted for violent offences, property offences with violence, and sexual offences. Opium Act offences are third in the ranking of types of offences.

The percentage decreased from 19-20% in 2006-2009 to 15% in 2012.

*Figure 9.1.1: Percentage of detainees for Opium Act offences compared to other categories of offences (including Unknown<sup>I</sup>), September 30, 2012*



I. Unknown: this can be caused by specific legal conditions or other reasons. Source: Kalidien & De Heer-de Lange, 2013.

### *Other information: expenditures for Opium Act offences*

Moolenaar et al. (2013) report on expenditures for prevention, investigation, prosecution, sentencing and support of offenders of different types of offences in 2011. The types of offences are categorized on the basis of the most serious offence. Opium Act offences are one of the categories, differentiated according to Schedule I drug offences (hard drugs) and Schedule II drug offences (soft drugs) (table 9.1.6). Figures for 2011 are preliminary. Expenditures for Opium Act offences in 2011 are estimated at € 395,0 million (in nominal amounts), of which € 287,9 million is spent on hard drugs and € 107,2 million on soft drugs. Expenditures for Opium Act offences account for 3.1% of the total of expenditures for all offences. Of all 8 types of offences, Opium Act offences rank seventh in amount of expenditures (see table 9.1.7).

€ 8,3 million is used for prevention activities, €81,8 million for investigation, € 44,6 million for prosecution, € 16,0 million for sentencing, € 205,3 million for the execution of sentences, and € 38,9 million for support of offenders and other kinds of support and activities (not in table).

Soft drugs expenditures are highest in the stage of prevention and investigation, but hard drugs are higher in all the other activities (not in table). From all drug expenditures, the execution of sentences for hard drug offences rank highest (its estimated costs are € 175.3 million).

*Table 9.1.6: Expenditures for different types of offences, in %, 2011<sup>I</sup>*

| Type of offences:                      | % of expenditures                 |
|--|-----------------------------------|
| Property crimes                        | 36.3%                             |
| Vandalism, disturbance of public order | 24.3%                             |
| Violent and sexual offences            | 20.0%                             |
| Traffic offences                       | 5.9%                              |
| Other offences                         | 5.0%                              |
| Minor offences <sup>II</sup>           | 5.0%                              |
| Opium Act offences                     | 3.1%                              |
| Economic offences                      | 0.4%                              |
| Total                                  | 100% (€ 11 613,9 <sup>III</sup> ) |

I. Figures are preliminary. II. Lawmaking, Inspectorates. III. Total amount of expenditures for security issues In million euros (nominal). Source: D.E.G. Moolenaar, B. Nauta en F.P. van Tulder (2013). Kosten van criminaliteit. In: Kalidien, S.N, De Heer-De Lange, N.E (red), Criminaliteit en Rechtshandhaving 2012, Den Haag, WODC, Justitie en statistiek nr. 2.

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

#### *Offences committed by drug users*

The Police Records System includes a classification 'drug user'. This designation is given to a suspect 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. An unknown proportion of drug using offenders is missing in the classification.

The category of drug users who are registered as such by the police has the following profile in 2012 (not in table; preliminary data):

- 92% is male. They are an ageing population: the mean age increased from 37 years in 2003 to 42 in 2012. The majority (97%) is over 24 years old in 2012.
- Many of them are frequent offenders: 83% was arrested more than ten times and 26% more than 50 times.

The profile did not change much compared to 2011. The total number of arrestees that was classified as a drug user by the police decreased in 2011 and 2012. There is a clear decreasing trend in the longer term: in 2004, 10,504 arrestees were classified as a drug user, in 2012 5,533.

With regards to the type of crime, we can see the following pattern in the registered crime (table 9.1.7):

- Most of the drug using suspects is suspected of property crimes. This fraction did not change between 2011 and 2012 and no general trend is visible in the longer term.

- The proportion of drug users suspected of property crimes with violence or extortion did not change between 2011 and 2012, but since 2004 there is a general decreasing trend.
- Violent crimes (against persons) committed by drug using suspects remained more or less constant (28% in 2012).
- Opium Act offences, vandalism/disturbance of public order and traffic offences show decreasing trends in the last years. The proportion of drug users suspected of Opium Act offences did decrease substantially on the long term (15% in 2012).
- 'Other offences' increased somewhat in 2012. These offences concern the Weapons and Munition Act and economic or environmental offences.

*Table 9.1.7: Types of crime of suspects classified by the Police as drug users, 2004-2012<sup>I</sup>*

|   | <b>2004<br/>N=<br/>10,504</b> | <b>2005<br/>N=<br/>9,646</b> | <b>2006<br/>N=<br/>8,878</b> | <b>2007<br/>N=<br/>8,307</b> | <b>2008<br/>N=<br/>7,757</b> | <b>2009<br/>N=<br/>6,892</b> | <b>2010<br/>N=<br/>6,324</b> | <b>2011<br/>N=<br/>6,199</b> | <b>2012<br/>N=<br/>5,533</b> |
|---|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Property crimes without violence        | 56%                           | 53%                          | 50%                          | 49%                          | 51%                          | 50%                          | 52%                          | 54%                          | 54%                          |
| Property crimes with violence/extortion | 10%                           | 8%                           | 8%                           | 8%                           | 7%                           | 7%                           | 7%                           | 6%                           | 7%                           |
| Other violence (against persons)        | 24%                           | 24%                          | 26%                          | 29%                          | 28%                          | 29%                          | 29%                          | 29%                          | 28%                          |
| Opium Act offence                       | 23%                           | 24%                          | 25%                          | 21%                          | 21%                          | 19%                          | 16%                          | 16%                          | 15%                          |
| Vandalism, disturbance of public order  | 23%                           | 22%                          | 23%                          | 24%                          | 22%                          | 20%                          | 20%                          | 20%                          | 19%                          |
| Traffic offence                         | 11%                           | 11%                          | 11%                          | 12%                          | 13%                          | 13%                          | 11%                          | 12%                          | 10%                          |
| Sexual offence                          | 1%                            | 1%                           | 1%                           | 1%                           | 1%                           | 1%                           | 1%                           | 1%                           | 1%                           |
| Other                                   | 11%                           | 11%                          | 10%                          | 11%                          | 10%                          | 11%                          | 11%                          | 12%                          | 13%                          |

I. Suspects may commit more than one type of offence; percentages do not add up to 100. Source: HKS, KLPD/DNRI, extraction from the WODC Datamart Drugs, 2013.

### *Prolific offending by drug users*

The Research and Documentation Centre of the Ministry of Security and Justice monitors the population of Very Active Adult Prolific Offenders [VAPO's] since 2005. In 2013 the analysis covers the period 2003-2011 (Tollenaar and Van der Laan 2013; for 2011 only a limited number of data is available yet). A very active prolific offender is a person of 18 years and older with more than ten police reports in the last five years of which at least one in the year of report. The total number of VAPOs shows a decreasing trend (table 9.1.8). This trend continues in 2011 (not in table).

- The majority of VAPO's is recorded by rehabilitation services as having addiction problems (table 9.1.8). It is however a decreasing majority: in 2003 73% was addicted and in 2010 65%.
- There is a shift in problems over the years: there are less addiction problems and less housing problems, but more financial and relational problems.

*Table 9.1.8: Problem categories amongst very active prolific offenders, according to rehabilitation services, in %, 2003-2010<sup>1</sup>*

|   | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Total number of very prolific offenders | 5,883 | 6,059 | 5,886 | 5,614 | 5,467 | 5,152 | 4,820 | 4,513 |
| Addiction problems                      | 73%   | 72%   | 71%   | 70%   | 68%   | 67%   | 65%   | 65%   |
| Mental health problems                  | 38%   | 40%   | 40%   | 41%   | 42%   | 43%   | 43%   | 42%   |
| Housing problems                        | 43%   | 44%   | 44%   | 44%   | 44%   | 44%   | 43%   | 39%   |
| Financial problems                      | 44%   | 44%   | 45%   | 47%   | 47%   | 47%   | 46%   | 46%   |
| Problems with physical health           | 19%   | 20%   | 20%   | 19%   | 19%   | 19%   | 19%   | 16%   |
| Relational problems                     | 36%   | 38%   | 39%   | 40%   | 41%   | 42%   | 43%   | 41%   |

I. Based on information in intervention plans as registered in the Client Monitoring System of rehabilitation services. Incomplete data corrected by multivariate imputation sampling. Data 2010 are less reliable because 30% or more of the data is missing. Source: Tollenaar and Van der Laan, 2013.

### *Driving offences by drug users*

There are plans for changing the Road Traffic Act with regards to driving under the influence of drugs (see Chapter 1). In addition, most cases of offences against article 8 of the Road Traffic Act were handled in 2012 by the Central Fine Collection Agency (CJIB) on behalf of the Public Prosecution Service (Openbaar Ministerie 2013a; Openbaar Ministerie, 2013).

- In 2012, the police arrested almost 39,000 drunken drivers and the Public Prosecution Service registered 26,500 cases of driving under the influence (Openbaar Ministerie 2013a; Openbaar Ministerie, 2013; Kalidien and De Heer-De Lange 2013). These cases concern almost always alcohol. There is a decreasing trend.

### *Drug-related nuisance*

With regards to drug-related nuisance there is information from the annual Integral Security Monitor (CBS 2013). This is a victimization survey based on self report by Dutch inhabitants of 15 years and older who live in a private household situation a.o. about victimization and feelings of security in the last 12 months. Respondents filled out questionnaires via internet, on paper, by telephone or face-to-face. The latest survey used questions that differ from those in former reports, which makes a comparison between 2012 and 2011 and the years before invalid. Drug and alcohol related nuisance is categorized under “social nuisance”. Drug related nuisance contains “drug use or drug dealing, for instance in streets or in coffee shops”. Public drunkenness, defined as “drunken persons in the street” is also a category.

- Twenty-seven percent of the respondents report that nuisance from public drunkenness occurred in their neighbourhood in 2012. Three percent experienced a lot of nuisance from these behaviours themselves.
- Twenty-four percent report that drug use or drug dealing occurred in their neighbourhood in 2012. Four percent experienced a lot of nuisance from these behaviours themselves.

The new criteria for coffee shops (see chapter 1.2.3) aimed a.o. on a reduction of nuisance related to drug tourism. The nuisance experienced by people living in the direct vicinity of the coffee shops was assessed in the broad evaluation study (Nijkamp and Bieleman 2013).

- There was no change in the frequency of nuisance experienced by these persons. However, inhabitants of the three southern provinces, where the criteria were enforced, did report changes in the nature of the nuisance.
- Before the enforcement of the new criteria, local residents attributed the nuisance they experienced mostly to the coffee shops and the coffee shop visitors from abroad. Six months later, they attributed the nuisance mainly to drug dealing in the streets, which residents believed to concern the illegal trade of soft drugs, at least in part.
- Local residents moreover continued to attribute some of the nuisance to drug tourists, but no longer drug tourists visiting coffee shops.

## **9.2 Prevention and combat of drug related crime**

### *9.2.1 Prevention of drug law offences*

#### *Prevention and combat of organised crime*

##### *Priorities in law enforcement*

- The organised crime in relation to cocaine, heroin, synthetic drugs and the large-scale professional cannabis cultivation are defined as priority areas for the Dutch police for the period 2013-2017 (T.K. 29911-79).
- In the province of Brabant there is a special Taskforce Approach Organized Crime Brabant (Taskforce B5). It was installed in 2010 for the combat of organised cannabis cultivation. The Task Force investigated 11 criminal networks in 2012 (4 in 2011) and arrested 62 suspects. 32 million euros of criminal money were confiscated (Rijksoverheid 2012). The Task Force will continue its work until 2016 (Brabants Dagblad, 24 May 2013).

##### *Strategies in law enforcement*

- In the combat of organised crime, the 'barrier' model is applied, which aims at interventions in the logistic organisation and central processes of the crimes. There is plenty attention for facilitators (Verantwoording aanpak georganiseerde criminaliteit in 2012, 2013).
- A central aspect in the combat still is the co-operation of local and regional institutions like the public administration, police, Public Prosecution Service, Fiscal investigation units and Tax Authorities and this approach will be continued (T.K. 29911-84). A combination of administrative and criminal laws is applied (see also Verantwoording aanpak georganiseerde criminaliteit in 2012, 2013). Co-operation between administrative and judicial partners is enhanced and supported by so-called Regional Information and Expertise Centres (RIEC-networks). RIECs are supported by a national Centre of Information and Expertise (LIEC), which is a shared service centre for RIECs. Organised cannabis cultivation is one of the main priority areas of the RIECs. By the end of 2012 there are 10 RIECs with a capacity of 137,3 fte (Smits et al. 2013). In general, RIECs are evaluated positively by the municipalities.
- The administrative approach in the combat of organised crime, which should be applied by municipalities, was evaluated (Smits et al., 2013). The cultivation of cannabis is the main priority of municipalities. The capacity that is available for the combat differs from municipality to municipality; mean is 0.5 fte. Main partners of the municipalities are the

police, the Public Prosecution Service and the RIEC. The administrative approach is strengthened compared to 2009, according to the researchers. The awareness of the presence of organised crime increased and municipalities developed policies. 93% of them is partner in a RIEC at the end of 2012. The local embedment of the approach within the municipalities differs, about 40% has a lot of structure in their approach, but about 30% only has a weak organisational embedment, which makes the administrative approach there vulnerable.

- A central element in the approach against organised crime is the confiscation of criminal proceeds (T.K. 29911-79).
- On a national level, the Public Prosecution Service and the police started 65 investigations into undermining organised crime organisations who were involved in cocaine, heroin, and synthetic drugs in 2012 and finished 51 investigations (Verantwoording aanpak georganiseerde criminaliteit, 2013). Investigations into organisations involved in large-scale cannabis production started 3 times and were finished 2 times in 2012. In general, this is less than in 2011. 71 times a prison sentence was applied by the court in first instance. On a regional level, the Public Prosecution Service and the police did investigative projects into 71 organisations who were involved in cocaine, heroin and synthetic drugs. In addition, they investigated 22 drug related organisations in a regular way or in short investigations ('korte klap'). 72 investigative projects into organisations who are involved in large-scale cannabis cultivation were carried out in 2012 in the regions, plus 10 regular or short ('korte klap') investigations.
- The Integrity Screening of persons who apply for a license from public authorities is an important tool for local authorities in their combat of organised crime (Public Administration Probity Screening Act, Wet Bibob). The screening determines whether there is a serious danger that a license or authorization will be misused for criminal activities. This tool is a.o. applied on coffee shops and smart- or growshops. The ministry of Security and Justice ordered a national screening of coffee shops on the basis of Bibob. Mayors were asked to pre-select coffee shops where criminal activities might take place, but municipalities are not obliged to co-operate. The screening of coffee shops will last until 2014 (Bureau Bibob 2012).
- In 2011, the minister of Security and Justice called upon the mayors to carry out a Bibob screening on all the coffee shops in their municipality. Municipalities were asked to pre-select coffee shops for such a screening and to prioritise them. This lead to 46 Bibob screenings of coffee shops (21% of all Bibob advices) and 2 about grow shops (1%). The number of screenings of coffeeshops increased substantially compared to 2011, when there were 10 Bibob-advices about coffee shops (5% of all Bibob advices) and 5 about smart- and growshops (3%).
- Of the 46 advices about coffee shops in 2012, 42 (91%) contained a 'serious danger' classification (Jaarverslag 2012 Landelijk Bureau Bibob, 2013). This is 33% of all 'serious danger' classifications in 2012. The danger consists of the risk that a license will be used for money laundering or to commit criminal offences.
- The implementation of the Bibob law is complex; the national Bibob Bureau has a help desk for public government organisations that want to apply the law. These organisations get also support from their regional RIECs (see above).
- The special Taskforce Approach Organized Crime Brabant (Taskforce B5) was installed in December 2010 See above and Chapter 1.



- Qat is placed on Schedule II of the Opium Act since 2013. Law enforcement focusses on the combat of import and export, the trade and the distribution of qat (T.K. 24077-311).

#### *New regulations for law enforcement*

- The Bibob-law was broadened in 2013 (Stb 2013-205; for more information see chapter 1).
- The Public Prosecution Service has been developing a new way of working since 2010 in the 'ZSM' programme. The aim of ZSM ('as soon as possible') is to react in a fast, selective, smart and simple way to frequent crime, in co-operation and with a focus on safety in society (Openbaar Ministerie 2013a). ZSM-teams are located at the police offices. The Public Prosecutor sanctions less complicated cases himself, more complicated cases are brought to court. ZSM-procedures are faster than regular procedures: in 2012, 42% of the cases that came to the ZSM-team were judged within one day, 78% was judged within a week and 85% within a month, whereas the regular procedures took a mean of 38 weeks.

#### *Future developments relevant for law enforcement*

- The government plans to place cannabis with a THC concentration of more than 15% on Schedule I of the Opium Act (T.K. 33593-1). See also Chapter 1.
- If acts which are facilitative or preparatory for cannabis cultivation will be defined as criminal acts in the Opium Act, this will have an impact on law enforcement. See also Chapter 1.
- In July 2012 a new Police Act was accepted by the Upper House of Parliament. This Act came into force per 1-1-2013. Under this Act, the former 25 regional police units are re-organized into one National Police. The police put efforts in the preparation of this re-organization in 2012. It is expected that the transition process will last until 2017 (Inspectie Veiligheid en Justitie, 2013). See also chapter 1.

#### *Prevention and combat of crimes and nuisance related to coffee shops*

- As described in chapter 1, two new criteria for licensing and non-prosecution of the sale of cannabis in 'coffee shops' were introduced in the Opium Act Directive in January 2012: the Private club criterion and the Residence criterion. The Private club criterion stipulated that coffee shops would become private clubs (with a limited number of members) and a database of registered members. The Residence criterion stipulated that only residents of the Netherlands would be allowed to become members and enter the Dutch coffee shops. These criteria were an addition to the already existing tolerance criteria for coffee shops. Both criteria were enforced from May 1<sup>st</sup> 2012 in the municipalities with coffee shops in the three southern provinces. The rest of the country had to follow per 1 January 2013. Per 1 January 2013, the number of members would be limited to 2,000 per coffee shop.
- The new criteria aimed at reduction of nuisance and crime related to coffee shops and the trade in narcotics. Coffee shops had to be made smaller and more manageable. The attraction of Dutch drug policy on users who were not a resident of the Netherlands had to be reduced (T.K. 24077-259). The coffee shop owner is responsible for compliance to the criteria. The municipality and the police conduct controls of coffee shops. The police has to enforce on the illegal cannabis market outside the coffee shops and prevent this market from increasing.

- The consequences of the new criteria were evaluated in research. There was a national study about the period May-November 2012 (Van Ooyen et al., 2013) and three local studies (Snippe and Bieleman, 2012; Van der Torre et al., 2012; Van der Torre et al. 2013). Snippe and Bieleman (2012) conducted research in Dordrecht, a medium sized city with 8 coffee shops which was located right outside the southern provinces. Dordrecht decided to introduce the two new criteria in July 2012 voluntarily. Van der Torre et al. (2012) conducted research in the city of Tilburg in 2012. Tilburg is a city in one of the 3 southern provinces, which enforced the new criteria per 1 May 2012. Van der Torre et al. (2013) report about the situation in 2012 and 2013 in Maastricht. This city is located close to the Belgian and German border. It has 14 coffee shops which attracted a lot of non-resident visitors. Main results of the studies were:
- The number of coffee shop visitors decreased substantially after the introduction of the new criteria. Especially young adults stayed away from the coffee shops.
- The number of drug tourists also decreased substantially.
- The illegal retail market for cannabis increased. This illegal market is partly invisible because it takes place out of the sight of citizens or the police or it dispersed to different parts of the city.
- The nuisance around the coffee shops as reported by neighbours stayed more or less the same, but the kind of nuisance changed from nuisance related to coffee shops to nuisance related to drug dealing outside the coffee shops.
- After a while, when the rules with regards to membership were implemented more flexible and controls of coffee shops were reduced, residents returned to the coffee shops again. See chapter 1 for a more elaborate description of the new rules and the developments in 2012.
- The Private club criterion was abolished in November 2012 (T.K. 24077-293). The Residence criterion is continued, but with amendments. For more information see chapter 1.
- There were several debates in the Parliament in 2013 about the coffee shop policy and the Residence criterion (T.K. 24077-307; T.K. 24077-41-8; T.K. 24077-312). For more information see Chapter 1.
- There were also several judicial procedures about the Residence criterion in 2013 (2013Z16767, 2 October 2013). Some concerned criminal law (ECLI:NL:RBLIM: 2013: 4071, 4073, 4075, 4077, 4078, 4082, 4084, 26 June 2013). Three coffee shop owners and three members of the personnel of coffee shops were sentenced in first instance for the sale of cannabis to non-residents of The Netherlands. One other concerned civil justice (ECLI:NL:RBDHA:CA1921, 5 June 2013). The civil judge adjudicated in first instance that the Residence criterion was sufficient for the realization of the goals and that the Private Club criterion violated the interests of coffee shop visitors. The State was convicted to compensation coffee shops for the damage caused by the Private Club criterion. Two others concerned administrative law (ECLI:NL: RBZWB: 2013: BY8753; ECLI:NL: RBLIM: 2013: BZ8548). In January 2013, the administrative judge applied a sentence of administrative coercion to a coffee shop because of violation of the Residence criterion. In April 2013 the administrative judge adjudicated that the municipality of Maastricht, which closed a coffee shop because of violation of the criterion, should motivate better why a less radical measure than the Residence criterion was not possible. These verdicts can be considered as supportive for the legitimacy of the Residence criterion. All verdicts are in appeal.

- The Parliament asked for an overview of the status of enforcement plans of the Residence criterion. This overview will be provided by the Minister of Security and Justice (this is an ongoing activity in 2013).
- Another new national criterion for coffee shops that was planned for 2013, was the 'distance criterion': the distance between coffee shops and schools for secondary education and for vocational training had to become at least 350 meters. This plan was abolished in 2012. For more information see Chapter 1.
- The municipality of Maastricht has been considering relocation of coffee shops from the centre of the city to the periphery (closer to the border). This plan was opposed by municipalities, businesses and private persons in one of the envisaged vicinities. In August 2013, the Council of State (Raad van State) judged that relocation of coffee shops is a legal option (ECLI:NL:RVS:2013:696, 2013). It is unclear yet what will happen with the relocation in Maastricht. For the coffee shops, who offered to pay for the relocation, it is not attractive any more to be removed to a location closer to the border, given the fact that the Residence criterion is enforced in Maastricht. The minister of Security and Justice advised the Mayor of Maastricht on his request about relocation in relation to the Residence criterion. The advice was to keep on enforcing the Residence criterion in the whole municipality, because differentiation according to location of coffee shops does not comply with the national tolerance policy (Ministerie van Veiligheid en Justitie 2013a). The goals of the Residence criterion are not realised, or even frustrated by relocation of coffee shops, according to the Minister in his advice. Relocation should always be combined with the Residence criterion.
- The municipality of Rotterdam is also considering relocation of coffee shops to other locations within the municipality in order to reduce nuisance (Gemeente Rotterdam 2012).

### *9.2.2 Prevention of crimes committed by drug users*

An addition to the Road Traffic Act (article 8) is in the procedure of discussion in the Lower House (TK 60-9; TK 32859-9). The change will facilitate the arrest and the prosecution of driving under the influence of drugs. It will define the limiting values for the amount of a certain drug as assessed in the blood of a driver above which driving will be a punishable act. It does not aim at zero tolerance. The central discerning element is whether a driver forms a concrete danger for traffic security. The plan is to define one limiting value for each specific type of drug. There is, however, still some insecurity around the meaning of the values for the behaviour of individual drivers, because the scientific evidence is not 100% conclusive. Some drivers who use a drug more regularly might have developed tolerance for a drug, they might score above a limiting value while being able to drive adequately (T.K. 32859-9). Some parties opt for a zero tolerance rule for driving under the influence of drugs because this might be easier to enforce. Preselection will take place by the police on the basis of a saliva test. Some parties posed questions about the reliability of this test. It is important that the police are able to recognize behaviours that indicate drug use. It is estimated that the new procedures, once in force, will cost about 3.5 and 4 million euros. See also chapter 1.

A change in the Code of Criminal Procedure is in preparation which will make it possible for the police to check the use of alcohol and drugs amongst suspects of violent crimes. For more information see chapter 1.

### 9.3 Interventions in the criminal justice system

Only addiction probation services and some behavioural interventions are targeted to the specific group of addicted offenders. The other interventions in the criminal justice system are not exclusively for drug users or addicts; they have broader target groups and aim at offenders with 'criminogenic' problems that can affect their rehabilitation and their criminal recidivism. Addicts are a relevant target group for the last category of interventions, but also offenders with mental health problems or mild learning disabilities. We will describe the interventions for the category of offenders with criminogenic problems (which include drug abuse and addiction).

The following interventions are available:

- "Safety Houses" (see § 9.3.1).
- Forensic care and Penitentiary Psychiatric Centres (see § 9.3.2).
- Addiction probation services (see § 9.3.3).
- Behavioural interventions inside and outside prison (see § 9.3.4)
- The Measure of Placement in an Institution for prolific offenders (see § 9.3.5).

#### 9.3.1 *Safety Houses*

Safety houses are networks of local organisations working together to reduce crime. Offenders are discussed in case meetings. Adequate trajectories are planned. This is an approach for all offenders, but prolific offenders (amongst whom there are a lot of addicts) and offenders with addiction problems are a relevant target group. Per 1 January 2013, the Safety Houses came under the management and control of municipalities (instead of the national government). A national framework was developed to promote harmonisation of working procedures (Ministerie van Veiligheid en Justitie 2013b).

#### 9.3.2 *Forensic Care and Penitentiary Psychiatric Centres*

The planned Forensic Care Act (Wet forensische zorg) is a broad Act which provides a framework for an adequate connection between care agencies and the justice system (T.K. 32398-3). The Act still is in the process of discussion in the Upper House (E.K. 32398-F).

#### 9.3.3 *Addiction Probation Services*

On 31 December 2012, the Addiction Probation Services had 17,752 registered clients in 2012, less than in 2011 ([www.svg.nl](http://www.svg.nl)).

- Mean age is 37,5 years, higher than in 2011.
- The majority is male (93%), also in 2012. Most clients (also) use drugs in 2012; 36% uses only drugs, mostly hard drugs, and 32% uses both alcohol and drugs.

Information about the problems of clients is incomplete and will not be reported here.

The activities of Addiction Probation Services in 2012 are shown in table 9.3.2. Due to changes in definitions and criteria for registration, the figures of 2009 and before are incomparable to 2010 and 2011, and figures about 2012 are incomparable to those from the years before. Only 2010, 2011 and 2012 are shown in figure 9.3.2. For 2010, activities based on old and new definitions were added.

- Supervision of clients and the writing of advisory reports for judicial authorities were carried out most often in 2012. This pattern is the same as in 2011.

*Table 9.3.2: Types of assistance offered by addiction probation services and number of times activities within each type was carried out, 2010-2012<sup>I</sup>*

| Type of assistance   | 2010   | 2011                | 2012                 |
|--|--------|---------------------|----------------------|
| First visit to arrestee/prisoner in remand   | 2,122  | 2,049               | 1,754                |
| Advisory reports (by order of Public Prosecutor, Judge, prison authorities, etc; including reports about the social environment) | 10,522 | 10,722              | 12,226               |
| Referral to care programs (under a judicial measure)   | 5,046  | 7,311 <sup>II</sup> | 1,183 <sup>III</sup> |
| Supervision of clients in the framework of a judicial decision   | 10,954 | 11,168              | 26,646 <sup>IV</sup> |
| Behavioural interventions <sup>V</sup>   | 686    | 542                 | 634                  |
| Supervision of working sentences   | 4,888  | 3,510               | 3,087                |
| Judicial case management <sup>VI</sup>   | -      | 623                 | 897                  |

I. No figures on case level, no specification for type of drug/alcohol/gambling. II. Excluding referrals to care programmes outside the judicial framework of probation supervision. III. Excluding referrals to care programmes in the judicial framework of probation supervision. IV. This activity was defined broader in 2012 and is incomparable with 2010 and 2011. V. Including learning sentences since 2011. VI. New in 2011. Source: Foundation of Addiction Probation Services, 2013.

#### *9.3.4 Behavioural interventions for substance users*

Behavioural interventions for the target group of drug dependent offenders or offenders with a gambling problem are: the short Lifestyle Training and the Lifestyle Training, both developed by the Foundation of Addiction Probation Services and accredited in 2009 by the Accreditation Commission for Behavioural Interventions for offenders. A third intervention is 'Alcohol and Violence', accredited in 2012.

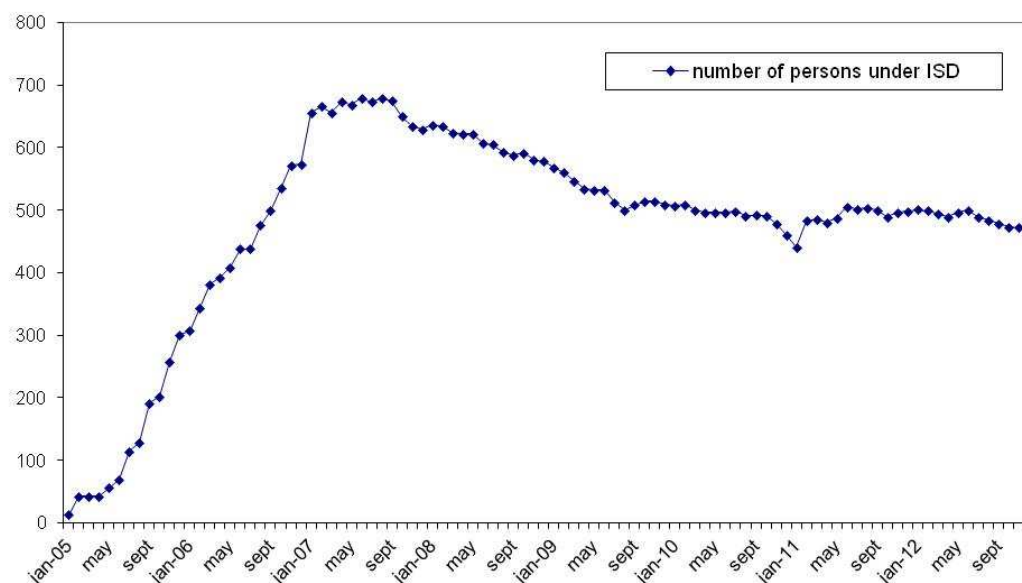
In 2012, addiction probation services did carry out 634 out activities in the framework of such an intervention (see table 9.3.2).

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

The measure of Placement in an Institution for Prolific Offenders (ISD) is a judicial measure for prolific offenders of over 18 years old. ISD can be applied for a maximum of two years. The aim of the measure is twofold: to safeguard society from the frequent offences committed by prolific offenders by incapacitation of the offenders, and to improve the individual situation of offenders, in order to reduce their recidivism.

- Tollenaar and Van der Laan (2012) showed that a majority of the group of very active prolific offenders in 2003-2009 is an addict (see table 9.1.9).
- In 2012, there were 472 to 501 persons per month under the Measure of Placement in an Institution for Prolific Offenders (ISD), with a mean of 488. This is about the same as in 2010 (mean: 493) and 2011 (mean: 494), but less than in 2009 (mean: 528) and 2008 (mean: 607). In 2012, the mean number per month is 497.
- Since 2010, the number of ISD-convicted offenders per month is more or less stable (see figure 9.3.1).

*Figure 9.3.1: Number of offenders under the Measure of Placement in an Institution for Prolific Offenders (ISD'ers), January 2005-December 2012*



Source: Custodial Institutions Agency, 2013.

- Most offenders under the ISD-measure participate in an trajectory with behavioural interventions or care programmes (table 9.3.3). Most of these trajectories take place inside prison, the others outside prison. A minority of offenders under the ISD-measure stays in regular prison regime.
- The proportion of participants in trajectories versus regular prison regime did not change in 2012 compared to 2011.
- The proportion of trajectories outside prison shows a slightly increasing trend.

*Table 9.3.3: Percentage of offenders in different regimes under the Measure of Placement in an Institution for Prolific Offenders, 2009-2012*

| Regime:                   | 2009 | 2010 | 2011 | 2012 |
|---------------------------|------|------|------|------|
| Trajectory outside prison | 24%  | 30%  | 32%  | 33%  |
| Trajectory inside prison  | 57%  | 55%  | 52%  | 51%  |
| Regular prison regime     | 19%  | 15%  | 16%  | 16%  |
| Total N (mean per month)  | 528  | 493  | 494  | 488  |

Source: Custodial Institutions Agency 2013.

- Tollenaar and Van der Laan (ongoing; see [www.wodc.nl](http://www.wodc.nl)) are conducting a replication of their 2012 study into the effectiveness of ISD. ISD proved to be effective in comparison with a regular imprisonment for a comparable target group (Tollenaar & Van der Laan, 2012).
- A broadening of the target group of ISD to adolescents of 12-18 years is under study (T.K. 28741-19; TK 31110-13; T.K. Handelingen 2012-2013, 89-4; TK 28684-385).

- Members of Parliament asked the minister of Security and Justice to study the cost - effectiveness of a longer duration of treatment under the ISD-measure, because there seems to be a subpopulation which needs longer treatment before returning to society. This study is in the phase of starting (T.K. 29270-69; see also [www.wodc.nl](http://www.wodc.nl)).
- There was an Inspection report of the ISD – a follow-up from an earlier report of 2007 - which showed a.o. that there were important improvements, but that the processes during the ISD-measure could be more efficient (Inspectie Veiligheid en Justitie, 2013; T.K. 31110-14). The ISD-locations will undergo substantial changes in 2013-2018 with closures of locations and relocations.

#### **9.4 Drug use and problem drug use in prison**

For almost one third of the detainees (31%) their substance use is a problem (Bulten and Nijman 2010). 81% of the detainees with an addiction link this to the reasons of their detention. 75% of these detainees report that they need assistance in order to cope with this problem. Wouters et al. (2010) reported that injecting of drugs hardly occurs in Dutch prisons (see also National Report 2011).

#### **9.5 Responses to drug related health issues in prison**

The Dutch prison system aims at continuity of care before, during and after imprisonment. The prison system is obliged to realize a prison regime which prevents a deterioration of the physical and mental condition of the detainee during his imprisonment. Furthermore, the principle is that prisoners should have equivalent access to health care and to health care of equivalent quality as they would have outside prison. There is a policy of determent of drug use and the central aim is a drug-free detention situation, although experience over the years has learned that it is virtually impossible to keep the penitentiary institutions actually drug-free (see also National Report 2011).

#### **9.6 Reintegration of drug users after release from prison**

Aftercare – in terms of having an identity card, housing, income and care (if necessary) and settlement of debts – is a responsibility of municipalities and penal institutions. It should be available for all (ex-)prisoners. The municipality should know in a timely manner when a prisoner will be released and what kind of problems he/she has. The Ministry of Security and Justice started a special aftercare programme (Van Duijvenbooden and Plattje 2010). This programme runs under the direction of the Ministry, and penitentiary institutions, municipalities, probation services, mental health/addiction care organisations, housing corporations and organisations that help people to solve their debts, work together. This programme is still running in 2013.





## 10 Drug markets

It is difficult to get a valid overview of the availability and supply of drugs because of the hidden character of drug production and trafficking and the lack of unambiguous indicators. Production of drugs in the Netherlands is often indoor (for instance cannabis cultivation or production of synthetic drugs) and not directly visible. The data in § 10.1 and § 10.2 are partly drawn from research reports and Crime Analyses Reports of the Netherlands Police Agency (see also national report 2012). Data on purity and prices of drugs at retail level (§ 10.3) are monitored by the Drugs Information and Monitoring System (DIMS). Moreover, § 10.1 describes availability of cannabis in coffee shops and changes on the cannabis markets as found in an evaluation study on the implementation of two additional criteria coffee shops have to adhere to in order to be tolerated.

### 10.1 Availability and supply

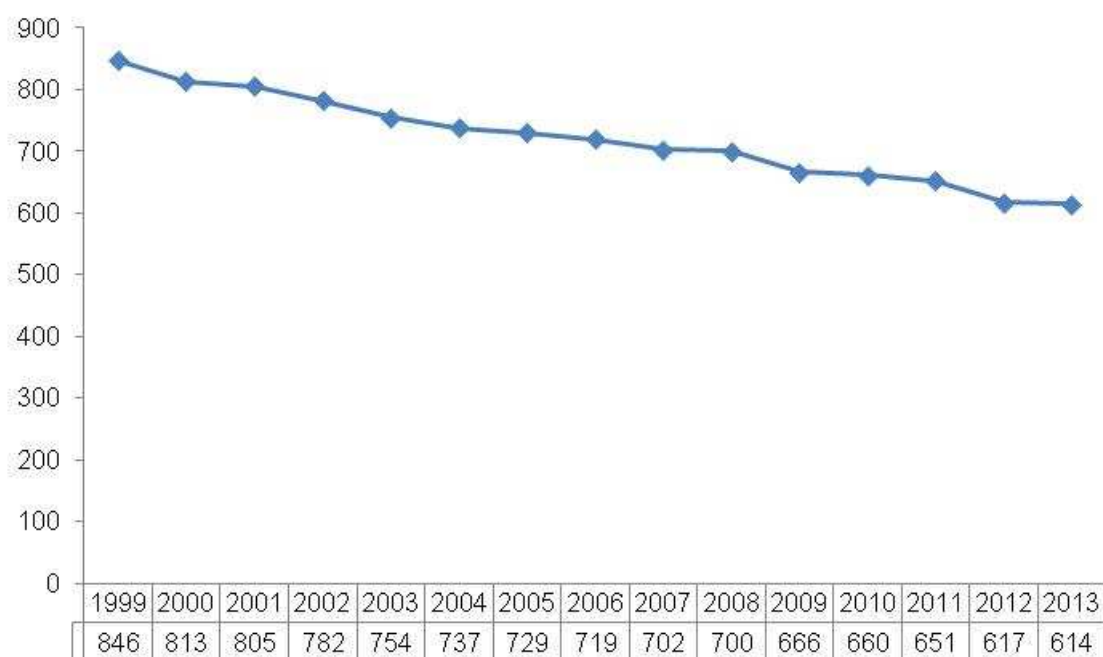
#### 10.1.1 Availability

##### *Access to cannabis/availability of cannabis*

In the Netherlands, the sale of cannabis to individual users is tolerated by the mayor and not prosecuted by the Public Prosecutor if it takes place in a coffee shop which has a formal permit of the mayor and which adheres to criteria for non-prosecution which are defined in the Opium Act Directive of the Public Prosecution Service (Aanwijzing Opiumwet, see [www.om.nl](http://www.om.nl)). Municipalities can apply additional local criteria, for instance with regards to opening hours of location (Bieleman et al. 2013).

- The number of coffee shops decreased in 2012 and 2013. At the end of 2011 there were 651 coffee shops, at the end of 2012 there were 617 and in April 2013 there were 614 coffee shops (Bieleman et al. 2013; see figure 10.1.1). After years of gradual decreases, there was a more substantial decrease of 5.2% in 2012 compared to 2011.
- Coffee shops were closed permanently, a.o. because the formal permit was withdrawn after a negative outcome of the screening on the basis of Public Administration Probity Screening Act (BIBOB) and because they violated the conditions.
- In 2012 the coffee shops were located in 103 (25%) of the 415 municipalities. Most municipalities (68%) have a 'zero-policy' with regards to coffee shops, which in practice means that they do not permit any coffee shops. A quarter (25%) of all municipalities apply a 'maximum policy': they limit the number of coffee shops; 7% does not have any explicit policy with regards to the tolerance of coffee shops (Bieleman et al. 2013). This is largely comparable to 2011.
- Coffee shops are concentrated in the West of the Netherlands (the 'Randstad') and in medium sized municipalities in the provinces. Almost half (46%) of the coffee shops is located in the three big cities (Amsterdam, Rotterdam, The Hague). This situation is comparable to 2011.
- Municipalities with coffee shops have 31,523 inhabitants per coffee shop in 2012 (mean). This has not significantly changed compared to 2011. Amsterdam still has the highest coffee shop density per inhabitant: one coffee shop per 3,843 inhabitants.

Figure 10.1.1: Number of coffee shops in the Netherlands, 1999-2013<sup>I</sup>



I. 2013: situation in April. Source: Bieleman, Nijkamp, Reimer, and Haaijer 2013.

- The majority of the municipalities with coffee shops apply additional local criteria as well, mostly with regard to the location of the coffee shop (like: not near schools or near youth facilities). 81% of the municipalities with coffee shops apply a local distance criterion: coffee shops are not allowed to be located within a certain distance from secondary schools or schools for professional education. This minimum distance is 250 metres or less in 55 of the 103 municipalities and more than 250 metres in 19 municipalities. The planned national distance criterion from schools of 350 metres was abolished (T.K. 24077-293).
- Adherence to the tolerance criteria is controlled by municipalities and/or police. If a coffee shop does not comply with the rules, sanctions can be applied, ranging from a formal warning to temporary or permanent closure of the shop. The sanction depends on the rule that was violated (presence of hard drugs and youngsters is sanctioned more severely than advertising) and recidivism (repeated violation of rules is sanctioned more severely). The sanctions are established in a local enforcement arrangement, in which administrative and criminal justice law are combined.
- Compliance with the rules has been evaluated (Bieleman et al. 2013). In 2012 a total of 56 violations of rules were recorded (in 2011: 51), especially of the maximum stock criterion (in 13 municipalities), the youth criterion (in 7 municipalities) and the residence criterion (in 7 municipalities).
- Almost two-thirds (64%) of the municipalities with coffee shops do not experience problems with the coffee shops.

#### *Sharpening of the national coffee shop policy in 2012*

Coffee shops have to comply with criteria. According to national criteria for non-prosecution, which are defined in the Opium Act Directive of the Public Prosecution Service, they are not allowed to advertise (with some exceptions), to have hard drugs or youth under 18 present in

their shops, to cause nuisance, to sell more than 5 grams to a customer per day or to have a stock of 500 grams of cannabis or more.

- Between January 2012 and end of 2012, two new criteria were added to the Opium Act Directive: coffee shops had to become a private club, whereby the members should be residents of the Netherlands: the Private Club and the Residence criterion (Opium Act Directive of the Public Prosecution Service 2011A021 2012, [www.om.nl](http://www.om.nl)). The new criteria were enforced since 1 May 2012 only in the three southern provinces and were planned to be broadened to the rest of the country per 1 January 2013. Per 1 January 2013, the number of members would be limited to 2,000 per coffee shop.
- In November 2012, the Private club criterion was abolished by the new government (T.K. 24077-293). It was removed from the Opium Act Directive per 1 January 2013, including the foreseen maximum of 2,000 members.
- The Residence criterion was continued and is valid now for the whole country, but it is applied in a different way since 1 January 2013: The decision about when to start the actual enforcement of this criterion is taken at local level and it may be implemented in phases. See also chapter 1.

The new criteria for coffee shops (the Private club and the Residence criterion, see also § 1.2.3) led to considerable changes on the cannabis consumer market in the South of The Netherlands between 1 May 2012 (the start of the enforcement of the new criteria) and October-November 2012 (Van Ooyen et al. 2013).. The drug tourists mostly disappeared, the number of visits to coffee shops decreased drastically and users were purchasing their cannabis on the illegal market significantly more often.

The evaluation study shows that cannabis users in the Southern part of the Netherlands where the policy was implemented, more often purchased their cannabis on the illegal market and less from coffee shops, whereas the cannabis users in the northern municipalities mostly continued to purchase cannabis the way they used to before the new criteria came into effect (Korf et al. 2013) (see chapter 1.2.3). The cannabis users in the South purchased their cannabis more often from mobile phone dealers; street dealers; home dealers who sell drugs from their own home, partly from own cultivation; self-growers, who give cannabis away or sell it; and from or through friends (Korf et al. 2013). Table 10.1 gives an overview of the places where cannabis users in the street survey of the evaluation study get their cannabis.

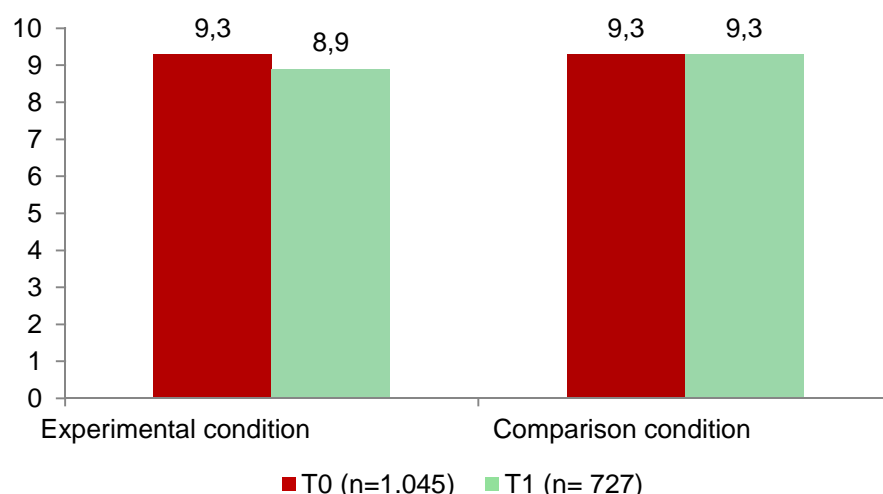
*Table 10.1.1: Places where cannabis users get their cannabis in May 2012 (T0) and October-November 2012 (T1) in the South of the Netherlands (experimental condition) and the other provinces (comparison condition)*

|  | Experimental condition |      |     |      |           | Comparison condition |      |     |      |           | Experimental vs. comparison |      |
|--|------------------------|------|-----|------|-----------|----------------------|------|-----|------|-----------|-----------------------------|------|
|  | T0                     |      | T1  |      | T0 vs. T1 | T0                   |      | T1  |      | T0 vs. T1 |                             |      |
|  | n                      | %    | n   | %    | p         | n                    | %    | n   | %    | p         | T0                          | T1   |
| Bought it in coffee shop                                 | 403                    | 94.4 | 195 | 60.0 | 0.00      | 486                  | 94.4 | 428 | 87.9 | 0.00      | 0.99                        | 0.00 |
| Bought it from 06-dealer                                 | 35                     | 8.2  | 65  | 20.0 | 0.00      | 25                   | 4.9  | 43  | 8.8  | 0.01      | 0.04                        | 0.00 |
| Bought it from self grower                               | 22                     | 5.2  | 21  | 6.5  | 0.44      | 34                   | 6.6  | 26  | 5.3  | 0.40      | 0.35                        | 0.50 |
| Bought it from home dealer                               | 34                     | 8.0  | 34  | 10.5 | 0.24      | 44                   | 8.6  | 31  | 6.4  | 0.19      | 0.74                        | 0.04 |
| Bought it from street dealer                             | 42                     | 9.9  | 54  | 16.6 | 0.01      | 25                   | 4.9  | 26  | 5.3  | 0.73      | 0.00                        | 0.00 |
| Bought it from under-the-counter dealer                  | 5                      | 1.2  | 2   | 0.6  | 0.71      | 5                    | 1.0  | 5   | 1.0  | 1.00      | 0.76                        | 0.71 |
| Bought it from (house) dealer in a normal catering place | 3                      | 0.7  | 1   | 0.3  | 0.64      | 4                    | 0.8  | 2   | 0.4  | 0.69      | 1.00                        | 1.00 |
| Bought it elsewhere                                      | 2                      | 0.5  | 2   | 0.6  | 1.00      | 5                    | 1.0  | 12  | 2.5  | 0.07      | 0.47                        | 0.05 |
| Bought it from friends who live in The Netherlands       | 35                     | 8.2  | 57  | 17.5 | 0.00      | 26                   | 5.1  | 24  | 4.9  | 0.93      | 0.05                        | 0.00 |
| Cultivated it myself                                     | 21                     | 4.9  | 29  | 8.9  | 0.03      | 19                   | 3.7  | 39  | 8.0  | 0.00      | 0.36                        | 0.65 |
| Got it   | 84                     | 19.7 | 84  | 25.8 | 0.04      | 121                  | 23.5 | 120 | 24.6 | 0.68      | 0.15                        | 0.70 |

Source: Korf, Benschop & Wouters, 2013.

According to Van der Torre et al. (2013) the abolishment of the closed-club criterion in November 2012 has caused a return of clients to the coffee shops. Clients of coffee shops turned their back to the illegal market. The availability of cannabis in The Netherlands (from coffee shops as well as from selling points outside the coffee shops) as perceived by coffee shop visitors decreased significantly in the Southern provinces, where the new criteria were enforced (Nijkamp and Bieleman, 2013). It did not change in the other provinces. In general, the perceived availability is high: 9.3 on a scale from 0-10.

Figure 10.1.2: Perceived availability of cannabis in The Netherlands amongst coffee shop visitors in May 2012 (T0) and October-November 2012 (T1) in the South of The Netherlands (experimental condition) and the other provinces (comparison condition)



Source: Nijkamp & Bieleman, 2013.

### *Availability and access to ecstasy, amphetamine, cocaine*

Information on locations and ease of obtaining amphetamine, ecstasy and cocaine by predominantly recreational users is available from a Dutch survey conducted in spring 2012 in the framework of a European study (Frijns and Van Laar 2013). In this study, a convenience sample of last year users of ecstasy, amphetamine and cocaine in the Netherlands was recruited through drug prevention networks and through the web (social media, Partyflock and other web sites)<sup>21</sup>. The study distinguished between infrequent users (people using on less than once a month); occasional users (people using 'less than once a week but at least once a month') and frequent users (people using once a week or more').

Regarding the question how the respondents usually obtained their drug, a higher proportion indicated always to buy ecstasy (60%) themselves, compared to cocaine and amphetamine (45% for each). The proportion of users indicating that they usually got it for free or that other people shared it with them was 9% for ecstasy, 15% for amphetamine and 19% for cocaine. For amphetamine and cocaine, a higher proportion of infrequent users got their drug for free. Between 32% and 40% of the users sometimes bought their drug or sometimes got it for free.

For those who usually purchased their drug table 10.1.1 shows the locations of purchase most often mentioned. Buying at a seller's home or at someone else's home were frequently mentioned locations for all drugs, although cocaine was also relatively often bought on the street or in a park. The internet played a negligible role for purchasing user amounts of ecstasy, amphetamine or cocaine.

<sup>21</sup>Offline recruitment in the Netherlands focused on the network of drug testing facilities and addiction care centres linked to the national Drug Information Monitoring System (DIMS) and through the peer educators network of Unity. Online recruitment, e.g. advertisement on various drug information websites, as well as in the digital newsletters, Facebook updates and tweets of these websites. By far the biggest response occurred after an advertisement programme was launched on Partyflock, a website and online community of party goers.

Differences between user types were significant. The proportion of amphetamine users who purchased at the seller's home was higher among frequent than among infrequent users. For ecstasy a higher proportion of frequent users bought the drug on the street or in a park compared to infrequent users.

*Table 10.1.2: Usual locations for purchasing ecstasy, amphetamine or cocaine*

|                                  | <b>Ecstasy</b> | <b>Amphetamine</b> | <b>Cocaine</b> |
|----------------------------------|----------------|--------------------|----------------|
| N (100%)                         | 1,455          | 652                | 455            |
| At a pub/bar                     | 1%             | 1%                 | 5%             |
| At a private party               | 2%             | 2%                 | 2%             |
| At a music concert or festival   | 4%             | 3%                 | 2%             |
| At other place of entertainment  | 6%             | 6%                 | 4%             |
| On the street or in a park       | 12%            | 11%                | 25%            |
| At a public transport station    | 1%             | 1%                 | 0%             |
| At seller's home                 | 26%            | 30%                | 19%            |
| At my own home                   | 6%             | 5%                 | 8%             |
| At someone else's home           | 27%            | 29%                | 23%            |
| Through the Internet             | 1%             | 1%                 | 0%             |
| At school, college or university | 1%             | 1%                 | 0%             |
| Other                            | 14%            | 11%                | 12%            |

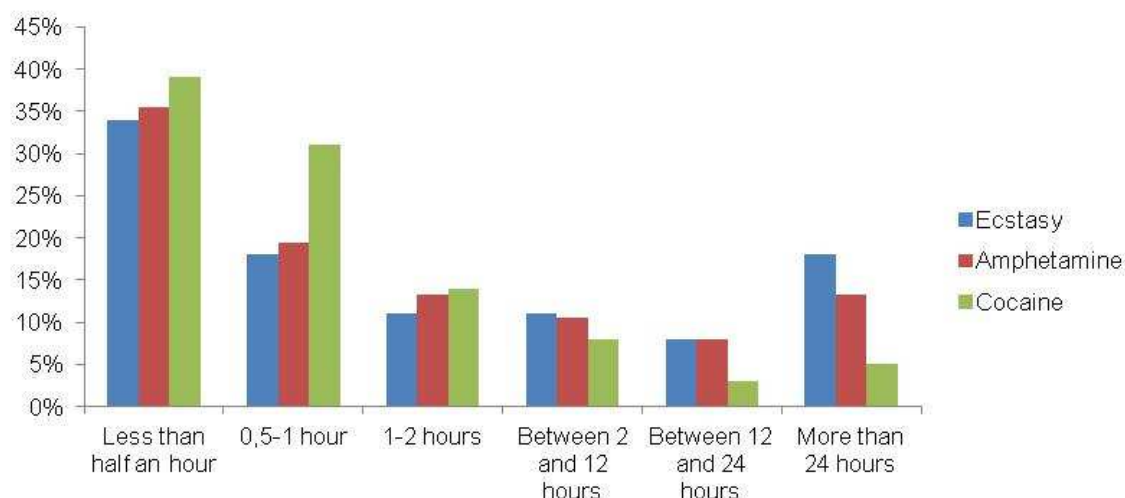
Source: Frijns & Van Laar (2013).

Among the reasons to buy at a certain location personal contacts are mentioned most often for amphetamine (56%) and ecstasy (63%), but they were hardly mentioned for cocaine (91%). For cocaine, habits appeared to play the major role (52%). Risk of police detection were hardly mentioned for ecstasy and amphetamine (3% and 4%, respectively), while it was still mentioned by 12% of the cocaine users. Price only played a role for cocaine (18%), while it was mentioned by only 4% and 6%, respectively, of the ecstasy and amphetamine users.

Availability seemed to be relatively high for most users. Between 34% and 39% indicated to obtain the amount of drug they normally purchase within half an hour (excluding those who get their drugs from others). For ecstasy and amphetamine, however, still some users appeared to have difficulties as indicated by the fairly high proportion of users long time to get these drugs. There is no explanation for this finding.

The proportion of users indicating that there were times in the past twelve months they had problems with obtaining their drug while they had cash was lowest in the Netherlands for all drugs (21% for amphetamine; 13% for ecstasy and 20% for cocaine; cf: for ecstasy between 39% and 49% in Sweden, Bulgaria, and Czech Republic and UK).

*Figure 10.1.3: Estimated time needed to buy the amount of ecstasy, amphetamine or cocaine usually purchased by last year users*



### 10.1.2 Supply

The National Police Agency observed in their Crime Pattern Analysis of drug related serious and organised crime no substantial new developments in the production of cannabis in the Netherlands (Jansen 2012, 2012a; see National Report 2012). Main destinations for export are the UK, Germany, Italy and the Scandinavian countries. Foreign hashish comes mainly from Morocco and is imported over sea. This type of crime seems to be conducted in a small group, although the number of players increased.

The Crime Pattern Analysis about organised crime related to cocaine (Van der Laan 2012) describes that source countries are Peru, Bolivia and Colombia, with Western Africa, South Africa, Kenya and Mauritania as transit regions. The trafficking there seems to be in the hands of Europeans. The most important way of transport to the Netherlands is by boat. Rotterdam and Antwerp are main ports of entry of the cocaine. The Netherlands is primarily a transit country (see National report 2012)

In the field of synthetic drugs there were important developments in 2008-2012 (KLDP 2012a, 2012b). New (pre)precursors emerged, MDMA production recovered in 2011 and production sites increased in scale.

With regards to heroin there were no substantial developments between 2008 and 2012 (KLDP, 2012c). The National Crime Squad did not observe any consequences of the decrease in opium production in Afghanistan in 2010. The Netherlands seem to function as a transit country for heroin. The smuggling route from Afghanistan via Iran, Turkey and the Balkan countries still seems to be the main route, although it was noticed that this route might be less attractive because of the intensified enforcement efforts in Turkey. An alternative is the northern route along the Black Sea. Turkish groups are the big players in the Netherlands. Most of the heroin that is reported in police files was smuggled in sea containers or by couriers who travel by airplane.

The internet seems to be of growing importance as a medium of contacts over trading and production of drugs (T.K. 24077-295).

## 10.2 Seizures

### *Drug seizures*

Figures of 2012 are reported in table 10.2.1 (see also ST13). Source of the figures are the National Police Forces. Seizures by the Customs and Military Police are included. The figures are incomplete, because data from five police regions (out of 25) are lacking. No comparisons can be made between years, because an unknown number is missing each year: in 2010, four police regions did not report their seizures and in 2011, seven regions did not report. Seizures are always registered in The Netherlands, but reporting them in a comparable way to a national system is time consuming and difficult for the police regions. It happened on a voluntary basis. Since January 2013, there is a National Police, and this might facilitate the uniformity of the registration in the future. In addition, so called 'seizure houses' were installed in the regions since January 2011, these are central points for the collection of seized drugs. This might also facilitate the reporting of seizures in the future. Figures about 2012 might include double counting. Figures are rounded off in order to avoid the suggestion that they are valid and precise.

*Table 10.2.1: Drug seizures in 2012<sup>I</sup>*

| Type of drug                   | Amount in 2012 <sup>I</sup>                               |
|--------------------------------|---|
| Opiates                        | + 1 kilogram  |
| Heroin                         | + 750 kilograms and 385 balls                             |
| Cocaine <sup>II</sup>          | + 10,000 kilograms and + 2,570 balls                      |
| Methadone                      | + 20 grams, 3,800 tablets and 0,5 litres                  |
| Hashish                        | + 2,200 kilograms   |
| Marihuana                      | + 12,600 kilograms  |
| Hallucinogenic mushrooms       | + 0.3 kilograms and 18 mushrooms                          |
| Amphetamine                    | + 680 kilograms <sup>II</sup> , 560 tablets and 35 litres |
| Methamphetamine                | + 0,5 kilograms and 200 tablets                           |
| Ecstasy-type substances        | + 60 kilograms and 2,442,200 tablets                      |
| LSD                            | + 30 grams and 230 doses                                  |
| GHB                            | + 9 kilograms and 80 litres                               |
| mCPP                           | + 6,400 tablets   |
| Ketamine                       | + 3 kilograms   |
| Domestic marihuana 'nederwiet' |   |
| - plants                       | + 1,400,000 plants  |
| - mother plants                | + 5,500 plants  |
| - plant tops                   | + 2,440 kilograms   |

I. Five out of 25 regions did not report. Figures are rounded off. Figures of Customs and Military Police are included. II. Powder or crack not specified. III. Paste included. Source: National Police Forces (KLPD/IPOL), 2013.



### *Dismantlements*

- In 2012, 5,773 dismantlements of cannabis cultivation sites were reported to the National Police Forces. This number ranges over the years between 5,000 and 6,000 and the number for 2012 does not deviate from this pattern.
- 42 dismantlements of production locations of synthetic drugs are reported in 2012, more than in 2011 (table 10.2.4). This number is relatively high in 2012.
- 66 storage places of hardware, chemicals or both were discovered by the police, more than in 2011.
- The number of dumpings is higher than in 2011 (68 times).

*Table 10.2.2: Number of dismantlements of production locations for synthetic drugs 2004-2012<sup>I</sup>*

|                              | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------|------|------|------|------|------|------|------|------|------|
| Production locations         | 29   | 18   | 23   | 15   | 21   | 24   | 19   | 30   | 42   |
| Storage places <sup>II</sup> | 14   | 19   | 43   | 44   | 35   | 37   | 41   | 50   | 66   |
| Waste dumpings               | 81   | 51   | 42   | 50   | 36   | 34   | 35   | 55   | 68   |

I. 2004-2011: source is KLPD 2012. 2012: number of times that the special national squad for support at dismantlements, the Landelijke Faciliteit Ondersteuning Ontmantelen was active; source is National Police Forces. II. Hardware and chemicals.

## **10.3 Purity and price**

### *10.3.1 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 based on specific characteristics (colour, logo, weight, diameter etc.) and the Marquis test compared with previously analysed tablets. All other samples (non-recognised tablets and all powders and liquids) are sent to the laboratory for chemical analysis.

In 2012, the number of delivered drug samples was 9,286 (similar to 2011: 9,259), of which 64% were analysed in the laboratory. The majority of drug samples were tablets (5,093) followed by powders (3,748), and the remainder were capsules, liquids, paper trips and miscellaneous formulations. In general, ecstasy tablets contained a high amount of MDMA, higher than in all previous years.

In the text below, a distinction is made between tablets according to how they were sold to the consumer, e.g. tablets sold as ecstasy, amphetamines or something else. Data on powders are similarly distinguished in this paragraph (mainly cocaine and amphetamine). We will first briefly describe the (assumed) composition of consumer samples (tablets) that were identified in 2012 based on the identification lists (without laboratory analysis). Thereafter we will continue with the findings based on laboratory analyses.

#### *Tablets identified without lab tests*

In 2012 2,711 of a total of 5,093 tablets delivered to the DIMS (53%) were recognised (or classified) on the basis of a visual analysis, Marquis test and recognition lists (DIMS, 2012).

Virtually all tablets were sold as ecstasy or ecstasy-like substance (99%). Whereas in 2009 about one-third of ecstasy tablets did not contain MDMA (or MDEA/MDA), in 2012 this was only 3%. Most tablets that did not contain MDMA contained mCPP (1.7%). Mephedrone has virtually disappeared in 2011 (0.2%) and 2012 (0.1%).

### Laboratory analyses

#### *Ecstasy: very high purity of tablets in 2012/2013*

In 2012, 1,848 tablets sold as ecstasy were analysed in the laboratory. Table 10.3.1 shows the percentage of analysed tablets containing certain substance(s), or a combination of substances. These categories are mutually exclusive.

- The total percentage of ecstasy tablets containing MDMA (and/or an MDMA-like substance, such as MDEA, MDA) as the only scheduled drugs has decreased in 2008 and 2009 (58%). Since then, the percentage of MDMA (and/or an MDMA-like substance) containing ecstasy tablets increased again to 92% in 2012 and 93.4% in the first half of 2013.
- As for the past two years, mCPP was again detected less frequently (3%). Mephedrone was nearly absent in 2012 (0.2%; 3 tablets). These signals are indicative of a strong 'recovery' of the ecstasy market.

*Table 10.3.1: Content of tablets sold as 'ecstasy' based on laboratory analyses*

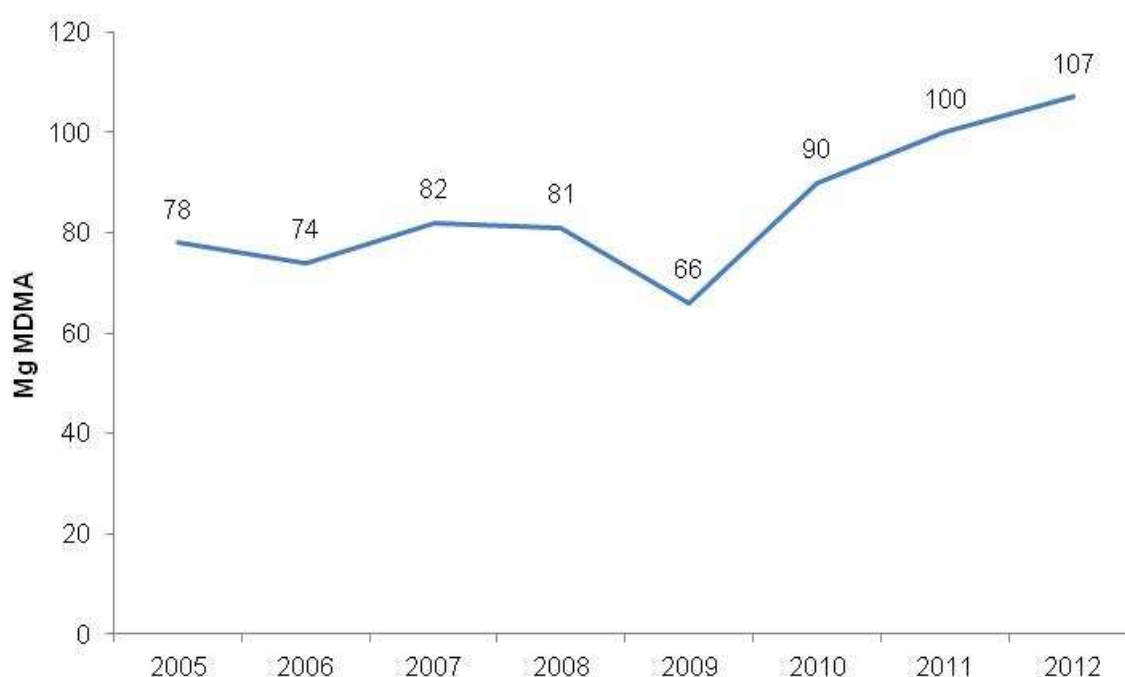
|   | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Number of tablets analysed                  | 1,985 | 2,140 | 2,523 | 2,319 | 2,183 | 2,181 | 2,357 | 2,183 | 1,848 |
| Only MDMA-like substances                   | 91.9% | 88.6% | 83.2% | 84.6% | 70.5% | 70.8% | 81.9% | 90.5% | 92.0% |
| (Meth)amphetamine                           | 0.8%  | 4.0%  | 1.8%  | 0.7%  | 1.1%  | 4.9%  | 2.9%  | 2.3%  | 1.0%  |
| MDMA-like substances and (meth)am-phetamine | 0.3%  | 1.4%  | 2.2%  | 1.3%  | 1.4%  | 1.3%  | 2.2%  | 3.0%  | 2.0%  |
| Others <sup>I</sup>                         | 4.5%  | 0.3%  | 4.5%  | 3.8%  | 7.4%  | 1.40% | 1.8%  | 1.0%  | 1.0%  |
| Miscellaneous <sup>II</sup>                 | 2.5%  | 5.7%  | 8.3%  | 9.6%  | 17.7% | 21.7% | 11.2% | 3.2%  | 4.0%  |

I. Category 'others' may include samples with MDMA and for example caffeine and other pharmacologically active non-scheduled substances. II. In 2009: The category miscellaneous consisted mainly of mCPP (11.60%) and mephedrone (7.4%). In 2010, 2011 and 2012 this category consisted mainly of mCPP and caffeine. Source: DIMS, Trimbos Institute.

- The concentration of MDMA in tablets has always shown a wide variation. Excluding ecstasy tablets without any trace of MDMA, in 2012 3% of the ecstasy tablets contained between 1 and 35 mg MDMA, 11% contained between 36 and 70 mg and, 38% between 71 and 105 mg, 29% between 106 and 140 mg and 19% contained a high dose of over 140 mg. The first half of 2013 shows a larger proportion in the highest potency category (28%). This is a substantial shift towards higher dosed MDMA tablets compared to 2010 and 2011.
- In general, users subjectively rate doses between 81 and 100 mg as most positive or desirable, while for higher doses the likelihood of desirable effects decrease and the risk of adverse effects increase (Brunt et al. 2012).

- The average amount of MDMA in tablets (containing at least 1 mg MDMA) was relatively low (66 mg) in 2009, which is probably due to a shortage of precursors for synthesising MDMA. The averaged dose increased since, and was as high as 112 mg in the first half of 2013 (see figure 10.3.1).
- DIMS detected the harmful substance PMMA in a number of ecstasy tablets: 29 tablets (1.2%) in 2010, 28 tablets (1.3%) in 2011, 26 tablets in 2012 (1.4%), and a worrying upward trend as it was detected 23 times in the first half of 2013 (2.7%). Usually, this substance is detected in tablets also containing MDMA. Only a few tablets were found which only contained PMMA in a substantial concentration (20 mg or higher), 6 in 2012 and 1 in the first half of 2013. The use of PMMA was associated with several fatal emergencies in 2010 and 2011 (4 with use of PMMA verified, one non-verified), and one in 2013, although other substances might also have contributed to death. The number of nonfatal emergencies is not known.

Figure 10.3.1: Average concentration of MDMA in tablets sold as ecstasy



I. Tablets analysed in the laboratory containing at least 1 mg MDMA. Source: DIMS, Trimbos Institute.

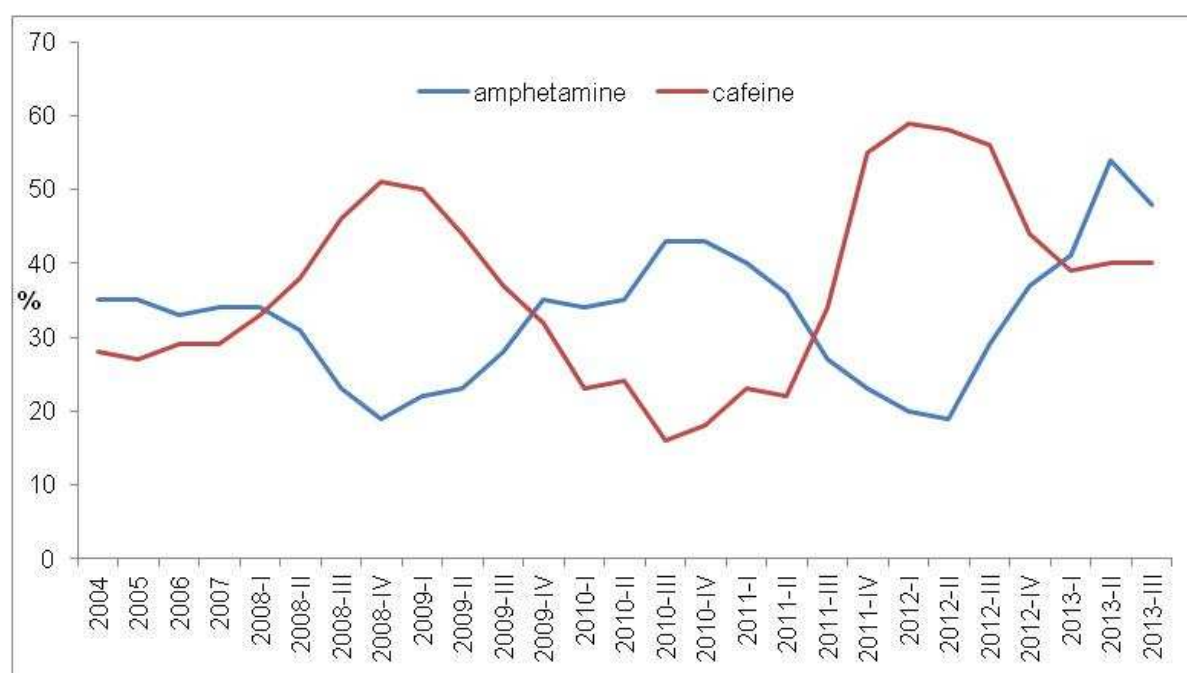
### Amphetamine

Purity of amphetamine powders shows strong fluctuations, which may be associated with (temporary) shortages in precursors. Whenever the content of amphetamine drops in the powders, this is compensated by an increase in caffeine, the most preferred adulterant. In 2012, DIMS received 1,639 powders sold as speed.

- The majority of speed powders (96%) contained amphetamine, with an average concentration of 27%. In the first half of 2013, this has increased to a concentration of 45% in 632 powders containing at least 1%, and again the majority (95%) of the powders sold as speed contained amphetamine. Methamphetamine was rarely detected in speed samples in the Netherlands.
- The concentration caffeine in powders sold as amphetamine was 55% in 2012 and 40% in the first half of 2013.

- Figure 10.3.2 shows the percentage of caffeine in all samples sold as amphetamine.
- In 2012, 2.6% of the speed samples contained the non-controlled substance 4-fluoramphetamine, which was 0.6% in the first half of 2013; both much lower than in 2008 (10%).
- In 2010, 4-methylamphetamine (4-MA) was detected for the first time in 10% of the samples, 9% 2011, 12% in 2012, and 5% for the first half of 2013. It has been suggested that 4-MA is less potent than amphetamine (Wee et al., 2005). Nonetheless, the Netherlands Forensic Institute has associated the use of this substance with several fatal emergencies in the Netherlands in 2010, 2011 and 2012, although the precise role of 4-MA as a cause of death is not yet known. In some cases there may have been severe hyperthermia and there are indications that this drug may cause adverse effects only in particular persons (idiosyncratic reaction). On request of the Minister of Health, Welfare and Sport, a quick scan on the risks of 4-MA was carried out in May/June of 2012 by the Co-ordination Centre for the Assessment and Monitoring of New Drugs (CAM, June 2012). This resulted in the immediate placement of 4-MA on Schedule I of the Opium Act (on June 13 2012).

*Figure 10.3.2: Average concentration of amphetamine and caffeine in speed samples<sup>I</sup>*



I. Data based on a selection of samples containing at least a trace of amphetamine (with or without caffeine).  
Source: DIMS, Trimbos Institute.

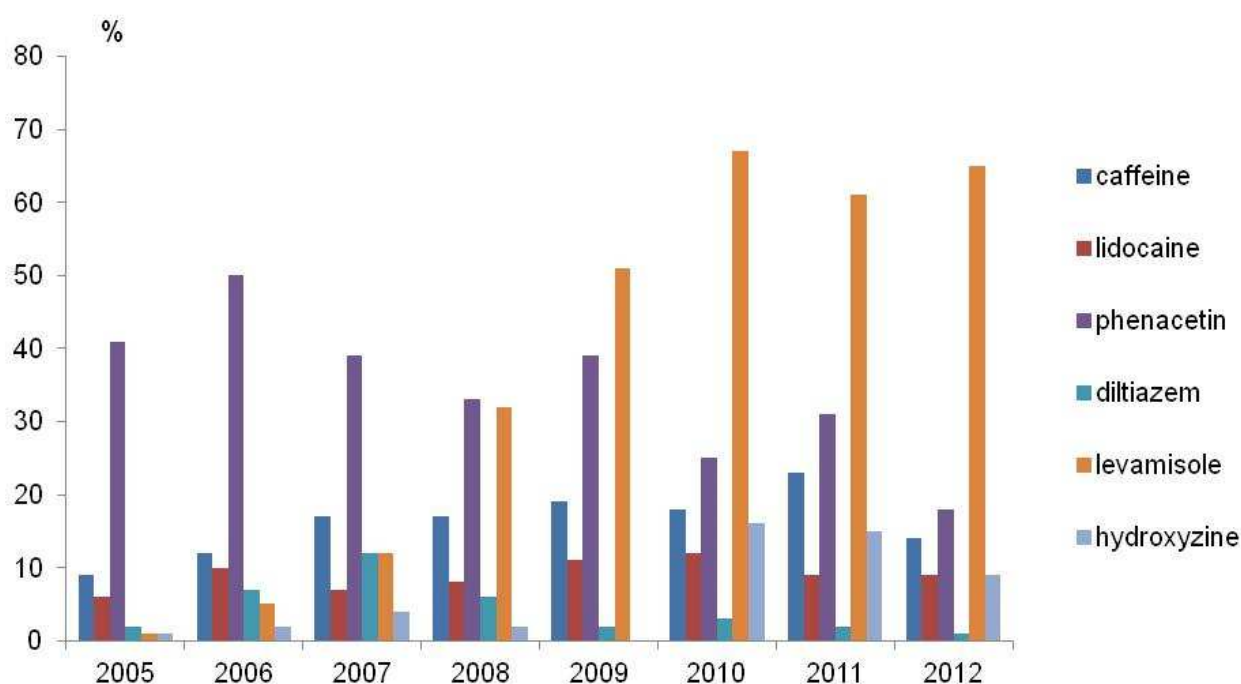
### *Cocaine*

In 2012, 1,205 powders sold as cocaine were analysed.

- Almost all (96%) of samples contained cocaine (among other substances), with an average concentration of 58%. This is an increase compared to 2011 (49%), which seems to continue in the first half of 2013 (62%). However, over the past decade, average purity has gradually decreased (e.g. it was 68% in 2002).

- Since 2002, the percentage of cocaine samples containing pharmacologically active adulterants or diluents has strongly increased (see also Brunt et al., 2009).
- Figure 10.3.3 shows that the proportion of powders sold as cocaine with phenacetin is lower than in previous years (18% in 2012, 17% in the first half of 2013).
- The proportion of cocaine powders containing levamisole is still very high (65% in 2012 and 63% the first half of 2013). Levamisole is an antihelminthic used mainly for veterinary purposes. It is also used as an anti-cancer drug, but is not officially registered for human use in the Netherlands. The average dose of levamisole was 7.5% in 2012 and 9.7% in the first half of 2013. In North-America, the use of cocaine adulterated with levamisole has been associated with serious blood diseases. In the Netherlands no such cases are known (CAM 2009).
- In 2012, 9% of cocaine samples contained hydroxyzine (an antihistamine with anxiolytic properties also used for skin disease). This is a decrease compared to 2011 (14%).

Figure 10.3.3: Percentage of powders sold as cocaine also containing medicines



Source: DIMS, Trimbos Institute.

#### Other substances

Several “new psychoactive substances” (or research chemicals) were found in 2012 samples analysed in the laboratory. Most common were 4-floramphetamine (see also § 2.4), followed by mephedrone, methylone, methoxetamine and 6-APB (BenzoFury). The number of samples containing 4-methylamphetamine, which was brought under control of the Opium Act in June 2012, dropped from 199 in 2012 to 35 in the first half of 2013.

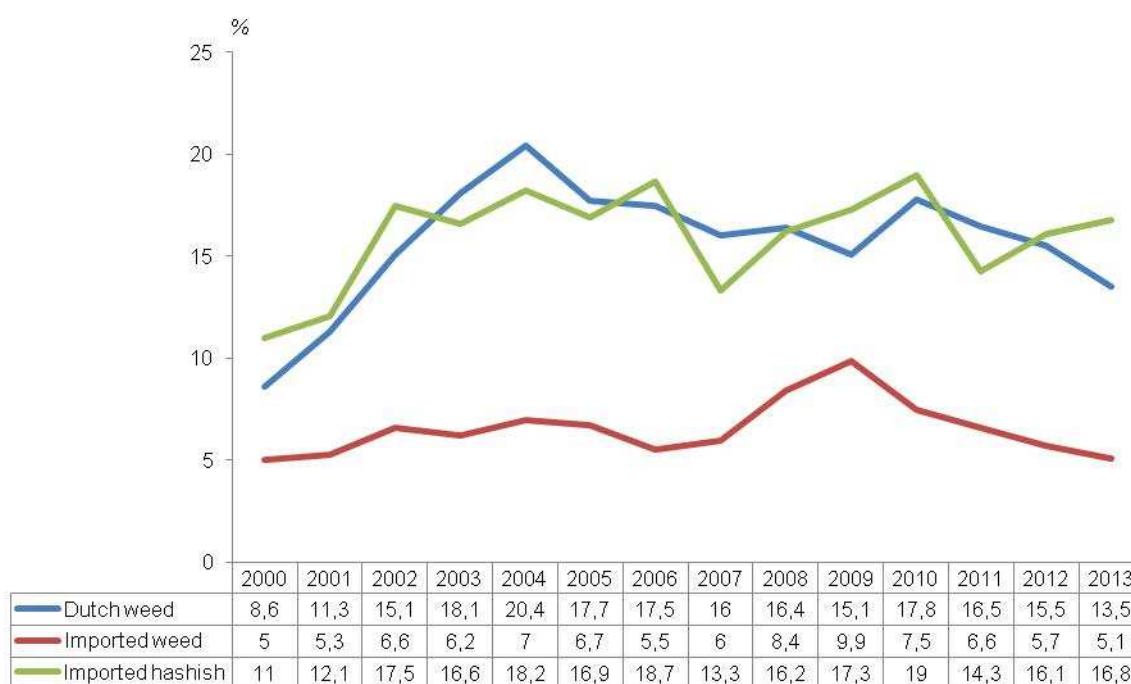
#### Cannabis

Since 2000, a special department of the DIMS also monitors the THC content and prices of cannabis. This department of the DIMS is called the THC-monitor. In 2013, 190 samples of different cannabis products (about 1 gram each) were procured from a random sample of

coffee shops and chemically analyzed (Rigter and Niesink 2013). Figure 10.3.4 shows the average concentration of THC in Dutch-grown weed ('nederwiet'), imported weed 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. In 2010, there was a change in the laboratory assessing the THC concentration, which may have had some impact on the trend data.

- Between 2000 and 2004, the percentage of THC in Dutch-grown weed (most popular type) doubled from 9% to 20%. Between 2010 and 2013, the average concentration decreased from 17.8% to 13.5%.
- The percentage of THC in Dutch weed sold as 'most potent type' was higher than the most popular type (15.6% against 13.5%), which is in contrast with 2012 when there was no significant difference (16.9% against 15.5%).
- The THC concentration in imported weed increased between 2007 and 2009 and dropped again afterwards.
- The percentage of THC in imported hashish dropped from 18.7% in 2006 to 13.3% in 2007, and fluctuated in the consecutive years. These changes are hard to explain.

Figure 10.3.4: Average THC percentage in cannabis products



Source: THC-monitor, DIMS, Trimbos Institute (Niesink and Rigter 2013). Dutch weed: sold as 'most popular' type.

- Dutch weed contains approximately 2.5 times more THC than imported weed. This relatively high THC content in Dutch weed is probably due to highly professional cultivation methods, which have been refined more and more during the past years.
- A committee of experts has advised the Minister of Security and Justice and the Minister of Health, Welfare, and Sport to reschedule weed containing more than 15% THC from Schedule II to Schedule I of the Opium Act (Expertcommissie Lijstensystematiek Opiumwet 2011) (see also chapter 1)

### *THC versus cannabidiol (CBD)*

The potency of cannabis is generally indicated by the concentration of THC. In recent years scientific publications increasingly point at the role of another cannabinoid – cannabidiol (CBD) – in contributing to the (health) effects of cannabis. More specifically, cannabidiol seems to counteract some of the effects of THC that are implicated in, among others, psychosis and dependence. In this regard, especially the ratio between THC and CBD – rather than absolute THC content - seems to count.

Dutch weed contains relatively high average concentrations of THC and very low levels of CBD: in 2013 13.5% versus 0.3%, respectively. For imported weed this balance is slightly better (5.1% versus 0.4%), but here the levels of CBD are also rather low. Imported hashish contains the highest levels of CBD (7.0%), and somewhat higher levels of THC (16.8%) compared to Dutch weed.

However, although various studies point at some protective effects of CBD on THC induced adverse health effects, there is insufficient knowledge of the 'optimal ratio' of THC and CBD, and whether the different types of cannabis are indeed associated with different health risks (Niesink and Van Laar 2012).

### *10.3.2 Prices*

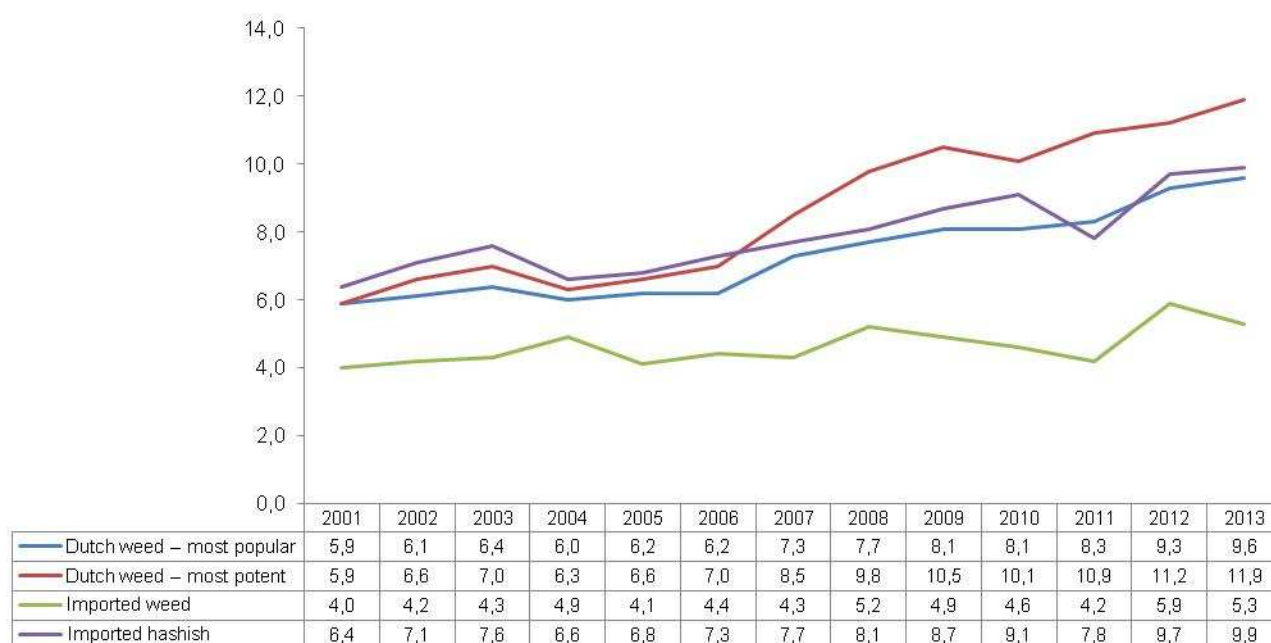
Sources on the price of drug samples at consumer level are DIMS/THC-monitor. It should be noted that prices may vary widely between regions (e.g. often higher prices in Amsterdam), but a reliable picture of these differences is not available. Also, prices may vary depending on the amount that is purchased and source of the purchase (Benschop et al. 2009; Doekhie et al, 2010). Prices reported in this paragraph are not corrected for purity (unless mentioned otherwise).

### *Cannabis*

- According to the THC-monitor, the average retail price of a gram of imported marihuana is consistently lower compared to other cannabis products (Figure 10.3.5; see also ST 16).
- Retail prices in coffee shops for Dutch weed sold as 'most potent' did not significantly differ from Dutch weed sold as 'most popular' (11.9 versus 9.6 euro in 2013).
- The retail price of Dutch marihuana increased steadily since 2006, with the strongest increases reported for Dutch weed sold as most potent type.
- Prices of imported hash also slowly increased from 6.3 euro per gram in 2000, to 9.9 euro per gram in 2013.
- Prices for imported marihuana remained low and stable over the years (5.3 euro per gram in 2013).
- Taking 2013 data for the most potent and popular types of Dutch weed together, a significant correlation was found between prices per gram and THC concentration ( $r=0.49$ ,  $p<.0001$ ).



Figure 10.3.5: Trends in average prices per gram of different types of cannabis



Source: THC-monitor, Trimbos Institute (Niesink and Rigter 2013).

### Prices of other drugs

Retail prices of other drugs reported by users who delivered their drugs sample to DIMS did not change very much over the past three years (see table 10.3.2; ST 16). However, the price range of ecstasy tablets increased somewhat from 1-10 euro between 2008-2010, to 0.5-20 euro in 2012. The average price per tablet seems to have increased between 2008 and 2010, and remained stable since. Yet the median price of 2 euro per tablet in 2012 was lower than previous years (3 euro). The Amsterdam Antenna monitor 2012 reported similar price ranges (1-25 euro) and average price per tablet (4.2 euro), and that price and quality of ecstasy tablets were not correlated (Benschop et al. 2013).

The price of cocaine lies between 18 and 80 euro. The average price per gram cocaine seems to fluctuate around 50 euro, uncorrected for purity. Benschop et al. (2013) reported that prices Amsterdam dealers have to pay for one kilogram of cocaine have increased up to 34,000-40,000 euro in 2012, but prices at retail level remained generally stable at between 50 and 70 euro. However, amounts sold to consumers are often lower than 1 gram and increasingly contain adulterants.

Amphetamine is much cheaper than cocaine - one gram generally costs between 3 and 30 euro - which is sometimes mentioned as a reason to use it as a substitute for cocaine. Prices fluctuated in the past years, and increased from 2010 to 2012 (table 10.3.4), which may be related to previously described changes in quality (and availability).

Prices of heroin vary from 15-40 euro, with little changes over the past years, although a slight decreasing trend can be observed. However, note that the number of samples is very low and may not be a representative sample of the heroin available on the heroin consumer market.



Table 10.3.2: Prices (in €; mean and range) of drug samples delivered to DIMS in 2008 - 2012

|                    | 2008  | 2009  | 2010  | 2011  | 2012    |
|--------------------|-------|-------|-------|-------|---------|
| <b>Heroin</b>      |       |       |       |       |         |
| Sample size (n)    | 24    | 40    | 24    | 26    | 34      |
| Mean (€)           | 40    | 40    | 41    | 37    | 34      |
| Min – max (€)      | 15-60 | 10-60 | 15-60 | 15-50 | 15-40   |
| <b>Cocaine</b>     |       |       |       |       |         |
| Sample size (n)    | 637   | 780   | 979   | 679   | 401     |
| Mean (€)           | 50    | 50    | 45    | 52    | 53      |
| Min – max (€)      | 25-70 | 20-80 | 30-75 | 25-80 | 18-80   |
| <b>Amphetamine</b> |       |       |       |       |         |
| Sample size (n)    | 843   | 973   | 969   | 843   | 650     |
| Mean (€)           | 6     | 8     | 6     | 8     | 9       |
| Min – max (€)      | 5-15  | 1-25  | 2-15  | 3-17  | 3-30    |
| <b>Ecstasy</b>     |       |       |       |       |         |
| Sample size (n)    | 1766  | 1561  | 1994  | 1855  | 1611    |
| Mean (€)           | 2     | 3     | 4     | 4     | 4       |
| Min – max (€)      | 1-10  | 1-10  | 1-10  | 1-16  | 0.50-20 |

Prices for heroin, cocaine, and amphetamine are given in euro per gram. Price for ecstasy is given in euro per tablet. Source: DIMS, Trimbos Institute.



## ***Part B: Bibliography and annexes***



## 11 Bibliography

### 11.1 References

Adviescommissie Drugsbeleid (2009). Geen deuren maar daden: nieuwe accenten in het Nederlands drugsbeleid. Ministeries van VWS, Justitie en BZK, Den Haag.

Barendregt, C., Wits, E., De Haan, G., Schippers, R., and Van Duin, L. (2013). Liggen we op koers? Herstelondersteunende verslavingszorg en inzet van ervaringskennis in vier praktijkvoorbeelden. IVO Instituut voor Onderzoek naar Leefwijzen en Verslaving, Rotterdam.

Benschop, A., Nabben, T., and Korf, D. (2009). Antenne 2008: trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.

Benschop, A., Nabben, T., and Korf, D.J. (2013). Antenne 2012: Trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.

Bieleman, B., Nijkamp, R., Reimer, J., and Haaijer, M. (2013). Coffeeshops in Nederland: aantal coffeeshops en gemeentelijk beleid 1999-2012. Intraval, Groningen-Rotterdam.

Bijl, R., Boelhouwer, J., Cloin, M., and Pommer, E. (2012). The Social State of the Netherlands 2011. The Netherlands Institute for Social Research | SCP, The Hague.

Blanckaert, P., Van Amsterdam, J.C.G., Brunt, T.M., Van den Berg, J.D.J., Van Durme, F., Maudens, K. et al. (2013). 4-Methyl-amphetamine: a health threat for recreational amphetamine users. *J Psychopharmacol* 27, (9), 817-822.

Boendermaker, M. and Bieleman, B. (2013). Monitor regionaal kompas Oost-Veluwe: metingen 2009 tot en met 2012. Intraval, Groningen.

Boertien, D., and Van Bakel, M. (2013). Handreiking voor de inzet van ervaringsdeskundigheid vanuit de geestelijke gezondheidszorg. Trimbos-instituut, Utrecht.

Bovens, R.H.L.M., Van Etten, D.M., and Weingart, S.W.S.M. (2013). Ouderen en verslaving: adviesrapport in opdracht van Stichting Resultaten Scoren. Trimbos-instituut/Victas, Utrecht.

Brunt, T.M., Koeter, M.W., Niesink, R.J., and Van den Brink, W. (2012). Linking the pharmacological content of ecstasy tablets to the subjective experiences of drug users. *Psychopharmacology (Berl)* 220, (4), 751-762.

Brunt T.M., Niesink R.J., and Van den Brink W. (2013). Impact of transient instability of the ecstasy market on health concerns and drug use patterns in The Netherlands. *Int J Drug Policy* 23: 134-140.

Brunt T.M., Van Amsterdam J.G., and Van den Brink W. (2013). GHB, GBL and 1,4-BD addiction. *Curr Pharm Des* ; (epub ahead of print).

Bulten, E. and Nijman, H. (2009). Veel psychiatrische stoornissen onder gedetineerden op reguliere afdelingen van penitentiaire inrichtingen. *Nederlands Tijdschrift voor Geneeskunde* 153, (A634), 1-6.

Buster, M. and Van Brussel, G. (2011). De GGD Amsterdam en de Openbare Geestelijke Gezondheidszorg: OGGZ-monitor 2010. GGD Amsterdam, Amsterdam.

CAM (2009). CAM quick scan rapportage levamisol. RIVM, Bilthoven.

CAM (2012). CAM Quick Scan rapportage van 4-methylamfetamine (4-MA). RIVM, Bilthoven.

Croes, E. and Van der Veen, C. (2012). Hepatitis C in de verslavingszorg: de effectiviteit van de hepatitis C informatiecampagne. Trimbos-instituut, Utrecht.

Cruts, A.A.N., and Van Laar, M.W. (2010). Aantal problematische harddrugsgebruikers in Nederland Trimbos-instituut, Netherlands Institute of Mental Health and Addiction, Utrecht, the Netherlands.

Cruts, A.A.N., Van Laar, M., and Buster, M. (2013). Aantal en kenmerken van problematische opiatengebruikers in Nederland. Trimbos-instituut, Utrecht.

De Looze, M.E. (2013). Young, wild and free? The social and cultural context of adolescent risk behavior. Universiteit Utrecht, Utrecht.

De Vet, R., Van Luijcklaar, M.J., Brilleslijper-Kater, S.N., Vanderplasschen, W., Beijersbergen, M.D., and Wolf, J.R. (2013). Effectiveness of case management for homeless persons: a systematic review. *Am J Public Health* 103, (10), e13-e26.

De Vos AS and Kretzschmar MEE. (2013). The efficiency of targeted intervention in limiting the spread of HIV and hepatitis C virus among injecting drug users. *J Theor Biol* 333:126-134.

De Vos AS, Van de Helm JJ, Matse A, Prins M, and Kretzschmar MEE. (2013). Decline in incidence of HIV and hepatitis C virus infection among drug users in Amsterdam: evidence for harm reduction? *Addiction* 108: 1070-1081.

Doekhie, J., Nabben, T., and Korf, D.J. (2010). NL.Trendwatch: gebruikersmarkt uitgaansdrugs in Nederland, 2008-2009. Rozenberg, Amsterdam.

E.K.32398-F.Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32398 nr.F (2013). Vaststelling van een Wet forensische zorg en daarmee verband houdende wijzigingen in diverse andere wetten (Wet forensische zorg); Memorie van antwoord. Sdu Uitgevers, Den Haag.

E.K.32842-A.Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32842 nr.A (2013). Wijziging van de Opiumwet in verband met de strafbaarstelling van

handelingen ter voorbereiding of vergemakkelijking van illegale hennepsteelt. Sdu Uitgevers, Den Haag.

E.K.32842-B.Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32842 nr.B. (2013). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepsteelt; Memorie van antwoord. Sdu Uitgevers, Den Haag.

E.K.Handelingen 2012-2013, 22-3. Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 vergaderingsnummer 22-3,18 april 2013,pag.22-3 (2013). Behandeling van het wetsvoorstel Wijziging van de Wet bevordering integriteitsbeoordelingen door het openbaar bestuur naar aanleiding van de evaluatie van die wet, alsmede uitbreiding van de reikwijdte ervan en wijziging van enige andere wetten (Evaluatie- en uitbreidingswet Bibob) (32676); en andere wetsvoorstellen. Sdu Uitgevers, Den Haag.

Ferwerda, H., Van Hasselt, N., Van Ham, T., and Voorham, L. (2012). De juiste snaar? Professionals met een publieke taak en de omgang met overlast, agressie en geweld als gevolg van alcohol- en/of drugsgebruik. WODC, Den Haag.

Gemeente Heerlen, Gemeente Roermond, and Gemeente Venlo (2013). De voor- en achterdeur 'open'; voorstel tot een pilot voor de regulering van de hennepsteelt in Limburg.

Gemeente Heerlen/Gemeente Roermond/ Gemeente Venlo, Heerlen/Roermond/Venlo.

Gemeente Rotterdam (2012). Verkenning verplaatsingsmogelijkheden coffeeshops in de gemeente Rotterdam. Gemeente Rotterdam, Rotterdam.

Gemeente Utrecht (2013). Voortgangsbericht Cannabisexperimenten [brief van 10 september 2013]. Gemeente Utrecht, Utrecht.

GGD Amsterdam. Richtlijn Excited Delirium Syndroom (EDS). (2013). Amsterdam: GGD Amsterdam.

Goosens, F.X., Frijns, T., Van Hasselt, N.E., and Van Laar, M.W. (2013). Het Grote Uitgaansonderzoek 2013: uitgaanspatronen, middelengebruik en risicogedrag onder uitgaande jongeren en jongvolwassenen. Trimbos-instituut, Utrecht.

Grady, B., Van den Berg, C., Van der Helm, J., Schinkel, J., Coutinho, R., Krol, A. et al. (2011). No impact of hepatitis C virus infection on mortality among drug users during the first decade after seroconversion. Clin Gastroenterol Hepatol. 9, (9), 786-792.

Grebely J, Page K, Sacks-Davis R, Schim van der Loeff M, Rice TM, Bruneau J, Morris MD, Hajarizadeh B, Amin J, Cox AL, Kim AY, Govern BH, Schinkel J, et al. (2013). The effects of female sex, viral genotype and IL28B genotype on spontaneous clearance of acute hepatitis C virus infection. Hepatology In press.

Hahne, S.J., De Melker, H.E., Kretzschmar, M., Mollema, L., van der Klis, F.R., van der Sande, M.A. et al. (2012). Prevalence of hepatitis B virus infection in The Netherlands in 1996 and 2007. *Epidemiol Infect* 140, (8), 1469-1480.

Hanck L and Schellekens AF.(2013). Halucinogen persisiting perception disorder after ecstasy use. *NTvG* 157: A5649.

Havinga, P. and Van der Poel, A. (2011). Gebruiksruimten in Nederland. Update van de handreiking bij organisatie en inrichting. Trimbos-instituut, Utrecht.

Health Council of the Netherlands. (1997). Committee on Hepatitis C. Detection and treatment of people with hepatitis C. Rijswijk: Health Council of the Netherlands, Report No: 1997/19.

Hondebrink L, Tan S, Hermans E, Van Kleef RG, Meulenbelt J, Westerink RH. (2013). Additive inhibition of human  $\alpha 1\beta 2\gamma 2$  GABAA receptors by mixtures of commonly used drugs of abuse. *Neurotoxicology*, 35: 23-29.

Hotho, D.M. (2013). Chronic hepatitis C: clinical and societal evaluations. Erasmus Universiteit Rotterdam, Rotterdam.

Inspectie Veiligheid en Justitie (2013). De uitvoering van de ISD-maatregel: vervolgonderzoek. Inspectie Veiligheid en Justitie, Den Haag.

Inspectie Veiligheid en Justitie (2013). Nationale Politie op Koers? Eerste onderzoek naar de mijlpalen en resultaten van acht operationele doelen in de periode 1 januari - 1 juli 2013. Inspectie Veiligheid en Justitie, Den Haag.

Jansen, F. (2012). De rol van Nederland in de internationale hasjhandel: Quicksan ten behoeve van het Nationaal Dreigingsbeeld zware of georganiseerde criminaliteit. KLPD/DNR, Driebergen.

Jansen, F. (2012a). Georganiseerde hennepsteelt: criminaliteitsbeeldanalyse 2012. KLPD-Dienst Nationale Recherche, Driebergen.

Kalidien, S.N. and De Heer-De Lange, N.E. (2013). Criminaliteit en Rechtshandhaving 2012: ontwikkelingen en samenhangen. WODC/CBS/Raad voor de Rechtspraak, Den Haag.

Kepper, A. (2013). Substance use among adolescents in special education and residential youth care: prevalence, onset and risk factors. Universiteit Utrecht, Utrecht.

KLPD-Dienst Nationale Recherche (2012a). Jaarverslag synthetische drugs en precursoren 2011. KLPD/DNR, Driebergen.

KLPD-Dienst Nationale Recherche (2012b). Synthetische drugs en precursoren 2012: criminaliteitsbeeldanalyse 2012. KLPD/DNR, Driebergen.



KLPD-Dienst Nationale Recherche (2012c). Criminaliteitsbeeldanalyse 2012: Heroïne. KLPD/DNR, Driebergen.

Korf DJ, Nabben T, Benschop A, Ribbink K, Van Amsterdam JGC.(2014). Risk factors of  $\gamma$ -hydroxybutyrate overdosing. Eur Addict Res 20: 66-74.

Korf, D., Benschop, A., and Wouters, M. (2013). De illegale gebruikersmarkt van cannabis, In Het Besloten club- en het Ingezetenenecriterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage.M. Van Ooyen-Houben, B Bieleman, and D Korf, (eds.), pp. 131-151. WODC, Den Haag.

Krul J. 2013. Mass gathering medicines at raves: incidents and substance-related emergencies. Amsterdam: Vrije Universiteit PhD thesis.

Landelijk Bureau BIBOB (2013). Jaarverslag 2012. Ministerie van Veiligheid en Justitie/Jusits/Landelijk Bureau Bibob, Den Haag.

Liebrechts, N., Van der Pol, P., Van Laar, M., De Graaf, R., and Van den Brink, W. (2013). The role of parents peers and partners in cannabis use and dependence trajectories among young adult frequent cannabis users. Contemporary Drug Problems In press.

Liebrechts, N., Van der Pol, P., van, L.M., de, G.R., Van den Brink, W., and Korf, D.J. (2013b). The Role of Study and Work in Cannabis Use and Dependence Trajectories among Young Adult Frequent Cannabis Users. Front Psychiatry 4, 85.

Lukashov VV, Jurriaans S, Bakker M, and Berkhout B. (2013). Transmission of risk-group specific HIV-1 strains among Dutch drug users for more than 20 years and their replacement by nonspecific strains after switching to low-harm, drug practices. J Acquir immune defic syndr 62, 234-238.

Lukashov VV, Op de Coul EL and Coutinho RA, (1998). HIV-1 strains specific for Dutch injecting drug users in heterosexually infected individuals in the Netherlands. AIDS 12:635-641.

Matser, A., Urbanus, A., Geskus, R., Kretzschmar, M., Xiridou, M., Buster, M. et al. (2011). The effect of hepatitis C treatment and HIV coinfection on the disease burden of hepatitis C among injecting drug users in Amsterdam. Addiction.

Matser, A., Urbanus, A., Geskus, R., Kretzschmar, M., Xiridou, M., Buster, M. et al. (2011). The effect of hepatitis C treatment and HIV coinfection on the disease burden of hepatitis C among injecting drug users in Amsterdam. Addiction.

Ministerie van Veiligheid en Justitie (2013). Coffeeshopbeleid [brief van 4 februari 2013]. Sdu Uitgevers, Den Haag.

Ministerie van Veiligheid en Justitie (2013a). Coffeeshopbeleid [brief van de Minister van Veiligheid en Justitie aan de Gemeente Maastricht, kenmerk 422760, d.d. 30 augustus 2013]. Ministerie van Veiligheid en Justitie, Den Haag.

Ministerie van Veiligheid en Justitie (2013b). Landelijk kader Veiligheidshuizen: vóór en dóór partners. Ministerie van Veiligheid en Justitie, Den Haag.

Ministerie van Volksgezondheid Welzijn en Sport (VWS) (2013). Alles is gezondheid...het Nationaal Programma Preventie 2014-2016. Ministerie van VWS, Den Haag.

Monshouwer, K., Van Dorsselaer, S., Verdurmen, J., and Vollebergh, W. (2012). Factsheet ESPAD 2011: het gebruik van alcohol, tabak en drugs onder Nederlandse scholieren vergeleken met de rest van Europa. Trimbos-instituut, Utrecht.

Moolenaar, D.E.G., Nauta, B., and Van Tulder, F.P. (2013). Kosten van criminaliteit, In Criminaliteit en rechtshandhaving 2012: ontwikkelingen en samenhangen. S.N. Kalidien and N E De Heer-De Lange, (eds.), pp. 227-257. CBS/WODC/Raad voor de rechtspraak, Den Haag.

Nabben, T., Benschop, A., and Korf, D.J. (2012). Antenne 2011: trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.

Nabben, T., Benschop, A., and Korf, D.J. (2012). Antenne 2011: trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.

Nationaal Netwerk Drugexpertise (2012). Ontmantelingen 2011. NND Nieuwsbrief 10, (1), 2.

Niesink, R. and Van Laar, M. (2012). THC, CBD en gezondheidseffecten van wiet en hasj: recente inzichten. Trimbos-instituut, Utrecht.

Nijkamp, R. and Bieleman, B. (2013). Coffeeshopbezoek, In Het Besloten club- en het Ingezetenen criterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage. M. Van Ooyen-Houben, B Bieleman, and D Korf, (eds.), pp. 117-129. WODC, Den Haag.

Norden, L., VAN, V.M., Lidman, C., Todorov, I., Guarita, B., Kretzschmar, M. et al. (2013). Hepatitis C among injecting drug users is two times higher in stockholm, sweden than in rotterdam, the Netherlands. Subst Use Misuse 48, (14), 1469-1474.

Nusselder, W.J., Sloekers, M.T., Krol, L., Sloekers, C.T., Looman, C.W., and van Beeck, E.F. (2013). Mortality and life expectancy in homeless men and women in rotterdam: 2001-2010. PLoS ONE 8, (10), e73979.

Openbaar Ministerie (2012). Feitenboekje: lijst van feiten betreffende misdrijven, overtredingen en Muldergedragingen. Commissie Feiten en Tarieven, Utrecht.

Openbaar Ministerie (2013). Feitenboekje: lijst van feiten betreffende misdrijven, overtredingen en Muldergedragingen. Commissie Feiten en Tarieven, Utrecht.

Openbaar Ministerie (2013a). Jaarbericht 2012. Openbaar Ministerie, Den Haag.

Openbaar Ministerie and Politie (2013). Verantwoording aanpak georganiseerde criminaliteit 2012. OM/Politie, Den Haag.

Openbaar Ministerie-College van procureurs-generaal (2011). Consequenties cannabisaanbeveling van de expertcommissie lijstensystematiek Opiumwet [brief van 12 augustus 2011]. Openbaar Ministerie, Den Haag.

Oteo Pérez, A., Cruyff, M.J.L.F., Benschop, A., and Korf, D.J. (2013). Estimating the prevalence of crack dependence using capture-recapture with institutional and field data: A three-city study in the Netherlands. *Substance Use & Misuse* 48, (1-2), 173-180.

Oudejans, S. and Spits, M. (2013). Investeren in verslavingspreventie: beschrijving van Nederlandse programma's voor jeugd en jongeren. Stichting Resultaten Scoren/Mark Bench, Amersfoort.

Permentier, M., Kullberg, J., and Van Noije, L. (2013). Werk aan de wijk: Een quasi-experimentele evaluatie van het krachtwijkenbeleid. Sociaal en Cultureel Planbureau, Den Haag.

Pieters T, De Hon O. (2013). Faster, higher, stronger: knowledge about old and new doping substances. *Nederlands Tijdschrift voor Geneeskunde* 157: A6450.

Redactie NND-nieuwsbrief (2012). Hennep(teelt). NND Nieuwsbrief 10, (1), 2.

Rigter, S. and Niesink, R. (2013). THC-concentraties in wiet, nederwiet en hasj in Nederlandse coffeeshops (2012-2013). Trimbos-instituut, Utrecht.

Rijksoverheid (2012). Taskforce B5 pakt meer georganiseerde criminaliteit aan [nieuwsbericht 06-12-2012]. Rijksoverheid, Den Haag.

Rijlaarsdam, J., Smits, L.J.M., and Van de Laar, M.J.W. (1999). De aangifte van hepatitis B in Nederland in de periode 1976-1998. *Infectieziektenbulletin* 10, 178-182.

Roberts, H., Van Dijk, L., and Van der Vlugt, I. (2013). Ik red me wel! Zwerfjongeren, middelengebruik en seksueel gedrag: Een verkenning naar ervaringen en behoeften aan preventie en ondersteuning van zwerfjongeren. Mainline/Rutgers WPF, Utrecht.

Rondy, M., Wiessing, L., Hutchinson, S.J., Mathei, C., Mathis, F., Mravcik, V. et al. (2012). Hepatitis C prevalence in injecting drug users in Europe, 1990-2007: impact of study recruitment setting. *Epidemiol Infect* , 1-10.

Rutten, R., and Schippers, G.M. (2013). Integratie verslavingszorg en ggz: leidt het tot betere zorg? *Verslaving [Addiction]* 9, (2), 3-14.

Schaap, C. and Kools, J.P. (2013). Bevindingen veldwerk voor het onderzoek 'Problematische opiatengebruikers in Nederland', In Aantal problematische harddrugsgebruikers in Nederland. A.A.N. Cruts and M. Van Laar, (eds.), pp. 25-32. Trimbos-instituut, Utrecht.

Significant (2012). Impactanalyse Zware Cannabis op lijst 1. Significant, Barneveld.

Smits, J., Sibma, A., Roodnat, J., and Schudde, B. (2013). Bestuurlijke aanpak georganiseerde criminaliteit: Onderzoek naar de stand van zaken in 2012. Arena Consulting/Pro Facto, Deventer/Groningen.

Snippe, J. and Bieleman, B. (2012). Onderzoek invoering wietpas Dordrecht. Intraval, Groningen-Rotterdam.

Snippe, J. and Bieleman, B. (2013). Omwonenden van coffeeshops, In Het Besloten club- en het Ingezetenen criterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage. M. Van Ooyen-Houben, B. Bieleman, and D. Korf, (eds.), pp. 107-116. WODC, Den Haag.

Snippe, J., Nijkamp, R., and Bieleman, B. (2013). Onderzoek drugsbeleid Venlo 2012-2013. Intraval, Groningen-Rotterdam.

Snoek, A., Wits, E., Van der Stel, J., and Van der Mheen, D. (2010). Kwetsbare groepen. Kwetsbare groepen jeugdigen en (problematisch) middelengebruik: visie en interventiematrix. IVO, Rotterdam.

Soetens, L.C., Koedijk, F.D.H., Van den Broek, I.V.F., Vriend, H.J., Op de Coul, E.L.M., Van Aar, F. et al. (2013). Sexually transmitted infections, including HIV, in the Netherlands in 2012. RIVM, Bilthoven.

Staten-Generaal-33593 A-Nr.1.Eerste en Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 33593 A-1 (2013). Besluit, houdende wijziging van lijst I, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van hasjiesj en hennep met een gehalte aan tetrahydrocannabinol (THC) van 15 procent of meer . Sdu Uitgevers, Den Haag.

Stb 2002-201.Staatsblad van het Koninkrijk der Nederlanden Jaargang 2002 nr 201 (2002). Besluit van 28 juni 2002, houdende vaststelling van het tijdstip van inwerkingtreding van de Wet van 18 april 2002 tot wijziging van de Tabakswet (Stb. 2002,201). Sdu Uitgevers, Den Haag.

Stb 2004-351.Staatsblad van het Koninkrijk der Nederlanden jaargang 2004, nr.3. (2004). Wet van 9 juli 2004 tot wijziging van het Wetboek van Strafrecht, het Wetboek van Strafvordering en de Penitentiaire beginselenwet (plaatsing in een inrichting voor stelselmatige daders). Sdu Uitgevers, Den Haag.

Stb 2013-1.Staatsblad van het Koninkrijk der Nederlanden jaargang 2013 nr 1 (2013). Besluit van 18 december 2012, houdende wijziging van lijst II, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van het middel Qat. Sdu Uitgevers, Den Haag.

Stb 2013-205 (2013). Besluit van 7 juni 2013, houdende enkele aanpassingen van het Besluit Bibob, het Besluit justitiële en strafvorderlijke gegevens, het Besluit politiegegevens, het Besluit controle op rechtspersonen, het Besluit omgevingsrecht, het Besluit strategische

goederen en het Subsidiebesluit Ministerie van Buitenlandse Zaken in verband met de Evaluatie- en uitbreidingswet Bibob (Verzamelbesluit evaluatie en uitbreiding Wet Bibob). Sdu Uitgevers, Den Haag.

Stb 2013-207.Staatsblad van het Koninkrijk der Nederlanden jaargang 2013 nr 207 (2013). Besluit van 31 mei 2013, houdende wijziging van lijst I, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van 4-methylamfetamine (4-MA). Sdu Uitgevers, Den Haag.

Stb 2013-380.Staatsblad van het Koninkrijk der Nederlanden jaargang 2013 nr 380 (2013). Wet van 1 oktober 2013, houdende wijziging van de Drank- en Horecawet teneinde enkele leeftijdsgrenzen te verhogen van 16 naar 18 jaar en de preventie en handhaving te verankeren. Sdu Uitgevers, Den Haag.

Stc 2011-11134.Staatscourant van 27 juni 2011, nr.1. (2011). Aanwijzing Opiumwet. Sdu Uitgevers, Den Haag.

Stc 2011-13125.Staatscourant van 21 juli 2011, nr.1. (2011). Voorstel van wet tot wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepeteelt. Sdu Uitgevers, Den Haag.

Stc 2011-13125.Staatscourant van 21 juli 2011, nr.1. (2011). Voorstel van wet tot wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepeteelt. Sdu Uitgevers, Den Haag.

Stc 2011-22936.Staatscourant van 27 december 2011, nr.2. (2012). Aanwijzing Opiumwet. Sdu Uitgevers, Den Haag.

Stc 2012-12249.Staatscourant van 14 juni 2012 nr.12249 (2012). Regeling van de Minister van Volksgezondheid, Welzijn en Sport, van 13 juni 2012, nr. VGP/3119055, houdende plaatsing van het middel 4-methylamfetamine op lijst I van de Opiumwet. Sdu Uitgevers, Den Haag.

Stc 2012-26938.Staatscourant van 24 december 2012 nr.26938 (2012). Aanwijzing Opiumwet. Sdu Uitgevers, Den Haag.

Stc 2012-8299.Staatscourant van 27 april 2012, nr.8. (2012). Aanwijzing OM-afdoening. Sdu Uitgevers, Den Haag.

Stc 2013-26229.Staatscourant van 23 september 2013 nr.26229 (2013). Besluit van de Minister van Volksgezondheid, Welzijn en Sport van 1 september 2013, 121748-104686, houdende vaststelling van een beleidskader voor subsidiëring van anonieme e-mental health 2014. Sdu Uitgevers, Den Haag.

T.K.24077-259.Tweede Kamer der Staten Generaal vergaderjaar 2010-2011 publicatienummer 24077 nr.259 (2011). Drugbeleid; Brief regering; Drugsbeleid. Sdu Uitgevers, Den Haag.

T.K.24077-265.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 24077 nr.265 (2011). Drugbeleid; Brief regering; Aanscherping  
gedoogcriteria coffeeshops. Sdu Uitgevers, Den Haag.

T.K.24077-267.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 24077 nr.267 (2012). Drugbeleid; Brief regering; Aanscherping  
gedoogcriteria coffeeshops. Sdu Uitgevers, Den Haag.

T.K.24077-286.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 24077 nr.286 (2012). Drugbeleid; Brief regering; Informatie over actuele  
zaken inzake het Coffeeshopbeleid. Sdu Uitgevers, Den Haag.

T.K.24077-287.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 24077 nr.287 (2012). Drugbeleid; Brief regering; Effecten invoering  
aangescherpt coffeeshopbeleid. Sdu Uitgevers, Den Haag.

T.K.24077-288.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 24077 nr.288 (2012). Drugbeleid; Brief regering; Toezeggingen  
drugsdebat van 1 en 28 maart 2012 en over nog openstaande toezegging uit het Algemeen  
Overleg Georganiseerde Criminaliteit. Sdu Uitgevers, Den Haag.

T.K.24077-289.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 24077 nr.289 (2012). Drugbeleid; Brief regering; Reactie op  
informatieverzoek van de vaste Kamercommissie Veiligheid en Justitie over evaluatie  
clubpas. Sdu Uitgevers, Den Haag.

T.K.24077-291.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 24077 nr.291 (2012). Drugbeleid; Brief regering; Reactie op het verzoek  
van het lid Berndsen om een debat met betrekking tot de weerstand die er is tegen  
algemene invoering van de 'wietpas'. Sdu Uitgevers, Den Haag.

T.K.24077-293.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 24077 nr.293 (2012). Drugbeleid; Brief regering; Reactie op verzoek  
Berndsen-Jansen over het coffeeshopbeleid en de toegenomen straatoverlast en  
drugshandel als gevolg van de invoering van de wietpas in Limburg, Noord-Brabant en  
Zeeland. Sdu Uitgevers, Den Haag.

T.K.24077-295.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 24077 nr.295 (2012). Drugbeleid; Brief regering; Inventarisatie  
drugshandel via het internet. Sdu Uitgevers, Den Haag.

T.K.24077-307.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 24077 nr.30 (2013). Drugbeleid; Verslag van een algemeen overleg;  
Verslag van een algemeen overleg, gehouden op 13 december 2012, inzake Clubpas. Sdu  
Uitgevers, Den Haag.

T.K.24077-308.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 24077 nr.308 (2013). Drugbeleid; Brief regering; Reactie op het DSW-  
rapport inzake verslavingszorg. Sdu Uitgevers, Den Haag.

T.K.24077-311.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 24077 nr.311 (2013). Drugbeleid; Brief regering; Stand van zaken  
toezeggingen gedaan tijdens het dertigledendebat over de blijvende sleutelrol van  
Nederland in de drugshandel op 16 april 2013. Sdu Uitgevers, Den Haag.

T.K.24077-312.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 24077 nr.312 (2013). Drugbeleid; Verslag van een algemeen overleg;  
Verslag van een algemeen overleg, gehouden op 3 juli 2013, over Coffeeshopbeleid. Sdu  
Uitgevers, Den Haag.

T.K.28684-385.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 28684 nr.385 (2013). Naar een veiliger samenleving; Motie; Motie van het  
lid Helder over het opleggen van de ISD-maatregel aan jeugdigen vanaf 12 jaar. Sdu  
Uitgevers, Den Haag.

T.K.28741-19.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 28741 nr.19 (2012). Jeugdcriminaliteit; Brief regering; Voortgang  
adolescentenstrafrecht. Sdu Uitgevers, Den Haag.

T.K.29270-69.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 29270 nr.69 (2012). Reclasseringsbeleid; Verslag van een algemeen  
overleg; Verslag van een algemeen overleg, gehouden op 13 juni 2012, inzake reclassering.  
Sdu Uitgevers, Den Haag.

T.K.29350-10: Tweede Kamer der Staten-Generaal vergaderjaar 2010-2011  
publicatienummer 29350 nr.10 (2011). ICT bij politie: rapport 2010. Sdu Uitgevers, Den  
Haag.

T.K.29628-269.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012  
publicatienummer 29628 nr.269 (2011). Aanvalsprogramma Informatievoorziening Politie  
2011-2014: continuïteit, verbetering en vernieuwing [Bijlage]. Sdu Uitgevers, Den Haag.

T.K.29628-421.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014  
publicatienummer 29628 nr.421 (2013). Politie; Brief regering; Stand van zaken vorming  
nationale politie. Sdu Uitgevers, Den Haag

T.K.29911-1.Tweede Kamer der Staten-Generaal vergaderjaar 2004-2005 publicatienummer  
29911 nr.1 (2004). Bestrijding georganiseerde criminaliteit; Brief minister. Sdu Uitgevers,  
Den Haag.

T.K.29911-79.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
publicatienummer 29911 nr.79 (2013). Bestrijding georganiseerde criminaliteit; Brief  
regering; Nationaal Dreigingsbeeld Georganiseerde Criminaliteit 2012 en Vierde rapportage  
op basis van de Monitor Georganiseerde Criminaliteit. Sdu Uitgevers, Den Haag.

T.K.29911-84.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 29911 nr.84 (2013). Bestrijding georganiseerde criminaliteit; Brief regering; Resultaten bestrijding georganiseerde criminaliteit. Sdu Uitgevers, Den Haag.

T.K.31110-13.Tweede kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 31110 nr.13 (2013). Justitieel Verslavingsbeleid; Brief regering; Effecten ISD-maatregel. Sdu Uitgevers, Den Haag.

T.K.31316-3.Tweede Kamer der Staten-Generaal vergaderjaar 2007-2008 publicatienummer 31316 nr.3 (2008). Bepalingen over de zorg voor de publieke gezondheid (Wet publieke gezondheid). Sdu Uitgevers, Den Haag.

T.K.32398-3.Tweede Kamer der Staten-Generaal vergaderjaar 2009-2010 publicatienummer 32398 nr.3 (2010). Vaststelling van een Wet forensische zorg en daarmee verband houdende wijzigingen in diverse andere wetten (Wet forensische zorg); Memorie van toelichting. Sdu Uitgevers, Den Haag.

T.K.32793-2.Tweede Kamer der Staten Generaal vergaderjaar 2010-2011 publicatienummer 32793 nr.2 (2011). Preventief Gezondheidsbeleid: Nota Gezondheid Dichtbij: Landelijke nota gezondheidsbeleid. Sdu Uitgevers, Den Haag.

T.K.32842-2.Tweede Kamer der Staten-Generaal vergaderjaar 2010-2011 publicatienummer 32842 nr.2 (2011). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepcultuur; Voorstel van wet. Sdu Uitgevers, Den Haag.

T.K.32842-3.Tweede Kamer der Staten-Generaal vergaderjaar 2010-2011 publicatienummer 32842 nr.3 (2011). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepcultuur; Memorie van toelichting. Sdu Uitgevers, Den Haag.

T.K.32859-9.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32859 nr.9 (2013). Wijziging van de Wegenverkeerswet 1994 in verband met het verbeteren van de aanpak van het rijden onder invloed van drugs; Verslag (nader, tweede nader etc.); Nader verslag. Sdu Uitgevers, Den Haag.

T.K.33675-3.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 33675 nr.3 (2013). Wijziging van de Zorgverzekeringswet, de Algemene Wet Bijzondere Ziektekosten en enkele andere wetten teneinde de bekostiging van anonieme e-mental health structureel te regelen en de anonieme financiering van zorg aan ernstig bedreigde cliënten mogelijk te maken; Memorie van toelichting. Sdu Uitgevers, Den Haag.

T.K.33738-2.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 33738 nr.2 (2013). Wijziging van de Tabakswet ter invoering van een verhoogd strafmaximum op overtreding van het rookverbod (Verhoging strafmaximum overtreding rookverbod Tabakswet); Voorstel van wet; Voorstel van wet. Sdu Uitgevers, Den Haag.



T.K.Aanhangsel -1136.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
Aanhangsel van de Handelingen nr.1136 (2013). Vragen van het lid Van Veen (VVD) aan de minister van Volksgezondheid, Welzijn en Sport over het artikel «verslavingszorg zelf ontspoord» (ingezonden 23 november 2012). Antwoord van minister Schippers (Volksgezondheid, Welzijn en Sport) (ontvangen 30 januari 2013). Sdu Uitgevers, Den Haag.

T.K.Aanhangsel-1189.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
Aanhangsel van de Handelingen nr.1189 (2013). Vragen van het lid Van der Steur (VVD) aan de minister van Veiligheid en Justitie over een uitzending van Omroep Brabant over drugssmokkel via de Antwerpse Haven (ingezonden 9 januari 2013).  
Antwoord van minister Opstelten (Veiligheid en Justitie) (ontvangen 1 februari 2013). Sdu Uitgevers, Den Haag.

T.K.Aanhangsel-2463.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
Aanhangsel van de Handelingen nr.2463 (2013). Vragen van het lid Oskam (CDA) aan de ministers van Veiligheid en Justitie, van Volksgezondheid, Welzijn en Sport en van Economische Zaken over het bericht dat criminelen in toenemende mate apaan gebruiken als grondstof voor de productie van synthetische harddrugs (ingezonden 26 april 2013).  
Antwoord van minister Opstelten (Veiligheid en Justitie), mede namens de staatssecretaris van Volksgezondheid, Welzijn en Sport) (ontvangen 5 juni 2013). Sdu Uitgevers, Den Haag.

T.K.Aanhangsel-2549.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013  
Aanhangsel van de Handelingen nr.2549 (2013). Vragen van het lid Van der Staaij (SGP) aan de minister van Veiligheid en Justitie over het gedogen van qat-gebruik (ingezonden 16 april 2013). Antwoord van minister Opstelten (Veiligheid en Justitie) (ontvangen 29 mei 2013). Sdu Uitgevers, Den Haag.

T.K.Aanhangsel-78.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014  
Aanhangsel van de Handelingen nr.78 (2013). Vragen van het lid Van Tongeren (GroenLinks) aan de minister van Veiligheid en Justitie en de staatssecretaris van Volksgezondheid, Welzijn en Sport over de uitkomst van de consultaties over de 15% THC-norm voor cannabis (ingezonden 20 augustus 2013). Antwoord van minister Opstelten (Veiligheid en Justitie) mede namens de staatssecretaris van Volksgezondheid, Welzijn en Sport (ontvangen 20 september 2013). Sdu Uitgevers, Den Haag.

T.K.Handelingen 2011-2012-69.Tweede Kamer der Staten Generaal vergaderjaar 2011-2012, v.6.2.m.2.p.p. (2012). Voortzetting van het debat over de hoofdlijnen drugsbeleid. Sdu Uitgevers, Den Haag.

T.K.Handelingen 2012-2013, 41-8.Tweede Kamer der .Staten.-Generaal. vergaderjaar 2012-2013 vergaderingnummer 41-8,11 maart 2013,pag.41-48 (2013). Debat naar aanleiding van een algemeen overleg op 13 december 2012 over de clubpas. Sdu Uitgevers, Den Haag.

T.K.Handelingen 2012-2013, 60-9. Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 vergaderingsnummer 60-9,24 mei 2013,pag.17-22 (2013). Regeling van werkzaamheden. Sdu Uitgever, Den Haag.

T.K.Handelingen 2012-2013, 67-9. Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013,vergadernummer 67-9,27 maart 2013,pag 24-42. (2013). Voortzetting van de behandeling van het wetsvoorstel Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepsteelt ( 32842 ). Sdu Uitgevers, Den Haag.

T.K.Handelingen 2012-2013, 89-4. Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 vergaderingsnummer 89,5 juli 2012,pag.4-30 (2013). Voortzetting van de behandeling van het wetsvoorstel Wijziging van het Wetboek van Strafrecht, het Wetboek van Strafvordering en enige andere wetten in verband met de invoering van een adolescentenstrafrecht. Sdu Uitgevers, Den Haag.

Tollenaar, N. and Van der Laan, A.M. (2012). Effecten van de ISD-maatregel: factsheet 2012-1. WODC, Den Haag.

Tollenaar, N. and Van der Laan, A.M. (2013). Monitor veelplegers 2013: trends in de populatie zeer actieve veelplegers uit de periode 2003-2010. WODC, Den Haag.

Trienekens, S.C.M., Koedijk, F.D.H., Van den Broek, I.V.F., Vriend, H.J., Op de Coul, E.L.M., Van Veen, M.G. et al. (2012). Sexually transmitted infections, including HIV, in the Netherlands in 2011. RIVM, Bilthoven.

Trimbos Institute, projectteam uitgaan alcohol en drugs, 2013. Opwindingsdelier - factsheet voor politie. Utrecht: Trimbos Institute.

Tuynman, M., and Planije, M. (2012). Monitor Plan van Aanpak Maatschappelijke Opvang: Rapportage 2011: Amsterdam, Rotterdam, Den Haag en Utrecht. Trimbos-instituut, Utrecht.

Tuynman, M., Muusse, C., and Planije, M. (2013). Opvang landelijk toegankelijk? Onderzoek naar regiobinding en landelijke toegankelijkheid van de maatschappelijke opvang. Trimbos-instituut, Utrecht.

Van Amsterdam JGC, Brunt TM, McMaster MTB, Niesink R, van Noorden MS, and Van den Brink W. (2012). Cognitieve schade door intensief gebruik en overdoses van GHB. T Psychiatrie 54 (12): 1001-1010.

Van de Glind G. 2013. ADHD in treatment seeking patients with a substance use disorder. Amsterdam: University of Amsterdam. PhD thesis.

Van de Glind, G., Van den Brink, W., Koeter, M.W., Carpentier, P.J., van Emmerik-van, O.K., Kaye, S. et al. (2013). Validity of the Adult ADHD Self-Report Scale (ASRS) as a screener for adult ADHD in treatment seeking substance use disorder patients. Drug Alcohol Depend 132, (3), 587-596.

Van den Berg CHSB, Nanlohy NM, Van de Laar TJW, Prins M, and Van Baarle D.(2013). Ongoing risk behavior and the presence of HCV-RNA affect the hepatitis C virus (HCV-) specific CD4+ T cell response. Viral Immunology , 26: 216-219.

Van der Laan, F. (2012). Criminaliteitsbeeldanalyse 2012: Cocaïne. KLPD/DNR, Driebergen.

Van der Pol, P., Liebrechts, N., De Graaf, R., Korf, D.J., Van den Brink, W., and Van Laar, M. (2011). The Dutch Cannabis Dependence (CanDep) study on the course of frequent cannabis use and dependence: objectives, methods and sample characteristics. *Int J Methods Psychiatr Res* 20, (3), 169-181.

Van der Pol, P., Liebrechts, N., De Graaf, R., Korf, D.J., Van den Brink, W., and Van Laar, M. (2013b). Facilitators and barriers in treatment seeking for cannabis dependence. *Drug Alcohol Depend* 133, (2), 776-780.

Van der Pol, P., Liebrechts, N., De Graaf, R., Korf, D.J., Van den Brink, W., and Van Laar, M. (2013c). Predicting the transition from frequent cannabis use to cannabis dependence: A three-year prospective study. *Drug Alcohol Depend* 133, (2), 352-359.

Van der Pol, P., Liebrechts, N., De Graaf, R., Korf, D.J., Van den Brink, W., and Van Laar, M. (2013d). Reliability and validity of the Severity of Dependence Scale for detecting cannabis dependence in frequent cannabis users. *Int J Methods Psychiatr Res* 22, (2), 138-143.

Van der Pol, P., Liebrechts, N., De Graaf, R., Korf, D.J., Van den Brink, W., and Van Laar, M. (2013e). Validation of self-reported cannabis dose and potency: an ecological study. *Addiction* 108, (10), 1801-1808.

Van der Pol, P., Liebrechts, N., De Graaf, R., Ten Have, M., Korf, D.J., Van den Brink, W. et al. (2013a). Mental health differences between frequent cannabis users with and without dependence and the general population. *Addiction* 108, (8), 1459-1469.

Van der Stel, J. and Van Gool, R. (2013). Quick Scan: Resultaten scoren rond herstel. Resultaten Scoren, Haarlem/Sassenheim.

Van der Torre, E.J., Holvast, R., Keijzer, D., Beke, B., and Bik, J. (2013). Het nieuwe coffeeshopbeleid: een overzichtelijke tussenbalans in Maastricht. Politieacademie/LokaleZaken/Beke Advies, Apeldoorn.

Van der Torre, E.J., Schaap, L., Beke, B., Bervoets, E., Gieling, M., and Keijzer, D. (2012). Tilburgse taferelen: de eerste rapportage: drugsmonitor Midden en West Brabant & Zeeland. Politieacademie/LokaleZaken/Beke Advies, Apeldoorn.

Van Dijken GD, Blom RE, Hené RJ, Boer WH. High incidence of mild hyponatraemia in females using ecstasy at a rave party. *Nephrol Dial Transplant* 2013; 28:2277-2283.

Van Dijken, G.D., Blom, R.E., Hene, R.J., Boer, W.H., and NIGRAM Consortium (2013). High incidence of mild hyponatraemia in females using ecstasy at a rave party. *Nephrol Dial. Transplant* 28, (9), 2277-2283.

Van Dongen, T., Selleslaghs, J., and Gehem, M. (2013). Detecting elusive criminals: research for tackling europe's grand challenge of transnational organized crime. The Hague Centre for Strategic Studies/TNO, Den Haag.

Van Duijvenbooden, K. and Plattje, W. (2010). Stand van zaken Implementatie Samenwerkingsmodel Nazorg binnen het Gevangeniswezen en binnen gemeenten. Ministerie van Justitie/VNG, Den Haag.

Van Ewijk, C., Van der Horst, A., and Besseling, P. (2013). Toekomst voor de zorg: gezondheid loont: tussen keuze en solidariteit. Centraal Planbureau, Den Haag.

Van Laar, M., Cruts, G., Van Ooyen-Houben, M., Meije, D., Croes, E., Meijer, R. et al. (2013). The Netherlands drug situation 2012: report to the EMCDDA by the Reitox National Focal Point. Trimbos-instituut/WODC, Utrecht/Den Haag.

Van Laar, M., Trautmann, F., and Frijns, T. (2013). Drugs market: an assessment from the demand side: introduction, In Further insights into aspects of the EU illicit drugs market. F. Trautmann, B Kilmer, and P Turnbull, (eds.), pp. 57-72. Publications Office of the European Union, Luxembourg.

Van Laar, M.W., Cruts, A.A.N., Van Ooyen-Houben, M.M.J., Meijer, R.F., Croes, E.A., Ketelaars, A.P.M., Verdurmen, J.E.E., Brunt, T., and Sheikh-Alibaks, R. (Eds.) (2013). Nationale Drug Monitor: Jaarbericht 2012 [Netherlands National Drug Monitor: Annual Report 2012]. Trimbos-instituut, Netherlands Institute of Mental Health and Addiction, Utrecht, the Netherlands.

Van Ooyen-Houben, M.M.J. and Van der Giessen, M. (2013). De implementatie van de B- en I-criteria volgens betrokken actoren: resultaten van de procesevaluatie, In Het Besloten club- en het Ingezetenen criterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage. M. Van Ooyen-Houben, B Bieleman, and D Korf, (eds.), pp. 77-106. WODC, Den Haag.

Van Ooyen-Houben, M.M.J., Bieleman, B., and Korf, D.J. (2013). Het Besloten club- en het Ingezetenen criterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage. WODC, Den Haag.

Van Sighem A, Smit C, Holman R, Gras L, Stolte I, Bezemer D, De Wolf F, on behalf of the Netherlands collaborative HIV treatment centres (2012). Monitoring report 2012. Human Immunodeficiency virus (HIV) infection in the Netherlands. Amsterdam: HIV Monitoring Foundation.

Van Sighem, A., Smit, C., Gras, L., Holman, R., Stolte, I., Prins, M. et al. (2011). Monitoring Report 2011: Human Immunodeficiency Virus (HIV) Infection in the Netherlands. Stichting HIV Monitoring, Amsterdam.

Verdurmen, J., Monshouwer, K., Van Dorsselaer, S., Vermeulen, E., Lokman, S., and Vollebergh, W. (2012). Jeugd en riskant gedrag 2011: kerngegevens uit het Peilstationsonderzoek scholieren: roken, drinken, drugsgebruik en gokken onder scholieren vanaf tien jaar. Trimbos-instituut, Utrecht.

Vogels, N. and Croes, E. (2013). Monitor Drugs Incidenten: factsheet 2012. Trimbos-instituut, Utrecht.

Voorham L and Van Hasselt N. Geweld onder invloed beïnvloeden. Factsheet 2013. Utrecht: Trimbos-Institute.

Vriend HJ, Veen MG van, Prins M, Urbanus AT, Boot HJ, Op de Coul ELM. (2013). Hepatitis C prevalence in The Netherlands: migrants account for most infections. *Epidemiol Infect* 141: 1310-1317.

Vriend, H.J., Op de Coul, E.L., Van de Laar, T.J., Urbanus, A.T., van der Klis, F.R., and Boot, H.J. (2012). Hepatitis C virus seroprevalence in The Netherlands. *Eur J Public Health*.

VVD and PvdA (2012). Regeerakkoord VVD-PvdA: Bruggen slaan. Rijksoverheid, Den Haag.

Wisselink, D.J., Kuijpers, W.G.T., and Mol, A. (2013). Kerncijfers Verslavingszorg 2012: Landelijk Alcohol en Drugs Informatie Systeem (LADIS) [Key Figures Addiction Care 2012: National Alcohol and Drugs Information System (LADIS)]. Houten, The Netherlands: Stichting Informatie Voorziening Zorg (IVZ) [Foundation for the Provision of Care Information].

Wisselink, J. (2013). Treatment demand crack trends in the Netherlands [Paper presented at the EMCDDA week on 'measuring, understanding and responding to drug problems in Europe' 23-27 September 2013]. EMCDDA, Lissabon.

Wouters, M., Doekhie, J., Korf, D., and Benschop, A. (2010). Gezondheidsrisicogedrag onder mannelijke gedetineerden: tatoeages, piercings, boegroes, seks & injecteren van drugs en anabolen. Rozenberg Publishers, Amsterdam.

## 11.2 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](http://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](http://www.jur.uva.nl) & [www.jellinek.nl](http://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](http://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](http://www.cbs.nl).

Clïënt 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](http://www.ggd.amsterdam.nl).

Clïënt 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](http://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](http://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](http://www.ggd.amsterdam.nl).

Database problematische harddrugsgebruikers 2008, Data base problem hard drug users 2008

Data base about a field sample of 572 socially marginalized problem hard drug users. This database is a compilation of databases supplied by the Municipal Health Service Amsterdam, the Addiction Research Institute Rotterdam (IVO) and Bureau INTRAVAL.

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](http://www.trimbos.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](http://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/](http://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](http://www.trimbos.nl) & [www.hbsc.org](http://www.hbsc.org).

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

National reporting system for diagnoses of HIV and AIDS assessed by doctors, including HIV and AIDS due to injecting drug use, conducted by the HIV Monitoring Foundation (SHM). Homepage: [www.hiv-monitoring.nl](http://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](http://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). Homepage: [www.politie.nl/KLPD/](http://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 Organisation Care Information Systems (IVZ). Homepage: [www.sivz.nl](http://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](http://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](http://www.veiligheid.nl).

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

Monitor gedoogde coffeeshops, Monitor of tolerated coffee shops  
National monitor of the number of coffee shops that are officially tolerated by the local municipal policy, conducted by Bureau Intraval. Homepage: [www.intraval.nl/](http://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 Security and Justice. Homepage: [www.wodc.nl/](http://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/](http://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](http://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](http://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](http://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](http://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 Security and Justice. Homepage: [www.wodc.nl/](http://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/](http://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](http://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/](http://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](http://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/](http://www.wodc.nl/).

#### THC-monitor

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

#### TULP/GW, Ten UitvoerLegging van vrijheidsbenemende straffen en maatregelen in Penitentiare 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/](http://www.dji.nl/).

### 11.3 List of relevant internet addresses

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

#### URL Websites

##### Research institutes

<http://www.trimbos.nl/>  
<http://www.wodc.nl>  
<http://www.intraval.nl>  
<http://www.aiar.nl/>  
<http://www.ivo.nl/>  
<http://www.scp.nl/>  
<http://www.nispa.nl/>  
<http://www.rivm.nl/>  
<http://www.sivz.nl/>  
<http://www.prismant.nl/>  
<http://www.zonmw.nl/>  
<http://www.hiv-monitoring.nl/>  
<http://www.jur.uva.nl/criminologieuk>  
<http://www.drugresearch.nl/>

##### Ministries/ governmental organisations

<http://www.rijksoverheid.nl/ministeries/vws>  
<http://www.rijksoverheid.nl/ministeries/venj>  
<http://www.rijksoverheid.nl/ministeries/bzk>  
[http://www.om.nl/vast\\_menu\\_blok/english/](http://www.om.nl/vast_menu_blok/english/)  
<http://www.politie.nl/KLPD/>  
<https://www.riecnet.nl/>  
<http://www.hetccv.nl/english>  
<http://www.cbs.nl/>

##### Online information and care websites

<http://www.drugsinfoteam.nl/>  
<http://www.unitydrugs.nl>  
<http://www.drugsinfo.nl/>

##### (Addition) Care institutes

<http://www.ggznederland.nl/>  
<http://www.ggd.nl/>  
<http://www.boumanggz.nl/>  
<http://www.brijder.nl/>  
<http://www.jellinek.nl>  
<http://www.centrummaliebaan.nl/>  
<http://www.vnn.nl/>  
<http://www.parnassia.nl>  
<http://www.novadic-kentron.nl/>

<http://www.tactus.nl/>  
<http://www.ggznm.nl/>  
<http://www.mondriaan.eu/home/>  
<http://www.emergis.nl/>  
<http://www.gezond.amsterdam.nl/>  
<http://www.castlecraig.nl/>  
<http://www.rodgersana.nl/en/home/>  
<http://www.addiction-solutions.nl/>



## 12 Annexes

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## 12.2 List of abbreviations used in the text

|         |  |
|---------|--|
| 4-MA    | 4-methylamphetamine  |
| ACS     | Amsterdam Cohort Studies   |
| ACT     | Assertive Community Treatment                                      |
| 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                     |
| BZP     | 1-benzylpiperazine   |
| CAM     | Coordination Centre for the Assessment and Monitoring of New Drugs |
| CAPI    | Computerised Assisted Personal Interview                           |
| CASI    | Computer Assisted Self-Interviewing                                |
| CBD     | Cannabidiol  |
| CBS     | Statistics Netherlands   |
| CBT     | Cognitive Behavioural Treatment                                    |
| CBO     | Dutch Institute 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       |
| CDC     | Centres for Disease Control  |
| CIA     | Cannabis Intelligence Amsterdam                                    |
| CIDI    | Composite International Diagnostic Interview                       |
| CMR     | Central Methadone Registration                                     |
| CPA     | Central Post for Ambulance Transports                              |
| CRA     | Community Reinforcement Approach                                   |
| CVGU    | Centre Safe and Healthy Nightlife                                  |
| DBC     | Diagnosis Treatment Combinations                                   |
| DHD     | Dutch Hospital Data  |
| DIL     | Drugs Information Line   |
| DIMS    | Drugs Information and Monitoring System                            |
| DJI     | Department of Judicial Institutions                                |
| DNR     | National Crime Squad   |
| DNSSSU  | Dutch National School Surveys on Substance Use                     |
| DOB     | 2,5-dimethoxy-4-bromoamphetamine                                   |
| DSM     | Diagnostic and Statistical Manual of Mental Disorders              |
| DUTCH-C | Drug Users Treatment for Chronic Hepatitis C                       |
| E.K.    | Senate   |
| EMCDDA  | European Monitoring Centre for Drugs and Drug Addiction            |
| EU      | European Union   |
| FACT    | Function Assertive Community Treatment                             |
| FIOD    | Fiscal Intelligence and Investigation Department                   |
| GBL     | Gamma-butyrolacton   |
| GGD     | Municipal Health Service   |
| GG&GD   | Area Health Authority  |



|         |  |
|---------|--|
| GGZ     | Mental Health Service  |
| GHB     | Gamma-hydroxy-butyrate   |
| GMR     | General Mortality Register   |
| HAART   | Highly Active Anti-Retroviral Treatment  |
| HAT     | Heroin-assisted treatment  |
| HAVO    | Secondary education at middle level  |
| HBV     | Hepatitis B virus  |
| HBSC    | Health Behaviour in School-aged Children                                       |
| HCV     | Hepatitis C virus  |
| HIV     | Human Immune Deficiency Virus  |
| HKS     | Defendant Recognition System (of the Police)                                   |
| HTN     | Healthy Nightlife Toolbox  |
| ICASA   | International Collaboration on ADHD and Substance Abuse                        |
| ICD     | International Classification of Diseases, Injuries and Causes of Death         |
| ICT     | Intensive Community-based Treatment  |
| 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 |
| IVZ     | The Foundation for the Provision of Care Information                           |
| KLPD    | National Police Agency   |
| LADIS   | National Alcohol and Drugs Information System                                  |
| LCI     | National Coordination Structure on Infectious Diseases                         |
| LCMR    | National Board for Substance Registration                                      |
| LEDD    | National Centre of Expertise on Double Diagnosis                               |
| 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-methylenedioxypheyl)-2-butanamine                              |
| mCCP    | Meta-chloro-phenyl-piperazine  |
| MDA     | Methylene-dioxyamphetamine   |
| MDEA    | Methylene-dioxyethylamphetamine  |
| MDFT    | Multi Dimensional Family Therapy   |
| MDI     | Monitor drug-related emergencies   |
| MDMA    | 3,4-methylene-dioxymethamphetamine   |
| MIM     | Multivariate (Social) Indicator Method   |
| MSM     | Men having Sex with Men  |
| NDM     | National Drug Monitor  |
| NEMESIS | Netherlands Mental Health Survey and Incidence Study                           |
| NHG     | Association for General Practitioners  |
| NIGZ    | National Institute for Health Promotion and Disease Control                    |

|        |   |
|--------|---|
| NIVEL  | Netherlands Institute for Health Services Research                              |
| NNIA   | No new information available  |
| NND    | National Network Drugs Expertise  |
| NPO    | National Drug Use Survey/National Prevalence Survey                             |
| NPP    | National Prevention Program   |
| NVIC   | National Poisons Information Centre   |
| OBJD   | Justice Documentation Research Database   |
| OCTA   | Organised Crime Threat Assessment   |
| OMC    | Office of Medicinal Cannabis  |
| OMDATA | Public Prosecution Department Data  |
| PMA    | Paramethoxyamphetamine  |
| PMK    | Piperonyl-Methyl-Keton  |
| PMMA   | <a href="#">Para-Methoxymethamphetamine</a>                                     |
| PPC    | Penitentiary Psychiatric Centres  |
| RDS    | Respondent Driven Sampling  |
| RIEC   | Regional Information and Expertise Centres                                      |
| RIOB   | Guideline on Methadone Maintenance Treatment                                    |
| RISc   | Risk Assessment Scales  |
| RIVM   | National Institute for Public Health and the Environment                        |
| ROM    | Routine Outcome Monitoring  |
| SCP    | National Institute for SocioCultural Studies                                    |
| SES    | Socioeconomic Status  |
| 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                                |
| SVG    | Addiction Probation Services  |
| SWOV   | Institute for Road Safety Research  |
| TBC    | Tuberculosis  |
| TDI    | Treatment Demand Indicator  |
| THC    | Tetrahydrocannabinol  |
| T.K.   | Lower House of Parliament   |
| TM     | Treatment Multiplier  |
| TRAILS | Tracking Adolescents Individual Lives' Survey                                   |
| VAPO   | Very Active Adult Prolific Offenders  |
| VBA    | Drugfree Addiction Support Unit   |
| VNG    | Association of Netherlands Municipalities                                       |
| 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 Security and Justice |
| WTZi   | Admittance of Care Institutions Act   |
| XTC    | Ecstasy   |
| ZonMw  | Netherlands Organisation for Health Research and Development                    |

### 12.3 List of full references of laws in original language (with link)

- **Opiumwet:** <http://wetten.overheid.nl/BWBR0001941>
- **Wet Victor:** <http://wetten.overheid.nl/BWBR0013719>
- **Uitvoeringsregeling Opiumwet:** <http://wetten.overheid.nl/BWBR0014569>
- **Opiumwetbesluit:** <http://wetten.overheid.nl/BWBR0014405>
- **Beleidsregels bestuurlijke boete Opiumwet:** <http://wetten.overheid.nl/BWBR0027767>
- **Penitentiaire Beginselenwet:** <http://wetten.overheid.nl/BWBR0009709>
- **Uitvoeringsbesluit voorwaardelijke invrijheidstelling:**  
<http://wetten.overheid.nl/BWBR0024029>
- **Plaatsing in een inrichting voor stelselmatige daders (ISD):**  
<http://wetten.overheid.nl/BWBR0017012>
- **Wet Voorkoming Misbruik Chemicaliën:** <http://wetten.overheid.nl/BWBR0007286>
- **Wijzigingswet Wet voorkoming misbruik chemicaliën, enz. (handel in drugsprecursoren):** <http://wetten.overheid.nl/BWBR0019523>
- **Mandaatregeling Wet voorkoming misbruik chemicaliën 2006:**  
<http://wetten.overheid.nl/BWBR0019984>
- **Wet bevordering integriteitsbeoordelingen door het openbaar bestuur (Wet Bibob):**  
<http://wetten.overheid.nl/BWBR0013798>
- **Besluit Bibob:** <http://wetten.overheid.nl/BWBR0014964>
- **Zorgverzekeringswet:** <http://wetten.overheid.nl/BWBR0018450>
- **Geneesmiddelenwet:** <http://wetten.overheid.nl/BWBR0021505>
- **WetMaatschappelijke Ondersteuning (WMO):** <http://wetten.overheid.nl/BWBR0020031>
- **Interimbesluit Forensische Zorg** <http://wetten.overheid.nl/BWBR0029333>
- **Algemene Wet Bijzondere Ziektekosten:** <http://wetten.overheid.nl/BWBR0002614>
- **Wegenverkeerswet:** <http://wetten.overheid.nl/BWBR0006622>
- **Gemeentewet:** <http://wetten.overheid.nl/BWBR0005416>
- **Drank- en Horecawet:** <http://wetten.overheid.nl/BWBR0002458>
- **Wet Publieke Gezondheid:** <http://wetten.overheid.nl/BWBR0024705>
- **Wet Verplichte Geestelijke Gezondheidszorg (in preparation)**



## Map of the Netherlands: provinces and major cities

### The Netherlands









Each year, the National Focal Points from the Member States of the European Union report on the drug situation in their country. These National Reports are prepared according to the guidelines issued by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The National Reports represent the basic input for the European Drug Report (EDR) compiled by the EMCDDA. In keeping with the guidelines, the National Reports focus on new developments in the reporting year.

This 2013 National Report for the Netherlands was prepared by the staff of the Bureau of the Netherlands National Drug Monitor (NDM) at the Trimbos Institute, Netherlands Institute of Mental Health and Addiction, as well as the staff of the Research and Documentation Centre (WODC) of the Ministry of Security and Justice. The NDM was established in 1999 on the initiative of the Ministry of Health, Welfare, and Sport (VWS). The Ministry of Security and Justice also participates in the NDM.

To carry out the functions of the Netherlands National Focal Point, the NDM relies on the contribution of a multitude of experts and input from registration systems and monitors throughout the Netherlands.