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Roland Simon, IFT Institute for Therapy Research

Marion David-Spickermann, Federal Centre for Health Education

Gabriele Bartsch, German Head Office for Dependence Matters

## **2006 National Report to the EMCDDA by the REITOX national focal point**

# **Germany**

## **New Developments, Trends and In-Depth Information on Selected Topics**

### **Drug Situation 2006**

**IFT Institute for Therapy Research (Epidemiology and Coordination)**

Roland Simon (Dipl.-Psych., Head of the DBDD)

Parzivalstr. 25

D - 80804 Munich

Tel.: +49 (0) 89 - 36080440

Fax: +49 (0) 89 - 36080449

Email: [simon@ift.de](mailto:simon@ift.de)

**Federal Centre for Health Education (BZgA) (Prevention)**

Marion David-Spickermann

Ostmerheimer Str. 220

D - 51109 Cologne

Tel.: +49 (0) 221-8992 - 290

Fax: +49 (0) 221-8992 - 300

Email: [marion.spickermann@bzga.de](mailto:marion.spickermann@bzga.de)

**German Head Office for Dependence Matters (DHS) (Therapy)**

Gabriele Bartsch

Westring 2

D - 59065 Hamm

Tel.: +49 (0) 2381-901521

Fax: +49 (0) 2381-901530

Email: [bartsch@dhs.de](mailto:bartsch@dhs.de)

For better legibility, the following report refrains from using the female gender which is instead subsumed under the respective male form.

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## Abbreviations

	German	English
AMG	Arzneimittelgesetz	Medical preparations act
BfArM	Bundesinstitut für Arzneimittel und Medizinprodukte	Federal Centre for Drugs and Medical Devices
BMG	Bundesministerium für Gesundheit	Federal Ministry for Health
BMJ	Bundesministerium der Justiz	Federal Ministry of Justice
BSHG	Bundessozialhilfegesetz	Federal Public Welfare Act
BtM	Betäubungsmittel	Narcotic drugs
BtM-ÄndV	Betäubungsmittelrechts-Änderungsverordnung	Amending regulation on narcotic drugs
BtMG	Betäubungsmittelgesetz	Narcotic Drugs Act
BtMG-ÄndG	Gesetz zur Änderung des Betäubungsmittelgesetzes	Amending Narcotic Drugs Act
BUB-Richtlinien	Richtlinien über die Bewertung von ärztlichen Untersuchungs- und Behandlungsmethoden	Guidelines on the evaluation of medical examination and treatment methods
BZgA	Bundeszentrale für gesundheitliche Aufklärung	Federal Centre for Health Education (FCHE)
DAS	Drogenaffinitätsstudie	Drug Affinity Study
DBDD	Deutsche Referenzstelle für die Europäische Beobachtungsstelle für Drogen und Drogensucht	German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction
DHS	Deutsche Hauptstelle für Suchtfragen	German Main Office for Dependence Matters
DND	Drogennotdienst	Drug Emergency Service
EBDD	Europäische Beobachtungsstelle für Drogen und Drogensucht	EMCDDA - European Monitoring Centre for Drugs and Drug Addiction
ECDP		European Cities on Drug Policy
EDDRA		Exchange on Drug Demand Reduction Action
ESA	Bundesstudie	Epidemiological Survey on Addiction
EU	Europäische Union	European Union
GRV	Gesetzliche Rentenversicherungen	Public Social and Pension Insurance
HAART		Highly Activating Antiretroviral Treatment
HBV	Hepatitis B Virus	Hepatitis B Virus
HCV	Hepatitis C Virus	Hepatitis C Virus
IFT	Institut für Therapieforschung	Institute of Therapy Research
IVU	Intravenös applizierende Drogenkonsumenten	IDU - Injection drug user
KJHG	Kinder- und Jugendhilfegesetz	Law on children and youth welfare
LAAM	Levoalphaacetylmethadol	Levomethadyl acetate hydrochloride
NGOs	Nicht-staatliche Organisationen	Non-governmental organizations
REITOX	Europäisches Informationsnetzwerk zu Drogen und Sucht	European Information Network on Drugs and Addiction
RKI	Robert Koch Institut	Robert Koch Institute
SGB	Sozialgesetzbuch	Social Codes
StBA	Statistisches Bundesamt	Federal Statistical Office
StGB	Strafgesetzbuch	Penal code
THC	Tetrahydrocannabinol	Tetrahydrocannabinol
UN	Vereinte Nationen	United Nations
VDR	Verband Deutscher Rentenversicherungsträger	German Association of Pension Insurances
WHO	Weltgesundheitsorganisation	World Health Organization
ZI	Zentrales Institut der Kassenärztlichen Versorgung	Central Institute of SHI-accredited care services

## The Laender

	<b>Bundesland</b>	<b>Federal Land</b>
BW	Baden-Württemberg	Baden-Württemberg
BY	Bayern	Bavaria
BE	Berlin	Berlin
BB	Brandenburg	Brandenburg
HB	Bremen	Bremen
HH	Hamburg	Hamburg
HE	Hessen	Hesse
MV	Mecklenburg-Vorpommern	Mecklenburg West-Pomerania
NI	Niedersachsen	Lower Saxony
NW	Nordrhein-Westfalen	North Rhine-Westphalia
RP	Rheinland-Pfalz	Rhineland-Palatinate
SL	Saarland	Saarland
SN	Sachsen	Saxony
AT	Sachsen-Anhalt	Saxony-Anhalt
SH	Schleswig-Holstein	Schleswig-Holstein
TH	Thüringen	Thuringia



## Introduction

The German REITOX-Report 2005 has been written in accordance with the guidelines of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) taking into account the quality report's feedback on previous reports.

Each chapter of the report has an introductory passage presenting the most important and up-dated background information – e.g. on the structure of the health care system of a Land or the available data sources used for surveys of drug use in the population. If necessary, these parts have been revised to give an up-to-date picture of the situation in the reporting year.

The other sections of the individual chapters provide exclusively new data and results of the reporting year. Older data are only used for comparative purposes where appropriate. Otherwise, the report will refer to earlier publications. Standard tables (ST) and structured questionnaires (SQ) of the EMCDDA containing basic information are referred to in the text. As these have so far only been electronically available – some of them without print layout, they have not been included in this report. They can, of course, on request, be supplied in soft format. They will soon be made available also on the website of the DBDD.

More information on the national report can be found under [www.dbdd.de](http://www.dbdd.de) and on the European Report under [www.emcdda.europa.eu](http://www.emcdda.europa.eu).

Roland Simon

Director of the DBDD



## **Summary**

The present report on the drug situation in Germany has been prepared on behalf of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) which is an agency of the European Union. The report is the result of joint work between the Institute for Therapy Research (IFT), the Federal Centre for Health Education and the German Head Office for Dependence Matters (DHS). They collaborate in the German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction (DBDD) with financial support of the Federal Ministry for Health. The overall report is structured according to EMCDDA guidelines and is available for download under [www.dbdd.de](http://www.dbdd.de)

### **National Policy in context**

Isolated “drug” concepts have meanwhile been replaced by a cross-substance “addiction” policy which increasingly sets the focus on common aspects of the whole range of psychotropic substances. The current “Action Plan Drugs and Addiction” is the mainstay of the overall political concept in which various activities are embedded. The “Council for Drugs and Addiction” which is to accompany and evaluate the goals and measures laid down in the action plan, introduced its work program in September 2005. The program focuses on reducing smoking and alcohol consumption among teenagers as well as on bringing down experimental and regular use of cannabis.

### **Drug consumption: prevalence and prevention**

Studies carried out in the years 2003/2004 show that about a quarter of the adult population in Germany had experience with drugs (lifetime prevalence). 7% of this group used drugs in the last 12 months, little less than 4% in the last 30 days. Prevalences are higher among teenagers and young adults. The last data collection, which was conducted in schools in Hamburg, didn't show any significant change in the prevalence of drug use in the 30-day-category between 2004 and 2005. However, there are indications that gender differences seem to level off.

### **Problem drug use: extent and treatment**

Based on the figures on treatment, police contacts and drug-related deaths, estimates on the prevalence of problem (i.e. risky, harmful or dependent) drug use make the number of problematic users of heroin range between 78,000 and 195,000 (0.1%-0.4%). According to the definition of the EMCDDA, problem use is given in less than 0.5% of the overall population aged between 18 and 65 years. The most recent figures found for problem drug use in a larger sense are as follows: “regular” use of cannabis in 12 – 25 year-olds in 3%; “habitual use” of cannabis (at least 25 times in the lifetime) which was continued to the last month prior to data collection in 12%; use of other illicit drugs in 2%.

52% of the clients who present to outpatient drug counselling facilities, have a primary opiate problem; 31% suffer primarily from cannabis-related problems. Of those who are in treatment

for the first time, 58% have cannabis-related disorders. In inpatient facilities, opioids continue to play a predominant role. Here also, the number of cannabis cases is on the rise. Whereas in 2002, there was one cannabis patient in eight opiate patients, the ratio in 2004 was 1:5.

### **Health aspects of drug use and measures to curb them**

1,326 people died of drugs in Germany in 2005. This is a slight decrease relative to the previous year and a substantial decrease by about a third compared to the peak of 2,030 death cases in the year 2000. The death cases are mostly related to opiates which were frequently used in combination with other psychotropic substances including alcohol.

### **Social effects of drug use and measures to curb them**

In the year 2005, about 194,000 offences in connection with drug use (excluding drug dealing) were recorded. This corresponds to a decrease of 3% relative to the previous year, which can be explained by declining figures for heroin (-2,5%), cannabis (-5,6%) and ecstasy-related offences (-14,3%) and rising figures for amphetamine (+12,9%) and other drug offences (+13,2%) during the same period of time.

Unemployment, low education and low income are commonly found problems among drug users. Special measures undertaken by unemployment insurance institutions and offers made by the second labor market are geared to tackle these problems, which play a decisive role for the outcome of the therapy, but which are hard to solve under current labor market conditions.

### **Drug Market**

There was little change in retail drug prices for cocaine, amphetamine and cannabis in 2005. Prices for heroin and LSD were on average more than 10% lower than the year before, which is an indication of a large offer relative to the demand. Wholesale drug prices didn't change much either between 2004 and 2005, the only exception being ecstasy whose price fell on average by 11%.

The level of active substances of street drugs was somewhat lower in 2005 compared to the year before. Most striking in this context was the development of marijuana whose THC-content started to fall back for the first time in eight years.

### **Selected topic: Drug use in very young people**

Drug use in persons aged under 15 is uncommon in Germany as shown by school surveys and statistical reports from outpatient counselling facilities. In 2004, prevalence of lifetime drug use in the age group 12-14 years was at 3.8% for cannabis and at 1.4% respectively for other drugs. However, it must not be overlooked that the number of those in outpatient therapy has increased tenfold for this age group over the last ten years. About a third of those with drug experience used drugs more than 10 times. Various projects are currently trying to liaise youth welfare and drug aid offers with a view to better cater to the needs of this target group.

### **Selected topic: Cocaine and crack**

About 3% of the adult population has experience with cocaine. In younger age groups prevalences are higher. The lifetime prevalence for cocaine has been on the rise over the last 10 years. However, because of the often very short duration of consumption, consumption prevalence has hardly gone up in the last 12 month-category. Cocaine is used in quite different social strata. It is the second important substance used in the heroin scene. And its generally used simultaneously or alternatingly with heroin. Other groups tend to combine cocaine with other drugs. Here, problematic side-effects are generally less common than in the heroin scene.

Those with very problematic cocaine use have meanwhile started also to use crack, which has however met with no interest outside the drug scene. So far, Germany's crack scene has been limited to the two cities of Frankfurt and Hamburg for years. However, prevalences are on the rise there.

Although about 7% of the clients presented to an out- or inpatient drug facility because of a primary cocaine problem, there were hardly any specialized therapy offers available for this group of persons. Strikingly high was the portion of detainees in this group. Cocaine-related deaths and negative sequelae were relatively seldomly reported in comparison with heroin.

### **Selected topic: Drugs and driving**

In 2004, accidents on German roads with injury to persons totalled 336,619 with 413,942 operators of motor vehicles being involved. Out of these, 0.3% were under the influence of "other intoxicating substances" – in most cases probably cannabis – and 5.0% under the influence of alcohol.

Quick detection of drugged driving is still causing problems. At the end of an international project ("ROSITA") which was carried out with German participation to validate salvia quick tests to detect drug use, none of the tests was recommended for practical use because of insufficient specificity.

Driving under the influence of medical drugs can also pose considerable risks because some of them can impair psycho motility and rate of reaction of the driver. Apart from experimental and clinical tests, there are however hardly any data available on this.

A special topic is the (re-)grant of the driving licence for opiate addicts in substitution treatment. Prerequisites for a (re)grant are a stable course of substitution treatment and stopping of the by-use of other drugs. But even under the most favourable circumstances it is very difficult for opiate addicts in substitution therapy to get back their driving licence. Without a driving licence however, patients have even less chances to find a job under current labour market conditions. That is why temporary suspensions of driving licences get ignored in some cases.



## **PART A: NEW DEVELOPMENTS AND TRENDS**

### **1 National policies and context**

#### **1.1 Overview**

In Germany, the term 'drug policy' is undergoing a gradual change of meaning. Till the end of the last century, it was exclusively related to illicit drugs which were at the centre of the political interest. There was no comparable conception for an alcohol or tobacco policy nor for an 'addiction policy', comprising the whole range of addictive substances. Since a few years however, (1) disorders induced by legal psychotropic substances and (2) common aspects of such substances (e.g. with regard to primary prevention or patients with multiple abuse) have increasingly become the focus of political interest. This is the reason why the terms 'drug and addiction policy' and 'addiction policy' find more frequent use gradually replacing the term 'drug policy'. Due to the differences in political aims and strategies for legal and illegal substances in German the term 'drug and addiction policy' is used more often.

Moreover, the range of vision is expanding from the original main focus on substance-related addiction to risky and harmful use and thus to a comprehensive understanding of health policy for substance-related disorders and risks. However, in the German language there is no short term appropriately reflecting this expansion of the concept, so that the (unsatisfactory) term of 'addiction policy' continues to be used. As a consequence, legal substances and common strategies for both legal and illegal substances have to be taken into account in the annual reports of the DBDD. In many cases, it is not possible any more to set the two categories apart due to technical and political developments. Nevertheless, in line with the guidelines given for the topic of this report, exclusively illicit substances will be taken into consideration, where possible.

##### **1.1.1 Political framework**

###### **Responsibilities of the Federal Government and the Laender**

The responsibility for the drug and addiction policy is shared between the Federal Government and the Laender. According to the Basic Constitutional Law, the Federal Government has legislative authority over the narcotic drugs law, the penal law, the law of penal execution and the social welfare law. On this basis, it has defined a legal framework for drug policy and formulated specific standards. However, the execution of these federal laws mainly falls under the responsibility of the Laender. In addition, they also have their own legislative authority in areas which are of relevance for drug and addiction policy including school, health and education systems. The actual implementation of the drug and addiction policy – in particular also funding – mainly lies in the hands of the Laender and municipalities which may very well set different focuses within the framework of given legal guidelines and common goals.

Currently, as part of the implementation of drug policy, a few Laender are increasingly stressing the municipalities' competences especially with regard to counselling, care and general prevention activities (z.B. Hessisches Sozialministerium, 2006), in order to, among others, improve integration between youth welfare and addiction aid systems. However, this will tend to render supra-regional exchange of information and surveying of the overall situation more difficult.

### **The role of the funding organs**

Funding of treatment and rehabilitation is for the most part provided by the health or pension insurance funds respectively. Alternatively, funding is taken over by social welfare providers. Costs caused by (secondary) disorders resulting from drug use and withdrawal (detoxification) are generally borne by the health insurance funds whereas outpatient and inpatient medical rehabilitation is paid for by the pension insurance funds. Social insurance providers act as independent self-governing bodies under public law. Therefore, political decisions often do not have a direct impact on the funding practice with regard to certain treatment offers.

### **The role of non-governmental organizations**

In Germany, health care and social work in particular are governed by the principle of subsidiarity. The associations of SHI-accredited doctors (i.e. general practitioners) are tasked to guarantee outpatient medical care. Private charity organizations in particular, organize large parts of the measures of socio-therapeutic care for drug users for which they receive public funding – from national, Laender- and municipal budgets according to certain criteria. Only in few cases (e.g. counselling facilities run by public health offices or psychiatric clinics), the Federal Government itself provides special treatment offers and services for persons with addiction problems. Also youth welfare relies on the joint work of governmental and non-governmental institutions in legal terms (SGB VIII and XII).

A general outline of the institutional framework and policies can be found in structured questionnaire 32.

## **1.1.2 Legal Framework**

### **The Narcotic Drugs Act**

The Narcotic Drugs Act (BtMG) contains all important regulations on as how to deal with these substances taking into account the respective UN-conventions on addictive substances. Substances which are deemed as narcotic drugs in terms of the German Narcotic Drugs Act are listed in three schedules encompassing all substances mentioned in the international agreements on narcotic drugs:

- Schedule I: narcotics prohibited from distribution (e.g. MDMA, heroin, cannabis).
- Schedule II: narcotics allowed for distribution but not approved for medical use (e.g. Delta-9-tetrahydrocannabinol (THC), dexamphetamine).



- Schedule III: narcotics allowed for distribution and approved for medical use (e.g. amphetamines, codeine, dihydrocodeine, cocaine, methadone, LAAM, morphine and opium).

The prescription of narcotics (schedule III) as part of a medical therapy is subject to the special regulations on the prescription of narcotic drugs (BtMVV) and requires for example the use of special prescription forms for narcotic drugs.

### **Social Security Codes**

The social security codes define the framework for the financing of addiction therapy. The costs of drug addiction therapy (withdrawal) are borne by the pension insurance funds. Physical withdrawal (detoxification) and substitution therapy are paid for by the health insurance funds.

With the fusion of the unemployment aid and social aid in 2005 ("Hartz IV"), the social security codes (in particular SGB II) have become even more important for people with drug problems. The central goal of the reform being to improve procurement of work, it is to work more intensely on the removal of obstacles to the placement on the job market. In this context, drug addiction represents a particularly problematic obstacle requiring specific attention.

According to the social security codes (SGB II), aid is granted by the employment agencies or the working groups formed by the latter and the municipalities.

#### **1.1.3 Objectives and priorities of national drug and addiction policy**

Created in 1998, the function of the Federal Drug Commissioner is assigned to the Federal Ministry for Health. The Federal Drug Commissioner coordinates the drug and addiction policy of the Federal Government which is based on the following four cornerstones:

- Prevention of drug use
- Counseling and treatment of drug users
- Survival aid and harm reduction
- Repression and supply reduction

Hereby, it is intended to create a balance between measures to reduce both demand and supply. The Federal Government's addiction policy comprises legal psychotropic substances and associated risks and takes European developments into account.

In line with the broad conception of the WHO, addiction is understood as a complex illness associated with psychological, somatic and social disorders requiring treatment. Existing measures to combat drug use and addiction are to be made available as early and comprehensively as possible. Prevention of addiction plays a primordial role in addiction policy. It aims at preventing or at least significantly reducing risky consumption, harmful use and substance dependence. Existing measures and offers are to be further complemented and their quality secured.

The national “Action Plan Drugs and Addiction“, which was passed in 2003, is to serve as a framework for addiction policy for the next years. Further details can be found in the REITOX Report 2004.

In December 2005, Sabine Bätzing was appointed the new Drug Commissioner of the Federal Government. As focal points of her work she mentioned the reduction of tobacco and alcohol use and measures to curb misuse of medication. She also set herself the goal to shift the increasing prevalence of cannabis consumption more into the focus of attention and lend her support to appropriate programs. Prevention and close cooperation between youth welfare and drug aid systems are to help in achieving set goals (Die Drogenbeauftragte der Bundesregierung, 2005).

#### **1.1.4 Coordination**

Due to the federal structure and the principle of subsidiarity as well as the differences in the degree of problems and starting conditions, there are considerable regional differences in how substance-related disorders are dealt with. As a consequence, drug and addiction programs are subject to different guidelines and rules in the individual Laender. However, the Laender have agreed on a profile for outpatient regional facilities of addiction aid. There are no uniform formal requirements or criteria respectively for quality assurance with regard to measures aiming at the reduction of drug demand. Approaches going into this direction – e.g. the development of guidelines and programs for quality assurance – are solely adopted at a technical level by professional and scientific associations as well as by the funding organs. Compliance with and application of these guidelines are, however, not mandatory (see 5.5). Therefore, a multitude of different approaches and methods or instruments are currently used in the individual Laender and municipalities. Furthermore, large differences with regard to the availability of resources are to be found between the Laender. Coordination between the Federal Government and the Laender takes place in the conferences of government departments and their working groups. The new Council for Drugs and Addiction as well as its steering group play also an important role in this field. As part of the steering group the working group ‘German statistical report on addiction therapy’ has been installed in order to coordinate the collection of statistical data in this area. In addition, cooperation between Laender and Federal Government is also project-based.

At the national level, the Federal Centre for Health Education (BZgA) is responsible for the planning and execution of prevention programs and the monitoring of preventive activities. It chairs the working group “Addiction prevention” which also reports to the Drug and Addiction Council. The Federal Institute for Pharmaceutics and Medical Devices (BfArM) is responsible for the admission of pharmaceutics. Part of the BfArM is the Federal Opium Monitoring Centre which monitors the quantity of delivered narcotics and has been keeping the National Substitution Register since its creation in 2003.

## **1.2 Legal framework**

### **1.2.1 Laws**

#### **The Narcotic Drugs Act**

The legal framework for addressing drug issues basically remained unchanged in 2005. The Narcotic Drugs Act (BtMG), which regulates the distribution of narcotic drugs, was not amended in the reporting period. A detail change to the Narcotic Drugs Act was made by the 19<sup>th</sup> Amendment to the Narcotic Drugs Act dating back to March 2005 (see Reitox report 2005).

#### **Legal aspects of heroin prescription**

After the completion of a study on the diamorphine-based therapy of opiate addicts (“heroin study”) (Naber & Haasen, 2006), an application for the admission of diamorphine as a pharmaceutical drug was filed with the BfArM in spring 2006. Given the positive results of the study (see 5.6), the BfArM has meanwhile technically endorsed the admission. However, the admission of diamorphine requires a few legal changes, among others also of the Narcotic Drugs Act. The necessary legal changes and the definition of modalities allowing for a continuation of the treatment with diamorphine also after the completion of the study, are currently still subject of a political decision process.

In the meantime, a speedy answer needs to be found to the question as how to deal with patients who are currently still treated with heroin in the study. According to current planning, which sets the legal framework for the prescription of heroin, the study will be definitely terminated by the end of the year. Efforts are undertaken to create a smooth transition to regular treatment (SZ 22.4.2006).

#### **Discussion on a Law on Prevention**

In the previous REITOX–Report (Simon, David-Spickermann & Farke, 2005) it was reported that the Federal Cabinet had decided on a general concept on prevention in which “addiction“ was defined as one of nine central fields of activities. The law was debated in parliament but not passed in 2005. After the early change of government in November 2005, the Law on Prevention was included in the coalition agreement of 11 November 2005 and put on the agenda for the current legislative period. Prevention is to be made a cornerstone of health care; cooperation and coordination are to be improved as well as quality of measures offered. In February 2006, the Health Minister said that a new run-up for a law on prevention is not to be expected before 2007.

## 1.2.2 Laws implementation

### Study on the legal practice of criminal prosecution

The German Narcotic Drugs Act § 31a provides for the possibility to discontinue prosecution for possession of drugs under certain circumstances, namely when the offender has grown, produced, imported, exported, bought or received and possessed in any other way narcotic substances in small amounts exclusively for personal use and when his guilt is deemed as minor and there is no public interest in prosecution. This provides the public prosecutor with an instrument to stop proceedings for consumption related offences without court approval. All Federal Laender have regulated details of the application of § 31a BtMG through recommendations or guidelines. However, these regulations diverge in crucial points such as for example the definition of “non substantial amount”.

A study conducted by Schäfer & Paoli (2006) for the Ministry of Health investigated the differences in the application of §31a in the individual Laender. The study was to find out whether the guidelines passed by the individual Laender generally lead to a more uniform legal practice as explicitly requested in a judgement of the Federal High Court of Justice in 1994. The study is based on an earlier survey on discontinued prosecution carried out by Aulinger (1997). Going beyond the earlier survey, the study took a random sample of 450 proceedings on consumption-related offences in six different Laender. Out of these proceedings, files of a total of 2,011 individual cases were analysed and a large number of experts interviewed (policemen, public prosecutors, criminal court judges and counsels at the criminal bar) in eleven selected cities. Furthermore, the study was to find out whether the suspension of prosecution would ease the work load of criminal prosecution authorities, whether it would promote the principle of “help before punishment“ and whether there was a correlation between prevalence of drug use and practice of criminal prosecution in the individual Federal Land.

The regional differences found in the application of the drug law were substantial. The insufficiently defined term of “occasional consumption” which is regarded as a criterion for absent “public interest“ in prosecution, was identified as one of the core problems by the authors of the study. Maximum quantities providing for a discontinuation of prosecution varied between 6 and 30 grams of cannabis from one Land to the other. Below these maximum amounts, discontinuation of proceedings is obligatory in some Laender whereas in others it is subject to a case-by-case approach also taking into account for example repeat offences. In some Laender, the maximum amount for heroin is 1g, in three Laender, there are no maximum amounts at all for other drugs. Correspondingly, the quota of discontinued proceedings ranges between 20% and 80%. As in the majority of cases, the quantities of cannabis involved were under 6 grams (in 40% of the cases less than 1 gram), the publicly much discussed maximum amount was of little relevance for legal practice. Critical was the question whether prosecution should be generally discontinued or only under certain conditions (first offender, occasional or habitual consumption). After the opening of proceedings, charges were filed or summary awards of punishment requested in 4.9%

(Schleswig-Holstein) to 40.7% (Bavaria) of the cases. The practice of stopping prosecution has led to the intended decrease of workload for the prosecution authorities. Courts by contrast, have seen their workload rising in respect of drug-related offences. According to Schäfer & Poli, §31a cannot contribute anything substantial to turning the concept “Therapy before punishment” into practice. That diverging legal practice had a considerable influence on drug use, is regarded as ‘rather unlikely’ by the authors, especially in respect that it remains unclear whether the potential users were actually aware of these differences. The results of the study have so far not led to a change of the Narcotic Drugs Act.

### **1.3 Institutional framework, strategies and policies**

#### **1.3.1 Coordination**

Cooperation between the different players in the fields of health care, drugs and addiction, is being supported by a series of information offers. In cooperation with the Land Commissioners for drug prevention, the BZgA has created a national platform called „Prevnet“ enabling the exchange of information and opinion on prevention between experts and institutions. Till now, the expert network has been used by 565 members from 408 facilities. It provides access to a host of information material (brochures, flyers, books, videos, posters and CD Roms), over 300 projects for various settings and studies as well as information on events. In its interactive section, 45 working groups and 22 forums were set up and 11 newsletters created. Since its start in September 2004, the number of visitors rose continually from below 10,000 to almost 40,000 in May 2006.

#### **1.3.2 National plans and strategies**

The yearly Drug and Addiction Report was presented to the public by the Drug Commissioner of the Federal Government Sabine Bätzing in May 2006. As priorities were mentioned the improvement of the protection of non-smokers through agreements with gastronomy and the project “smoke-free hospitals”, campaigns to reduce smoking and a ban on smoking at schools, demonstration programs to curb alcohol consumption among teenagers and a study on dependence on medical drugs in Germany. Other focuses regarding illicit substances aim at improving help offers for persons with cannabis problems and putting results of the heroin study into practice.

The framework for the current drug and addiction policy was set by the Action Plan Drugs and Addiction in 2003. The Drug and Addiction Council (see 1.3.3) is the most important body to accompany and steer the implementation of the plan. After the new elections of the Federal Government, the council has re-constituted itself and resumed its work from the last legislative period (see 1.3.3) (Die Drogenbeauftragte der Bundes, 2006a).

### **1.3.3 Implementation of policies and strategies**

#### **Implementation of the Action Plan Drugs and Addiction**

On 25 June 2003, the Federal Cabinet decided on the “Action Plan Drugs and Addiction“. For the implementation of the plan, a “Drug and Addiction Council” was set up to accompany measures, evaluate results and make suggestions for further developments. It is composed of representatives of the respective government and Laender departments as well as funding organs, associations, research and self-help organizations.

Following its reconstitution after the elections in autumn 2005, the Council reconfirmed the primordial goal of the “Action Plan Drugs and Addiction“ which is to reduce consumption of licit and illicit psychoactive substances as well as non-substance-related addiction. The following focal areas were defined:

- The quota of smokers among teenagers (12-17 years) is to fall below 17% by 2008. It sank already from 28% to 20% between 2001 and 2005.
- The quota of teenage consumers of alcoholic beverages is to be reduced from currently 20% to below 18% by 2008.
- The quota of experimental cannabis users among 12 to 25 year-olds is to be brought down from 31% in 2004 to below 28 % by 2008.
- The quota of regular cannabis users among 12 to 25 year-olds is to fall below 3 % by the year 2008.

In order to implement these goals, a wide range of offers and support by the Laender and service providers are considered imperative. Research results of the Federal Ministry of Education and Research and the heroin study are also to be taken into account.

#### **Demonstration programs and research projects under federal funding**

As part of the cooperation project “INCANT“(International Cannabis Need of Treatment Study) carried out by Germany and several neighbouring countries, a pilot study was conducted. The counselling centre “Therapieladen“ in Berlin, which has been specialising on care for clients with cannabis-related problems for a long time, participated in the pilot study which is followed by a main study which started in October 2006. More information on other still ongoing demonstration programs can be found in earlier REITOX-reports.

Since November 2004, one focal area of Germany’s drug and addiction policy has been addiction research which will be continued in the second funding period till November 2007. In four research networks, funded by the Federal Ministry for Education and Research, scientists from different fields cooperate with facilities of primary care in their region and participate in application-oriented research projects in drug care. One focus of the working program is among others to optimize the allocation of offers of help to treatment demand. Out of the multitude of sub-projects only those will be presented in the following whose focus

is on illicit substances and which have not yet been terminated in the reporting period. A series of results presented in this report and pertaining publications are from these projects:

- Targeted early intervention in cannabis, ecstasy and alcohol users:  
A study analysing demand and offer of drug aid services in and around Munich found out that – despite a substantial expansion of resources in terms of personnel and institutions - intervention and therapy offers were not adequately allocated to the demand. Currently, there is another study ongoing on targeted early intervention in this group of persons with a goal to further investigate this issue.
- Modular therapy of cannabis-related disorders (CANDIS):  
In January 2006, Germany's first outpatient department specialising in cannabis opened up in Dresden. As part of the randomized control intervention study, a special short-term therapy for cannabis-related disorders is to be developed, carried out and evaluated. Hereby, a comparison will be drawn between a fully standardized version, individualised therapy and a waiting group.
- Supply quality and allocation in substitution therapy (COBRA):  
The study investigates substitution therapy in Germany comparing the use of methadone and buprenorphine as well as the effects of substitution practice and describing patients in therapy.
- Individualized psychosocial therapy and selection of substitution substances for patients in substitution therapy:  
In this randomized study, various therapy forms and dose effects were compared in 182 opiate-dependent patients.

### **Activities undertaken by the Federal Laender**

The Federal Laender too, set a focus on children and teenagers as well as on licit addictive substances. Central to their work are a stronger target orientation of help offers, the comparison of demand and offer in addiction care and the optimization of the aid system through improved cooperation, cost control and work sharing. The activities deployed by the Laender will be presented in more detail under the respective topics of this report.

Many Laender have created their own coordination centres to implement drug and addiction policy. Brandenburg for example, has, after the passing of its program against addiction, installed a "Land addiction conference" to discuss and compare goals and status on a regular basis. Operationalised indicators serve to evaluate the results of the measures undertaken. Here an example of this approach in respect of cannabis: A survey conducted in 10<sup>th</sup> grade among 10,000 pupils showed that 5% of the male and 2% of the female pupils used cannabis in the last week. Prevalence is to be reduced to 3% and 1% respectively by 2008 through legal measures, geared to target groups and settings, and continuing education of care staff. A follow-up school survey is to be conducted to verify set targets. (Land Brandenburg, Ministerium für Arbeit, Soziales, Gesundheit und Familie, personal communication 27.6.2006).

As of 2006, the city of Hamburg provides 300,000 to 500,000 € annually for the extension of counselling offers for teenagers and young adults at risk of developing addiction. In a call for tenders, providers of outpatient addiction help services were selected to conceive and implement corresponding offers. Target groups are young drug users on the verge of problematic consumption, their parents, teachers and other addiction specialists in their environment. Close cooperation with youth welfare and regular documentation are explicitly requested. The further development of the offers is accompanied by methods of “impact-oriented steering“ (Schröder & Kettiger, 2001) (Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz, Hamburg).

### **Activities undertaken by the Federal Centre for Health Education (BZgA)**

The “Expert report on primary prevention of substance abuse“ of the year 1993 was updated. The Federal Centre for Health Education (BZgA) tasked scientists to make the current scientific status of addiction research available to the expert public in a concise form. Different aspects relating to efficiency (prevention, retardation or reduction of the consumption of psychotropic substances among children and teenagers) and measures of behavioural and relational prevention were taken into account in the final conclusions. Further details can be found in chapter 3.

As part of the project „Dot.sys“ run by the BZgA, a documentation system is to complete the overview of the prevention measures carried out. More than 20,000 data files are available which are currently being evaluated. First results have already been included in this report. In addition, data on prevention measures are also collected by other documentation systems. Nationwide however, there are no statistics available on these data.

### **Conferences and working group sessions**

In October 2005, the Commissioner of the Federal Government organized the expert conference “Participation in work life – perspectives for people suffering from addiction“. Central topic was the situation of addiction aid with regard to job procurement 10 months after the fusion of social and unemployment aid. More than 100 staff of addiction aid facilities as well as representatives from help organizations, social insurance funds and politics used the conference to discuss problems and examples of successful cooperation between job agencies, social welfare offices and addiction aid facilities (Die Drogenbeauftragte der Bundesregierung, 2006).

On the occasion of the “Experts’ Conference Addiction 2005“ organized by the German Head Office for Dependence Matters (DHS) and jointly funded by the Federal Ministry of Health and the Berlin Senate, a multitude of concepts and projects were presented to and discussed with the expert public under the title: Early detection of and early intervention in substance- and behaviour-related disorders.



## **International cooperation**

Germany actively cooperates with international institutions in the areas of drug and addiction, with the European Commission, the Horizontal Group Drugs, the European Monitoring Centre for Drugs and Addiction and the Pompidou-Group at the Council of Europe being the most important partners. Bilateral cooperation with regard to drugs and addiction took place with Poland (twinning project, exchange on the program FreD) and with France (conference on cannabis).

### **1.3.4 Impact of policies and strategies**

In 2004, the Federal Government reacted to the significant increase of the consumption of sweet mixed drinks containing spirits ("alcopops") with the introduction of a surtax to noticeably increase the price of these beverages. The Federal Centre for Health Education conducted a representative survey on the development of alcohol consumption among 12- to 25-year-olds between March and April 2005 placing the consumption of alcopops at the centre of the study. The goal of the survey was to explore the effects of the "Law on Alcopops". The now available results show that both consumption of alcopops and overall consumption of alcohol have decreased (Christiansen, von Rüden & Töppich, 2005). At regional-level, similar results were found by a study carried out in Hamburg (Baumgärtner 2006). The conception of this survey as a naturalistic study does not support causal connections since there is no control group. However, more than 60% of the teenagers stated that they reduced their alcohol consumption because beverages were "too expensive".

The alcohol industry reacted to the political measures by introducing mixed drinks on the basis of beer and wine. The effects of this development on overall consumption need to be monitored over the next years.

## **1.4 Budgets and public expenditure**

Funding is strongly determined by the federal structure of Germany's system of organization (see chapter 1.1.1) and the principle of subsidiarity which have led to a complex system of responsibilities of Bund, Laender, municipalities and social insurance with respect to funding, administration and execution of tasks. Data on the budgets allocated by the Laender and municipalities to drug and addiction problems are currently not collected across the board due to limited comparability. Therefore, only the budgets of the Federal Ministry of Health, which is mainly concerned with national representation and framework legislation, can be presented in the following. For this reason, important areas of expenditure cannot be included in this report. The figures presented in the following can therefore only fall short of giving a complete picture of all the financial resources allocated to drugs and addiction issues.

The work of outpatient addiction facilities is largely funded by the municipalities and Laender. In 2005, their budget was composed as follows: municipalities 54.2% (2004: 5.0%), Land 21.6% (2004: 24.2%), Federal Government 0.1% (2004: 1.6%; only demonstration

programs), pension and health insurance funds 7.2% (2004: 8.2%), health contribution by clients 1.2% (2004: 1.0%), 0.7% employment agency (2004: 1.5); own funds of the facilities 8.0% (2004: 2.6%) and others 8.4% (2004: 12.9%) (Strobl et al. 2006a).

The Laender also finance other segments of addiction help. The following example serve to illustrate which approaches and funding channels are used. However, for the above mentioned reasons, it is currently not possible to give a complete, let alone representative overview of the financial resources allocated by the Laender to the area of drugs and addiction.

The Land Baden-Württemberg for example, finances the positions of the commissioners for addiction prophylaxis and the communal drug commissioners (Ministerium für Arbeit und Soziales, Baden-Württemberg, personal communication).

In the reporting year, budget constraints of some Laender resulted in an even more critical evaluation of help offers with regard to content-related orientation, use of offers and cost structures. The results of this evaluation have indeed led to a reduction of offers for example in outpatient, non-medical care but also of the financial support lent to self-help groups (Ärztezeitung, 12.4.2006).

Federal expenditure for “measures undertaken in the area of drug abuse“ was at 14 million € in 2005 (2004: 13.5 M €). The sum was split up as follows: 6.7 million € (2004: 6.7 M €) for educational measures, 1.0 million € for central facilities, 0.7 million € (2004: 0.7 M €; 2003: 0.5 M €) for the national information centre, 4.5 million € (2004: 4.1 M €) for demonstration programs and 1.0 million € for research and development.

Outpatient and inpatient rehabilitation which aims at “restoring earning capacity“ is funded by the statutory pension insurance funds. The most recent statistical data are available for the year 2004 in which expenditure by the statutory pension insurers for rehabilitation and other services with regard to addiction (alcohol, pharmaceuticals, drugs) was at 524.6 million €, which was slightly under the figure for the previous year (2003: 527.0; 2002: 493.5; 2001:478.9). Funding for inpatient services was declining to stable (2004: 409.6; 2003: 415.2; 2002: 389.0; 2001: 379.2), transitional payments (2004: 77.1; 2003: 78.8; 2002: 77.9; 2001: 75.9) and other services (2004: 11.0; 2003: 10.8; 2002: 9.9; 2001: 9.3). As opposed to this, funding of outpatient services continued to increase considerably (2004: 26.9; 2003: 22.2; 2002: 16.7; 2001: 14.5). Based on the portion of drug and poly-drug users in the total number of patients in rehabilitation (2004: 26.6%), the estimate for the portion of the budget allocated to this group of persons is about 140 million €.

Apart from these funds which were directly allocated to addicts in therapy, the German Pension Insurance (Bund/National) has made 0.7 million € available to regional self-help organizations. Funding for the member organisations of the German Head Office for Dependence Matters amounted to 1.3 million € which were used for the technical and organisational support of after care and self-help (Die Drogenbeauftragte der Bundesregierung, 2006a).

## **1.5 Social and cultural context**

In the reporting year, public discussion was dominated by the topics economy, unemployment, health and fiscal policy as well as pensions. Addiction and in particular illicit drugs were much less debated as a topic in public discussion and in the press than in previous years. Cannabis however – a substance which has started to concern society as a whole – received the widest interest.

### **Public opinion on drug-related questions**

No new studies were published in the reporting period.

### **Attitude towards drugs and drug users**

As part of a school survey conducted in Hamburg, also data on the “image“ of various substances were collected and evaluated in three dimensions to estimate future developments of consumption behaviour. The most recent data collection of the year 2005 shows, in comparison with the previous year, a significant reduction of positive ratings for amphetamines, mushrooms, cocaine and LSD in all three dimensions, for cannabis in two dimensions and for ecstasy and tobacco in one dimension. The image of alcohol has remained unchanged. Following the logic of this approach, prevalences of consumption are expected to decline in the following years (Baumgärtner, 2006). The drug affinity study carried out by the BZgA also shows a declining readiness to use amphetamines and ecstasy in the long-term trend (BZgA, 2004).

### **Initiatives in parliament and civil society**

Members of parliament actively participated in the discussion on current topics (e.g. diamorphine-based therapy, implementation of substitution therapy, driving under the influence of cannabis, spread of methamphetamine). However, besides the activities deployed by the Federal Government, no specific initiatives were launched.

Based on the principle of subsidiarity, the German Head Office for Dependence Matters plays an important role as the umbrella organisation of the charity organisations in German society. As part of the project “Bridging the Gap“, it currently works together with partners from 30 European countries and international partner organizations to set up a network for alcohol policy and to develop a comprehensive strategy to reduce alcohol-induced health damages in Europe. The project is funded by the European Union. Non-governmental, large-scale initiatives with regard to drugs and addiction are currently unknown.

### **Media representations**

Addiction and in particular illicit drugs were much less debated in the public discussion and in the press than in previous years. Nevertheless, response to the EMCDA drug report was stronger than in the years before.

## 2 Drug use in the population

### 2.1 Overview

#### Aspects of drug use

Experience with drugs means, in many cases, a one-off or only infrequent use of drugs. After the drug was 'tried', its use is, in most cases, completely discontinued in the course of time. Therefore, drug use related to the lifetime is only a rough indicator of the extent of drug use at a given point of time. The figures include people reporting experience with drugs sometimes dating back 20 or 30 years.

Therefore, drug use in the 12 months (12-month-prevalence) prior to the survey is a better indicator of current user numbers. An even more up-to-date picture is provided by surveys on drug use 30 days prior to the survey. The clear difference which is shown in the total population between lifetime-prevalence, 12-month-prevalence and 30-day-prevalence identifies experimental or short-term use as the most common pattern of consumption.

#### Data sources

In Germany, epidemiological sources for drug consumption data are mainly available through regular national representative surveys and prevalence studies which are complemented by regional studies and research surveys.

The Drug Affinity Study (DAS) carried out by the Federal Centre for Health Education investigates on a long-term basis the consumption, the motives for consumption and the situational conditions with regard to tobacco, alcohol and illegal addictive substances among teenagers and young adults (age group 12-25 years). The study has been conducted since 1973 in a 3-4 year-rhythm. Initially designed as a personal interview, it has been carried out as a telephone interview (CATI) with a sample of 3000 interviewees. The last survey dates back to the year 2004 (BZgA 2004).

The nationwide Epidemiological Survey on Addiction (ESA) is a paper-based study on the use of psychotropic substances, their effects and assessment as well as on other basic data. Since 1980, the study has been conducted every 3 to 4 years on the basis of a representative sample of the resident population in the age group from 18 to 59 years. Funded by the BMGS, the IFT has conducted the survey since 1990. The sample taken in each survey comprised about 8,000 persons since 1995. Some Laender have provided additional funding for a regional expansion of the sample to create a statistical basis which is sufficient also for regional evaluations. The last survey took place in 2003 (Kraus & Augustin, 2005).

In 2003, the Laender Bavaria, Berlin, Brandenburg, Hesse, Mecklenburg-West Pomerania and Thuringia participated for the first time in ESPAD, the European School Survey Project on the Use of Alcohol and Other Drugs, which had been initiated by the Pompidou Group at the Council of Europe. The survey which is coordinated by CAN, Stockholm, uses common

European-wide standards for data collection. It is carried out in the age group from 15 to 16 years in the respective school grades. In the most recent survey, the sample comprised 11,043 school children from 556 classes at 515 schools (Kraus et al. 2004a). The next survey will probably be conducted in the same Laender in 2007.

As part of the HBSC study on the health behavior of school children, four Laender (North Rhine-Westphalia, Berlin, Saxony, Hesse) participated in a WHO survey on the health behavior of school children. The survey 2001/2002 also included data on the use of illegal drugs. The most recent data are available for the year 2002 (Hurrelmann et al. 2003).

Supported by the Federal Ministry for Health, the National Focal Point held a symposium with representatives of epidemiological studies on drug use in Germany. Apart from an exchange of opinion, the development of a standard care report was a central topic of the symposium. A synopsis of the items evaluated by the various studies is already available; the core report is in development.

In addition to these surveys which are conducted on a regular basis, various studies are commissioned by the Laender and carried out irregularly at a regional and local level focusing among others on the extent and effects of the consumption of a specific substance, consumption patterns or characteristics of a specific group of users.

As part of the Local Monitoring System (LMS), a survey was conducted for the second time under the title "Hamburger Schulbus" among 14-18 year old students at schools providing general education or at vocational schools in Hamburg. Out of the almost 3,000 collected data sets, 1,147 were used for evaluation. Questions were related to the consumption of licit and illicit drugs as well as family and school situation, satisfaction with life, stress and assessment of various psychotropic substances (Baumgärtner, 2006).

This report presents the respective results of the most recent Drug Affinity Study and the Federal Study as well as relevant partial results of other mentioned sources. Insofar as no new data were published in the period under review, this report confines itself to presenting only a few basic data. Further details can be found in earlier REITOX-Reports.

When interpreting the results of population surveys, it has to be taken into account that the figures are not insignificantly underestimated given the fact that in particular persons with a high consumption of illegal drugs are more difficult to reach by such studies and often have a tendency to underreport the frequency and quantity of their consumption. Therefore, especially in the case of heroin addicts, estimation methods tapping other data sources (e.g. police files) are used. In addition to quantitative data, also qualitative studies, if available, were taken into account.

## 2.2 Drug use in the general population

### 2.2.1 Overview of the use of various drugs

Table 1 presents a minimal estimate of the prevalence of the use of illicit drugs in Germany. The estimate is based on ESA- and DAS-results from the years 2003 and 2004. The data were already presented in detail in the REITOX-Report 2004. Details are contained in online standard table 1 (table 1).

**Table 1: Prevalence of illicit drugs in Germany**

Source	Age		Population	Absolute numbers
<b>Lifetime-Prevalence</b>				
DAS '04	12-17	15.1%	5,684,349	892,000
ESA '03	18-59	25.2%	47,140,383	11,879,000
DAS '04 + ESA '03	12-59	24.2%	52,824,732	12,772,000
<b>12 months prevalence</b>				
DAS '04	12-17	10.4%	5,684,349	591,000
ESA '03	18-59	7.3%	47,140,383	3,441,000
DAS '04 + ESA '03	12-59	7.6%	52,824,732	4,032,000
<b>30 days prevalence</b>				
DAS '04	12-17	2.5%	5,684,349	892,000
ESS '03	18-59	3.9%	47,197,636	1,180,000
DAS '04 + ESA '03	12-59	3.7%	52,910,625	1,983,000

Source: DAS 2004 (BZgA 2004a); ESA 2003 (Kraus, Augustin & Orth 2005)  
 Statistisches Bundesamt 2005 (as of 31.12.2004),  
 DAS: „recent use“ instead of 30 day prevalence, Absolute: Figures rounded

A representative telephone survey conducted in Schleswig-Holstein (S-H) (N=3.500) among 14-year-olds found substantially lower consumption prevalences in the 12-month-category than the national surveys: Cannabis SH: 4%, national: 7%; other illegal drugs SH: 0.3%, national: 2%. The use of telephone interviews in lieu of paper-based questionnaires may partially account for these differences. The readiness to admit the use of illicit substances is generally lower in a telephone survey than in a paper-based one (Kraus, Bauernfeind & Bühringer, 1998). The comparative figures for the age group 12 to 25 years were also lower than the ones found by the Drug Affinity Study conducted by the BZgA: Cannabis SH: 8%, national: 13%; other illicit drugs SH: 0.3%, national: 2%. As both surveys worked with telephone interviews, the divergences can not be explained by differences in methodological approaches (Raschke, Buth & Kalke, 2005).

### 2.2.2 Comparison of the use of individual drugs

There are no new data available for the prevalence of the use of individual drugs. The most important data on the prevalence of experience with the individual substances in the lifetime category for the two age groups are summarized once again in table 2. Further details can be found in earlier REITOX-Reports (table 2).

**Table 2: Lifetime prevalence of illicit drugs**

Drug	12-17 years DAS %	18-59 years ESA %	Persons at the age of 12 to 59 with drug experience N
Amphetamines	0.7	3.4	1,645,000
Cannabis	15.2	24.5	12,413,000
Ecstasy	1.0	2.5	1,190,000
LSD	< 0.5	2.5	1,180,000
Cocaine	< 0.5	3.1	1,463,000
Mushrooms	0.8	2.7	1,320,000
Volatile substances	0.9	1.5	748,000
Drugs other than cannabis	--	7.1	3,351,000

Source: DAS 2004 (BZgA, 20054; ESA, 2003 (Kraus, Augustin & Orth, 2005)

To estimate the prevalence of cocaine consumption in individual cities and regions of Germany, Sörgel and colleagues measured the concentration of metabolic products of cocaine in rivers for whose catchment areas population figures were known. The method was developed in Italy and used for the first time (Zuccato et al., 2005). The authors estimate that about 11 tons pure cocaine are consumed per year in the Rhine area in Germany with a population of 38.5 million inhabitants. This figure is an indication that the prevalences found by the surveys are clearly underreported. However, since reliable figures on average consumption per user are missing, the actual extent of underreporting cannot be reliably calculated (Spiegel online, 11.11.2005). Methamphetamines are generally not widely spread in Germany. They are mainly to be found in Bavaria and Saxony and in the border area with the Czech Republic (Süddeutsche Zeitung, 17.4.2006).

### 2.3 Drug use in the school and young population

#### Consumption of legal psychotropic substances

In the year 2005, school children and teachers were surveyed for the second time on drug use ("Schulbus"). The comparison between 2004 and 2005 reveals some significant changes in the age group 14 to 18 years (Baumgärtner, 2004, 2005). The most striking decline in consumption frequency with regard to legal substances was found for alcopos. At the same time however, beer consumption among male students went up which is an indication that apart from the decline of overall alcohol consumption there was also a shift in preferences for alcoholic beverages.

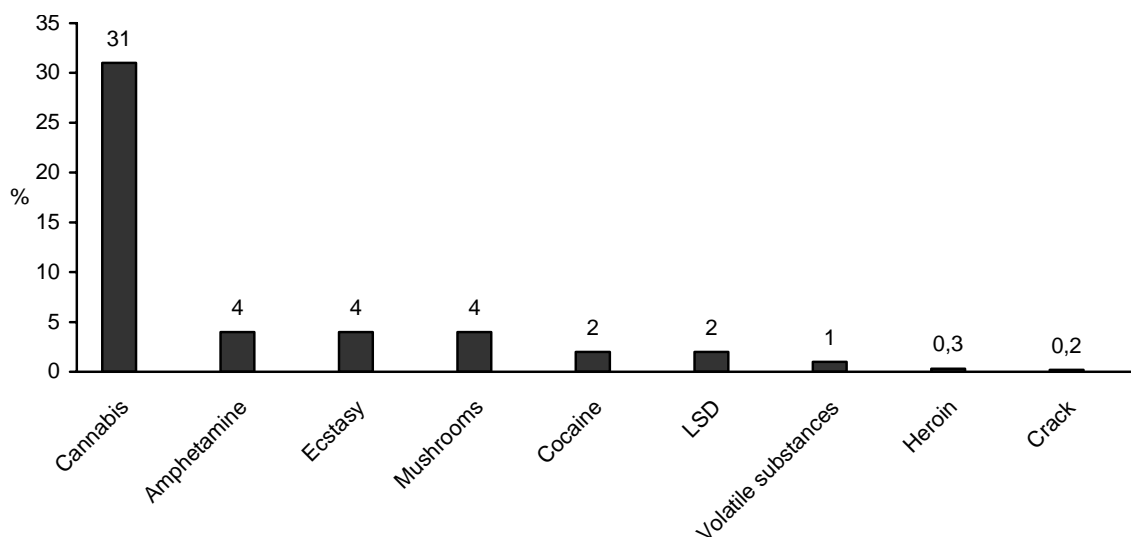
While the quota of smokers remained unchanged, the average quantity of smoked cigarettes increased from 7.3 to 8.1 among girls. The figures for boys, by comparison, fell slightly back from 12.7 to 12.5. More girls than boys from this age group consumed alcohol or tobacco in the last 30 days. Hereby it needs to be taken into account that, especially in this age group, girls above 14 years are somewhat ahead in their development and go out and meet more

with peers than boys. These frame conditions increase the likelihood of consuming alcohol and tobacco. The same comparison in 20-year-olds would probably give a more favourable picture for the female interviewees, since the mentioned lead in development has levelled off by that age. Nevertheless, the prevalences found speak at least of an increase of tobacco consumption among the girls of this age group.

A telephone follow-up survey conducted by the BZgA among 3,600 young people aged between 12 and 19 years in 2003 and 2005 found a slight reduction of the quota of smokers from 28% to 26%. However, the reduction occurred exclusively among “occasional” smokers and here mainly among girls. The portion of “permanent” smokers remained unchanged while the portion of never smokers increased both in girls and boys (BZgA, 2006).

### Consumption of individual drugs

Experience with cannabis is most common, followed by mushrooms, amphetamines and ecstasy with markedly lower prevalences. Experience with all other drugs is even less common. Figure 1 shows the situation in the age group 12 to 25 years for the whole of Germany for 2004. The data were already presented last year.



**Figure 1: Lifetime consumption of illicit drugs in the age group 12-25 years in Germany in 2004**

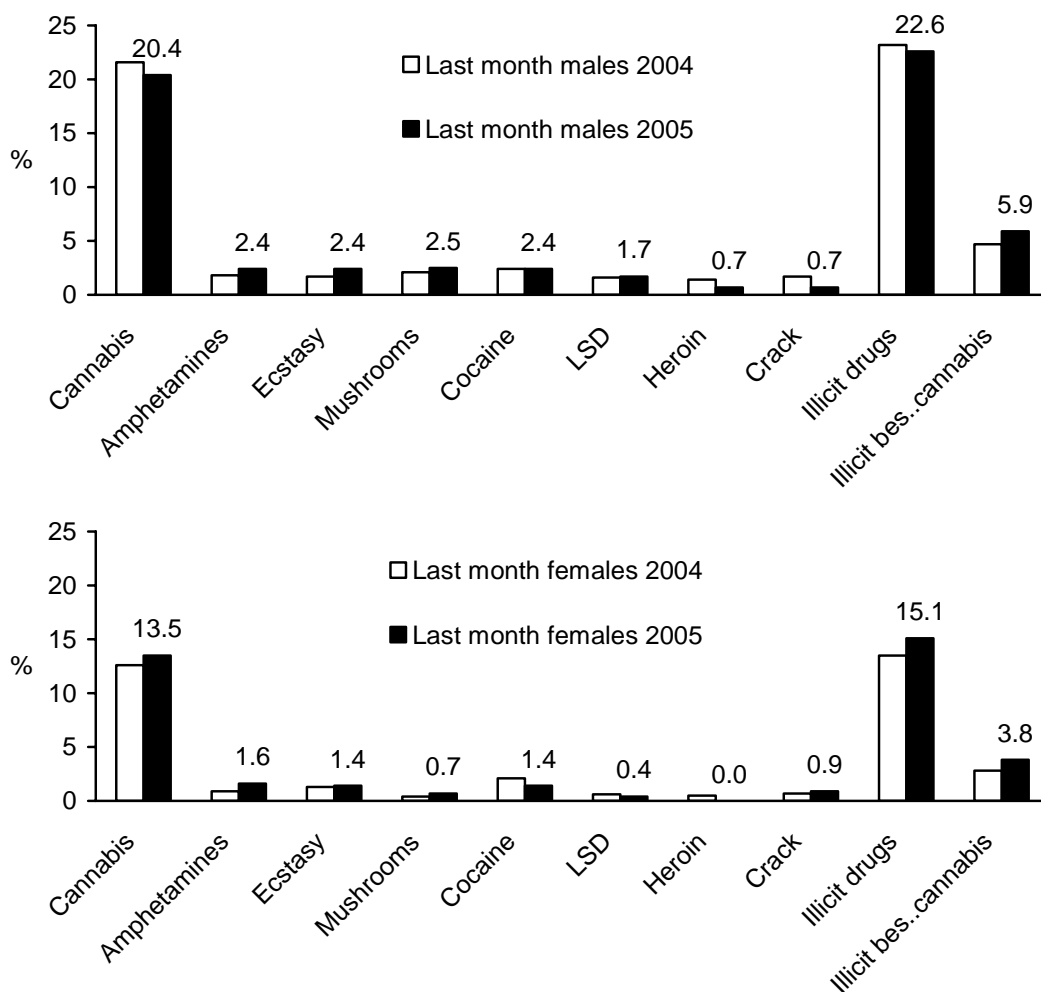
Source: BZgA (2004)

The comparison between the two school surveys conducted in Hamburg (Baumgärtner, 2004, 2005) shows a similar picture for the age group 14-18 years. The most recent results found can however give indications of a change in the consumption behaviour. Prevalences of cannabis consumption among male pupils in the lifetime category (2004: 45.4%; 2005: 41.3%) and in the last 30 days (2004: 21.6%; 2005: 20.4%) are slightly lower than the figures found in the previous year. Prevalences in girls have slightly increased (lifetime: 2004: 34.7%; 2005: 36.6%; last month 2004: 12.6, 2005: 13.5%).

Differences between genders have tended to level off. However, all changes are – apart from the decline in lifetime alcohol consumption among male interviewees – statistically not significant.



As for consumption in the last 30 days prevalences found between 2004 and 2005 didn't show any significant changes for Hamburg either. But in line with the trend, figures also went up in girls and down in boys (figure 2).



**Figure 2: Consumption of illicit substances in the last month in men and women between 14 and 18 years in Hamburg between 2004 and 2005**

Source: Baumgärtner (2005, 2006)

14.9% of the boys and 8.2% of the girls were classified as habitual consumers, 6.6% and 3.6% respectively as occasional consumers. The portion of abstainers was at 58.8% or 63.3% respectively. Also here, no significant changes were found between 2004 and 2005 (Baumgärtner, 2006).

### Summary and trends

Tables 3 and 4 summarize the results of the most recent study on the prevalence of consumption of illicit drugs and cannabis respectively. When comparing the figures, it needs to be taken into account that the age groups interviewed were not identical. It also needs to be taken into account that ESPAD and HBSC have taken place in 6 and respectively 4 of the 16 Länder which might have led to distortions.

While consumption in the middle age group provides comparable figures ranging from 32-42%, the prevalence estimates in the 30-day-category diverge considerably. Although the ESPAD-study included both urban and rural parts of Germany, figures found by the Schulbus-study which was conducted in one metropolitan area, are quite similar for the category current consumption (table 3).

**Table 3: Prevalences of consumption of illicit drugs among teenagers, different studies**

Study	Year conducted	Age group (years)	Substance	Region	Period		
					30 days	12 months	Lifetime
BZgA	2004	12-15	Illicit drugs	National	1.3%	5.5%	7.8%
BZgA	2004	16-17	Illicit drugs	National	5.2%	20.8%	32.2%
BZgA	2004	18-19	Illicit drugs	National	6.0%	20.0%	36.0%
ESPAD	2003	15-16	Illicit drugs	6 Länder	15.0%	26.0%	33.0%
Schulbus	2004	14-18	Illicit drugs	Hamburg	18.5%		41.6%
Schulbus	2005	14-18	Illicit drugs	Hamburg	19.0%		40.5%

Note: BZgA ("present consumption" = 30 days), Schulbus ("current" = 30 days)  
 ESPAD interviewed pupils from grades 9 and 10, the focus therefore being on the 15- to 16-year-olds, but also a few pupils aged 14 or 17 respectively took part.

Some of the differences found between the prevalence estimates of the BZgA and other sources can be attributable to the method of telephone interviews used by the BZgA. In comparison to paper-based questionnaires, they tend to lead to denial of socially not accepted behavior, which increases in relation to the proximity of the interview. On the other hand, school surveys can also create the effect of dissimulation, i.e. they artificially increase prevalences when interviewees exchange opinions before filling out the questionnaires. Furthermore, formulations used by the surveys are not identical. Interviewees might for example interpret "present" consumption as a smaller period of time than 30 days.

Prevalence of cannabis consumption does not substantially differ from the figures on overall consumption of illicit drugs. This may be explained by the fact that practically every user of illicit drugs has started with cannabis and that this substance continues to be used also when other substances are added. What has been said above about the systematic differences in the estimates with regard to the different sources also applies here (table 4).

**Table 4: Prevalences of cannabis consumption among teenagers, different studies**

Study	Year conducted	Age group (years)	Substance	Region	Period		
					30 days	12 months	Lifetime
HBSC	2002	M=15.7	Cannabis	4 Länder		18.0%	24.0%
BZgA	2004	12-15	Cannabis	National	1.0%	5.0%	7.0%
BZgA	2004	16-17	Cannabis	National	5.0%	15.0%	32.0%
BZgA	2004	18-19	Cannabis	National	6.0%	19.0%	36.0%
ESPAD	2003	15-16	Cannabis	6 Länder		24.0%	31.0%
Schulbus	2004	14-18	Cannabis	Hamburg	17.3%		40.3%
Schulbus	2005	14-18	Cannabis	Hamburg	17.1%		39.1%

Note: BZgA ("present consumption" = 30 days), Schulbus ("current" = 30 days)  
 ESPAD interviewed pupils from grades 9 and 10, the focus therefore being on the 15- to 16-year-olds, but also a few pupils aged 14 or 17 respectively took part.

A close connection between regular use of licit addictive substances and cannabis consumption was also found by the school survey carried out in Hamburg. 37% of the habitual smokers used cannabis in the last month, but only 26.2% of the occasional smokers and only 9% of the experimental smokers. The picture is similar for alcohol (Baumgärtner, 2006). Klein (2006) found a considerable interdependence of consumption of various psychotropic substances in 11-16-year-olds. About one third of the heavy alcohol or tobacco users also consumed cannabis. The interdependence is stronger for female users than for the male ones.

Details on population surveys are available online in standard table 2, youth surveys can be found in standard table 30.

## 2.4 Drug use among specific groups

### Migrants

The persistently difficult situation of Russian speaking drug addicts in Germany was underlined once more by the results of a survey conducted by 10 experts from the Hamburg drug aid system. They report about a strikingly early initiation of drug use, excessive consumption and often very risky consumption patterns like in particular needle and utensil sharing connected with a high infection risk for HIV and HCV (Haasen, Rangué, Blätter & Reimer, 2005).

## **3 Prevention**

### **3.1 Overview**

The importance of addiction prevention measures is referred to more and more often at the political level and in the media. The continuing discussion on advertising bans, smoke free rooms and surtaxes for licit addictive substances has certainly contributed to a greater problem awareness. Prevention is a cornerstone of the drug and addiction policy of the Federal Government (cf. 1.1).

After life-skill programs have been developed and largely implemented as part of the universal prevention strategy, prevention measures are now increasingly aiming at risk groups or risk users respectively. The focus is on behavioural prevention measures comprising promotion of risk skills, problem solving strategies, self-efficiency experiences and self-confidence. Legal regulations and agreements at national and Laender level set the frame for relational prevention measures changing the structures also in the area of licit substances.

#### **Focuses of prevention**

The Federal Government and the Laender continue to set their focus on curbing addiction on licit substances, especially on reducing consumption of tobacco and alcohol. At the same time, the view is expanded to the group of women aged over 50 years strengthening the importance of prevention.

Prevention and information measures of early intervention are increasingly used in cannabis-related disorders to counteract risky consumption patterns and early initiation of drug use.

The Drug and Addiction Council which is to flank and advance the implementation of the Action Plan Drugs and Addiction of the Drug Commissioner of the Federal Government, has formulated a series of targets which have prevention and early intervention for subject (cf. 1.3.3). Currently, the expert working group 'addiction prevention' advises the Drug and Addiction Council on the resources and measures to use to reach the set targets in the areas of tobacco, alcohol and cannabis.

#### **Cooperation, transfer and evaluation**

Preventive measures are implemented at local, regional and national level. The drug prevention agencies established in the Laender play an important role for the cooperation at and between national, regional and local level as well as for intersectoral coordination. In the meantime improvements have been made in pooling resources and realising joint measures.

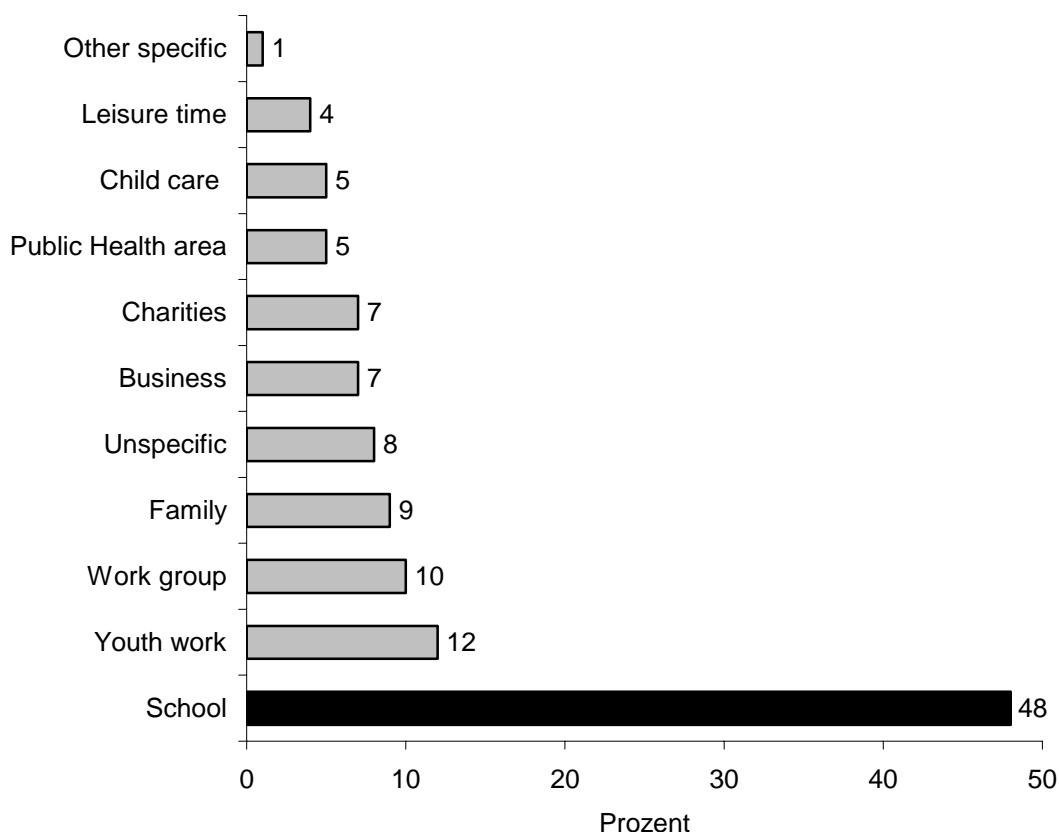
As a prompt transfer of knowledge of documented and evaluated measures is the precondition for quality-assured planning of measures undertaken by various players, a large number of institutions working in addiction prevention, has started to document their measures in a uniform way through the documentation system since 1 January 2005. The system was developed by the BZgA and the Laender prevention coordinators. A first

evaluation on over 20,000 measures undertaken in 15 Laender will be available in the second half of the year. First results have been included in this report.

The expert portal “PrevNet“ ([www.prevnet.de](http://www.prevnet.de)) serves to network all players in the field of prevention and to facilitate access to information and material (cf. 1.3.1). Through the programs supported both at national and Laender level, the Federal Centre for Health Education has created a better basis for quality reporting on addiction prevention in Germany. Prevnet data have also been integrated into this report.

### 3.2 Universal prevention

A first evaluation of the prevention measures documented since the beginning of 2005 through dot.sys in Germany shows the distribution of measures by work fields and settings. Accounting for almost half of the prevention measures carried out in Germany, schools continue to be an important setting for measures of drug prevention. Following are youth work, working groups and family (Figure 3).



**Figure 3: Settings for prevention measures**

Source: Dot.sys data evaluation, 2005

### 3.2.1 Kindergarten/day care centre:

In child and youth protection, addiction prevention ranks very high, being regarded as an integral part of legal tasks. In numerous Laender, work targets of regional child and youth are to

- improve living circumstances of children and teenagers through supporting measures
- to promote skills enabling children to take responsibility for shaping their own life
- increase personal competence and social integration
- strengthen life skill competences and
- reduce risk factors ([www.jugendschutz.de](http://www.jugendschutz.de), 07.07.06)

Only 4% of the measures documented by Dot.sys were carried out in kindergartens or day care centres for children. Out of these, the program "Toy-free kindergarten" is the most common one (project description in the EDDRA-data base: <http://eddra.emcdda.europa.eu>).

„Papilio“ is the name of a new project which is mainly carried out in Bavaria, Hesse, Mecklenburg-West Pomerania and Thuringia (Reports of the Land drug prevention coordinators, 2005/6):

<b>Project title</b>	<b>Papilio (siehe <a href="http://www.papilio.de">www.papilio.de</a>)</b>
<b>Target group</b>	Educational staff of day care centres for 4 – 7 year old children and their parents
<b>Project goals</b>	Counteract risk factors in child development and promote protection and resilience factors
<b>Activities</b>	<p>Three dimensional approach: Educational staff – children – parents</p> <p>Educational staff are the central multipliers of the program. They continue to train their own behavior to promote child development, they carry out Papilio-measures with the children and integrate parents. Child-oriented measures are:</p> <ol style="list-style-type: none"> <li>1. Spielzeug-macht-Ferien Tag (Our toys go on holiday) (children learn to keep themselves busy, and play creatively without conventional play material)</li> <li>2. Meins-deins-unser-Spiel (My-your-our-game) (to increase social competence)</li> <li>3. Paola und die Kistenkobelde (A story book which teaches how to deal with feelings like anger, sorrow, fear and joy).</li> </ol>

### 3.2.2 School

Schools remain the most important setting of drug prevention in Germany. 48% of the documented measures take place in schools, 68% outside of schools (e.g. youth work, companies, clubs, associations, churches).

Measures were carried out with teachers, social workers of schools and also with pupils. Almost 60% of all material (mainly brochures and flyers), which is documented in the data base of the drug prevention network PrevNet is school-related ([www.prevnet.de](http://www.prevnet.de)). Often, drug prevention at schools begins with the training of teachers. Additionally, many schools offer working groups for teachers, pupils' representatives as well as parents. In 2005, prevention

activities were mainly related to licit substances with alcohol ranking first (58%), followed by tobacco (55%) and cannabis (33%) (Dot.sys, 2005, multiple entries possible)

Above and beyond “conveying information and forming critical opinion“, school measures were mainly aimed at “promoting general life-skills (58%) and forming values“ (33%). They were accompanied by strategies of early recognition and early intervention (see following chapter). Awareness in schools is growing (25%) that addiction prevention needs to be structurally rooted to be effective (25%). The whole school, headmaster and teachers, need to look into the matter and decide how addiction prevention can be integrated into school day routine.

After an evaluation of 101 studies on the effectiveness of prevention measures, Soellner und Kleiber (2005) come to the conclusion that useable evidence is available for programs in the school setting. However, specific approaches regarding prevention of cannabis consumption in schools do not yet exist.

### 3.2.3 Family

The child makes his first fundamental and ‘imprinting’ experiences in his family. Here, the basis for his later development is laid, here the child sees how his mother and father deal with addictive substances.

8% of the measures documented through Dot.sys were aimed at the family setting. Their central focus lies on parental work, i.e. integration of parents into prevention projects carried out in schools or kindergartens like for example the “toy-free kindergarten“ (for detailed project description see EDDRA data base <http://eddra.emcdda.europa.eu/>) or into life-skill programs mainly in form of parents’ evenings in schools. Apart from providing basic information on addiction and substances through brochures and books, parental work is also about sensitizing parents for protection and risk factors in the family. It offers help for orientation and support in child raising with a view to integrating parents more fully into prevention activities ([www.starke-eltern.de](http://www.starke-eltern.de), 10.07.06).

Examples of projects promoting parental work are „Denk mal“ (“Think“) developed in Bremen for parents’ evenings and “Parents meet parents“ which trains parents in Hesse to become multipliers in drug prevention.

Further targets of the Hessian project are to:

- stimulate exchange of experience and intensify social networks
- strengthen parents in their child raising skills
- reduce unsureness
- reach parents who seldomly take part in parents’ evenings

To promote child raising competence, prevention elements are woven into parents courses offered outside the school setting. One example is the Hamburg project “Kompass-Erziehungstraining (“compass for child raising“) which set itself the following targets:

- strengthening of child raising skills (taking into account aspects of addiction prevention)
- Integration of successful educational behaviour into everyday family routine

### **3.2.4 Community**

As a direct living space for adults, teenagers and children, local communities represent a suitable basis for the implementation of comprehensive prevention activities and projects. However, up to now, there is only little tradition of prevention strategies carried out at municipal level. On the initiative of the Drug Commissioner of the Federal Government, the BZgA has been organizing the competition “Model strategies of municipal addiction prevention” since 2001 in order to underline the importance of communities in drug prevention.

In June 2005, all German cities, municipalities and districts were asked to present their concepts on the subject “alcohol prevention at local level“. Apart from approaches on behavioural prevention, also structural measures are expected like for example stronger control of compliance with the rules on the sale of alcoholic drinks to children and teenagers ([www.kommunale-suchtpraevention.de](http://www.kommunale-suchtpraevention.de)).

### **3.2.5 Other settings**

#### **Sports clubs**

More than 70% of the children and teenagers in Germany are - for a shorter or longer period of time- member of a sports club, the most important leisure time area of this age group. The BZgA has therefore made framework agreements with the largest sports club associations to define cooperation in drug prevention as part of children and youth work. The BZgA also uses large-scale sports events to transport messages of addiction prevention into the sports clubs. One highlight was the cooperation with the World Cup Organizing Committee in 2006. Through the joint campaign, 22,000 local football clubs were reached in the running up to the Football World Cup in 2006.

#### **Driving schools**

Developed in the year 2000 for driving schools in Saxony-Anhalt, the “PEER-Project“ was implemented in a further nine Laender in the same or a somewhat modified form over the following years. The basic idea of the project is to have qualified peers (young people of the same age) address the issue of “driving under the influence of alcohol and drugs” in the theoretical training at driving schools (details can be found in earlier REITOX-reports). According to a final evaluation report on the project carried out in seven Laender, the overall feedback was positive. Both driving school instructors who traditionally have problems with addressing the subject in the theoretical part of their training and the learners who appreciated the opportunity of talking openly about risks and consequences of drunk and drugged driving with peers of their age, generally rated the project positively in the survey.



The project is currently tested in 11 European countries with EU funding. It is scientifically accompanied by MISTEL/SPI Research in Magdeburg (Heckmann et al., 2006).

A variation of “PEER“ is the prevention project “Prästo“ carried out in Lower Saxony. In a two-day course, 10 peers were trained to go into 50 driving schools and reach about 1,000 learners. An expansion of the project to other regions is currently under way. Yearly meetings are held for the peers to exchange experience and further develop the project. (Niedersächsisches Ministerium für Soziales, Frauen und Gesundheit, 2006, personal communication).

### **3.3 Selective/ indicative prevention**

In Germany, target group-specific addiction prevention mainly happens in the leisure time sector, but increasingly also in schools and in (Internet-based) counselling work. Accompanied by strategies of early recognition and intervention, the measures are to teach young people how to critically approach psychoactive substances (risk competence). Multipliers and parents are shown how to deal with drug-using young people. About 5,000 entries (23%) in Dot.sys refer to the areas youth work, leisure time and sports clubs.

#### **3.3.1 The organized leisure time sector**

In the organized leisure time sector, clubs have joined forces in many Laender to promote legal, educational and structural youth protection with a focus on addiction prevention. Measures aim primarily at gearing leisure-time offers to the needs and problems of young people and at providing training for the staff of youth centres in dealing with young people displaying conspicuous behaviour (Schmidt 2004).

The further training seminar on motivational short intervention in drug-using teenagers ‘MOVE’ has meanwhile been implemented in many Laender (for detailed project description see EDDRA-data base, <http://eddra.emcdda.europa.int>). Since the start of MOVE in 2002, about 2000 contact persons of teenagers with drug problems from youth care and other school-external work fields have received training in motivational talk in North Rhine-Westphalia. However, there is a call for stronger networking and integration between youth and drug aid (Farke et al., 2003).

#### **3.3.2 The non-organized leisure-time sector**

In the non-organized leisure-time sector, drug prevention – and especially measures relating to night life – remains to represent an exception. However, party projects based on scene initiatives are establishing themselves to an increasing extent, receiving also political support. Examples of party projects can be found under [www.party-pack.de](http://www.party-pack.de) (Cologne), [www.drugscouts.de](http://www.drugscouts.de) (Leipzig), [www.drogen-und-du.de](http://www.drogen-und-du.de) (Berlin), [www.party-project.de](http://www.party-project.de) (Bremen), [www.chill-out.de](http://www.chill-out.de) (Aachen), [www.alice-project.de](http://www.alice-project.de) (Frankfurt), [www.drobs-hannover.de](http://www.drobs-hannover.de) (Hannover).

A very specific project on this subject was reported from Hamburg (reports of the Land coordinators 2005/6):

<b>Project title</b>	<b>Prevention Project DOM – streetwork at the Hamburg fairground DOM</b>
<b>Target group</b>	Teenagers and young adults who regularly meet at the ride “Dancer“ during fairground opening times
<b>Project goals</b>	Early intervention in alcohol and drug use
<b>Activities</b>	Teenagers and young adults are approached at their meeting point and provided with counselling, leisure-time offers and, if required, also day-structuring offers

### 3.3.3 Risk families

In Germany, more than 2.5 million children aged under 18 years grow up with at least one addicted parent. They have a higher risk of developing addiction and psychological disorders. These children suffer often from cognitive impairments as well as social, psychological and physical stress.

The Drug Commissioner of the Federal Government has called upon the professional help system and self-help groups to integrate these groups more strongly into their work. Politicians and experts at national and Land level concur that the needs and interests of the children of addicted parents need to receive more attention in the future. These children and their families are to be given further support to improve the family situation and especially prevent the later onset of addiction in the children (Die Drogenbeauftragte der Bundesregierung, 2006).

Following are a few examples of projects from the Laender:

Bremen:

<b>Project title</b>	<b>Prevention in children of addicted parents (see PrevNet)</b>
<b>Target group</b>	Children of addicted parents (primary school, 6-10 years)
<b>Goals</b>	Re-stabilizing family systems
<b>Activities</b>	Educational group work (6-8 children)

Hamburg:

<b>Project title</b>	<b>Connect (see PrevNet and detailed project description in the EDDRA data base under <a href="http://EDDRA.EMCDDA.EUROPA.EU">http://EDDRA.EMCDDA.EUROPA.EU</a>)</b>
<b>Target group</b>	Personnel of youth care, kindergartens, schools, medical care
<b>Goals</b>	<ul style="list-style-type: none"> <li>- To increase efficiency of existing help offers for children of addicted parents through integration of help systems</li> <li>- To improve chances of development for children of addicted parents</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>- Stock-taking of the situation in the project region</li> <li>- Continuing education offers</li> <li>- Development of a stable and sustainable network structure</li> <li>- Suggestions for the implementation of the project in other regions of Hamburg</li> </ul>

In Thuringia, children of addicted parents are offered educational experiential measures. By actively dealing with each other and engaging in body-oriented leisure time activities, children are to learn to develop problem coping strategies and psychosocial behavioural skills and to choose for functional equivalents to addictive behaviour ([www.prevnet.de](http://www.prevnet.de), reports of the Land coordinators of addiction prevention 2005/6).

There is relatively little material available for children and teenagers growing up in families with addiction problems. In Rhineland-Palatinate, the book "Leon findet seinen Weg" (Leon makes his way) was published as part of a Land campaign. The book is to illustrate drug use in every day life from the child's perspective and establish a dialogue with children from families with addiction problems ([http://www.dhs.de/newsletter\\_1206e.html](http://www.dhs.de/newsletter_1206e.html), 07.07.06).

### **3.3.4 Other risk groups**

#### **Teenagers and young adults with cannabis problems**

The gap between prevention and therapy in the area of problem cannabis use is getting smaller. Over the last years, traditional drug counselling facilities have increasingly been used also by cannabis users. However, there is no scientific, evaluated therapy concept for this target group yet. A step in this direction was taken by the international multi-central study "INCANT" (International Cannabis Need of Treatment Study) to improve therapy of cannabis users. After the completion of the pilot phase, in which the counselling facility 'Therapieladen' took part, it is now planned to start the main study. The University of Dresden currently works on the development of a therapy program for this target group under the title CANDIS (cf. 5.6).

The goal of the German-Swiss project "Realize it" is to significantly change the consumption behaviour of the participating 15- to 30-year-old cannabis users. It is implemented as a demonstration program in six drug counselling facilities. The program on short intervention in cannabis use is to be tested in the course of the project, evaluated and afterwards systematically integrated into the spectrum of offers provided by drug counselling facilities in Germany and Switzerland (Die Drogenbeauftragte der Bundesregierung, 2006a).

A similar project is the Internet-based program "quit the shit" offering support to stop using cannabis. Two years ago, the Federal Centre for Health Education (BZgA) started the program under [www.drugcom.de](http://www.drugcom.de) (see detailed project description, EDDRA-data base: <http://eddra.emcdda.europa.eu>). Results show that those who made use of the online support to quit using cannabis, still had their average consumption quantity reduced by a third three months after the completion of the program. The number of days on which cannabis was consumed went down by 50%. Because of these positive results and the strong usage of this offer, there is a great demand for "quit the shit" at the drug counselling facilities in Germany. Therefore, the BZgA has offered twelve drug counselling facilities in Germany to use the Internet-based program and take over the counselling of the clients (BZgA personal communication).

Out of the many regional and local activities, the cannabis campaign of the city of Frankfurt “Be.U!” ([www.be-u-online.de](http://www.be-u-online.de)) is mentioned as an example. It is geared to young people, parents and multipliers providing them with general and detailed information, self-tests for users and references to help offers in the region.

### Early intervention against cannabis use in schools

At the beginning of the year 2005, the BZgA provided educational staff teaching grades seven to thirteen with a brochure titled “Cannabis at schools – guidelines, measures, early intervention“. The brochure was distributed across the board and contains suggestions on how to address cannabis use at schools, gives schools ideas for setting up their own rules and advises teachers on how to react adequately to pupils displaying conspicuous behaviour. It also contains suggestions for developing intervention guidelines to be followed in case of non-compliance with set-up rules. Additional material and information on websites as well as contact persons at Land level complement the offer.

Another example of early intervention is the project “Voll im Blick” (“In full view“)

<b>Project title</b>	<b>Voll im Blick (see PrevNet)</b>
<b>Target group</b>	Teachers, headmasters, parents' representatives
<b>Goals</b>	Increase awareness and intervention density with regard to drug-related incidents at school
<b>Activities</b>	Campaign to decrease cannabis use and trafficking at schools; Focus areas: <ul style="list-style-type: none"> <li>- Better recognition and motivation to intervene: posters, various types of material for teachers and parents</li> <li>- Group offers for cannabis users</li> </ul>

The early intervention programs MOVE and FreD presented above were revised and adapted to the school setting (see earlier REITOX-Reports, detailed project description: EDDRA data base, <http://eddra.emcdda.europa.eu> ). In the last year, about 200 teachers and social workers at schools were trained in a three-day-continuing training course on motivational short intervention ([www.ginko-ev.de](http://www.ginko-ev.de), 11.07.06). Originally only conceived for teenagers who came to the attention of police, FreD is meanwhile also used in schools which now can refer drug using pupils to counselling facilities (see next page) ([www.projekt-fred.de](http://www.projekt-fred.de), 07.07.06).

In many Laender schools successfully use circular letters which they send to parents to pick up problems which are typical for teenagers and cause insecurity among parents or are a strain on the parent-child relationship. ([www.prevnet.de](http://www.prevnet.de)).

In the seminar “Frau Müller, sie haben mir gar nichts zu sagen“ (Mrs. Müller, I am not going to listen to what you say“) – a continuing education program to prevent addiction and violence – teachers in Lower Saxony are trained in dealing with pupils who display conspicuous behaviour ([www.prevnet.de](http://www.prevnet.de)).

Meanwhile, there is a host of initiatives to integrate prevention-related contents into the training and further education of full-time professionals or volunteers working with children and teenagers (Berichte der Landeskoordinatorinnen und -koordinatoren der Suchtvorbereitung, 2005).

### **Juvenile delinquents**

In nearly all Laender, the juvenile court assistance system provides different forms of support for juvenile delinquents under the name "outpatient social educational measures" as an alternative to traditional juvenile court sentences, especially detention (<http://www.sgbviii.de/S108.html>, 07.07.06).

Funded by the Federal Ministry for Health, the demonstration project FreD was developed to intervene early in conspicuous drug users. In this project, which is meanwhile used nationwide, 14- to 18-year-olds, but also young adults up to 25 years who have come to the attention of police for drug-related offences for the first time, are made an early specific offer to prevent addiction ([www.projekt-fred.de](http://www.projekt-fred.de), 11.07.06). More details can be found in earlier REITOX-Reports.

### **School dropouts**

The youth welfare system offers qualification measures in form of profession-oriented promotion courses for disadvantaged young people, especially school dropouts and persons without compulsory school leaving certificate or qualification from a vocational school. "Central elements hereby are the formation of key qualifications, the promotion of social integration, non formal and informal learning as well as taking into account specific target groups ..." ([www.jugendhilfeportal.de](http://www.jugendhilfeportal.de), 07.07.06).

In addition, practice-oriented offers are made by youth workshops. The Cologne drug assistance organization 'Drogenhilfe Köln' for example runs a workshop to promote professional reintegration of former drug addicts, some of them having no school leaving qualification at all (for detailed project description see EDDRA data base, <http://eddra.emcdda.europa.eu>).

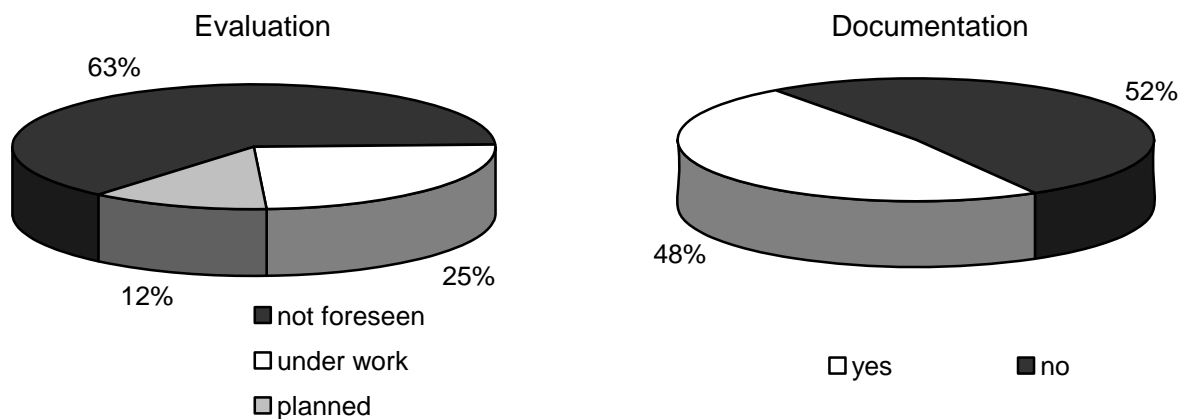
### **Ethnic groups**

Guided by the principle "the best prevention of addiction for migrants is integration", the Federal Ministry of the Interior lends its support to numerous measures to promote integration which are at the same time of a preventive nature (Die Drogenbeauftragte der Bundesregierung, 2006). At the Land-level, measures for migrants and repatriates are mainly carried out by institutions of addiction aid. In addiction prevention practice, projects specifically geared to these groups, are quite rare ([www.prevnet.de](http://www.prevnet.de), Reports of the Land coordinators of addiction prevention 2005/6).

### 3.4 Quality assurance and research

#### Evaluation status in Germany

As already mentioned above, about 20,000 activities were registered in the documentation system for prevention measures in the year 2005. 25% of these measures had been evaluated, 63% not and in 12% evaluation was in planning. More than half of the measures had not been documented (figure 4).



**Figure 4: Evaluation and documentation of prevention measures**

Source: dot.sys

As shown by the most recent dot.sys survey, neither documentation nor evaluation are general practice in Germany. However, there are signs of a change in thinking: "Evaluation as a means of quality assurance for projects is being considered as increasingly important" (Kalke, Raschke & al., 2004).

#### Research

In the year 1993, the Federal Centre for Health Education tasked the Institute for Therapy Research (IFT) to draw up an 'expert report on primary prevention in substance abuse'. After ten years, there was a need to take stock of the current scientific status with regard to intervention strategies and their efficiency and to make this knowledge available to the expert public in a concise form. Funded by the BZgA, the IFT evaluated 49 high quality overviews such as reviews and meta-analyses (8 meta-analyses, 22 systematic reviews, 13 unsystematic reviews, 4 best-practice overviews, 2 other) on the prevention of substance abuse and derived efficient strategies of addiction prevention. Apart from analyzing the gender-specific effectiveness of approaches and possible negative effects of addiction prevention, the IFT also took a closer look at the subject 'efficiency'. In the following, the theoretical background of current prevention measures will be presented.

The expert report written by Bühler and Kröger (2006) provides quality support for the conception of prevention measures in the settings family, school, leisure time and community. It also discusses the effect of media campaigns and the influence of legislative

measures. The report has been drawn up for decision makers at all levels as well as persons involved in developing, carrying out and evaluating prevention measures (BZgA, 2006a).

The works were evaluated by means of a coding grid by two independent reviewers in terms of contents and methods used. The conclusions were jointly formulated with each conclusion receiving an evidence rating and a reference to the works they are based on.

The conclusions have the following evidence grades:

- A (results are based on a meta-analysis of high quality studies)
- B (systematic review of high quality studies)
- C (meta-analysis or systematic review of all studies)
- D (unsystematic review)
- E (individual study or result is discussed on the basis of empirical evidence) and
- F (contradictory evidence)

Based on the evidence grades, the report gives the following *recommendations* for future prevention measures:

- to offer comprehensive measures for families, i.e. combined trainings for parents, children and families (especially alcohol: evidence grade C)
- to carry out interactive programs based on the model of social influence or life-skill competence at schools (all substances: evidence grade A)
- not to carry out isolated measures at schools (only communication of information, only affective education, other non-interactive measures (all substances: evidence grade A).
- to use media campaigns as flanking measures and not as the only measures (tobacco: evidence grade C)
- to influence the price of substances (tobacco, alcohol: evidence grade C,D) and the age limit for consumption (alcohol: evidence grade B) through legal measures B
- for the leisure time sector no conclusions could be drawn
- with regard to communal prevention, scientific evidence is contradictory

The expert report states furthermore that prevention measures can, in individual cases, also lead to an unintended effect, like for example higher consumption. There are not enough individual studies and reviews available which would allow for an evaluation of efficiency (cost-benefit-analysis). As far as gender-specific differences are concerned, it seems like girls tend to profit more from prevention approaches. There is lots of theoretical knowledge available for developing measures in various activity fields, however it is rarely investigated how it could be turned into practice.

The study indicates the difficulty to decide from a scientific viewpoint which measures to prefer. The combination of behavioural and relational prevention is favoured by the authors. "Consumption behaviour" as the only criterion for the effectiveness of prevention measures is viewed critically. The report evaluates the state of addiction prevention research in the German speaking countries and points out future necessary steps for practice and research.

In another study, the RAFFT screening tool (items: Relax, Alone, Eriends, Eamily, Trouble) was successfully used in a sample of 276 teenagers to collect data on drug use. In the age group 14-18 years, it reached a sensitivity of 79.5% in men and 50.0% in women and a specificity of 67.3% in men and 60.9% in women (Laging, 2005).



## 4 Problem drug use

### 4.1 Overview

#### The term 'problem drug use'

There is no uniform definition of the term 'problem use'. However, there are practical definitions for specific areas (e.g. prevalence estimation of the EMCDDA). Generally, consumption is regarded as problematic if at least one of the following criteria is fulfilled:

- Risk carrying use (risky consumption)
- Harmful use (F1x.1) or addiction (F1x.2x) in terms of a clinical diagnosis (ICD / DSM)
- Harm inflicted on other persons
- Negative social consequences or delinquency

Irrespective thereof, consumption can also be problematic if the user himself experiences it as problematic and for example considers himself to be addicted without having an objective diagnostic classification confirming addiction (Kleiber and Soellner 1998). The definitions used in the different work areas comprise respectively different parts of the described total group. Only the terms based on clinical classification systems are clearly defined. As for other terms like for example 'risky drug use', definition and understanding of the concept vary considerably.

#### Measuring and estimation methods

Sometimes there are considerable methodological difficulties in evaluating data of specific collection systems or studies with regard to problematic use in terms of addiction. Whereas with police records only the higher probability of intense drug users to be picked up by police can be interpreted as an indication of problematic drug consumption, surveys make use of additional information (frequency of use, accompanying circumstances, diagnostic criteria) or adapted clinical tests to differentiate. A relatively safe classification is possible in therapy facilities where staff has been trained in or has experience in diagnosing such cases.

In addition to content-related and general methodological difficulties in defining problematic drug use, specific difficulties arise when collecting data on illegal drugs. A series of surveys shows that users of hard drugs tend to report only the use of 'soft' drugs correctly while denying using for example heroin or extenuating intensity and frequency of use.

While representative surveys allow for valid statements to be made on experimental drug use and lighter forms of multiple or permanent drug use, intense or regular users are generally underrepresented in the population sample. Moreover, in their case, the extent of the problem is under-reported. Methodological problems have been described by Kraus et al. (1998) and Rehm et al. (2005).

## **National and local estimations of drug use**

The EMCDDA has collected a series of methods for estimating the prevalence of problem drug use at national level and has developed them further. The target groups of the selected methods are based on the definition of problem drug use as an “intravenous or long-term/regular use of opiates, cocaine or amphetamines“ (EMCDDA 2003). However, as it would not have been possible to exclude multiple countings in police figures when reviewing several substances, and as there are valid mortality estimates only available for heroin users, the prevalence estimates for Germany were restricted to the target group of heroin users.

## **Intravenous and non-intravenous drug use**

In view of the particular risks carried by intravenous drug use, the form of use is of particular interest when trying to minimize secondary harm. In Germany, intravenous use continues to be strongly linked to heroin. Therefore, differentiation among user groups for the prevalence estimates and the description of patients, is done in terms of main drug and not in terms of mode of administration.

## **4.2 Prevalence and incidence estimates**

### **4.2.1 Estimate methods of the EMCDDA**

For the years 2004 and 2003, three multiplier-methods were calculated anew based on the data available:

- One estimate based on police contacts  
Assuming an average consumption period of 8 to 10 years, the numbers of heroin users who have come to the attention of police for the first time (incidence), are summed up over the years respectively. The portion of persons in drug-related death cases already known to police is used respectively to calculate the estimated number of unknown cases.
- One estimate based on treatment admissions  
The overall figure of treated cases is calculated on the basis of recorded client figures in outpatient and inpatient treatment, the total figure of counselling facilities as well as on a multiplier for reaching the target group.
- One estimate based on drug-related deaths  
The number of drug-related deaths in the reference year is extrapolated to the overall figure of opiate users in the population using the quota of drug-related deaths in outpatient clients per year.

All results are only to be taken as a rough approximation since different preconditions are to be presupposed. Especially the multipliers used have only limited validity as they are based on small case figures and selective samples. The methods have been described elsewhere. The other methods have not been used since the necessary parameters were not available in a timely, empirically evidenced form.

The individual estimates are to be found in standard table 7.

### Results of the prevalence estimates

Calculations based on figures collected from treatment, police contacts and drug-related deaths lead to an estimated figure of problem heroin users ranging between 78,000 and 195,000 persons. This corresponds to a rate of 1.4-3.5 persons per 1000 inhabitants in the age between 15 and 64 years. These estimates correspond to the prevalences calculated by a European meta-study on the dependence on illicit substances for the age group 18 to 65 years: 3.0/1000 (threshold values 0.2-0.6). Further details are contained in 4.2.2.

Based on more recent findings (Perkonigg et al., 2004), the response rate for outpatient treatment was raised to 41% from 2004 onwards. This figure is a mean value calculated from the results found by two surveys carried out in Munich (previously Augsburg) and Hamburg. Here, it needs to be pointed out again that the definition of the target group in these estimates is restricted. Amphetamines and cocaine could only be taken into account in the estimate of 2005 on the basis of therapy data while problem cannabis use has not been included right from the start (table 5).

**Table 5: Prevalence estimate of problem opiate use from 1995 to 2005**

Method based on data source	Reference year					Prevalence per 1000 (18-64)
	1995 thousands	2000 thousands	2003 thousands	2004 thousands	2005 thousands	
Treatment	78-124	166-198	109-177	102-150	164-195	3.0-3.5
Police contacts	131-142	153-190	144-182	136-172	128-166	2.3-3.0
Drug related deaths	78-104	127-169	92-123	87-115	78-111	1.4-2.0

When choosing a broader definition of the target group including users of opiates, cocaine, crack and amphetamines, the following problem arises: these substances do comply with the definition of the target group by the EMCDD, however, there is no possibility to verify intravenous or highly frequent consumption of these substances with the data sources available. In this way, an unknown number of persons whose problems with drug use might be less severe, is taken into account possibly leading to an overestimation of prevalence.

Calculations based on treatment data including clients with cocaine and amphetamine problems, produce a prevalence of 208,000 to 246,000. Estimates based on police data and drug-related deaths are not carried out for the extended target group because of the problems explained in chapter 4.1.

#### 4.2.2 Further approaches to collect data on problem drug use

In order to broaden the narrow concept of “problem drug” use according to the definition of the EMCDDA, further data sources and approaches will be used in the following to estimate figures for the target group in Germany.

In a young age group of users (14-18 years) in Hamburg, habitual consumption of cannabis (at least 25 times in the lifetime and at least once in the last 30 days) was found in 11.6% of the interviewees, habitual consumption of other illicit drugs in 2.4% (Baumgärtner, 2006).

The risk of cannabis addiction depends on the intensity of consumption as shown by a study on 2446 interviewees of a population sample taken in the age group from 14 to 24 years in Munich. Out of the persons who consumed cannabis at least on three days of the week, 81% fulfilled at least one criterion of addiction showing most of the withdrawal and tolerance symptoms (Nocon et al., 2005). Combined with the results of the drug-affinity study which found regular consumption in 3% of the 12-25 year-olds, there is an indication of addiction in 2.4% with at least one fulfilled criterion.

In a meta-analysis carried out in 16 European countries on the basis of 27 studies surveying more than 150,000 persons, substance-related disorders showed the highest prevalences next to anxiety disorders, depressions and somatoform psychological disorders. Hereby, displaying a prevalence of 0.3% (confidence interval: 0.2-0.6), dependence on illicit substances was ten times less common than alcohol addiction (3.3%; 2.8-4.0) (Wittchen & Jacobi, 2005).

All the studies and approaches presented in this report are to be understood as a rough approximation. Limitations in the representativeness of data (regional data sets, small samples), insufficient standardization of age groups and other points don't allow for exact comparisons to be drawn between groups. Problem use in respect of the EMCDDA definition amounts to less than 0.5% of the overall population. When lowering the criterion for problem drug use (substance, consequences) and choosing a younger age group, prevalence increases to about 3% and intensive consumption patterns to more than 10%.

National prevalence estimates are contained in standard table 7, local prevalence estimates in standard table 8.

### **4.3 Profiles of clients in treatment**

Information on characteristics and consumption patterns of clients in therapy are available from various sources. Based on the German Core Data Set, the German Statistical Report on Addiction Therapy provides expansive data for clients in outpatient therapy from more than 75% of all facilities receiving regional and communal funds. The TDI is integrated in the Core Data Set. Outpatient counselling facilities are the first place of call for drug users insofar as drug problems are not treated by office-based doctors in primary care. In most cases, counselling is free of costs, the facilities being funded mainly by the municipalities and Laender.

If drug problems and concomitant symptoms are too problematic, consequences too massive and the general situation for the drug addict himself and his environment too stressful, the patient will be admitted to inpatient therapy. However, the transfer from outpatient to inpatient therapy involves some administrative work and it needs to be clarified who will take over the costs for inpatient therapy (generally the pension insurance fund, patients without

employment are subject to other regulations). Sometimes inpatient therapy is inappropriate for the client's situation - if for example existing employment would be jeopardized or no adequate care for the children of an addicted mother can be found. The transfer from outpatient to inpatient care also has the effect of a filter mechanism. Patients in inpatient therapy do not only differ from outpatient ones in the severity of the addiction problem but also in gender distribution.

For inpatient therapy, expansive data are available also from the German Statistical Report on Addiction Therapy. However, only about 120 facilities take part in the federal evaluation. Many large, especially psychiatric clinics providing addiction therapy are not represented in the statistical report. In order to fill these gaps as far as possible, two other sources were tapped for data. The statistical report on hospital diagnoses documents the diagnoses on discharge of all patients of inpatient facilities. Though complete, it is not addiction-specific and offers little detailed information for this area. The statistics of the pension insurance funds comprise all cases for which the costs were borne by the pension insurer. However, the part of inpatient therapies which represent acute treatments or are financed by other sources, is missing. Therefore it is more difficult to describe the profile of inpatient patients than of the outpatient ones. While it is necessary to tap various sources simultaneously, one needs to bear in mind that each source has a different type of selectivity.

Details on the characteristics of drug users can be found in standard table 3.

#### **4.3.1 Outpatient treatment**

The data presented in the following are based on the National Statistical Report on Addiction Therapy published for Germany for the year 2005 (Welsch and Sonntag 2005a) and the detailed data of the tables (Strobl et al. 2004a). While the overall system recorded a total of 245,601 cases in the year 2005, this report only takes account of clients who were in treatment mainly for one illicit substance diagnosed as primary drug.

##### **Socio-demographic information**

In the year 2005, 79% of all 44,509 outpatient clients recorded by the National Statistical Report on Addiction Therapy were male. About 61% of them were between 15 and 30 years old. 87% of them were of German nationality, 3% were from European neighbour countries, 10% from non-EU member states such as Turkey or the former Soviet Union (Strobl et al. 2006).

Facilities report increasing problems concerning care and referral of older drug clients. Frame conditions, motivational approaches and therapy concepts and goals do not match with the reality of this group of persons. With the increasing number of older heroin addicts, the demand for corresponding offers will increase in Germany as well as in other Western European countries.

As living conditions of the clients vary considerably depending on the main diagnosis or the used drug respectively, the following table discriminates correspondingly. Further information can be found in standard tables 8 and 9 as well as in the TDI-questionnaire

**Table 6: Socio-demographic data by primary drug**

Characteristics	Primary drug			
	Opiates	Cannabis	Cocaine	Amphetamines
Ages starting treatment (Mean)	32.0	23.0	30.7	24.8
Age of first use (Mean)	20.4	15.8	20.3	17.9
Gender (Ratio males)	77%	85%	84%	73%
Single	52%	61%	46%	55%
Working situation				
Unemployed	53%	26%	38%	29%
In school education	5%	39%	7%	20%
Homeless	5%	1%	3%	1%

Source: DSHS (Strobl et al., 2006)

### Use patterns

Table 7 shows the most common forms of consumption for various substances as reported by the outpatient counselling facilities in the German Annual Statistical Report on Addiction Therapy for 2005.

Heroin is mainly injected by 64.7% of the clients. This use pattern is also to be found in about a third of the cocaine users. All other substances are predominantly orally consumed or smoked respectively. As for heroin consumption, intravenous use decreased slightly to 64.7% relative to the previous year (2004: 66.6%; 2003: 70.2; 2002: 72.2; 2001: 68.4%), as for other opiates it fell significantly to 8.7% (2004: 15.2%; 2003: 21.2%). Regarding cocaine, the portion of injecting users remained almost stable at 32.8% (2004: 34.3%; 2003: 33.8%). As the sample taken at the facilities and documented in the German Annual Statistical Report on Addiction Therapy is subject to yearly fluctuations, these small changes require cautious interpretation. Since smoking of heroin has considerably increased in the reporting period, it seems justified – also with a look at the case figures – to speak about a trend away from intravenous use also in Germany (table 7).

**Table 7: Drug application modes of clients in outpatient therapy**

Substance	Year	Mode of application					Total
		Injection	Smoke	Oral	Sniff	Others	
Heroin	2003	70.2%	17.6%	1.6%	9.6%	1.1%	16,181
	2004	66.6%	23.8%	3.7%	5.0%	1.0%	11,649
	2005	64.7%	25.3%	3.4%	5.6%	1.0%	13,492
Methadone	2003	3.3%	3.1%	93.0%	0.2%	0.4%	8,298
	2004	3.6%	1.8%	92.1%	0.2%	2.2%	4,356
	2005	4.1%	1.9%	91.7%	0.2%	2.2%	5,406
Other opiates	2003	21.1%	8.3%	64.3%	4.2%	2.2%	2,509
	2004	15.2%	7.7%	72.0%	0.8%	4.2%	880
	2005	8.7%	6.3%	80.1%	0.6%	4.3%	1,150
Cocaine	2003	33.8%	19.8%	1.7%	38.8%	5.9%	8,049
	2004	34.3%	26.3%	1.7%	30.2%	7.5%	5,468
	2005	32.8%	26.1%	1.4%	32.8%	6.9%	6,451
Crack	2003	17.9%	47.5	2.5%	31.7%	0.4%	1,344
	2004	8.7%	65.3%	4.0%	19.7%	2.3%	173
	2005	6.7%	85.8%	2.0%	4.4%	1.0%	586

Source: DSHS (Strobl et al., 2006a), multiple entries possible

### Diagnostic data

For the year 2005, data on the main diagnoses of a total of 55,524 persons who presented to therapy in an out-patient psychosocial addiction aid facility because of problems with illicit drugs were collected for the German Annual Statistical Report on Addiction Therapy. The main diagnoses are based on the diagnostic categories of the international classification system of the WHO (ICD 10) for disorders caused by psychotropic substances (harmful use or addiction). In more than half of the cases diagnoses were related to opiates, second came cannabis. 6.7% of the diagnoses were cocaine-related, 5.7% concerned stimulants. As for those who presented to addiction therapy for the first time, cannabis was clearly the predominant drug in 58% of the clients (table 8).

**Table 8: Main diagnoses in outpatient therapy**

Main diagnosis harmful use/ addiction of..  (ICD10: F1x.1/F1x.2x)	All intakes			First treated clients		
	Males %	Females %	Total %	Males %	Females %	Total %
Opioids	50.7	57.7	52.2	20.1	26.5	21.2
Cannabinoids	33.2	21.9	30.8	61.5	43.8	58.4
Sedatives/ Hypnotics	1.1	5.5	2.0	0.9	6.4	1.9
Cocaine	7.2	5.1	6.8	7.6	5.3	7.1
Stimulants	5.3	7.3	5.7	8.0	15.7	9.4
Hallucinogenic drugs	0.2	0.3	0.2	0.2	0.4	0.2
Volatile substances	0.0	0.0	0.0	0.1	0.2	0.1
Other psychotropic substances	2.3	2.1	2.3	1.8	1.8	1.8
Total	43,871	11,576	55,524	11,487	2,546	14,062

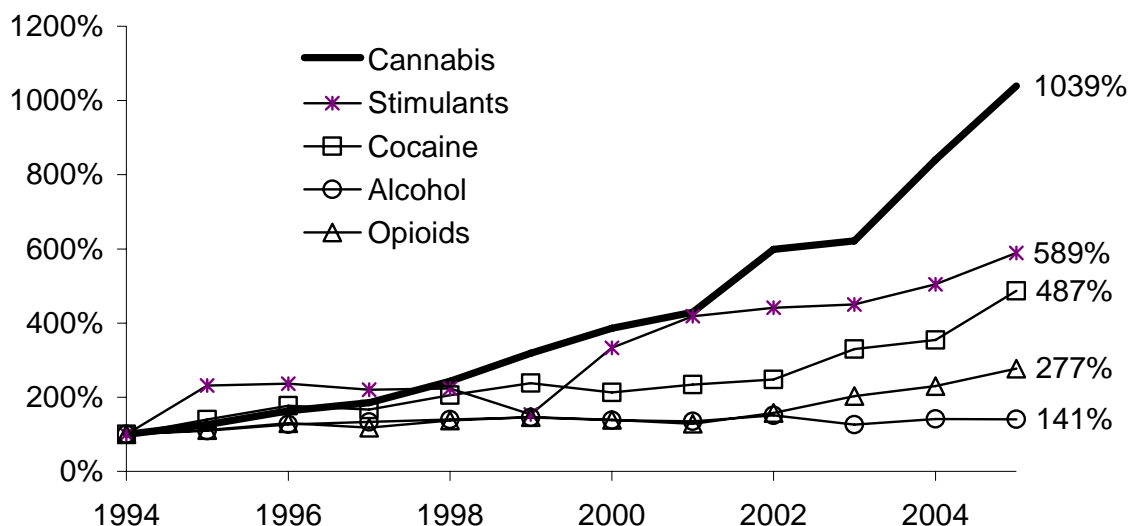
Source: DSHS (Strobl et al., 2006a)

When calculating the change in percentage of clients' admissions by main diagnoses, it shows that the increase found for cannabis was the most significant. Figures for this client group have soared more than tenfold. The number of clients with primary stimulant- or cocaine-related problems has quintupled over the same period of time. Opioids and alcohol by comparison, have remained stable, representing however the largest group of persons in absolute figures (Figure 5).

Secondary addiction diagnoses are relatively common. Out of the clients with primary opiate-problems, 24.6% also have alcohol-related disorders (addiction or harmful use) and 27.1% cocaine-related disorders. Out of those who had primary cocaine-related problems, 44.4% also used cannabis, 17.5% amphetamines and 13.2% ecstasy (Sonntag, Bauer & Hellwich, 2006)

Further detailed information is given in the EMCDDA standard tables in the attachment (standard table TDI).





**Figure 5: Long-term changes in admissions to outpatient addiction therapy for various main drugs (1994=100%)**

Source: DSHS (Strobl et al., 2006)

### Abuse of pharmaceuticals

Abuse of and dependence on pharmaceuticals is a relatively common phenomenon which however – due to the limited negative impact on the social environment and the smaller conspicuousness of those abusing pharmaceuticals, is less paid attention to and recorded than for example dependence on illicit drugs. According to an estimate of the Laender, there are 1.2-1.3 million people addicted to pharmaceuticals in Germany (Simon, 2005), other estimates go up to 1.9 million (Soyka et al., 2005a). In order to get an indication of which active substances and medication are mainly abused and to discern developing trends, the monitoring system “ebis-med“ has been used in Germany for more than 10 years to collect data on abusive or respectively addictive use of pharmaceuticals among clients in outpatient addiction therapy. It is assumed that these people represent a high-risk group in which abuse and changes in the use pattern are quicker and better to discern than in the general population.

Included into the system are primarily patients with primary medication-related problems. However, such disorders are also often to be found in persons with a primary alcohol or drug problem. The monitoring system collects data on the abuse and addictive use of pharmaceuticals by clients of counselling facilities by means of a sample of 36 outpatient facilities from all over Germany. The most recent results of this survey date back to the year 2004 (Rösner & Küfner, 2006). 518 reports of abusive consumption of pharmaceuticals of 396 patients were included in the evaluation. Table 9 shows which active substances and medication groups are abused the most. Benzodiazepines, which are used as tranquillizers, account for almost two thirds of the documented abuse cases, hypnotics which are based on this active substance account for a further fifth.

Regarding abuse of substitution substances, cases were recorded in which the substance was not used as part of an ordinary treatment but had been obtained without prescription, i.e. from the black market (table 9).

**Table 9: Most common groups of active substances and pharmaceuticals abused by opioid-clients**

Pharmaceutics/ substance	N	%	Pharmaceutics Substance	N	%
<b>Benzodiazepines</b>	<b>141</b>	<b>63.0</b>	<b>Hypnotics</b>	<b>47</b>	<b>21.0</b>
<b>Tranquilizers</b>	<b>94</b>	<b>42.0</b>	Flunitrazepam	44	19.6
Diazepam	84	37.5	Flurazepam	1	0.4
Bromazepam	6	2.7	Vinylbarbital	1	0.4
Lorazepam	2	0.9	Zopiclon	1	0.4
Oxazepam	1	0.4	<b>Substitution substance</b>	<b>39</b>	<b>17.4</b>
Dikaliumclorazepat	1	0.4	Buprenorphine	18	8.0
			Methadone	16	7.1
			Levomethadone	5	2.2

Source: Rösner & Küfner, 2006

Due to the sometimes big random fluctuations in the number of reported abuse cases, the portion of individual groups of pharmaceuticals was monitored in order to establish trends. The comparison of percentages over the last years shows a clear rise in abuse cases for substitution substances between 2003 and 2004 while the portion of abused hypnotics fell back by more than 10% (table 10).

**Table 10: Portion of various groups of pharmaceuticals in abused medication 2000 to 2004**

	2000	2001	2002	2003	2004	2004 vs. 2003	
	%	%	%	%	N	%	
Substitution substance	4.7	17.1	6.4	6.9	39	17.4	+10.5
Analgetics	6.5	8.1	7.4	3.6	17	7.6	+4.0
Antidepressants	2.8	5.7	6.4	4.4	14	6.3	+1.8
Anti Parkinson medication	0.0	0.0	0.0	0.8	0	0.0	-0.8
Neuroleptics	0.9	0.0	1.1	4.8	3	1.3	-3.5
Hypnotics	34.6	20.3	31.9	33.2	47	21.0	-12.2

Apart from the data collected by the monitoring system EBIS-med, criminal prosecution records are also pointing to an increasing problem with regard to abuse of pharmaceuticals. The number of proceedings which have been opened in Hesse because of violations of the Medical Preparations Act has increased by more than 50% from the year 2003 (N=385) to the year 2004 (N=601) (Hessisches Sozialministerium, 2006).

Among patients of a detoxification facility in Munich, who were admitted to therapy between 1991 and 1996, a significantly higher use of benzodiazepines was found in those who were substituted with methadone or codeine (still frequently used at that time) in comparison with heroin. Interpretation of the results is however difficult because of the self-selection by the clients (Backmund, 2005).

Data from regional monitoring systems, may, in so far as they are based on the German core data set, be compared to national data. Being based in part on original data and comprising to a large extent complete surveys carried out over whole regions, they are a valuable complement to national statistics for describing the situation.

The results provided by the Hessian “COMBAS-System” corroborate the findings of the national statistics in many points. The evaluation was based on 30,759 therapies. 308,359 individual services could be assigned to 15,185 persons. Cannabis-related disorders were the main diagnosis in 10% of the clients, hard drugs in 32%, alcohol in 48%, the category “Others” comprises the remaining 10% of the clients (Hessische Landesstelle für Suchtfragen, 2006).

Discriminating outpatient clients by illicit main drug, opiates including substitution substances rank first with 50% followed by cannabis with 24% and cocaine with little less than 7%. With that, the portion of cannabis cases is somewhat smaller than the average national figure found, which may be explained by structural reasons (e.g. low intensity of criminal prosecution in a Land) and differences in data collection (about a third of the clients are surveyed anonymously and are not included in this system). The trends observed over the last years – stabilizing or declining figures for opioids and rising figures for cannabis – are however identical to the ones observed at national level (Raschke, Buth & Kalke, 2005).

### **4.3.2 Inpatient therapy**

#### **Data from the German annual statistical report on addiction therapy**

Out of the 31,569 in-patient clients with substance-related disorders recorded by the German statistical report on addiction therapy, 5,802 persons (4,505 men and 1,292 women, portion of men: 77.6%) were treated for illicit substances (including pharmaceuticals) in the year 2006 (Strobl et al. 2006.). Only completed treatments were recorded. Here also, the main diagnoses – e.g. the substance which is the main reason for therapy – were based on the diagnostic categories of the international classification system of the WHO (Sonntag, Hellwich und Bauer, 2006).

Opiates (44.0%) and poly-drug use (26.2%) were followed by cannabis whose portion in case figures (15.2%) placed it third. The latter played a definitely minor role in women: only 9.2% of the female patients compared to 16.9% of the male ones had a cannabis diagnosis. The portion of opiate cases was considerable lower relative to the previous year (2004:55.6%) and the portion of cannabis cases somewhat higher. At the same time, the portion of diagnoses in respect of F19.x (other harmful substances or respectively multiple dependencies) almost doubled from 12.9% to 26.2% (table 11).

**Table 11: Main diagnosis in inpatient therapy (DSHS)**

Harmful use/ Dependence from (ICD10 F1x.1/F1x.2x)	Males %	Females %	Total %
Opiates	44.5%	41.9%	44.0%
Cannabis	16.9%	9.2%	15.2%
Sedatives / hypnotics	1.9%	13.5%	4.5%
Cocaine	7.6%	3.2%	6.6%
Stimulants	3.4%	3.3%	3.4%
Hallucinogenic drugs	0.1%	0.1%	0.1%
Volatile substances	0.0%	0.0%	0.0%
Other psychotropic substances	25.5%	28.8%	26.2%
Total	4,504	1,292	5,802

Source: DSHS (Strobl et al., 2006)

Inpatient therapy of cannabis-related disorders used to be an exception until recently. This has changed however, as figures show in table 11. Meanwhile, therapy concepts have changed too, so that inpatient therapy increasingly represents an option for this group of persons. Holzbach et al. (2006) request that withdrawal therapies should be carried out for cannabis addicts in an inpatient setting, if addiction has been diagnosed and outpatient therapy has failed or severe psychiatric co-morbidity, psychosocial immaturity or high consumption frequency are given. Therapies carried out in an inpatient setting allow for an integrated approach in dealing with retarded maturation, psychological disorders or sequelae of drug use of these clients, who - due to their age - can draw on less psychological resources than other groups. Therapy duration is planned for at least 3 weeks, after care should take place in an outpatient setting.

### Data from other sources

An overview of all clients undergoing inpatient therapy in Germany can be gleaned from the statistics on hospital treatments, the most recent data of which (reporting year 2004) are contained in table 12. By documenting main diagnosis, age and gender, they mainly serve as framework data for the German annual report on addiction therapy, complementing a series of specific pieces of information. Data provided by the German Association of Pension

Insurances (German Federation of Pension Insurances as of 2006), are all related to rehabilitation therapies of drug addicts. The statistics are identical to a large extent in their discrimination by main diagnoses taking into account the considerably higher portion of undifferentiated diagnoses in respect of F19 (multiple substance use and by-consumption of other psychotropic substances) in the data of the German Association of Pension Insurances.

In terms of figures, opioids are clearly in the foreground followed by sedatives/hypnotics and third by cannabis. The largest sub-category however, is related to multiple substance use. In most cases, primary use of illicit substances may be behind that, as alcohol appears much more often as the only substance of addiction. However, with no substance-related data being available, verification of this assumption is not possible.

When comparing the data from the addiction-specific statistical report (DSHS) to these statistics, one gets the following picture: opiates rank first among illicit substances. If one adds the cases of multiple substance use which, in most cases, involves a combination of opiate addiction and cocaine- and other drug-related addiction problems, the portion amounts to 70%-80% among inpatient clients. Intoxications caused by sedatives and hypnotics are relatively common in acute treatment with every tenth addiction diagnosis being related to these substances in hospital therapies. In withdrawal therapies however, they play a rather minor role. Patients suffering from a cannabis-disorder rank second in rehabilitation therapy, followed - at a large distance though - by opioids. Cocaine comes third (table 12).

**Table 12: Inpatient clients with addiction diagnoses from 2002 to 2004**

	Diagnoses	Hospital treatment			VDR	DSHS
		2002	2003	2004	2004	2005
F11	Opioids	29.9%	30.1%	30.8%	19.6%	44.0%
F12	Cannabinoids	3.8%	5.0%	6.1%	5.4%	15.2%
F13	Sedatives/ Hypnotics	10.1%	9.6%	10.1%	2.6%	4.5%
F14	Cocaine	1.1%	1.3%	1.3%	3.4%	6.6%
F15	Stimulants	1.1%	1.3%	1.4%	1.4%	3.4%
F16	Hallucinogenics	0.9%	0.7%	0.7%	0.1%	0.1%
F18	Volatile substances	0.3%	0.2%	0.2%	0.1%	0.0%
F19	Multiple substance use/ use of other psychotropic substances.	52.8%	51.8%	49.6%	67.4%	26.2%
	Total	82,473	83,539	84,147	10,311	5,802

Source: Statistisches Bundesamt (2004), VDR (2005) (as of 2006: Deutsche Rentenversicherung Bund), Deutsche Suchthilfestatistik

As for illicit drugs, heroin is the predominant problem drug both in in- and outpatient facilities. Cannabis however ranks top among those presenting to outpatient treatment for the first time and also plays an equally important role there compared to opiates. The higher threshold for the admission to inpatient therapy (costs, time and organization) leads to a smaller number of cases being in inpatient treatment besides the generally lower severity of problems.

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

Prison populations show a higher prevalence of consumption of psychotropic substances and of substance-related disorders. Those who are in detention for drug-related crimes – mostly drug-trafficking offences – or for other reasons, continue to consume psychotropic substances within prisons. Epidemiological data on the consumption of psychotropic substances in penal institutions are very difficult to collect and have little validity. A general picture of the situation can be obtained from Simon & Tischer (2006) on the basis of the data provided by the Ministries of Justice of the individual Laender. Insofar as data and estimates of the prevalence of dependence on licit and illicit substances were given, figures range between 40 and 50%. The portion of prison inmates who are assumed to be addicted to illicit drugs amounts to about 33%. Prevalences for female inmates tend to be somewhat higher than those for male ones.

New studies which could give information on characteristics or use patterns of problem drug users outside treatment facilities were not published in the period under review.

## 5 Drug-related treatment

### 5.1 Overview

People who want to overcome their dependency with professional support are offered a wide range of therapeutic services and aids to quit. On the one hand, there are substitution offers available for opiate addicts with a limited target aiming at the stabilization of the overall condition, and, on the other side, abstinence-oriented treatment offers. The two concepts complement each other. In the long term, substitution too, aims at abstinence from drugs, where possible.

Abstinence-oriented therapy is - according to the present state of knowledge – subdivided in four basic phases:

- contact and motivation phase
- withdrawal phase
- rehabilitation phase
- integration and after care phase

The therapy is structured according to the above phase model. The goal of the *contact phase* is to develop, maintain and strengthen the motivation to have addiction treated. A help plan should be developed for the therapy which should start with counseling comprising medical, psychological and social diagnostics and case history. The help plan should take account of therapy and health care offers available at a regional level in order to select the measures which are best suited for the individual case.

In the *withdrawal phase* all possible aspects of addiction are worked on in multi-professional teams in the frame of a 'qualified withdrawal'. The duration of the withdrawal phase may vary, depending on the individual circumstances, between two to six weeks.

The goal of the *rehabilitation phase* is to stabilize the abstinence achieved in the detoxification phase and to put a definitive end to addiction. Rehabilitation can be carried out in out-patient, in-patient- or partly in-patient therapies. The standard therapy duration is six months.

The *integration and after-care phase* is a 'phase of assimilation', where individual therapeutic measures move into the background in favor of an outward orientation with a view to promote integration into society and work. In their efforts to reintegrate into society, clients receive support from the special service departments of the job agencies as well as from the pension insurance funds.

## Organization of treatment

Medically-assisted substitution therapy is available to a large number of drug addicts. Since 2001, substitution based therapy has been regulated in detail by the Narcotic Drugs Act and is meanwhile fully accepted as a medical therapy method. Already in the year 2002, the Federal Medical Council passed guidelines to lay down the state of the art, and in 2003 national health insurance acknowledged substitution therapy as a SHI-accredited care service without any restrictions taking over the costs of therapy for the insured. The majority of patients in substitution therapy are treated by office-based doctors or in specialized outpatient facilities. Doctors carrying out maintenance-therapy need to be qualified in addiction-medicine. If not, they can treat up to three patients maximum in consultancy with a qualified colleague. Meanwhile, also some inpatient facilities have started to accept patients for substitution therapy. However, the status of integration between general health care and special drug aid into one effective network is still rather dissatisfying. At regional level however, cooperation and coordination of the offers are clearly better.

Medical substitution therapy should generally be accompanied by psychosocial care. Outpatient counseling facilities offer contact, motivation and outpatient care; withdrawal treatments/detoxifications are mainly done in general hospitals but also in a few specialized clinics. Rehabilitation can take place in special departments of hospitals, specialized clinics or therapeutic communities.

As a result of the successfully completed study on the use of heroin in the treatment of opiate addicts in 2006, the admission of diamorphine for regular treatment is currently under consideration. This kind of treatment is meant for a small portion of patients who could not sufficiently profit from other treatment offers. The necessary legal changes and the definition of modalities allowing for a continuation of the treatment with diamorphine also after the completion of the study, are currently still subject of a political decision process.

In the integration and after-care phase, a varied offer geared to the specific needs of the clients with regard to employment, housing and re-integration into society is made. All fields of work are staffed with specialists who, for a major part, have done work-field-specific supplementary training. All offers made aim at stabilizing abstinence from drugs.

One essential standard of addiction therapy is the cooperation of different professional groups from social work/pedagogy, psychology and medicine. As for out-patient offers (out-patient treatment centers and others), quality assurance and technical monitoring are mainly in the hands of the supporting organs of the facilities or respectively of the Laender and municipalities. The responsibility for detoxification and rehabilitation however lies with the respective service providers. With outpatient treatment offers being increasingly funded by the statutory pension insurances, the above mentioned standards also gain in importance with them.



In many Laender, cooperation between the different fields of work and organizations is promoted by Laender-financed institutions, like for example the Bavarian Academy for Addiction, the Hessian Land Centre for Dependence Matters (HLS) or the Thuringian Office for Dependence Matters.

### **Funding and supporting organs**

There are about 934 specialized drug counselling facilities treating patients mainly for problems with drugs or other psychotropic substances. Countrywide, there are more than 2,078 treatment slots available for inpatient detoxification and about 5,260 places for rehabilitation. The majority of the facilities are independent non-profit organizations. Public bodies and commercial enterprise also work in particular in the field of inpatient therapy (Simon 2005).

Low threshold services and counseling are, for the most part, based on public funds. Here, a relevant portion of the costs of outpatient facilities is borne by the legally and economically responsible bodies themselves. Except for the therapeutic treatment, outpatient addiction care is, for the most part, voluntarily funded by the Laender and municipalities. However, the institutions have no legal claim to these funds. Withdrawal treatment lies in the hands of the legal health insurance funds. The pension insurers in their turn are responsible for rehabilitation therapy which they fund in terms of a medical rehabilitation to restore the earning capacity of the client. Hereby, the pension insurance institutions decide on the type, extent and duration of the therapy. Except for a few individual cases, there is no legal funding basis for the integration and after-care phase. Here, the legally and economically responsible bodies of the facilities have to resort to financing models with make use of budgets of social insurances and agencies of work.

Addiction therapy may only be provided by adequately skilled staff with work-field-specific supplementary training. In this context, the German Pension Insurance has passed guidelines for the supplementary training of therapy staff working in individual and group therapy in the frame of medical rehabilitation of addicts, serving as a 'recommendation for the acknowledgement' of the respective advanced training courses. As part of the restructuring of the education system in Germany according to European standards (introduction of Master and Bachelor programs at universities and technical colleges) work specifications for therapeutic staff in addiction aid have to be newly developed and defined.

### **Data sources**

By integrating other documentation systems into the reporting system, the portion of addiction aid services recorded for the national report on addiction therapy has been considerably increased in recent years. In the reporting year, 749 out of 943 (79.4%) facilities receiving funds from the Federal Government or the respective Land, were included.

Since 1 July 2002, information on substitution therapy is recorded by the substitution register with the purpose to avoid double prescriptions of substitution drugs and to monitor the implementation of specific quality standards in therapy. The short-term use of substitution

drugs in detoxification is not recorded by this register. For 2005, results are available on number and gender of treated clients as well as on substitution drugs used. In addition, the names of the doctors in charge of therapy are listed

In Germany, hospitals carry out acute treatments of drug-related problems and detoxification as well as rehabilitation aiming at long-term withdrawal to restore working capacity. The main diagnoses made for all persons treated in German hospitals are reported to the Federal Statistical Office which publishes the data on a regular basis. Statistics on rehabilitation are provided by the pension insurance funds documenting the services provided by these institutions.

## **5.2 Treatment system**

### **Institutions and organizations**

A differentiation between drug-free and medically assisted treatment is not very useful to describe the therapy system in Germany. Whereas a large part of the activities undertaken by GPs can be assigned to medication-assisted therapy, services offered by psychosocial counseling facilities representing a central element of care, can only be clearly assigned in those cases in which they themselves supply the substitution drugs. In many cases however, medical substitution takes place outside the counseling facilities. In this way, psychosocial care or therapy provided by the counseling facilities is, per se, neither indebted to a drug-free nor a medication-assisted approach. In order to avoid repetitions, outpatient counseling facilities are regrouped in the following sections under drug-free therapies.

Parallel to and partly in cooperation with professional help offers, there is host of self help organizations being active in the field of addiction. So far however, their activities have been mainly geared to alcohol addicts and older target groups.

Cooperation and referral between various facilities were the subject of a study conducted in the greater area of Munich. In 11 facilities providing different services ranging from low-threshold offers, counselling, substitution, withdrawal to rehabilitation, client and care data (N=432) were collected and evaluated to gain insight into the course of therapy (referral, further treatment, premature therapy termination, discharge). Transfers from one type of facility to the other corresponded to the conception of the help system: counselling facilities refer 31.5% of their clients during the observation period while rehabilitation facilities continue with further therapy for 96.6% of the clients according to their long-term approach. Striking is the relative high number of circular referrals from one substitution facility to another one of the same type and the relative low referral quota (10.9%) of low-threshold institutions (Queri et al., 2005).

## **Treatment demand and evaluation**

Planning of the treatment demand for the different segments of the medical and/or social help system at national level is not compatible with the federal structure of the Federal Republic of Germany. Instead, planning is done at Land and municipal level. Examples of demand planning on the basis of situation assessments and health reports are to be found in Berlin (Senatsverwaltung für Gesundheit, Soziales und Verbraucherschutz 2004), Frankfurt (Prinzleve et al. 2004, Werse et al. 2005) and Hamburg (Baumgärtner 2004a, b, Baumgärtner & Wies 2005). In Hesse, like in many other parts of Germany, cooperation between addiction aid and youth welfare is currently intensified with a view to specifically cater for the needs of younger drug users. To this purpose, integrated youth and addiction aid centres were created in Hesse (Hessisches Sozialministerium, 2006).

So far, substance-related disorders of those aged over 60 have not been paid much attention to. However, the changing population structure, higher life expectancy and changed consumption patterns beyond the age of 60 years make this subject increasingly urgent. With regard to licit substances, the sometimes late onset of problem alcohol use, but also the abuse of pharmaceutical drugs play an important role in this group of persons. (Deutsche Hauptstelle für Suchtfragen, 2005).

Apart from this group of addicts of licit substances, the number of aging opiate users in and outside substitution is also growing. Here, the help system is faced with new challenges. This subject was for example discussed at the 29<sup>th</sup> Federal Drug Congress held by the fdr (Professional Association Drugs and Narcotics). For this target group there are hardly any therapy slots available which would be really adequate in terms of therapy goals, setting and insurance conditions.

Data on treatment availability is contained in standard table 24.

### **5.3 Drug-free treatment**

Generally, not much has changed in this area. The only partially existing legal basis for the funding of out-patient services has often led to financing problems. The municipalities which provide the funds for the largest part of these services are currently struggling with extremely tight budgets. Therefore, offers of outpatient addiction aid services, the financing of which is no legal obligation for the municipalities, are reduced at various locations. At the same time however, an professionalisation in financial management as well as in treatment is to be observed among facilities. The profiles of clients in in- or respectively outpatient treatment have already been described in chapter 4.3. Following is therefore only a presentation of the figures of clients in therapy.

#### **Client figures in inpatient treatment**

In general, inpatient treatment in Germany is carried out under drug-free conditions. Since documentation discriminates by type of funding and not by type of treatment (drug-free vs. medication-assisted), all inpatient treatments for persons with main diagnoses F11-F17 or

F19 are presented in the following. Discrimination is done by acute hospital treatment and rehabilitation therapy. Hospital treatment is aimed at detoxification, physical and psychiatric treatment and remedy of the effects of acute intoxication. Apart from accounting information on services provided, there is no systematic compilation of comprehensive statistical material on the treatments provided for these clients. Rehabilitation aims at long-term withdrawal and drug-freeness as a precondition for restoring the working capacity of the client. It is generally carried out in the inpatient, but, to an increasing extent, also in the outpatient setting.

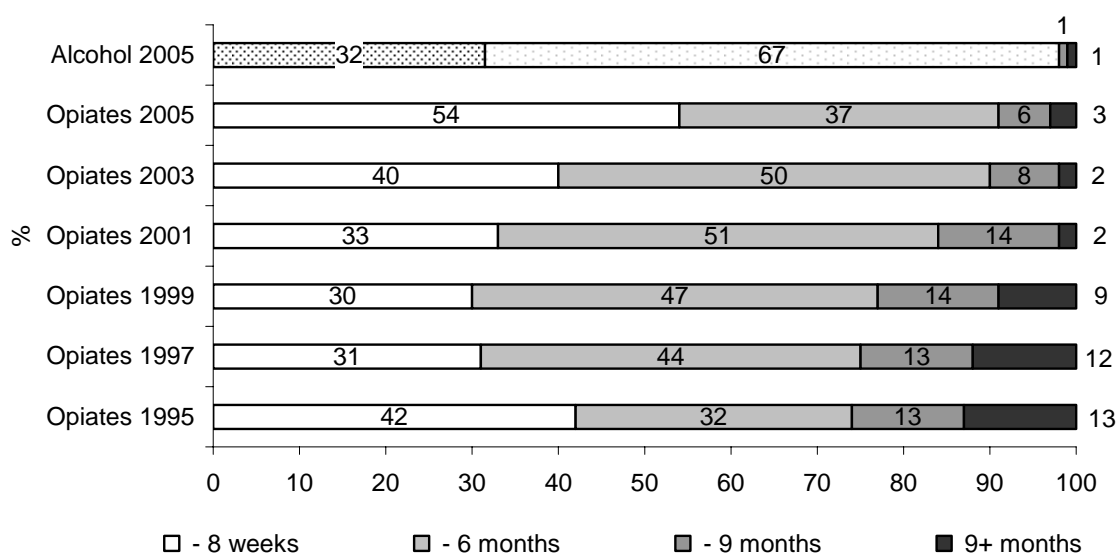
As for acute treatment, alcohol ranks first among main diagnoses distancing all other substances. Opiates and cannabinoids play the most important role among illicit substances. The large prevalence of multiple drug use and associated risks is also shown by the fact that such a diagnosis was assigned to more than half of all drug cases during hospital treatment. While the overall figure of addiction or respectively drug therapies went up only slightly between 2004 and 2005, the number of cannabis cases increased by almost a quarter. The number of therapies of opioid addicts – after alcohol the largest group of patients – changed only little by +3%. Therapies for stimulants increased by 6% (table 13).

**Table 13: Inpatient treatment of drug addicts in hospitals**

Main diagnosis	Substance	2002	2003	2004	Changes 2004 vs. 2003
F10	Alcohol	258,083	288,115	290,864	1.0%
F11	Opioids	24,663	25,145	25,889	3.0%
F12	Cannabinoids	3,113	4,151	5,107	23.0%
F13	Sedatives/ hypnotics	8,359	8,035	8,504	5.8%
F14	Cocaine	887	1,112	1,096	-1.4%
F15	Stimulants	912	1,074	1,139	6.1%
F16	Hallucinogenic drugs	741	573	562	-1.9%
F17	Tobacco	1,110	944	420	-55.5%
F18	Volatile substances	269	197	151	-23.4%
F19	Multiple Use	43,529	43,252	41,699	-3.6%
Total addictions		341,666	372,598	375,431	0.8%
Total drugs		73,845	75,307	84,147	0.7%

Source: Statistisches Bundesamt (2005d)

The figures contained in the German Annual Statistical Report on Addiction Therapy for inpatient facilities (Sonntag, Hellwich & Bauer, 2006) show considerable differences in average therapy duration but also in their variance. In 2005, average therapy duration (weeks) for opioids was 10.9 (SD:9,1; n=2.552), 14.7 (SD:15,5; n=881) for cannabinoids, 10.7 for sedatives/hypnotics (SD: 5,2; n=261) and 14.5 for cocaine (SD:9.9; n=385). The therapy duration for the largest group of drug addicts in inpatient therapy has been on a clear decline for about 5 years which is to be explained by the more critical approval practice adopted by funding organs (Figure 6)



**Figure 6: Duration of inpatient therapy of patients with primary opiate- and alcohol-related problems from 1995 to 2005**

Source: DSHS (Sonntag, Hellwig & Bauer, 2006)

The analysis of the case figures for rehabilitation gives a varied picture of the drug patients. The number of the inpatient rehabilitation therapies fell by 1.5% to 7,613 between 2003 and 2004 while the figure of outpatient rehabilitation therapies increased by 9.6% to 1,020. Here like in other patient groups, there has been a shift from inpatient to outpatient therapy for several years. The number of patients with multiple use of psychotropic substances (which generally also includes drug use) has also considerably gone up in the outpatient setting. Nevertheless, there are still eight times more drug patients in inpatient rehabilitation therapies than in outpatient ones (VDR 2004, 2005) (table 14).

**Table 14: Rehabilitation for drug problems**

Main diagnosis	In-patient				Out-patient			
	2002	2003	2004	2004 vs. 2003	2002	2003	2004	2004 vs. 2003
Alcohol	30,257	28,782	28,884	0.4%	8,581	9,477	10,739	13.3%
Drugs	8,498	7,731	7,613	-1.5%	58	931	1,020	9.6%
Pharmaceutics	344	347	372	7.2%	848	78	83	6.4%
Multiple use	2,806	3,332	3,359	0.8%	393	445	466	4.7%
Total addictions	41,905	40,192	40,228	0.1%	9,880	10,931	12,308	12.6%

Source: VDR (2003, 2004)

The trend towards outpatient rehabilitation is confirmed by regional surveys. The number of therapies which were approved by the statutory pension insurance in Hesse increased by almost 60% to 812 between years 2002 and 2004 (Hessisches Sozialministerium, 2006).

### Client figures in outpatient treatment

Admissions to outpatient therapy are presented in the German Annual Statistical Report on Addiction Therapy on the basis of the data provided by the 703 facilities. Among the illicit substances, opiates rank first with 52.2% of the admissions, followed by cannabis with 30.8%, and, at quite some distance, cocaine (6.8%) and stimulants (5.7%). All other substances were reported less frequently in the category of main problems.

While the portion of those treated for the main substance opiates, cannabis and cocaine rose between 2003 and 2005, the portion of alcohol addicts in therapy went down at the same time. There were only slight changes in the portions of all other patients (table 15).

**Table 15: New admissions to outpatient therapy**

Main diagnosis	Substance	2003 % Total	2004 % Total	2005 % Total	2005 % Drugs	2005 N
F10	Alcohol	64.5%	60.2%	55.6%		71,640
F11	Opioids	18.8%	20.5%	22.5%	52.2%	28,971
F12	Cannabinoids	9.6%	11.5%	13.3%	30.8%	17,104
F13	Sedatives/ Hypnotics	1.0%	1.0%	0.9%	2.0%	1,106
F14	Cocaine	2.2%	2.3%	2.9%	6.8%	3,749
F15	Stimulants	2.4%	2.4%	2.5%	5.7%	3,188
F16	Hallucinogenic drugs	0.1%	0.1%	0.1%	0.2%	111
F17	Tobacco	0.7%	1.0%	1.3%		1,655
F18	Volatile substances	0.0%	0.0%	0.0%	0.0%	26
F19	Multiple use	0.6%	0.9%	1.0%	2.3%	1,269
Total addictions		102.757	115.284	100%		128,819
Total drugs		38.308	44.509		100.0%	55,524
Number or reporting facilities		699	682	703	703	703

Source: DSHS (Strobl et al., 2004a, 2005a)

The German Annual Statistical Report on Addiction Therapy contains some basic data on therapy intensity (Sonntag, Bauer & Hellwich, in Druck). As of 2005, diagnoses are also differentiated in terms of addiction and harmful use. The average number of contacts during therapy was highest among opiate clients (20.6) while it was lowest among cannabis clients (10.0). Generally, women have more contacts with therapy facilities than men. More contacts were recorded in addiction cases than in harmful use.

The average therapy duration corresponds to the distribution of contact figures. Opiate clients are on average 43.6 weeks in therapy, cannabis clients 23.7 weeks, cocaine clients 30.6 weeks and clients with primary problems with stimulants 30.1 weeks (Sonntag, Bauer & Hellwich, 2006).

**Table 16: Number of contacts by main diagnosis**

	Opiates			Cannabis			Cocaine			Stimulants		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
<b>Total</b>												
<i>MW</i>	19.5	24.3	20.6	9.9	11.0	10.0	16.4	19.5	16.9	11.9	12.9	12.1
<i>SD</i>	32.2	40.4	34.7	13.9	18.0	14.7	21.7	29.2	23.0	12.1	13.5	13.1
<i>N</i>	16,266	4,850	21,236	10,980	1,784	12,806	2,344	464	2,821	1,706	590	2,315
<b>Addiction</b>												
<i>MW</i>	20,0	24,9	21,1	11,0	12,2	11,1	17,6	20,0	18,0	13,0	15,9	13,7
<i>SD</i>	33,1	41,7	35,7	15,2	21,2	16,5	22,6	27,7	23,4	12,4	17,3	14,3
<i>N</i>	12.402	3.875	16.359	5.592	914	6.521	1.675	319	2.006	1.113	364	1.481
<b>Harmful use</b>												
<i>MW</i>	15.4	17.7	15.8	7.3	7.5	7.3	12.4	13.1	12.7	8.8	7.7	8.5
<i>SD</i>	14.9	40.1	20.6	11.0	6.8	10.6	21.4	22.4	21.0	8.9	3.6	7.9
<i>N</i>	334	90	425	3,027	480	3,538	194	56	253	314	131	448

Source: (Sonntag, Bauer & Hellwich, 2006)

### Regional data

Kalke and colleagues (2005) have evaluated information from the basic documentation of outpatient addiction aid facilities in Schleswig-Holstein for the two age groups 14-17 years and 18-26 years. Data on 13,565 addiction aid services were included in the study. The main difference between these two age groups was the main drug. In the younger age group, mainly cannabis (57%) and alcohol (16%) were the dominant drugs. In the older age group (18-26), opiates (43%) ranked first followed by cannabis and alcohol with 21% respectively. While almost all members of the younger age group (93%) would like to have counselling, only a quarter of the older ones seeks therapy in a closer sense or referral respectively to (mostly) inpatient therapy offers of other facilities. The average number of contacts for the younger group is 5 compared to 13 for the older group with a total duration of 3.4 hours vs. 8.6 hours (Kalke et al., 2005).

The documentation system for addiction therapy in Schleswig-Holstein also provides information on the service duration differentiating by type of service and client group (Raschke, Buth & Kalke, 2005). Figures from the year 2003 show clearly that relatively little time is dedicated to clients with cannabis-related problems, while considerable time is allocated to measures undertaken to accompany opiate clients. Even more intense are the services provided for clients with alcohol disorders. The data on clients with pathological gambling or eating disorders are not separately presented in this report, but have been taken account of in the overall figure. Compared to the year 2003, services with regard to substitution substances and opioids increased by 8% and with regard to cannabis problems by 10%. The average time allotted per type of service is referred to those clients for which the services were actually carried out (table 17).

**Table 17: Used services by main diagnosis**

Main drug	Information (hrs)	Counselling (hrs)	Referral (hrs)	Support (hrs)	Other services	Escort (hrs)	Total 2004	Total 2003	N
Alcohol	2.1	5.9	1.0	27.7	6.8	5.2	12.8	12.5	4,253
Substitution substance	2.5	3.2	1.3	4.4	7.0	6.3	7.9	7.3	1,056
Opiates	1.5	6.2	1.1	6.8	7.3	3.8	8.1	7.5	980
Cannabinoids	1.0	2.6	1.1	7.9	2.7	4.7	3.2	2.9	629
Total	1.9	5.2	1.1	15.4	8.5	5.0			
N	1,822	6,787	1,088	2,563	533	222			

Source: Raschke, Buth & Kalke, 2005

Surveys conducted among Hessian addiction aid facilities found an average overall contact time of 5.3 hours for cannabis clients and of 9.5 hours for clients with opiate and cocaine diagnoses. Although the relation is similar to the one in Schleswig-Holstein, the average time allotted to the individual client is higher in Hesse (Hessische Landesstelle für Suchtfragen, 2006b).

### Innovative addiction aid offers and demonstration programs

Initiated by the Federal Centre for Health Education, the Internet-based portal drugcom.de offers support to people with cannabis-related disorders to quit cannabis consumption. Participants of the program are provided with virtual assistance over a period of 50 days. They keep an online logbook and receive individualised feedback from a consultant on a weekly basis. So far, about 600 persons have been admitted to the program (Tossmann, personal communication). Addiction in respect of clinical standards (DSM IV) was found by a first evaluation (N= 429) of the project in 87% of the participants at the start of the program, 92% rated themselves as addicted. Three months after the termination of the program, the daily consumption quantity had fallen from 18.2 grams at the start of the program to 7.5 grams, the number of consumption days from 22.2 to 12.8. 78% of the participants stated that the logbook had helped them considerably or very much. 60% of the former participants recommended the program to friends and acquaintances. The evaluation is based on self-assessments of the participants (Jordan, Tossmann, Tensil & Jonas, 2006).

The bi-national project "realize it" is a program offering counselling to cannabis users who seek help from drug or respectively addiction aid facilities. The program was run as a demonstration project in seven counselling facilities in Baden-Württemberg and in Switzerland. It comprises five individual sessions and one group session and runs for 10 weeks. So far, more than 200 teenagers and young adults have participated in the program. The evaluation of the program is currently carried out by the University Fribourg (Tossmann, personal communication).



As of 2006, the city of Hamburg provides between 300,000 to 500,000 € annually for the expansion of the counselling offers for teenagers and young adults at risk of developing addiction. In a call for tenders, providers of outpatient addiction help services were selected to develop and implement corresponding offers. Target groups are young drug users on the verge of problematic consumption, their parents, teachers and other addiction specialists in their environment. The further development of the offers is accompanied by methods of “impact-oriented steering“ (Schröder & Kettiger, 2001) (Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz, Hamburg).

#### 5.4 Medically assisted treatment

##### Withdrawal treatment

In the withdrawal treatment of opiate addicts, methadone and buprenorphine are, among others, temporarily used to reduce negative concomitant symptoms. Because of minimal side effects and less severe withdrawal symptoms the latter finds increasing usage. Statistical data on this type of treatment are not available in a differentiated form. The cases are however contained in the statistical reports of the hospitals (cf. table 13).

Abuse of benzodiazepine is relatively common in persons undergoing methadone-maintenance treatment. Inpatient withdrawal of benzodiazepine – in many cases in combination with other substances like cocaine – is necessary for the success of substitution and in most cases also possible. However, the majority of the treated patients has a relapse within three months (Specka & Scherbaum). It is currently discussed whether methadone-induced sleeping disorders could trigger the use of benzodiazepine (Elsner, 2006b).

##### Substitution treatment

Substitution has been the standard therapy for opiate addicts in Germany for many years (Michels, 2005). In their publications, Gerlach & Stöver (2005) give an excellent comprehensive survey of the status of substitution after 20-years of usage in Germany and of the topics which are currently under discussion. Substances admitted for substitution therapy are methadone and buprenorphine. Codeine and DHC can only be prescribed in exceptional cases. Although the use of buprenorphine has considerably increased, methadone remains the predominant substance (Die Drogenbeauftragte der Bundesregierung, 2006a) (table 18).

**Table 18: Type and percentage of substitution substances reported to the substitution register**

Substitution substance	2002	2003	2004	2005
Methadone	72.1%	70.8%	68.3%	66.2%
Levomethadone	16.2%	14.8%	15.0%	15.8%
Buprenorphine	9.7%	13.0%	15.6%	17.2%
Dihydrocodeine	1.7%	1.2%	0.9%	0.7%
Codeine	0.3%	0.2%	0.2%	0.1%

Source: Die Drogenbeauftragte der Bundesregierung (2006a)

In their re-analysis of patient data of a facility in Munich, Backmund and colleagues point to the rising portion of older clients. While between 1991 and 1996, only 12% of the analysed age groups were 36 to 45 years old, the percentage in the period between 2003 and 2005 was already at 26%. In the first cohort, 37% of the clients were younger than 26 years, in the second one only 22% (Backmund et al., 2006b).

According to the register of the Federal Centre for Drugs and Medical Devices, more than 5000 doctors were licensed to carry out substitution treatments already in 2003. However, only 2670 did actively work in substitution therapy in 2005 (Die Drogenbeauftragte der Bundesregierung, 2006a). Specificity of the problems of these clients and administrative expense were stated as reasons by the other physicians not to offer substitution therapy. Access to substitution therapy is particularly difficult in rural areas of eastern Germany. (Wittchen, Apelt & Mühlig, 2005).

### **Substitution treatment**

Within the first three and a half years since the introduction of compulsory reporting (01.07.2002 to 31.12.2005) about 206,000 substitution therapies were recorded in the substitution registry. Out of these, about 142,000 have already been terminated. With no clear codes being used, persons who present to several practices may possibly be counted several times. Depending on the period under review, there are different estimates of the number of clients in substitution therapy. For one and the same year, 56,000 cases were reported for a set day, 59,000 for a set month and 95,000 cases for the whole year (Wittchen, Apelt & Mühlig, 2005).

The most recent census permits to evaluate the number of persons reached on a set day but not over the course of the year. The number of people recorded in the substitution register on the set date 1st of June increased significantly from 46,000 at the introduction of the register in 2002 (2003: 52.700; 2004: 57.700) to 61,000 cases in 2005 (Die Drogenbeauftragte der Bundesregierung, 2006a). The increase may partly be attributable to reporting and processing problems on the part of the office-based doctors in the year of the introduction of the system. Teething problems meanwhile being solved, the increase by 5.7% between 2004 and 2005 can be rather considered an actual reflection of rising case figures of patients in therapy.

In Hesse too, the number of patients in substitution is determined through a census on a set day. Data from the quality evaluation of the Association of SHI-accredited physicians show an increase by 8.9% from the year 2003 to the year 2004 (2004: 5.885; 2003: 5.403). 20% of the patients are treated in substitution outpatient clinics, the majority however by office-based doctors (Hessisches Sozialministerium, 2006). The number of substitution outpatient clinics in other parts of Germany, especially in rural areas of eastern Germany is probably even lower than in Hesse. So it can be stated that substitution in Germany is almost exclusively carried out by office-based doctors. Psychosocial care, if required, is provided by outpatient counselling facilities.

## **Psychosocial care**

Although psychosocial care of patients in substitution is explicitly requested, offers are funded only to a limited extent by pension and health insurers. Therefore, apart from municipal resources, funds from the Laender also play an important role for this care sector. In the following, two examples of financing models with regard to psychosocial care are given.

Saarland provides funds for a total of 6000 hours of psychosocial care for patients in substitution. Parallel to medical substitution therapy, the goal is to develop and strengthen life skills. In Saarland, psychosocial care has been exclusively provided by private institutions since 1.1.2005. Assuming a demand of 0.5 hours per week and per client, psychosocial care is offered for 30-50% of the patients in substitution (Clearingstelle Suchtkrankenhilfe Saarland, personal communication).

Based on a framework agreement according to §78 SGB, costs of psychosocial care for patients in substitution therapy in Berlin are borne by the public welfare authorities. Further details on this can be found in the last Report.

## **5.5 Quality assurance**

### **Treatment guidelines**

Various professional societies and experts have worked together in the last years to develop guidelines for the treatment of drug dependence and addiction problems. These publications are a condensed summary of the current state of knowledge and provide practical guidance for carrying out treatments. Guidelines have meanwhile been published for the acute treatment of opioid-related disorders (Reymann et al. 2003), the post-acute treatment of opiate addicts (Havemann-Reinecke et al. 2004), patients with cannabis-related disorders (Bonnet et al. 2004) as well as behavioral disorders induced by cocaine, amphetamines, ecstasy and hallucinogens (Thomasius & Gouzourlis-Mayfrank 2004).

### **ASTO**

In cooperation with the Institute for Health and Social Research GmbH (IGES, Berlin), the Medical Council Westfalen-Lippe carried out a development project on quality assurance in outpatient substitution therapy of opiate addicts (project "ASTO") from 2000 to 2005. The project was funded by the Ministry of Health, Social Affairs, Women and Family of North Rhine-Westphalia, the Federal Ministry of Health and sponsors from industry.

ASTO serves to optimize therapeutic processes in outpatient substitution therapy and to improve organisational processes within individual practices and with other experts involved. It is also to help doctors to clarify legal issues. First central results of the first project phase were included in a "Manual on quality assurance in outpatient substitution therapy of opiate addicts" (ASTO Manual). 1500 copies of the manual were sent to office-based doctors and used as a basis for further measures of quality management. In the second phase of the project at the end of the year 2004, the focus was on completing the implementation of quality management in outpatient substitution therapy or the participating facilities

respectively. In selected practices, a newly developed group-coaching-model was used to support office-based doctors in setting up a quality management system for substitution therapy.

Measuring the situation in practice at the beginning and the end of the quality management measures, the evaluation of the project in 2005 showed that structure and process quality could be improved (Die Drogenbeauftragte der Bundesregierung, 2006a). 80% of the users of the manual rated it as good or very good and considered it a helpful tool for optimizing work processes within substitution (Nolting & Folmann, 2005).

### **Staff training**

In Germany, as in many other European countries, courses of studies are currently restructured. In the restructuring process, post-graduate training for social workers, psychologists and physicians play a particularly important role for addiction aid. The relevance of the current introduction of bachelor and master study programs at German universities is under discussion.

### **Quality management**

Taking a drug and addiction counselling facility with about 1500 clients as an example, an individual case study showed that in the course of a 5-year use of quality management measures according to EFQM, an improvement of quality from level three to four according to EFQM could be achieved. The evaluation was based on 30 criteria. The most marked improvements were found in result quality, satisfaction of staff and clients (Nabitz, Schaefer & Walburg, 2006).

Quality management at Land level also comprises regular data collections to assess the problem status as well as documentation of interventions. In a series of Laender this is meanwhile done systematically and regularly. Hesse for example presented its third Land Addiction Report in 2005. The report also comprises the data of the countrywide base documentation on therapy (Combass) and prevention (Cheops). The systems support national standards and regularly provide information for the countrywide surveys (Hessisches Sozialministerium, 2006).

### **Documentation and follow-up reports**

The "Core Data Set Addiction", which is the result of joint work between the DHS and the DBDD - the German Reitox Focal Point - contains a definition of the standards on the documentation of clients, therapy and facilities. In addition, a follow-up module was passed to provide also outpatient facilities with the possibility to evaluate results at the end of therapy. Information ranging from the organisation of the survey over sample taking to the calculation of outcome quotas was published in a comprehensive manual ([www.dhs.de](http://www.dhs.de), [www.dbdd.de](http://www.dbdd.de)).

## 5.6 Research

### Research Focus “Addiction“

With a series of projects funded by the Federal Ministry for Research and Education between 2001 and 2004, a first research focus was set on prevention, early recognition, improvement of the treatment of addicts and prevention of relapses. Built in the course of the projects, the research network is currently carrying out phase II which serves to put results of phase I into care practice. Hereby, the central topic is the question of allocation. While the majority of the measures aim at tobacco and alcohol consumption, the following chapters will only deal with projects which are specifically dedicated to the subject of drugs.

#### CANDIS

A “Modular Therapy of Cannabis-related Disorders“ (CANDIS) has been developed at the Research Outpatient Department in Dresden since January 2006 as part of a randomised controlled intervention study. For the first time, a special therapy program for cannabis-related disorders is to be developed, carried out and evaluated in Europe. The short-term therapy consists of ten therapy units and is a mixture of fully standardized and individualized parts. In total, 210 cannabis-addicted patients are to be recruited for the study (Die Drogenbeauftragte der Bundesregierung, 2006a).

#### COBRA

The collaborative multi-stage epidemiological study COBRA is to give a comprehensive picture of substitution therapy practice in Germany and to analyse frame conditions and results as well as possibilities of optimization. Methods and design were described by Wittchen et al. (2005). The data basis for the first evaluations was formed by the reports of 223 doctors with a total of 2,694 patients who represent a random sample of those undergoing substitution therapy in Germany. Over a period of 12 months, data of the practices were collected in a three-month-rhythm. For the longitudinal evaluation, data from 195 practices with 2,461 test persons could be drawn on.

The retention quotas of patients in substitution ranged between 60% and 80%. Within a period of 12 months, 4% of the patients terminated the therapy with abstinence, 7% changed into drug-free programs. Patients who stayed in substitution therapy could somewhat reduce their by-consumption (opiates pre: 20.0% post: 15.7%; other drugs pre: 50.6%, post: 48.8%). Somatic and psychological conditions of the patients improved significantly as well as satisfaction with life. Regarding by-use of opiates, effects tended to be better in methadone-maintenance groups, regarding by-use of cocaine, effects tended to be better in patients substituted with buprenorphine. However, the buprenorphine group had better starting conditions anyway. As the study is not randomized, differences in the effects can actually not be evaluated with different starting conditions and selection effects being effective. Practices with a small number of substituted patients were at least as successful as large practices specialized in this therapy offer (Wittchen & Apelt, 2006).

In 2003, 76% of the substituted patients were treated by 11% of the doctors of large practices. At the lower end of the scale, 48% of the substitution-accredited doctors treated only 4% of the patients. From these figures, Elsner (2005) calculated a figure of 159 patients per doctor for large practices, doubting that, with this ratio, opiate addicts could still be provided with medically adequate care.

### **Heroin trial**

Following preparatory works in 2000 and 2001, the "Study on diamorphine-based therapy of opiate addicts" started in 2003. In 2006 final results of the project were presented.

A total of 1,032 patients in seven cities were treated within the frame of the study. Two target groups were investigated: heroin addicts who (1) had already undergone methadone substitution treatments without positive therapy outcome, or heroin addicts (2) who had not been reached by the offer (in the previous six months). Patients received diamorphine-based therapy vs. methadone-maintenance, each combined with two alternative forms of psychosocial care (psychological education/drug counselling vs. case management/motivational interviewing). Main target criteria were (1) the improvement of the physical condition (measured with the OTI health scale) and the psychological condition (measured with SCL-90-R) by at least 20% and (2) a decrease of the illicit use of street heroin (measured through self-reports of the clients) by at least 60% without parallel increase of cocaine consumption.

On 23 - 25 March 2006, the central results were presented at a conference held in Cologne under international participation. Heroin prescription showed significantly better results. Positive effects on the health condition were found in 80% of the heroin group compared to 74% of the methadone group, illicit drug use decreased by 69.1% (heroin) compared to 55.2% (methadone). Both target criteria were fulfilled in 57.3% (heroin) compared to 44.8% (methadone). In two of the seven cities, significantly lower effects were found for the target criterion drug use, otherwise no effects were found with regard to location of therapy or type of psychosocial care. The retention quota for the heroin group was at 67% after 12 months and for the methadone group at 39%. The latter figure is mainly attributable to the fact that a third of the clients who were randomly attributed to this therapy group, did not present to therapy. As expected, heroin prescription turned out to be a more risky therapy form with regard to undesired side-effects.

In the first phase of the study, mortality of this difficult target group was low (1.2%). No death case was causally connected to the medication prescribed as part of the study. The target group of those who had not been reached by help offers and had not been in contact with the help system during the previous six months, did not differ in their therapy history from the other group (Naber & Haasen, 2006).

After the completion of the study an application for the admission of diamorphine as a pharmaceutical drug was filed with the BfArM. The BfArM has meanwhile technically endorsed the admission. However, the admission of diamorphine also after the completion of the study requires a few legal changes, which are currently still subject of a political decision process.

### **Other studies and results**

A working group consisting of experienced therapists and addiction experts discussed criteria for inpatient therapy of cannabis addicts and published results in a position paper (Holzbach et al., 2006). According to this working group, the necessity of inpatient therapy needs to be examined if (1) dependence on cannabis according to ICD-10 is given and outpatient withdrawal has failed, (2) cannabis consumption is connected with severe psychiatric comorbidity, psychosocial immaturity or high consumption frequency or (3) in the case of severe withdrawal symptoms.

With the WHO Assist Questionnaire having been translated into German and the first field test having been completed, the general medical care system and addiction practice in particular have now a screening instrument at their disposal to collect information on drug consumption in all important substance categories (Schütz, Daamen & Niekerk, 2005).

A naturalistic study investigated the effects of family therapy in teenagers and young adults (n=86) with poly-drug use. 72% terminated the therapy according to schedule, out of these 73% showed significant improvements of their addiction status. Also with regard to parents and family, significant improvements were found (Thomasius et al, 2005).

Scherbaum and colleagues (2005) established evidence of a significantly positive additive effect of a cognitive-behavioral group therapy for opiate addicts in a controlled study, in which substitution therapy was carried out as a base therapy. The effect was significant after six months, but not at earlier measurements.

## 6 Health correlates and consequences

### 6.1 Overview

Drug use has an influence on morbidity and mortality of the users. Data on drug-related deaths are collected by two countrywide systems: The case register on narcotics (FDR) of the Federal Office of Criminal Investigation (BKA) and the general death register of the Federal Statistical Office (StBA). There are hardly any data available on the morbidity of untreated drug addicts which could be used for epidemiological purposes, so alternatively, the descriptions of the health condition of the clients at the beginning of a therapy are used. As these often represent a positive selection by drug users, health aspects probably tend to get underestimated.

#### The case register narcotics

Drug-related deaths are recorded by the criminal investigation departments of the respective Laender through the case register on narcotics (FDR). Data collection modalities and assessment principles differ between the individual Laender. The portion of autopsied drug-related deaths as a measurement for the quality of the assignment of drug-related deaths varies considerably between the Laender. Toxicological reports on body fluids and tissue play an important role in determining the cause of death providing clarifying information on the drug status at the time of death. Autopsies and toxicological reports are generally written by different institutions. The latter in particular, are made available with considerable delay and are therefore not sufficiently taken into account in the classification of drug-related deaths.

In order to facilitate the recording of drug-related deaths and reduce mistakes, the following categories for drug-related deaths were defined by the BKA in a sheet of instructions (Bundkriminalamt 1999)

- drug-related deaths due to unintended overdose
- death as a result of health damage (physical decline, HIV or hepatitis C, weakness of organs) caused by long-term drug abuse,
- suicide out of despair over living conditions or under the influence of withdrawal symptoms (e.g. delusions, strong physical pain, depressive mood),
- fatal accidents under the influence of drugs

#### General death register

In Germany, a death certificate is written out for every case of death, recording personal data and information of the cause of death. The death certificate is passed on to the health office and then to the Land Statistical Office. Aggregation and evaluation at national level is done



by the Federal Statistical Office. Also this data source doesn't take account of results of delayed toxicological reports in the classification of the drug-related deaths.

Only cases with specific causes of death are reported from the general death register to the EMCDDA. The selection is based on the specifications of EMCDDA (section B), which – in comparison with the specifications of the Federal Office of Criminal Investigation – have a narrower definition of drug-related deaths. As a basis for the assignment to the group of drug-related deaths, the assumed underlying disorder (ICD10-Codes F11-F19) or the assumed reasons of death (ICD10-Codes X, T, and Y) were used respectively.

Comparisons with other European countries should only be made on the basis of the general death register, as this register largely follows common standards. Due to the broad definition of a 'drug-related death', the data of the police register lead to higher estimates. The police register is of great importance for long-term comparisons of national trends but it is less suitable for European-wide comparisons due to differences in the selection criteria and recorded age groups.

Neither of the two registers records the totality of drug-related deaths. A certain number of relevant cases is – with either register – not recognized, not reported or wrongly assigned. However, a long-term comparison of the two registers shows very similar developments and trends effecting a kind of cross-validation of the two estimate procedures. An empirical analysis of the questions with regard to double recordings and overlapping of the two target groups remains to be undertaken.

### **Infectious diseases**

According to the Infectious Disease Control Law (IfSG) effective as of 1 January 2001, data on infectious diseases, including HIV and viral hepatitis, are to be reported to the Robert Koch-Institute (RKI). They are published in regular intervals ([www.rki.de](http://www.rki.de)). According to the German Regulation on Laboratory Reports of 1987 and the Infectious Disease Control Law all laboratories in the Federal Republic are obliged to report confirmed HIV-antibody tests anonymously to the AIDS-Centre of the Robert-Koch-Institute. These laboratory reports contain information on age, gender, place of residence of the infected and way of transmission. In addition, the AIDS-Case-Register collects epidemiological data on diagnosed AIDS-cases in an anonymous way and based on voluntary reportings of doctors in charge of the treatments. Thanks to a change in the collection of data on new HIV-diagnoses, it is now better possible to avoid (formerly unrecognized) multiple data entries.

With the introduction of the Infectious Disease Control Law in 2001, data on possible ways of transmission of hepatitis B and C also have to be reported. This is done by the health authorities investigating the case persons themselves or by the laboratories and general practitioners passing on the information.

The most recent data are published yearly by the Robert Koch Institute in Berlin in the "Infection epidemiological yearbook of notifiable diseases".

## 6.2 Drug-related deaths and mortality of drug-users

### 6.2.1 Drug-related deaths

#### Data from the special police register on drug-related deaths

The reliability of information on drug-related deaths strongly depends on the question whether autopsies and toxicologic examinations have been used to validate the initial classification as drug-related death (cf. 6.1). On average, the autopsy rate in the reporting year was at 64% (2004: 74%), a few individual Länder however, diverged considerably from this value (BKA, 2006).

The overall figure of drug-related deaths as recorded by the register of the Federal Office of Criminal Investigation, fell by 4% from 2004 to 2005. With 834 in 1,326 cases, overdose of heroin was the most common cause of death (2005: 63%; 2004: 56%; 2003: 41%; 2002: 55%). This category comprises both death cases in which heroin was found as the only drug and cases in which other drugs apart from heroin were detected. Over the last years, the portion of the latter showed an upward trend. Shrinking, by way of contrast, was the portion of drug-related deaths in which also substitution substances played a role (2005: 25%; 2004: 25%; 2003: 28%; 2002: 40%).

As the data collected by the Land Offices of Criminal Investigation for the federal statistical report, may contain multiple entries of the same case, it could be that a death case gets coded for example as a suicide and an overdose of cocaine. The sum of all entries on overdose is already higher than the overall figure of death cases. This means, that double entries are also contained in this category. Therefore, it is possible to add up only categories which have no data overlappings. This is for example the case for the categories “overdose through heroin (alone)” and “overdose through heroin and other drugs”. The figure of death cases caused by overdose can therefore not be calculated (table 19).

**Table 19: Drug-related deaths in 2005**

Todesursachen	2002 %	2003 %	2004 %	2005 %	2002	2003	2004	2005
1. Overdose of:								
Heroin	36%	31%	34%	40%	551	456	470	529
Heroin + other drugs	19%	18%	22%	23%	285	266	311	305
Cocaine	3%	2%	2%	2%	47	25	34	24
Cocaine + other drugs	6%	6%	10%	9%	84	93	132	123
Amphetamines	1%	0%	0%	1%	10	3	6	9
Amphetamines + other drugs	2%	1%	2%	2%	27	16	30	26
Ecstasy	1%	0%	0%	0%	8	2	5	2
Ecstasy + other drugs	1%	1%	1%	0%	11	8	15	5
Medicaments/ substitution substances	10%	4%	3%	6%	145	55	46	75
Narcotic drugs + alcohol + substitution substance	30%	24%	22%	19%	453	354	299	255
Other narcotic drugs / unknown	4%	9%	10%	10%	54	139	141	129
2. Suicide	9%	8%	7%	8%	133	117	92	104
3. Long-term damage	11%	14%	12%	12%	165	204	173	165
4. Accident/other	2%	3%	2%	2%	33	37	26	31
5. Total	100%	100%	100%	100%	1,513	1,477	1,385	1,326

Source: BKA (2006)

Note: Due to multiple entries in the categories overdose (various types of narcotic drugs) and suicide, the number of summed-up death-causes lies above the total figure.

Despite the continuous decline in overall drug-related deaths, details found might be an indication of a problematic development in consumers who are *not* in substitution. The increase in mortality among clients of outpatient counselling facilities (see 6.2.2) and rising heroin-related death cases point into the same direction. At the same time, the number of cases in which substitution substances played a role in the death of a patient, decreased which might be attributed to improvements in the qualification of care personnel and quality assurance measures.

#### Data from the general death register

The most recent figures on drug-related deaths which are available through the general death register, date back to the year 2003. For that year, the register recorded data on 231 women (2002: 201; 1999: 249) and 1,161 men (2002: 1,139; 1999: 1,337) whose deaths were linked to illicit drugs. These figures recorded by the general death register are about 20% higher than the figures registered by the BKA. In about half of the death cases, the underlying disorder, i.e. addiction or harmful drug use, was coded as cause of death. A

further 40% were related to overdose. Shifts especially between intoxication and accidental overdose might possibly be attributable to changes in coding (table 20).

**Table 20: Cause of death in drug-related deaths, general death register**

	1999	2002	2003
Acute Intoxication	19.7%	7.3%	7.8%
Harmful use	4.6%	5.4%	3.2%
Dependence syndrome	54.6%	42.8%	48.1%
Other psychological or behaviour disorders	3.5%	1.7%	0.7%
Unintentional overdose	1.6%	26.5%	21.3%
Suicidal overdose	2.9%	7.4%	12.7%
Overdose, unknown intention	13.0%	8.9%	6.2%
N	1,337	1,139	1,161

Source: Statistisches Bundesamt, own calculations

The substances which were the cause of death are presented in table 21. They were either coded with F1X.X under "Psychological and behavioural disorders caused by psychotropic substances" or with X/Y- under "external cause of death". Apart from opiates, poly-drug use (probably also including opiates) was predominant. Other substances accounted for a maximum of 2% of the deaths (table 21).

**Table 21: Substances in drug-related deaths, general death register**

	1999		2002		2003	
	F1x.x	X/Y	F1x.x	X/Y	F1x.x	X/Y
Opiates	41.4%	4.7%	41.7%	5.1%	43.4%	6.0%
Cannabinoides	0.6%	0.0%	0.6%	0.0%	0.8%	0.0%
Cocaine	1.2%	0.6%	1.0%	0.5%	0.4%	0.4%
Other stimulants	0.2%	0.1%	0.2%	0.1%	0.4%	0.0%
Hallucinogenic drugs	1.1%	0.0%	1.3%	0.0%	2.0%	0.0%
Multiple/other substances	38.7%	10.4%	37.5%	10.6%	32.5%	11.6%
Other narcotics		1.1%		1.4%		2.4%
Total	1,337		1,139		1,161	

Source: Statistisches Bundesamt, own calculations

Currently, a study is conducted to investigate correspondence between the drug related death cases recorded by the general death register and the ones recorded by the police register. The study is part of the European efforts to promote the process of creating uniform standards in data collection (Heinemann & Simon, 2005).

Detailed data on drug-related deaths are contained in standard table 5, the development of the case figures in table 6.

### 6.2.2 Overall mortality and causes of death among drug users

There is no survey available on the mortality of the total population of drug users and recent regional cohort studies are not known either. It is however possible to get at least closer to the question by resorting to the data which exist on drug addicts in therapy.

According to the German Annual Statistical Report for 2005, therapy in outpatient counselling facilities ended in 1.4% (2004: 1.2%; 2003: 1.2%) of the opiate addicts with death of the patient. In order to eliminate the effect of treatment duration, which has on average been on the rise since 1996, a treatment duration of 12 months was mathematically assumed. The resulting mortality per year increased in 2005 for the first time again relative to the previous year and is even somewhat higher than in the years since 2000. This could be an indication of a change in mortality in the drug scene (Strobl et al., 2006). However, when looking at these data, it needs to be taken into account that the counselling facilities do not always get to know about the death of a client so that the actual mortality is presumably higher than the value given here. Proceeding on the assumption that knowledge of the facilities about clients' deaths has not changed over the years, it is nevertheless possible to interpret trends in the way presented (table 22).

**Table 22: Mortality of opioid patients in outpatient therapy**

	1996	1998	2000	2001	2002	2003	2004	2005
Proportion of deaths amongst treatment outtake	1.7%	1.2%	1.1%	1.1%	1.2%	1.2%	1.2%	1.4%
Duration of treatment (weeks)	33.9	32.1	34.9	37.6	40.1	40.3	42.5	43.6
Mortalität p.a.	2.6%	1.9%	1.6%	1.5%	1.6%	1.5%	1.5%	1.7%

Source: DSHS (Strobl et al. 2006a)

Mortality of patients in substitution therapy was measured at 1.1% by the COBRA-study in the course of one year. This value is based on a sample taken in 223 substituting doctors and their 2,694 patients (Wittchen & Apelt, 2006).

The increase in offers of substitution therapy was paralleled by a decrease in the number of drug-related deaths in Germany. Based on autopsies and toxicologic reports, an analysis of drug-related deaths which occurred in the year 2003 (n=272) in the region of Munich also found a lower risk of overdose in substitution with buprenorphine in comparison with methadone. During this period of time, about 10% of all patients undergoing substitution therapy in this region were treated with buprenorphine, 87% with methadone. In the death cases however, only one single case (0%) was found in which buprenorphine played a role in contrast to 96 cases (35% of the drug-related deaths) in which methadone was detected in the body (Soyka, Penning & Wittchen, 2006).

## Overall situation

Compared to the situation 10 years ago, the number of drug-related deaths is currently relatively low and has fallen again slightly below the figure of the previous year. Overdose of opiates is by far the most common cause of death, whereby in many cases additional licit and illicit substances were consumed. Only data from therapy facilities point to an increase of drug-related deaths, which is however not confirmed by other sources. The further development needs to be carefully monitored in the next year.

In comparison to the police register, substances, apart from opioids, are even more rare to get recorded by the general death register. The reason for this could be that the results of differentiated toxicologic examinations arrive too late to be coded and entered into the system while in the police register these pieces of information can be still added at a relative late point of time.

Two sources provide information on drug-related deaths which are generally not much taken notice of. There have been 24 deaths in Germany caused by inhalants since 1996. For the 458 hospital cases involving intoxication with volatile substances (F18), which were recorded in 2004, detailed data are missing to define the portion of abuse cases (Elsner, 2006). Critical health effects caused by GHB were reported regionally in an individual case. In May 2006, four people passed out shortly after the consumption of GHB, but their lives could be saved in the intensive care station. Police found later that apparently only little quantities of the drug had been illegally offered (Südkurier.de, 12.6.2006).

Data on the mortality of drug users can be found in table 18.

## 6.3 Drug related infectious diseases

### 6.3.1 HIV

Drug users are, in terms of figures, the fourth largest risk group for HIV-infections. According to the Robert Koch-Institute, HIV incidence was at 7% (2004: 5.8%; 2003: 7.0%) in the group of injecting drug users. Until the year 2000, the figure was at 10% (2000: 171 out of 1,696). Data on the way of transmission were available for 84% of the new diagnoses of HIV-infections in 2005. Out of these, 59% are men who have sex with other men (MSM). This group has been the largest for years and continues to grow. The second largest group is formed by people who come from a country with a high HIV-prevalence in the general population and who presumably contracted the disease already in the country of origin. Infections caused through heterosexual contacts were at 16% (Robert Koch-Institut, 2006).

In 2005, HIV-incidence in the overall population was at 3.0 in 100,000 (2004: 2,7). However, there are considerable regional differences. The highest incidence of HIV-first diagnoses among the Laender was found in the city states Berlin and Hamburg with figures above 10 in 100,000 cases. Similarly high figures were found for Cologne (13.6), Munich (11.5), Düsseldorf (8.9), Wiesbaden (8.8) and Frankfurt on the Main (8.5).

In 5.7% (2004: 3.9%) of the drug-related deaths (70 out of 1,237) recorded in 9 Laender, a positive HIV-status was found. Data from outpatient counselling facilities show a prevalence of 3.7% (N=843 tested clients with known results) (Strobl et al. 2006). However, due to the small number of reported cases and the assumed selectivity, these data have only little expressivity.

Comparing cohorts between 1991-1996 (N=1070) and 2001-2005 (N=1390), the prevalence of HIV-infections among drug addicts in qualified substitution therapy declined from 5% to 2%. Among the n=2.694 substitution patients of the COBRA-study, 14% were HIV-positive, almost all of them also had an HCV-infection (Gözl, 2006). The infection status is primarily based on self-reports of the patients. However, statements made by treating doctors on infection quotas, are not seldomly more conservative. As in this quota the sample design of the study has not been taken into account yet, the figure cannot be interpreted as an HIV-prevalence of substituted patients.

The HIV-quota of clients in drug consuming rooms in Frankfurt was at 6.5%. The figure is based on self-reports of the clients (Simmedinger & Vogt, 2006).

Summarizing, it can be concluded that intravenous consumption was the probable cause of infection in less than 10% of those newly infected and that in most of the analysed groups less than 5% of the IDUs were HIV-positive in the year 2005.

### **6.3.2 Viral hepatitis**

#### **Data from population statistics**

For the general population basic data on viral hepatitis are available. According to the Federal Health Report (Robert Koch-Institut, 2004, Vol. 15) 5-8% of the population in Germany in the age between 18-79 years are affected by a hepatitis-B-infection, 0.4-0.7% are virus carriers. A total of 0.5-0.7% of the population carries hepatitis-C-antibodies.

In the year 2005, 1,235 (2004:1,276) cases of acute hepatitis B were reported. Hepatitis B incidence in the population was at 1.5 in 100,000 inhabitants (2004: 1.5/100,000). Regarding possible ways of transmission, intravenous drug use was reported 81 times in hepatitis B cases (2004: 138). This corresponds to 4.4% (2004: 7%) of the 1,861 cases for which possible ways of transmission were recorded.

In the same year, 8,308 new hepatitis C infections were reported to the RKI (2004: 9,072). Hepatitis C incidence was at 10.1 in 100,000 inhabitants (2004:11). Discrimination between acute and chronic hepatitis-C infections in the case reportings is not possible with the current reporting system. Intravenous drug use is assumed to be the cause of infection in 35% of the cases (2004: 37%). This corresponds to 2,152 in 6,226 cases for which possible ways of transmission were recorded. In the group of males with HIV-infections aged between 15 and 29 years, the portion of IDUs is markedly higher reaching 78% (Walter et al., 2006).

### **Data from facilities and vaccination programs**

Comparing cohorts between 1991 to 1996 (N=1070) and 2001 to 2005 (N=1390), drug addicts in qualified withdrawal therapy show stable to slightly declining prevalences. During both periods of time, hepatitis B was found in 6% of the patients, prevalence of hepatitis C fell from 61% to 53% (Backmund et al., 2006a.).

HCV-prevalence among users of drug consumption rooms was at 60% (self-reports) (Simmedinger & Vogt, 2006).

Out of the 2,694 patients treated in office-based substitution practices and surveyed as part of the COBRA-study, 69% tested HCV-positive. In the course of 12 months, an HCV-infection was found in 76 out of 512 initially HCV-negative patients (Backmund et al., 2006b). The resulting incidence of 15% in 12 months could however be too high given possible delays in making the diagnoses.

A study conducted among more than 1000 inmates consecutively committed to a German penal institution for male prisoners aged between 16 and 24 years, found an HCV-prevalence of 8.6 by measuring HCV-antibodies or HCV-RNA respectively. As a central result, the study found a significant difference in the prevalence of prisoners who were born in Germany (6%) and repatriates born in the UdSSR (31%). Given the age and gender of the inmates, it can be assumed that the number of offences committed against the Narcotic Drugs Act is considerable. Therefore, apart from intravenous drug use, the country of origin should be more taken into account in the future as an additional risk factor (Meyer et al., 2006).

Summarizing, antibody prevalence (infection rate) of hepatitis B among IDUs in Germany can be estimated to range between 40-60% and for hepatitis C between 60-80%. Despite the unsatisfying data situation, it is to be noted nevertheless that antibody prevalence in IDUs is very high for hepatitis B and hepatitis C. Being strongly affected by new infections, drug users play a central role in the spread of this disease.

### **6.3.3 Sexually transmissible diseases, Tbc and others**

Since the end of the year 2002, infections of HIV, syphilis, gonorrhoea, chlamydiae and trichomonas are recorded by the Robert Koch-Institute in a countrywide sentinel-network. A total of about 235 selected medical practices, specialized outpatient units and health offices report data on sexually transmissible diseases diagnosed by them. In addition, the persons concerned are asked to fill out anonymized questionnaires on their sexual practices, drug use and social status. Current data on the prevalence of these diseases among drug users are not available.

Data on the prevalence of hepatitis B and C and of HIV among intravenous drugs users are contained in standard table 9.



#### **6.4 Psychiatric comorbidity**

Drug addicts have a higher suicidality than comparable groups. According to police statistics (cf. table 19), living conditions were the reason for suicide in 8% of the cases. A study conducted by the University Hamburg among clients of an outpatient drug department for teenagers and young adults, found depressive episodes in more than 20% of the patients (ICD-10 Code F32), repeated depressive episodes in more than 10% (F33), personality disorders (F60, F61) and emotional childhood disorders (F93). Initiation with cannabis consumption was on average between 14 and 15 years. At the start of therapy, cannabis was used on 6 out of 7 days. Clients with primary cannabis problems (F12.x) did not differ in this from persons with by-use of other substances (F19.x). 58% of the interviewees were aged under 21years (Sack et al., 2005).

#### **6.5 Other drug-related health correlates and consequences**

Neuropsychological tests found that consumers who used both ecstasy and cannabis (N=24) showed stronger attention and short-memory deficits than those who only consumed cannabis. Hereby, the lifetime dose of cocaine and LSD was taken account of as a covariate (Wartberg et al., 2005).

The most recent review on neurotoxic effects induced by MDMA found that changes of the serotonergic transmission in MDMA-users possibly do not disappear completely even after a long phase of abstinence. Because of methodological problems it is however not possible to draw final conclusions. Multiple use of other substances and other pre-existing variables cannot be excluded either as causes of the changes (Gouzoulis-Mayfrank & Daumann, 2006).

For correlates between drug use and driving see chapter 13.

## **7 Responses to health correlates and consequences of drug use**

### **7.1 Overview**

Health aspects of drug use are addressed by specific offers provided for drug users as well as within the frame of general health care. Information on the scope and type of measures is generally only available for a part of the specific measures, as these are carried out by specialized facilities or as part of a specific program.

#### **General health care**

Data on general health care do not provide any information which could be specifically referred to the group of drug addicts. Except for individual cases, there are no data available on the number of emergency missions due to overdose or other life-threatening conditions caused by drug use. There are no data either on the treatment of sequelae carried out in office-based practices or clinics.

#### **Special offers**

Outpatient services facilitate access to basic medical care which is generally provided by office-based doctors in their function as medical consultants. Dental treatments which have been put off for a long time and other medical treatments are common to be carried out during inpatient therapy. Basic data hereto are available from the German Annual Statistical Report on Addiction Therapy. In a few Laender, specific projects on dental hygiene and infection prophylaxis are offered as part of low-threshold drug aid.

### **7.2 Prevention of drug-related deaths**

In the last few years, various approaches were aimed at preventing drug-related deaths: drug emergency prophylaxis, 'therapy now', use of naloxon, drug consumption rooms and the expansion of substitution treatment.

#### **Drug consumption rooms**

In drug consumption rooms, drugs are brought along by the drug users themselves. Infection prophylaxis is part of the systematic service provided. Paraphernalia brought along to the consumption rooms may not be used. The goal of this initiative is to secure the survival and stabilization of the health conditions of the drug users as well as to attract drug users who can otherwise not be reached by the system in order to provide them with motivational offers to quit using drugs. Based on §10a of the Narcotic Drugs Act, which defines minimum conditions for the operation of these facilities, the governments of the Laender may pass regulations specifying the authorization criteria to be fulfilled for setting up and running drug consumption rooms. In 6 out of 16 Laender, corresponding regulations have been passed. At the moment, there are 25 drug consumption rooms in Germany (Die Drogenbeauftragte der Bundesregierung, 2006a) with 214 consumption places, Care is provided by 175 staff (Simon, 2005).

The evaluation of the documentation of the consumption rooms showed that the four consumption rooms in Frankfurt were used by 4,253 persons in 2005. This corresponds to an increase of 16% on the previous year (N=4,253). 156,834 drug use activities were recorded. Regular consumers who used the rooms more than 50 times only represented a small portion (15%) of this group. According to self-reports, 51% of the users were under medical care in the last 30 days because of their drug use. The majority of users (74%) consumed heroin, 44% crack and 13% benzodiazepine. First time users were on average 33 years old, only 1.3% were younger than 20 years (Simmedinger & Vogt, 2006). The facility "Step" in Frankfurt reported 35,000 drug use activities in its consumption rooms. Heroin was the predominant drug with 90%. Combined use of heroin and cocaine was at 4%, lying markedly over last year's figure (Step, o.J.).

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

#### **Syringe programs in prisons**

The distribution of syringes to injecting users in prisons was tested in Germany since the mid-eighties and implemented in 7 penal institutions over a longer period of time. The results demonstrated the feasibility of such programs and also yielded some positive effects, but did not lead to a country-wide implementation. Possible reasons were expenditure, costs and organizational problems connected to the implementation of the program. 6 of the 7 programs have meanwhile been stopped. A relatively small penal institution for women in Berlin is the last one to still distribute syringes to addicted inmates.

As part of a study conducted in the years 1998 and 1999, sterile injection needles were distributed to inmates of a penal institution. Out of 174 IDUs, 75% continued injecting drug use during the project. However, needle sharing sank from 71% down to 0%. Seroprevalence at the beginning of the study was at 18% for HIV, at 53% for HBV and at 82% for HCV. During the period under review, no new cases of HBC or HIV occurred, but 4 cases of HCV were found (Stark et al., 2005).

#### **Syringe programs in low-threshold work**

Distribution and exchange of syringes in low-threshold services is explicitly permitted by the Narcotic Drugs Act and is also practiced in many locations. Experts assume that there are about 200 distribution machines for syringes available countrywide (REITOX-Bericht 2005). National statistics on the exact number of distribution locations or the number of distributed needles are not available. Indications of developments and trends may be possibly gleaned from reports of individual facilities or supporting organs.

The report from Schleswig-Holstein contains a description of 5 low-threshold facilities. They can at least give some data to go by with regard to the national situation. While the number of contacts and distributed meals remained relatively stable in these facilities between 1997 and 2004, the number of distributed syringes plummeted by about 50% from 2001 to 2004 (data from 3 facilities). Authors of the report attribute this on the one hand to a reduction of opiate addicts attended to in these facilities by about a quarter, and on the other hand to

changes in drug application modes. Other possible explanations may be the large spread of substitution offers and the stable or even declining overall consumption of intravenous heroin use (Raschke, Buth & Kalke, 2005).

Data on the availability of syringes are contained in standard table 10.

### **Information on infection risks, vaccination and treatment**

In view of the high infection risks for hepatitis A and B, vaccination programs for IDUs are an important instrument of infection prophylaxis. They are used in many places.

The action committee 'Hepatitis and Drug Use' is a cooperation of the German Society for Addiction Medicine, the German AIDS-Society, Akzept e.V. and several other self-help groups. Funded by the BMG, the action committee developed the manual "Hepatitis C and drug use" which is specifically addressed to drug aid facilities. It contains up-to-date information on prevention and therapy of hepatitis C in this group of persons as well as guidelines and material for counselling, therapy and legal issues. A workshop was run on this topic on the occasion of the 3<sup>rd</sup> International Conference on Hepatitis and Drug Use on 21 and 22 September 2006 in Bonn (Aktionsbündnis Hepatitis und Drogengebrauch, 2006).

Funded by the Federal Ministry for Education and Research, the research and application network named "Hep-Net", is to promote early recognition of hepatitis B and C and improve quality of therapy through rational diagnostic methods and training of doctors. The network comprises about 1000 members. Forming a large group among those infected, drug addicts could as well profit from these developments. Cooperation with other European initiatives ([www.virgil-net.org](http://www.virgil-net.org)) has meanwhile been started (Meyer & Deterding, 2005).

### **Treatment of hepatitis C in drug users**

While in the past, IDUs have mostly been excluded from standard HCV-therapy with Interferon and Ribavirin in Germany, most recent results show the feasibility of such treatment approaches also for this group of persons. The frame conditions for a successful HCV-therapy are quite good in particular when patients attend to substitution therapy.

In view of the considerable costs resulting from chronic hepatitis C – 25% develop hepatic cirrhosis in a period of 20 years, 5% hepatic cancer - treatment of this disease also in drug users is important and appropriate not only for medical but also for economic considerations. Given the right frame conditions, therapies can indeed yield positive results (Gölz, 2006).

The COBRA-study (N=2,694 clients, 223 doctors) showed that treatment of hepatitis C was successful for 56% of the patients in substitution therapy. This figure corresponds to the outcome quotas of general population studies (Backmund et al., 2006b).

Even better results are achieved by specialized facilities. Out of the 115 patients who were treated between 2001 and 2003 in a Munich substitution outpatient clinic, N=40 accepted to be treated for hepatitis C. At the end of the treatment with standard Interferon and Ribavirin, 70% of them tested HCV-RNA-negative. The success rate in genotype 1 was at 58%, in

genotype 3a at 79%. The therapy outcome was particularly successful when substitution and HCV-therapy were offered by a doctor at one single location (Backmund & Meyer, 2006).

#### **7.4 Interventions related to psychiatric co-morbidity**

Drug users who, in addition to their drug problems, suffer from psychological disorders, need care which takes both areas into account. These individuals are particularly in need of general diagnostic competences of addiction therapists with regard to psychological disorders, and, at the same time, require an appropriate organization of cooperation between clinical psychology/psychiatry and addiction care. The problem being stated and described at many places does not mean that the practical consequences are always easy to implement given the differences in work areas, responsibilities and financing modalities.

In practice, there are two models to deal with these problems: either, the two problem areas are dealt with by two different therapists/institutions who/which have to closely coordinate their activities. Alternatively, the treatment is carried out at one place, which however requires competences in both problem areas. In general, mixing these clients with other drug clients has not proven positive, as clients with double diagnoses sometimes require a slower and more flexible therapeutic approach (e.g. regarding medication, keeping agreements, accepting set structures).

A study conducted by Schäfer (2005) arrives at the conclusion that antiviral therapy in drug addicts is feasible even in the case of concomitance of psychiatric disorders and drug addiction. However, excluding criteria are severe cerebro-organic changes (e.g. dementia), uncontrolled alcohol consumption and insufficient motivation.

#### **7.5 Interventions related to other health correlates and consequences**

Low-threshold initiatives and in particular syringe exchange programs (cf. 7.3) and in particular consumption rooms (cf. 7.2) serve to curb negative health effects of drug use. Harm reduction measures as offered especially by low-threshold facilities aim at the same direction.

Every third opiate addict in outpatient therapy lives together with a child (Strobl et al., 2006). Proceeding on the known case figures, several hundred newborn babies are affected each year. A special information brochure with the title "You are pregnant ... and you take drugs?" tries to address the target group of pregnant drug users in order to reduce health risks and damage both for mother and child (Deutsche Hauptstelle für Suchtfragen, 2006). A few therapy facilities offer therapy places for mother and child. In general however, specific offers for this target group are rare. This is a problem area where it is often necessary to take difficult decisions weighing between the duty of the state in respect of care and supervision of the child on the one hand and the wish and right of the mother to raise her child on the other.

Information on the topics traffic accidents and drug use can be found in chapter 13.

## 8 Social correlates and consequences

### 8.1 Overview

Drug use is often linked with difficult family and life circumstances. While it may be a consequence of these circumstances, it can also aggravate the situation and worsen the drug users' outlook for the future. The social framework conditions under which drug use takes place indicate the marginalization especially of intensive drug users.

As the possession of drugs is illegal, the most important negative consequences drug users face in this respect not only in the EU member states, are penal sanctions. The Federal Office of Criminal Investigation differentiates in its statistics on drug-related crimes between punishable acts in terms of violations of the Narcotic Drugs Act and cases of direct economic compulsive criminality. The first ones are subdivided into four different groups of offences:

- General offences in terms of §29 BtMG (especially possession, purchase and distribution, so-called consumption-related offences)
- Illegal trafficking and smuggling of narcotic drugs in terms of §29 BtMG,
- Illegal import of narcotic drugs in non negligible quantities in terms of § 30 BtMG
- Other offences against the BtMG

Prosecution of economic compulsive crimes is mainly related to theft and robbery.

### 8.2 Social Exclusion

Some indication of the aggravated general living conditions of drug users can be gleaned from socio-demographic data of treatment documentation. Opiate-addicted members of the open drug scene are affected the most. Data from the national addiction aid statistics and the regional monitoring systems like in Frankfurt and Hamburg give insight into the situation. Further information on this group's life circumstances is provided by MoSyd in Frankfurt (Werse et al. 2005) and by the surveys carried out on selected key persons in Hamburg (Baumgärtner & Gies 2005).

A considerable part of the opiate clients of outpatient counselling facilities do not have any educational attainment at the beginning of treatment. More than half of the clients with primary heroin problems and primary cocaine problems are jobless or without income. One in six does not have any school leaving qualification. While as for cannabis clients, this is partly due to the relatively young age, the rest are mostly school drop-outs (Strobl et al., 2006). The portion of homeless among clients of drug consumption rooms was at 13% (Simmedinger & Vogt, 2006) (table 23).

**Table 23: Social situation of persons in outpatient therapy without main drug**

Main diagnosis	Substance	No school examination	Unemployed	No gainful work	Homeless
F10	Alcohol	4.9%	26.4%	3.8%	0.9%
F11	Opioids	17.2%	52.7%	10.8%	4.7%
F12	Cannabinoids	25.9%	25.9%	8.2%	0.8%
F13	Sedatives/ Hypnotikcs	6.5%	29.0%	5.1%	1.1%
F14	Cocaine	15.4%	37.7%	13.5%	1.5%
F15	Stimulants	14.5%	29.2%	11.6%	2.5%
F16	Halluzinogenics	25.6%	37.6%	9.4%	4.0%
F17	Tobacco	10.2%	15.7%	2.8%	0.3%
F18	Volatile substances	36.8%	14.3%		
F19	Multiple use	20.0%	41.5%	12.1%	1.6%

Source: DSHS (Welsch & Sonntag)

Lampert, Richter & Klocke (2006) have written an overview on unequal opportunities in Germany investigating the correlation between prosperity of the family and health conditions of the child. The overview establishes a connection between low living conditions and developmental retardations, allergies, danger of accidents and general well-being. Families living in poor conditions make less use of health offers even when these are free of charge. No difference was found in the tobacco and alcohol use of teenagers of either population group. Differences could probably develop later with different school settings. However, worse health behaviour is not directly linked to disadvantaged living conditions. Rather, a high social capital in terms of strong support from family, friends and acquaintances can have a strong protective effect.

### 8.3 Drug related crime

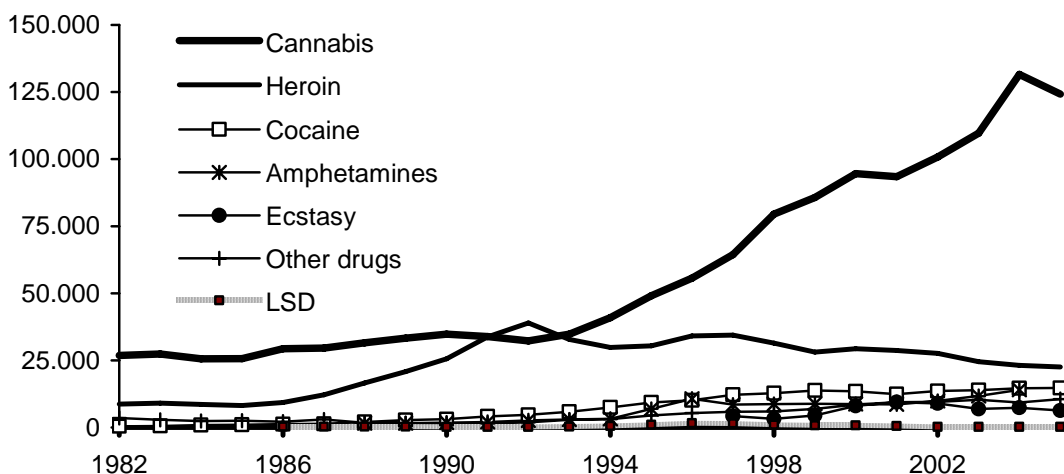
#### 8.3.1 Economic compulsive crimes

All criminal offences which are committed in order to obtain narcotic drugs, substitute or alternative drugs are subsumed under the term 'direct economic compulsive crimes'. In the reporting year, 2,205 economic compulsive crime cases (2004: 2,568, 2003: 2,807) were recorded. With that, the number of offences declined in two consecutive years. In 2005, figures fell significantly by 14% from the previous year. More than 50% of these offences are related to forgery of prescriptions or theft of prescription forms (Bundesministerium des Inneren, 2006).

### 8.3.2 Consumption-related offences

Drug offences with regard to trafficking and smuggling are the subject of chapter 10 and will not be dealt with in the following. Rather, this section is about drug offences which are classified by police as general offences based on general criteria (quantity, persons involved) and are thus more seen as consumption-related offences .

With regard to these offences, cannabis and heroin play a predominant role. The decline of the overall figure (2005: 194,444; 2004: 200,378; -3.0%) is mainly attributable to decreasing figures found for heroin (2005: 22,592; 2004: 23,161; -2.5%), cannabis (2005: 124,170; 2004: 131,587; -5.6%) and ecstasy (2005: 6,328; 2004: 7,383; -14.3%). Amphetamine-related offences (2005: 15,845; 2004: 14,039; +12.9%) and offences involving other drugs (2005: 10,574; 2004: 9,341; +13.2%) by contrast, increased. Cocaine-related cases (2005: 14,728; 2004: 14,660; +0.5%) remained stable (Figure 7).



**Figure 7: Development of consumption-related offences**

Source: Bundeskriminalamt (2005a)

### 8.3.3 Drug-users with first-time police contact

Alongside data on drug-related offences, the Federal Office of Criminal Investigation also publishes statistics on persons who came to the attention of police for the first time in connection with hard drugs. These statistics represent a kind of incidence measuring. However, the entries made on these persons have to be erased after a certain, legally defined period of time provided no new offences have been committed in the meantime. In this way, an unknown number of repeat offenders is wrongly classified as “coming to the attention of police for the first time“ and the reality is lower than the measured incidence.

The total figure of users of hard drugs who came to the attention of police for the first time was at 19,990 in 2005 ranging 5% below the 21,100 cases of the previous year. The most significant decline was found for heroin -13.0% (2005: 4,637; 2004: 5,324; 2003: 5,443; 2002: 6,378) and ecstasy -19.5% (2005: 3,145; 2004: 3,907; 2003: 3,352; 2002: 4,737). Amphetamine slightly increased by +1.7% (2005: 9,339; 2004: 9,238; 2003: 6,588), codeine slightly decreased by -6.5% (2005: 4,489; 2004: 4,802; 2003: 4,346), crack by -5.9% (2005:



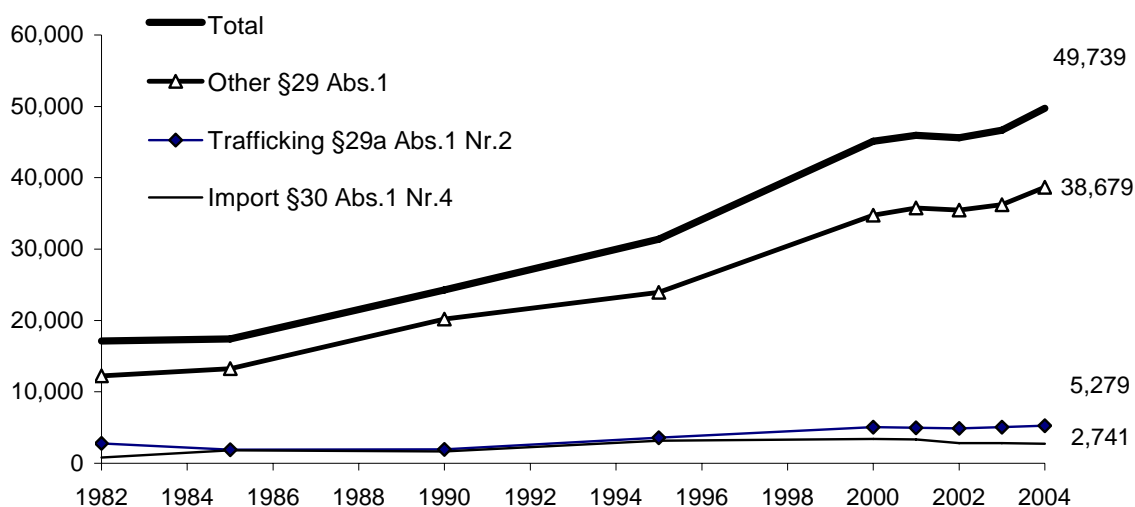
433; 2004: 409) and LSD by -2.4% (2005: 147; 2004: 151). Cannabis-related offences are not taken account of in these statistics as only so-called “hard” drugs are recorded.

When analysing the trends, it needs to be taken into account that the number of those coming to the attention of police for the first time, also depends on the intensity of criminal prosecution. Drug-related crimes are control crimes, i.e. the higher the control, the higher the number of detected crimes. Through triangulation, a comparison with trends in other recorded areas, e.g. the number of treated cases, can help to evaluate trends more reliably.

### 8.3.4 Convictions under the Narcotic Drugs Act and imprisonment

In the year 2004, a total of 49,739 persons were convicted under the Narcotic Drugs Act. 38,959 convictions were imposed under the general criminal law relating to adult offenders and 10,780 under the criminal law relating to young offenders. Regarding the convictions rendered in respect of the general criminal law, 17,070 prison sentences (out of these 10,878 suspended on probation) – and 21,889 fines were imposed (Statistisches Bundesamt, 2006).

The number of convictions went up by 6.6% on the previous year (2004: 49,739; 2003: 46,676), the increase being mainly related to adult offenders and unspecific consumption-related offences (§29 para. 1). The number of offences related to trafficking only slightly increased by little less than 2% (figure 8).

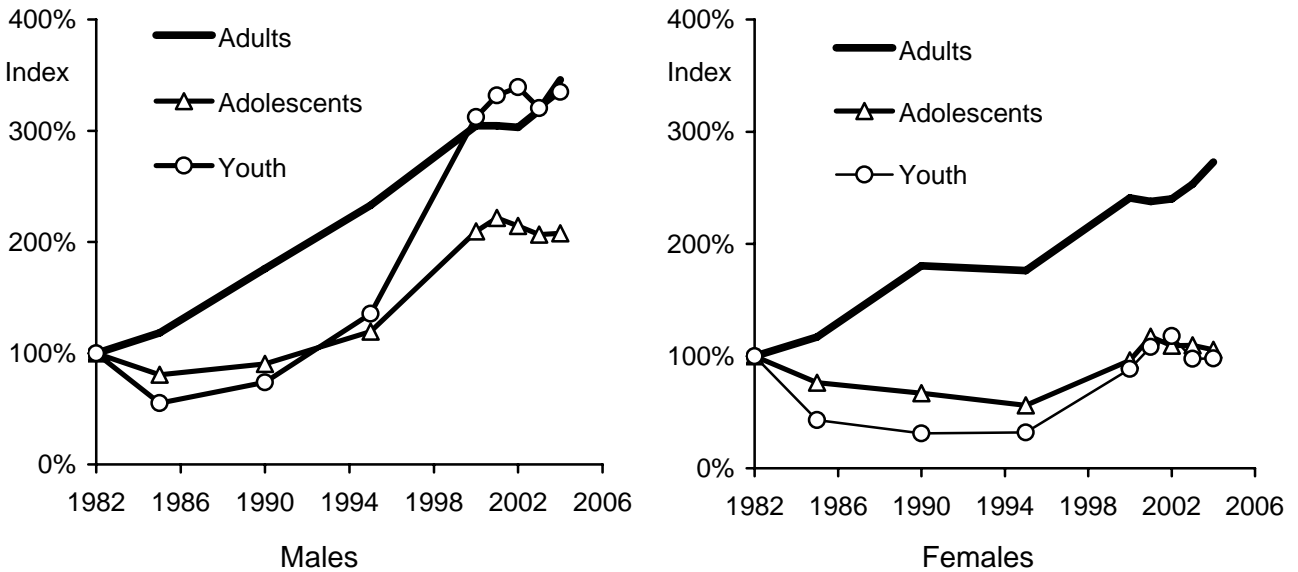


**Figure 8: Convictions under the Narcotic Drug Act**

Source: Statistisches Bundesamt (2006a)

Violations of the Narcotic Drugs Act account for about 6% of all convictions. Referred to juveniles, the figure is at 7.2% and to those aged between 18 and 21 it even amounts to 10.6%. Accordingly, drug-related crimes committed by this age group have a dominant share in overall criminality. 64.7% of those convicted have already been sentenced before (Statistisches Bundesamt, 2006a).

In 2004, about nine times more men than women were convicted for violations of the Narcotic Drugs Act (men: 44,675; women: 5,064). However, the development trends are rather similar for both genders. Using the figures of 1982 as an index (=100%), the number of convictions tripled for both genders until 2004. However, significant differences were found in juveniles and young adults. While for women the situation remained stable over the period under review, the number of convictions of male juveniles tripled and the number for young adults doubled. Only from the year 2000 onwards there were no further increases found for either of the groups (Figure 9).



**Figure 9: Trends in convictions under the Narcotic Drugs Act**

Source: Statistisches Bundesamt (2005a)

Data on violations of the Narcotic Drugs Act are contained in standard table 11.

**8.3.5 Drug use and accidents**

Information on this subject can be found in chapter 13.

**8.4 Drug use in prison**

The total number of those convicted for violations of the Narcotic Drugs Act was at 9,277 in 2005 (2004: 9,221). This corresponds to a portion of 14.6% of all detainees. In adults, the portion amounted to 15.4% for male and 20.1% for female prisoners. In juvenile sentenced populations, portions were at 7.3% and 10.2% respectively.

The number of those detained for drug-related offences has remained stable from 2004 to 2005. However, the portion of these offences in all detainees slightly increased from 2003 to 2005. Women accounted for only 6% of this group. However, the portion of drug-related offences in female detainees increased somewhat stronger than the one for men. The number of sentences imposed for juvenile offenders and the portion of drug-related crimes in these sentences have been on the decline since 2003 (table 24).

**Table 24: Number of detainees and drug-related crimes**

		Detainees			Adults		Juveniles		Preventive detention
		Total	Males	Females	Males	Females	Males	Females	
2005	Detainees N	63,533	60,527	3,006	53,380	2,742	6,797	264	350
	Narcotic law N	9,277	8,700	577	8,207	550	493	27	0,0
	Narcotic law %	14.6	14.4	19.2	15.4	20.1	7.3	10.2	0.0
2004	Detainees N	63,677	60,566	3,111	53,262	2,807	7,000	304	304
	Narcotic law N	9,221	8,658	563	8,129	521	529	42	0,0
	Narcotic law %	14.5	14.3	18.1	15.3	18.6	7.6	13.8	0.0
2003	Narcotic law %	14.4	14.2	17.9	15.2	18.2	8.0	15.0	0.3

Source: Statistisches Bundesamt (2006)

Drugs controls are carried out in prisons on a regular basis. The extensive control system comprises urine tests but also large-scale searches with police forces and tracker dogs. The statistical report for the Land Hessen reports 120 seizures for 2004. The distribution of substances corresponds to the situation outside of prisons. Hashish was found 88 times, heroin 16 times, cocaine 6 times and other drugs ten times (Hessisches Sozialministerium, 2006).

Data on drug use in prisons can be found in standard table 12.

### 8.5 Social costs

An overall estimate of the financial implications of drug use for German society is not available. Direct costs borne by individual public agencies as well as health and pension insurance funds were presented in chapter 1 insofar as differentiated and assignable data were available.

## **9 Response to social correlates and consequences**

### **9.1 Overview**

Similar to the efforts deployed to curb negative health effects, there are also general and specific measures used to address social consequences of drug use.

Specific aid is provided in particular by complementary addiction aid facilities. They provide opportunities to work at sheltered work places, to catch up at school and obtain school leaving qualification. They run hostels to facilitate the transition between the end of therapy and self-sufficiency. All these measures are intended to support reintegration into social life beyond the drug scene. Further details are contained in chapter 5.2 which contains a description of the addiction aid system in Germany. Responsible for these measures are the Laender. However, no standard national statistics are available on these services.

In addition to these specific offers, social welfare services are also available to drug users in need of affordable accommodation or financial support to sustain their living or in need of support in other walks of life. However, as there are no statistics available on the activities deployed for this group of persons, it is not possible to give a quantitative presentation of them.

### **9.2 Social reintegration**

#### **9.2.1 General changes of the legal framework conditions and their impact on people with substance-related problems**

Last year's revision of the German social codes has created a series of preconditions for an improvement of the social reintegration also of people with substance-related disorders. More details on this can be found in last year's REITOX-report (DBDD 2005).

In the wake of the restructuring of the national employment services and the labour market reform, initial trends are beginning to appear. Because of the deep, structural changes made to institutions and authorities concerned, it took a relatively long time for possible effects to show also for the group of drug users. So far, the dimensions of the effects are not assessable.

#### **9.2.2 Housing**

There is a series of offers for drug addicts to tide them over homelessness. Statistical material on this is contained in the Laender reports for the reference year 2004 (Simon, 2005). In 45 low threshold facilities 632 emergency beds are offered specifically for this target group. 277 facilities provide sheltered accommodation for 7,599 people. The transition from inpatient therapy to a fully self-sufficient life is to be facilitated by adaptation facilities. 81 of these are spread countrywide, offering transitional support to 983 clients (Simon, 2005).

### 9.2.3 Education

In the last few years, a series of measures to improve integration of jobless people with handicaps into the labour market has been tested. Generally, these measures have not been specifically developed for people with substance-related problems, but they are commonly found among the target group of these activities. Parts of the test results have been taken into account of in the revision of the social codes II, III and XII.

Complementary to therapy, promotional programs are offered to drug addicts by many facilities to promote educational attainment, improve vocational training or provide orientation for professional life. Drug addicts are also given the opportunity to acquire missing school leaving certifications as part of external school projects. Vocational training is made possible through close cooperation between craft and industry. However, in view of the high unemployment figures and the rather declining financial resources allotted to this area, an improvement of the situation is not in sight.

### 9.2.4 Employment

The anyway tense situation on the labour market makes it difficult for substance dependant people to reintegrate into professional and social life. The unemployment quota among drug addicts is extremely high – depending on the severity of the problem up to 80%. Studies show that social and professional integration is a crucial indicator for sustained abstinence.

Countrywide, there are 51 work projects or qualification measures with 711 places specifically available for drug addicts. For persons with substance-related a total of 1,787 places in 124 facilities is available.

In the frame of the content-related and structural further development of existing rehabilitation offers, the targeted promotion of employment opportunities of jobless addicts in rehabilitation by the German Pension Insurance at national level (German Federation of Pension Insurances)<sup>1</sup> has become an integral part of addiction therapy. It comprises for example indicative groups with regard to unemployment and trainings for job application. From the viewpoint of the pension insurance carrier, central goal of addiction therapy is the restoration of the working capacity. Apart from somatic aspects also psychological factors – i.e. personal and social competences of the client – need to be taken into account to prepare clients for work life.

Persons with drug-related problems do not seldomly form part of the target groups of specific programs offered by employment agencies to promote reintegration of long-term unemployed on the labour market. However, in general, the available statistical material does not give specific data on this sub-group, so that measures undertaken and results achieved for this group cannot be presented separately in this report.

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<sup>1</sup> BfA and LVAs were integrated into the German Federation of Pension Insurances as of 1.10.2005.

According to a survey carried out among addiction therapists from 33 inpatient facilities, out of which 6 were specialized in drugs, 90.9% of the respondents rated the existing offer to promote (re-)integration into work life as insufficient (Weissingner, 2005).

Further activities are described in chapters 9.2.1 and 9.2.2.

### **9.2.5 Social assistance and welfare benefits**

Drug addicts receive the same social assistance and welfare benefits from the government, employment agency and social insurance funds as other needy persons. However, separate statistics are not available.

## **9.3 Prevention of drug related crime**

### **9.3.1 Programs for drug users in prisons**

#### **Syringe programs**

In the past, syringe programs for injecting inmates of penal institutions were developed and evaluated in several Laender. However, all but one have meanwhile been stopped.

#### **Therapy in prison**

Substitution is prison in subject to different regional regulations. In general, continuation of a substitution therapy which started before the beginning of a prison sentence, is given in all Laender. The same applies to the use of methadone in withdrawal treatment. Whether substitution therapy can be started in prison, depends on the Land regulations and the prison doctor's decision. Only a few Laender offer substitution in prison across the board. Programs are generally limited to 3-6 months (Pollähne & Stöver, 2005).

A survey carried out by the DBDD at the Ministries of Justice of the Laender by order of the working group addiction statistics in the year 2005, gives a broad overview of the current situation. In six out of 10 Laender for which detailed information was available, the clients are attended to by external consultants. These generally come from outpatient private charity counselling facilities. In many Laender, internal and external consultants are used.

Substitution therapy is primarily accompanied by internal medical prison staff (Simon & Tischer, 2006). Focal areas of addiction work in prisons are, apart from prevention, mainly motivation to undergo withdrawal treatment, referral to inpatient withdrawal facilities or after care (Hessisches Sozialministerium, 2006).

### **Therapy instead of punishment**

The Narcotic Drugs Act (BtMG) allows for the suspension of proceedings in cases of minor guilt or lack of public interest in prosecution (§31a BtMG). This applies mainly to consumption-related offences, in particular when they occur for the first time and third parties are not involved. These regulations are subject to different regional application as shown by a study carried out by Schäfer & Paoli (2006). Furthermore, it is possible to defer prison sentences to provide drug addicts with a chance to undergo therapy ('therapy instead of punishment', §35BtMG).

### **Alternative judicial measures to prevent drug-related offences**

Under certain circumstances, criminal proceedings may be ceased at all levels. Often, a few hours of social work are a first reaction of authorities to problematic behaviour in connection with drugs.

#### **9.3.2 Other interventions to prevent drug criminality**

There are a few other interventions used to curb drug criminality and also economic compulsive crimes. Many cities have created legal possibilities to ban drug users from certain places to prevent the formation of open drug scenes. The deployment of indicated prevention measures through peers at local level as practiced in the widely used program FreD also represents a possibility to intervene and start criminal proceedings (cf. 3.3.4).

## 10 Drug markets

### 10.1 Overview

#### Availability and supply

The availability of illicit substances can be rated in terms of statements made in surveys on how 'easy' or 'very easy' they are to obtain during a certain period of time. These data are collected by the epidemiological survey on addiction (ESA), the drug affinity study and by several school surveys on a regular basis. The perceived availability is a reflection of the situation on local and regional drug markets but also of personal opinions. The market situation with regard to suppliers is expressed in terms of number of seizures, quantity and quality of seized drugs.

#### Seizures

Within Germany and in particular at the borders with neighboring countries, at seaports and airports, large quantities of narcotic drugs are regularly seized. For a part of the seized substances, the country of departure, origin or transit is identified by police and customs authorities. Alongside the number of seizures and quantities seized, prices, content of active substance or respectively purity of substances are also indicators of the situation on the drug market. In order to better understand the structure and effects of new designer drugs, considerable efforts in chemical analyses are necessary.

#### Prices

Since 1975, the Federal Office of Criminal Investigation establishes an average price for different drugs. Distinction is made between small quantities of several grams and quantities of 1 kilogram and over. The price for small quantities corresponds to the price paid by the user at street level, while the price for large quantities reflects the costs relevant for drug dealers. These prices are mean values calculated on the basis of the market prices found in the individual Länder.

The thus established drug prices can only be interpreted as rough approximate values, particularly since differences in purity and quality categories are not taken into account in establishing the prices. What makes things even more difficult is the fact that the individual seizures on which prices are established are not genuine 'random samples', so that random effects may alter these figures substantially.

#### Purity

Apart from establishing prices, the Federal Office of Criminal Investigation also ascertains the purity of different drugs on the market. Samples taken from drug seizures serve as a basis for analysis. For better comparability, the contents of the psychotropic ingredients are related to the chemical form of the base, irrespectively of the form in which the illegal preparation of the substance is found. All figures given may only be interpreted as rough



values because large differences in purity levels of the individual substances seized may lead to marked random effects.

The presentations are based on the Statistical Evaluation Program Narcotic Drugs (Zerrell et al., 2006) and on the Situation Report on Narcotic Drugs 2005 (BKA 2006) (until 2002 called Annual Report on Narcotic Drugs). The active ingredients of the seized substances are quantified and broken down into three levels: street trafficking (< 1g), retail and wholesale (>= 1000g). Results are presented differentially insofar as considerable differences in purity levels at wholesale and street trafficking level were found. The reason for this is that active substances get increasingly diluted from the wholesale to the street trafficking level for profit maximization. Together with the data on active ingredients, the most frequently found additives are reported. Insofar as these are pharmacologically effective, they are categorized as adulterants (e.g. caffeine) or otherwise as diluents (e.g. sugar).

## **10.2 Availability and supply**

Availability and supply are two views of the drug market - from the perspective of the client and of the supplier.

### **10.2.1 Availability**

The perceived availability of drugs is contained in the data presented in the REITOX-Report of 2005. There are no new epidemiological studies on availability.

### **10.2.2 Production, distribution sources and supply**

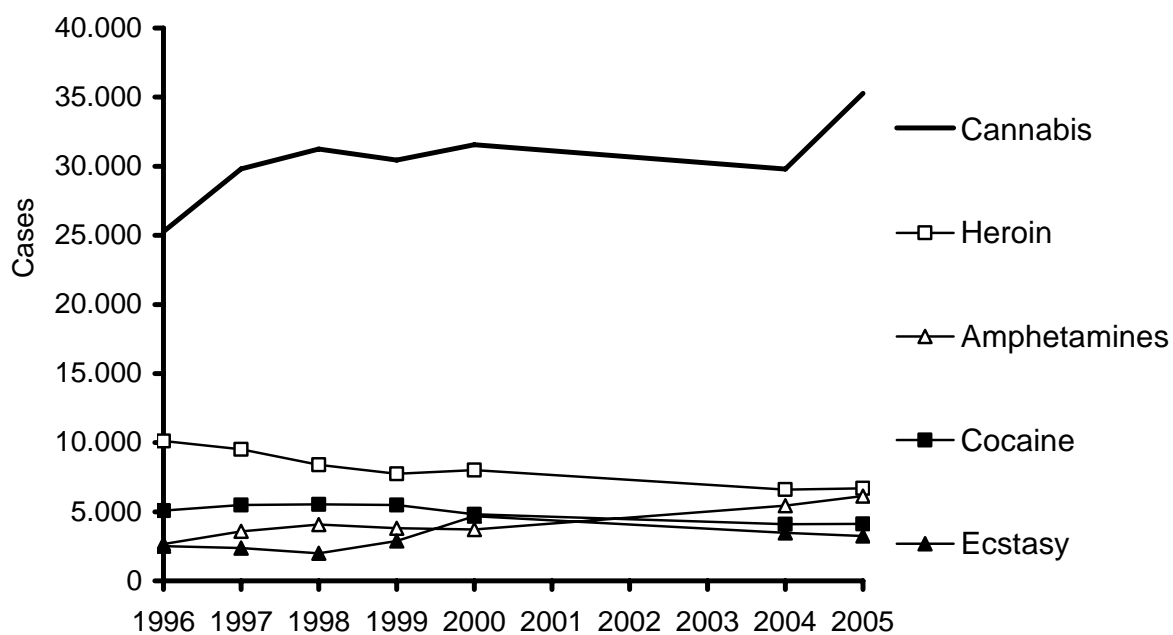
For the German heroin market, South-West-Asia and in this region mainly Afghanistan are the main source of origin. The Balkan route (among others via Turkey) and to a smaller extent also the silk route over the Central Asian countries are the main transport routes to western Europe. Cocaine is, for a large part, smuggled in from the Netherlands and directly from South America (Columbia, often via Brazil and Peru, but increasingly also over Venezuela, Argentina and transit via the Caribbean islands). Amphetamine comes mainly from the Netherlands and in part also from Poland. Crystalline methamphetamine ("Crystal") is smuggled from the Czech Republic into Germany, especially into Bavaria, Saxony and also Thuringia.

The Netherlands is the main country of origin and departure for marijuana seized in Germany. Cannabis resin mainly comes from Morocco. It is transported by land over Spain or by ship via the Netherlands to Germany. The extent of marijuana cultivation in Germany is difficult to assess because the number of seizures of plants is subject to strong variations. A clear trend is not recognizable. However, criminal police have detected increased cultivation of cannabis in so called large indoor-plantations close to the border with the Netherlands. Intensification of criminal prosecution in the Netherlands is a possible reason for this development. (SZ, 21.4.2006)

### 10.3 Seizures

For 2005, the following quantities of seized illicit drugs were reported: heroin 786.6kg (2004: 775kg; +1.5%); cocaine 1,078.9kg (2004: 969kg; +11%); crack 5.6kg (2004: 2.5kg; +124%); amphetamine 668.8kg (2004: 556kg; +20.3%), ecstasy 1,588,908 pills (2004: 2,052,158 pills; -22,6%), hashish 3,637.5kg (5,473kg; -34%), marijuana 3,013.7kg (5,384kg; -44%), khat 14,321kg. (13,350kg; +7.3%), mushrooms 85.5kg (2004: 26.3kg; +225.1). While the seized quantities of cocaine, amphetamine and khat went somewhat up, the quantities of ecstasy and hashish were markedly lower than in the previous year. Heroin practically remained unchanged, while seized quantities of crack and mushrooms more than doubled.

Since the annual quantities seized may considerably vary depending on individual large seizures, the number of seizures is investigated too. The total figure of seizures regarding the above mentioned drugs went up by 12% compared to the previous year. An increase of almost 50% or slightly above from the previous year was found for amphetamine, cannabis, LSD, mushrooms and khat. In the long-term, the chart shows an increase in the number of seizures of cannabis and amphetamines while figures for heroin showed a downward trend. In 2005, a total of 57,436 seizures was recorded - 11% more than in the previous year (51,634 cases) (figure 10).



**Figure 10: Number of seizures of narcotic drugs in the Federal Republic of Germany from 1996 to 2005**

Source: BKA 2006

Amphetamines are clearly on the rise in terms of quantities seized and number of seizures since 2000. The same applies to mushrooms and khat since the start of their recording in 2004. While the number of seizures and seized quantities of heroin was stable to declining, cannabis was showing an upward trend again (table 25).

**Table 25: Comparison of number of seizures and quantities seized since 2000**

	2005 vs. 2004	Heroin	Cocaine	Ampheta- mines	Ecstasy	Can- nabis	Mush- rooms	Khat
Cases	2004	+9%	+8%	+59%	+26%	+49%	+32%	+102%
Amount seized	2004	+2%	+11%	+20%	-23%	+0	+300%	+146%
Cases	2000	-17%	-15%	+64%	-31%	+12%	--	--
Amount seized	2000	-1%	+18%	+147%	-3%	-2%	--	--

Source: BKA 2004

Note: Increases &gt;10% framed, decreases &gt;10% shaded

In the year 2005, 94,000 cannabis plants were seized, the highest figure since 1999. Compared to 2004, the figure went up by 40% and the number of cases by 3% (table 26).

**Table 26: Seizures of cannabis plants**

	1998	1999	2000	2001	2002	2003	2004	2005
Number of plants seized	81,097	168,833	25,277	68,698	29,352	35,863	68,133	93,936
Cases	1,661	1,254	1,048	785	887	750	1,008	1,035

Source: BKA, personal communication

With only a few individual seizures of gamma hydroxybutyrate (GHB, "liquid ecstasy") in 2004, existing concerns over a significant increase of this substance which were caused by the detection of 9 laboratories in the previous year, were fortunately not confirmed. It turned out that the mentioned laboratories seemed to be, by production capacity, only intended for private use of the operators (BKA, 2005a).

An overview of the most recent seizures can be found in standard table 13.

## 10.4 Price and purity

### 10.4.1 Price

Generally, drug prices didn't change much between 2003 and 2004. Ecstasy was 10% cheaper at street level. The wholesale price of marijuana went up by almost 10% which is possibly due to a higher concentration of active substance. Police reports that at the wholesale and intermediate trade level, marijuana from special cultivations is trafficked with corresponding labelling, which is an indicator of market differentiation. However, differentiation of different qualities in this form has not reached the end-user level yet. The marked decline of prices for LSD at street-level by more than 15% is possibly an indication of a sinking interest in this drug (table 27).

An overview of current prices is given in standard table 16.

**Table 27: Prices of drugs from 2003 to 2005**

Price per gram (small)/ kilogram (large quantities)	Heroin	Cocaine	Crack	Ecstasy	Amphe- tamines	Mari- huana	Cannabis raisin	LSD
Small quantities 2005	35.0€	60.5€	--	--	11.9€	7.2€	6.0€	8.5€
Small quantities 2004	39.5€	58.9€	60.8€	6.7€	12.1€	7.2€	6.1€	10.2€
Changes between 2004 and 2003	-3.4%	-2.0%	--	-11.0%	-4.0%	-1.4%	+1.6%	+7.4%
Changes between 2005 and 2004	-11.4%	+2.7%	--	--	-1.7%	0.0%	-1.6%	-16.7%
Large quantities 2005	22.992€	36.007€	--	1.908€	4.258€	3.487€	2.358€	--
Large quantities 2004	20.710€	35.602€	--	2.219€	5.346€	3.315€	2.245€	--
Changes between 2004 and 2003	+8.8%	+0.4%	--	-4.4%	+4.8%	+9.7%	-8.6%	--
Changes between 2005 and 2004	-3.40%	-2.00%	--	-11.00%	-4.00%	-1.40%	+1.60%	--

Source: BKA, personal communication

#### 10.4.2 Purity

The data on the concentration of active substances contained in amphetamine, ecstasy, heroin and cocaine are based on the Statistical Evaluation Program Narcotic Drugs 2005 (Zerrel et al. 2006) as well as on the Situation Report on Narcotic Drugs 2005 (Zerell et al., 2006).

Table 28 gives an overview of the development of the levels of active substances contained in amphetamines, cocaine and heroin since 1996. Despite some fluctuations, the level of active substance contained in amphetamine and cocaine continually went down at street-level. The content of active substance contained in heroin increased at street level but remained rather stable despite strong individual fluctuations.

The most recent figures are contained in standard tables 15 and 16.

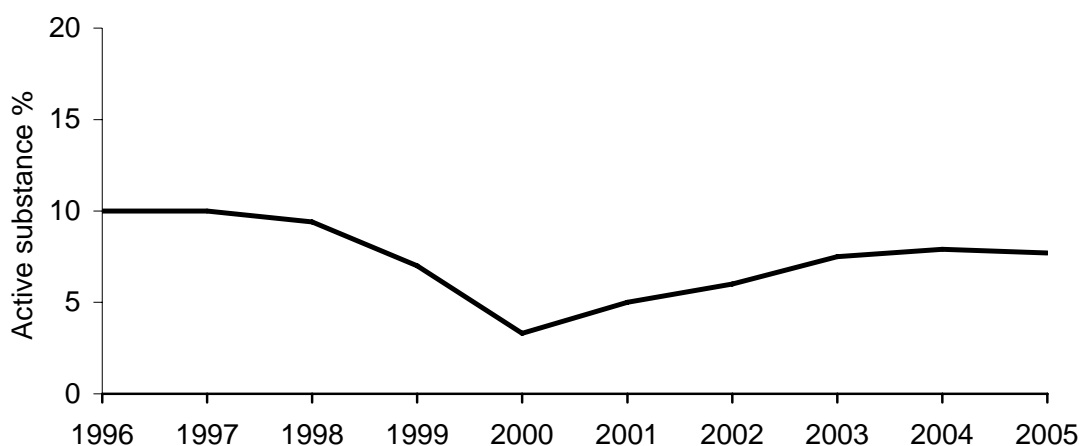
**Table 28: Level of active substance contained in different drugs from 1996 to 2003 (median)**

	1996 %	1997 %	1998 %	1999 %	2000 %	2001 %	2002 %	2003 %	2004 %	2005 %
Amphetamine	10.0	10.0	9.4	7.0	3.3	5.0	6.0	7.5	7.9	7.7
Cocaine street trafficking	46.8	50.7	40.2	49.4	35.5	42.6	38.5	32.0	34.5	34.2
Cocaine wholesale	77.3	79.4	74.3	69.1	69.1	73.0	73.9	76.7	75.0	68.8
Heroin street trafficking	13.4	9	9	9.4	11.1	12.0	9.9	17	19.9	15.0
Heroin wholesale	46.4	31.9	20	29.2	35.1	45.8	27	7.3	48.8	36.5

Source: Zerell et al. (2005)

## Amphetamine

A total of 2,047 samples of amphetamines were analyzed in 2005 to find out about concentration levels of active ingredients contained. Same concentrations (7.7%) were found for the street- and wholesale-level. The most common adulterant found in 1,801 analyzed samples was caffeine (74%). Lactose (54%), creatine (8 %), glucose (7%), mannitol (3.2%), 1-phenylethylamine (2.8%), starch (1.4 %), saccharose (1.3 %) and fructose (1.1 %) were the most commonly used diluents (Fig. 11)

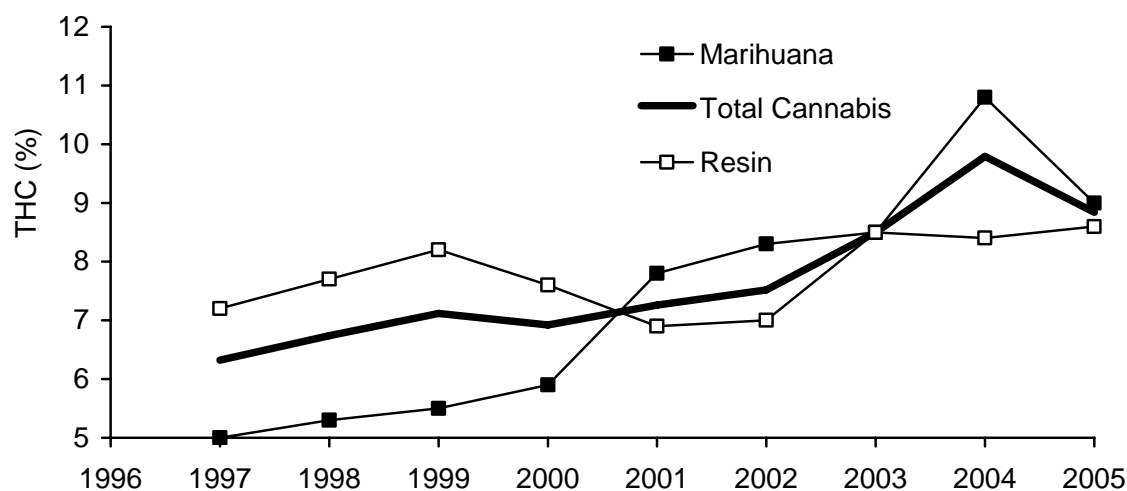


**Figure 11: Content of active substance in amphetamine 1996 – 2005**

Source: Zerell et al. (2005)

## Cannabis

The THC-content was determined by the laboratories of the Federal Office of Criminal Investigation, the offices of criminal investigation of the Laender and the customs authorities on the basis of seizures of 2,365 samples of marijuana, 3,505 samples of inflorescences and 3,926 samples of hashish resin. The mean THC-content was on the decline between 2004 and 2004 which is mainly attributable to the decreasing mean content of active substance contained in marijuana (Fig. 12).



**Figure 12: THC-content of marijuana and hashish resin**

Source: Zerell et al. (2005)

## Ecstasy

In 2005, a total of 1,115,478 tablets and capsules were analyzed. 93.3% of them were mono-preparations (2004: 93.4%), 6.7% (2004: 6.6%) a combination of two or three addictive substances. The portion of combined substances increased relative to the year 2002 (0.4%) and 2003 (4.0%).

Out of the 1,040,716 mono-preparations 93.6% (2004: 95.0%) contained MDMA. The remaining 6.4% contained amphetamine, metamphetamine, MDA and/or MDE. Levels of active ingredients are shown in table 29.

Combination preparations reported were mixings of MDMA/MDE, MDMA/MDA, MDMA/amphetamine, MDMA/MDA/MDE, MDMA/metamphetamine, MDMA/ MDE/amphetamine and MDMA/MDA/metamphetamine. The most frequently reported MDMA/MDE-preparations contained on average 48 mg MDMA and 4 mg MDE per consumption unit (table 20).

**Table 29: Content of active substance in ecstasy in mg per tablet/capsule**

Wirkstoff	2002 Quantity mg	2003 Quantity mg	2004 Quantity mg	2005 Quantity mg	2002 Median mg	2003 Median mg	2004 Median mg	2005 Median mg
MDA	21 – 69	20	15-57	13-47	64	20	40	22
MDE	14 – 62	39 – 62	59-65	1-50	43	56	62	11
2-C-I	--	--	10		--	--	10	--
MDMA	3 – 362	0.3 – 260	3-205	1-441	62	63	60	57
Amphetamine	0.1 – 36	2 – 24	4-207	1-45	9	7	8	14
Meth- amphetamine	-	17 – 21	20-21	5-14	--	17	21	10

Source: Zerell et al. (2006)

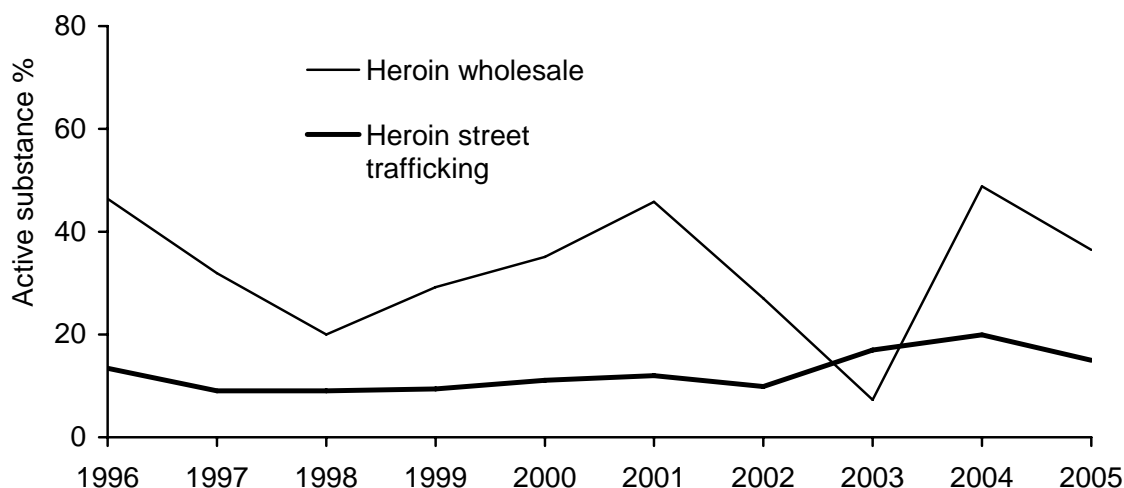
Note: Content of active substance calculated as base

Mean contents of MDA and MDE were generally on the decline between 2002 and 2005. The MDMA-level remained stable oscillating slightly around 60 mg.

## Heroin

For 2005, levels of active substances contained in 4,283 (2004: 4,131) samples of heroin were analysed. While purity of seizures at wholesale-level fluctuated considerably between 10% and over 40% over the years (2005: 36.5%), the content of active substance of street heroin remained relatively stable amounting to 15% in 2005 (figure 13).

Among the 3,899 analyzed samples, the most commonly found adulterants were caffeine (99%), paracetamol (98%) and griseofulvin (4.1%); Lactose (3.4%) was the most common diluent used.



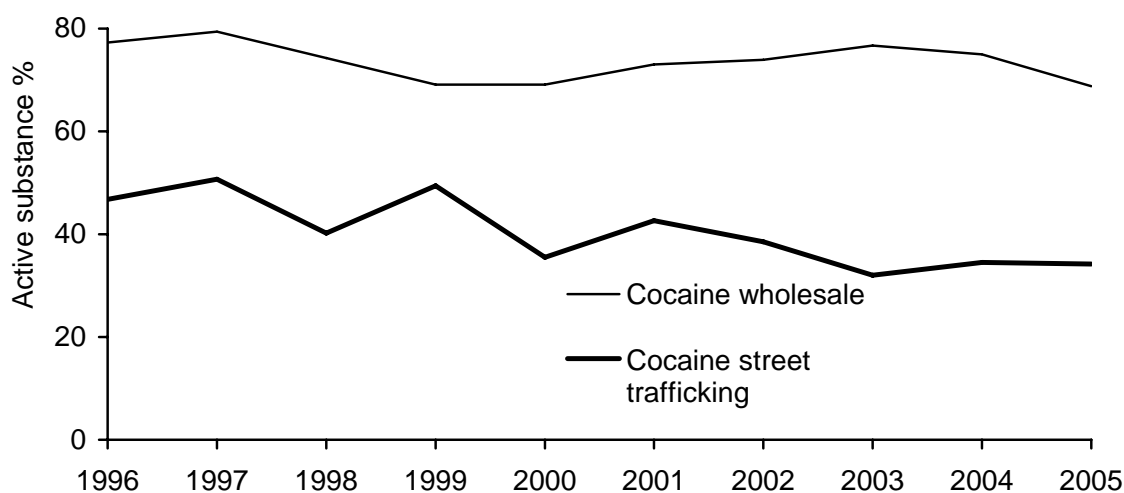
**Figure 13: Content of active substance in heroin 1996-2005**

Source: Zerelli et al. (2005)

### Cocaine

For the year 2005, 3,696 samples of cocaine were analyzed. Cocaine is mainly offered as hydrochloride on the market. In the following however, cocaine-hydrochloride and cocaine base are presented together.

The content of active substance of street cocaine oscillated around 40% with a slight downward trend between 2000 and 2005. In the year 2005 the median level was at 34.2%. At wholesale level, contents of active substance have only slightly changed since 1996. The median concentration was at 68.8% in 2005 (figure 14).



**Figure 14: Content of active substance in cocaine 1996 – 2005**

Source: Zerelli et al. (2005)

The most common adulterants found in 2,638 samples were phenacetin (44%), lidocaine (21%), caffeine (7%), diltiazem (6%), procain (3.5%), tetramizol (2.2%), hydroxyzin (1.7%), paracetamol (1.1%) and bezocain (1.0%). Blended into the drugs were also lactose (48%), mannitol (16%), glucose (5%), inosite (3.8%), saccharose (3.5%) and sorbitol (2.0%).

## Part B: Selected issues

### 11 Drug-use and related problems among very young persons

#### 11.1 Summary

The extent of drug use among children and teenagers aged below 15 years is rather small in Germany, but apparently growing in some areas as reflected by the therapy demand. The predominant drug in this age group is cannabis. In 2005, ten times more children and teenagers presented to outpatient therapy than in 1996. There is a strong correlation between drug use and use/abuse of alcohol and tobacco. Therapeutic offers for this age group are rare.

#### 11.2 Drug use and problematic drug use

Epidemiological data on the age group below 15 years are only provided at national level by the drug affinity study carried out by the BZgA. Details of the study are contained in chapter 2.1. However, with 52 cannabis users and 25 users of other drugs, the total case figure has been quite limited in the last three surveys. Prevalence of cannabis use in the lifetime category was at 5% both for girls and boys, prevalence for the use of other drugs ranged below 2% (table 30).

**Table 30: Prevalence of the use of cannabis and other drugs in the lifetime among 12-14 year-olds from 1997 to 2004**

	Males		Cannabis		Total		Other drugs	
			Females				Total	
	N	%	N	%	N	%	N	%
1997 (N=504)	2	0.8	7	2.9	9	1.8	8	1.6
2001 (N=647)	15	4.5	4	1.3	19	2.9	8	1.2
2004 (N=631)	15	4.5	9	3.0	24	3.8	9	1.4

Source: Orth (2006), personal communication

When looking at this age group and the relatively low prevalences, the possibility of dissimulation needs to be taken into account – i.e. the reporting of drug experience which is actually inexistent. Pape & Storvoll (2006) asked among others about experience with a fake drug among 13-19-year-old Norwegian pupils finding a lifetime prevalence of 0.5%. If these cases are left out of count in the evaluation, prevalence declines also for actually existing hard drugs especially among male interviewees. However, also here, it is quite possible that these drug-affine teenagers do have experience with drugs, but want to deny their alleged ignorance about a fake drug. That is why these statistical figures require cautious interpretation.

Table 31 shows the consumption features of 24 persons who took part in the drug affinity study in 2004 and who used cannabis at least once in their lifetime.



Consumption took place longer than a year ago in only in a fifth of the interviewees, about half of them had just started using cannabis at the age of 13 or 14. Only a total of 5 children had started cannabis consumption before their 13<sup>th</sup> anniversary.

About half of those with drug experience, had not used cannabis more than twice in their life. About a third did so more than 10 times in their lifetime and about a quarter even ten times or more in the last year.

It is difficult to generalize these figures beyond the sample due to the small case figures. These data may nevertheless give an idea or indication of the present situation (table 31).

**Table 31: Consumption features in 24 lifetime cannabis consumers**

		N	%
Recent use	yes, recently used	7	27.6
	no, but used during the last year	12	52.2
	no, but used in lifetime	5	20.2
Age of first use	11 years	2	7.7
	12 years	3	12.5
	13 years	10	40.0
	14 years	10	39.9
Frequency of use during lifetime	Once	10	40.2
	Two times	3	12.5
	3 to 10 times	3	11.4
	More often	9	35.9
Frequency of use during the last year	Never	5	20.2
	Once	8	32.2
	Two times	3	11.9
	3 to 10 times	2	7.8
	More often	7	27.9

Source: Orth (2006), personal communication

### 11.3 Treatment demand

The number of children aged under 15 years who attend counselling or therapy in outpatient or inpatient facilities because of addiction problems is generally very low. In the reporting year 2005, 1,207 persons of this age group were in outpatient therapy (0.8% of all clients). Out of these, 700 did not have a substance-related disorder of their own. They were either treated for non-substance-related disorders or as part of the therapy of their addicted parents. The portion of the age group below 15 years is for almost all substances at below 0.5%; only for cannabis, hallucinogenes and tobacco, figures are somewhat higher. The only diagnosis which takes up a relatively high portion, is related to volatile solvents, whereby the absolute figure was below 30 for the whole of Germany in 2005. 3 persons (0.0% of all clients) in the age group under 15 years, were in inpatient therapy, out of these only one was given an addiction diagnosis (table 32).

**Table 32: Admissions of clients under 15 years to outpatient and inpatient therapy**

Substance/ Main diagnosis	Out-patient		In-patient	
	Clients below the age of 15	Ratio below 15	Clients below the age of 15	Ratio below 15
Alcohol	128	0.2%		
Opioids	27	0.1%		
Cannabinoids	338	2.0%		
Sedatives/ Hypnotics	1	0.1%		
Cocaine	2	0.1%		
Stimulants	6	0.2%		
Hallucinogenics	1	0.9%		
Tobacco	51	3.1%		
Volatile substances	8	30.8%		
Other psychotropic substances	13	1.2%	1	0.1%
Eating disorders	44	2.6%		
Pathological gambling	4	0.1%		
Other problems	433	1.9%	2	0.2%
Total	1,056		3	

Source: Strobl et al. (2006a,b)

The development of client figures of this age group for the three main substances is presented in table 33. Despite the differences in the figures reported by the facilities, absolute figures are given because of the quite small case figures. Apart from changes in the therapy demand, there are also changes in the sample of the participating facilities which need to be taken into account when interpreting the therapy demand. Considering the different facility basis when comparing the case figures from 1996 to 2005, there was a decline in client figures by about 35% for alcohol, an increase by 67% for opioids and an increase by more than 900% for cannabis. With that, even when taking into account the above mentioned detail problems, the increase of cannabis cases in this age group is evident (table 33).

**Table 33: Admissions of clients aged below 15 years to outpatient therapy from 1990 to 2005**

Main diagnosis	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2005 vs 1996
Alcohol	121	135	181	147	22	14	46	68	78	128	0.65
Opioids	10	24	30	44	8	8	5	12	22	27	1.67
Cannabis	20	42	60	65	96	84	137	250	310	338	10.48
N	436	436	463	447	400	362	454	699	682	703	

Source: DSHS

### 11.4 Main groups

Studies carried out on risk factors for the development of drug use, especially cannabis use, show children who play truant, ran away from home or come from problem families, especially families with drug problems, as a risk group. Recent studies on this subject are however not available.

Experience with alcohol and tobacco correlate with the use of cannabis. The portion of present smokers in those who have experience with cannabis is markedly higher at the point of the interview than in persons without cannabis experience. The portion of non-smokers is correspondingly smaller. Similar correlations were found for alcohol. Prevalence of alcohol use and binge-drinking in the last 30 days, alcoholic intoxication at least once in the lifetime as well as the average weekly consumption of alcohol (gram alcohol, quantity-frequency-index) are markedly higher in cannabis users (table 34).

**Table 34: Consumption of licit substances and lifetime experience with cannabis**

		Cannabis experience			p
		Yes (N=24 <sup>a</sup> )	No (N=607 <sup>a</sup> )	Total (N=631)	
Smoker (at least 1 cigarette during the last 30 days)	N	12	14	26	0.00 <sup>b</sup>
	%	52.2	2.3	4.1	
Non-smoker	N	3	446	449	0.00 <sup>b</sup>
	%	12.5	73.6	71.3	
Use of alcohol during the last 30 days	N	21	216	237	0.00 <sup>b</sup>
	%	87.5	35.7	37.7	
5+ glasses of alcohol at least one day during the last 30 days	N	12	31	43	0.00 <sup>b</sup>
	%	52.2	5.1	6.9	
At least one alcohol intoxication during lifetime	N	17	54	71	0.00 <sup>b</sup>
	%	70.8	8.9	11.3	
Average consumption of alcohol per week (gram)	M	109.9	7.8	11.7	0.00 <sup>c</sup>
	SD	148.3	46.9	57.4	

a) Minimum N because of missing data: Cannabis-yes: 23 Cannabis-no: 560 for gram alcohol, for other items 603

b) Fisher's exact test

c) Mann-Whitney-Test

Source: Orth (2006), personal communication

### 11.5 Correlates and consequences of drug use

In Germany, drug use – especially in this young age group – can be equalled to cannabis use. Correlates of cannabis use are described in literature: lower school performance, retarded maturation processes, higher risk of other substance-related disorders and psychiatric disorders like for example depression.

### **11.6 Policy and legal development**

Prevention is a cornerstone of national drug and addiction policy. Included in this are naturally children and teenagers aged below 15 years. However, special programs which are specifically addressed to this target group are scarce and based only on isolated initiatives.

An important role in this field is played by the youth welfare offices whose task is to support parents in raising their children or respectively to intervene when parents are no longer able to fulfil their parental duties. Weighing between rights of the parents and welfare of the child, state authorities exercise restraint if parents do not agree with intervention from outside. The requested stronger cooperation between youth welfare and drug aid systems is to improve conditions to be better able to provide adequate care for this target group and take early interventions measures when problematic developments begin to show.

### **11.7 Prevention and treatment**

Youth welfare and addiction aid facilities primarily look after the risk group of families with addiction problems/children of addicted parents. In addiction aid, there is already well documented experience in dealing with children of addicted parents.

Currently, increased efforts are undertaken to better network different social services and institutions to create cross-sectional cooperation (see conference on the subject of children of addicted parents, organized by the 'Land Forum Addiction' of the Hessian Land Office for Dependence Matters (HLS) on 05.07.06).

There are few isolated specific projects to be found in addiction prevention. In the following, a few early intervention projects or self-help/counselling projects respectively which are of interest especially for children under 15 years are presented. Other offers available to this and other age groups are not listed in this report. Details on most of the offers can be found in the EDDRA data base. Some offers are addressed to children from families with drug problems:

- Connect – help for children with addiction problems – Office for Addiction Prevention Hamburg
- The Land Centre for Health Promotion in Rhineland-Palatinate has published the picture book "Leon findet seinen Weg" ("Leon finds his way") which is to establish a dialogue with children from families with addiction problems and look at the child's perception of alcohol use in everyday life.
- The brochure "Kinder - Netz – Hilfe" ("children – network – help") was published in Hamburg. It propagates not to turn a blind eye and gives a lead about cooperation between specialists, honorary workers and relatives of children of families with addiction problems. It also gives information on possibilities of help in the individual work and life areas around the child and his family. The brochure is used in kindergartens, schools, practices of pediatricians and in the neighbourhood.

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Other projects are addressed to children and teenagers who have drug problems themselves:

- "Stop over" – an abstinence-oriented clarification and motivation program for young drug users or teenagers who are at risk of developing addiction – Berlin.

There are relatively few specialized facilities to offer counselling and care for children and teenagers with drug problems. The example of one facility in Hannover shows a combination of inpatient and outpatient measures which comprises important elements from both addiction therapy and youth welfare and which is funded by child and youth welfare. Care is provided by one and the same person over the longest possible period of time, which is particularly important for this age group (Schoor & Möller, 2005).

## **12 Cocaine and crack: status and responses**

### **12.1 Summary**

About 3% of the adult population in Germany has experience with cocaine; in younger age groups and in larger cities prevalences are around 5%. Experience with cocaine has been on the rise in the last ten years. However, generally short-term consumption periods of cocaine limit the further increase of current consumption in the population.

In the classic heroin scene, cocaine is meanwhile the second most important substance. Generally, it is consumed together or alternatingly with heroin. Those with very problematic cocaine use have meanwhile started to use also crack, which has however met with no interest outside the drug scene. Germany's crack scene has been limited to the two cities of Frankfurt and Hamburg for years. Cocaine-related deaths and negative sequelae of the substance are relatively seldomly reported in comparison with heroin.

About 7% of the clients who presented to an outpatient or inpatient drug aid facility did so because of a primary cocaine problem. Treatment demand has been on the rise especially in the outpatient area for many years. However, in public drug aid, there are hardly any specialized offers for this group of persons. Strikingly high is the portion of detainees in cocaine users with males accounting for a quarter of them.

### **12.2 Prevalence, patterns and trends of cocaine and crack use**

#### **Use of cocaine in the population**

The survey of the national epidemiological study (ESA, details see chapter 2.1) carried out in 2003, found that 3.1% of the adult population between 18 and 59 years had experience with cocaine (Kraus, Augustin & Orth, 2005). Prevalence of cocaine consumption among 18 to 24 year-olds rose considerably in the lifetime category from 0.7% in 1980 to 4.7% in 1990. However, at the same time, the portion of those who continued consumption to the interviewing period was declining for some years (1995: 40.6%, 2003: 28.2%). So it can be said, that while experience with this drug has been slowly spreading in the population, current consumption has not gone up in parallel (Kraus, Semmler & Augustin, 2005).

#### **Use of crack in the population**

In the general population crack is hardly present as a drug at all. Even in groups with drug affinity, crack is clearly rejected outside the street scene (Baumgärtner & Gieß, 2005).

#### **Cocaine consumption among pupils**

The last survey carried out as part of the drug affinity study (BZgA, 2004a) in the age group 12-17 years, found a lifetime prevalence of below 0.5% for cocaine and among the 12 to 25-year-olds, the figure was at 2%. Methodological details on the study are contained in chapter 2.1.

In 2003, a survey was carried out as part of the ESPAD-study in six Laender (Kraus et al., 2004a). Among the 15-16-year-old pupils 2.8% (boys: 2.7%, girls: 2.8%) stated to have experience with cocaine. Out of these, 1.9% used it 1-5 times, 0.5% 6-19 times and 0.3% even more often. 0.8% of the interviewees used crack in the last 30 days (boys: 0.9%; girls: 0.7%) (Kraus et al., 2004a).

In 2004, lifetime prevalence in the setting of a city (Hamburg) was markedly higher among the 14-18 year-olds amounting to 5%. Prevalence of cocaine consumption in the last 30 days was at 2% (Baumgärtner, 2004). In the most recent data collection carried out in 2005, consumption in the last month was at 1.4% for girls and at 2.4% for boys of this age group (Baumgärtner, 2006).

### Crack use among teenagers

Data on the crack use among school children are available from the ESPAD-study for the year 2003. According to the survey, 2.1% of the pupils in the age between 15 and 16 years (boys: 2.4%; girls: 1.9%) had experience with crack. Out of them, 1.5% used crack 1-5 times, 0.4% 6-19 times and 0.2% more often. 0.7% of the interviewees stated to have used crack in the previous 30 days (boys: 0.8%; girls: 0.5%) (Kraus et al., 2004a).

Table 35 shows the prevalence for crack and cocaine as found by the ESPAD-study 2003 for school children between 15-16 years. Consumption quantities reported by the teenagers require validation. Some of the figures might be overreported.

**Table 35: Prevalence of the consumption of cocaine and crack among 15-16 year-olds in the lifetime, in the last 12 months and the last 30 days**

Substance	Boys %	Girls %	Total %	Period
Crack	2.4	1.9	2.1	Lifetime
Crack	1.7	1.3	1.5	12 months
Crack	0.8	0.5	0.7	30 days
Cocaine	2.8	2.7	2.8	Lifetime
Cocaine	1.8	1.7	1.8	12 months
Cocaine	0.9	0.7	0.8	30 days

Source: ESPAD (Kraus et al., 2004.a)

### Prevalence of cocaine and crack in special groups

Cocaine is used in quite different groups. Initially, the drug was associated with artist and media circles, later also with business and sex industry. When looking at consumption patterns, cocaine is often found in the surroundings of the classical heroin scene but also in less marginalized groups in connection with cannabis and amphetamines. Crack, however, remains a fringe group drug in Germany.

In a study carried out in several European cities on users of cocaine hydrochloride (without substitution, intravenous consumption or opium consumption), Prinzleve et al. (2005) found that crack was either used alone or in combination with hydrochloride in socially marginalized groups or respectively by clients of treatment facilities, but only in a few individual cases by socially integrated clients.

In Germany, crack consumption has been occurring for a few years in the lower segment of the classical heroin scene, but has so far been limited to the cities of Frankfurt and Hamburg. It plays no role in other regions of Germany, like for example in Saarland (Ministerium für Justiz, Gesundheit und Soziales, 2006, personal communication) or in Berlin (Senatsverwaltung für Gesundheit, Soziales und Verbraucherschutz, 2006, personal communication).

In the Land Hesse, crack is concentrated to the city of Frankfurt. Less than 1% of police crime scenes are outside of the city limits. In 2004, the number of offences increased by 38% from the previous year to 2,174 cases, the portion of crack-related offences in the overall crime figure rose from 10.1% to 10.8% in the same period of time. The number of suspects went up by 8%. The portion of females among crack offenders is at 24.9% and more than a third of the delinquents are not of German nationality. Most of them are Turks, Moroccans, Italians and Algerians. They are mainly aged between 25 and 40 years and teenage crack users are rare (Hessisches Sozialministerium, 2006).

### **12.3 Problems related to cocaine and crack use**

#### **Outpatient therapy demand**

Cocaine is the main drug in about 7% of the clients of outpatient facilities. The portion is about the same among first admissions. In inpatient therapy, cocaine cases account for 6.6% of all the clients treated. While the portion of males treated for cocaine-related problems was at 7.6%, females with the main drug cocaine accounted for only 3.2%. Extrapolated to the total number of 934 outpatient facilities in Germany (Simon, 2005), 4,500 persons presented to treatment because of a primary cocaine-related disorder in the year 2005, which is about five times more than in the year 1994 (cf. 4.3.1). A third of the cocaine clients additionally have an alcohol diagnosis (dependence or harmful use), 22% a heroin diagnosis and 48% a cannabis diagnosis. Cocaine-related disorders account for 29% of the secondary diagnoses among heroin clients.

At the beginning of therapy, clients are on average 31 years old. Men account for 84%; almost half of them are single. Striking is the fact that many clients with this main diagnosis are detainees. 25% of the males with a primary cocaine disorder and 5% of the females are still serving a prison sentence at the beginning of therapy. Whether this is due to a high prevalence of cocaine-related disorders in prisons or whether this group of clients is favoured by special selection mechanisms, is unknown (Strobl et al., 2006a).



### **Inpatient therapy demand**

In 2005, primary cocaine-related disorders were found in 6.6% of the new admissions to inpatient facilities. Here also, additional addiction diagnoses are common. They are mainly related to alcohol (61%), heroin (31%), cannabis (65%), amphetamine (24%) and ecstasy (27%) (Strobl et al., 2006b). Personality and behavioural disorders (F6x) rank first among co-morbid disorders accounting for 9.3%.

In comparison with alcohol (290,864 cases) and opioids (25.889 cases), cocaine patients account only for a small portion of the hospital treatments with 1,096 cases per year (Statistisches Bundesamt, 2006d).

### **Drug-related deaths**

While cocaine is relatively common to find as a by-substance in opioid-related deaths, purely cocaine-related deaths are extremely rare. According to the police death register, 2% of the drug-related deaths in 2006 were caused solely by an overdose of cocaine and 6% by cocaine in combination with other drugs (cf. 6.2.1, Bundeskriminalamt, 2006). The General Death Register recorded 0.4% deaths caused by cocaine in 2003. Opiates by comparison accounted for 6.0% of the deaths (cf. 6.2.1).

### **Other negative consequences of cocaine consumption**

There is a series of known negative somatic and psychological effects on the user and in pregnant females on the foetus respectively. Apart from data on co-morbidity provided by inpatient treatment facilities for the National Statistical Report on Addiction Therapy, there are no representative data or new studies available in Germany. Kraus et al. (2004b) did an overview on the epidemiological situation as well as on risks and therapy approaches.

## **12.4 Response and interventions to cocaine and crack use**

### **Treatment measures**

Cocaine clients have the normal therapy offer of outpatient and inpatient facilities as described in this report (cf. chapter 5) at their avail. Special offers for cocaine problems are rare. Haasen et al. (2002) concluded that due to the complexity of cocaine dependence, specific therapeutic solutions are required and suitable methods need to be found.

It is to be assumed that a non-negligible number of therapies is carried out by office-based psychiatrists and psychotherapists which are not entered into the general statistics.

### **Harm reduction measures**

The “safer use” recommendations valid for heroin users also apply to cocaine consumers insofar as they move in the respective circles. However, special programs for cocaine users tend to be rare. In view of the fact that only a small percentage of cocaine users is treated in outpatient or inpatient facilities, it is to be assumed that a non-negligible number of cocaine-

only users is treated privately by office-based doctors and psychotherapists. However, there are no statistics available on this.

### Response of criminal prosecution organs to cocaine consumption

As all other illicit substances, cocaine is prosecuted under criminal law. Crack has been put under special observation in order to avoid an expansion of the market and the drug scene beyond the city limits of Frankfurt and Hamburg if possible.

## 12.5 Cocaine-related crime and cocaine and crack markets

### Crime

Cocaine is part of the drug problem in Germany. Due to the close association of parts of the cocaine user scene with the classical heroin scene, cocaine accounts for a large part of the criminal activities in this area. Its connection with the sex industry also gives it a special status.

With 14,728 cases in the year 2006, cocaine was almost as often involved in consumption-related offences as opiates with 22,592 cases.

### Cocaine and crack markets

As part of the surveys carried out in Germany, questions were also asked about the perceived availability of cocaine and crack ("how easy is it for you to get ... in 24 hours?"). 15% of the school children said that cocaine was rather easy to procure. For cannabis, figures are considerably higher with 44%.

In the year 2005, more than a ton of cocaine was seized. This corresponds to an increase of 11.3% from the previous year. However, the number of seizures went up only slightly. The comparably small quantity of seized crack shows that this substance is exclusively made from cocaine on the spot (Hessisches Sozialministerium, 2006). The increase in terms of quantity from 2004 to 2005 should therefore not be over-interpreted (table 36).

**Table 36: Seizures of cocaine and crack in 2004 and 2005**

Substance	2004		2005		2005 vs. 2004	
	Kg	Cases	Kg	Cases		
Cocaine	969.0	4,088	1,078.9	4,109	+11.3%	+0.5%
Crack/ Freebase	2.5	1,970	5.6	1,659	+124.0%	-15.8%

Source: Bundeskriminalamt (2006)

## 13 Drugs and Driving

### 13.1 Summary

### 13.2 Policy

The number of road accidents and deaths has noticeably decreased over the last decades. Accidents per 1 million driven kilometres continually sank from 1.5 in 1970 to 0.49 in 2004. The number of deaths decreased from 76.5 per 1 billion driven kilometres to 8.4 during the same period of time ([www.bast.de](http://www.bast.de), 31.7.2006). Drunk driving has been an important topic in Germany for many years. Gradually, drugged driving has also been given more attention as a subject of discussion. The Drug Commissioner of the Federal Government points out in her previous report (2005) that the number of accidents with casualties in which drugs ("other intoxicating substances") played a role, increased from 612 cases in 1997 to 1,409 cases in 2003. However it needs to be taken into account that the technical equipment to measure intoxication by drugs and training of police officers have improved in this area. So, public and political interest in this problem area has developed in parallel to the empirical basis.

Young, especially male drivers remain a central risk group. They have a higher prevalence of drug use, a relatively high consumption of alcohol and they go out frequently. The combination of these factors makes them increase the risk of accidents. Especially in the rural setting, "going out" is equal to nightly car races to the discotheque. These so-called "disco accidents" account for a large number of the accident statistics and are therefore an important focus of prevention measures.

### 13.3 Prevalence and epidemiological methodology

#### Methodology

The data situation on this is as follows:

- There are no systematic surveys carried out in Germany to measure prevalence of drunk or drugged driving on a regular basis. However, there are a few data sources which can be used for monitoring.
- In the past, blood samples of conspicuous operators of motor vehicles, which were analysed for alcohol, were occasionally also reanalyzed for cannabis at a later point of time. However, this led to methodological problems in backdating the THC-concentration to the time of driving. Furthermore, since the selection of tested drivers is alcohol-oriented, cannabis users are therefore probably underrepresented.
- *Road-side-studies* are, from an epidemiological point of view, the best possibility to collect representative data on the extent of drugged driving. To this purpose, random samples are taken among drivers in ordinary road traffic and tested for alcohol and drugs. However, this is only possible in exceptional cases like for example as part of a study. In principle, tests which are carried out without justifiable suspicion, are not allowed.

- The analysis of data on recorded *road accidents* with or without damage to persons and property, gives an insight into quite a large number of accidents. The data basis is formed by accidents which were recorded by police. Since police are called in most of the road accidents in Germany, the data situation is quite good. Only petty cases are possibly not taken account of. Apart from alcohol, the influence of “other intoxicating substances” - mostly cannabis - is recorded in the statistics. Information on accident-free driving under the influence of intoxicating substances is of course not included by this method.

## Results

A road-side-study was carried out in Germany in the nineties. As part of the study, a representative sample of car drivers was tested for several substances. In 0.57% of the tested drivers, cannabis and in 5.48% of the cases alcohol was found in the blood. By comparison, the figures for opiates ranged between 0.15 - 0.62% (heroin, codeine). Only one in 2,017 samples contained cannabis in a quantity (>40 ng/ml) which actually represented an acute impairment of the fitness to drive (Krüger, Schulz & Magerl, 1998). However, prevalence of cannabis consumption has risen since then, which probably has also led to an increase of driving under the influence of this drug.

The following presentation is based on the most recent statistical data on road accidents. In the year 2004, accidents with casualties on German roads totalled 336,619 with 413,942 operators of motor vehicles being involved. Out of these, 1,343 (0.3%, 2003: 1,341) were under the influence of “other intoxicating substances“ and 20,663 (5.0%, 2003: 22,674) under the influence of alcohol. Regarding accidents with deaths, influence of drugs was found in 41 out of 6,729 cases (0.6%) compared to alcohol which was found in 6.8% of the cases. As for accidents with injury to property, influence of drugs was found in 770 out of 128,168 cases (0.6%) compared to alcohol with 9.4% (Statistisches Bundesamt, 2006c). Considering the prevalence of the different drugs used in Germany, cannabis probably accounted for the largest part of these “intoxicating substances”.

Contrary to alcohol, detection of drug use in road traffic still poses major problems. Therefore, drug cases are probably clearly underreported. According to a frequently quoted proximate value, one in 600 cases of drugged driving is detected compared to one in 300 hundred cases of drunk driving. Even when taking account of the underreporting of drug-cases, the number of accidents caused under the influence of alcohol still is 5 times higher.

### 13.4 Detection, measurement and law enforcement

#### Detection and measurement

Funded by the European Commission and institutions in the USA, the international project Rosita was dedicated to the development of appropriate technical instruments for the quick detection of drugs in road traffic. Urine tests are considered a reliable method for drug detection, but haven't proven useful in their practical implementation. Therefore, the

development and testing of saliva testing instruments in drug detection formed an important part of the project (Moeller, 2004).

However, the final report on these projects arrived at an overall negative judgement of these methods. It points to the largely dissatisfying sensitivity of the tests with good sensitiveness for many substances. Therefore, under current conditions, none of the analysed methods was recommended for practical usage. The authors of the study held the opinion that use of the methods could nevertheless make sense because of the deterring effect of the tests. However, the effect would decrease, when it became known that the tests often give negative results after drug consumption (Verstraete & Raes, 2006).

As a result, despite the introduction of new detection methods and training of police officers, the chances of detecting drugged driving, have probably not really increased. Since it is forbidden to carry out tests without justifiable suspicion and personnel resources for regular controls are limited, tests are mainly carried out in the surroundings of discotheques and other events which are assumed to have a higher prevalence of drugs and alcohol consumption.

### **Legal situation**

Since 1998, driving under the influence of drugs is legally classified as a regulatory offence which can be punished with a fine or the suspension of the driving licence. This also applies to cases where unfitness to drive could not be proven.

Experts currently work on a grid to measure intoxication caused by THC analogously to the blood alcohol concentration. However, the connection between THC concentration in the body and the impairment of physical ability is more complex than in the case of alcohol. Therefore it is more difficult to define individual limit values.

Based on the meta-analysis by Berghaus and Krüger (1998), Grotenhermen and colleagues (2005) have given their view on cannabis in road traffic. They recommend setting the limit value for the THC concentration in the blood at 3.5–5 ng/mL. This limit value would, says this group of experts, allow on the one hand to prosecute impaired fitness to drive through THC, and on the other, to ignore residual symptoms of cannabis use which do not impair fitness to drive anymore. If, at the same time, the blood alcohol concentration is higher than 0.3 per mille, the limit value for cannabis should be lowered. Legally valid tests should be based on blood samples and saliva tests can serve for screening. Since laboratory results of one and the same sample can diverge up to 30%, limit values need to be given a larger range of variations.

Driving under the influence of alcohol or drugs entails penal consequences but has also insurance-related aspects. If, after the consumption of alcohol or drugs, driving is rated as “grossly negligent“, the obligatory third party insurance of the driver who caused the accident, may claim back parts of the costs asserted by the victim of the accident from the driver who caused the accident. The same applies to insurances against damage to one’s own automobile.

### **Driving under the influence of medical drugs**

The problematic effects of medical drugs in road traffic remain a side issue in public and expert discussion. Benzodiazepines play the most important role among the group of active substances. The possibly problematic effects of medication on the driving capacity need to be weighed against the negative effects of the disease itself which can be reduced or cured by medication (Berghaus, 2004). Driving under the influence of medical drugs is not regularly monitored in Germany and there are no representative data available on this issue.

### **Driving and substitution**

Driving of persons undergoing substitution therapy is a special topic. An intensive debate has been led in Germany for quite some time on the re-grant of the driving license to those in stable substitution therapy, since a driving license would definitely increase patients' employment chances on the labour market. The question when and under which circumstances the driving license can be re-granted to heroin and cocaine addicts who generally have lost their licence long before, hasn't been sufficiently answered. However, there is agreement on a few aspects: substitution should have been ongoing for a year and no additional drugs should be taken. The overall situation of the patients should be stable. Buprenorphine seems to impair the driving capacity less than methadone. Comparing between persons who were treated with methadone (n=24) and buprenorphine (n=22), a study carried out by Soyka and colleagues (2005b) found a significant impairment of the cognitive-motor functions of the users of buprenorphine.

There is large grey zone between doctor's secrecy, insurance law and regulations of the criminal law. It is the doctor's duty to inform patients in substitution therapy that driving under the influence of substitution substances is forbidden. A re-grant of the driving license is difficult to achieve even in a stable therapy situation (Ebert et al., 2005).

### **13.5 Prevention**

The attempt to prevent or reduce risks and damage caused by intoxicated drivers of motor vehicles, comprises both structural and behavioural prevention. In practice, the risks caused by alcohol and drugs – especially by cannabis – are often commonly worked on. Preventive measures and offers are generally not substance-specific. Specific measures undertaken for users of benzodiazepines are not known. Information on a driving ban and special risks should generally come from the doctor in charge of the treatment. Additionally, patients can inform themselves on these and other undesired side effects in the package circulars of the medical drugs.

In the following, the report presents innovative projects which have been recently developed for these subject areas in Germany.

### **Fifty-fifty**

An interesting approach of structural prevention is the initiative “fifty-fifty-Taxi“. The project is addressed to visitors of discotheques in Saxony-Anhalt who can ride home by taxi for half the price on Friday and Saturday nights. In this way, drunk or drugged driving is prevented. So far, 300,000 tickets have been sold for such rides. Sponsors who cover the other half of the costs are from industry and economy (Ministerium für Gesundheit und Soziales Sachsen, 2006, personal communication).

In the last decades, additional bus lines have been introduced in many cities which can be used at night after the end of regular operating hours by discotheque goers for a trip home at regular bus fares. The buses operate either on an hourly schedule or can even be called on demand. However, such initiatives are limited to cities and are hardly found in rural areas.

### **FreD**

The project FreD uses peer trainers to inform young adults in the course of their driving instruction about risks of drunk and drugged driving. The project has been running since 2001 and has been used by a series of Laender. It is currently used in a demonstration project at European level. Details are contained in the last REITOX-report. The project description can be found in the EDDRA data base.

### **Public discussion and media**

Accident risks caused by driving under the influence of drugs are only occasionally picked up as a subject in the public discussion and by the media. Hereby, drunk driving is far more often addressed than driving under the influence of cannabis or other drugs. Due to the relatively high accident figures of nightly rides home of young adults, press deals with this subject mostly under the headline “disco trips“.





## Part C: Bibliography and Annex

### 14 Bibliography

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## 14.2 Websites

Along the websites of the most important institutions, a few innovative offers were selected from the field of demand reduction. The list is an extract of a multitude of addresses existing in this area.

Website	Inhalt
<a href="http://www.bmg.bund.de">www.bmg.bund.de</a>	Bundesministerium für Gesundheit (BMG) Federal Ministry for Health
<a href="http://www.bzga.de">www.bzga.de</a>	Bundeszentrale für gesundheitliche Aufklärung (BZgA) Federal Centre for Health Education (FCHE)
<a href="http://www.dbdd.de">www.dbdd.de</a>	Deutsche Referenzstelle für die Europäische Beobachtungsstelle für Drogen und Drogensucht (DBDD) German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction
<a href="http://www.dhs.de">www.dhs.de</a>	Deutsche Hauptstelle für Suchtfragen (DHS) German Head Office for Dependence Matters
<a href="http://www.drugcom.de">www.drugcom.de</a>	FCHE information for young people and party goers BZgA Informationen für junge Leute und Partygänger
<a href="http://www.drugscouts.de">www.drugscouts.de</a>	Project in Saxony for young people Landesprojekt in Sachsen für junge Leute
<a href="http://www.emcdda.europa.eu">www.emcdda.europa.eu</a>	Europäische Beobachtungsstelle für Drogen und Drogensucht (EBDD) European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)
<a href="http://www.ift.de">www.ift.de</a>	Institut für Therapieforchung (IFT), München Institute for Therapy Research, Munich
<a href="http://www.rki.de">www.rki.de</a>	Robert Koch-Institut (RKI), Berlin



## **15 Annex**

There are no entries for the annex.

## Part D: Standard Tables and Structured Questionnaires

### 16 Standard Tables (ST) and Structured Questionnaires (SQ)

The following tables and questionnaires comply with the specifications of the EMCDDA. The data are provided by all member states of the European Union in this format for European reporting. The complete tables and questionnaires are available exclusively in electronic format under [www.dbdd.de](http://www.dbdd.de).

Nr	Standard Table (ST) Structured Questionnaire (SQ)	Title	Optional (O)
1	<i>Online</i> ST 01	Basic results and methodology of population surveys on drug use	
2	<i>Online</i> ST 02	Methodology and results of school surveys on drug use	
3	ST 03	Characteristics of persons starting treatment for drugs	
5	ST 05	Acute/direct related deaths	
6	ST 06	Evolution of acute/direct related deaths	
7	ST 07	National prevalence estimates on problem drug use	
8	ST 08	Local prevalence estimates on problem drug use	
9	ST 09	Prevalence of hepatitis B/C and HIV infection among injecting drug users	
10	ST 10	Syringe availability	
11	ST 11	Arrests/Reports for drug law offences	
12	ST 12	Drug use among prisoners	
13	ST 13	Number and quantity of seizures of illicit drugs	
14	ST 14	Purity at street level of illicit drugs	
15	ST 15	Composition of tablets sold as illicit drugs	
16	ST 16	Price in Euros at street level of illicit drugs	
17	ST 17	Leading edge indicators for new developments in drug consumption	O
18	ST 18	Overall mortality and causes of deaths among drug users	
24	ST 24	Drug-related treatment availability	
30	ST 30	Methods and Results of youth surveys	O
31	SQ 31	Treatment as an alternative to imprisonment applicable for drug using offenders in the European Union	
32	SQ 32	Policy and institutional framework	
34		TDI data	
33	Selected Issue	Very young people TDI data	O
35	Selected Issue	Very young people conditional prevalence table	O
36	Selected Issue	Cocaine orientative frequency	O

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