



European Monitoring Centre  
for Drugs and Drug Addiction



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## **2007 National Report to the EMCDDA by the REITOX National Focal Point**

# **Germany**

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

**Drug Situation 2006/2007**

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For better legibility the present report refrains from using female forms which are instead subsumed under the respective male gender.

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## ABBREVIATION

Abbreviation	German	English
AMG	Arzneimittelgesetz	Medical preparations act
BfArM	Bundesinstitut für Arzneimittel und Medizinprodukte	Federal Centre for Drugs and Medical Devices
BMI	Bundesministerium des Innern	Federal Ministry of the Interior
BMJ	Bundesministerium der Justiz	Federal Ministry of Justice
BMG	Bundesministerium für Gesundheit	Federal Ministry for Health
BSHG	Bundessozialhilfegesetz	Federal Public Welfare Act
BtM	Betäubungsmittel	Narcotic drugs
BtM-ÄndV	Betäubungsmittelrechts- Änderungsverordnung	Amending regulation on narcotic drugs
BtMG	Betäubungsmittelgesetz	Narcotics Act
BtMG-ÄndG	Gesetz zur Änderung des Betäubungsmittelgesetzes	Amending Narcotics 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
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 Centre for Addiction Issues
DND	Drogennotdienst	Drug Emergency Service
DRV	Deutsche Rentenversicherung Bund	German National Statutory Pension Insurance
EBDD	Europäische Beobachtungsstelle für Drogen und Drogensucht	EMCDDA - European Monitoring Centre for Drugs and Drug Addiction
ECDP		European Cities on Drug Policy
EDDRA	Austausch über Aktivitäten zur Reduzierung der Drogennachfrage	Exchange on Drug Demand Reduction Action
ESA	Europäische Suchtstudie (früher Bundesstudie)	Epidemiological Survey on Addiction
EU	Europäische Union	European Union
GRV	Gesetzliche Rentenversicherungen	Statutory Social and Pension Insurances
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 applizierender Drogenkonsument	IDU – Injecting drug user
KJHG	Kinder- und Jugendhilfegesetz	Law on children and youth welfare
LAAM	Levoalphaacetylmethadol	Levomethadyl acetate hydrochloride
NGO	Nicht-staatliche Organisation	Non-governmental organization
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 (DESTATIS)	Federal Statistics Office
StGB	Strafgesetzbuch	Penal Code
THC	Tetrahydrocannabinol	Tetrahydrocannabinol
UN	Vereinte Nationen	United Nations
WHO	Weltgesundheitsorganisation	World Health Organization
ZI	Zentrales Institut der Kassenärztlichen Versorgungen	Central Institute of SHI-accredited care services

## The Federal Länder

<b>Abbre- viation</b>	<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-Western 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 at [www.dbdd.de](http://www.dbdd.de) and on the European Report at [www.emcdda.europa.eu](http://www.emcdda.europa.eu).

Tim Pfeiffer-Gerschel

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## **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 German Reference Centre (DBDD), the Institute for Therapy Research (IFT), the Federal Centre for Health Education (BZgA) and the German Centre for Addiction Issues (DHS). The German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction is funded by the Federal Ministry for Health and Social Affairs and the EMCDDA. The overall report is structured according to EMCDDA guidelines and is available for download at [www.dbdd.de](http://www.dbdd.de)

### **National policies and 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 for Fighting Drugs and Addiction” is the mainstay of the overall policy concept in which various activities are embedded. The national “Board on Drugs and Addiction” which is to accompany and evaluate the goals and measures laid down in the action plan, introduced its work programme in September 2005. The programme focuses on reducing smoking and alcohol consumption among teenagers as well as on bringing down experimental and regular use of cannabis. Focal points of national policy-making in the field of illicit substances in the reporting year were mainly the improvement of care offers for persons with cannabis problems, the research of the effects of abusive cannabis use as well as putting the results of the heroin trial into the field of practice.

### **Drug use: prevalence and prevention**

The results of the last epidemiological survey carried out in 2006 corroborate the findings of earlier surveys, showing that about a quarter of the adult population in Germany has had experience with drugs. The portion of adults who took drugs in the last 12 months fell to 5%; only about 3% used drugs in the last 30 days. Prevalences among teenagers and young adults continue to be higher, but have also decreased compared to studies of previous years. Only 13% of the 14- to 17-year-olds stated in a representative national survey carried out in 2007 to have smoked cannabis at least once in their lifetime compared to 22% in 2004. According to the most recent results, cannabis consumption among teenagers in the age group from 11 to 17 years lies below 10% in the 12-month-category. Unchanged however appears to be the portion of young adults who regularly use cannabis. 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.

## **Prevention**

The guidelines spelled out by the EU-drug strategy 2005-2012 for supply and demand reduction are implemented with resolution in Germany. Hereby, health protection and prevention continue to be given priority.

Schools are still the most important setting for addiction prevention in Germany. Target group specific prevention is commonly taking place in recreational settings, to an increasing extent also in schools and in (Internet-assisted) counselling work. Using strategies of early recognition and early intervention, young people are taught to critically deal with psychoactive substances (risk competence). Multipliers and parents are shown possibilities of dealing with substance abusing youth.

In addition to behavioural measures, structural approaches increasingly gain in importance especially in the area of licit addictive substances. Measures of addiction prevention undertaken in the field of licit and illicit drugs and behavioural addictions have been complemented by a new concentration area dedicated to fighting “pathological gambling” since 2006. In response to higher quality demands in the area of addiction prevention, documentation and evaluation of the measures carried out increasingly gain in importance.

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

Based on the figures from treatment, police contacts and records of drug-related fatalities, estimates venturing the prevalence of problem (i.e. risky, harmful or dependent) drug use make the number of problematic users of heroin range between 76,000 and 161,000 persons (0.1-0.3%). For problem use in a broader sense, the following figures were found: “regular” use among the 12- to 25-year-olds was found in 3%, habitual (at least 25 times in the lifetime) use of cannabis which was continued until the last month in 12%, use of all other illicit drugs in 2%. Among the 14- to 17-year-olds, the portion of persons who regularly use cannabis has remained roughly between 2% and 3% since 1993. In the age group from 18 to 19 years, this portion ranges between 3.6% and 6.4%, lying at 4.3% in 2007 (BZgA 2007a).

51% of the clients who seek help from outpatient drug counselling facilities, have a primary opiate problem; 31% suffer primarily from cannabis-related problems. Of those who are in therapy for the first time, 57% have cannabis-related disorders (opiates: 22%). In inpatient facilities, opioids continue to play a predominant role among illicit drugs. Here also, the number of cannabis cases is on the rise. In 2006, there was one cannabis patient in 2.4 patients with an opioid diagnosis.

## **Health correlates and consequences of drug use**

1,296 people died of drugs in Germany in 2006. This is again a slight decrease relative to the previous year and a substantial decrease by almost 40% compared to the peak of 2,030 death cases in the year 2000. The death cases were mostly related to opiates which were frequently used in combination with other psychotropic substances including alcohol.

## **Social correlates and consequences of drug use**

In the year 2006, about 179,000 offences in connection with drug use (excluding drug dealing) were recorded. This corresponds to a decrease of -8% relative to the previous year, which can be explained by the declining figures found for cannabis (-10.9%), heroin (-5.2%) ecstasy (-21.0%), cocaine (-6.6%) and other drug offences (-10.3%). Only amphetamine-related offences (+15.7%) increased in the same period of time.

Unemployment, low education and low income are still commonly found problems among drug users. Special measures undertaken by social security agencies and offers made by the second labour 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 labour market conditions.

## **Drug Market**

There was little change in the development of drug prices between 2005 and 2006. As in the previous year, the wholesale price of marijuana rose again. The price at street level increased by almost 14% relative to the previous year. After a slight decrease in the previous year, heroin at street level is about 5% more expensive in 2006. This development is in contrast with the decline of heroin prices at wholesale level by 22%. Street prices for amphetamines and cannabis resin (which had slightly decreased in the previous year) have gone up compared to 2005. The changes found for cocaine were only marginal. Despite some variations, the level of active substance in amphetamines and cocaine at street level has been on a continual decline since 1996. The level of active substance of heroin increased at street level while remaining rather stable at wholesale level despite strong fluctuations. As in the previous year, the mean THC-content of cannabis resin and marijuana declined again between 2005 and 2006. The decrease in marijuana can be partly explained by the fact that in 2006 all participating laboratories reported their data differentiating between cannabis leaves and flowering tops which have a higher concentration of active substance (10.6%) than the rest of the plant.

## **Selected issue: drug-related government expenditures**

In German-speaking territory there have been very few studies systematically dealing with health-economic aspects of addiction-related illnesses. Nor has there been any systematic analysis of the costs of or governments' expenditures relating to the consumption of illegal drugs in Germany. The majority of studies venturing estimates of costs thus far have focused on the costs (macro-economic, health-care and social) of alcohol abuse and dependence. There have only been scattered studies, on the other hand, which explore the health-economic aspects of abuse or dependence on illegal substances. The vast majority of the studies available are limited to secondary analysis of existing data. One fundamental problem shared by all systematic analyses estimating costs in the German health-care system is illustrated by the highly fragmented health-care system in Germany. The data available for secondary analyses are spread out among a large number of institutions and data sources and in some cases are subject to considerable data-protection requirements.

There are data available on the direct expenditures of the Federal and Länder ministries as well as individual studies and statistics, but these only allow very limited conclusions to be drawn on the areas of expenditures analysed, which moreover are generally not broken down by individual substances.

### **Selected issue: vulnerable young people**

In Germany considerable research has been performed on groups of young people who are particularly at risk of consuming drugs. Generally speaking, these are not epidemiological, but rather sociological studies which seek to explain the factors which may lead to drug consumption. The disciplines involved furthermore adopt different perspectives: while representative studies on the prevalence of drug consumption only provide information on the various risk groups to a limited extent, research on help for adolescents and addicts – who have contact with the risk groups – tends to be process and output-oriented or more qualitative in nature. Research to date on impact is rather scanty, as the tools and funding required are often lacking. In the therapeutic setting, on the other hand, research is usually quantitative and outcome-oriented, but less focused on risk groups. In response to increased quality demands in the area of prevention of addictions, greater efforts have been made in the past years in order to review behavioural and condition preventive approaches in prevention measures and programmes to determine their impact (Bühler & Kröger 2006).

The manifold problems facing youth and adolescents who are particularly vulnerable are matched by a broad range of prevention, counselling, support and treatment opportunities.

### **Selected issue: drug-related research**

Research focusing on drugs in Germany covers the entire bandwidth of basic and application-related research. Although several important projects are also being carried out on illicit drug consumption, the focal point of studies is on tobacco and alcohol consumption.

There is no central national coordinating office for drug-related research in Germany. A key role in drug-related research is however played by interdisciplinary addiction research associations which have been receiving funding since 2001 from the Federal Ministry of Education and Research within the framework of the Federal Government's Health-Research Programme. These research associations explore questions relating to specific substances as well as more general substance-related issues. On top of this, there are various university and independent institutes which have very different focal points and apply for funding in tendered projects (e.g. by the Federal Ministry of Health) or in some cases receive basic funding. A selection of important studies (which in terms of the funding provided can be termed large-scale) since 2000 must also include *inter alia* the "Federal German Model Project on Heroin-Supported Treatment of Persons Dependent on Opium".

The exchange of information in the research community is to a large extent organised by researchers themselves, associations and specialised enterprises and organisations and takes place primarily through research congresses and scholarly journals addressing the field.

## **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. Until 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. For a few years however, (1) disorders resulting from licit psychotropic substances and (2) common aspects of all substances (e.g. in universal prevention or in patients with multiple abuse) as well as non-substance-related addiction (e.g. pathological gambling) have increasingly moved into the focus of the political interest. This is the reason why the terms 'drug and addiction policy' or 'addiction policy' find more frequent use gradually replacing the term 'drug policy'. As a result of the differences in the policy aims pursued and strategies deployed in the area of licit and illicit substances, the term 'drug and addiction policy' finds preferred usage in the German language.

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 appropriate term reflecting this expansion of the concept, so that the (unsatisfactory) term of 'addiction policy' continues to be used. As a consequence, licit substances and common strategies for both licit and illicit substances have to be taken into account in the annual reports of the DBDD. In many cases however, 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. Non-substance-related addiction is currently of no relevance for this report.

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

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

The responsibility for the drug and addiction policy is shared between the Federal Government and the Länder. According to the Basic Constitutional Law, the Federal Government has legislative authority over the narcotic drugs law, the penal law, and the social welfare law. On this basis, it has defined a legal framework for its drug policy and has formulated specific standards. However, the execution of these federal laws mainly falls under the responsibility of the Länder. In addition to the legislation on the enforcement of sentences and the legal execution the Länder 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 Länder 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 the drug policy, a few Länder are working on shifting competences especially with regard to counselling, care and general prevention activities to the municipalities (z.B. Hessisches Sozialministerium, 2006), in order to, among others, improve integration between youth welfare and addiction support 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, Länder- 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. Youth welfare relies on the joint work of governmental and non-governmental institutions (SGB VIII).

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

## **1.1.2 Legal Framework**

### **The Narcotics Act**

The Narcotics 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 Narcotics Act are listed in three schedules encompassing all substances mentioned in the international agreements on narcotic drugs:



- Schedule I: narcotics not eligible for trade and medical prescription (e.g. MDMA, heroin, cannabis).
- Schedule II: narcotics eligible for trade but not for medical prescription (e.g. Delta-9-tetrahydrocannabinol (THC), dexamphetamine).
- Schedule III: narcotics eligible for trade and medical prescription (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 (rehabilitation) 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 unemployment aid and social aid for the unemployed and welfare recipients of social assistance 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, efforts are undertaken to work more intensely on the removal of obstacles hindering 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), the following institutions are in charge of granting aid: the employment agencies or the working groups formed by the latter as well as the municipalities and the so-called opting municipalities.

### **Other laws**

Other relevant laws, in which the possible legal consequences of the consumption of psychoactive substances are defined (for example with regard to the participation in road traffic), are the following ones:

- Road Rules (StVO), in which traffic controls etc. are regulated,
- The Road Traffic Act (StVG), in which the alcohol limit is specified as well as driving motor vehicles under the effect of other intoxicating resources is defined as misdemeanor,
- the Criminal Code (StGB), which also deals with the effects of the consumption of alcohol and other intoxicating agents on those participating in road traffic
- the license Regulation (FeV), in which the conditions, doubts about suitability as well as the withdrawal of driving licenses are defined, for example because of being dependent on narcotics.

### 1.1.3 Objectives and focal points of national drug and addiction policy

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

- Prevention of addictive drug consumption
- Counselling and treatment of drug users
- Survival aid and harm reduction
- Repression and supply reduction

The intention hereby is to create a balance between measures undertaken to reduce both demand and supply. The Federal Government's addiction policy comprises licit psychotropic substances and associated risks taking into account European developments.

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 undertaken 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 for fighting Drugs and Addiction" passed in 2003, is to serve as a framework for addiction policy for the next years. More details can be found in the REITOX report 2004.

Focal points of last year's drug/addiction-related issues were a comprehensive and intense debate on the protection of non-smokers, alcohol prevention - in particular amongst youth - as well as the discussion on the continuation of heroin-assisted therapy. Increased attention was also given to cannabis use and binge drinking among teenagers. Under German EU-Council Presidency the EU Commissioners on Narcotic Drugs came together and held a Reitox-Academy on 'Cannabis' together with the EMCDDA in Berlin. Within the so called "Horizontal Drug Group" of the European Council the following issues were discussed: low threshold aid, HIV/AIDS infections and other diseases transmitted by blood among drug consumers, finally the international cooperation of controlling precursor and basic substances.

Another focal point was formed by the discussion on the maintenance of the state betting monopoly in Germany. In a verdict passed by the Federal Constitutional Court in March 2006, the state gaming providers were requested to provide evidence by the end of 2007 that a state betting monopoly offers best possibilities of carrying out effective measures to prevent the onset of gaming addiction and embedding these measures structurally.

### **1.1.4 Coordination**

As a result of the federal structure of the Federal Republic of Germany 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 programmes are subject to different guidelines and rules in the individual Länder. However, the Länder have agreed on a profile for regional outpatient addiction support facilities. There are no uniform formal requirements or criteria 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 programmes 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 Länder and municipalities. Furthermore, large differences with regard to the availability of resources are to be found between the Länder.

Coordination between the Federal Government and the Länder takes place in the conferences of government departments and their working groups. The new national Board on Drugs and Addiction (Drogen- und Suchtrat, DSR) as well as its steering group play also an important role in this field. Being part of the DSR, the working group ‘German Annual Statistical Report on Addiction Therapy’ has been installed in order to coordinate the collection of statistical data in this area. The working group ‘Interface problems in the supply of addicts’ of the DSR also deals with coordination tasks. The main topics of this working group are the following: possible improvements of addiction treatment for people working, staying or being out of prison, and, in general, improvements of early-intervention in counseling and treating addicts. In addition, Länder and Federal Government cooperate in projects.

On a national level, the Federal Centre for Health Education (BZgA) is in charge of the planning and execution of prevention programs and the monitoring of preventive activities and their quality assurance. It chairs the working group “Addiction prevention” which also reports to the Board on Drugs and Addiction. The Federal Institute for Pharmaceuticals and Medical Devices (BfArM) is responsible for the admission of pharmaceuticals. Affiliated with 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 inception in 2003.

## **1.2 Legal aspects**

### **1.2.1 Laws**

#### **The Narcotics Act**

The legal framework for addressing drug issues didn’t change much in 2006. With the 20<sup>th</sup> Amendment to the Narcotics Act (BtMÄndV 14.02.2007) the synthetic drug “meta-

chlorphenyl-piperazine (M-CPP)“ was placed in schedule II (substances eligible for trade but not approved for medical use) of the Narcotics Act. With the basic restructuring and change of the law on precursors at EU-level in 2005, integral parts of the monitoring and control of precursors were transferred to European level. As a consequence, the national law had to be changed correspondingly. The new version of the law on precursors in Germany is expected to enter into force by the end of the year 2007. By putting individual regulations into force already as of 1 January 2006, a few loopholes in the criminal law which resulted from the change of the EU-law since August 2005 could meanwhile be closed again.

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

After the completion of a study on the diamorphine-assisted therapy of people dependent on opiates (“heroin trial”) (Naber & Haasen, 2006), an application for the admission of diamorphine as a pharmaceutical drug was filed with the BfArM in spring 2006. Despite the positive results of the demonstration project “heroin-assisted therapy” (cf. also chapters 5.6 and 13.2.1) the continuation of the therapy with diamorphine is uncertain in Germany. The BfArM has given its technical approval of the application, but cannot admit diamorphine as a pharmaceutical drug before the Narcotics Act, which currently still prohibits the prescription of diamorphine, has been changed accordingly. So far, the Federal Government has not been able to bring in a corresponding bill into the German Parliament. For the moment, patients treated under the demonstration project continue to receive diamorphine since January 2007 according to a special regulation of § 3.2 of the Narcotics Act based on the public interest.

### **Debate on a Law on Prevention**

The law on prevention has not yet been passed in Parliament during the last (shortened) legislative period. In the coalition agreement of 11 November 2005, a decision was made to renew such a law. At the moment, Members of Parliament work on a draft which is based on the draft of the last legislative period. That the German Parliament will pass the law in early 2008 is sought for. The central rules are concerned with strengthening health promotion and primary prevention. One focus of the law is on the expansion of setting activities (in nurseries, schools, business, senior citizens' organizations, town-districts), because in this way groups with health problems can be reached more easily. Those are especially the socially disadvantaged and people with migration background, who so far have hardly taken advantage of the benefits of health promotion and disease prevention.

### **Penal Code (Hospital order)**

As part of a legal reorganisation of the Law on hospital orders, a series of changes was decided by the German Parliament end of April 2007. More than in the past, it will, amongst others, depend on the predictable outcome of withdrawal treatment whether a substance abusing delinquent will be allowed to undergo treatment while in custody. Based on this change, patients who are not treatable or willing to be treated, can be transferred much quicker than in the past from treatment facilities back to penal institutions.

## **1.2.2 Laws implementation**

### **Study on the legal practice of criminal prosecution**

The German Narcotics 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 Länder 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”.

As part of a study comparing laws on the topic “Drug use and practice of criminal prosecution“, the current legal practice of the departments of public prosecution with regard to the application of § 31a des BtMG) – providing for the possibility to discontinue prosecution – was evaluated in the context of other regulations on the discontinuation of prosecution (Schäfer & Paoli 2006). The study carried out by the Max-Planck-Institute for foreign and international penal law in Freiburg found as a result a different application of § 31a des BtMG in the various Federal States. The study was already presented in the REITOX-report 2006. In the year 2007, it is to be determined whether and to what extent the guidelines and the practice of discontinuation have been harmonized between the Länder and whether there is further need for action.

Following Schleswig-Holstein and Hamburg, the Ministry of Justice of the Rhineland-Palatinate reduced the “small amount“ of cannabis up to which possession is not prosecuted from 10g to 6g (Ministerium der Justiz Rheinland-Pfalz 2007). With that, 14 Federal Länder (at 09/25/2007) have meanwhile introduced this limit (upper/lower limit). Limits however still vary between 5g to 15g from one Land to the other.

Given the fact that the potency of cannabis preparations has been dramatically increased in particular through the cultivation of high-performance cannabis in indoor plantations, also Patzak et al. (2007a, 2007b) recommend to modify the different upper- and lower level concepts of the various Federal Länder and replace them by uniform limits.

## **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 supported by a host of information offers. In cooperation with the Land Commissioners for the Prevention of Addictions, the BZgA has created a national platform called “Prevnet“ enabling the exchange of information and opinion on prevention between experts and institutions. Currently, the expert network is used by 800 members from 560 facilities. More than 300 projects and materials as well as over 80 studies can be found on the portal. In

PrevNet's interactive area more than 60 (cross-Land) internet working groups have been set up by numerous experts.

### **1.3.2 National Plans and Strategies**

In May 2007, the yearly Drug and Addiction Report was presented to the public by the Federal Government Commissioner on Narcotic Drugs. As one of its continued central tasks it lists the improvement of the protection of non-smokers through regulations for a better protection against the dangers of passive smoking both at federal government and regional level. In October 2006, the annual meeting held by the Federal Government Commissioner on Narcotic Drugs was placed under the title "Protection against passive smoking: experiences – models – perspectives". Another focal point of the year 2006 was the preparation of the action week "Alcohol – responsibility sets the limits" which took place from 14 to 18 June 2007. The goal of the countrywide campaign was to raise a discussion in the population on how to deal responsibly with alcohol. An important approach to reduce excessive alcohol consumption is made by the federal demonstration project „HaLT – Hart am Limit“ which offers support for teenagers who had alcohol poisoning and which strives for more respect of the Protection of Young Persons Act at local level. In order to improve the data situation in old age with regard to medication and alcohol abuse, the data available from the health survey 1997 are to be evaluated for the age group of the 59- to 79-year-olds. The results are to improve the knowledge and necessary offers for the prevention of medication abuse. The recent doping cases in high-performance sports have prompted the Federal Government to penalize the possession of blood doping drugs.

Other focal points regarding illicit substances are related to the improvement of help offers for persons with cannabis problems, the access of young cannabis users to the help system, the research status of new concepts in the treatment of cannabis users, the effects of abusive cannabis use as well as the implementation of the results of the heroin trial into practice. It is furthermore planned to investigate the so far insufficiently known long-term effects of substitution therapy in a three-year research study.

The framework for the current drug and addiction policy is set by the Action Plan for fighting Drugs and Addiction passed in the year 2003. The national Board on Drugs and Addiction (see 1.3.3) is the most important body to support and steer the implementation of the plan.

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

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

On 25 June 2003, the Federal Cabinet passed the "Action Plan for fighting Drugs and Addiction". To implement the plan, a national "Board on Drugs and Addiction" (Drogen- und Suchtrat, DSR) was set up to accompany measures, evaluate results and make suggestions for further developments. It is composed of representatives of the respective government and Länder departments as well as funding organs, associations, research and self-help organizations.

Following its reconstitution after the elections of the German parliament in autumn 2005, the Board reconfirmed the primordial goal of the “Action Plan for fighting Drugs and Addiction” which is to reduce the consumption of licit and illicit psychoactive substances as well as non-substance-related forms of 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 18% 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 the 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 the 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 Länder and service providers are considered imperative. Research results of the Federal Ministry of Education and Research and the heroin trial are also to be taken into account.

#### **Demonstration programmes and research projects with central government funding**

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 programme is among others to optimize the allocation of help offers 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 during the reporting period. A host of the results presented in this report and pertaining publications were taken from these projects:

- Targeted early intervention in cannabis, ecstasy and alcohol users:  
Building on the results of a first study funded from 2001 to 2005, two working groups in Bonn and Essen have investigated an individualized short intervention which aims at reducing cannabis use among older youth and young adults as part of the project “Intervention and Neural Psychology in Cannabis Abuse (INCA)”. Preliminary analyses of the follow-ups 3 and 6 months later show a clear reduction of cannabis use. Some of the test persons were moreover examined by means of computer tomography and imaging procedures for cognitive changes. The final results of these analyses are not available yet.
- Modular therapy of cannabis-related disorders (CANDIS):  
As part of a randomized-controlled intervention study, a modular treatment programme for patients with cannabis-related disorders was analyzed between January and

December 2006 in terms of effectiveness. As a result of the high level of acceptance among patients and therapists as well as of the encouraging therapy results (whose stability is currently examined in 3- and 6-month-catamnyses), a follow-up study is to implement and evaluate CANDIS therapy in the outpatient setting (funding: Federal Ministry for Health). It is at present being considered whether to expand the study to European level ([www.candis-projekt.de](http://www.candis-projekt.de)). Further information on the project can be found in chapter 13.2.1.

- **Care quality and allocation in substitution therapy (COBRA)**  
The study examines substitution therapy in Germany comparing the use of methadone and buprenorphine as well as the effects of certain practice characteristics and describes patients in therapy. Results of the study were presented to the press at the end of the year 2006 ([www.cobra-projekt.de](http://www.cobra-projekt.de)).
- **Demand evaluation at local government level II, local government-based and epidemiologically-based data as a basis for the planning and prioritization of allocation and intervention with disorders caused by the use of psychotropic substances:** Three main goals are pursued in the second funding period until 2007: The matching of problem profiles and help services in substance-related disorders, the transfer of improved allocation resources and strategies for the high-risk group identified in the first funding period, comparison of the unsatisfied demand of persons with substance-related disorders by collating the results with nine international longitudinal studies.
- **Examination of alternative allocation processes in the substitution therapy of opiate patients on the basis of empirically assessed treatment needs to contribute to the improvement of treatment quality by gaining more knowledge for target-oriented, differential decisions on indication and allocation.**

#### **Further research projects with Federal Government co-funding**

- **International Cannabis Need of Treatment Study (INCANT)**  
Starting at the end of 2006, the three-year main study of the multi-staged project INCANT (International Cannabis Need of Treatment Study), is carried out in parallel in the Netherlands, France, Belgium, Switzerland and Germany. The German “Therapieladen”, a counselling centre in Berlin which has been specializing on care for clients with primary cannabis problems for a long time, is participating in INCANT (<http://www.incant.de/>). The cooperation project was also presented at the REITOX-Academy on Cannabis held at the end of March 2007 in Berlin by representatives from France, the Netherlands and Germany.
- **Cannabis cessation program “Quit the Shit“**  
Available since 2004 at [www.drugcom.de](http://www.drugcom.de), the cannabis cessation program “Quit the Shit“ addresses people with regular cannabis use. Since April 2006, the Federal Centre for Health Education has been cooperating with twelve drug counselling facilities in seven Federal Länder in order to guarantee the spread and integration of the program into municipal structures.



- German-Swiss project “Realize it“  
The German-Swiss project “Realize it“ aims at significantly changing the consumption behaviour among the participating 15- to 30-year-old cannabis users. It is implemented as a demonstration project in six drug counselling facilities.
- EU project DRUID  
The Federal Road Accounting consortium (BAST, [www.bast.de](http://www.bast.de)) takes the chair in the project of the European Commission, in which 37 partners on "Alcohol, Drugs, Medicines and Driving" are working together (duration: 2006-2010). The topic of psychoactive substances in road traffic is being treated in seven units. The results of this interdisciplinary research project will offer important information about how frequently psychoactive substances appear in road traffic (as such, or in combination with others) as well as their potential risk. In addition, as part of experimental studies on these psychoactive substances, proposals are to be expected about danger limits presently not yet clearly defined, which are to be defined in analogy to the limits on alcohol. Methods and requirements for the detection, prosecution and punishment for those driving under the influence of alcohol, drugs or medicines, and their rehabilitation will be evaluated. Information for professionals and for the general public has to be developed and also disseminated (for more information see [www.druid-project.eu](http://www.druid-project.eu)).

### **Activities undertaken by the Federal Länder**

The Federal Länder too, have 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 Länder are presented in more detail under the respective topics of this report.

There are numerous projects in the Federal Länder addressing a series of target groups with different settings and focuses. They range from specific offers like for example for migrants or socially disadvantaged families over school projects or initiatives of sport clubs to differentiated interventions for example in drug users who have come to notice of police for the first time.

In the year 2006, a central agency for the prevention of addiction was set up in Berlin to better pool already existing preventive resources and network players in the field of prevention in the Land Berlin. In Mecklenburg-Western Pomerania, a specialized treatment center for children and teenagers with addiction problems has recently been opened and affiliated to the Clinic for Child and Adolescent Psychiatry in Stralsund. With the opening of a “Contact Center” a low-threshold offer was made for drug users and persons at risk in Rostock. In the area of Greifswald/Western Pomerania, a local project analyzes the developments of alcohol and drug abuse. In their first published results the authors report a significant increase of cannabis use in particular among young persons aged under 25 years in the period from 2001-2006 (Hoffmann & Moll 2007). Also with cocaine abuse, significant increases were found, while absolute figures are still markedly lower. Amphetamine including

ecstasy and other new designer drugs show, in comparison with other drugs, slight increases, however the estimated figure of unknown cases is presumably much higher.

In future, the addiction counselling facilities in Hamburg are to expand their offer also to minors addressing especially teenagers and young adults. Three addiction care organizations were selected by tender to set up a counselling offer for youth at risk of developing addiction in five selected districts of Hamburg in cooperation with the local youth welfare offices and private youth care organizations. The initiative receives funds of € 550,000 per year by the Agency for Social Affairs, Family, Health and Consumer Protection. In order to systematically network addiction and youth care in Hamburg, the organizations were already requested in their application to demonstrate co-operational relations with youth organizations or at least show corresponding efforts. A demonstration project is to investigate the development of new counselling offers to test outcome-oriented steering in addiction therapy. The Agency for Social Affairs, Family, Health and Consumer Protection and the addiction aid organizations will make outcome-oriented agreements with the addiction aid organizations until summer 2007, in which they will determine the target groups of the new counselling offers and also specify desired effects like for example regular substance-free attendance at schools and vocational training.

In November 2006, 13 addiction aid facilities in Hamburg held a week full of activities to combat hepatitis C. They demonstrated possibilities of prevention, diagnostics and treatment. It is planned to carry out similar events in future since the offers - e.g. consulting hours with subsequent vaccination possibility (hepatitis B), information events or films on patients of addiction aid facilities - were for the most part positively received.

In October 2006, the German Centre for Addiction Problems among Children and Adolescents (DZSKJ) was founded. The centre's goal is to improve the quality of addiction prevention among children and adolescents who are severely at risk of developing addiction and guarantee practice-oriented research. The DZSKJ is affiliated with the University Clinic Hamburg-Eppendorf and closely networked with the clinic's drug outpatient unit for adolescents and young adults and their families. The tasks of the DZSKJ range from research, concept development over evaluation to quality assurance and quality development.

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

The prevention activities undertaken by the BZgA aim at motivating potential and actual users of harmful substances to critically reflect their consumption behaviour and establish less risky forms of consumption. Apart from illicit drugs, in particular the licit and socially accepted drugs nicotine and alcohol are in the centre of attention. Since 2006, the BZgA's new focus of work has been the response to 'pathological gambling' (details can be found in chapter 3). The following innovative measures were undertaken in 2006:

- ***Participation in the Football World Cup 2006***

In summer 2000, the German Football Association was awarded the organization of the

FIFA Football World Cup 2006. The BZgA was tasked to accompany the Football World Cup 2006 with the campaign “Making children strong” which was to promote life-skills.

Football clubs were invited to actively participate in the campaign by making their own contribution to “Club 2006 - The FIFA World Cup at your Club” – the largest football club competition ever. One possibility of participating in the competition was to dedicate one World Cup-day to the motto “Make children strong”. The football clubs received support from the BZgA in making addiction prevention an integral part of their children and youth work.

A total of 900 clubs organized one World-Cup-Day. With more than 477 clubs, more than the half of them opted for the BZgA – motto “Making children strong”. For further details see chapter 3.

- ***Transfer of the Internet-based cannabis cessation program “quit the shit” to municipal addiction aid facilities***

Developed in 2003, the cannabis cessation program “quit the shit” was posted on the Internet portal [www.drugcom.de](http://www.drugcom.de) in August 2004 to reach young people with drug affinity (for further information please refer to previous reports).

The conception and evaluation of the first pilot phase being completed, the second phase was to transfer the program “quit the shit” to municipal structures of youth welfare and drug care or facilities of addiction prevention respectively. By means of a survey carried out among 629 outpatient addiction support facilities suitable cooperation partners were recruited to participate in the transfer of the program “quit the shit” to outpatient addiction support facilities. The program was to be expanded at municipal level to meet the great demand for the participation in the program. Participating staff was trained, software adapted and the organization of the client-related program work restructured.

An evaluation report will be presented by the end of 2007 which will serve as a discussion basis for the expansion of the project (further details are contained in chapter 3).

- ***Rap Attack – Music competition for socially disadvantaged adolescents***

In order to promote the integration of the Internet portal [www.drugcom.de](http://www.drugcom.de) set up to address young people with drug affinity into practical youth work with a focus on youth recreation, the online music competition Rap Attack was carried out in the middle of the year 2006.

Conceived as project promotion, the music competition was to address socially disadvantaged young people in youth centres. Rap Attack took place as a demonstration project in the four Federal States Berlin, Mecklenburg-Western Pomerania, Saarland and Saxony. Young people were offered the possibility to record their own rap tracks dealing with “intoxication”. The 30 best tracks were selected by user voting, out of these 3 were declared winners by a professional music jury.

The competition was designed in such a way that, in future, it can be carried out countrywide on a regular basis. The cooperation within the framework of the competition led to the development of two work manuals on cannabis and alcohol for the use of the Internet and drugcom in educational youth work ([www.bzga.de](http://www.bzga.de): Themenschwerpunkt Suchtprävention).

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

The German Centre for Addiction Issues (DHS) organized a cooperation conference also in 2006 in order to link the care areas psychiatry and medicine with addiction support at a high level. This was done in close cooperation with the Federal Medical Council and the support of the Federal Ministry for Health. The conference confirmed that the medical system offers care to substance abusers either in an isolated specialized form (generally in substitution practices) or is only of a peripheral nature.

“Alcohol – responsibility sets the limits“ was the motto of a countrywide action week held by the DHS, the BZgA and many other partners from 14 to 18 June 2007. Altogether, more than 2,000 events took place all over Germany to reduce alcohol consumption, enhance awareness for the problem and overcome stigmatization of people with alcohol problems.

A REITOX-Academy dealing with the “Prevention and therapy of cannabis disturbances in Europe: status, projects, need for development“ which was attended by the representatives of almost all national focal points of the EMCDDA and numerous experts, was held end of March in cooperation between the EMCDDA, DBDD, BMG and the Federal Government Commissioner on Narcotic Drugs. The results of the conference will be summarized in a common report of the EMCDDA and DBDD.

In May 2007, the national drug coordinators of the EU met for their bi-annual meeting under German EU council presidency in Berlin. Their meeting was also attended by the executive director of the United Nations Office on Drugs and Crime (UNODC), the chairman of the Pompidou-Group of the Council of Europe and the director of the EMCDDA. The UNODC executive director suggested to the EU drug coordinators to set up a European addiction research agency on the American model or to link existing bodies and create a European addiction research network. Another focal point of discussion was the cannabis problem in Europe.

### **International cooperation**

Germany actively cooperates with international institutions in the area of drugs and addiction. Its most important partners are the European Commission, the Horizontal Drugs Group (HDG), the European Monitoring Centre for Drugs and Addiction and the Pompidou-Group at the Council of Europe. Bilateral cooperation with regard to drugs and addiction took place with Poland and Croatia (twinning projects, exchange on the program FreD) and with France. In particular within the framework of the German EU-council presidency numerous specific events and working sessions were organized with international partners which have already

been mentioned in other chapters of this report (e.g. focal areas of the HDG, REITOX-Academy on cannabis).

### **1.3.4 Effects of policies and strategies**

In 2004, the Federal Government reacted to the significant increase in the consumption of sweet mixed drinks containing spirits (“alcopops”) by introducing a surtax to increase the price of these beverages. The results of a study carried out by the BZgA already mentioned in last year’s report (Christiansen, von Rügen & Töppich 2005) and of a regional survey conducted by Baumgärtner (2006a) show that both the consumption of alcopops and alcohol have generally declined among adolescents.

The alcohol industry reacted to the policy measures by introducing mixed drinks on the basis of beer and wine. First indications of the effects of these developments on the overall consumption quantities were presented on the occasion of the Addiction Week 2007 organized by the BZgA in June 2007 in the form of the most recent results of the representative survey 2007 on the alcohol consumption of adolescents. Compared to the results of the surveys from the years 2004 and 2005 it was found that— after a decline in 2004 and 2005 – alcohol consumption among teenagers was clearly on the rise again. The increase is particularly striking among the 16- to 17-year-old males. The quantities consumed in 2007 are similar to the ones of 2004.

The readiness to drink more than five glasses of alcohol in a short time has increased both in boys and girls. This type of behaviour, also called binge drinking, is an indicator for risky alcohol consumption. Every second teenager in the age from 16 to 17 years states to have drunk five or more glasses of alcohol on one day in the last month. In the year 2004, the figure was still at 40% of the youth.

The increase in alcohol consumption is attributable to the increase of the consumption of beer, mixed drinks with beer and spirits. Alcopops by contrast, which were very popular a few years ago, are hardly ever consumed.

## **1.4 Budgets and public expenditures**

Full details on this topic can be found in the special chapter “Public expenditure“ (chapter 11, beginning page 125) in part C of this REITOX-report.

## **1.5 Social and cultural context**

In the reporting year, public discussion in Germany was dominated by the topics of economy, unemployment, health and fiscal policy. Addiction and in particular illicit drugs were paid relatively little attention in public discussion and in the press whereas excessive alcohol consumption among youth, so-called flat rate parties and binge drinking which claimed one casualty in spring 2007, received the widest interest. Among the illicit drugs, cannabis, which has made its entry into all social strata, and sporadically also cocaine were also in the center of attention. In the first six months of 2007 there were a few reports on biogenetic drugs (in

particular on *salvia divinorum*). In spring 2007 the results of the heroin trial and the uncertain future of the project had lots of press coverage.

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

No new studies were published in the reporting period.

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

As part of a school survey conducted in Hamburg, data on the “image” of various substances were collected and three-dimensionally evaluated 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 within the framework of its drug policy, no further specific initiatives were launched.

Based on the principle of subsidiarity, the German Centre for Addiction Issues plays an important role as an umbrella organisation for the charity organisations in the German civil society. Following the project “Bridging the Gap”, which was carried out from 2003 to 2006, it is currently working together with partners from 30 European countries and international partner organizations in the follow-up project “Building Capacity” 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 in the field of drugs and addiction have recently not been made known.

### **Media coverage of drug-related issues**

Addiction and in particular illicit drugs were much less debated in the public discussion and in the press than in previous years. Media coverage has a considerable influence on the public discussion. Therefore, reporting on addiction and (illicit) drugs is practically identical in terms of contents to the subjects already referred to in chapter 1.5. At the end of 2006/beginning of 2007 the continuation of the heroin trial was subject of a lively debate. Virtually all relevant regional and supra-regional media reported on the subject. In spring 2007, there was a short, but relatively wide coverage of binge drinking among teenagers, which was sparked by a

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death case in this context. The response to the drug report of the EMCDDA was stronger than in previous years.





## 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. Drug use related to the lifetime is therefore 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 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) on a long-term basis. The study has been conducted since 1973 in a 3- to 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). In 2007, the BZgA additionally published first results of a representative survey on cannabis use among 3,602 interviewees in the age group from 12 to 19 years (BZgA 2007a). Data collection was done by means of computer-based telephone interviews (CATI). Interviewing took place in January and February 2007.

- The nationwide Epidemiological Survey on Substance Abuse (ESA) (Federal Study on the abuse of psychoactive substances among adults in Germany) 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 BMG, the survey has been conducted by the IFT since 1990. The sample taken in each survey has comprised about 8,000 persons since 1995. Some Länder have provided additional funding for a regional expansion of the sample to create a statistical basis allowing for regional evaluations. The last data collection took place in 2006, results

are expected to be published at the end of 2007 (Kraus et al. in the press). First data are however already included in this year's REITOX-report.

- The "European School Survey Project on Alcohol and other Drugs" (ESPAD) was carried out already in 1995 in 26, 1999 in 31 and 2003 in 35 European countries. In 2007, some Länder are participating for the second time in the survey after 2003. This time, the participants are Bavaria, Berlin, Brandenburg, Hesse, Saarland, Mecklenburg-Western Pomerania and Thuringia. Initiated by the Pompidou-Group at the Council of Europe and coordinated by CAN in Stockholm, the survey uses European-wide uniform standards for data collection. The survey is carried out among 15- to 16-year olds in school grades 9 and 10. In 2007, the adjusted sample size comprised 12,448 pupils from 586 classes at 567 schools; the results are expected by end of 2007.
- As part of the WHO-funded Study on the Health Behaviour of School-Aged (Children (HBSC), which is meanwhile carried out every four years in 41 countries, five Federal Länder (North Rhine-Westphalia, Berlin, Hamburg, Saxony, Hesse) participated in the survey on health behaviour of children between 9 and 17 years in 2005/2006. The survey carried out in 2006 also collected data on the consumption of illicit drugs. First results have been available since summer 2007 (Settertobulte & Richter 2007).
- Early in 2007, the first results of the Health Interview and Examination Survey for Children and Adolescents (KiGGS) were presented (Lampert & Thamm 2007). The results are based on countrywide representative data on the health state of children and adolescents in the age of 0-17 years. A total of 17,641 children and adolescents participated in the study. For the analyses of the tobacco, alcohol and drug consumption, the data from the interviews conducted among the 11 to 17 year old boys and girls and their parents were used.

Apart from these surveys, most of which are conducted on a regular basis, various studies commissioned by a few Länder are carried out irregularly at 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 a general education or vocational training in 2005 in Hamburg. The results were already presented in the last REITOX-report (Baumgärtner 2006a).

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. In 2007, the BZgA presented two studies which analyzed the cannabis and alcohol consumption of adolescents and young adults. Both studies are presented in a subsequent chapter of this report.

When interpreting the results of population surveys, it needs however to be taken into account that the figures may be non-negligibly 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 on 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 the last two ESA-results (2003, 2006) and the DAS-results (2004). The DAS-results were already presented in detail in the REITOX-report 2004. Because of the several-year gap between the surveys, the absolute figures of the DAS (2004) and the last ESA (2006) were not added to the total figures.

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

	Source	Age	Prevalence	Population	Absolute numbers
<b>Lifetime Prevalence</b>					
	ESA '06	18-59	<b>25,4%</b>	47.106.787	11.965.000
	ESA '03	18-59	25,2%	47.140.383	11.879.000
	DAS '04	12-17	15,7%	5.684.349	892.000
	DAS '04 + ESA '03	12-59	24,2%	52.824.732	12.784.000
<b>12 Months Prevalence</b>					
	ESA '06	18-59	<b>5,4%</b>	47.106.787	2.544.000
	ESA '03	18-59	7,3%	47.140.383	3.441.000
	DAS '04	12-17	10,4%	5.684.349	591.000
	DAS '04 + ESA '03	12-59	7,6%	52.824.732	4.015.000
<b>30 Days Prevalence</b>					
	ESA '06	18-59	<b>2,7%</b>	47.106.787	1.272.000
	ESA '03	18-59	3,9%	47.140.383	1.838.000
	DAS '04	12-17	2,5%	5.684.349	142.000
	DAS '04 + ESA '03	12-59	3,7%	52.824.732	1.958.000

DAS 2004 (BZgA 2004); ESA 2003 (Kraus, Augustin & Orth 2005), ESA 2006 (Kraus et al. in the press)

Population figures: Statistisches Bundesamt 2006b

DAS: "current use" instead of 30-day-prevalence, Absolute: figures rounded

This table shows that in the ESA study 2006 the lifetime-prevalence of illicit drugs has practically remained unchanged since the last survey of 2003 (2006: 25.4%; 2003: 25.2%). However, the comparative figures both for the consumption of illicit drugs in the 12-month-category (2006: 5.4%; 2003: 7.3%) and in the 30-day-category (2006: 2.7%; 2003: 3.9%) are markedly lower than the ones found by ESA 2003 (details are also contained in the online standard table 1) (Table 1). These declines can almost exclusively be explained by the lower

prevalences of the consumption of cannabis which are possibly an indicator of a trend reversal in cannabis consumption (which seems to be confirmed by similar figures found by a recent BZgA study). Taking the latest ESA findings from 2006 as a basis, the figure for current users (12 months, 30 days) in the age group 18-59 years would be markedly lower than the comparative value from 2003.

However, the recent ESA figures are higher than the 12-month-prevalences found by Raschke and colleagues (2005) in Schleswig-Holstein (SH) for illicit drugs apart from cannabis (SH: 0.3%; national: 1,2%) for which only a slight difference was found (SH: 4%; national: 5%).

## 2.2.2 Comparison of the consumption of individual drugs

The recent ESA study has provided new data on the prevalences of individual drugs. The most important data on prevalences of substances used in the lifetime are presented for both age groups in table 2. ESA data from 2006 are set against the ones from 2003. Hereby, the comparison of the data between 2003 and 2006 shows slightly declining prevalences for all substances – apart from cannabis whose value has practically remained unchanged.

**Table 2.** Lifetime prevalence for illicit drugs<sup>1)</sup>

Substance	Investigation	DAS (%)		ESA (%)		Total (N) <sup>2)</sup>
	Age group	12-17 Years	18-59 Years	18-59 Years	12-59 Years	
	Year	2004	2003	2006	2004 und 2006	
Amphetamines		0,7	3,4	2,7		1.643.000 <sup>4)</sup>
Cannabis		15,2	24,5	24,7		12.413.000
Ecstasy		1,0	2,5	2,2		1.235.000
LSD		< 0,5	2,5	1,9		1.207.000
Cocaine		< 0,5	3,1	2,7		1.490.000
Mushrooms		0,8	2,7	2,6		1.318.000
Volatile Substances		0,9	1,5	1,2		758.000
Drugs other than Cannabis		--	7,1	6,3		3.347.000

<sup>1)</sup> DAS 2004 (BZgA 2004); ESA 2003, 2006 (own calculations)

<sup>2)</sup> Total figures excluding the weights calculated mere addition of individual values, resulting from the multiplication of prevalences and population in the relevant age group revealed

<sup>3)</sup> Prevalences < 0.5 were used to calculate the total number as prevalences = 0.5 set. Thereby the results are conservative in the sense of a higher estimate

<sup>4)</sup> All figures rounded to the thousand; because of the multi-gap between the surveys the absolute numbers of DAS (2004) and the recent ESA (2006) are not added to total numbers

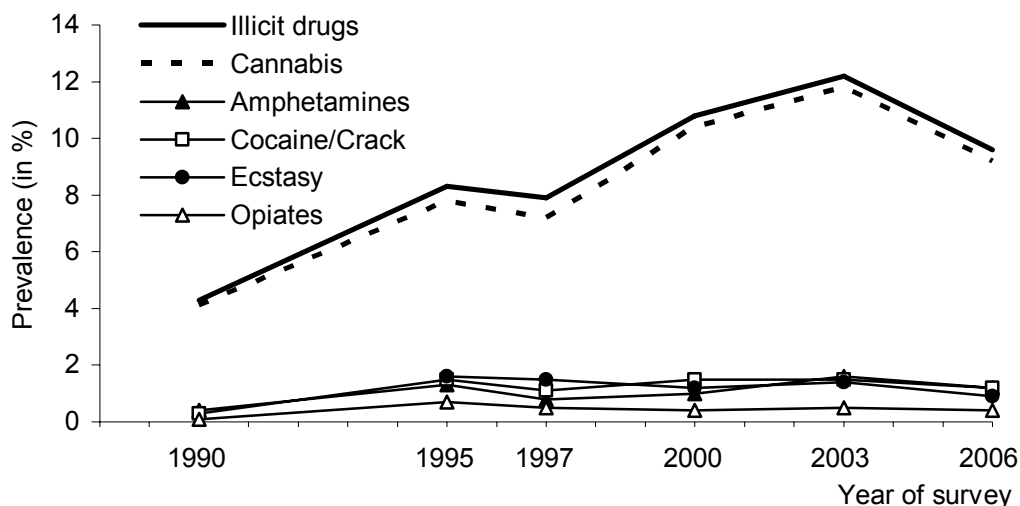
In Table 3 the ESA findings 2006 for the lifetime-, 12-month- and 30-day-prevalences are broken down again in detail by gender and individual substances. Compared to table 2, the figures for the lifetime category are slightly diverging which is explained by the reference to different age groups: 18-64 years compared to 18-59 years. Taking the consumption within the last 12 months as an indication for the size of the group of the active users, it can be stated that cannabis remains by far the most consumed illicit drug. Worth mentioning are

furthermore only cocaine (0.6%), amphetamine (0.5%), ecstasy and mushrooms (both 0.4%). Consumption of heroin, LSD and crack is still limited to specific markedly smaller groups.

**Table 3.** Lifetime-, 12-month- and 30-day-prevalence of the consumption of illicit drugs (age group 18-64 years)

Prevalence (in %)	Gender		
	Total	Males	Females
<b>Lifetime</b>			
Cannabis	23,0	26,6	19,2
Amphetamines	2,5	3,0	2,0
Ecstasy	2,0	2,5	1,5
LSD	1,7	2,4	1,1
Heroin	0,4	0,5	0,4
Cocaine	2,5	3,0	2,0
Crack	0,3	0,4	0,2
Mushrooms	2,4	3,1	1,6
<b>12 Months</b>			
Cannabis	4,7	6,4	2,9
Amphetamines	0,5	0,8	0,2
Ecstasy	0,4	0,8	0,1
LSD	0,1	0,2	0,0
Heroin	0,1	0,1	0,1
Cocaine	0,6	0,9	0,3
Crack	0,1	0,1	0,0
Mushrooms	0,4	0,6	0,2
<b>30 Days</b>			
Cannabis	2,2	3,1	1,3
Amphetamine	0,3	0,5	0,1
Ecstasy	0,2	0,3	0,0
LSD	0,0	0,1	0,0
Heroin	0,1	0,1	0,1
Cocaine	0,2	0,3	0,1
Crack	0,0	0,1	0,0
Mushrooms	0,1	0,1	0,0

The consumption of illicit drugs is a phenomenon which occurs primarily in the age groups up to about 40 years. Since 1990 ESA has been providing comparative data for the age group 18-39 years which can be used for trend analyses. Figure 1 and table 4 contain the 12-month-prevalences (Table 4: plus lifetime) found for individual substances and illicit substances in total for the ESA survey years since 1990 (Kraus et al. in print).



**Figure 1.** Trends: 12-month-prevalence of illicit drugs in the age group 18-39 years (results of the Epidemiological Survey on Substance Abuse 1990-2006) (Kraus et al. in print).

It can clearly be seen that the variations in the 12-month-prevalence of illicit drugs (total), which can be regarded as an approximation to the number of active users, is primarily attributable to the differences in the number of cannabis users at any time. Striking in this more restricted age group is also the clear decline of the 12-month-prevalence of cannabis use in comparison with 2003 and even more so the drop below the figure of 2000. As for the other substances, only slight variations are to be found.

**Table 4.** Trends of the lifetime- and 12-month-prevalence of the consumption of illicit drugs broken down by individual substances (age group 18-39 years)

		Prevalence in %					
		1990	1995	1997	2000	2003	2006
Illicit Drugs	LT	14,6	19	18,9	27,7	33,8	34,7
	12M	4,3	8,3	7,9	10,8	12,2	9,6
Cannabis	LT	14,0	18,2	17,6	27,2	33,1	33,9
	12M	4,1	7,8	7,2	10,4	11,8	9,2
Amphetamines	LT	2,8	3,6	2,1	3,0	4,6	4,0
	12M	0,4	1,3	0,8	1,0	1,6	1,2
Ecstasy	LT		2,5	2,8	2,8	4,4	4,3
	12M		1,6	1,5	1,2	1,4	0,9
LSD	LT	1,8	2,3	1,8	2,3	3,1	2,3
	12M	0,1	0,9	0,6	0,3	0,4	0,2
Opiates	LT	1,4	2,2	1,1	1,4	1,9	1,4
	12M	0,1	0,7	0,5	0,4	0,5	0,4
Cocaine/Crack	LT	1,3	3,2	2,0	3,7	4,8	4,1
	12M	0,3	1,5	1,1	1,5	1,5	1,2

LT = lifetime prevalence; 12M = 12 month-prevalence  
Kraus et al. (in print)

Data on the consumption of methamphetamines are not separately available in the current epidemiological studies. However, it can be assumed that they are still not very prevalent in Germany in comparison with other substances. Seizures of methamphetamines mainly took

place in Bavaria and Saxony close to the Czech border. Methamphetamine is almost without exception seized in crystalline form. In the year 2006, around 11 kg crystalline methamphetamine were seized in 416 cases. Around 90 percent of the cases were registered in the Federal Länder Bavaria, Saxony and Thuringia, whereby the quantities seized in Thuringia were relatively small compared to the ones of Bavaria and Saxony (Bundeskriminalamt 2007a).

Methamphetamine in its crystalline form "Crystal" is mostly produced in the Czech Republic for German customers and smuggled over the border with Bavaria and Saxony into the Federal Republic of Germany. It is to be assumed that the majority of the drugs come from a large number of smaller drug laboratories in the Czech Republic and also in Slovakia where the substance has been on the market under the name "Pervitin" for a long time (Deutscher Bundestag 2006).

### **2.3 Drug use in the school and youth population**

#### **Consumption of licit psychotropic substances**

In the year 2005, school children and teachers were surveyed for the second time on drug use. The results of the survey ("Schulbus") were already reported in detail in the last REITOX-report (Baumgärtner 2006a).

In the most recent study carried out by the BZgA in the year 2007, 3,602 young persons in the age group from 12 to 19 years were asked about their alcohol consumption. One important result of the survey is that the portion of the 12- to 17-year-olds who regularly drink alcoholic beverages has gone up again in 2007 after a slight decrease between 2004 and 2005. In the year 2007, 22% of the youth population had at least one alcoholic drink per week compared to 19% in 2005 and 21% in 2004.

After the introduction of an extra duty on spirituous alcopops the number of young people who drink these beverages at least once a month, continues to shrink. The portion of the 12- to 17-year-old teenagers who drink spirituous alcopops at least once a month decreased from 28% in 2004, to 16% in 2005 and to 10% in 2007. However, the alcohol quantity consumed per capita among the 12- to 17-year-olds has been on the rise again since 2005. The overall increase is attributable to the increased consumption of beer, mixed drinks containing beer or wine as well as spirits in particular among young males between 16 and 17 years.

All in all, the decline in the overall consumption of alcohol in the youth population found by a survey in 2005, has not lasted. Quite to the contrary, the consumption of alcoholic beverages has even topped the level of the year 2004 in sub-groups of the youth population.

Also the portion of 12- to 17-year-old adolescents who have five or more alcoholic drinks on one day in the last month (binge drinking) has markedly risen to 26% (BZga 2007b).

Recent information on alcohol consumption among the youth population has also been provided by the HBSC-study (Settertobulte & Richter 2007). According to this survey, only

few 11-to 13-year-olds regularly drink alcohol. Among the 11-year-old boys 2.2% drink beer, wine or other alcoholic beverages at least once a week, among the 11-year-old girls it is less than 1%. In the age group of the 13-year-olds, regular alcohol consumption was found already in 5.9% of the boys and 3.4% of the girls. From the age of 14 years onwards, alcohol consumption becomes common for many teenagers. About a quarter of the 15-year-old boys already drink regularly. Girls of this age are more cautious with 15%. Differentiating between the types of beverages, beer was found to be the most popular drink among the 15-year-olds. As in previous surveys, alcopops and other alcoholic beverages come second. For alcopops the regular consumption frequency was 9.6% in boys and 5.8% in girls. Striking is the increase in the consumption of spirits among 15-year-olds compared to previous surveys. At the present, 6.7% of the boys and 4.8% of the girls drink spirits regularly.

According to the results of the Health Interview and Examination Survey for Children and Adolescents (KiGGS), 64.8% of the boys and 63.8% of the girls in the age group from 11 to 17 years have already drunk alcohol once in their life (Lampert & Thamm 2007). 38.6% of the 11- to 17-year-old boys and 22.2% of the girls of the same age can be referred to as regular drinkers. Out of the 17-year-old boys 67.2% stated to drink alcohol at least once a week contrary to only 39.7% of the girls. Gender-specific differences were also found in the favoured types of drinks. Beer is regularly drunk by 45.9% of the 14- to 17-year-old boys compared to 17.4% of the girls of this age group. Regular consumption of wine, fruit wine and sparkling wine was reported by 9.1% of the boys and 12.3% of the girls. Spirits are consumed weekly by 17.5% of the boys and 11.2% of the girls.

In the last HBSC-study the adolescents were also asked about their experience with tobacco. 11.7% of the interviewed 11-year-old boys (7.5% of the girls) reported to have at least once smoked a cigarette, cigar or pipe. In the higher age groups however, the boys are overtaken by the girls: among the 13-year-olds, more girls (32.95%) than boys (29.6%) stated to have smoked at least once. The difference gets even bigger in the age group of the 15-year-olds where 60.1% of the girls and 54.4% of the boys have smoked at least once. These data patterns were not found in earlier HBSC-studies (Settertobulte & Richter 2007).

According to the data provided by the Health Interview and Examination Survey for Children and Adolescents (KiGGS), 20.5% of the 11- to 17-year-old boys smoke and 20.3% of the girls of the same age. Prevalences increase with age from below 2% among the 11- to 12-year-olds to over 40% among the 17-year-old teenagers (Lampert & Thamm 2007). The majority of the 11- to 13-year-olds who smoke, only smoke occasionally. Among the 14- to 17-year-olds however, many smoke regularly: 25.5% of the boys and 25.7% of the girls smoke at least once a week, 21.4% of the boys and 20.8% of the girls even daily. Measured by the consumption of 10 cigarettes or more per day, 13.1% of the boys and 10.3% of the girls can be referred to as strong smokers. 20 or more cigarettes per day are smoked by 2.4% of the boys and 1.9% of the girls. The 14- to 17-year-old boys and girls, who smoke regularly, have a consumption of 9.2 or respectively 7.9 cigarettes per day.

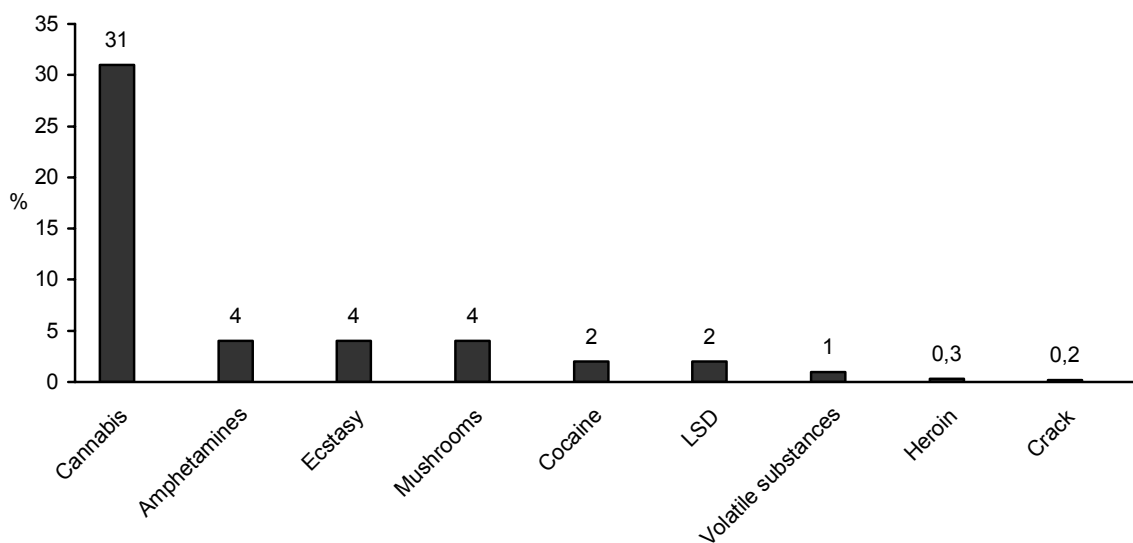
The results of a recently published longitudinal study conducted among 3,021 teenagers and young adults (age at baseline: 14 – 24 years) between 1995 und 1999, showed relatively



high rates of substance abuse and dependence in the population. According to these results, the lifetime incidence (up to an age of 28 years) was 43.8% for any substance abuse or dependence (12-month-prevalence: 24.4%), with the values for nicotine dependence (24.8%) and alcohol abuse (19.3) being the highest. The survey results moreover indicate a decrease in age at onset of substance-related disorders in young cohorts. The authors of the study conclude that (universal and selective) prevention of nicotine consumption or respectively dependence is of great importance since nicotine dependence has a high association with other disorders as a result of the consumption of illicit substances (Perkonigg et al. 2007).

### Consumption of individual drugs

Most common in the populations surveyed is experience with cannabis, followed by mushrooms, amphetamines and ecstasy at a marked distance. Experience with all other drugs is even less common. Figure 2 shows the situation in the age group 12 to 25 years for the whole of Germany for 2004. The data were already reported in the previous years. However, in particular the data for cannabis from the year 2004 can meanwhile be regarded as out-dated. In 2007, the results of two new studies were presented which arrive at considerably lower values with regard to cannabis consumption compared to 2004.

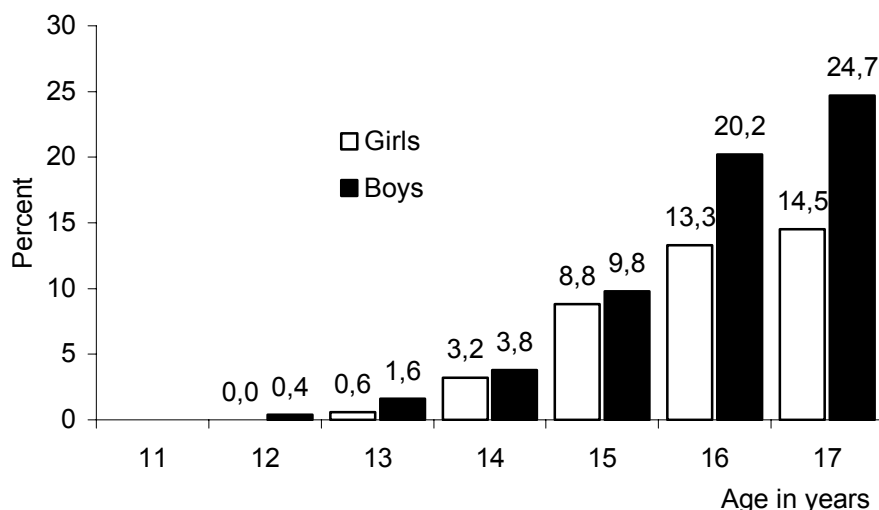


**Figure 2.** Consumption of illicit drugs in the lifetime in the age group 12 to 25 years in Germany in 2004 (BZgA 2004)

The most recent results of a countrywide representative survey carried out in spring 2007 by the BZgA among adolescents and young adults between 12 and 19 years, indicate a strong decline in cannabis consumption in this age group. 13% of the 14- to 17-year-olds reported to have smoked cannabis at least once in their life. The comparative value of the year 2004 was still at 22% (DAS 2004). Particularly strong increases in the lifetime prevalences for cannabis observed between 1997 and 2004 in the age group of the 18- to 19-year-olds. In 2004, the lifetime prevalence for cannabis consumption was at 40% (1997: 19%). In the most recent study, this value shrank to about a third (32%) of the young adults. A decrease was also found for the 12-month-prevalence. Compared to the figures of the drug affinity study of

the year 2004 (14%), the comparative value of the recent survey was only at 8%. Among the 18- to 19-year-olds, this value was at 14%, while in 2004 it was still at 18%. However, the portion of young adults who regularly consume cannabis has remained unchanged. About 4% of the 18- and 19-year-olds stated to have consumed cannabis more than 10 times in the last year. Hereby, the percentage of the young males was markedly higher ranging at about 7% compared to 2% of the young females who reported regular cannabis consumption (BZgA 2007a).

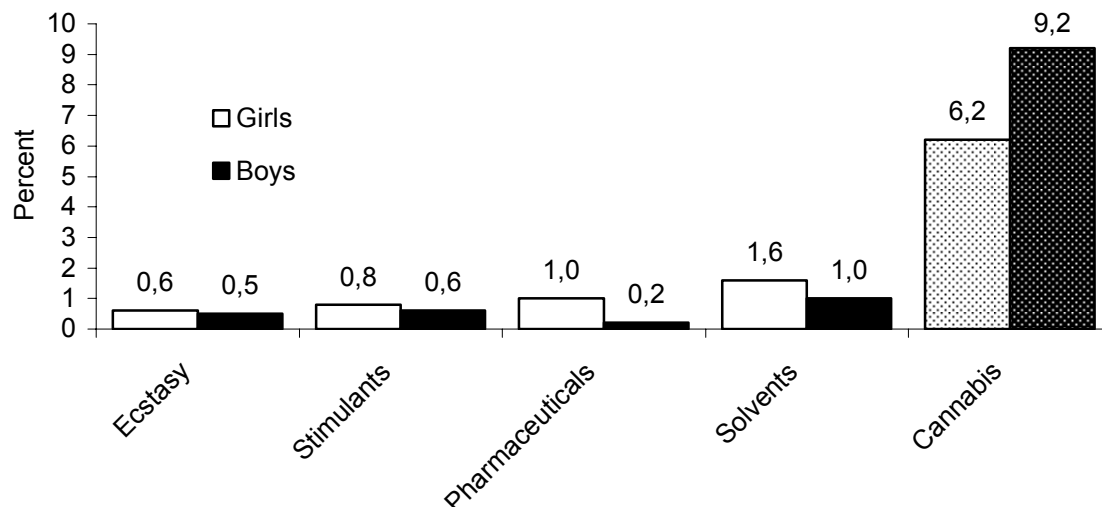
Recent data on the consumption of cannabis among adolescents aged between 11 and 17 years (Lampert & Thamm 2007) are also available from the Health Interview and Examination Survey for Children and Adolescents (KiGGS). According to the study, the 12-month-prevalence for cannabis consumption is at 9.2%; however, prevalence rates for the age groups 11 to 13 years are extremely low (Figure 3). Between the age of 14 years (3.8% of the boys, 3.2% of the girls) and the age of 17 years (24.7% of the males, 14.5% of the females) prevalences are on a continual rise with the differences between boys and girls becoming increasingly bigger. The observed increase in the cannabis consumption in the course of adolescence is in accordance with the results found by the Drug Affinity-, ESPAD- and HBSC-study.



**Figure 3.** 12-month-prevalence of cannabis consumption among 11-17-year-old boys and girls (KiGGS; Lampert & Thamm 2007)

Other illicit drugs apparently play a minor role (figure 4). According to the KiGGS, the 12-month-prevalence for ecstasy was at 0.5% of the 14- to 17-year-old boys and 0.6% of the girls of the same age. The values for stimulants like for example speed or amphetamines (0.6% of the boys, 0.8% of the girls) are comparatively low. With this, cannabis remains at the top of this age group. Striking are the values found for the girls who have – with the exception of cannabis and alcohol (and tobacco which is equally frequently consumed by both genders) higher prevalences for all other substances than their male counterparts. Analyses differentiating in terms of social status, type of school, migration background and residential area have only found differences between the frequency of cannabis use which is

higher in boys who go to a “Gesamtschule“ (comprehensive school) than in the ones who attend a grammar school.



**Figure 4.** 12-month-prevalence of the consumption of various substances among 14-17-year-old boys and girls (Cannabis: 11-17 years) (KiGGS; Lampert & Thamm 2007)

The results of the last school survey carried out in Hamburg (Baumgärtner 2006a) were already presented in detail in the REITOX-report 2006.

### Summary and trends

Tables 5 and 6 summarize the results of the most recent study on the prevalence of the consumption of illicit drugs altogether and respectively of cannabis among adolescents. When comparing the figures, it needs to be taken into account that the age groups interviewed are not identical. It also needs to be considered that ESPAD and HBSC have only been carried out in a few of the 16 Federal Länder which also might have led to distortions. Some of the differences in the prevalence estimates are also attributable to for example different methods (telephone vs. face-to face interviews) or different wording used in the questionnaires. The results of the most recent ESPAD-study which are expected to be published by the end of 2007 will provide valuable data complementing the results of the HBSDC- and KiGGS-study.

There are no new data available on the experience with the overall group of illicit substances in the reporting year. The prevalences reported in Table 5 were already presented in the last REITOX-report.

**Table 5.** Prevalences of the 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 consumption" = 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.

As already mentioned under chapter 2.2.2 (page 21, Figure 1) in connection with the adult population, the prevalence of cannabis consumption in young users does not diverge considerably from the figures on the overall group of illicit drugs. This can be explained by the fact that virtually every user of illicit drugs has started with cannabis and continues using this substance even when taking other drugs. It is interesting to note that the results of the HBSC-study (2006) and the BZgA-study (age group 14-17 years) from 2007 do not diverge considerably in particular with regard to the lifetime prevalences despite different populations and catchment areas (national vs. selected Länder).

The decline in prevalences as found by the BZgA-studies (and by the ESA-study also in the adult population) (and to a limited extent also by the HBSC-study 2006 compared to 2002) can be interpreted as an indication of a possibly decreasing readiness for experimental use of cannabis in young user groups.

Details on population surveys are contained in online standard table 2, on youth surveys in standard table 30.

**Table 6.** Prevalences of cannabis use among teenagers, different studies

Study	Years	Age group	Region	Consumption in period (%)		
				30 days <sup>1)</sup>	12 months	Lifetime
<b>HBSC<sup>2)</sup></b>	<b>2006</b>	<b>15</b>	<b>5 Länder</b>	<b>7,1/4,3</b>		<b>18,1/13,8</b>
HBSC	2002	M=15,7	4 Länder		18,0	24,0
<b>KiGGS<sup>2)</sup></b>	<b>2003-2006</b>	<b>11-17</b>	<b>National</b>		<b>9,2/6,2</b>	
KiGGS	2003-2006	14	National		3,8/3,2	
KiGGS	2003-2006	15	National		9,8/8,8	
KiGGS	2003-2006	16	National		20,2/13,3	
KiGGS	2003-2006	17	National		24,7/14,5	
<b>BZgA</b>	<b>2007</b>	<b>12-19</b>	<b>National</b>	<b>3,4 (2,3)<sup>3)</sup></b>	<b>8,0</b>	<b>15,1</b>
<b>BZgA</b>	<b>2007</b>	<b>18-19</b>	<b>National</b>	<b>(4,3)<sup>3)</sup></b>	<b>13,9</b>	<b>32,3</b>
<b>BZgA</b>	<b>2007</b>	<b>14-17</b>	<b>National</b>	<b>(2,3)<sup>3)</sup></b>	<b>8,4</b>	<b>12,8</b>
<b>BZgA</b>	<b>2007</b>	<b>12-13</b>	<b>National</b>	<b>(0,0)<sup>3)</sup></b>	<b>0,4</b>	<b>0,4</b>
BZgA	2004	12-19	National		12,1	21,3
BZgA	2004	12-15	National	1,0	5,0	7,0
BZgA	2004	16-17	National	5,0	15,0	32,0
BZgA	2004	18-19	National	6,0	19,0	36,0
ESPAD <sup>4)</sup>	2003	15-16	6 Länder		24,0	31,0
Schulbus	2004	14-18	Hamburg	17,3		40,3
Schulbus	2005	14-18	Hamburg	17,1		39,1

<sup>1)</sup> BZgA ("present consumption" = 30 days), Schulbus ("current consumption" = 30 days)

<sup>2)</sup> HBSC (2006) and KiGGS: First value: boys, second value: girls

<sup>3)</sup> In brackets: regular consumption (> 10 times in the last year)

<sup>4)</sup> 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 years respectively took part. BZgA (2004)

## 2.4 Drug use among specific groups

### Repatriates and migrants

Substance abuse among migrants takes the third place in psychological disorders. Even more frequent are psychosomatic and depressive syndromes. Post traumatic stress disorders and psychoses have a lower incidence than drug dependence (Collatz 2001). Adolescent ethnic German immigrants from Russia constitute a specific social risk group in Germany exhibiting disintegrated biographies at a disproportionately high scale including substance abuse and deviance.

Access to migrants who only make use of care offers when they are directly addressed continues to constitute a special problem. Apart from language barriers and potential fears of consequences for their rights of residence, also cultural reasons seem to play a role in this. Heimann & Colleagues (2007) have investigated models to explain substance abuse disorders among immigrants from the former Soviet Union, migrants from Turkey and native Germans. The results confirm that cultural differences assumed by the explanatory models with regard to substance abuse may be held responsible for communication problems with the personnel of addiction support facilities. Apart from the overestimation of their own ability to control substance use, fears of stigmatization and social marginalization also play an important role.

A closer look at children and adolescents with migration background is taken in part B of this report under the special topic "Vulnerable groups of young people" (beginning page 125).

## 3 Prevention

### 3.1 Overview

The four proven cornerstones of drug and addiction policy in Germany are prevention, therapy, harm reduction and repression. It is based on the current Action Plan for fighting Drugs and Addiction of the Federal Government Commissioner on Narcotic Drugs. The expert working group "Prevention" advises the national Board on Drugs and Addictions on the implementation of the plan. It makes suggestions for strategies and measures which need to be carried out to reach the goals set in the fields of tobacco, alcohol and cannabis.

The guidelines spelled out by the EU-drug strategy 2005-2012 on the offer and demand reduction are implemented with resolution. Hereby, priority continues to be given to health protection and prevention.

Alongside measures of behavioural prevention, structural approaches – in particular in the field of licit substances – increasingly gain in importance. As part of these approaches legislative measures are undertaken to reduce consumption by for example influencing price and availability (through the number of vending places), by setting age limits, restricting trading hours and licences and by prohibiting advertising. The policy mix of influencing the supply on the one hand (measures of condition prevention) and the demand on the other (measures of behavioural therapy) are regarded as particularly effective (Die Drogenbeauftragte der Bundesregierung 2007).

#### Focal areas of prevention

As already reported in previous years, the Federal Government and the Länder have set a focus on combating dependence on licit addictive substances, especially on the consumption of alcohol and tobacco. Since 2006, another focal area has been added: The combat against "pathological gambling".

With the questioning of the maintenance of the state betting monopoly<sup>1</sup>, the state gaming business (e.g. Lotto- and Totoblock, casinos etc.) was requested in a judgement rendered by the Federal Constitutional Court in March 2006, to provide evidence by the end of 2007 that a state betting monopoly offers best possibilities of carrying out effective and comprehensive measures to prevent gaming addiction and embedding these measures structurally.

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<sup>1</sup> In general usage, the gaming monopoly refers to the state control on publicly accessible gaming for monetary assets. In its decision of 28 March 2006 (1 BvR 1054/01), the Federal Constitutional Court specified that the state gaming monopoly interferes with the constitutional right of the freedom of occupation of private betting operators and is only justifiable by a consequent and credible fulfilment of state substance abuse prevention. Therefore, the Federal Constitutional Court is critical of the exclusion of private betting and gaming operators by the state and simultaneous advertising for sports betting for example by the state licensed operator ODDSET.

The lottery operators and the Federal Centre for Health Education have reached a cooperation agreement for an umbrella campaign with the following modules:

- a monitoring system for monitoring (betting) gaming behaviour and gaming addiction risks,
- countrywide telephone counselling for gamblers at risk of developing addiction
- Internet-based help offers and information material on the topic of gaming addiction
- Realisation of a mass media campaign to prevent gaming addiction

The measures undertaken by the BZgA complement those taken at Länder-level where Land lottery operators intensely cooperate with regional addiction counselling organisations.

At the same time however, initiatives and measures carried out to reduce the consumption of illicit substances are not receding into the background. This can be seen from the recent debate on the risks of the consumption of cannabis as well as from the increased attention given to risky consumption patterns especially among young people. The expansion of prevention and help services for people at risk of developing addiction or already addicted people remains on the things-to-do-list. Almost all federal ministries and especially the Länder and municipalities are very active in this field (ebda).

The expertise of Bühler and Kröger (2006) offers a qualified support for the conception of actions to prevent addiction problems in families, schools, recreation areas and in the community. The authors of the study also discuss the effect of media campaigns and the influence of legislative measures.

Each conclusion of the expertise is given a rating (starting with "A: the result is based on a meta-analysis with high-quality studies" to "F: contradictory findings between reviews"), and an annotation is added on the reviews they are based on. The expertise proposes also a list of preventive actions based on that rating. These preventive actions were already described in the last REITOX report.

The study describes the difficulties which arise for the scientific community, namely to decide which action should be preferred. The authors prefer a combined behaviour and condition prevention. "Consumption behaviour" as the only criteria for preventive actions against addiction is critically assessed. Finally, the results in preventive addiction researches in Germany are rated, and the next steps for application and research are shown.

### **Cooperation, Transfer and evaluation**

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

Because a prompt transfer of knowledge of documented and evaluated measures is the precondition for quality-assured planning of measures undertaken by different players, a



large number of institutions working in addiction prevention have started to document their measures in a uniform way using the documentation system Dot.sys since 1 January 2005. The system was developed by the BZgA and the Länder coordinators of the prevention of addictions. In 2006, about 29,000 measures undertaken by more than 300 professionals in 16 Länder were documented.

Following is an overview of the most important results:

- 51% of the measures are addressed to multipliers, another 44% to final addressees, 5% fall in the category “public relations“
- The most frequently reported setting is the school (44%). The field outside school is very heterogeneously structured. The most important areas of activities are “youth work“ (15%) and “health care“ (11%),
- The individual substances mostly dealt with are alcohol, cannabis and tobacco. As regards non-substance-related addictions, eating disorders continue to be number one.
- “Passing on information“ and “forming critical opinion“ are the most commonly reported concepts for measures. In the target group of multipliers follow “structural measures“ (52%) and “promotion of skills“ (41%). The second most common activities undertaken for final addressees are aimed at “promoting skills“ (58%). Third comes “forming of values“ (39%)
- Measures are implemented in many different ways. Whereas group-related forms of implementation<sup>2</sup> are commonly used in the cooperation with final addressees (57%) they only account for 30% of the measures deployed for multipliers. Individual methods<sup>3</sup> are used in 30 % of the measures carried out for multipliers and in 25 % of the measures undertaken for final addressees. Cross-sectional tasks<sup>4</sup> account for 39 % in multipliers and respectively for 6% in final addressees. Public relations work<sup>5</sup> is found in 5 % (multipliers) or respectively 3 % (final addressees) of the spectrum of documented methods.
- It is planned to carry out an evaluation for 14% of the measures, another 24% are currently in the evaluation phase. For 62% no evaluation is planned (BZgA 2007c). However, it has to be taken into account that a non-recorded number of professionals is already working in evidence-based projects which do not require further evaluation (these already in former surveys evaluated projects will be recorded as well by the code system beginning 2007).

The Internet portal “PrevNet“ ([www.prevnet.de](http://www.prevnet.de)) serves to network professionals in the field of prevention facilitating the access to a host of information and material. Approximately 800

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<sup>2</sup> Categories “expert meeting/further education/training“, “lecture/presentation“, „seminar./workshop“, “exhibitions/project days/ action weeks“, “leading groups“

<sup>3</sup> Categories “information on and referral to help services“, “information/counselling/supervision“

<sup>4</sup> Categories “conceptual work“, “networking/cooperation/coordination“

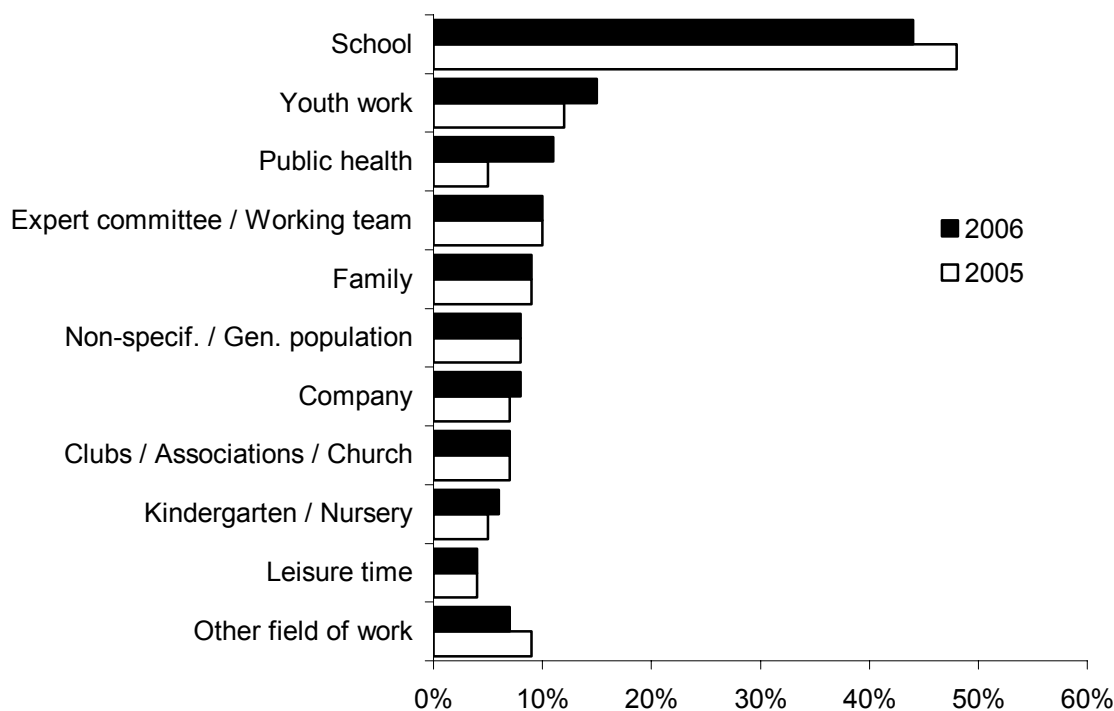
<sup>5</sup> Categories “Interviews/press statements/TV-spots and films“, “producing materials/media“

professionals from 560 facilities of substance abuse prevention are members of the portal. Over 300 projects and information material as well as over 80 studies can be found in the portal. In PreveNet's interactive area, more than 60 (cross-Land) Internet working groups have been set up by numerous professionals.

The programmes which are jointly supported by the BZgA and the Länder provide a better basis for well-founded reporting on addiction prevention in Germany. Information from PrevNet and Dot.sys has been included in this report.

### 3.2 Universal Prevention

The evaluation of the prevention measures documented in 2006 through dot.sys in Germany shows the distribution of measures broken down by settings (here in comparison with 2005). With 44%, prevention measures carried out in schools have somewhat declined compared to the previous year, but schools continue to be an important setting for measures of drug prevention. Following are youth work, public health and family (Figure 5).



**Figure 5.** Settings for prevention measures in 2006 in comparison to 2005 (Dot.sys)

BZgA 2007c

#### 3.2.1 School

Schools remain the most important setting of drug prevention in Germany. Meanwhile, there are a host of programs which are regularly used for preventing substance abuse in schools (e.g. ALF, Lions Quest, Class 2000, How to become independent, BASS-module programme for prevention of substance abuse at school) (Hallmann et. al 2006).

Despite a somewhat lower percentage in 2006 compared to 2005, the school setting is still leading the field of work settings with 44% of all prevention measures documented in Dot.sys in 2006.

Prevention activities carried out at schools were primarily aiming at licit substances. Alcohol prevention (67%) was followed by tobacco (66%) and cannabis prevention (62%) (multiple answers were possible).

Above and beyond “conveying information and forming critical opinion“ (81%), school measures were mainly aimed at “promoting general life skills (53%) and forming values“ (32%). Awareness in schools is still growing (25%) that addiction prevention needs to be structurally rooted to be effective (27%). The whole school, headmaster and teachers, need to look into the matter and decide how addiction prevention can be integrated into school day routine (BZgA 2007c).

Therefore, universal prevention at school is behaviour-related and to a growing extent also condition-related. Behaviour-related prevention strengthens the skills of the individual. Condition-related prevention means an improvement of the living environment. The design of school buildings and school life, the promotion of a good atmosphere at school, the organization of breaks and design of school yards have received increasing attention.

Comprehensive prevention of addictions at school also forms part of educational behaviour. Especially with regard to nicotine and alcohol, teachers have a model function.

### **3.2.2 Family**

An integral part of substance abuse prevention is imparted through education. Therefore, families or respectively parents are an important target group of substance abuse prevention. The central focus lies on parental work, i.e. the integration of parents into prevention projects carried out in schools or kindergartens or into life skill programmes mainly in form of parents' evenings in schools. Hereby, basic educational questions are dealt with like for example promoting stress coping skills, personal responsibility or scope for developing freely. Equally important are elements of substance abuse prevention like basic information on addiction and substances as well as family-related protection and risk factors ([www.starke-eltern.de](http://www.starke-eltern.de) 26.07.07).

### **3.2.3 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 has been no tradition of carrying out prevention strategies at local government level. On the initiative of the Federal Government Commissioner on Narcotic Drugs, the BZgA has been organizing the competition “Model strategies of municipal addiction prevention” since 2001 in order to underline the importance of municipalities in drug prevention.

In July 2006, a total of 105 entries on the subject “alcohol prevention at local government level” were submitted. 13 German cities, municipalities and districts were awarded prizes for their concepts. Apart from approaches to behavioural prevention, the competitors also suggested measures of influencing conditions like for example the stronger control of compliance with the rules on the sale of alcoholic drinks to children and teenagers.

Compared to previous competitions, measures have now been more strongly integrated into the overall concept of substance abuse prevention of the municipality. This shows that legal regulations on youth protection would grasp at thin air without local government involvement. ([www.kommunale-suchpraevention.de](http://www.kommunale-suchpraevention.de)).

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

In Germany, target group-specific measures of addiction prevention are mainly carried out in recreational settings, 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 deal with psychoactive substances (risk competence). Multipliers and parents are shown possibilities of dealing with drug-using young people. About 7,300 entries made in Dot.sys in 2006 refer to the areas youth work, recreational settings and sports clubs.

#### **3.3.1 Recreational settings**

On the one hand, prevention of substance abuse in the recreational setting wants to enable and encourage children and adolescents to lead a healthy life and prevent addictive behaviour. Attractive action alternatives are set against the consumption of addictive substances; life skills such as being able to enjoy, dealing with conflicts, assuming personal responsibility and developing self-esteem are strengthened. On the other hand, structures in the recreational setting are strengthened in order to meet the children’s and adolescents’ needs for free development and creativity and to promote their sense of responsibility for the community.

At municipal level, efforts are undertaken to make use of the preventive character of structural changes and root youth-related issues more deeply in local government work (Schmidt 2004).

#### **Organized leisure time**

- **Youth centres**

The Children and Youth Welfare Act (SGB VIII) regulates and describes the right of young people to be promoted and educated to become independent individuals capable of living in a community. Substance abuse prevention is part of this description of tasks.

Classic facilities of youth welfare and youth protection are day care centres, youth centres and facilities offering child-rearing support. Youth centres are often a meeting point for adolescents who engage in high or risky substance use, who are involved in

criminal activities, who are economically or socially disadvantaged or display psychological disturbances.

In order to teach these adolescents skills like risk competence and risk management skills, staff of youth centres need to, as part of substance abuse prevention, take a holistic approach to the lives of the adolescents and not focus only on substance abuse and harm reduction. They need to give support in coping with existing risks or difficult life circumstances. They need to address substance use and risks connected to it, set up rules in the facilities to control the consumption of psychoactive substances and develop strategies to implement these rules and make sure that they are observed (Hallmann et al. 2006).

- **Sports clubs**

Alongside schools and families, sports clubs form an important part of the lives of children and adolescents where substance abuse prevention needs to find its place. More than 70% of all adolescents are member of a sports club for a shorter or longer period of time.

***Participation in the Football World Cup 2006 with a substance abuse prevention campaign***

The positive cooperation between the German Football Association DFB and the BZgA in the campaign “Making children strong” and the very good response from the sports clubs gave the idea of accompanying also the Football World Cup 2006 with the campaign of substance abuse prevention.

Placed under the motto “Club 2006 - The FIFA World Cup at your Club”, the FIFA organization committee invited football clubs to participate in the largest football club competition ever held in Germany. One possibility of participating in the competition was to dedicate one World Cup-day to the motto “Making children strong”. The football clubs received support from the BZgA in making addiction prevention an integral part of their children and youth work.

A total of 900 clubs organized one World-Cup-Day. With more than 477 clubs, more than the half of them opted for the BZgA–motto *Making children strong*. The clubs which participated in the campaign received support from the BZgA in form of a package with information material and counselling. They were also requested to fill out a questionnaire on the scope and intensity of material usage and on the acceptance of substance abuse prevention in the club.

The evaluation of the questionnaires confirmed the BZgA in carrying the message of substance abuse prevention into the football clubs. The clubs reported that this topic would be relevant for them and that they would plan further prevention activities. Numerous clubs also plan to set up rules on the use of alcohol and tobacco. The evaluation shows that substance abuse prevention should be firmly established in many sports clubs (BZgA 2007e).

### **Cooperation with mass sports associations**

After the Football World Cup, the BZgA made general agreements with the mass sports associations on the cooperation in substance abuse prevention in children and youth work. To support the implementation of the preventive contents in the clubs, the BZgA developed a communicative concept with various modules which was continued in 2006 and which is to be expanded in cooperation with the partners in 2007.

*Multipliers:* Staff of sports clubs involved in children and youth work receive qualification and support in their work. Meanwhile, 12,500 staff have taken part.

*Personal communication:* At sports and family events, the BZgA engages in a dialogue with parents, children, full-time and honorary staff (in 2006, 24 sports and family events were attended by 3,000 – 180,000 people).

*Mass communication:* Sports and family events are accompanied by mass media campaigns (the initiative “Making children strong“ is known to 19% of the Germans aged between 14 and 65 years and interested in sports; 72% of them know that this campaign is a initiative of substance abuse prevention (Die Drogenbeauftragte der Bundesregierung 2007).

### **Non organized leisure time**

In the non-organized leisure-time sector, drug prevention measures – and especially those relating to night life – are still scanty. However, some of the party projects set up through scene initiatives continue to establish themselves and to network with municipal youth welfare or drug care facilities as well as other party projects. Examples for party projects can be found at [www.partypack.de](http://www.partypack.de) (Cologne), [www.drugscouts.de](http://www.drugscouts.de) (Leipzig), [www.eve-rave.net](http://www.eve-rave.net) (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). Almost all initiatives offer online counselling for substance users on their websites.

#### **3.3.2 At-risk groups**

##### **Adolescents and young adults with (problematic) cannabis use**

The gap between prevention and therapy in respect of problem cannabis consumption is narrowing. This is shown by the fact that the traditional drug counselling centres have increasingly been used by cannabis users in the last years.

- **Expert’s report on “Access to young cannabis users“**

Funded by the Federal Ministry for Health, the expert’s report on “Access to young cannabis users“ investigates the current status of measures undertaken for this target group. The possibilities of access to this user group are shown by means of best-practice examples from addiction and drug aid. In order to further improve the offers, the study recommends:

- to develop a close cooperation with judicial authorities, hospitals, medical practices, schools and youth welfare facilities.
- to change PR-work (e.g. image of drug counselling as a service for citizens),
- to pool existing individual projects and network them into a comprehensive offer

The results of the expert's report were published in December 2006 (Die Drogenbeauftragte der Bundesregierung 2007).

- ***Cannabis cessation programme "Quit the Shit"***

The cannabis cessation program "Quit the Shit" has been online available under [www.drugcom.de](http://www.drugcom.de) since 2004. Addressing people with regular cannabis use, the cessation program aims at significantly reducing individual consumption within 50 days. Participants in the program are requested to continually monitor their use patterns by means of an Internet-log book.

Since April 2006, the BZgA has been cooperating with twelve addiction and drug counselling centres in seven Länder in order to guarantee the expansion and the integration of the program into municipal structures. For quality assurance, one case in four is monitored by a drugcom-team. The evaluation of the program has shown that the level of acceptance of the cannabis cessation program among adolescents is very high. It leads to a reduction of consumption even when participation is not given over the full program period (BZgA 2007d).

The two studies INCANT – "International Cannabis Need of Treatment Study" and CANDIS – "Modular Therapy of Cannabis-related Disorders" as well as the German-Swiss project "Realize it" were already presented in chapter 1.3.3 (p. page 8).

The cannabis campaign carried out by the city of Frankfurt "Be.U!" ([www.be-u-online.de](http://www.be-u-online.de)) is mentioned here as an example for the host of activities undertaken at local and regional level. The initiative addresses adolescents, parents and multipliers with a mix of general and detailed information, self-tests for users and references to help offers in the region.

### **Juvenile delinquents**

- ***Outpatient socio-educative measures***

In nearly all Länder, the juvenile court assistance system provides different forms of support for juvenile delinquents under the name "outpatient socio-educative measures" as an alternative to traditional juvenile court sentences, especially incarceration (<http://www.sgbviii.de/S108.html> 26.07.07).

- ***Cooperation***

Cooperation is often problematic between the various systems involved, such as addiction aid and judiciary, but especially between youth welfare and addiction/drug care. This realization has recently led to cooperation agreements and cooperation commitments between youth welfare and drug care in some Länder (Die

Drogenbeauftragte der Bundesregierung 2007). The Federal Ministry for Health and the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth also started a common initiative to stimulate closer cooperation between youth welfare and drug care in the Internet ([www.dialog-jugendhilfe-drogenhilfe.de](http://www.dialog-jugendhilfe-drogenhilfe.de) 26.06.07).

### **FreD – Early intervention in conspicuous drug users**

The project “FreD – Early intervention in conspicuous drug users“ is still the most successful programme existing in this area. Meanwhile used countrywide, the programme addresses 14- to 18-year-olds, but also young adults up to 25 years who have come to the notice of police for the first time.

The drug care system as the provider of this early intervention measure on the one hand and police and public prosecution on the other need to cooperate closely to put this project into practice. Experience made with this demonstration project shows that the implementation of the programme was successful in particular in those regions in which transparent and binding commitments were made by the parties involved ([http://www.lwl.org/LWL/Jugend/KS/Projekte\\_KS1/FreD/](http://www.lwl.org/LWL/Jugend/KS/Projekte_KS1/FreD/), 26.07.07, more details can be found in earlier REITOX-reports).

### **Ethnic Groups**

Substance abuse prevention measures for migrants and immigrants are mainly carried out by addiction support facilities. Projects specifically geared to these groups still tend to be rare in prevention practice ([www.prevnet.de](http://www.prevnet.de), Berichte der Landeskoordinatorinnen und – koordinatoren der Suchtvorbeugung 2006).

- **Guide “Inter-cultural opening of addiction counselling“**

In its monograph series *Theorie und Praxis*, the federal association of the German charity organization Arbeiterwohlfahrt published a guide with the title “Inter-cultural opening of addiction counselling” (“Interkulturelle Öffnung der Suchtberatung”). At the end of the project “The living environment of young migrants as the starting point for migration-sensitive addiction aid“, a psycho-social guide for the counselling of migrants was developed in various languages in order to reach substance users with a migration background. The many aspects of the project’s concentration areas helped to sensitize local parties involved to the issue, to develop new implementation strategies and to gradually introduce changes (AWO Bundesverband e.V. 2006).

- **Counselling centres for the integration of young immigrants**

The Federal Ministry for Family Affairs, Senior Citizens, Women and Youth provides funding to around 400 counselling centres countrywide which support the integration of young immigrants in Germany. The topic of addiction and drug prevention is addressed by group offers, and local public events related to substance abuse and drugs are referred to during counselling sessions. Young immigrants who have problems with addictive substances are referred to drug care facilities which are primarily in charge (Die Drogenbeauftragte der Bundesregierung 2007).



- ***Integration projects for adolescent migrants***

Funded by the Federal Agency for Migration and Refugees, a host of measures of addiction prevention are carried out among young migrants within the framework of community-oriented integration projects specifically geared to young people. Apart from social integration, the 40 projects also aim at a targeted prevention of alcohol abuse and consumption of illicit substances. In 2006, overall federal government funding for addiction prevention for youth with migration background amounted to € 1,447,907 (ebda).

- ***Support Programme “Substance abuse of young migrants and ethnic German immigrants”***

A support programme of the charity foundation ‘Landesstiftung Baden-Württemberg’ deals with the substance abuse of adolescent migrants and ethnic German immigrants from Eastern Europe. As a result of integration problems, substance abuse in this group has reached a very problematic dimension over the last years. Within the group of migrants, young ethnic German immigrants from East European countries are regarded as being particularly at risk of developing addiction. Countrywide, the number of deaths among young immigrants rose from 36 in the year 1999 to 132 in the year 2006 and their proportion in the overall figure of drug-related deaths (10.2%) is over-proportionally high (percentage of ethnic German immigrants in the total population : 5.5%). Therefore, the support programme of the Landesstiftung aims at improving the social integration of young German ethnic immigrants and migrants by supporting such projects. Within the framework of two competition rounds held between 2002 and 2006, funding was granted to 15 projects for young migrants and German ethnic immigrants. Some of them are scientifically accompanied and evaluated (<http://www.landesstiftung-bw.de>, 26.07.07).

- ***Professional qualification “Intercultural addiction counselling”***

The competence platform of the Catholic University of Applied Sciences NRW and the Otto Benecke Foundation from Bonn jointly offer a 13-month-qualification programme in the area of “intercultural addiction counselling”. The training is intended for graduates of psycho-social studies qualifying them for work in addiction support. The full-time measure is offered to Russian-speaking immigrants and foreign applicants with a higher education entrance qualification (also with migration background), who receive unemployment benefit II. The goal of this measure is to integrate participants into the labour market in the area of low-threshold addiction counselling and prevention (DHS 2007).

### **3.3.3 At-risk families**

There are more than 20,000 substance-using mothers living in Germany. Between 40,000 and 60,000 children grow up with parents who use drugs or substitution drugs. A total of 2.65 million children live in families with alcohol use. On average, one in 5.6 children (17.6%) is affected by substance abuse in the family. The number of children who suffer from non-substance-related forms of addiction at their parental homes (gaming addiction, sex

obsession, co-dependence) is not quantifiable. It is to be assumed that about 10 percent of the German population have been affected in their childhood or currently are affected by substance abuse in the family (<http://www.nacoa.de/fakten1.html>, 27.07.07).

These alarming facts have come more into the focus of public attention since the Federal Ministry for Health together with addiction experts have passed a keynote paper to improve the situation of children in families with substance abuse problems in 2003. The following measures serve as examples to show the countrywide commitment of the Federal Government in this area:

- **Self-help-offers**

Many German cities have self-help-offers for families with addiction problems. Targeted offers for children and adolescents are provided by the Alateen-Groups<sup>6</sup> as well as the children groups of the self-help associations (Guttempler, Kreuzbund, Blaues Kreuz, Freundeskreise für Suchtkrankenhilfe). If there are no specific offers for children in families with addiction problems, there are at least often help offers for substance users and their relatives ([www.nacoa.de](http://www.nacoa.de), 30.07.07).

- **Inpatient and outpatient help offers**

Additionally, among the professional help offers there are outpatient offers of drug counselling centres as well as inpatient offers of drug care facilities which cater for the children while their parents undergo inpatient treatment and sometimes also provide targeted therapeutic support for the children. Even if these offers are not always directly addressed to children from families with addiction problems, they can make a contribution to improving the family situation and easing the burden on the children (ebda).

- **Internet-based counselling offers**

The Internet offers numerous portals to support children of addicted parents, the (addicted) parents themselves and multipliers. Here are a few examples:

- [www.kidkit.de](http://www.kidkit.de): Funded by donations, this Internet page informs children on questions around addiction and provides counselling. The page is organized by a team of 15 members.
- [www.proli-sucht.de](http://www.proli-sucht.de): Countrywide list of help offers for children of addicted parents. The homepage gives a countrywide overview of the projects and help offers for children in families with addiction problems. Both professionals and children/families affected find quick information on this page on local help offers (sorted by postcode).
- [www.huckleberry-und-pippilotta.de](http://www.huckleberry-und-pippilotta.de): An association which supports children, adolescents and parents in addiction-stricken families.
- [www.seitenstark.de](http://www.seitenstark.de): Working group for networked Internet pages for children.

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<sup>6</sup> Alateen is a self-help-organization for children and adolescents of families with alcohol abuse and form part of the Al-Anon-Family Groups. Alateen has around 40 self-help-groups in Germany.

- [www.encare.de](http://www.encare.de): ENCARE (European Network for Children Affected by Risky Environments within the family) – European network for experts who work with children in families with addiction problems. Website of the German ENCARE-Network.
  - [www.nacoa.de](http://www.nacoa.de): Association representing the interests of children in addiction-stricken families.
- **Telephone counselling**

The countrywide “Addiction & Drug Hotline“ was set up in 2003. It is made up of several regional providers of emergency call services in Germany who have joined up under the organisational umbrella of the Federal Centre for Health Education.

The “Addiction & Drug Hotline“ can be reached countrywide under the uniform telephone number **01805/313031**. The hotline offers telephone counselling, support and information provided by experienced professionals from the area of addiction and drug aid. The Addiction & Drug Hotline is available both for people with addiction problems and relatives, friends or colleagues. The hotline is staffed 24 hours a day and costs 14 cents per minute on the German landline network. In the year 2006, about 3,500 people seeking help called the addiction and drug hotline.

The Bundes-Arbeits-Gemeinschaft (BAG) Kinder- und Jugendtelefon e.V. provides two anonymous telephone counselling services in Germany. The services are available countrywide and free of charge.

The service offered for children and adolescents is separated from the one for parents so that children and adolescents can be sure that the counsellors don't talk to their parents.

Both service lines offer anonymity to all callers – children, adolescents and parents alike. If the callers request further – also personal – help, the counsellors can refer to the corresponding organizations ([www.kinderundjugendtelefon.de](http://www.kinderundjugendtelefon.de) 30.07.07).

More information on this topic can be found in the special chapter 12 “Vulnerable groups of young people“.

### **3.4 Indicative prevention**

#### **Children with ADHS**

Due to its high prevalence and common comorbidity, the attention-deficit-/hyperactivity-syndrome (ADHS) is of great clinical relevance. Various studies have shown that ADHS is also an important risk factor for the development of addiction. In a German study conducted by the Medical College of Hannover, 152 adult patients with alcohol dependence (n=91) or respectively multiple substance dependence (n=61) were examined for ADHS. In 23.1% (DSM-IV diagnostic criteria) of the alcohol patients, retrospective indications for ADHS in childhood were found. In 26.3% of the patients, the ADHS-diagnosis was also found in adulthood. In the group of the substance using patients, 54.1% (DSM-IV) of the patients

fulfilled the diagnostic criteria for ADHS in childhood, in 65.5% the syndrome subsisted in adulthood.

The results of the study suggest that ADHS is linked to a high comorbidity which finds its expression in alcohol abuse and also in the consumption of illicit substances. They underline the importance of early and adequate diagnostics and therapy of ADHS to prevent later addiction (Ohlmeier et. al 2005).

In Germany, ADHS is generally treated at several interlinked levels. In addition to a thorough diagnostic analysis, the so-called “multi-module treatment concept“ also comprises counselling for the parents, relatives and other persons of reference as well as psychotherapeutic and psychosocial treatment and counselling measures. Various approaches such as psychotherapy, medical treatment, educational measures and psychosocial support are interlinked. Cooperation with the kindergarten or the school forms an integral part of the treatment of ADHS. Different problem areas require the cooperation of different professionals starting from the psychotherapist for children and adolescents over ergotherapists, physiotherapists to teachers. So far, the possible connection between ADHS and addiction has been taken account of by ADHS research, however, it is seldomly included in therapy concepts for addiction treatment (BZgA 2005).

### **Children and adolescents with behavioural disorders**

A growing number of children and adolescents in Germany are affected by psychological disorders and mental diseases. According to experts, reasons for this development lie in the complexity of today’s demands made on children, but also in deficient child-raising skills of the parents who are themselves unable to cope.

According to the Professional Association for Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, a fifth of all children and adolescents in Germany suffer from some kind of psychosocial disorder. The spectrum of disorders ranges from contact difficulties over eating disorders to depression. Young people are increasingly over-challenged and do not find any support in their parents who are helpless themselves.

Adults who are at their wit’s end often resort to violence. Children who have experienced violence, cannot process it mentally but try instead to “treat“ it with drugs or display aggressive behaviour themselves. (<http://www.bkjpp.de/> 30.07.07).

The treatment of behavioural disorders and mental diseases in children takes a multi-level approach comprising parental counselling as well as child and adolescent psychotherapeutic or psychiatric therapy which includes parents and sometimes also siblings. In some cases, the children also need to be medically treated. Psychosomatic symptoms in childhood and adolescence are mostly treated in an outpatient setting and not in clinics. In particularly severe cases however, the children or adolescents are admitted to the inpatient child and adolescent psychiatric department of a hospital.

The most important treatment method of psychosomatic disorders is psychotherapy. Scientifically recognized methods of the psychotherapeutic treatment of children and adolescents are the depth psychology oriented psychotherapy and behavioural therapy.

In the initial diagnostic interview, questions are asked on family and peer relations, leisure time behaviour, punished and undiscovered delinquency, sexual development, self-image but also on drug use ([www.uni-duesseldorf.de/SWMF/II/028-020.htm](http://www.uni-duesseldorf.de/SWMF/II/028-020.htm) 30.07.07).

In Germany, there are 281 clinics and day clinics as well as 183 outpatient departments for child and adolescent psychiatry/psychotherapy (<http://www.dgkjp.de/einrichtungen.php> 30.07.07).

### **Children in families with addiction**

See chapter 3.3 (selective prevention). In this area, there are large overlappings with the indicative prevention measures.



## 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

In addition to the collection of clinical diagnoses concerning "dependency" and "harmful use" for which the international criteria of the ICD-10 (Dilling et al. 2005) apply, the German core data set finds a definition for the "risky drug use." According to experts' estimates, the "risky drug use" for any substance or disorder shall be specified, if neither ICD-criteria for addiction nor harmful use are fulfilled and thus no diagnosis is possible and if at the same time the number of consumption days during the last 30 days is bigger than zero. For the evaluation of the individual "risky alcohol consumption" apply in this case the recommendations of the WHO, the British Medical Association and the board of trustees of the DHS. For other substances, there are currently no binding recommendations. Irrespective of the above definitions, consumption can also be problematic if the user himself experiences it as problematic and for example considers himself as being addicted without having an objective diagnostic classification of addiction (Kleiber and Soellner 1998). The working definitions used at different places respectively comprise different subsets 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 problem drug use, 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 or has experience in diagnosing such cases.

In addition to content-related and general methodological difficulties in defining problem drug use, specific difficulties arise when collecting data on illicit drugs. A series of surveys shows

that users of hard drugs tend to report only the consumption of 'soft' drugs like for example hashish correctly while denying using for example heroin or attenuating intensity and frequency of use.

While population surveys allow for valid statements to be made on experimental drug use and lighter forms of multiple or sustained 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).

Based on a literature review on the epidemiology of multiple use of illicit drugs in Hamburg, Ilse and colleagues (2007) conclude that in view of frequently occurring poly-drug use, the diagnostic methods should be further developed and adapted to the complexity of consumption patterns. Furthermore, discriminating between licit/illicit substances and focusing on the concept of problem use of a primary drug or respectively a medical classification of a main drug is - according to the authors - not sufficient. These difficulties are of special relevance in particular for extrapolations which are based on treatment data.

### **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 selection of the target groups of these methods are based on the definition of problem drug use as an "intravenous or long-term/regular use of opiates, cocaine or amphetamines" (Kraus et al. 2003). However, as it would not have been possible to exclude multiple mentions in police figures when reviewing several substances, and as valid mortality estimates are only available for heroin users, the prevalence estimates for Germany were restricted to the target group of heroin users.

### **Injecting and non-injecting drug use**

In view of the particular risks carried by intravenous drug use, this use pattern is of particular interest when trying to minimize secondary harm. In Germany, injecting drug use continues to be strongly linked to heroin. Therefore, differentiation among user groups for estimating prevalences and describing patients is done in terms of main drug and not in terms of administration route.

## **4.2 Prevalence and incidence estimates**

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

As in the previous year, three multiplier-methods were calculated new and based on the data available for 2006:

- 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 notice of police for the first time (incidence), are summed up over the respective years. 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 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 can 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 76,000 and 161,000 persons. The figure is somewhat lower than in previous years and corresponds to a rate of 1.4 - 2.9 persons per 1000 inhabitants in the age between 15 and 64 years. These estimates are similar to the prevalences recently calculated by a new European meta-study conducted on the dependence on illicit substances for the age group 18 to 65 years: (3.0/1,000; threshold values 0.2-0.6; Wittchen & Jacobi 2005). Further details are contained in 4.2.2.

Based on recent findings (Perkonig et al., 2004), the response rate for outpatient treatment was raised to 41% in the calculations 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 (Table 7).

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 EMCDDA, however, there is no possibility to verify injecting 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 are 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 167,000 to 198,000 (2005: 188,000 – 223,000). This corresponds to a prevalence of 3.0 – 3.6 (in 1,000 inhabitants). Estimates based on police

data and drug-related deaths are not performed for the extended target group because of the problems explained in chapter 4.1.

**Table 7.** Prevalence estimates of problem opiate consumption from 1995 to 2006 (number in 1,000; age group 15-64 years)

Method based on data source	Reference year					Prevalence per 1.000
	1995 thousands	2003 thousands	2004 thousands	2005 thousands	2006 thousands	
Treatment	78-124	109-177	102-150	155-184	136-161	2,5 - 2,9
Police contacts	131-142	144-182	136-172	128-166	117-159	2,1 - 2,9
Drug related deaths	78-104	92-123	87-115	78-111	76-108	1,4 - 2,0

#### 4.2.2 Other 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 carried out on 2,446 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. With 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).

The studies and approaches presented above 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 the 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 use patterns of clients in therapy are available from various sources. Based on the German Core Data Set, the German Statistical Report on Addiction Therapy (Deutsche Suchthilfestatistik, DSHS, Sonntag, Bauer & Hellwig 2007a) provides extensive data for clients in outpatient therapy from more than 80% (N=744) of all facilities which receive regional and municipal funding (countrywide total figure: N=934, Simon 2005). The Treatment Demand Indicator (TDI) of the EMCDDA is integrated in the Core Data Set. Outpatient counselling facilities are the first place of call for drug users insofar as their drug problems are not treated by office-based doctors in primary care. In most cases, counselling is free of charge. The facilities are mainly funded by the municipalities and Länder.

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 does not suit 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, extensive data are also available from the German Statistical Report on Addiction Therapy. However, only about 157 (2005: 140; 2004: 102) facilities took part in the federal survey in 2006 (Sonntag, Bauer & Hellwig 2007b). 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 the discharge of all patients of inpatient facilities. Though complete, it is not addiction-specific and offers little detailed information for this specific area. The statistics of the pension insurance funds show all cases for which the costs were borne by the pension insurer. However, the part of inpatient therapies which were acute treatments or which were financed by other sources, is missing hereby. 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 published detailed data of the tables of the German Statistical Report on Addiction Therapy of the year 2006 (Sonntag, Bauer & Hellwich 2007a). In the year 2006, a total of 267,496 (2005: 265,245) cases treated in outpatient facilities were recorded by the DSHS. However, this report only takes account of the clients who were treated for illicit substance use.

#### Socio-demographic data

In the year 2006, 79.5% (2005: 79.0%) of all 55,246 (2005: 55,524) outpatient clients with drug problems recorded by the German Annual Statistical Report on Addiction Therapy were male. About 56.6% (2005: 57.9%) of them were between 15 and 30 years old. 82.1% (2005: 83.3%) of them were of German nationality, 3% (2005: 2.7%) were from countries of the European Union, 8.7% (2005: 10.0%) from non-EU countries such as Turkey or the former Soviet Union.

The addiction support system reports increasing problems regarding care and referral of older drug clients. Framework 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 accordingly. Further information can be found in standard tables 8 and 9 as well as in the TDI-questionnaire

**Table 8.** Socio-demographic data broken down by main drug (outpatient)

Characteristics	Primary drug			
	Opiates	Cannabis	Cocaine	Amphetamines
Ages starting treatment (Mean)	32,3	23,6	31,1	25,3
Age of first use (Mean)	20,1	15,6	20,1	17,9
Gender (Ratio Males)	76,9%	86,0%	85,3%	75,2%
Single	50,9%	60,0%	45,7%	53,1%
Working situation				
Unemployed	53,9%	28,2%	39,1%	32,6%
In school education	4,3%	34,0%	6,7%	18,9%
Homeless	4,7%	1,0%	2,3%	1,2%

Sonntag, Bauer & Hellwich 2007a

#### Consumption behaviour

Table 9 shows the most common use patterns for various substances as reported by the outpatient counselling facilities in the German Annual Statistical Report on Addiction Therapy for the period 2003 - 2006.

Heroin is mainly injected by 63.0% (2005: 64.7%) of the clients. This use pattern is also to be found in a little less than a third of the cocaine users. All other substances are mainly orally consumed or smoked. As for heroin use, injecting use decreased slightly compared to the previous year; the portion of injecting users among the heroin users has been continually declining since 2003. As for the other opiates, the portion of injecting users (7.4%) also slightly declined in comparison with the previous year; since 2003, these substances have been showing a significant downward trend for injecting use. Regarding cocaine, the portion of injecting users has hardly changed with 29.1% (2005: 32.8%).

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 since 2003, it seems justified – also with a look at the case figures – to speak about a trend away from intravenous use also in Germany (Table 9).

**Table 9.** Drug administration routes in outpatient clients 2003-2006

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
	<b>2006</b>	<b>63,0%</b>	<b>25,6%</b>	<b>4,2%</b>	<b>6,1%</b>	<b>1,1%</b>	<b>10.935</b>
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
	<b>2006</b>	<b>3,8%</b>	<b>1,7%</b>	<b>92,2%</b>	<b>0,1%</b>	<b>2,2%</b>	<b>4.812</b>
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%	1150
	<b>2006</b>	<b>7,4%</b>	<b>8,2%</b>	<b>78,3%</b>	<b>1,7%</b>	<b>4,5%</b>	<b>907</b>
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
	<b>2006</b>	<b>29,1%</b>	<b>26,1%</b>	<b>1,4%</b>	<b>36,7%</b>	<b>6,7%</b>	<b>5.003</b>
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
	<b>2006</b>	<b>5,4%</b>	<b>74,2%</b>	<b>4,8%</b>	<b>13,4%</b>	<b>2,2%</b>	<b>186</b>

Double entries possible  
Sonntag, Bauer & Hellwich 2007a

## Diagnostic data

For the year 2006, the German Annual Statistical Report on Addiction Therapy contains data on the main diagnoses of a total of 55,246 (2005: 55,524) persons who started therapy in an outpatient psychosocial addiction support facility because of problems with illicit drugs. 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).

Looking only at illicit substances, just a bit more than half of the cases (50.7%; 2005: 52.2%) were related to clients who sought treatment or counselling primarily for dependence or harmful use of opiates. In about a third of the cases, clients (31.1%; 2005: 30.8%) were treated for primary cannabis problems. Cocaine was the primary reason for treatment in 7.0% (2005: 6.7%) of the clients, stimulants in 6.3% (2005: 5.7%). As for those who sought addiction therapy for the first time, cannabis was clearly the predominant drug in 58% of the clients (Table 10).

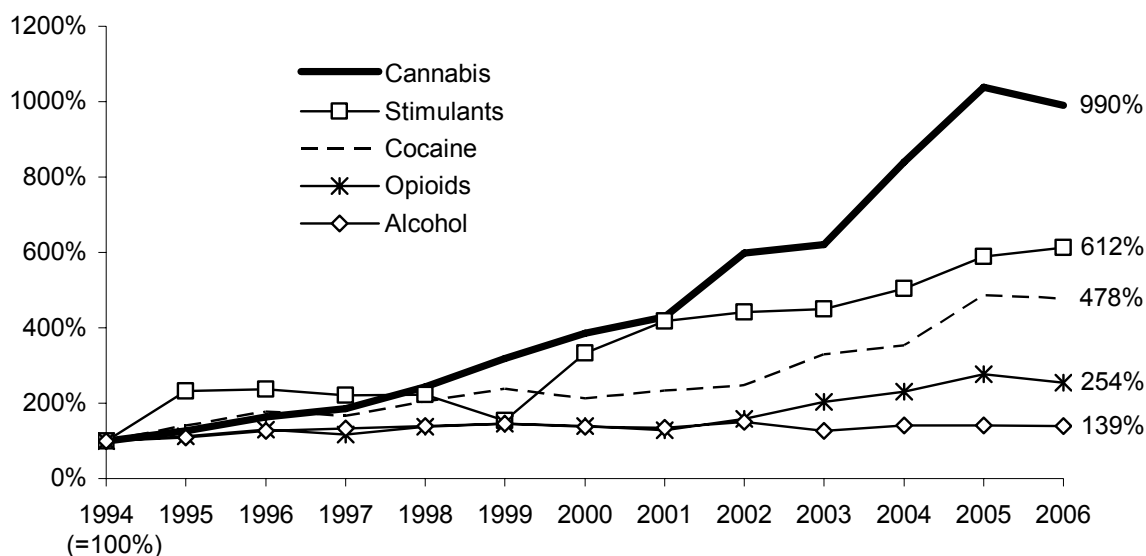
When calculating the change in percentage of clients' admissions by main diagnoses since 1994, it shows that the increases found for cannabis are the most significant. Figures for this client group have soared more than tenfold since 1994. However, they seem to begin to stagnate after the increases of previous years. The number of clients with primary stimulant- or cocaine-related problems has also considerably gone up over the same period of time, increases being respectively six- and fivefold. Opioid-related diagnoses have doubled, while alcohol has remained stable. However, the last two groups represent the largest group of persons in absolute figures (Figure 6).

**Table 10.** Main diagnoses in outpatient treatment

Main diagnosis harmful use / addiction of ... (ICD10: F1x.1/F1x.2x)	All intakes (%)			First treated clients (%)		
	Males <sup>r</sup>	Females	Total	Males	Females	Total
Opioides	49,1	57,2	50,7	20,2	29,0	21,8
Cannabinoids	33,7	21,1	31,1	60,2	42,6	57,1
Sedatives/ Hypnotics	1,1	6,4	2,2	0,9	6,7	1,9
Cocaine	7,6	5,0	7,0	8,1	5,3	7,6
Stimulants	6,0	7,7	6,3	9,0	15,1	10,1
Hallucinogenic drugs	0,2	0,2	0,2	0,2	0,2	0,2
Volatile substances	0,0	0,1	0,0	0,0	0,1	0,1
Other psychotropic substances	2,3	2,4	2,3	1,4	1,1	1,3
<b>Total</b>	<b>43.908</b>	<b>11.226</b>	<b>55.246</b>	<b>11.345</b>	<b>2.488</b>	<b>13.859</b>

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

Secondary addiction diagnoses in addition to the main diagnosis are relatively common. Out of the clients with primary opiate-problems, 22.5% (2005: 24.6%) also have alcohol-related disorders (addiction or harmful use) and 24.0% (2005: 27.1%) cocaine-related disorders. Out of those who have primary cocaine-related problems, 45.6% (2005: 44.4%) also use cannabis, 18.0% (2005: 17.5%) amphetamines and 14.8% (2005: 13.2%) ecstasy. 10.6% (2005: 10.1%) of the clients with a primary cannabis-diagnosis make harmful use of or are dependent on cocaine, 15.8% (2005: 14.0%) on amphetamines and 10.7% (2005: 11.3%) on ecstasy (Sonntag, Bauer & Hellwich 2007a).



**Figure 6.** Long-term development in the admissions to outpatient addiction treatment broken down by main drug (1994=100%) (Sonntag, Bauer & Hellwich 2007a)

Data from regional monitoring systems, can, insofar as they use the German Core Data Set, be compared to the federal data. Partly based on the original data and covering whole regions, these evaluations are a valuable complement to the national statistical reports.

The results from the Hessian “COMBASS-Systems“ used by 103 outpatient facilities in Hesse corroborate the data of the federal statistics in many respects - even if, in individual cases, the evaluation is based on diverging definitions (e.g. evaluation only of persons known by name with at least one documented appointment in the reporting year) or respectively follows another logic at regional level (documentation of the counselling of individual persons in the calendar year). The evaluation 2005 is based on 20,897 counselling cases (18,874 persons with own addiction problems and 1,142 relatives). Appointments for counselling and support were made with 17,562 clients registered by name, 2,847 had documented anonymous contacts. Despite the growing number of participating facilities, the number of the documented anonymous contacts markedly decreased in comparison with the previous year (2004: 3,418, N=99 participating facilities). This development can be a

reflection both of a changed documentation mode used by the facilities or of an actual reduction of the offers of anonymous counselling e.g. for cost reasons. 40% of the clients were treated for alcohol problems, 35% for opiates. Cannabis was the main substance in 12% of the clients, cocaine, crack and amphetamine (and other stimulants) in respectively 2%. Other diagnoses accounted for 7% of the documented cases. The portion of opiate users rose from 31% in 2003 to 35% in 2005 (Hessische Landesstelle für Suchtfragen 2006a).

Discriminating outpatient clients by illicit main drug, opiates (including substitution drugs) rank top with 50%, followed by cannabis with 24% and by cocaine with little less than 7%. In the Combass evaluation, the portion of cannabis users is somewhat lower than the federal mean which may have structural reasons (e.g. less intense criminal prosecution in the federal Land) or may be linked to differences in data collection (about a third of the clients are anonymously documented and are not taken account of). However, all in all, the trends observed over the last years – stability or decrease in opioids and increase in cannabis – are the same as at federal level (Raschke, Buth & Kalke 2005).

### **Abuse of pharmaceutical drugs**

Abuse of and dependence on pharmaceutical drugs are relatively common phenomena which however – due to the limited negative impact on the social environment and the smaller conspicuousness of pharmaceutical drug abuse, is paid less attention to and recorded than for example dependence on illicit drugs. Even if medication abuse is currently receiving greater attention of the expert public, there is still a considerable need for information (Soyka et al. 2005a).

According to an estimate of the Länder, there are 1.2-1.3 million people addicted to pharmaceutical drugs in Germany (Simon 2005); other estimates range between 1.4-1.9 million (Soyka et al. 2005a; Kraus et al. 2006). Based on his own calculations, Schwabe (2007) noted that previous estimates might possibly be too high and estimated around 700,000 persons to be dependent on medicinal drugs.

Among the client data recorded by the National Report on Addiction Treatment for outpatient facilities, only 0.8% had sedatives/hypnotics as main diagnosis. Among women the portion (1.7%) was four times higher than among men (0.4%) (Sonntag, Bauer & Hellwich 2007a). Similar portions of this group of clients and a similar gender distribution were reported for the year 2005 by the base documentation system of the outpatient addiction support system in the Hesse (COMBASS) (Hessische Landesstelle für Suchtfragen 2006a).

In order to get an indication of which active substances and drugs have a particularly high abuse or addiction potential and to find out about 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 medication 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.



Recorded by the system are mainly patients with primary medicinal drug problems. However, such problems are also often found in persons with a primary alcohol or drug problem. The monitoring system collects data on characteristics of the abused pharmaceutical drugs and the detailed criteria of the abuse and addictive use of prescription drugs by clients of outpatient counselling facilities by means of a representative sample of 36 outpatient facilities from all over Germany. The most recent results of this survey are available for the reporting year 2005 (Rösner & Küfner, 2007). 542 (2004: 518) mentions of abusive use of pharmaceutical drugs of 393 (2004: 396) patients were included in the evaluation.

Table 11 shows which active ingredients and drug groups have been mostly abused by opiate users. Apart from tranquilizers, mainly substitution drugs and hypnotics are abused by this group of clients. Tranquilizers and hypnotics of the type benzodiazepine (especially diazepam and flunitrazepam) cover almost two thirds (61.4%) of the documented abuse cases in this group of clients while about a third of the entries is related to the abuse of the substitution substances methadone and buprenorphine.

The data on the abuse of substitution drugs also comprises cases in which the substance was not used in the frame of a regular medical treatment, but without professional medical supervision or was purchased on the black market.

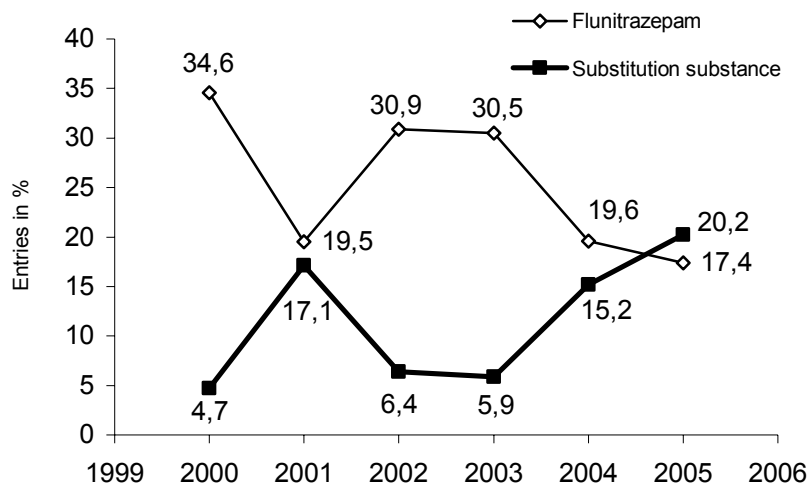
**Table 11.** Most common groups of active substances and pharmaceutical drugs abused by opioid-clients

Pharma- ceutics	Substance	N	%	Pharma- ceutics	Substance	N	%
<b>Tranquilizers</b>		<b>94</b>	<b>44,1</b>	<b>Hypnotics</b>		<b>38</b>	<b>17,8</b>
	<i>Benzodiazepines</i>	93	43,6		Flunitrazepam	37	17,4
	Diazepam	82	38,5		Zolpidem	1	0,5
	Oxazepam	5	2,3				
	Bromazepam	4	1,9	<b>Substitution substance</b>		<b>44</b>	<b>20,7</b>
	Lorazepam	1	0,5		Methadone	28	13,1
	Nitrazepam	1	0,5		Buprenorphine	15	7,0
	<i>Plant-based Tranquilizers</i>	1	0,5		Levomethadone	1	0,5

Rösner & Küfner 2007

Already observed as a trend in the previous year, the abuse of substitution drugs by clients with the main diagnosis opioids, is still on the rise. The portion of 20.7% in the cases reported for 2005 is the highest ever recorded. The development of the abuse of substitution substances is in contrast to the abusive use of hypnotics, especially of the benzodiazepine flunitrazepam.

Figure 7 illustrates the contrasting developments of substitution substances and flunitrazepam during the last years.



**Figure 7.** Abuse of flunitrazepam and substitution drugs by clients with primary opioid diagnosis 2000-2005 (Rösner & Küfner 2007)

#### 4.3.2 Inpatient treatment

##### Data from the German Annual Statistical Report on Addiction Therapy (Deutsche Suchthilfestatistik, DSHS)

Out of the 32,474 (2005: 31,569) inpatient clients with substance-related disorders recorded by the German Annual Statistical Report on Addiction Therapy, 6,915 (2005: 5,802) were treated for illicit substances (including prescription drugs) in the year 2006 (Sonntag, Bauer & Hellwich 2007b.). Out of these, 5,503 (2005: 4,505) were male, this corresponds to a male portion of 79.6% (2005: 77.6%). Alcohol-related disorders are still the main reason for inpatient treatment. Only completed treatments were recorded. Here also, the main diagnoses were based on the diagnostic categories of the international classification system of the WHO.

Clients with the main diagnosis “dependence/harmful use of opiate“ continue to represent the largest individual group in inpatient treatment (41.8%; 2005: 44.0%). The second largest group is formed by clients with polydrug use (25.7%; 2005: 26.2%). As in the previous year, cannabis comes third with 17.6% (2005: 15.2%) of the case figures gaining further in importance, while the portion of opiate clients is still declining. Cannabis continues to play a more important role among men than among women: only 10.4% of the females vs. 19.4% of the males have a cannabis diagnosis. Gender differences of this scale have otherwise only been found for sedatives and hypnotics for many years – however in a reversed ratio (Table 12).

**Table 12.** Main diagnoses in inpatient treatment (DSHS)

Harmful use / Dependence from ... (ICD10 F1x.1/F1x.2x)	2005	2006		
	Total	Males	Females	Total
Opiates	44,0%	42,3%	39,8%	41,8%
Cannabis	15,2%	19,4%	10,4%	17,6%
Hypnotics/ Sedatives	4,5%	2,1%	12,5%	4,2%
Cocaine	6,6%	6,6%	2,9%	5,8%
Stimulants	3,4%	5,1%	3,9%	4,9%
Hallucinogenic drugs	0,1%	<0,1%	0,1%	<0,1%
Volatile substances	<0,1%	<0,1%	<0,1%	<0,1%
Other psychotropic substances	26,2%	24,5%	30,4%	25,7%
Total	5.802	5.503	1.409	6.915

Sonntag, Bauer & Hellwich 2007b

Until recently, inpatient treatment of cannabis disorders was an exception. However, things have changed as can be seen from treatment figures. In a position paper on the inpatient qualified withdrawal treatment of cannabis patients, Holzbach et al. (2006) have set up criteria justifying inpatient withdrawal treatment and duration for cannabis dependence and have outlined treatment contents. The authors request inpatient withdrawal treatment to be carried out for cannabis users if dependence on cannabis has been diagnosed and outpatient treatment has failed or severe psychiatric comorbidity, disintegration, psychosocial immaturity or very high frequency of use are given. They point to the special problem situation of this seriously ill (albeit very small) group of cannabis users who generally have had a very early onset of use.

### Data from other sources

An overview of all clients in inpatient therapy in Germany can be gleaned from the statistics on hospital treatments (statistical report on hospital diagnoses) of the Federal Statistics Office, whose most recent data are available for the reporting year 2005. By documenting main diagnosis, age and gender, the statistical hospital report mainly provides framework data which are complemented by specific data from the National Statistical Report on Addiction Treatment. Data provided by social security administration (Deutscher Rentenversicherung Bund, DRV) are related to rehabilitation therapies of drug addicts. The two statistical reports largely tally in their discrimination by main diagnoses, although the DRV data contain a considerably higher portion of undifferentiated diagnoses in respect of F19 (multiple substance use and by-consumption of other psychotropic substances) which needs to be taken into account.

With regard to acute treatments (carried out in hospital), opioids are, in terms of figures, 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 however, primary use of illicit substances may be hidden beneath it, since alcohol appears much more often as the only addictive substance. 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 in the category of individual substances (Table 13).

**Table 13.** Addiction diagnoses in inpatient clients 2004-2005

Diagnoses	Hospital-treatment		DRV		DSHS	
	2004	2005	2004	2005	2005	2006
F11 Opioides	30,8%	32,2%	19,6%	19,9%	44,0%	41,8%
F12 Cannabinoide	6,1%	6,5%	5,4%	7,1%	15,2%	17,6%
F13 Sedatives / Hypnotics	10,1%	9,8%	2,6%	2,3%	4,5%	4,2%
F14 Cocaine	1,3%	1,4%	3,4%	3,5%	6,6%	5,8%
F15 Stimulants, incl. caffeine	1,4%	1,4%	1,4%	1,9%	3,4%	4,9%
F16 Halluzinogenics	0,7%	0,6%	0,1%	0,1%	0,1%	<0,1%
F18 Volatile substances	0,2%	0,1%	0,1%	0,1%	0,0%	<0,1%
F19 Multiple Substance use / use of other psychotropic substances	49,6%	48,0%	67,4%	65,2%	26,2%	25,7%
<b>Gesamt</b>	<b>84.147</b>	<b>88.487</b>	<b>10.311</b>	<b>10.573</b>	<b>5.802</b>	<b>6.915</b>

Statistisches Bundesamt 2007, Deutsche Rentenversicherung Bund (DRV) 2007, Sonntag, Bauer, Hellwich 2007b

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

### 4.3.3 Diagnostic data 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 Länder. Insofar as data were collected and estimates of the prevalence or dependence on licit and illicit substances performed, 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.

Repeated surveys carried out in the open drug scene of the city of Frankfurt between 2002 and 2006 show that prevalences of heroin and crack use in the Frankfurt drug scene are comparable. The 30-day-prevalence for heroin use is 87%, for crack 85%. During the last years, exclusive injecting use of crack has gained in importance reaching a value comparable to the exclusive inhalational use in 2006. The group of daily crack users increased again in 2006 (Müller et al. 2007). From former surveys it is already known that about 60% of the crack users use crack almost daily. The majority of crack users are in a bad social situation; one in two is homeless and 80% don't have a job. Striking about the group of excessive crack users (>8 consumption units per day) is that about 60% of them are females. The results of a comprehensive study on cocaine and crack use in Frankfurt have recently been published by Zurhold and Müller (ed.) (2007).



## 5 Drug-related treatment

### 5.1 Overview

People willing to overcome their substance dependency with professional support are offered a wide range of quitting counselling and therapeutic services. On the one hand, there are substitution offers with a limited target orientation aiming at stabilizing the overall condition, and, on the other, abstinence-oriented treatment offers. The two concepts complement each other, since, in the long term, substitution too, aims at abstinence from drugs, where possible.

Based on the present state of knowledge, abstinence-oriented therapy is 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 counselling comprising medical, psychological and social diagnostics and case history. The help plan should take account of therapy and health care offers available at regional level in order to select the measures which are best suited for the individual case.

In the *withdrawal phase*, multi-professional teams assist in working on addiction with all its aspects in a 'qualified withdrawal' program. 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 outpatient, inpatient- or partly inpatient therapies. The standard therapy duration is six months.

The *integration and after-care phase* is a "phase of assimilation", in which individual therapeutic measures move into the background in favour of an outward orientation with a view to promote integration into work and society. In the integration phase, clients receive support from the special service departments of the job agencies as well as from the social security administration.

### Treatment organization

Pharmacologically assisted substitution therapy offers reach quite a large number of drug addicts. Since 2001, substitution therapy has been regulated in detail by the Narcotics Act and is meanwhile fully accepted as a medical therapy method. Already in the year 2002, the

Federal Medical Council passed guidelines on the state of the art. In 2003, the national health insurance system 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 substitution 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 care 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 counselling 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 therapy 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. The positive results of the demonstration project show that this group of heavily addicted persons is in need of specific offers in addition to the already existing ones. Despite the positive results of the "heroin trial", it is still uncertain whether treatment with diamorphine will be continued in Germany. In 2006, an application for the admission of diamorphine as a prescription drug was filed with the Federal Institute for Pharmaceuticals and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte, BfArM). Although the BfArM has meanwhile given its technical endorsement, the drug can not be admitted yet because the Narcotics Act, which in its present wording prohibits the prescription of diamorphine, needs to be changed accordingly. So far, the Federal Government could not table a corresponding bill in the German Bundestag. For the time being, the patients who participated in the demonstration project continue to be treated with diamorphine based on an exceptional permission according to §3.2 of the Narcotics Act effective as of January 2007.

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

Cooperation between different professional groups from social work/education, psychology and medicine forms a standard and integral part of addiction therapy. As for outpatient offers (outpatient treatment centres and others), quality assurance and technical monitoring are mainly in the hands of the supporting organs of the facilities or respectively of the Länder and



municipalities. The responsibility for detoxification and rehabilitation however lies with the respective insurance carriers. With outpatient treatment offers being increasingly funded by social security administration, the above mentioned standards also gain in importance in this area.

In many Länder, cooperation between the different fields of work and organizations is promoted by Länder-financed institutions, like for example the Bavarian Academy for Addiction (Bayerische Suchtakademie, BAS), the Hessian Land Centre for Addiction Issues (Hessische Landesstelle für Suchtfragen, HLS) or the Thuringian Land Centre for Addiction Issues (Thüringische Landesstelle gegen die Suchtgefahren).

### **Funding and supporting organs**

According to the most recent overview dating from the year 2005, there are about 934 specialized drug counselling facilities which treat 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 in rehabilitation. The majority of the facilities are independent non-profit organizations. Besides, there are also public and private providers which carry out inpatient therapy (Simon 2005).

Low threshold services and counselling are, for the most part, funded by the Federal Government. However, a relevant portion of the costs of outpatient facilities is borne by the legally and economically responsible providers themselves. Except for the therapeutic treatment, outpatient addiction support is, for the most part, voluntarily funded by the Länder and municipalities. However, the institutions have no legal claim to these funds. Withdrawal treatment lies in the hands of the statutory health insurance funds. The statutory pension insurers in their turn are responsible for the rehabilitation therapy which they fund as a medical rehabilitation to restore the earning capacity of the client. They also decide on the type, scope 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 which tap federal government budgets or budgets of the social security funds and job agencies.

Addiction therapy may only be provided by adequately skilled staff with work-field-specific supplementary training. In this context, the German Pension Insurance Fund has passed guidelines for the supplementary training of therapy staff working in individual and group therapy within the framework of medical rehabilitation of drug addicts, serving as a 'recommendation for the acknowledgement' of the respective advanced training courses.

As part of the restructuring of the university 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 support services recorded by the National Report on Addiction Therapy has been considerably increasing over the last years. In the reporting year 2006, 744 out of 943 (79.7%) facilities receiving funds from the Federal Government or the respective Land, were included in the documentation system.

Since 1 July 2002, data 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 2006, this data source provides information on the number and gender of treated clients and on the substitution drugs used, complete with a list of names of the doctors in charge of therapy.

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

## 5.2 Treatment system

### Institutions and organizations

A differentiation between drug-free and pharmacologically 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 counselling facilities which represent 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 counselling facilities. In this way, psychosocial care or therapy provided by the counselling facilities is, per se, neither obligated to a drug-free nor a medication-assisted approach. In order to avoid repetitions, outpatient counselling facilities will be presented under the section "drug-free therapies".

Parallel to and partly in cooperation with professional help offers, there are 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. A study conducted by Queri et al. (2005) on cooperation and referral between the different facilities was already presented in the last REITOX-report.

### Treatment demand and evaluation

Planning of the treatment demand in 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 (Müller et al. 2007) and Hamburg (Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz Hamburg 2006, Baumgärtner 2006a, b). In Hesse, like in many other parts of Germany, cooperation between addiction support 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 support 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 use patterns beyond the age of 60 years make this topic increasingly urgent. With regard to licit substances, the sometimes late onset of problem alcohol use but also the abuse of prescription 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. For this target group there are hardly any places available in therapy which would be adequate in terms of therapy goals, therapy setting and insurance conditions.

Data on treatment availability are 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 outpatient services has often led to financing problems. The municipalities which provide the funds for most of these services are currently struggling with extremely tight budgets. Since the municipalities are not legally obliged to provide funds for outpatient addiction support, a lot of offers are cut down at various locations. At the same time however, facilities have started to engage in a professionalization of their operational and technical procedures. The profiles of clients in in- or respectively outpatient treatment have already been described in chapter 4.3 (beginning page 53). Following is therefore only a presentation of the figures of clients undergoing therapy.

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

In general, inpatient treatment in Germany is carried out under drug-free conditions. Documentation discriminates by type of funding and not by type of treatment (drug-free vs. pharmacologically assisted). Therefore, all inpatient treatments carried out for persons with main diagnoses F11-F16 or F18-F19 are presented in the following, discriminating by acute hospital treatment and rehabilitation therapy. Hospital treatment aims 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 data on the treatments provided for these clients. Rehabilitation therapy aims at long-term rehabilitation and drug-freeness as a precondition for restoring the

working capacity of the client. It is generally carried out in an inpatient, but, to an increasing extent, also in an outpatient setting.

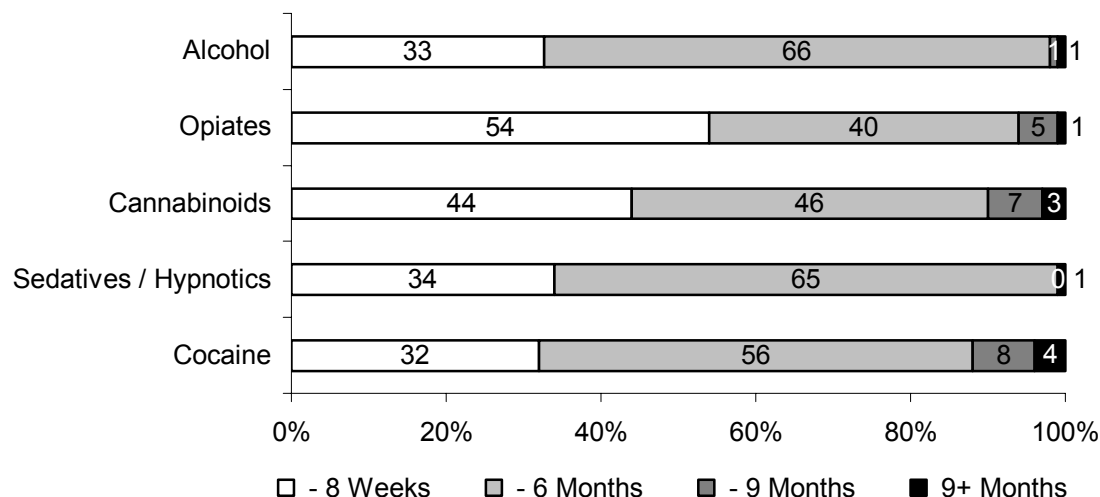
**Table 14.** Inpatient treatment of drug-related problems in hospitals 2002-2005

Main diagnosis		Year				Changes 2005 vs. 2004
ICD	Substance	2002	2003	2004	2005	
F10	Alcohol	258.083	288.115	290.864	299.428	+2,9%
F11	Opioids	24.663	25.145	25.889	28.476	+10,0%
F12	Cannabinoids	3.113	4.151	5.107	5.789	+13,4%
F13	Sedatives/ Hypnotics	8.359	8.035	8.504	8.667	+1,9%
F14	Cocaine	887	1.112	1.096	1.210	+10,4%
F15	Stimulants	912	1.074	1.139	1.226	+7,6%
F16	Hallucinogenic drugs	741	573	562	518	-7,8%
F17	Tobacco	1.110	944	420	278	-33,8%
F18	Volatile substances	269	197	151	122	-19,2%
F19	Multiple Use/ other subst.	43.529	43.252	41.699	42.479	+1,9%
	Total addictions	341.666	372.598	375.431	388.193	+3,4%
	Total drugs	73.845	75.307	84.147	88.487	+5,2%

Statistisches Bundesamt 2007a

As for acute treatment, alcohol ranks first among the 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 more than half of all drug cases were assigned the diagnosis 'multiple drug use' during hospital treatment. While the overall figure of addiction or respectively drug therapies went up only by about 5% between 2004 and 2005, the number of cannabis cases increased by 10% and 13% respectively. Therapies for stimulants increased again by almost 8%. The largest declines were found for hallucinogens (-8%) and volatile solvents (whose case figures are however very small) (-19%) (Table 14).

The data provided by the German Annual Statistical Report on Addiction Therapy for inpatient facilities (Sonntag, Hellwich & Bauer, 2007b) show considerable differences in average therapy duration but also in their variance. In 2006, the average therapy duration (weeks) for opioids was 10.4 (SD:8.1; n=2,892), for cannabinoids 14.1 (SD:39.5; n=1,215), for sedatives/hypnotics 11.8 (SD: 5.5; n=289) and for cocaine 15.3 (SD:9.8; n=402). The therapy duration for most of the drug addicts in inpatient therapy has been on a marked decline for several years which is to be explained by the more critical approval practice adopted by the funding organs (Figure 8).



**Figure 8.** Duration of inpatient addiction therapy broken down by type of substance abuse, 2006

Sonntag, Hellwich & Bauer, 2007b

The analysis of the case figures on rehabilitation therapy gives a varied picture of the drug patients. After a slight decline between 2003 and 2004, the number of inpatient rehabilitation therapies increased by 6.2% to 8,086 between 2004 and 2005. The figure of outpatient rehabilitation therapies has considerably been rising since 2003 and went up by another 11.9% to 1,141 cases. The shift from inpatient to outpatient therapy has also been confirmed by regional surveys (Hessisches Sozialministerium 2006).

**Table 15.** Rehabilitation therapies for addiction problems

Main diagnosis	In-patient				Out-patient			
	2003	2004	2005	Δ '04/'05	2003	2004	2005	Δ '04/'05
Alcohol	28.782	28.884	27.213	-5,8%	9.477	10.739	10.387	-3,3%
Drugs	7.731	7.613	8.086	+6,2%	931	1.020	1.141	+11,9%
Pharmaceutics	347	372	314	-15,6%	78	83	77	-7,2%
Multiple Use	3.332	3.359	3.097	-7,8%	445	466	520	+11,6%
Total addictions	40.192	40.228	38.710	-3,8%	10.931	12.308	12.125	-1,5%

VDR 2004, 2005, DRV 2007

A similar trend is to be observed in the figures for patients with multiple use of psychotropic substances (which generally may also include use of illicit drugs). However, the changes in percentage of patients in rehabilitation therapy for medication abuse require cautious interpretation due to the small case figures. There are still seven times more drug patients in

inpatient than in outpatient rehabilitation therapy, while the ratio for alcohol is only 1:2.6 (VDR 2004, 2005, DRV 2007) (Table 15).

### Client figures in outpatient treatment

Figures on admissions to outpatient therapy are presented in the German Statistical Report on Addiction Therapy (Deutsche Suchthilfestatistik, DSHS) on the basis of the data provided by 742 facilities. Among the illicit substances, opiates rank first with 50.7% (2005: 52.2%) of the admissions, followed by cannabis with 31.1% (2005: 30.8%), and, at quite some distance, cocaine (7.0%; 2005: 6.8%) and stimulants (6.3%; 2005: 5.7%). All other substances like hallucinogens and volatile solvents play only a minor role (cf. Table 16).

**Table 16.** New admissions to outpatient treatment of drug problems

Main diagnosis	Substance	Total (%)				Drugs (%)		N
		2003	2004	2005	2006	2005	2006	2006
F10	Alcohol	64,5	60,2	55,6	56,5			74.319
F11	Opioids	18,8	20,5	22,5	21,3	52,2	50,7	28.029
F12	Cannabinoids	9,6	11,5	13,3	13,1	30,8	31,1	17.200
F13	Sedatives/ Hypnotics	1,0	1,0	0,9	0,9	2,0	2,2	1.216
F14	Cocaine	2,2	2,3	2,9	3,0	6,8	7,0	3.887
F15	Stimulants	2,4	2,4	2,5	2,7	5,7	6,3	3.497
F16	Hallucinogenic drugs	0,1	0,1	0,1	0,1	0,2	0,2	107
F17	Tobacco	0,7	1,0	1,3	1,4			1.899
F18	Volatile substances	0,0	0,0	0,0	0,0	0,0	0,0	21
F19	Multiple use	0,6	0,9	1,0	1,0	2,3	2,3	1.269
Total addictions		102.757	115.284	128.819	131.464			131.464
Total drugs		38.308	44.509	55.524	55.246	100,0	100,0	
Number of reporting facilities		699	682	703	742			

Sonntag, Bauer & Hellwich 2007a

There were only minor changes to be observed with regard to all addiction diagnoses between 2005 and 2006. The portion of alcohol addicts has slightly gone up for the first time in several years. The portions of all other disorders have only changed little. The marked increase of cannabis figures of the previous years has come to a halt while the portion of opiate users decreased again in comparison with the previous year (Table 16). The portions of clients with the main diagnosis cocaine or stimulants continue to grow albeit at a very slow rate. Neglecting the primary alcohol and tobacco diagnoses, opiate diagnoses continue to represent the largest – albeit declining – individual group among the drug users in outpatient

treatment. Second come cannabis diagnoses followed by cocaine and stimulants – though in terms of figures – at quite some distance.

Basic data on therapy intensity are contained in the German Annual Statistical Report on Addiction Therapy (Sonntag, Bauer & Hellwich, 2007a). The average number of contacts during therapy was highest among opiate clients (22.0; 2005: 20.6) and lowest among cannabis clients (10.6; 2005:10.0). Generally, women have more contacts with therapy facilities than men. Furthermore, clients with addiction problems have more contacts than clients with harmful use.

The average therapy duration corresponds in its distribution to the contact figures. Opiate clients are on average 43.1 (2005: 43.6) weeks in therapy, cannabis clients 24.6 (2005: 23.7) weeks, cocaine clients 30.0 (2005: 30.6) weeks and clients with primary problems with stimulants 28.1 (2005: 30.1) weeks (Sonntag, Bauer & Hellwich, 2007a) (Table 17).

**Table 17.** Number of contacts broken down by main diagnoses

	Opiates			Cannabis			Cocaine			Stimulants		
	M	F	Ges	M	F	Ges	M	F	Ges	M	F	Ges
<b>Total</b>												
<i>MW</i>	21,4	24,0	22,0	10,4	12,2	10,6	15,9	21,4	16,7	12,7	12,8	12,7
<i>SD</i>	44,9	46,9	45,4	16,3	24,0	17,6	19,2	35,5	22,8	13,9	12,7	14,2
<i>N</i>	15.952	4.724	20.752	11.467	1.792	13.310	2.587	444	3.040	1.816	609	2.428
<b>Addiction</b>												
<i>MW</i>	23,1	25,6	23,6	11,5	12,7	11,7	17,2	23,9	18,2	13,3	13,8	13,4
<i>SD</i>	49,2	50,8	49,5	18,5	21,6	18,9	20,8	40,9	25,4	14,7	12,6	14,8
<i>N</i>	11.951	3.606	15.576	6.131	972	7.116	1.720	293	2.018	1.285	394	1.681
<b>Harmful use</b>												
<i>MW</i>	13,0	15,2	13,4	7,9	10,7	8,2	11,5	14,1	11,8	10,2	11,0	10,6
<i>SD</i>	13,1	18,4	15,2	10,1	26,0	13,7	10,8	13,9	11,4	8,5	7,9	8,4
<i>N</i>	270	79	353	2.839	428	3.289	217	33	253	291	125	421

Sonntag, Bauer & Hellwich 2007a

### Regional data

Kalke, Schütze and colleagues (2005) have evaluated the basic documentation of outpatient addiction aid facilities in Schleswig-Holstein for the two age groups 14-17 years and 18-26 years which were already presented in the last REITOX-report. Data on treatment duration broken down by main diagnosis are also already contained in the last REITOX-report (Raschke, Buth & Kalke 2005).

There are no new data from Hessen other than the ones already presented in the last REITOX-report (Hessische Landesstelle für Suchtfragen 2006a).

### **Innovative treatment offers and demonstration projects**

As part of the Internet-based offer “drugcom.de” made by the BZgA, a quitting program for persons with cannabis disorders (“quit the shit“) was conceived which was among others presented in chapter 3.3.2 and in the last REITOX-report (Jordan, Tossmann, Tensil & Jonas 2006).

The bi-national project "realize it" – a counselling program for cannabis users – was also presented in chapter 3.3.2 and in the last REITOX-report.

The demonstration project CANDIS – a modular therapy programme addressing cannabis users – is presented in detail in chapter 13.2.1.

The further development of the addiction support offers made by the city of Hamburg has been accompanied by measures of outcome-oriented steering since 2005 (Schröder & Kettiger 2001; Baumgärtner 2006b).

## **5.4 Pharmacologically assisted therapy**

### **Withdrawal**

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. However, the cases are contained in the statistical hospital reports (cf. table 14).

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 have a relapse within three months (Specka & Scherbaum 2005). It is currently being discussed whether methadone-induced sleeping disorders could trigger the use of benzodiazepine (Elsner, 2006b).

### **Substitution**

Substitution has been the standard therapy of opiate addicts in Germany for many years (Michels, 2005). Its beneficial effects for the psychological and physical health of the treated patients have been proven by numerous studies (Michels et al. 2007). Gerlach & Stöver (2005) have given an excellent overview of the status of substitution therapy in Germany after 20 years of usage as well as of the topics which are currently under discussion. Busch et al. (2007) have recently presented an overview commissioned by the German Institute for Medical Documentation and Information (Deutsches Institut für Medizinische Dokumentation und Information, DIMDI) with a summarizing report on long-term therapy of opiate addicts. After the evaluation of a total of 2,376 studies, the authors arrive at the conclusion that the reduction of mortality is still the empirically most founded evidence for the effectiveness of substitution treatment. The authors have also found evidence for improved retention rates, reduction of drug use and of incidences of HIV-infection, of drug-specific risky behaviour and



criminality. The direct comparison between abstinence-oriented treatment and maintenance treatment is viewed critically by the authors. They rather suggest to optimize the allocation of clients and treatment conditions under consideration of the individual situation of the patients.

Substances eligible for substitution therapy in Germany are methadone and buprenorphine. Codeine and DHC can only be prescribed in exceptional cases. Usage of buprenorphine has more than doubled since 2003, but methadone is still the predominant drug despite declining portions (Die Drogenbeauftragte der Bundesregierung 2007) (Table 18). Verthein and colleagues (2007) have recently investigated if a change from the substitution drug levomethadone to d,1-methadone leads to a change of the emotional condition of the treated patients and their craving for drugs. To this purpose, a stratified, randomized, double-blind 2x2-cross-over-study was carried out on 75 patients who had been in substitution treatment for at least a year. At the beginning of the trial and 4 weeks later medication was changed. The study found no effect which could be connected to the change of medication in either of the investigated parameters (emotional well-being, depression, anxiety, craving for drugs and drug use). Therefore, the authors conclude that levomethadone and d,1-methadon can be equally used in the respective dosages.

In Hesse, the number of patients in substitution treatment is established by a census. According to the Hessian census data, the portion of buprenorphine assisted substitution treatments (9.8%) is still below the national average (Hessisches Sozialministerium 2006). These data show that there are still considerable regional differences in Germany which find their expression mainly in the availability of substitution treatments and supplementary offers of psychosocial counselling.

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

Substitution substance	2002	2003	2004	2005	2006
Methadone	72,1%	70,8%	68,3%	66,2%	64,1%
Levomethadone	16,2%	14,8%	15,0%	15,8%	17,2%
Buprenorphine	9,7%	13,0%	15,6%	17,2%	18,0%
Dihydrocodeine	1,7%	1,2%	0,9%	0,7%	0,6%
Codeine	0,3%	0,2%	0,2%	0,1%	0,1%

Die Drogenbeauftragte der Bundesregierung 2007

Aspects of the increasing portion of older patients in substitution treatment have already been dealt with in the last REITOX-report (Backmund, Schäfer et al. 2006).

According to the register of the Federal Centre for Drugs and Medical Devices, more than 6,325 doctors were licensed to carry out substitution treatment in Germany in spring 2007. However, the actual number of doctors with a respective supplementary qualification is presumably higher, since some Länder have granted this qualification (at least temporarily) to all psychiatric and psychotherapeutic consultants without them being fully registered.

However, in terms of care aspects, the fact that only 2,706 doctors reported substitution treatments to the substitution register in 2006, is of much higher relevance (Die Drogenbeauftragte der Bundesregierung 2007). It is to be presumed that quite a few doctors acquire the supplementary qualification (e.g. through a special supplementary training course offered by clinics), but do not actually work with substitution patients and do not intend to do so either. The number of substituting doctors without special qualification fell from 153 in the year 2003 to 40 in 2006. In the year 2006, about 300 double substitution treatments were discovered by the substitution register. The doctors in charge were informed and the double treatments terminated. Looking at the relation between reported substitution patients and population figures in the individual Länder, the three city states Hamburg, Bremen and (at a considerable distance) Berlin are at the top of the list as expected. The lowest numbers of substituted patients per inhabitant are reported by the three eastern Länder Thuringia, Mecklenburg-Western Pomerania and (at a considerable distance) Brandenburg. With regard to the Land Brandenburg, it is to be presumed that numerous users turn to the metropolis Berlin for substitution treatment.

Generally, access to substitution treatment is particularly difficult in rural regions in the east of Germany. Only 2.7% (N=1.772) of the registered substitution patients and 3.4% of the substituting doctors (N=93) come from the eastern Leander (excluding Berlin) (Die Drogenbeauftragte der Bundesregierung 2007). On 14 February 2007, an expert meeting was held on the legal, medical, psychosocial and financial aspects of substitution treatment. At this meeting, care problems were identified and access to treatment and treatment quality (especially in respect of the interdisciplinary exchange) were rated as needing improvement. The high regulation of substitution treatment, the specificity of the clients' problems and the administrative expense are repeatedly mentioned by experts as important reasons not to offer such treatments. The expert round has developed a series of recommendations for the different decision makers at national and regional level to improve the identified care problems (Stöver et al 2007).

### **Number of substitution treatments**

Within the first four and half years since the introduction of compulsory reporting (01.07.2002 to 31.12.2006) around 253,900 (2005: 206,000) substitution therapies were recorded in the substitution registry. Out of these, about 186,000 (2005: 142,000) have already been terminated. With no identifying codes being used, persons admitted to several practices for substitution treatment may possibly be counted several times. Depending on the period under review, the estimates of the number of clients in substitution therapy vary. 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 carried out by the substitution register 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 01.07 of the calendar year increased considerably from 46,000 at the introduction of the register in 2002 to 64,500

cases in 2006 (2004: 57,700; 2005: 61,000) (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 having been solved, the repeated increase by 5.7% between 2005 and 2006 can rather be considered an actual reflection of rising case figures of patients in substitution treatment.

In the current discussion on substitution treatment which is meanwhile established in the care system, the question as to what goals are pursued by substitution treatment is still controversially debated. The success criteria for substitution treatments diverge with the perspective adopted by the viewer. The reduction of by-consumption of other psychotropic substances can be rated as much a success as the long-term termination of opiate dependence or the successful treatment of other somatic and psychological disorders. The attempt to give an overview of the care situation in Germany is problematic not least because of the different sets of goals and the resulting regional differences.

At the present, substitution is mainly offered by office-based doctors. Psychosocial counselling is provided, if required, by outpatient counselling facilities. The so far insufficiently known long-term effects of substitution treatment are to be investigated by a three-year research study funded by the Federal Ministry for Health (invitation for tenders in spring 2007).

### **Psychosocial care**

Although psychosocial care of substitution patients is explicitly requested, offers are funded only to a limited extent by statutory pension and health insurers. Therefore, the funds provided by the municipalities and especially by the Länder play an important role in this care sector.

In this connection, it needs to be taken into account that there are nationwide differences in the organisation and funding of psychosocial care offers and consequently in the interpretation by the Länder and municipalities.

### **Cannabis use in the treatment of HCV in drug users**

In a recently published prospective study conducted by Sylvestre et al. (2006), HCV-infected drug users were treated with an interferon-ribavirin combination therapy as part of a methadone maintenance program. The study found indications that those patients who maintained cannabis use during hepatitis treatment had a higher likelihood of responding to HCV-treatment. Based on the results of the study, Fischer and colleagues (2006) recommended to promote and support the possibility of an increased therapy response of HCV-infected individuals and especially of opiate addicts (who are expected to be affected most by increased HCV morbidity and mortality in the next 20 years) also by the pragmatic use of cannabis in cases where it seems appropriate. At the same time, the authors point to the limitations of the study conducted by Sylvestre and the general difficulties connected with the use of illicit substances.

## 5.5 Quality assurance

### Treatment guidelines

Various professional societies and experts have worked together over 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 under consideration of the quality of the empirical basis for the individual statements. Meanwhile, guidelines have been published for the acute treatment of opioid-related disorders (Reymann et al. 2003), for the post-acute treatment of opiate addicts (Havemann-Reinecke et al. 2004), for patients with cannabis-related disorders (Bonnet et al. 2004) as well as behavioural disorders caused by cocaine, amphetamines, ecstasy and hallucinogens (Thomasius & Gouzoulis-Mayfrank 2004). In the year 2006, the Working Group of the Scientific Medical Professional Societies (Arbeitsgemeinschaft der medizinisch-wissenschaftlichen Fachgesellschaften, AWMF) published the elaborated AWMF-guidelines on the diagnostics and therapy of substance-related disorders under the title "Evidence based addiction medicine – treatment guide for substance-related disorders" (Evidenzbasierte Suchtmedizin – Behandlungsleitlinie substanzbezogene Störungen). The evidence-based guidelines are to make treatment of drug addicts more transparent and de-emotionalize the scientific controversies over the most efficient therapy approaches (Schmidt et al. 2006).

At a consensus conference held in 2006, the guidelines of the German Society for Addiction Medicine (Deutschen Gesellschaft für Suchtmedizin, DGS e.V.) for the therapy of chronic hepatitis C in injecting substance users were passed. Contrary to recent practice, these guidelines recommend the treatment of opioid-addicts affected by hepatitis C, in particular when they are in substitution treatment (Backmund, Hinrichsen et al. 2006). In the guidelines of the National Institutes of Health (NIH) in the USA, which were also followed by the Europeans and Germany, drug dependence was so far regarded a contra-indication for the therapy of hepatitis C.

### ASTO

The project ASTO which deals with quality assurance in outpatient substitution therapy of opiate addicts was already presented in the last Reitox-report (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 still under discussion.

### **Quality management**

Using the example of a drug and addiction counselling facility with about 1,500 clients, an individual case study showed that in the course of 5 years, quality management measures brought about an improvement of quality from level three to four according to EFQM (Nabitz, Schaefer & Walburg 2006).

Quality management at Land level also comprises regular data collections to assess problem status and documentation of interventions. In a series of Länder this is meanwhile done systematically and regularly.

### **New core data set for documentation of addiction support**

After several years of cooperation, a new core data set for documentation of addiction support was passed by the German Centre for Addiction Issues, the DBDD (German REITOX Focal Point), the umbrella organizations of addiction support in Germany and the Länder in summer 2006. Based on a broad consensus procedure, this new German core data set contributes to uniform documentation standards which existed alongside one another at national level. A few new items were included in the core data set, others were modified or taken out. All in all, the new core data set succeeded in merging partly overlapping documentation standards and combine them into one single uniform standard (DHS 2006a).

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

In addition to the above mentioned core data set, a catamnestic 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 a 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. The research networks formed in the course of the projects are currently carrying out phase II which serves to implement the results of the first research phase in the field of care practice. Central topic of the second funding phase is “allocation”. A large part of the projects is aimed at tobacco and alcohol consumption. Selected projects dealing with the use of illicit substances were already presented in chapter 1.3.3 “Demonstration programs and research projects with central government funding“.

### **Access to young cannabis users**

The expert report “Access to young cannabis users“ funded by the Federal Ministry for Health, was presented in December 2006 (Landschaftsverband Westfalen-Lippe 2007). The goal of the study was to gain an overview of the current status of help offers made for young cannabis users and identify factors which could facilitate the access to this group of users from the perspective of drug and addiction support. The study conducted by the Organization for Research and Counselling in Health and Social Care (Gesellschaft für Forschung und Beratung im Gesundheits- und Sozialbereich mbH, FOGS) identified projects as successful if they

- were based on a close cooperation with judicial authorities, hospitals, medical practices, schools and youth welfare facilities
- were accompanied by successful PR-work (e.g. image of drug counselling as a service for citizens),
- managed to combine individual projects in one comprehensive offer

### **Heroin trial**

Following the preparatory works of the years 2000 and 2001, the “Demonstration project on diamorphine-assisted therapy of opiate addicts“ started in 2003. The final results of the project were published in 2006 and presented (Naber & Haasen 2006) in the last REITOX-report.

Despite the positive results of the “heroin trial“, it is still uncertain whether treatment with diamorphine will be continued in Germany. In 2006, an application for the admission of diamorphine as a prescription drug was filed with the Federal Institute for Pharmaceutics and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte, BfArM). Although the BfArM has meanwhile given its technical endorsement, the drug cannot yet be authorized because the Narcotics Act, which - in its present wording - prohibits the prescription of diamorphine, needs to be changed accordingly. So far, the Federal Government could not table a corresponding bill in the German Bundestag. For the time being, the patients who took part in the demonstration project have received diamorphine since January 2007 according to a special regulation of §3.2 of the Narcotics Act based on the public interest.

### **Other studies and results**

At the beginning of 2007, the Federal Ministry for Health presented an “Overview of the results of current research with regard to the effects of cannabis use, 1996-2006“. The study reviewed 246 publications from internationally recognized scientific data banks. The study found that especially the early onset of cannabis use increases the risk of developing later drug affinity, triggering a psychosis, rapidly developing cannabis dependence and long-term cognitive impairments (Petersen & Thomasius 2007).

Other studies in particular in the area of cannabis-related disorders were already treated in chapter 1.3.3 (beginning page 8) and chapter 3.3.2 (beginning page 40).

## 6 Health correlates and consequences

### 6.1 Overview

Drug use has an influence on morbidity and mortality of the users. Data on drug-related fatalities are collected by two countrywide systems: The Narcotics Case Register (Falldatei Rauschgift, FDR) kept by the Federal Office of Criminal Investigation (Bundeskriminalamt, BKA) and the general mortality Register of the Federal Statistics Office (Statistisches Bundesamt, StBA). There are hardly any data available on the morbidity of untreated drug addicts which could be used for epidemiological purposes. That is why, alternatively, the descriptions of the health condition of the clients at the beginning of therapy are often used as an approximation. However, as these often represent a positive selection of the total of drug users, health aspects probably tend to get underestimated.

#### The Narcotics case register

Drug-related fatalities are always recorded by the Land offices of criminal investigation in the individual Länder. The BKA has access to the database and is responsible for data quality management and data collection. Data collection modalities and the bases for the assessment of drug-related fatalities differ between the individual Länder. The portion of autopsied drug-related fatalities as a measurement for the quality of the assignment of drug-related fatalities varies (in some cases considerably) between the Länder. 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. Reports on autopsies and toxicological reports are generally written by different institutions. Since especially toxicological reports are often made available with considerable delay, they are not sufficiently taken into account in the classification of drug-related fatalities.

In order to facilitate the recording of drug-related fatalities and reduce mistakes, the following categories for drug-related fatalities were defined by the BKA (Bundeskriminalamt 1999):

- drug-related fatalities caused by 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 mortality register

In Germany, a death certificate is written out for every case of death, complete with personal data and information on the cause of death. The death certificate is passed on to the health office and then to the Land Statistics Office. Aggregation and evaluation at national level is done by the Federal Statistics Office. Often, this data source doesn't take account of the results of delayed toxicological reports in the classification of the drug-related deaths either.

From the general mortality register selected cases which correspond to the definition of "direct causality" are reported to the EMCDDA. Thus it is possible to identify as sensitive as possible all deaths, which occur closely after consumption of the opiates cocaine, amphetamines (derivates), hallucinogenic substances and cannabinoids - thus especially deadly poisoning. The selection is based on the specifications of EMCDDA (the so-called ICD 10-code-selection B). As a basis for the assignment to the group of drug-related deaths, the assumed disorder (ICD10-Codes F11-F19) or the assumed cause of death (ICD10-Codes X, T, and Y) are used. Long-term follow-up diseases, non-poisoning accidents and suicides are not included in this definition, but as a result of incorrect death certificates and coding errors individual cases of this type are included. Especially in connection with the up to 2006 valid coding rules of the WHO the ICD-10-code selection containing F1x.x- codes ("dependency" and "harmful use", other mental and behavioral disorders through psychotropic substances) may have shown problems of specification. The replacement of the priority of the coding for "abuse" or "harmful use" by future amended coding rules for intoxications might reduce this problem indirectly. On the other hand the data from the Federal Criminal Office show in addition explicitly police-known long-term follow-up diseases, suicides and accidents. For the comparison with the general mortality register an isolation of the deaths registered as intoxications would be desirable. However, on the level of the aggregated data base of the Federal Criminal Office these cases can only be estimated due to not completely disjunct categories (suicides).

Comparisons with other European countries should only be made on the basis of the general mortality register, as this register largely follows common standards. Due to the broader definition of the term '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 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 fatalities. A certain number of relevant cases is not recognized, not reported or wrongly assigned – by either register. However, a long-term comparison of the two registers shows very similar developments and trends which can be seen as a kind of cross-validation of the two estimation procedures. An empirical analysis of the question as to whether the two systems record the same cases and in how far target groups overlap remains to be undertaken.



## **Infectious diseases**

According to the Infectious Diseases Control Law, 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). These data 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 Diseases Control Law (Infektionsschutzgesetz, IfSG) all laboratories in Germany 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 individuals and ways of transmission. In addition, the AIDS-Case-Register anonymously collects epidemiological data on diagnosed AIDS-cases which are voluntarily reported by 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 Diseases Control Law in 2001, data on possible routes of transmission of hepatitis B and C are also collected. This is done by the health authorities which investigate the case persons themselves or by the laboratories and general practitioners who pass on the information.

The up-dated data are published yearly by the Robert-Koch-Institute in Berlin in the "Yearbook - Infection epidemiology of notifiable infectious diseases" (Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten) (Robert Koch-Institut 2007b).

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

### **6.2.1 Drug-related deaths**

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

The reliability of information on drug-related deaths strongly depends on the question as to whether autopsies and toxicological examinations have been used to validate the initial classification as drug-related death or not (cf. 6.1). On average, the autopsy rate of all drug-related deaths in the reporting year was 67% (2005: 64%), however, a few individual Länder diverged considerably from this value (Bundeskriminalamt 2007a). During the last years, autopsy rates tended to decrease which experts attribute to rising costs or respectively shrinking budgets.

The overall figure of drug-related fatalities fell by 2.3% to 1,296 cases from 2005 to 2006 (2004 vs. 2005: -4.3%) reaching the lowest level since 1989. With 837 cases, overdose of heroin (including use of heroin together with other drugs) remains the most common cause of death (65%; 2005: 63%). This portion of cases has showed a slight upward trend over the last years. The portion of drug-related deaths in which substitution substances alone or in combination with other drugs were detected, has again declined considerably (2006: 16%; 2005: 25%); in 2002, the portion was still 40%. In 2006, the BKA statistics showed the detected substitution substances broken down for the first time by methadone/polamidone and buprenorphine. According to the BKA data, all death cases which were exclusively

attributable to a substitution substance, happened in connection with methadone/polamidone (N=60). Among the 152 death cases, in which substitution drugs in combination with other drugs were found, there were also two cases in which buprenorphine was detected.

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

**Table 19.** Drug-related deaths 2006

Drug-related deaths	Percentage					Number
	2002	2003	2004	2005	2006	2006
1. Overdose of:						
Heroin	36	31	34	40	38	493
Heroin + other drugs	19	18	22	23	27	344
Cocaine	3	2	2	2	2	23
Cocaine + other drugs	6	6	10	9	9	114
Amphetamines	1	0	0	1	<1	3
Amphetamines + other drugs	2	1	2	2	3	34
Ecstasy	1	0	0	0	<1	4
Ecstasy + other drugs	1	1	1	0	1	7
Medicaments / substitution substances (since 2006: substitution substances)	10	4	3	6	5	60
- of them: Methadone/Polamidone						60
- of them: Subutex (Buprenorphine)						--
Substitution substances + other drugs (from 2006)					12	152
- of them: Methadon/Polamidon						132
- of them: Subutex (Buprenorphin)						2
Narcotic drugs + alcohol + substitution substances (does no more exist in 2006)	30	24	22	19		
Other narcotic drugs / unknown	4	9	10	10	8	109
2. Suicide	9	8	7	8	6	80
3. Long-term damage	11	14	12	12	11	140
4. Accident / other	2	3	2	2	13	173
5. Total (N)	1.513	1.477	1.385	1.326	1.296	

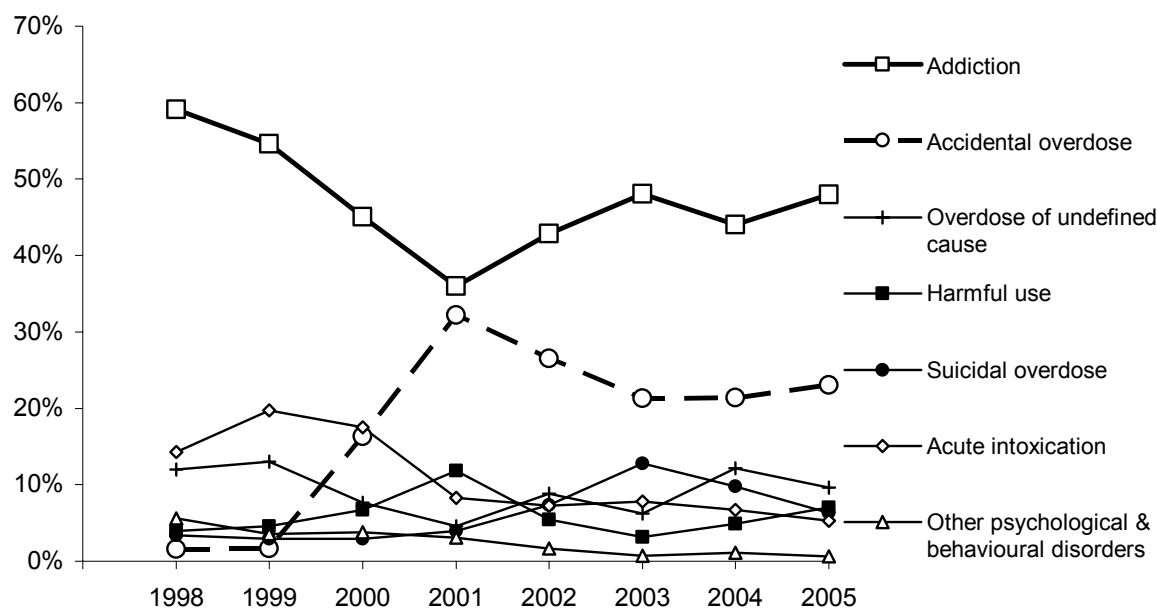
Bundeskriminalamt 2007a

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.

While the overall number of drug-related deaths has been continually declining over the last years, there has been an increasing portion of drug addicts who died because of by-use of heroin or other drugs. The number of death-cases in which substitution substances played a role, is still low which can be attributed to the good qualification of consultants and the reliability of quality assurance measures taken.

### Data from the general mortality register

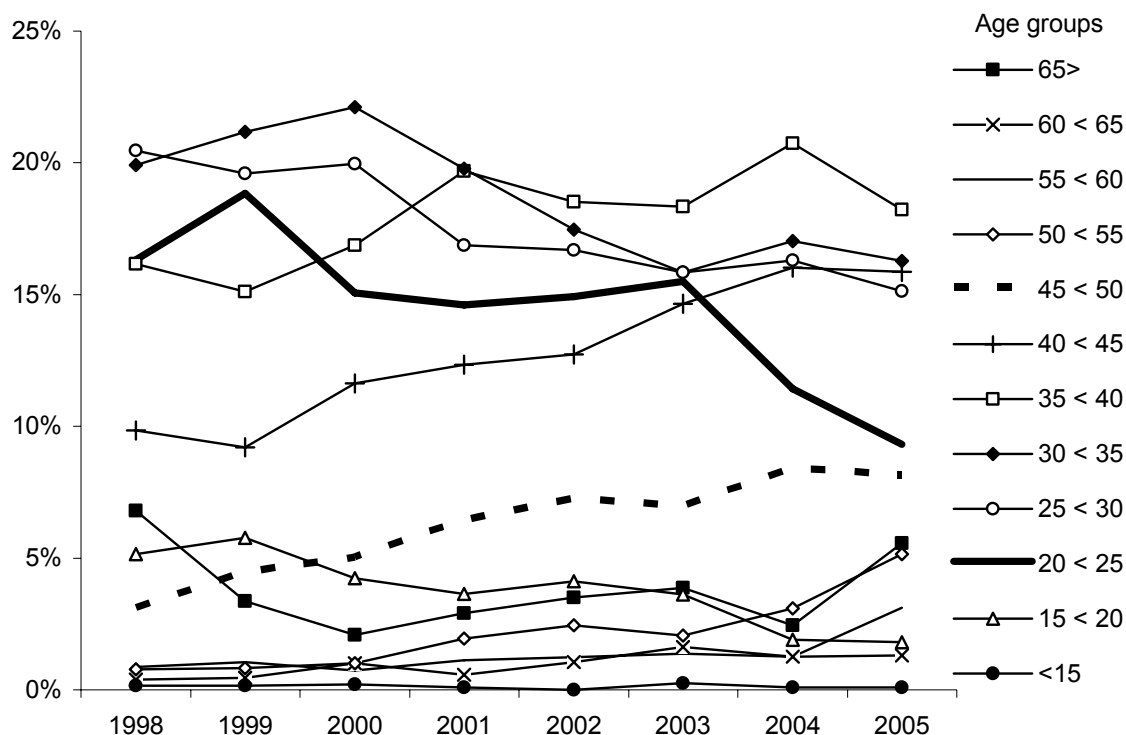
The most recent figures on drug-related deaths available from the general mortality register are from the year 2005. For the reporting year, a total of 231 females (2004: 212) and 992 males (2004: 892) who died in connection with illicit drugs were registered. With that, the number of drug-related deaths registered by the general mortality register in 2005 is only about 8% (2004: around 20%) below the figures of the BKA register. In more than half of the death cases, the underlying disease – i.e. addiction or harmful use – was coded as cause of death (55%; 2004: 49%) in the collection year 2005. Compared to 1999, there are considerable shifts to the advantage of the category “accidental overdose” and to the disadvantage of “acute intoxication” which are mainly attributable to changes in data coding and the connected data entry instructions (Figure 9).



Statistisches Bundesamt, special calculations

**Figure 9.** Coded causes of drug-related deaths in the general mortality register (1998-2005)

Looking at the age distribution of the drug-related deaths recorded over the last eight years, it can be seen that the portion of older drug users has been on the rise for a few years while the portions of the age group 20 to 25 years has been continually decreasing. These changes - together with the also increasing average age of opiate users - can be interpreted as another indication of a decrease in the younger group of heroin users (Figure 10).



**Figure 10.** Drug-related deaths broken down by age group, 1998-2005

The substances which were the cause of death are presented in Table 20. They were either coded with F1x.x as “Psychological and behavioural disorders caused by psychotropic substances” or with X/Y as “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.

Still in planning is a study which is to verify tallies between the general mortality register and police records (Heinemann & Simon, 2005).

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

**Table 20.** Substances involved in drug-related deaths recorded by the general mortality register

	Year								2005		Total
	1998	1999	2000	2001	2002	2003	2004				
	%	%	%	%	%	%	%	%	abs.	%	
Opiates	49,1	46,7	45,5	47,0	43,5	37,3	37,0	36,6	448	43,1	
Cocaine	4,8	1,6	0,9	1,5	1,6	1,4	0,9	1,5	18	1,8	
Other stimulants	0,8	0,3	0,2	0,2	0,8	0,8	0,4	0,2	3	0,5	
Cannabis	0,7	0,6	0,3	0,4	0,4	0,3	0,3	0,5	6	0,4	
Hallucinogenic drugs	1,6	1,3	1,3	1,2	0,1	0,3	0,3	0,1	1	0,8	
Other / multiple substances	43,0	49,5	51,6	49,6	53,7	59,9	61,2	61,1	747	53,4	
Total									1.223		

Statistisches Bundesamt, special calculations

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

There is no survey available on the mortality of the overall population of drug users nor have there been any recent regional cohort studies. 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 Statistical Report for 2006, therapy in outpatient counselling facilities ended in 1.3% (2005: 1.4%) of the clients with death of the opiate patients (opiate users accounted for 86% of the deceased patients recorded in the DSHS). In order to eliminate the effect of treatment duration, which has increased on average by more than 9 weeks since 1996, a treatment duration of 12 months was mathematically assumed. After a slight increase in 2005 the resulting mortality per year fell in 2006 to the level of previous years (since 2000).

However, when looking at these data, it needs to be taken into account that the counselling facilities are not always informed about the death of a client so that the actual mortality – in particular of treatment dropouts - is presumably higher than the value given here. Proceeding on the assumption that knowledge of the facilities about clients' deaths has not changed systematically over the years, it is nevertheless possible to interpret trends in the way presented (Table 21).

Mortality of patients in substitution therapy was measured at 1.1% by the COBRA-study in the course of one year (Wittchen & Apelt 2006). Hereby, the mortality risk among methadone and buprenorphine patients was about the same. A markedly higher mortality risk was found for substituted clients who terminated treatment for disciplinary reasons (especially for by-use) (2.4% vs. 0.75% in the "retained" patients).

**Table 21.** Mortality of outpatient opiate clients - trend

	1996	1998	2000	2001	2002	2003	2004	2005	2006
Proportion of deaths amongst treatment outtake	1,7%	1,2%	1,1%	1,1%	1,2%	1,2%	1,2%	1,4%	1,3%
Duration of treatment (weeks)	33,9	32,1	34,9	37,6	40,1	40,3	42,5	43,6	43,1
Mortality per year	2,6%	1,9%	1,6%	1,5%	1,6%	1,5%	1,5%	1,7%	1,6%

Sonntag, Bauer & Hellwich 2007a and own calculations

The increase in offers of substitution therapy was paralleled by a decrease in the number of drug-related deaths in Germany at national and regional level. An analysis carried out by the Institute for Forensic Medicine in Munich on the drug-related deaths which occurred in the years 2002 and 2003 (n=272) in the region of Munich also found a lower risk of overdose in substitution treatment with buprenorphine in comparison with methadone (Soyka, Penning & Wittchen, 2006). Split out for the first time in 2006, the presentation of the involvement of different substitution substances in the drug-related deaths recorded by the Federal Criminal Office, confirms the so far negligible role played by buprenorphine in substitution substance-related deaths. Contrary to methadone which was involved as a single drug in 60 deaths and in combination with other substances in another 132 deaths, buprenorphine was only recorded in connection with two deaths in combination with other substances.

### 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 was by far the most common cause of death, though with the involvement of additional licit and illicit substances in many cases. No further indications of an increase of drug-related deaths in treatment as feared in the previous year were found. Striking is the increase in the portion of older users in the drug-related deaths which has been observed for several years. The portion of the 20-25 year-olds by contrast, has considerably decreased over the last years. However, a slight increase in the deaths was found for this age group from 2005 to 2006.

In comparison with the police register, the general mortality register records even less data on other substances, apart from opioids, which played a role in drug-related deaths. The reason for this could be that the results of differentiated toxicological examinations arrive too late to be coded and entered into the general mortality register, while the police register allows for these pieces of information to be added at a later point of time.

Two sources provide information on drug-related deaths which are generally not taken much notice of. In Germany, there have been at least 24 deaths caused by inhalants since 1996 (Elsner, 2006a). However, the author states in his assessment that due to the lack of valid national data on serious incidents or deaths caused by the use of inhalants there is no important indicator available to measure the actual dangerousness of the use of inhalants.

Referring to the consequences of the abuse of inhalants in England (in particular in the middle of the 90ies), the author judges this situation as precarious since there are numerous indications of deaths or serious incidents in connection with inhalants which are however not systematically recorded.

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

### **6.3 Infectious diseases in drug users**

#### **6.3.1 HIV**

Drug users are still one of the largest at risk groups for HIV-infections. According to the Robert Koch-Institute, 6.2% (2005: 5.6%) of the persons with an initial HIV-diagnosis were out of the group of injecting substance users in 2006 (Robert Koch-Institut 2007a). Up to the year 2000, this value was still at 10.1% (2000: 170 out of 1,688). Considering only the cases for which information on the existence of an infection risk was available, the portion of injecting drug users increases even to 7.2%. The absolute figure of newly infected persons with injecting drug use rose by 15% compared to the previous year (161 cases; 2005: 140 cases) ranging clearly above the comparative values of the years 2001 (N=115) and 2002 (N=108). Between 2003 and 2005, 131 (2004) to 140 (2003 und 2005) individuals out of this at risk group were recorded among the initial HIV-diagnoses. With 42 cases, the number of female injecting drug users was about 30% higher than in the previous year (N=32), while the increase in males was lower amounting to around 10% (114 cases in 2006 vs. 103 cases in 2005).

Data on the way of transmission were available for 85% of the newly diagnosed HIV-infections (2005: 84%) in the year 2006. 61% (2005: 59%) out of these are men who engage in sex with men (MSM). For years, this group has been the largest and it is still growing. For the first time since 2001, individuals who acquired their HIV-infection through heterosexual contacts and do not come from high prevalence countries represent with 17% the second largest affected group in 2006 relegating persons who come from countries with a high HIV-prevalence in the general population to the third place in new HIV-diagnoses (14%). It is to be assumed that the major part of the latter group of persons acquired the infection already in their country of origin. 16% were affected by infections acquired through heterosexual contacts (Robert Koch-Institut 2007a).

In 2006, HIV-incidence was at 3.2 in 100,000 (2005: 3.0). However, there are considerable regional differences. The highest incidence of initial HIV-diagnoses among the Länder was found in the city states Berlin and Hamburg with values above 10/100.000 cases. Even higher values were reported from Cologne (17.1) and Munich (13.2) while the figures reported from Frankfurt on the Main (8.9) and Dortmund were somewhat below the comparative values of the city states.

According to the BKA, a positive HIV-status was found in 2.9% of the drug-related deaths (38 out of 1,296). However, a few Länder do not have any information on HIV-infections. In Berlin for example, the results of HIV-examinations are not reported to the police by the forensic

institutes. The value available for the city of Berlin results from records (e.g. interviews of relatives or family doctors) which are not useable for statistical purposes. Data from outpatient counselling services show a prevalence of 4.2% (N=897 tested clients with known results; Sonntag, Bauer & Hellwich 2007a). However, because of the small number of reported cases and their assumed selectivity, these data are not really meaningful.

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 who were originally included in the COBRA-study, 14% were HIV-positive, almost all of them additionally had an HCV-infection (Gözl, 2006). The infection status is primarily based on self-reports of the patients. Since the sample design of the study has not been taken into account yet in this quota, the figure cannot be interpreted as an HIV-prevalence of substituted patients. Among those patients who had useable follow-up data (N=1,615) at the end of the review period, the infection rate was only 7%. This is presumably attributable to the fact that especially severely ill patients with a particularly high infection status are expectedly to be found among the drop-outs of the study. An interesting result yielded by the COBRA-study was that the overall quota of HIV/HCV-infected individuals among the N=1,613 patients whose data were taken account of in the follow-up, has gone up (Wittchen 2006).

The HIV-quota in clients of the drug consumption rooms in Frankfurt was 6.5% in 2005. The figure is based on self-reports of the clients (Simmedinger & Vogt, 2006). For the year 2006 however, data on the HIV-status were only available from very few users of the consumption rooms (9%). This data basis is not sufficient to get a concrete idea of the prevalence of HIV-infections in the consumption rooms in Frankfurt (Simmedinger & Vogt, 2007).

All in all, it can be stated that injecting drug use was in much less than 10% of the newly infected individuals registered by the Robert-Koch-Institute the probable source of infection. Among other analysed groups, the portion of HIV-positive injecting drug users tended to be even lower still. A literature review commissioned by the EMCDDA arrives among others at the conclusion that the most effective measure to prevent HIV-infections among opiate users is to introduce substitution programs all over the country (Backmund & Reimer 2007). Therefore, the relatively well developed substitution therapy offer in Germany surely contributes to the relatively low HIV-infection rate among injecting drug users.

### **6.3.2 Viral hepatitis**

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

There are basic data available for viral hepatitis in the general population. According to the Robert Koch-Institute (2006), 5-8% of the German population in the age between 18 and 79 years have a history of hepatitis B infection, 0.4-0.8% are virus carriers. The federal health survey conducted in 1998, found a seroprevalence of HBc-antibodies as an indicator for an infection history in 7.7% in the old and in 4.3% in the new Länder (Thierfelder et al. 2001).



In the year 2006, 1,179 (2005: 1,236) cases of acute hepatitis B were reported. Incidence in the general population was 1.4 in 100,000 inhabitants (2005: 1.5). Regarding possible routes of transmission, sexual exposition was most commonly stated (400 cases, multiple entries possible). Injecting drug use was only reported in 38 cases (2005: 81) (3.8%). Out of these, 30 were male IDUs. With that, the portion of injecting drug users registered by the RKI has fallen by 72% since 2004 (138 cases) (Robert Koch-Institut, 2007b).

In the same year, 7,509 (2005: 8,363) initial hepatitis C diagnoses were reported to the RKI. Incidence was at 9.1/100,000 inhabitants (2004: 10.1), however, there are considerable differences between the various Länder (Pole: Saarland: 3.7; Berlin: 26.5). Currently, it is not possible to differentiate between acute and chronic hepatitis C infections among the cases reported. Since 2003, cases with an earlier laboratory HCV-test result, are removed from the register. In all other cases, i.e. when there is no documentation of the existence of an earlier infection, the case is entered in the statistics (first laboratory diagnosis). Injecting drug use was reported as a route of transmission in 35% of the cases with exposition data (1,992 out of 5,686 cases). In the group of the 20- to 29-year-old men affected by an HCV-infection and with data available on their exposition risk, the portion of injecting drug users is markedly higher amounting to 72% (661 cases) (Robert Koch-Institut, 2007b). The fact that men are clearly overrepresented in the injecting drug users explains the considerably higher incidence of first hepatitis C diagnoses in men in comparison with women.

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

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

44% of the users of consumption rooms in Frankfurt on the Main stated to have a hepatic disease. Almost half of clients were infected with hepatitis C, another 6% with hepatitis B and C. More women than men reported to have a hepatitis B and/or C infection (Simmedinger & Vogt, 2007).

The high hepatitis C-rate which has been observed among drug users of the Frankfurt open drug scene since 2002, remained unchanged in 2006 (61%; 2004: 63%). As for hepatitis A and B by contrast, the infection rate has been clearly declining since 2003 (5% and respectively 11%; 2004: 7% and respectively 15%). With 13% in 2006, the HIV-infection quota has remained practically unchanged since 2004. Just as is the case with hepatitis, women are more strongly affected by HIV than men (Müller et al. 2007).

Out of 2,694 patients from medical substitution practices who were surveyed within the framework of the COBRA-study, 69% tested HCV-positive. In the course of 12 months, an HCV-infection was found in 76 out of 512 originally HVC-negative patients (Backmund, Schäfer et al. 2006). However, the resulting incidence of 15% per year could have been excessively raised by delays in diagnostics. The overall infection quota of those study

patients with follow-up results fell from 67% to 50%; differences between the substitution substances (methadone, buprenorphine) were not found (Wittchen, 2006).

A study conducted in the year 2002 on more than 1,000 delinquents consecutively committed to a German penal institution for male prisoners in the age between 16 and 24 years, found a HCV-prevalence of 8.6%. The prisoners were tested for HCV-antibodies or HCV-RNA respectively. As a central result, the study found a significant difference in the prevalence of prisoners born in Germany (6%) and immigrants born in the USSR (31%). The authors therefore suggested giving special attention to the country of origin as an additional risk factor in future (Meyer et al. 2006).

First results of a project carried out on the state of knowledge, risk-management and self-assessment in injecting drug users of the open drug scene in Frankfurt on the Main provide indications of a high information demand on the part of the drug users in respect of hepatitis infections calling for the development of preventive measures to create and promote appropriate problem awareness of the risks connected to hepatitis. Of the 462 participants of the study, 282 tested hepatitis C positive. Out of these, 69 (25%) were not aware of their hepatitis C infection (Happel 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. Since drug users are strongly affected by new infections, they play a central role in the spread of these infections.

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

Since the end of the year 2002, infections of HIV, syphilis, gonorrhea, chlamydiae and trichomonas have been 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 have reported data on sexually transmissible diseases diagnosed by them. In addition, the persons concerned have been 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 6% of the drug-related deaths. A study conducted among the clients of the outpatient drug department of the university Hamburg for adolescents and young adults found apart from substance dependence also psychological disorders in more than 20% of the patients (Sack et al. 2005).

Based on the results of a prospective longitudinal analysis carried out among 1,395 adolescents in the age group 14-17 years over a period of 10 years, Wittchen et al. (2007) point to the role played by other psychological disorders (especially depressive and bipolar disorders: less consistently: anxiety disorders) and the extent of individual comorbidity for the incidence of cannabis use and its development into abusive or harmful use. The authors express their hope for a better understanding of the complex interactions between psychological disorders and cannabis use, abuse and dependence which is to lead to better etiological models and interventions strategies in the long-term.

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

Summarizing the current state of knowledge, it can be assumed that problematic cannabis use increases the risk of developmental disorders and is a threat to health. Set against this background, promotion of prevention and early prevention research assumes a particular role (Thomasius & Petersen 2006).

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).

In a recently published study Thomasius et al. (2006) investigated mood, cognition and central serotonin transporter and found indications of permanent functional damages caused by the neurotoxicity of MDMA – however, alternative explications for these findings cannot completely be ruled out due to the design of the study.

The most recent review on neurotoxic effects induced by MDMA found that changes of the serotonergic transmission in MDMA-users do possibly 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).

The study “*Mixed Up?*” conducted by the university of Cologne deals with the question as to whether the use of ecstasy has neurotoxic effects in human beings. A long-term study is to survey 250 test persons who used 5 consumption units of amphetamines or ecstasy maximum at the beginning of the study.

Information on the connection between drug use and accidents can be found in chapter 8.3.6 (beginning from page 107).



## **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 framework 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. Nor are there any data on the treatment of secondary diseases 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 addiction therapy. Basic data hereto are available from the German Annual Statistical Report on Addiction Therapy. In a few *Länder*, 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 have been 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**

Drugs are brought along to drug consumption rooms by the drug users themselves. Infection prophylaxis forms systematically part of the 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 drug use. Based on §10a of the Narcotics Act, which defines minimum requirements for the operation of these facilities, the governments of the *Länder* may pass regulations specifying the authorization criteria to be fulfilled for setting up and running drug consumption rooms. In 6 out of 16 *Länder*, corresponding regulations have been passed. In 2004, there were 26 drug consumption rooms operating in Germany with 214 consumption places and 175 staff (Simon 2005).

The evaluation of the data recorded on the consumption rooms showed that the four consumption rooms in Frankfurt were used by 4,544 persons in 2006 (Simmedinger & Vogt 2007). This corresponds to an increase of 7% on the previous year (N=4.253). In 2006, 164,164 (2005: 156,834) drug use activities were recorded. Regular clients 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 medically treated in the last 30 days because of their drug use. The majority of the clients used heroin (78%; 2005: 74%), 43% (2005: 44%) crack and 9% (2005: 13%) benzodiazepine. The recorded first time users were on average 33 years old.

The consumption room *Step* (Step 2006) in Hannover reported 35,109 drug use activities which took place on its premises in 2005 (2004: 34.450). The slight increase of drug use activities is almost exclusively attributable to the increase in females making use of the facility (2005: 6,320; 2004: 5,844). In Hannover data are merely collected on the injecting use of heroin (90%), cocaine (6%) and the combined use of heroin and cocaine (4%). Striking about the result is the marked increase in the by-use of substances in 2005 (1,405) compared to the previous year (1.087).

### **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. Apart from a relatively small penal institution for females, all programs have meanwhile been stopped. The reason may lie, *inter alia*, in the lacking acceptance of this approach among prison staff who experienced their work as contradictory in enforcing and accepting regulations.

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 plummeted 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. 2006)

#### **Syringe provision programmes in low-threshold work**

Distribution and exchange of syringes in low-threshold work is explicitly permitted by the Narcotics Act and is also practiced in many locations. There are approximately 200 distribution machines for syringes available countrywide (cf. also the REITOX report 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.

Data from the selected facilities in Schleswig-Holstein were already presented in the last REITOX report (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.

With funding by the Federal Ministry for Health, the Aktionsbündnis Hepatitis und Drogengebrauch (Action Alliance Hepatitis and Drug Use) published the manual "Hepatitis C and drug use" ("Hepatitis C und Drogengebrauch") providing up-to-date information on prevention and therapy of hepatitis C among this group of people complete with material on counselling, care and legal situation (Aktionsbündnis Hepatitis und Drogengebrauch 2006). An expert conference on hepatitis C and drug use – the forth of its type – is planned for mid-September 2007. Under the title "New models of successful HCV-work", the conference will deal among others with hepatitis C among substance abusing migrants, HCV-therapy and substitution, integrative HCV-therapy and HCV-work in inpatient long-term therapy ([www.hepatitiscfachtag.org](http://www.hepatitiscfachtag.org)).

The Federal Ministry for Education and Research provides funding for a research and application network called "Hep-Net" which is to improve early recognition of hepatitis B and C by means of more efficient diagnostics and training of medical staff and to enhance treatment quality. The cooperation between Hep-Net and other European initiatives launched in this area ([www.virgil-net.org](http://www.virgil-net.org)) were already reported about last year (Meyer & Deterding, 2005).

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

While in past years IDUs have mostly been excluded from standard HCV-therapy with interferon and ribavirin in Germany, more recent results show the feasibility of such treatment approaches also in this group of people. The framework conditions for a successful HCV-therapy are quite good in particular with patients undergoing substitution therapy. At a consensus conference held in 2006, the German Society for Addiction Medicine (Deutschen Gesellschaft für Suchtmedizin, DGS e.V.) passed guidelines for the therapy of chronic hepatitis C in injecting substance users. Contrary to recent practice, these guidelines recommend the treatment of opioid-addicts affected by hepatitis C in particular when they are undergoing substitution treatment (Backmund, Hinrichsen et al. 2006).

In view of the considerable costs resulting from chronic hepatitis C infection – 25% of the people affected 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 framework conditions, therapies can indeed yield positive results (Gözl, 2006).

Treatment of hepatitis C carried out within the framework of the COBRA-study was successful for 56% of the patients in substitution therapy. This figure corresponds to the outcome quotas of general population studies (Backmund, Schäfer et al., 2006).

Even better results are achieved by specialized treatment facilities as has been reported by Backmund and Meyer (2006) on the basis of the data collected at a Munich outpatient substitution treatment department. A study conducted by Schäfer (2006) arrives at the conclusion that antiviral therapy in drug addicts is feasible even in the case of concomitance of psychiatric disorders and drug addiction.

#### **7.4 Interventions related to psychiatric comorbidity**

Drug users who, in addition to their drug problems, suffer from psychological disorders which require treatment, need help which takes both fields into account. These individuals depend in a special way on the general diagnostic competences of addiction therapists also in the field of psychological disorders, and, at the same time, require cooperation between clinical psychology/psychiatry and addiction treatment which is appropriate to tackle both types of problems. The issue being stated and described at many places does not mean that the practical consequences are always easy to implement in the field of every day practice given the differences in work areas, responsibilities and financing modalities.

In practice, there are two ways of dealing 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).

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

**Low-threshold initiatives.** Low-threshold initiatives, syringe exchange programs (cf. 7.3) and in particular consumption rooms (cf. 7.2) contribute to curbing negative health effects of drug use.

**Children of addictive parents.** Every third opiate addict in outpatient therapy lives together with a child (Strobl et al., 2006); out of these two thirds are single parents (Sonntag, Bauer & Hellwig). 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 (DHS, 2006b). A few therapy facilities offer therapy places for mother and child. In general however, specific offers for this target group are scanty. This is a problem area in which difficult decisions are to be taken weighing between the caretaking obligations of the state on the one hand and the wish and right of the mother to raise her child on the other. Drug-addicted mothers undergoing substitution



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treatment need, according to expert opinion, considerable support to be able to cope with the complex demands of the role of a mother (Bartsch & Fröhlingendorf 2007)

**Traffic accidents.** Information on the topic “drug use and traffic accidents” can be found in chapter 8.3.6 (beginning page 107).



## 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 illustrate 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 (Bundeskriminalamt, BKA) differentiates in its statistics on drug-related crimes between punishable acts in terms of violations of the Narcotics Act (Betäubungsmittelgesetz, BtMG) 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. Insight into the situation can be gained from data provided by the national statistics on addiction aid and the regional monitoring systems used for example in Frankfurt and Hamburg.

A considerable portion of the opiate clients of outpatient facilities have not graduated from school yet at the beginning of their therapy. More than half of the clients with primary heroin problems (53,9%) and almost 40% of the clients with primary cocaine problems have no job at the beginning of therapy. In general, these conditions remain practically unchanged until the end of therapy. One in six clients has not graduated from school yet (18.0%). While as for cannabis clients, this may be partly due to the relatively young age, the rest are mostly early school leavers (Sonntag, Bauer & Hellwich, 2007a) (Table 22). The portion of the clients of the Frankfurt drug consumption rooms who live under precarious housing conditions (homeless, in shelters or other provisional accommodation), has declined compared to the previous years amounting to 11.5% (Simmedinger & Vogt, 2007). The majority of the crack users of the Frankfurt open drug scene are in a bad social situation with almost every second being homeless and around 80% jobless. Striking about the group of excessive crack users (>8 consumption units daily) is the portion of women amounting to 60% (Müller et al. 2007).

**Table 22.** Social situation of persons in outpatient treatment, broken down by main drug

Main-diagnosis	Substance	No school examination	Unemployed		Homeless
			Beginning	End	
F10	Alcohol	5,3%	26,8%	26,6%	0,8%
F11	Opioids	17,7%	53,9%	53,2%	4,7%
F12	Cannabinoids	24,3%	28,2%	27,3%	1,0%
F13	Sedatives/ Hypnotics	6,8%	27,3%	27,1%	0,5%
F14	Cocaine	17,1%	39,1%	38,9%	2,3%
F15	Stimulants	17,1%	32,6%	30,2%	1,2%
F16	Hallucinogenics	21,7%	45,9%	35,7%	1,1%
F17	Tobacco	9,7%	16,2%	9,6%	0,2%
F18	Volatile substances	33,3%	14,3%	27,3%	
F19	Multiple use	15,0%	48,9%	39,7%	2,6%

Sonntag, Bauer & Hellwich 2007a

Lampert, Richter & Klocke (2006) have dealt with unequal opportunities in Germany, exploring 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 depending on the type of school chosen. This assumption is supported by the results found by Health Interview and Examination Survey for Children and Adolescents (KiGGS) (Lampert & Thamm 2007). According to the survey, boys and girls attending a *Hauptschule* (lower level secondary school), smoke 4.6 or respectively 3.4 times more than their counterparts at a *Gymnasium* (grammar school); boys and girls going to a *Real-* (middle-level secondary school) – or a *Gesamtschule* (comprehensive school) 1.7 to 3.1 times more. The social status however only shows in the smoking behaviour of girls: girls from the lowest or middle social strata smoke 1.8 to 1.5 times more often than those coming from the highest social status group. The results show furthermore that adolescents with a migration background smoke comparatively little and that tobacco consumption is more common in the new Federal Länder than in old ones. The social status showed no influence on alcohol consumption, neither in boys nor in girls.

Bad 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.

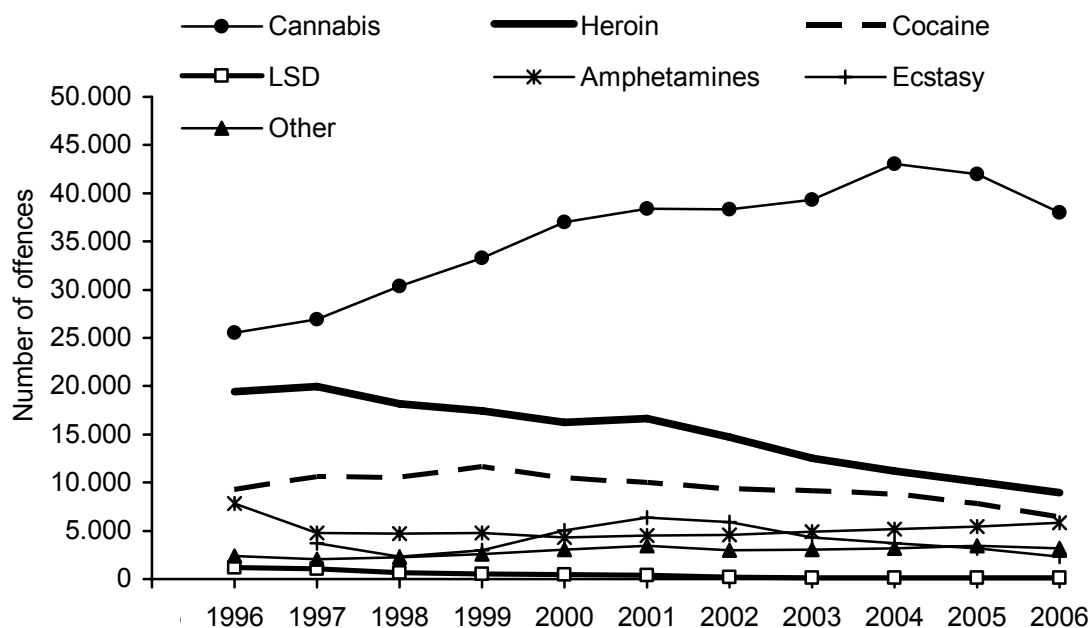
### 8.3 Drug-related crime

#### 8.3.1 Economic compulsive crimes

Direct economic compulsive crimes are taken as referring to all criminal offences which are committed in order to obtain narcotic drugs, substitute or alternative drugs. In 2006, 2,234 cases (2005: 2,210; 2004: 2,568) of direct economic compulsive criminality were registered. After having declined in previous years, the figure remained almost stable in the reporting year showing only a minimal increase of 1.1%. More than two thirds (68%) of these crimes were related to forgery of prescriptions or theft of prescription forms (Bundeskriminalamt 2007b).

#### 8.3.2 Trafficking crimes<sup>7</sup>

These crimes are related to offences committed in connection with commercial/professional trafficking of narcotics or smuggling of larger quantities. Just as consumption-related crimes, all trafficking crimes which were recorded by the police are taken account of in this report irrespectively of the outcome of later legal proceedings.



**Figure 11.** Development of trafficking crimes

Bundeskriminalamt 2007b

Both in terms of portion and absolute figures, cannabis plays the most important role in offences related to trafficking/smuggling (38,029 offences, 59% of all offences; 2005: 41,974, 58%), followed by heroin (8,927, 14%; 2005: 10,051, 14%) and cocaine (6,462, 10%; 2005: 7,800, 11%) (Figure 11). While the number and portion of trafficking crimes in connection

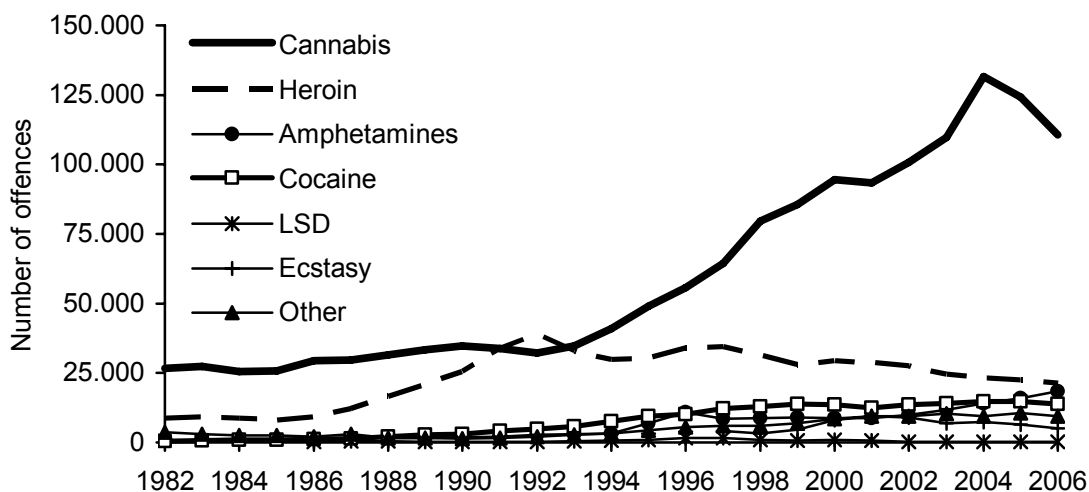
<sup>7</sup> Trafficking crimes are taken as referring to offences related to illegal trafficking and smuggling of narcotics according to § 29 BtMG as well as offences related to the illegal import of narcotics according to § 30 paragraph 1 no. 4 BtMG.

with heroin and cocaine have been declining over the last years, the absolute figures of cannabis-related offences have started to decrease only recently after a continual increase until 2004. Since the year 2000, the number of offences involving amphetamine has been continually climbing. In 2006, it has reached a portion of 9% (5,858 offences; 2005: 5,462, 8%) of all trafficking offences ranging just under the comparative value for cocaine (Bundeskriminalamt 2007b).

### 8.3.3 Consumption-related offences

This section is about drug offences which are - due to the frame conditions (quantity, persons involved) - classified by police as "general offences" and are therefore taken as referring to consumption-related offences.

In this category of offences cannabis plays a predominant role accounting for about 62% of all cases. Heroin (12.0%), amphetamines (10.3%) and cocaine (7.7%) make together 30% of the recorded offences, the rest are spread over LSD and other drugs. The repeated marked decrease in the overall figure (2006: 178,841; 2005: 194,444; -8,0%) is mainly attributable to the still declining cannabis figures (2006: 110,638; 2005: 124,170; -10,9%). But there were also less offences registered in connection with heroin (2006: 21,422; 2005: 22,592; -5.2%), ecstasy (2006: 4,996; 2005: 6,328; -21.0%), cocaine (2006: 13,755; 2005: 14,728; -6.6%) and other drugs (2006: 9,480; 2005: 10,574; -10.3%). Only the number of amphetamine-related offences followed the trend of the previous year and continued to increase also in 2006 (2006: 18,329; 2005: 15,845; +15.7%) (Figure 12).



**Figure 12.** Development of consumption-related offences

Bundeskriminalamt 2007b

### 8.3.4 Drug users who have come to the notice of police for the first time

Alongside data on drug-related offences, the Federal Office of Criminal Investigation also publishes statistics on persons who have come to the notice 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 “having come to the notice of police for the first time“ and the measured incidence overestimates the actual value.

In 2006, the total figure of users of hard drugs who came to the notice of police for the first time, amounted to 19,319 cases falling only slightly below the comparative value of the previous year (2005: 19,900 cases; -2,9%). Most marked was the decline for ecstasy (2006: 2,319; 2005: 3,145; -26.3%). The figures for the users of heroin (2006: 4,489; 2005: 4,637; -3.2%) and cocaine (2006: 4,225; 2005: 4,489; -5,9%) recorded for the first time, have also declined in comparison with the previous year. The recorded cases involving use of amphetamines by contrast, have gone up again (2006: 9,835; 2005: 9,339; +5.3%). For the first time, the users of amphetamines who have come to the attention of police meanwhile account for 45.5% of the users recorded for the first time by police (heroin: 20.8%; cocaine: 19.5%, ecstasy: 10.7; crack: 1.6% and other including LSD: 1.8%). Cannabis-related offences are not taken account of in these statistics as only so-called “hard” drugs are recorded.

When analyzing the trends, it needs to be taken into account that the number of those coming to police notice 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.

### **8.3.5 Convictions under the Narcotics Act and custody sentences**

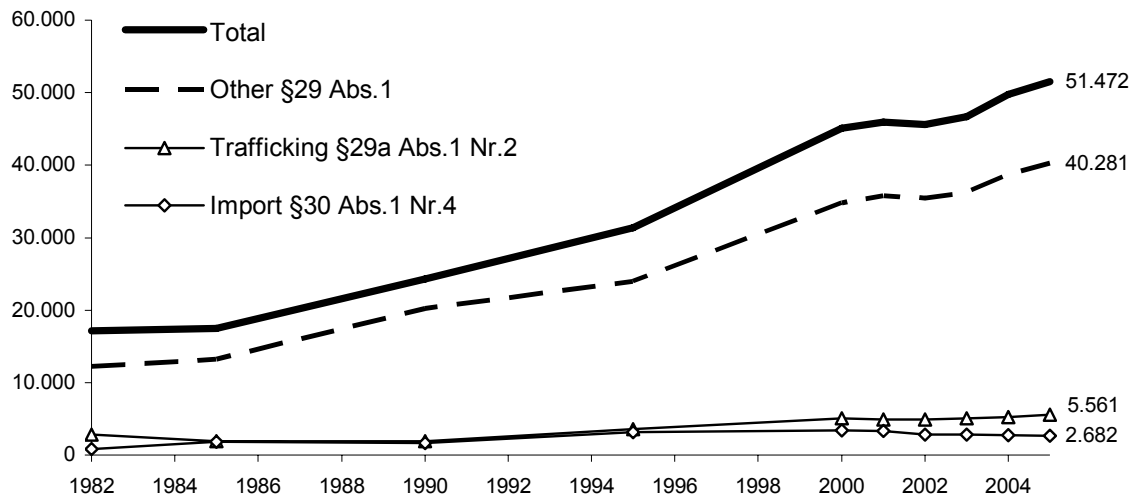
According to the criminal prosecution statistics of the Federal Statistics Office (series 10, part 3), 51,472 persons were convicted for offences committed against the Narcotics Act in 2005 (there are no data available yet for 2006). 41,057 convictions were rendered under the general criminal law relating to adult offenders and 10,415 relating to juvenile offenders. Regarding the convictions rendered in respect of the general criminal law, 17,049 custody sentences – out of these 10,587 were suspended on probation – and 24,008 fines were imposed (Statistisches Bundesamt 2007c).

The overall figure of convictions went slightly up by 3.5% compared to the previous year (2004: 49,739), the rise being mainly related to the increase in adult offenders (slight decreases in adolescents<sup>8</sup> and young adults<sup>9</sup>) and unspecific consumption-related offences (§29 paragraph 1 BtMG)). The number of trafficking crimes also slightly increased compared to the previous year (2004: 5,279; +5, 3%) albeit ranging at low level (Figure 13).

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<sup>8</sup> Adolescents means individuals who are 14 through 17 years of age at the time of the offence (§ 1 JGG). They are adjudicated under the criminal law relating to adolescent offenders.

<sup>9</sup> Young adults means persons who are aged 18 through 20 years at the time of the offence (§ 1 JGG). They can either be adjudicated according to the general criminal law or the criminal law relating to young offenders.



**Figure 13.** Convictions for offences committed against the Narcotics Act

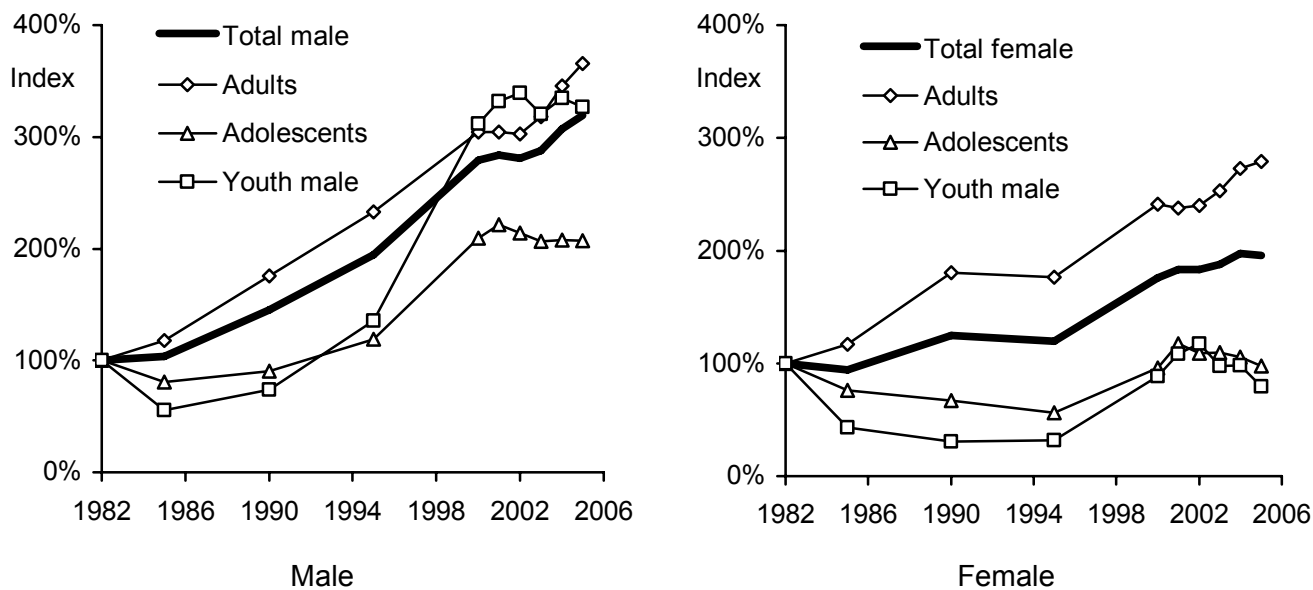
Statistisches Bundesamt 2007c

In 2005, violations of the Narcotics Act accounted for 6.6% of all convictions rendered. The portion of men was about double as high as the one of women (7.3% vs. 3.6%). Referred to juveniles, the share of convictions imposed for violations of the Narcotics Act was 6.6% while young adults aged between 18 and 20 years had a considerable higher share with 11.6% (2004: 10,6%). As a result, drug-related offences committed by this age group have an above-average share in the overall crime rate. 60.4% of those convicted for offences committed against the Narcotics Act, have already been sentenced before (men: 61.5%, women: 50.4%); in 60% of the cases, the crimes were committed by repeat offenders who had been sentenced at least three times before (Statistisches Bundesamt 2007).

In 2004, about nine times more men than women were convicted for violations of the Narcotics 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.

As in the previous year, about nine times more men than women were convicted for violations of the Narcotics Act (men: 46,452; women: 5,020). The development trends of the last 20 years also show marked differences. Using the figures of 1982 as an index (=100%), the number of convictions of males about tripled until 2005, while the convictions of females about doubled. Significant differences were found between adolescents and young adults. Over the whole period of time, there were relatively small changes in women of this age group, while the number of convictions of male adolescents more than tripled and the one of adolescents about doubled. Only from the year 2000 onwards, neither group showed any further increases (Figure 14).





**Figure 14.** Trends in the convictions under the Narcotics Act

Statistisches Bundesamt 2007c

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

### 8.3.6 Drug use and road accidents

In its statistical report on road accidents, the Federal Statistics Office also has also been providing information since 2003 on the question as to whether the operator of a motor vehicle involved in an accident was under the influence of other intoxicating substances than alcohol. Since 1998, driving under the influence of drugs has been legally classified as a regulatory offence. This also applies to cases where unfitness to drive could not be proven.

According to a supreme court decision, a THC-content of below 1.0 ng/ml in the blood does not constitute an acute impairment of the fitness to drive (Az. BvR 2652/03 dd. 21.12.2004). Based on a metaanalysis by Berghaus and Krüger (1998), Grotenhermen et al. (2005) stated their view on cannabis in road traffic setting the limit value for the THC concentration in the blood at 3.5–5 ng/mL.

In the year 2006, 327,984 accidents occurred on German roads with 403,886 operators of vehicles being involved (Table 23). Out of these, 19,405 (4.8%) were under the influence of alcohol and 1,320 (0.3%) under the influence of “other intoxicating substances“ (Statistisches Bundesamt 2007d). Since alcohol is easier to detect than other intoxicating substances, it is to be assumed that drug-related cases are underrepresented in the road traffic statistics.

The number of accidents with injury to persons caused by “other intoxicating substances“ more than tripled between 1997 (580) and 2005 (1,343) (Die Drogenbeauftragte der Bundesregierung 2007). Hereby it needs however to be taken into account that public and political interest in this issue has developed parallel to the empirical basis through the use of technical equipment to measure drug use and training of police officers.

**Table 23.** Drug use and road accidents

	Total accidents	Drivers involved	Drivers under the influence of alcohol	Drivers under the influence of other narcotic drugs
2003	354.534	443.293	22.674	1.341
2004	339.310	417.923	21.096	1.457
2005	336.619	413.942	20.663	1.343
2006	327.984	403.886	19.405	1.320

Statistisches Bundesamt 2007d

#### 8.4 Drug use in prison

In 2006, the total number of those convicted for violations of the Narcotics Act was at 9,579 (2005: 9.277). This corresponds to 14.8% of the overall prison population. The portion of male adults remained relatively stable at 15.7%; females had a share of 18.8%. In sentenced juvenile populations, portions were at 6.8% and 11.4% respectively. The number of those detained for drug-related offences increased by about 3% from 2005 to 2006. Their portion has been continually increasing – though at a minimal rate – since 2003. As in the previous year, females only accounted for about 6% of this group. The portion of drug-related offences in female detainees has stabilized ranging at 3% to 5% below the comparative value for men since 2003. The portion of drug-related offences in juvenile sentences has been on a continual decline in men since 2003 falling to 6.8% in 2006. For young women too, the figure found for 2006 (11.4%) lies below the comparative value of 2003, but it is slightly higher than in 2005 (Table 24). 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. However, there has been no new data on drug seizures available from the Länder.

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

		Prisoners and detainees			Imprisonment of adults		Juvenile court sentences		Preventive detention
		Total	Males	Females	Males	Females	Males	Females	
2006	Detainees N	64.512	61.250	3.262	54.170	2.972	6.705	290	375
	BtMG N	9.579	8.986	593	8.530	560	456	33	0
	BtMG %	14,8	14,7	18,2	15,7	18,8	6,8	11,4	0,0
2005	BtMG %	14,6	14,4	19,2	15,4	20,1	7,3	10,2	0,0
2004	BtMG %	14,5	14,3	18,1	15,3	18,6	7,6	13,8	0,0
2003	BtMG %	14,4	14,2	17,9	15,2	18,2	8,0	15,0	0,3

Note: "BtMG N": Number of persons detained for offences against the BtMG, "BtMG %": share of persons detained for offences against the BtMG

Statistisches Bundesamt 2006a

After having carried out a prospective survey on 100 young drug dependent prison inmates (average age 20.3 years) taking into account the parameters body weight, hepatitis marker, biochemical parameters and the results of short interviews, Meyer et al. (2007) arrive at the conclusion that a custody sentence of young male drug addicts leads to improvements of subjective and objective health parameters measurable in several dimensions. However, the authors point to the fact that the idea of drug-free prisons is a “*mere illusion*“, since more than half of the interviewees stated to smoke cannabis at least occasionally and some also reported injecting use of heroin.

Data on drug use in prisons are contained in standard table 12.

### **8.5 Social costs**

An overall estimate of the financial implications of drug use for the German society is still not available. Direct costs borne by individual government agencies as well as health insurance and social security funds are presented in chapter 11 insofar as differentiated and assignable data were available.



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

### **9.1 Overview**

Similar to the efforts undertaken 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 support facilities. They provide opportunities to work at sheltered work places, to catch up at school and obtain missing school leaving qualifications. 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 outside the drug scene. Further details can be found in the description of the addiction support system in Germany in chapter 4.3. Responsible for carrying out these measures are the Länder. However, there are no standard national statistics available on these services.

In addition, general 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.

### **9.2 Social reintegration**

#### **9.2.1 General changes to 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.

In the wake of the restructuring of the national employment services ("Hartz IV") and the labour market reform, initial tendencies are emerging. 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.

The "Law on the further development of the basic social assistance for people in search of work" effective as of August 2006, has laid down comprehensive regulations for the status of persons in inpatient facilities with regard to their right to basic social government care.

In connection with the health reform which entered into effect on 1 April 2007, not only parent-child-cures and geriatric rehabilitation but also medical rehabilitation for addicted individuals were included in the catalogue of standard insurance benefits. The countrywide expansion of outpatient rehabilitation for substance abusers led to an increase of the number of outpatient addiction support facilities authorized for rehabilitation treatment from 35 (2004) to 80 until the end of the year 2006. This expansion forms the basis for setting up regional treatment networks which can assure outpatient and inpatient care at regional level and at

the interface between care levels. Within the framework of a 18-month demonstration project carried out by the former Landesversicherungsanstalt Sachsen (LVA) (Land Insurance Agency Saxony), the formerly required social report is dispensed with in the application procedure for rehabilitation treatment. This is to considerably shorten the application procedure for persons suffering from addiction.

### **9.2.2 Housing**

There is a series of offers available for drug addicts to tide them over homelessness. Statistical material on this is contained in the Länder short reports for the reference year 2004 (Simon, 2005). In 45 low threshold facilities 632 emergency beds are provided specifically for this target group. 277 facilities offer assisted living 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). There are no new data available on this field.

### **9.2.3 Education and training**

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.

Many facilities complement therapy by offering promotional programs for drug addicts to support educational attainment and vocational training or to provide orientation for their professional life. Drug addicts are also given the opportunity to catch up on missing school leaving certificates within the framework 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 dependent 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 however that social and professional integration is a crucial indicator for sustained abstinence.

Countrywide, there were 51 work projects or qualification measures with 711 places specifically available for drug addicts in 2004. A total of 1,787 places in 124 facilities were offered to persons with substance-related problems (Simon, 2005). There has been no new data available on this field.

Within the framework of the content-related and structural further development of existing rehabilitation offers, the targeted promotion of employment opportunities of jobless addicts in

rehabilitation therapy by the Federal German Pension Insurance (Deutsche Rentenversicherung Bund)<sup>10</sup> at national level has become an integral part of the therapy for persons with addiction-related illnesses. It comprises for example indicative groups with regard to unemployment and trainings for job application. From the viewpoint of the social security administration, the 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 – are taken into account to prepare clients for work life.

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

Further activities were described in chapters 9.2.1 and 9.2.2.

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

People suffering from addiction receive the same social assistance and welfare benefits from the government, employment agency and social insurance funds as other needy groups. However, separate statistics are not available.

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

### **9.3.1 Assistance to drug users in prisons**

#### **Syringe exchange programs**

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

#### **Therapy in prison**

Substitution therapy carried out in prison is subject to very different regional regulations. In general, the continuation of a substitution therapy which started before the beginning of a prison sentence is guaranteed in all Länder. 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. The possibility of undergoing substitution therapy in prison is only offered region-wide in a few Länder. Programmes are generally limited to 3-6 months (Pollähne & Stöver, 2005).

A survey commissioned by the working group "German Statistics on Addiction Treatment" (Arbeitsgruppe Suchthilfestatistik, AG DSHS) carried out by the DBDD at the Ministries of

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<sup>10</sup> BfA (Bundesversicherungsanstalt) (National Pension Insurance for Salaried Employees) and LVAs (Landesversicherungsanstalten) (Land Pension Insurances for Wage Earners) were merged to form the "Deutsche Rentenversicherung Bund" (Federal German Pension Insurance) as of 1.10.2005

Justice of the Länder in the year 2005, gives a broad overview of the current situation. In six out of 10 Länder 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 Länder, internal and external consultants are used.

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

### **Therapy instead of punishment**

The Narcotics Act (Betäubungsmittelgesetz, 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). With regard to the prosecution of consumption-related offences involving cannabis, there has recently been a move to greater convergence of the definitions of limit values for “small quantities“ in the Länder. Meanwhile, 11 Länder have introduced a limit value of 6g (as upper/lower limit). Further details can be found in chapter 1.2.2 (page 7).

Furthermore, it is possible to defer prison sentences up to 2 years to provide drug addicts with a chance to undergo therapy (‘therapy instead of punishment’, §35 BtMG).

### **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 response of authorities to problematic behaviour in connection with drugs.

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

There is a series of other possibilities available 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 without starting criminal proceedings right away (cf. chapter 3.3.2, from page 40 onwards).



## 10 Drug market

### 10.1 Overview

#### Availability and Supply

The availability of illicit substances as perceived by the population or the users can be assessed by means of statements made in surveys on how 'easy' or 'very easy' they are to obtain during a certain period of time. In Germany, these data are regularly collected by the Epidemiological Survey on Addiction (ESA) (not in 2006), the Drug Affinity Study carried out by the BZgA and by several school surveys. The perceived availability reflects the situation on local and regional drug markets but also personal opinions. Referred to the suppliers, the market situation is presented in terms of number of seizures, quantity and quality of seized drugs.

#### Seizures

In Germany, in particular at the borders with neighbouring countries and at airports, large quantities of narcotic drugs are regularly seized. For some 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 understand the chemical structure and effects of new designer drugs, considerable efforts in form of chemical analyses need to be undertaken. Such analyses are for example carried out by the Forensic Science Institute of the Federal Office of Criminal Investigation (Kriminaltechnisches Institut des BKA).

#### Prices

Based on the drugs seized and delivered by the Land Offices of Criminal Investigation, the Federal Office of Criminal Investigation has been calculating the average prices for different drugs since 1975 differentiating between small quantities of several grams and quantities of 1 kilogram and over. The price for small quantities corresponds rather to the price paid by the user at street level, while the price for large quantities reflects the wholesale price 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. Furthermore, things are rendered even more difficult by the fact that prices only get known in connection with a few incidents, so that random effects may substantially alter these figures.

## 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 the analysis of purity and content of active substances. For better comparability the contents of psychotropic ingredients are related to the chemical form of the base, irrespectively of the form in which the illicit 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. As the distribution of values diverges considerably from the normal distribution, median values are used instead of arithmetic means.

The presentations are based on the Statistical Evaluation Program "Narcotic Drugs" (Zerrell et al., 2006) and on the Annual Short Report on "Narcotic Drugs" (Bundeskriminalamt 2007 a). The active ingredients of the seized substances are quantified and broken down into three levels: street trafficking (< 1g), retail (>1g to <1,000g) and wholesale (>= 1000g). Results are presented in a discriminating manner, insofar as considerable differences in purity levels at wholesale and street trafficking level were found. The reason for this is that active substances are increasingly diluted from the wholesale to the street trafficking level for profit maximization. Apart from 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 different perspectives of the drug market: the perspective adopted by the buyer and by the supplier.

### 10.2.1 Availability

The perceived availability of drugs is contained in the data presented in the REITOX-report of the year 2005. There have been no new epidemiological studies published on availability.

### 10.2.2 Production, distribution sources and supply

For the German heroin market, South-West-Asia and there mainly Afghanistan are the main regions of origin. The transport routes to Western Europe lead mainly over Turkey and variations of the Balkan route. Cocaine is, for a large part, smuggled in from the Netherlands and directly from South America (Columbia, often via Brazil, Peru, Venezuela and Argentina and also in transit via the Caribbean islands). Amphetamine comes mainly from the Netherlands and, to a much smaller extent, also from Poland. Crystalline methamphetamine ("Crystal") is smuggled from the Czech Republic into Germany, especially into Bavaria, Saxony and also Thuringia.

The Netherlands is an important country of origin and departure for marijuana seized in Germany. Furthermore, the cultivation of cannabis in indoor plantations has established itself in Germany almost countrywide (Patzak et al. 2007a, b). Cannabis resin often 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 large indoor-plantations close to the border with the Netherlands (Patzak et al. 2007a, b). A possible reason for this development could be the intensified criminal prosecution in the Netherlands.

### 10.3 Seizures of narcotic drugs

Table 25 gives an overview of the quantities of illicit drugs seized in 2005 and 2006 in Germany.

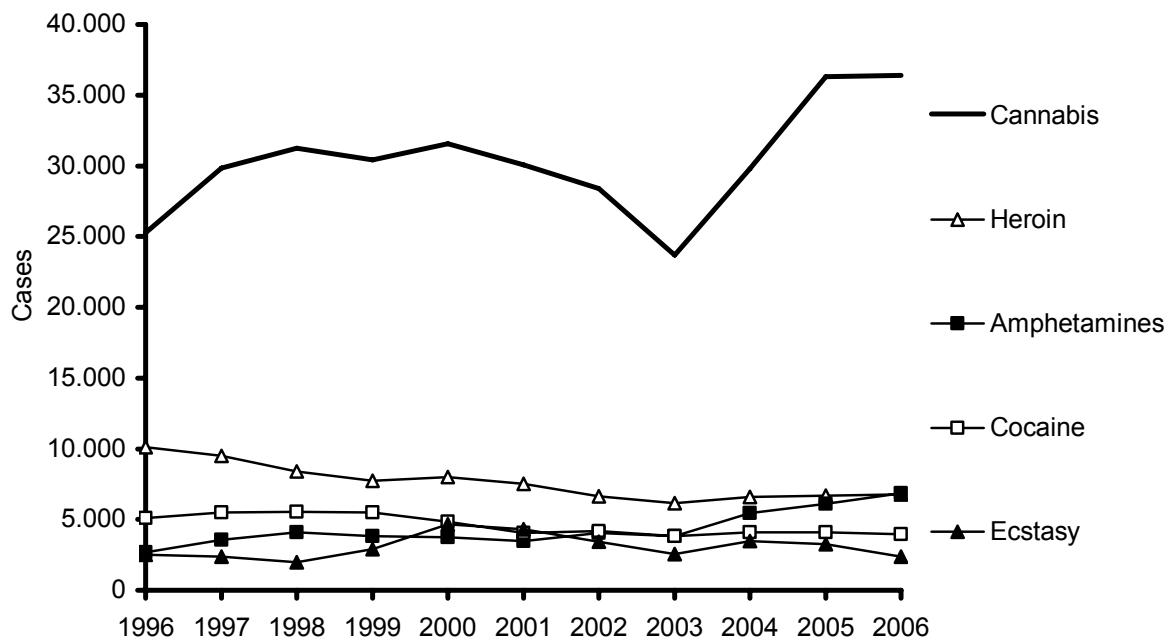
**Table 25.** Quantities of illicit drugs seized in Germany in 2005 and 2006

Substance	2005	2006	Change
Heroin	786,6 kg	878,9 kg	+11,7%
Cocaine	1.078,9 kg	1.716,6 kg	+59,1%
Crack	5,6 kg	3,9 kg	-30,4%
Amphetamines	668,8 kg	723,2 kg	+8,1%
Ecstasy	1.588.908 KE	1.082.820 KE	-31,9%
Hashish	3.637,5 kg	5.606,1 kg	+54,1%
Marijuana	3.013,7 kg	2.954,1 kg	-2,0%
LSD	16.558 Tr.	12.488 Tr.	-24,6%
Khat	14.321,6 kg	15.985,1 kg	+11,6%
Mushrooms	85,5 kg	99,7 kg	+16,6%

Bundeskriminalamt 2007a

While the seized quantities of mushrooms, heroin, khat and amphetamine increased, those of ecstasy and crack considerably declined compared to the previous year. There were practically no changes for marijuana. The seized quantities of cocaine and hashish however, showed a considerable increase.

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 remained stable in 2006 compared to the previous year. Increases worth mentioning were only found for crack (+19.2%) and amphetamine (+11.7%), while figures declined for ecstasy (-26%) and LSD (-10%). In the long-term, the chart shows an increase in the number of seizures of cannabis and amphetamine while figures for heroin tended to decrease. The number of seizures of ecstasy has been on a continual decline for three years while the figure for cocaine has shown hardly any variations during the same period of time. With a total of 56,551 seizures in the year 2006, the overall case figure has practically remained unchanged (2005: 56,711 cases) (Bundeskriminalamt 2007a) (Figure 15).



**Figure 15.** Number of seizures of narcotic drugs in the Federal Republic of Germany from 1996 to 2006

Bundeskriminalamt 2007a

Looking at the quantities seized and the number of seizures, there has been a marked increase in amphetamines since the year 2000. In respect of the year 2003, this also applies to mushrooms and khat which have not been recorded before. Their case figure however, remained practically unchanged between 2005 and 2006. The number of seizures and the quantities of ecstasy seized declined. As for heroin and cocaine, case figures showed hardly any change despite the increase in the seized quantities and tended to decline compared to the year 2000. Case figures for cannabis didn't show any changes either in the last year (Table 26).

**Table 26.** Changes in number and quantity of illicit drugs seized since 2000

	2006 vs.	Heroin	Cocaine	Amphetamines	Ecstasy	Cannabis	Mushrooms	Khat
Number	2005	+1%	-3%	+12%	-26%	0%	-1%	-2%
Quantity	2005	+12%	+59%	+8%	-32%	+29%	+225%	+139%
Number	2000	-16%	-18%	+84%	-49%	+15%	--	--
Quantity	2000	+10%	+88%	+167%	-34%	-41%	--	--

Note: Increases >10% are marked by frames, decreases >10% by shadows  
Bundeskriminalamt 2007a

In 2006, around 190,000 cannabis plants - the largest number since 1999 - were seized. The figure surpasses the 94,000 plants seized in 2005 - the up to then the largest amount ever seized in Germany. However, the seizures of 2006 comprise about 75,000 plants which stem from the sowing of 5 kg hemp seeds which were probably grown as an agricultural crop.

Compared to 2005, the figure has more than doubled and the number of cases has risen by 8.3% (Table 27).

**Table 27.** Seizures of cannabis plants

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Quantity in pieces	81.097	168.833	25.277	68.698	29.352	35.863	68.133	93.936	190.241
Cases	1.661	1.254	1.048	785	887	750	1.008	1.035	1.121

Bundeskriminalamt 2007a

For the first time, the cases detected in connection with methamphetamine free base (also referred to as “crystal”) were shown separately (as a subset of the data on amphetamine) in the presentation of seizures. According to that, 10.7kg “crystal“ were detected in the 416 seizure cases recorded in 2006.

No single laboratory<sup>11</sup> producing gamma hydroxybutyrate (GHB, “liquid ecstasy“) was found in 2006. As a result, there is still no indication of a marked increase of this substance in Germany. With the raid on 6 laboratories which produced ATS (amphetamine-type-stimulants), there were no changes to report either with regard to this category in comparison to the previous year.

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

## 10.4 Price and purity of drugs

### 10.4.1 Price

There were only minor changes in drug prices from 2005 to 2006. As in the previous year, the wholesale price of marijuana increased again and the street price rose by almost 14% in respect of the previous year which is probably attributable to the increased content of active substance of this drug. After having slightly declined in the previous year, the price of heroin at street level is about 5% more expensive in 2006 relative to the previous year. This development is in contrast to the fall of the heroin price at wholesale level by more than 20%. Street prices for amphetamine and cannabis resin picked up again in 2006 after the small decrease in 2005. There were practically no changes found for cocaine (Table 28).

The overview of the most recent figures on drug prices is contained in standard table 16.

<sup>11</sup> Attention is to be paid to the term “GHB-Lab” as distinguished from “GHB-kitchens” which – analogously to crack kitchens – are not recorded in the “Narcotic Drugs” Case Register (Falldatei Rauschgift, FDR). For the definition of a “Laboratory“ see the Annual Short Report on “Narcotic Drugs” 2005 of the BKA.

**Table 28.** Prices of different drugs until 2006 (all prices in €)

Price per gram (small quantities) kilogram(large quantities)	Heroin	Cocaine	Crack	Ecstasy	Amphetamines	Marijuana	Cannabis resin	LSD
Small quantities 2006	36,7	59,1	55,0	6,6	12,9	8,2	6,4	8,6
Small quantities 2005	35,0	60,5	--	--	11,9	7,2	6,0	8,5
Changes between 2006 and 2005	+4,9%	-2,3%	--	--	+8,4%	+13,9%	+6,7%	+1,2%
Changes between 2005 and 2004	-11,4%	2,7%	--	--	-1,7%	0,0%	-1,6%	-16,7%
Large quantities 2006	17.938	36.120	--	1.942	4.109	3.739	2.377	--
Large quantities 2005	22.992	36.007	--	1.908	4.258	3.487	2.358	--
Changes between 2006 and 2005	-22,0%	+0,3%	--	+1,8%	-3,5%	+7,2%	+0,8%	--
Changes between 2005 and 2004	+11,0%	+1,1%	--	-14,0%	-20,4%	+5,2%	+5,0%	--

Bundeskriminalamt, personal memorandum

#### 10.4.2 Purity

The figures presented on the active substances contained in amphetamine, ecstasy, heroin and cocaine are based on the "Statistical Evaluation Programme on Narcotic Drugs" (Zerell et al. 2007).

Table 29 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 in amphetamine and cocaine has been on a continual decline at street-level in the period under review. The concentration of active substance contained in heroin increased at street level but remained rather stable with some strong fluctuations.

**Table 29.** : Content of active substance in different drugs from 1996 to 2003 (median) in %

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Amphetamines	10,0	10,0	9,4	7,0	3,3	5,0	6,0	7,5	7,9	7,7	7,1
Cocaine street trafficking	46,8	50,7	40,2	49,4	35,5	42,6	38,5	32,0	34,5	34,2	24,6
Cocaine wholesale	77,3	79,4	74,3	69,1	69,1	73,0	73,9	76,7	75,0	68,8	72,2
Heroin street trafficking	13,4	9,0	9,0	9,4	11,1	12,0	9,9	17,0	19,9	15,0	15,6
Heroin wholesale	46,4	31,9	20	29,2	35,1	45,8	27	7,3	48,8	36,5	38,1

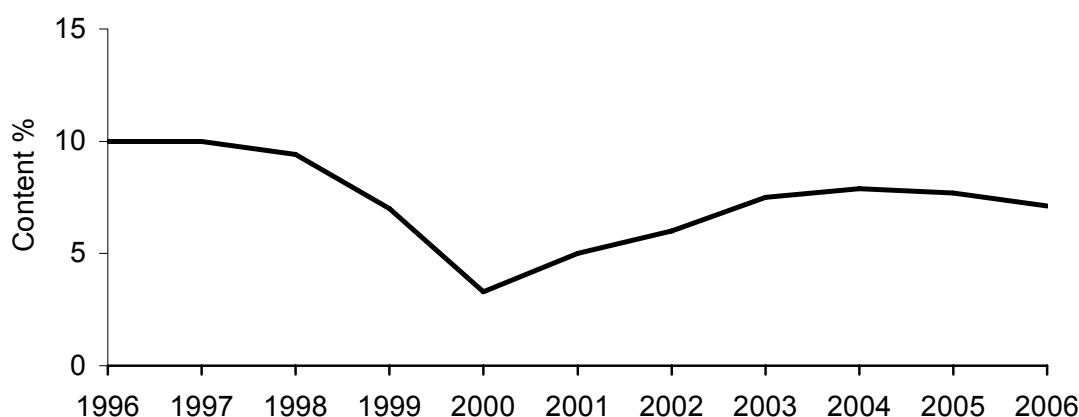
Zerell et al. 2007

The most recent values can be found in standard tables 15 and 16.

### Amphetamine

In the year 2006, a total of 2,362 (2005: 2,047) amphetamine samples were analyzed for their content of active substances which averaged 7.1%. As the concentration of active ingredients contained in amphetamine does not depend on the quantity seized, no differentiation was made between street and wholesale level.

The most common adulterant found in 2,087 samples was caffeine (71%); among the diluents were lactose (54%), creatine (8.4%), 1-phenylethylamine (7.4%), glucose (5.5%), mannitol (2.5%), saccharose (1.6%), starch/flour (1.5%), creatinine (1.3%) and sorbitol (1.0%) (Figure 16).



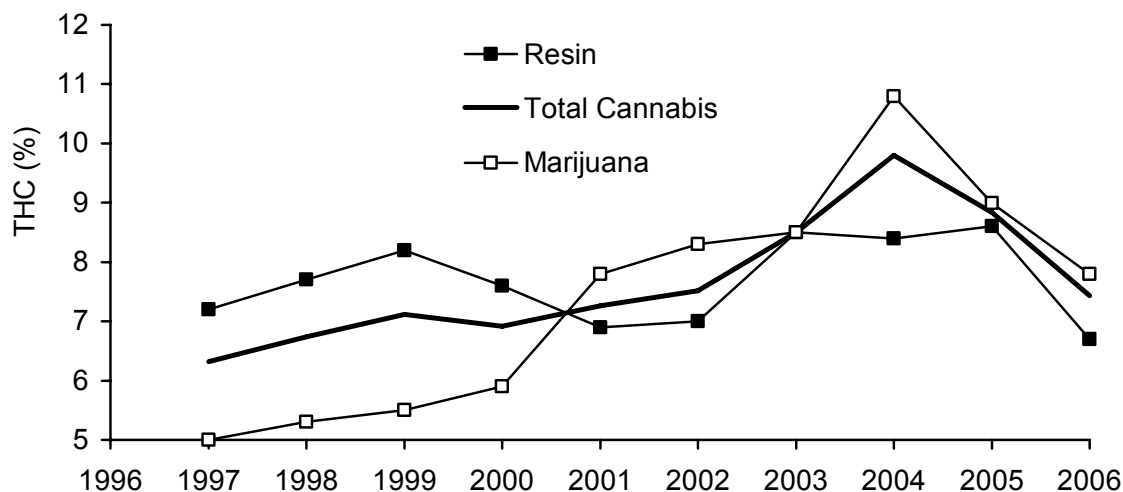
**Figure 16.** Content of active substance in amphetamine 1996 – 2006

Zerell et al. 2007

### Cannabis

The contents of active substance<sup>12</sup> are separately analyzed and evaluated for each cannabis preparation. In 2006, the THC-content was determined on the basis of the seizures of 2,183 marijuana samples, 4,467 inflorescences samples and 3,679 hashish resin samples by the BKA, LKA and customs authorities' laboratories. As in the previous year, the average THC-content declined again in 2006, which is attributable to a declining average content of active substance both of cannabis resin and marijuana (Figure 17). The decline in marijuana can be partly explained by the fact that in 2006 all participating laboratories reported their data differentiating between cannabis leaves and inflorescences which have a higher concentration (10.6%) of active substance than the leaves. In the year 2005, already 86% of the participating laboratories reported differentiated data so that the decline in the average content of active substance since 2005 is to be seen as a consequence of the differentiated analysis. Compared to the data of the year 1997, there were only small changes found both for cannabis resin and marijuana.

<sup>12</sup> In the reported concentrations of active substances, tetrahydrocannabinol (THC) additionally formed under thermal load is also taken account of.



**Figure 17.** THC-content of marijuana and cannabis resin 1997-2006

Zerell et al. 2007

### Ecstasy

In the year 2006, a total 795,657 pills and capsules were analyzed. 98.4% (2005: 93.3%) of them were monopreparations, 1.6% (2005: 6.7%) a combination of two or three addictive substances. With that, the portion of combined preparations decreased in respect of 2005 approximating to the initial value of the year 2002 (0.4%).

98.5% of the analyzed monopreparations (2004: 93.6%) contained MDMA. The remaining 1.5% contained amphetamine, MDA and/or MDE. Levels of active substances are presented in Table 30.

Combination preparations reported were mixings of MDMA/ MDE (50.4% of the reported combination preparations), MDMA/amphetamine (37.6%), MDMA/MDE (6.3%), MDMA/Metamphetamine (3.6%). Less than 1% of the cases were combinations of MDMA/MDE/metamphetamine, MDMA/amphetamine/metamphetamine, MDMA/MDA/MDE, MDMA/MDE/amphetamine and amphetamine/metamphetamine. The most frequently reported MDMA/MDE-preparations contained on average 31 mg MDMA and 9 mg MDE per unit (Table 30).

On average, contents of MDA and MDE continually declined from 2002 to 2005. After having slightly fluctuated around 60 mg between 2003 and 2006, the content of MDMA also decreased in 2006.



**Table 30.** Content of active substance in ecstasy in mg per pill/capsule

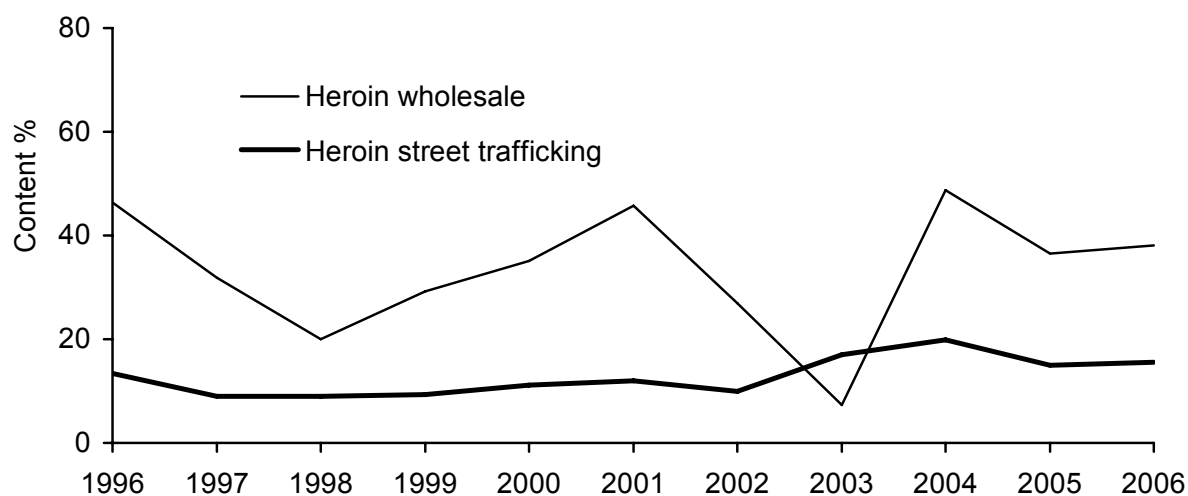
Substance	Quantity				Median			
	2003	2004	2005	2006	2003	2004	2005	2006
MDA	20	15-57	13-47	0,6-30	20	40	22	17
MDE	39 – 62	59-65	1-50	11*	56	62	11	11*
2-C-I	--	10	--	--	--	10	--	--
MDMA	0,3 – 260	3-205	1-441	0,8-141	63	60	57	48
Amphetamines	2 – 24	4-207	1-45	0,6-51	7	8	14	15
Meth-amphetamines	17 – 21	20-21	5-14	--	17	21	10	--

\* only one seizure

Note: The contents of active substance were calculated as base  
Zerell et al. 2007

## Heroin

In 2006, 5,227 (2005: 4,283) heroin samples were analyzed for their content of active substance. While the purity of the seizures on the wholesale market has been considerably oscillating between 20% (exception 2003: 7.3%) and almost 50% (2006: 38.1%) over the last years, the level of active ingredients at street level has been relatively stable on average amounting to 15.6% in 2006 (Figure 18).

**Figure 18.** Content of active substance in heroin 1996-2006

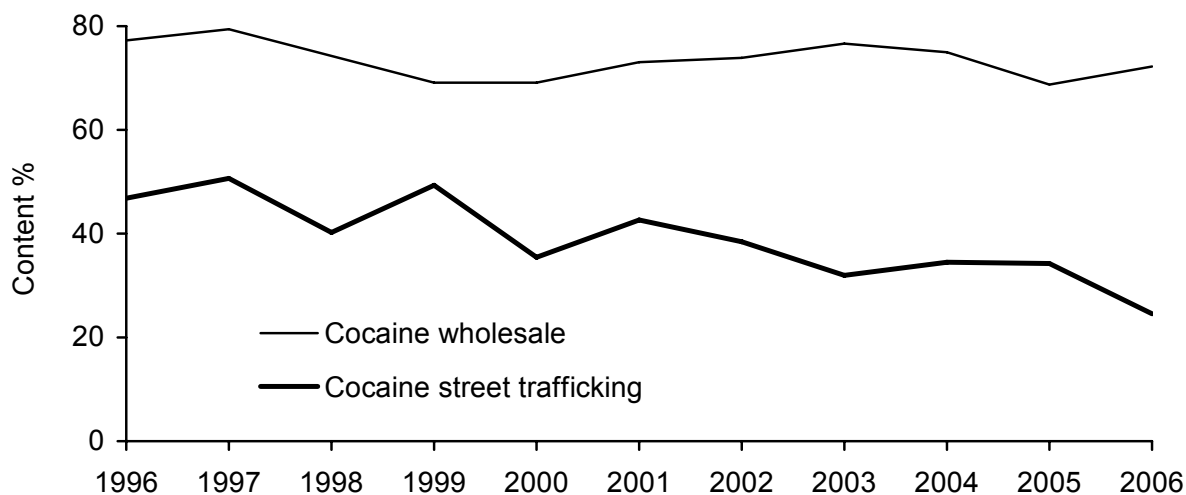
Zerell et al. 2007

Among the 4,732 analyzed samples, the most commonly found adulterants were caffeine (99%), paracetamol (98%) and griseofulvin (3.8%). Lactose (2.9%) was the most common diluent used.

## Cocaine

In the year 2006, 3,770 cocaine samples were analyzed. Cocaine is mainly offered as hydrochloride on the market. However, in the following no differentiation is made between cocaine hydrochloride and cocaine base - only 154 of the reported seizures (4% of the

samples) were preparations which contained the active substance in base form (Figure 19). At street level, the content of active substance amounted to around 40% between 2000 and 2005 showing a slight downward trend. In the year 2006 however, the median was clearly lower amounting to 24.6% - the lowest value recorded since 1997. The content of active substance at wholesale level has been varying only slightly since 1996 (Figure 19).



**Figure 19.** Content of active substance in cocaine 1996 – 2006

Zerell et al. 2007

The most common adulterants found in the 3,043 analyzed samples were phenacetin (40%), lidocaine (28%), diltiazem (9.8%), caffeine (7.9%), procain (5.4%), hydroxyzin (2.5%), tetramisol (2.1%), benzocain (1.2%) and amphetamine (1.1%). Blended into the drugs were also lactose (30%), inositol (25%), mannitol (9.6%), glucose (6.6%), sodium hydrogen carbonate (1.5%) and saccharose (1.2%).

## **PART B – SELECTED ISSUES**

### **11 Public expenditures**

#### **11.1 Introduction**

In German-speaking territory there have been very few studies which systematically examine health-economic aspects of addiction-related diseases. In a recently published overview based on a summary of results from two important recent surveys of literature Prieto (2007) concludes that there are considerable gaps in health-economic research on addiction therapies also at European level.

In view of the quantity of publications which have been devoted to the topic of addiction on the whole and the amount of funds expended in this area (not only by governments), this would appear astonishing. Moreover, the majority of studies on this issue primarily focus on the costs (to the macro economy and health care system as well as in terms of social costs) of alcohol abuse and dependence. There have only been sporadic studies examining the health-economic aspects of abuse or dependence on illegal substances. The affiliated research associations funded by the Federal German Ministry of Education and Research in the area of its targeted focus on addiction, within the framework of which health-economic research work is provided funding (even if in a highly circumscribed manner), are almost solely preoccupied with the costs of alcohol-induced disorders.

The vast majority of work which is available on this complex of issues is limited to the secondary analysis of data which is already available. One fundamental problem which all systematic analyses have in estimating costs in the German health system is the highly fragmented health-care landscape in the Federal Republic of Germany. The data which is available for secondary analysis is distributed across a large number of institutions and data-carriers and is in part subject to considerable data-protection requirements.

This fragmentation is furthermore associated with considerable limitations with respect to the comparability of the available information and problems this means for the interpretation of the results. An additional limitation in the analysis of secondary data which is published e.g. by institutions involved in health reporting (the Statistics Offices of the Federal government and Länder) is that these sources usually do not distinguish between licit and illicit substances, instead providing overall estimates of all psychological and behavioural disorders caused by psychotropic substances (F10 – F19, ICD10). Moreover, this global data is generally based on highly aggregated information from various data sources and for this reason there are considerable limitations in interpreting it (Salize et al. 2006). As a result of the dearth of alternative data, this secondary data nevertheless is often the only data available whatsoever and is provided in the following.

At the present time, a case-by-case compilation of information or data from various sources is only possible – if at all - within the framework of circumscribed research projects. But this does not solve the problem of comparability of data and non-existing conventions on what data has to be taken into account from what sources in the first place when cost estimates

are made. In a recently published article, Uhl (2006) came to the conclusion that the estimates of costs caused by substance abuse using the traditional “cost of illnesses approach” “*involve logically inconsistent and objectively unjustifiable, spurious quantifications*”. Uhl also draws attention to the highly heterogeneous use of terms, definitions and methods which significantly restrict the comparability of the results produced<sup>13</sup>.

Even from the narrow perspective of “direct costs” opted for in this select chapter, which avoids specific problems going beyond the aforementioned problems such as e.g. intangible and indirect costs (for example, the lack of a common scale with which to measure possibly foregone non-monetary benefits), one problem which arises is that the problems of interest (abuse and dependence on illegal substances) are not examined directly, but rather in terms of the amount of expenditures on these problems – for instance for prevention and to alleviate the impact of the problem. This begs the question as to whether it will be possible to develop relevant, useful foundations for the development of proactive strategies (Uhl 2003) solely on the basis of cost estimates in spite of the repeated efforts to standardise definitions and terms as well as survey methods (e.g. Single et al. 1996, 2001).

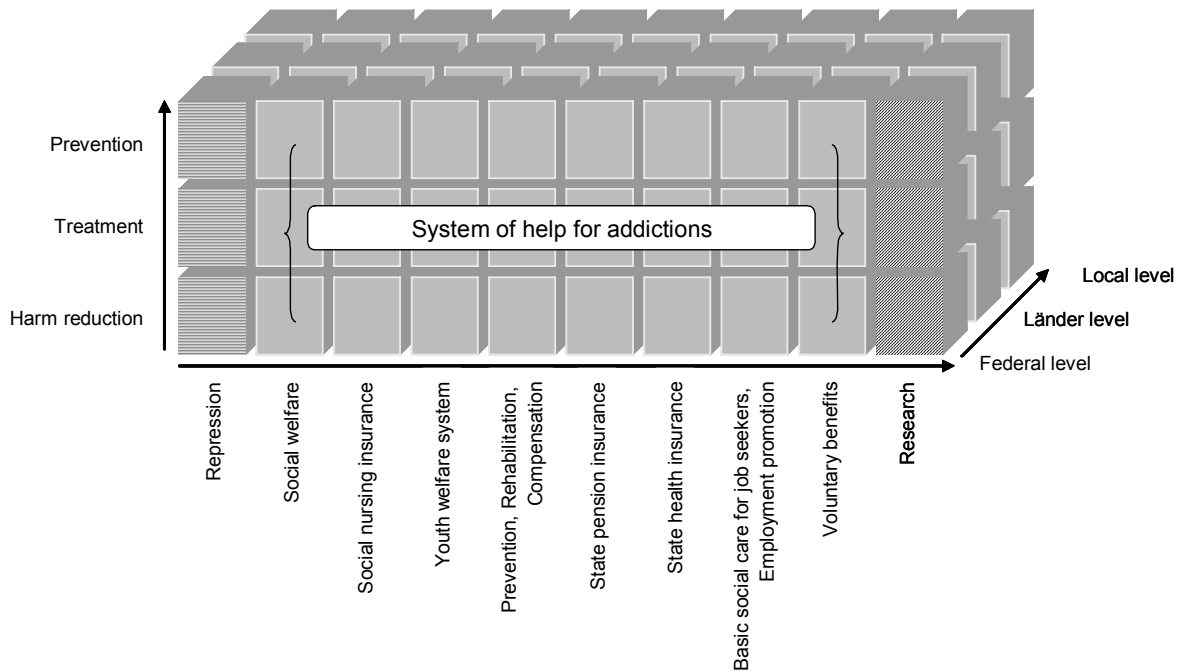
### **Funding and distribution of tasks in the Federal system**

To understand the structure of funding, one needs to have a grasp of the Federal structure of Germany (see chapter 1.1.1) and the principle of subsidiarity, which has led to a complex system of responsibilities at the Federal, Länder and local levels along with social insurance schemes with respect to the funding and execution of tasks. Information on financial resources which the Länder and local governments allocate to drug or addiction problems is not aggregated or compiled at the national level at present as a result of limited comparability. The resources described in the following can for this reason by no means even come close to providing complete information on the overall funds devoted to dealing with the drug problem.

Figure 20 demonstrates the complexity of the German funding situation (even if it is overly simplified). In particular the system of help for addictions differs greatly from one area of work and actors to the other. Numerous areas of work are by the same token split up between Federal, Länder and local governments

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<sup>13</sup> Uhl (2006) notes with respect to the problem of “criminality stemming from substance abuse”, which in particular plays a role in cost estimates as a result of abuse of and dependence on illegal substances, that it is also highly problematic to mix data from different perspectives together to form an aggregate sum. The costs, for example, which are frequently cited in this connection (e.g. as a result of theft) do constitute a loss for individuals affected, but this is in principle compensated for by the respective profit from the sale of stolen items by the party causing these costs at a broader level (society).



**Figure 20.** Matrix for identifying relevant cost areas

Responsibility for issues involving the health care of the population lies in the domain of the 16 different German Länder (or even at the local level). This means that information from at least 16 respectively involved German Länder has to be provided individually and if necessary supplemented with more detailed data. As a result of the fact that no distinction is normally made between individual substances in the health system, there is usually no detailed information contained in the respective budgets of the German Länder.

With respect to the area of repressive measures as well, for example, it is practically impossible to venture a precise estimate of the share of drug-related activities of the police compared to their other activities at the operative level. This means that it is practically impossible in individual cases to make a valid estimate of the time devoted by individual police officers who are not working in specialised units to crime-fighting in the area of narcotics.

Table 31 provides a view of the various funding channels for addiction and drug aid as well as prevention and repressive measures in Germany.

**Table 31.** Funding of addiction and drug aid in Germany by the Federal Government (examples)

Column	Actors				
	Federal Government	Länder	Local governments	Pension insurance	Health insurance
Prevention	BZgA BMG BMFSFJ BMELV	Ministries of Social Affairs (commissioners for prevention of addiction) Ministries of the Interior (police) Ministries of Education (addiction-prevention teachers; classes)		Participation benefits (§ 31 SGB VI)	Prevention and self-help (§ 20 SGB V)
Counselling, treatment, aftercare	Model projects	Ministries of Social Affairs (additional substitution)	Outpatient addiction counselling Assisted living Integration aid Assistance for vulnerable people Social-psychiatric services Medical rehabilitation	Medical rehabilitation Flat-sum aftercare benefits	Office-based physicians Hospitals Psychiatry Medical rehabilitation
Minimisation of harm, survival aid			Outpatient heroin clinics Drug consumption rooms Contact centres Emergency shelters		Physician's care
Repression	AA BMA BMF Federal Ministry of the Interior Federal Ministry of Justice	Ministries of Justice Ministries of the Interior Ministries of Finance			
Research	BMBF BMG			Model projects	Demonstration projects
International exchange	AA BMG DB Federal Ministry of the Interior				
Other	DB	Länder Commissioners for the Prevention of Addictions			

AA: Foreign Office; BMA: Federal Ministry of Labour and Social Affairs; BMBF: Federal Ministry of Education and Research; BMELV: Federal Ministry of Nutrition, Agriculture and Consumer Protection; BMF: Federal Ministry of Finance; BMFSFJ: Federal Ministry of Family Affairs, Senior Citizens, Women and Youth; BMG: Federal Ministry of Health; BMJ: Federal Ministry of the Interior; BMJ: Federal Ministry of Justice; BZgA: Federal Office for Health Education; DB: Federal Government Commissioner on Narcotic Drugs; SGB: Social Code

It is apparent, then, that solely the identification of costs incurred (prior to the calculation of specific shares for licit or illicit substances) is associated with considerable effort. Some of these areas overlap (i.e. the persons affected receive parallel services which are funded by different actors), others are excluded. It is probably particularly difficult to identify costs specifically relating to addiction in the cross-sectional areas of the police and judiciary.

Even if these considerations already affect the area of “non-labelled” direct costs, which is not the primary area of enquiry, it should be noted at this point that in particular this type of “non-labelled” direct costs would account for a considerable portion of a comprehensive estimation of total costs. This thus raises the question as to the implications of listing exclusively “labelled” direct costs.

## **11.2 Information on labelled costs**

### **11.2.1 Federal Budget**

Merely the budget of the Federal Ministry of Health is examined in a discriminating manner in the following section, which is especially focused on the national external representation and general legislation. As a result of the highly differentiated areas of tasks, other Federal ministries can also be expected to have expenditures included in the budgets which are connected with addiction problems. These include for example the Ministry of Foreign Affairs (e.g. activities in countries producing drugs), the Federal Ministry of the Interior (e.g. Federal Office of Criminal Investigation), the Federal Ministry of Finance (e.g. customs and immigration), the Federal Ministry of Justice (e.g. Federal courts), the Federal Ministry of Education and Research (e.g. funding of groups conducting research on addiction) and the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (e.g. prevention program). There is no summarising overview available at present.

According to the Federal budget, expenditures by the Federal Ministry of Health on “measures in the area of drug and addictive substance abuse” in 2006 amounted to € 14.2 million (2005: € 14.1 million). In the distribution of funds, € 6.7 million were devoted to information (2005: € 6.7 million), for grants to central institutions € 1.0 million (2005: € 1.0 million) and for the promotion of the national information node € 662 thousand (2005: € 662 thousand). Model measures received € 4.5 million (2005: € 4.5 million) and expenditures on research and development € 1.0 million, the same amount as in the previous year. On top of this, there were expenditures for the technical department of the Federal Ministry of Health and the Business Office of the Federal Government Commissioner on Narcotic Drugs. The total costs of these institutions taking into account all staff and material costs are not listed separately in the budget.

### **11.2.2 Statutory pension insurance**

Outpatient and inpatient rehabilitation with the aim of “restoring the capacity to work” are funded with payments from statutory pension insurance schemes. At € 494.0 million, expenditures by the statutory pension insurance schemes (statistics from Deutsche Rentenversicherung: Rehabilitation 2005) on rehabilitation and other payments in cases

involving dependence-related illnesses (total) continued to decline in 2005 (by approximately 6%), once again remaining below the amounts for the previous years (2004: € 524.6 million; 2003: € 527.0 million). Budgets for inpatient services are declining or stable (2005: € 390.6 million; 2004: € 409.6 million; 2003: € 415.2 million), transitional payments (2005: € 62.7 million; 2004: € 77.1 million; 2003: € 78.8 million) and other benefits (2005: € 10.6 million; 2004: € 11.0 million; 2003: € 10.8 million). In contrast, the funding of outpatient services rose again by about 12% (2005: € 30.0 million; 2004: € 26.9 million; 2003: € 22.2 million).

The share of persons dependent on drugs and medication among total patients who underwent rehabilitation measures as a result of problems with addictions (i.e. especially in connection with alcohol) was 28.2% in 2005 (2004: 26.6%). If one estimates the budget for this group of persons, one arrives at the identical amount as for the previous year – approximately € 139.4 million (2004: € 139.5 million).

In addition to these payments, which are made on a person-by-person basis to treat addiction-related illnesses, the National German Pension Insurance (Deutsche Rentenversicherung Bund) provided € 826 thousand for regional self-help for addictions. In addition, the member organisations of the German Head Office for Addiction Matters (Deutsche Hauptstelle für Suchtfragen, DHS) received grants to an amount of € 1.4 million, which was used for the technical and organisational support of aftercare and self-help (die Drogenbeauftragte der Bundesregierung, 2007).

### **11.2.3 German Statistical Report on Addiction Therapy**

The German Statistical Report on Addiction Therapy (Deutsche Suchthilfestatistik - DSHS) provides an overview of funding for outpatient help for persons with addiction-related problems. Even if less than half (46.2%) of the institutions participating in DSHS supplied data on their individual budgets, it is possible to infer funding structures, which in turn provide an overview on the type and composition of the funds available. Work performed by outpatient addiction-counselling facilities continues to be largely funded by local governments and the Federal Länder (together accounting for almost three-fourths of total funding). In comparison to the previous year there were practically no changes. The budget for 2006 breaks down as follows: local governments 52.8% (2005: 54.2%), financial resources of the Länder 21.1% (2005: 21.6%), financial resources of the Federal government 0.2% (2005: 0.1%; only demonstration programs), social security administration 7.1% (2005: 7.2%), health insurance schemes 1.1% (2005: 1.2%), costs assumed by clients 1.1% (2005: 1.2%), labour administration 0.9% (2005: 0.7%), associations' own funds 5.9% (2005: 8.0%) and various other funding resources 9.7% (2005: 8.4%) (Sonntag, Bauer & Hellwich 2007a).

### **11.2.4 Health reporting by the Federal Government: costs of illness 2004**

A comprehensive report on expenditures and costs of illnesses in Germany based on data from 2004 was published by the Federal Statistics Office (Statistisches Bundesamt - StBA)



within the framework of the Health Report of the Federal government for 2006<sup>14</sup>. Health expenditure statistics at the same time provide differentiated data on the agencies and institutions responsible for the expenditures and the facilities as well as the use of funds broken down by payments and the institutions transferring payments. The basis for the definition of illness in this context is the international statistical classification of illnesses by the World Health Organisation (WHO). It is possible to differentiate estimates using the main groups of ICD 10 and other selected variables such as e.g. age and gender, which means that statistics can be provided for the overall area (F10 – F19) of psychological and behavioural disorders resulting from psychotropic substances. It is not possible to further break down the statistics according to individual substances, however.

The direct costs of illnesses calculated in this connection describe the use of monetary resources in the health sector directly related to medical healing treatment, prevention, rehabilitation or nursing care measures. These also include the administrative costs of the funding organisations and all public and private institutions which fund health services in Germany. Non-medical costs (e.g. private travel to physicians or nursing care for family members free of charge) are not taken into account in the costs-of-illnesses statistics.

A whole host of data sources are used to estimate health costs: statistics provided by numerous health insurance schemes, the German National Pension Insurance, some research groups and institutions, associations of physicians accredited by the statutory health insurance schemes and medical services, the Robert Koch Institute and additional specific statistics of the Federal Statistics Office.

In connection with the system used to make estimates, it should be taken into account that a top-down approach is employed, which means that calculations are based on secondary statistics (see 11.1 regarding the problems associated with this sort of procedure). Another negative aspect of this approach is that it is only possible to perform a clear and complete coding of diagnoses in the available data sources if a clean distinction is made between the costs caused by individual illnesses. Different modalities of accounting and payment, statutory requirements and pension-related factors mean, however, that the diagnostic intensity and quality of the available data sources are subject to certain variances.

Based on an estimate by Uhl (2004), it can be assumed, however, that only approximately 10% of estimated costs are due to illicit drugs. The costs of psychological and behavioural disorders due to psychotropic substances (F10 – F19) calculated by the Federal Statistics Office in millions of Euros within the framework of the Health Report of the Federal government for Germany in 2004 can be found in Table 32 and Table 33. According to these statistics, more than 70% of monetary resources applied in connection with addiction-related illnesses are for males. This pattern remains constant through all age cohorts. In terms of the total population, the average cost of illnesses is € 30 per inhabitant and year (males: € 50, females: € 20) for psychological behavioural disorders resulting from psychotropic substances.

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<sup>14</sup> All the data is available online at [www.gbe-bund.de](http://www.gbe-bund.de) and can be used for analytical purposes.

**Table 32.** Costs of illnesses in Germany (2004) for psychological and behavioural disorders as a result of psychotropic substances (F10 – F19) broken down by age and gender (millions of €)

Age group in years	male	female	total
<15	4	3	7
15<30	257	93	350
30<45	641	219	860
45<65	757	305	1,062
65<85	225	142	367
>=85	6	14	20
Total	1,890	776	2,666

Health reporting by the Federal government [www.gbe-bund.de](http://www.gbe-bund.de)

**Table 33.** Costs of illnesses in Germany (2004) for psychological and behavioural disorders resulting from psychotropic substances (F10 – F19) broken down by facility and gender (millions of €)

Type of facility	Male	Female	Gesamt
Health care	6	4	10
Outpatient facilities	183	106	289
Doctor's practices	81	57	138
Practices of other medical professions	12	6	18
Pharmacies	57	28	85
Health trade / retail trade	13	5	18
Outpatient care	18	9	27
Other outpatient facilities	2	1	3
Inpatient / semi-inpatient facilities	1.443	561	2.004
Hospitals	688	301	989
Prevention / rehabilitation facilities	505	135	640
Inpatient / semi-inpatient care	250	125	375
Rescue services	51	26	77
Administration	172	62	234
Other facilities and private households	34	18	52
Foreign countries	1	1	2
Facilities total	1.890	778	2.668

Gesundheitsberichterstattung des Bundes, [www.gbe-bund.de](http://www.gbe-bund.de)

Around 75% of the estimated costs in this calculation are accounted for solely by inpatient and semi-inpatient treatment facilities. The difficulties involved in obtaining reliable information on costs, in particular outpatient health care involving addictions, are also reflected in this data from the Federal Statistics Office.

The costs of outpatient care have apparently been grossly underestimated in these statistics. The following extrapolations illustrate this: based on information from the 54% of facilities which are said to take part in the German statistics on addiction therapy, Sonntag et al. (2006) have estimated the average annual budget per outpatient facility in 2005 at

approximately € 283,000. If one extrapolates these figures while ignoring possible distortions (e.g. as a result of overrepresentation of larger or smaller facilities in the statistics) to the estimated number of N=934 outpatient facilities for people with addictions (Simon 2005) in Germany, this would mean an overall budget of approximately € 264 million (2004: € 258 million, Sonntag et al. 2005). Even if one takes into account in this calculation that costs of third parties are included in the calculation, there appears to nevertheless be a quantitative difference in comparison to the costs stated by the Federal Statistics Office of only € 3 million for all “other outpatient services” in total. According to information from the Federal Statistics Office, all outpatient addiction support facilities are added together in this category which cannot be assigned to any of the other outpatient categories listed. Because the key which is applied here is used to calculate total health costs for the Federal Republic of Germany while most of the other (somatic) health-care areas constitute a “residual category”, it can be assumed that the outpatient health-care system, which is highly specialised and differentiated in the area of addictions, is considerably underrepresented here. This question cannot be conclusively resolved on the basis of the available data, however.

#### **11.2.5 Information from the German Länder**

To date there is no complete or even roughly representative overview of the financial resources of the German Länder which are used for the area of drugs and addictions. Any such overview must run up against considerable difficulties for the aforementioned reasons. Some information is available on the budgets for addiction-related help in individual German Länder, however (budgets of the Länder). The Länder also fund projects on top of in some cases specific segments of addiction support such e.g. the Commissioner for the Prevention of Addictions already mentioned in the last REITOX report as well as local community commissioners in Baden-Württemberg or specialists in the prevention of addiction in other Länder.

North Rhine-Westphalia, the most populous of the German Länder, devoted € 15.8 million to fighting the dangers of addiction (labelled financial resources) in 2005. The total sum of budgets listed under the same budget item declined in 2006 (€ 12.1 million) and 2007 (€ 11.4 million). The budgets cannot be directly compared with one another, however, as the past form of funding by NRW was replaced by a flat specific-category-related sum and local financial resources beginning 1<sup>st</sup> January 2007. Thus the financial resources of counties and independent cities are provided as flat specific-category-related amounts for use by local governments under their own responsibility (and are allocated differently at the *Land* level). € 0.72 million are planned for prevention in the Land budget for 2007 (2006: € 2.42 million), € 76.0 thousand for studies and demonstration projects (2006: € 372.5 thousand) and € 0.62 million to fight addiction to gambling (2006: € 0.62 million) (NRW Ministry of Finance 2007).

The Land of Mecklenburg-Western Pomerania has quantified the items (direct costs) in the Land budget labelled for the area of addiction in 2007 at a total of € 1,977,300. The largest share is, as it were, devoted to addiction counselling and treatment facilities with € 1,637,300 (82.8%). The budget is rounded off by the prevention office (€ 227,500, 11.5%) and the Land

Centre for Addiction Issues with € 52,000 (2.6%) (Landesstelle für Suchtfragen Mecklenburg-Vorpommern acting on behalf of the Ministry of Social Affairs, personal memorandum).

The financial resources of the Land allocated to the area of aid for drug addictions in the Federal Land of Berlin were about € 7,900,000 in 2006. Of this amount, financial resources labelled for prevention amounted to almost € 1,000,000.

None of these figures distinguish between licit and illicit drugs. Nor are any costs associated with law enforcement (police, prisons and courts) taken into account in these budgets. The percentages used to fund addiction counselling and treatment offices, research budgets or Land facilities and staff such as prevention specialists or Land offices for Dependency matters differ considerably among the German Länder in some areas.

This can be illustrated by a direct comparison between the German Länder of Berlin and Mecklenburg-Western Pomerania: with 3.4 million inhabitants, Berlin has a population approximately twice the size of Mecklenburg-Western Pomerania's, but the Land of Berlin's budget is about four times as high as the comparable budget for Mecklenburg-Western Pomerania. Requirements which are placed on individual Länder regarding the financial resources which are required and made available to help people with addictions should therefore not be viewed in relation to the population. It would be theoretically possible to use the budgets which have already been prepared in the German Länder to precisely analyse the Länder budgets. It must at the same time be taken into account, however, that the differentiated addiction support system means that it would be an exhaustive task adding up all of the various items of budgets in the different ministries of the individual Länder. On top of this, distinguishing between licit and illicit substances only makes sense if new estimation approaches are developed as a result of the almost complete lack of differentiation made between these areas.

Information was still sought on Länder resources devoted to helping people with addictions within the framework of the short Länder reports up until 2001. The last available aggregate statistics listed € 136.0 million in 2001 (Simon 2005), although no distinction was made here between licit and illicit substances, either.

### **11.3 Information on non-labelled costs - COFOG**

The EMCDDA has proposed a classification similar to that specified in the UN's COFOG criteria (Classification of the Functions of Government) to carry out an initial estimation of the costs which are expended by the state in relevant sectors

(<http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4&Lq=1>). Under the provisions set out in regulation no. 113/2002 from 23<sup>rd</sup> January 2002 by the European Commission, the EU member states are obligated within the framework of the European System of National and Regional Accounts (ESA95) to supply information on costs in the 10 main categories of COFOG within a period of 12 months following the end of the respective year under report. Table 34 provides an overview of the respective total government costs from 2000 to 2006 as calculated by the Federal Statistical Office. The information contains the total costs of the individual contributions made by the Federal government, the Länder, local authorities, municipalities and social security administration.

**Table 34.** Public expenditures broken down by areas of tasks in billions of € (2001-2006)

COFOG category	2001	2002	2003	2004	2005	2006
1 General public administration	131,29	132,92	135,56	133,89	137,15	140,11
2 Defence.	25,03	25,46	25,18	24,69	24,70	24,74
3 Public order and security	35,15	36,07	36,12	36,37	36,19	36,30
4 Economic affairs	88,66	85,20	83,77	80,03	77,80	75,22
5 Environmental protection	12,34	11,36	11,16	11,01	11,17	11,55
6 Housing and local government community services	21,89	22,99	23,56	23,31	22,47	21,42
7 Health-care system	132,79	136,75	139,85	135,38	139,40	143,21
8 Leisure time, sports, culture and religion	14,87	14,67	14,44	14,30	14,40	14,41
9 Education	89,09	92,36	93,33	93,35	92,99	93,63
10 Social security	453,95	473,06	485,24	487,27	492,21	492,95
Total	1.005,06	1.030,84	1.048,21	1.039,60	1.048,48	1.053,54

In order to take an initial step in the direction of ascertaining drug-related expenditures, in particular categories 3 (public order and security) and 7 (health-care system) are of interest. The aforementioned 10 main categories (COFOG 1<sup>st</sup> level) are further broken down in line with the logic of the classification in order, for example, to be able to distinguish between the total expenditures on public order and security for the police (3.1), law courts (3.3) or prisons (3.4) (COFOG 2<sup>nd</sup> level). The total expenditures for category 7 (health-care system) can also be broken down in a similar manner within the framework of the COFOG classification e.g. for medical products, etc. (7.1), outpatient care (7.2), hospitals (7.3) and public health services (7.4).

The current European Agreement ESA95 requires that the member states only report at COFOG 1<sup>st</sup> level. No corresponding information is available for COFOG 2<sup>nd</sup> level for Germany to date. In response to an enquiry pursuant hereto, the Federal Statistics Office stated that it is currently being examined within the framework of a pilot project whether respective information can also be validly estimated for the Federal Republic of Germany (and to then report on this in the future). The results of the first model calculations are not available yet.

No additional information is available on non-labelled costs for the drug area at present.

#### 11.4 National studies, methods and results

Some studies have already been carried out for Germany in the area of health-economic research on alcohol-related problems. Some of these studies have attempted in a very differentiated manner to estimate costs. At the same time concrete proposals have been made and experience gathered on how to deal with certain problems in collecting, compiling and interpreting data. By contrast, there has thus far not been any comprehensive study which has attempted to determine the respective costs for the area of illegal drugs in Germany or to adopt the methods used for alcohol in this area. There are some studies,

however, which have made valuable contributions to the design for a future analysis of costs by examining certain economic aspects of drug consumption.

#### **11.4.1 Systematic search of the literature**

In this context a systematic search of the literature has been conducted in the German-language database PSYINDEXplus® with eight different search-word combinations: “Drogen” + “Ausgaben”, “Drogen” + “Kosten”, “Sucht” + “Ausgaben”, “Sucht” + “Kosten”, and “drug” + “expenditures”, “drug” + “costs”, “addiction” + “expenditures” and “addiction” + “costs”, to which the search word “Germany” was respectively added. Out of the total 166 hits, 61 studies dealing with illicit drugs and containing a costs analysis remained after excluding works which were not focused on the relevant topic, studies which were conducted in other countries, studies which focused exclusively on alcohol or surveys without any empirical data. After triaging the abstracts and subtracting multiple citations, eight studies remained. (cf. section 11.6 following this chapter), whose estimates of certain economic aspects of drug consumption may make a contribution to the design of future, more complex costs models. In addition, there are numerous project results produced by local or regional surveys which are frequently not published in pertinent journals and for this reason could not be identified.

#### **11.4.2 Special studies within the framework of the demonstration project on the controlled administration of heroin to severely addicted persons**

Supplementary health-economic research within the framework of the Federal German demonstration project on the administration of heroin has devoted attention to the costs and effects of heroin-supported treatment in comparison to methadone treatment (v. d. Schulenburg & Claes 2006b). This analysis focused on the first twelve months of the study. The health-economic evaluation (into which the data of 1,015 participants in the study flowed) came to the conclusion that each of the two types of treatments in the study is cost-effective both from the perspective of the funding agencies as well as from a societal perspective.

An analysis solely focusing on the costs of treatment estimated average annual costs for treatment in the study of € 18,060<sup>15</sup> per participant in the study for the heroin-supported treatment and € 6,147 per participant in the study for the methadone treatment. This calculation took into account both heroin and methadone treatment as well as psychological help (with annual costs of € 1,928 per participant), respectively.

The assessment of the costs of the two treatment approaches concluded that there was only a cost-saving effect when all the costs and benefits are included in the calculation, i.e. when one includes costs from a societal standpoint. It would appear that for the heroin group there are in particular major benefits in connection with a decline in delinquency (measured in terms of money units). When the costs of illness, costs relating to delinquency, imprisonment and court costs are also taken into account, the participants in the study for the heroin group

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<sup>15</sup> One model calculation concludes that administrating heroin in a regular care environment compared to the treatment in the study costs € 2,000 per patient and year less than the costs calculated for the study.

generate approximately € 6,000 per year in savings, while the methadone group produces *additional* costs of around € 2,100 per year.

The summary of the results performed within the framework of a cost-benefits analysis comes to the conclusion that less expenditures are necessary for the heroin-supported treatment to attain an increase of one quality-adjusted life year (QALY) than for methadone substitution. The results differ considerably among those participants in the study who have completed the respective treatment (for whom the methadone treatment proved to be superior) and premature drop-outs (for whom heroin proved to be superior), however.

The health-economic evaluation of the demonstration project for controlled administration of heroin does show some limitations, however, as a host of factors have only been included in the cost calculations as estimates or could not be taken into account at all. Looking at the results of comparable studies (the Netherlands, Switzerland) and applying some correction factors, the cost-benefit ratios shift towards costs savings for both therapies from a societal perspective.

This study was not purely focused on expenditures for a certain type of treatment. Complex cost-benefit analyses were also carried out in this case by comparing various parameters such as direct costs to societal benefits or improvements in the quality of the lives of clients (v. d. Schulenburg & Claes 2006b). Supplemental quantitative and qualitative criminological studies have shown that there is a significant decline in delinquency among participants in the studies (especially with the heroin-supported treatment) and have examined in a discriminating manner the need for treatment in relation to the prevalence of heroin consumption or the crimes committed by and charges filed against consumers (or prosecution of these). These studies also allow one to derive possible inferences relating to a future balance sheet on overall costs.

#### **11.4.3 The Robert Koch Institute's (RKI) study on alcoholism**

The study on alcoholism published by the Robert Koch Institute (RKI) in 2000 (Bergmann & Horch 2000, Bühringer et al. 2000) used procedures which, for example, estimate the problem of psychological or somatic co-morbidity, including the costs of prevention, research and training along with material damage and job-related accidents which stand in connection with the substance under examination. This mode of procedure, whose effectiveness is tried and proven in the study of alcohol-related problems, may possibly be used in future health-economic studies of illicit drugs as well. For the sake of completeness, it should be noted here that rough estimates which are based on the few international studies available attribute more than 50% of the calculated total costs of substance abuse to nicotine consumption alone and less than 10% to the consumption of illicit drugs (Uhl 2004).

#### **11.4.4 Cost-benefits analysis on savings effects in prisons**

The Land Centre for Addiction Issues in Baden-Württemberg of the Liga der Freien Wohlfahrtspflege e.V. (2004) published a cost-benefit analysis of the savings effect in prisons of placing imprisoned drug addicts in medical rehabilitation. Within the framework of this study, the authors came to the conclusion that the placement of inmates addicted to drugs in

medical rehabilitation allowed approximately 120,000 days of incarceration to be saved in the German Land of Baden-Württemberg alone, which corresponds to about 330 inmates. It was concluded from this that this approach would help avoid the construction of a new prison. This example clearly shows the often narrow focus in this area. It is interesting in this context, however, that individual studies like this one can provide useful ideas on the foundations for calculations (in this case, for example, the concrete costs of days of incarceration) which can later be integrated in complex models..

#### **11.4.5 Review of the expenditures on illicit addictive substances**

In a recently published review, Erbas et al (2004) furnished estimations of annual expenditures on addictive substances in Euros based on the money value spent by consumers per year to acquire or consume these substances. These authors do note that one limiting factor is that it must of course be assumed in the case of illicit drugs that the figures constitute particularly rough estimates which use the results of different epidemiological studies as the basis with which to calculate actual populations of consumers and expand this information to include numerous additional assumptions. The following costs were estimated in connection with illicit drugs in the article:

- Approximately € 4.2 billion for heroin
- Approximately € 1.5 billion for cannabis
- Approximately € 0.6 billion for ecstasy
- Altogether: around € 6.3 billion

These expenditures should of course not be viewed as directly labelled costs in the sense of public expenditures for illicit drugs. With respect to the therapy of persons dependant on opiates, the authors come to the conclusion that, based on these estimated values (which in part come from very old sources), the savings to be achieved by withdrawal treatment, approximately € 240 million, are roughly of the same magnitude as expenditures for these therapies (approximately € 250 million).

#### **11.4.6 Costs of dealing with hard drugs, an estimate from 1995**

The foundations for numerous estimates of costs in the area of illegal drugs in Germany continue to be provided by a study carried out more than ten years ago by Hartwig & Pies (1995), which was for its part based on an expertise commissioned by the German Land of Hesse. A very detailed estimate was made of the costs which accrue in connection with hard drugs in Germany within the framework of this work. The authors took into account data from the Federal Statistics Office, the Federal Office of Criminal Investigation and additional sources such as, for example, documentation of treatment. This data was juxtaposed in a complex procedure which included numerous supplementary assumptions in order to be able to estimate the costs of drug-related crime, morbidity and mortality, drug help, prevention and research. As a result of the detailed presentation of the calculation methods upon which this is based and taking into account information from different areas (prosecution of crimes, treatment and incarceration), the study is cited – for want of any similarly comprehensive alternatives – as the basis with which to answer questions relating to cost estimates even



though the data is now more than 15 years old (e.g. the data on the costs of treatment in hospitals, which comes from 1991).

Based on the information available at the time, Hartwig & Pies estimated the costs of drug-related crime in the narrower sense caused by heroin at about € 620 million (of this amount: police: € 246 million, law courts: € 75 million, costs of incarceration: € 300 million), for crime related to the procurement of heroin at around € 970 million (of this amount: police: € 659 million, law courts: € 189 million, costs of incarceration: € 122 million, value of stolen goods: € 1,649 million). Taking into account the information available at the time on costs stemming from the area of outpatient counselling and therapy, inpatient therapy, hospital treatment, prevention and research and funds used for substitute crops, total costs were estimated at around € 7.0 billion<sup>16</sup>.

To receive insight on the heroin-related costs for police and law courts, the authors made use of the percentage of resolved drug-related crimes and overall registered crime at the time. In a similar manner, the costs for the law courts were estimated based on the percentages of pertinent crimes (offences subject to the Narcotics Act (BtmG)).

As far back as the time of publication, the authors attached a lot of qualifications to their data and drew attention to the considerable problems involved in calculating individual items. This was reflected in part by the dearth of useful calculation keys or up-to-date data (thus, for instance, hospital data which was already obsolete back at the time was used, or estimates were made for individual German Länder). In addition, direct, indirect, labelled and non-labelled costs from different sources were aggregated and then placed in relation to each other. In sum, a fundamental problem proved to be that

- a.) the treatment system in Germany has changed considerably since the middle of the nineties (e.g. through the expansion of substitution treatment) and
- b.) the study by Hartwig & Pies especially aimed at forwarding a cost estimate based on the consumption of hard drugs (above all by heroin and opiate consumers), who in comparison to the overall population of consumers of illegal drugs no doubt constitute a much more analysed group. Hence numerous assumptions which have been made in the text in connection with heroin consumers cannot automatically be applied to drug consumers.

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<sup>16</sup> The costs of morbidity and mortality (in the sense of macro-economic losses in value-creation) were estimated at € 3,447 back at that time. The total costs of drug aid were estimated by Hartwig & Pies at € 308 million (of this amount: € 282 million for inpatient therapy and hospital treatment). Prevention and research accounted for approximately € 13 million of these estimated costs at that time.

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## 11.6 Results of literature research

Ates, T., Langer, B., Erbas, B., Tretter, F. & Wehner, B. (2005). Evaluierung von Arbeitsprojekten bei Drogenabhängigen im Rahmen einer Kosten-Nutzen-Analyse. Das Gesundheitswesen, 67 (2), 159-162.

Buschmann-Steinhage, R. (1991). Zur Effektivität und Effizienz von Rehabilitationsmassnahmen für Abhängigkeitskranke. Deutsche Rentenversicherung, 69-179

Gallander, S. & Neumeyer, J. (2001). Zu volkswirtschaftlichen Kosten der Drogenprohibition. In: A. Schmieder & A. Legnaro (Ed.): Deregulierung der Sucht. Muenster..Series: Jahrbuch Suchtforschung, Band 2

Glaeske, G. (1992). Auf Heller und Pfennig - Kosten und Nutzen der Suchtkrankenversorgung. Aus der Sicht einer Krankenkasse. In: G. Wienberg: Die vergessene Mehrheit. Zur Realität der Versorgung alkohol- und medikamentenabhängiger Menschen. Bonn: Psychiatrie-Verlag, 69-80.

Missel, P., Braukmann, W., Buschmann, H., Dehmlow, A., Herder, F., Jahrreiss, R. Ott, E., Quinten, C., Schneider, B. & Zemlin, U. (1998). Effektivität und Kosten in der Rehabilitation Abhängigkeitskranker. Ergebnisse einer klinikübergreifenden Katamnese. Praxis der Klinischen Verhaltensmedizin und Rehabilitation, 11, 55-67.

Salize, H.J., Stamm, K., Merkel, S. & Mann, K. (2006). Gesundheitsökonomische Suchtforschung in Deutschland - Gibt es Leben in der Wüste? Sucht, 52(2), 105-111.

Schnabel, P., Ernst, L. & Hillenkamp, R. (2000). Sozialökonomie als Bewertungs- und Planungsgrundlage betrieblicher Suchtprävention. Sucht, 46(6), 439-451.

Uhl, A. (2006). Darstellung und kritische Analyse von Kostenberechnungen im Bereich des Substanzmissbrauchs. Sucht, 52(2), 121-132.



## **12 Vulnerable groups of young people**

### **12.1 Summary**

In Germany there has been extensive research on groups of adolescents who are particularly at risk of consuming drugs. These are usually not epidemiological, but rather sociological studies which seek to explain the factors which can lead to drug consumption. The disciplines involved moreover adopt different perspectives: while representative studies on prevalence only provide limited information on the various risk groups, research on youth welfare and addiction support services – which are in contact with the risk groups – tends to be more process and output or qualitatively oriented. Research on impact is rare to date, as the tools and funding are often lacking. In the therapeutic environment, on the other hand, research is usually quantitative and outcome oriented, but less focused on risk groups. One response to increased quality demands in the area of addiction prevention has been to devote increased attention to examining the impact of behavioural and preventive approaches in prevention measures and programmes (Bühler & Kröger 2006).

There is a broad range of prevention, counselling, support and treatment possibilities with which to confront the multifarious problems experienced by particularly vulnerable adolescents.

### **12.2 Profiles of risk groups**

#### **12.2.1 Children and adolescents in youth welfare facilities**

Inpatient help in raising children means: placing children, adolescents and young adults of majority age who for widely differing reasons can no longer stay in their biological or foster families in suitable forms of dwelling. The Social Code (SGB VIII) sets out the framework for this. It is up to the Länder and local governments to implement the Social Code, and these have established youth welfare offices at Land and local level. Programmes and facilities in the area of youth welfare services are usually reserved for non-statutory welfare agencies. This type of help in raising children is provided in a facility (children's home, home for adolescents, etc.) or through a form of assisted living (flat-sharing adolescents, individual assistance in an individual flat). There are thus different forms of assistance subsumed under the rubric of assisted living.

Out of the total 23.4 million young people in Germany, 61,806 (0.26%) were living in homes or other forms of assisted living in 2005. 9.1% of young people living in homes and other forms of assisted living were non-German (Statistisches Bundesamt 2006c).

63% of minors between 12 and 17 years of age (39,293) were living in inpatient facilities run by children and youth welfare organisations, while this figure for young adults between 18 and 26 was 16% (9,951). In terms of gender, 56.3% were boys and 43.7% girls. Most of the housing (25,200 = 51%) was provided to adolescents aged 15 to 18 years (Statistisches Bundesamt 2007e).

Children and adolescents who are looked after by youth welfare facilities often have had very negative and difficult living conditions. Their family living conditions are marked by unemployment, poverty and exclusion. The constellation prevailing in such families is usually described as a complex set of multiple problems in which alcohol, drug and pill consumption often play a crucial role. Families are often only nominally present or exhibit difficult relationships between the parents. Some children and adolescents have experienced physical, psychological and sexual violence. But the percentage of children and youth from middle-class families who are receiving aid is also on the rise. Parents feel increasingly insecure when it comes to raising children.

There are gender-specific differences in deciding on assistance and help in raising children. While problems in school and general problems raising children of both genders are important when applying for child-rearing aid, girls are more frequently assisted because they run away from home, because sexuality plays an important role earlier on or because they develop psychological illnesses in response to crisis situations. Boys on the other hand receive child-rearing aid because of aggressive behaviour or delinquency (Kolmer 2003).

### **12.2.2 Early school leavers / failure in school**

The term “early school leavers” is used in statistics kept by the European Union (EUROSTAT) comparing indicators in the area of education. This designates 18 to 24-year-olds who do not have any secondary school degree allowing them to study at universities (at least a degree in the so-called “secondary area I”) and do not engage in any training or continuing education (Jörger 2004). This term is not used anywhere in the Federal Republic of Germany as a statistical feature of a group of persons, either in educational statistics or population statistics. Nor is there any uniform definition of the term “early school leaver”. The German Association of Towns and Municipalities (deutsche Städte und Gemeindebund (DStGB)) has estimated school leavers in Germany in 2005 to number 10% among Germans and 20% among foreigners living in Germany (DStGB 2005).

The literature in this area tends to use terms such as truancy, school fatigue, refusal to go to school or absenteeism. A distinction is generally made between three groups of schoolchildren:

- children who show the first indications of rejecting school in the form of e.g. loss of motivation, or who come late to school or leave early
- vulnerable children and adolescents who have mentally and physically withdrawn from school and are frequently absent for several days and
- school leavers who no longer view themselves as pupils of a school and are absent for weeks or months at a time (Rödel 2007).

It is estimated that 300,000 to 500,000 pupils in Germany show aversive behaviour relating to school, 10,000 of whom can be said to completely reject school.

Pupils who refuse to go to school frequently come from families with low education living in difficult social and material conditions. But also children who are especially gifted and

children who have learning challenges who do not learn at the same pace as taught in schools may also reject school.

Children between 12 and 14 years of age are particularly susceptible to school fatigue. Boys tend to be more prone to this, as they actively refuse to take part in classroom instruction, are disruptive or are absent, while girls tend to be less conspicuous and withdraw from the classroom environment (Rödel 2007).

### **12.2.3 Children from families with addiction problems**

Children from families with addiction problems denote those children and adolescents who at least part of the time live together with a parent who has a substance-abuse problem. It is estimated that there are 2.65 million children and adolescents living in families with an alcohol problem. This means that one in seven minors lives at least part of the time and one in twelve minors lives all the time in a family with an alcohol problem. 30,000 to 40,000 children and adolescents live with parents who are dependent on drugs. 2,200 babies are born with impairments due to alcohol consumption by their mothers during pregnancy in Germany every year. There are approximately 5 to 6 million adolescents whose parents are alcoholics. In addition, there are 5 to 7 million family members affected by the alcoholism of a member of the family (Klein 2007a; DHS 2006c).

Almost all mothers who are dependent on alcohol who have a partner live with a man who is dependent on alcohol (Klein 2007aa). Every third child in a family which suffers from dependence, experiences physical violence on a regular basis, be it as a witness or a victim. Children of parents suffering from an addiction constitute the largest risk group with respect to the development of a substance dependence. Approximately 30 to 40% of them will become addicts themselves. The risk of heavy consumption, abuse and dependence on illicit drugs is also greater among these children as is the risk of other psychological disorders such as anxiety, depression and ADHS (attention-span deficits / hyperactivity) (Klein 2007b; DHS 2006c; Lieb et al. 2001).

### **12.2.4 Young homeless people / street children**

In contrast to adult homeless people, young homeless people frequently have an official place of residence, as they are still registered as living with their parents. Young homeless people are often referred to in Germany as street children even when they are no longer children. The German Youth Institute (Deutsche Jugendinstitut - DJI) German Youth Institute uses the following criteria to define street children:

- high degree of withdrawal from socialisation points such as family or, lacking such, youth welfare organisations, schools and training programmes,
- they turn to the street, which becomes the most important or only area providing socialisation,
- these children begin to earn money on the street, largely by deviant, in part delinquent adult behaviour such as begging, theft, prostitution, drug trafficking and

- de facto homelessness (DJI 1995).

Short term “run-aways” from home are not considered to be street children. Programmes for the target group of “young homeless persons” are no longer only based on minors, but also on young adults, in part up to 27 years old.

Up to 2,500 children and adolescents beginning with the age of 12 run away from their homes or youth welfare service facilities each year to live on the street. The majority of them return home, however, or are taken in by an inpatient facility. Around 300 remain on the street, however. At present there are between 7,000 and 9,000 children and adolescents living on the street in Germany, one-third of them alone living in Berlin. Most street children are 13 and over ([www.tdh.de](http://www.tdh.de) / [www.offroadkids.de](http://www.offroadkids.de)).

Street children in Germany come from all social strata. Almost all of them are German. Most of them do not come from the large cities where they usually live. They tend to come from rural areas, rather, and seek protection in the anonymity of big cities. Street children are very mobile and frequently change cities. Up to 5 changes of their whereabouts in six months is not a rarity. Abuse in families is one of the main reasons why children and adolescents run away from their families. Little is known about foreign street children ([www.offroadkids.de](http://www.offroadkids.de)).

Some young people attempt to earn a living through prostitution. Drug-related prostitution or prostitution to acquire drugs are the terms used to designate the practice, toleration and encouragement of sexual acts in return for money or other material goods such as, for instance, food, lodging or drugs. This is practiced by girls as well as boys, especially those who consume heroin. The extent to which the increase in cocaine and crack consumption in some large cities has an impact on prostitution to acquire drugs has not been studied.

For girls and young women who consume drugs, prostitution is the second most important source of income to finance their own drug consumption after the sale or brokerage of drugs. A study carried out in Hamburg on women engaging in prostitution to acquire drugs determined that the average age of the 14 to 23-year-olds was approximately 19. These are girls and young women who have experienced many problems in their lives such as the death of their parents (19.1%), having to live away from their families (44.7%) and experience of violence (61%) (Zurhold 2005).

### **12.2.5 Young offenders**

Lawmakers deem persons who have reached 14 years of age to be cognisant of the consequences of their actions. For this reason they have to assume responsibility for their actions beginning at this age, which is denoted by the term “age of legal accountability”.

A person between fourteen and eighteen years of age who is accused of a crime is subject to the Youth Court Act (Jugendgerichtsgesetz). It is reviewed whether and, if so, the extent to which the accused is responsible for his actions under criminal law. Under some circumstances, the Youth Welfare Office (Jugendamt) may also take certain measures. If adolescents are responsible for an offence, then the juvenile criminal code applies. Young adults are generally deemed to be responsible for their actions under criminal law. It is



reviewed, however, whether young adults were mature at the point in time when actual offences were committed or whether they should be treated as an adolescent, or if they committed offences which were typical of adolescents. In actual practice, juvenile criminal law is often applied to young adults. Young drug addicts who commit offences also have the possibility of undergoing therapy for addictions in special facilities.

Delinquency varies with age in terms of type and frequency. It reaches a climax among young people between 16 and 20 and then declines continuously and significantly. Surveys of unreported crimes indicate that a majority of young people (80% to 90%) commit offences at least occasionally. A small percentage of young suspects, approximately 3% to 6%, are repeat offenders. This group includes boys more often than girls. This small group of multiple or intensive offenders commit between 30% and 60% of the offences committed by this age group according to surveys by the Länder bureaus of criminal investigation.

Statistics kept by the German police distinguish between child suspects (8 to 14 years of age), adolescents (14 to 18) and young adults (18 to 21).

Young suspects accounted for 27.2% of all offenders in Germany in 2006. 70% were males. The percentage of young female suspects declines with increasing age (Bundeskriminalamt 2007b) (Table 35). As for drug-related crime, 18.9% of these offences committed in 2006 were accounted for by young adults, 8.7% by adolescents and 2.3% by children in connection with the Narcotics Act. (For a more detailed discussion, see the section on "Social correlates and consequences").

**Table 35.** Persons suspected of crimes broken down by age groups and gender for 2006

Suspected persons	total	%	Male %	Female %
Children	100.487	4,4	71,4	28,6
Young adults	278.447	12,2	72,5	27,5
Adolescents	241.824	10,6	79,2	20,8
Adults	1.662.369	72,8	76,3	23,7
Total	2.283.127	100,0		

Bundeskriminalamt 2007b

### 12.2.6 Adolescents in socially deprived residential areas and/or with high availability of drugs

Reference is often made to city districts with special development needs rather than socially deprived residential areas. The term "socially deprived districts" is usually applied to large cities. The percentage of long-term unemployed, poor persons, older people, single parents and migrants is very high in these residential areas. There are few jobs or training positions, and problems like violence, crime, alcohol and drug abuse are rampant in schools. Families move out of these city districts when they can afford it. The ones who remain behind are often dependent on government welfare support. Children and adolescents learn from the very beginning that government support is a "normal" form of income (Institut für Stadtforschung und Strukturpolitik 2004).

Young people who grow up in socially deprived residential areas experience disadvantages in many respects, although these disadvantages also add up in a cumulative manner. German and foreign adolescents often do not receive any training in a trade or a job. Children and adolescents have significantly lower chances of being healthy. They are more likely to have accidents, exhibit a greater proclivity of psycho-social problems and only undergo insufficient preventive health examinations. Their life expectancy is several years lower than that of children and adolescents who grow up in a safe and secure social setting (Hemme 2003)<sup>17</sup>.

Basic data can be called up for any politically autonomous community in Germany at the Länder offices for statistics and data collection. The directory of communities lists among other things the official community identification key, the names of communities, their postal codes, geographical size and population. Moreover, data is also available on a broad spectrum of socio-demographic and economic factors. Individual research on small communities is also possible.

### **12.2.7 Young persons with migration backgrounds**

The term “ethnic minorities” is rarely used by social scientists with respect to Germany. Instead, the term “people with migration backgrounds” is used. This is also evident in statistical data gathering. Immigration has no longer been counted by using a definition of foreigners based on nationality since 2005, having been replaced by the notion of migration (Konsortium Bildungsberichterstattung 2006).

Of the 15.3 million people with migration backgrounds living in Germany in 2005, 96% were living in the old German Länder and Berlin. Their percentage of the overall population is highest in large cities such as e.g. Stuttgart, with 40%, or Frankfurt on the Main with 39.5%. For children under 5 years of age, this portion exceeds 60% in six cities. Altogether, almost one-third of all children under five have a migration background. (Statistisches Bundesamt 2007).

In the age group of persons below 25, more than one-fourth (27.2%) – which corresponds to approximately 6 million persons – have a migration background. 10% of the young population with migration background is made up of first, second and third generation foreign immigrants. Ethnic Germans from Eastern Europe account for 3.1% compared with 6.7% of children and adolescents who have been naturalised. 7.5% are 2<sup>nd</sup> generation Germans with

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<sup>17</sup> At the offices for statistics and data collection of the Länder, the basic data for any politically independent community in Germany can be retrieved. The community directory contains amongst others the characteristics of official municipal keys (AGS), community names, zip codes, areas and population. In addition, data for a wide range of socio-demographic and economic data are available. Also individual local investigations are possible.

one parent having a migration background or citizenship based on *ius-soli* arrangements<sup>18</sup>. Almost half of young people with migration background have German citizenship and have not immigrated to Germany themselves (Konsortium Bildungsberichterstattung 2006). Over the last five years approximately 36% of ethnic Germans from Eastern Europe who immigrated into Germany were less than 20 years old upon immigration (Kazin 2006).

In comparison to Germans without any migration background, migrants have a lower level of education on average. This applies both to general secondary school degrees as well as vocational training degrees. While young Germans usually attain a degree from a medium-level (Realschule) or the *Abitur* from a higher-level secondary school (Gymnasium), half of young foreigners graduate from a lower-level secondary school (Hauptschule). 20% of foreign adolescents do not graduate from a lower-level secondary school compared to 9% of Germans. Among Germans who do not have any migration background, the percentage of persons without any vocational degree in the age group 25 to 34 year-olds is 15%, while among persons with migration backgrounds it is 41%. The gender differences are similar between the population groups of people with and without migration background (Bundeszentrale für Politische Bildung 2004; Konsortium Bildungsberichterstattung 2006).

Drug dependence is in third place on the list of psychological disorders of migrants living in Germany. Psychosomatic syndromes and depression crop up even more frequently. Post-traumatic stress syndrome and psychoses are of a lower incidence than drug dependence (Collatz 2001). Adolescent Russian immigrants of ethnic German background constitute a special social risk group in Germany exhibiting disintegrated biographies on a disproportionately high scale, including addictive behaviour and deviance.

Children and adolescents with migration background usually live under more difficult conditions than children and adolescents without migration background. Nevertheless this group makes much less use of youth welfare services than average, with the drop-out quota right in aid programmes on the other hand being disproportionately high. Except for the area of outpatient aid and measures involving the judicial system such as social group work, foreign minors are underrepresented in programmes providing child-rearing assistance. This is in part also due to the restrictive legal requirements which apply to benefits for non-German children and adolescents. Facilities in the area of "Open Youth Work" (*offene Jugendarbeit*), which are open to all children and adolescents, are on the other hand used by a disproportionately large number of children and adolescents with migration background (Schuch 2003).

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<sup>18</sup> *Ius Soli* (lat. right of land) designates the principle under which a state confers citizenship on all children who are born in its territory. This is also referred to as the "principle of territoriality". An element of *Ius Soli* has also been part of German naturalisation law since 1<sup>st</sup> January 2000. Requirements for persons to acquire citizenship by virtue of birth are very strict, however, and constitute a so-called "optional model" in which there is double nationality until the age of majority, when these persons then must decide on one nationality (generally by the age of 23) ([www.wikipedia.de](http://www.wikipedia.de)).

### 12.2.8 Party scene

The “party scene” is the term used in Germany to denote young people who attend clubs, parties or events with electronic music, especially on weekends. Stimulants or drugs having a euphoric effect are accordingly referred to as “party drugs”, examples being ecstasy, amphetamines, methamphetamines or cocaine which are taken at these parties and events. Alcohol and hallucinogenic drugs (LSD or psilocybin mushrooms) are also party drugs, although the latter on a more limited scale. Cannabis tends to be used as an “after-party drug” in order to “come down” from the stimulating effect of the substances consumed earlier.

The popularity of so-called party drugs among adolescents and young adults has risen continuously since the beginning of the 1990s. Thus approximately 11.4% of the 18 to 24-year olds have experimented with ecstasy and/or amphetamines and 4.7% have consumed cocaine at some time in their lives (Kraus et al. 2005).

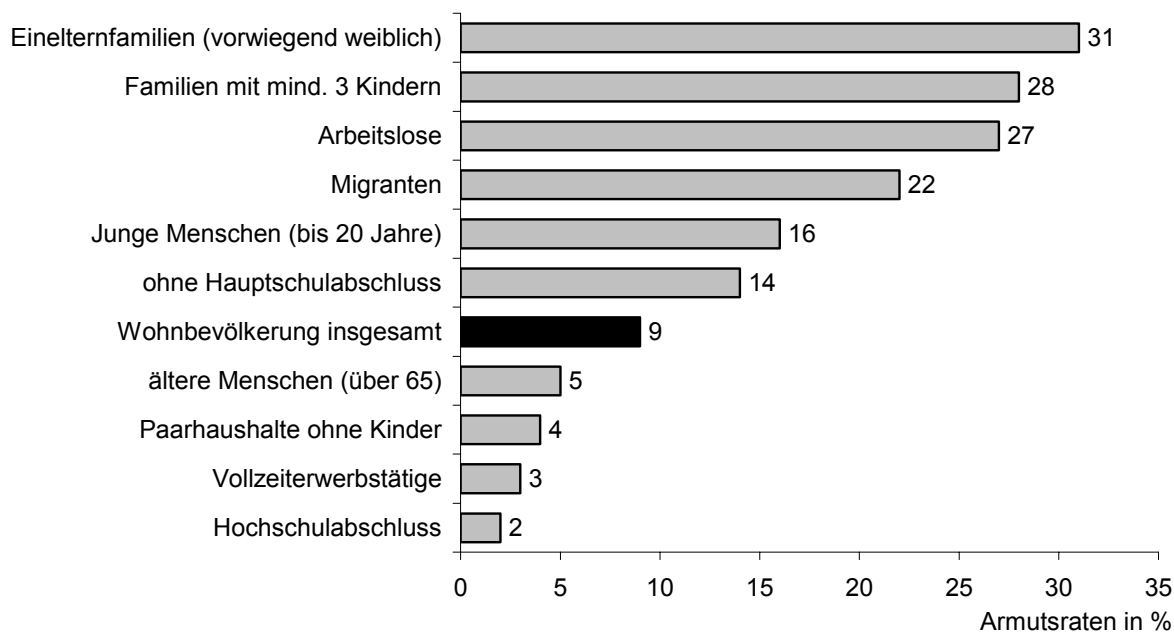
Party-goers are 21 years old on average. The main age group is made up of 18 to 19-year-olds. Around half of this group is between 16 and 21. People who go to techno parties – if they have already graduated from secondary school – tend to have higher degrees. One-third have passed the *Abitur*. Party-goers are of predominantly German nationality. The genders are equally represented (Schroers & Schneider 1999).

### 12.2.9 Young people from socially disadvantaged families

Comparative European research on poverty works with the notion of “relative poverty”. Individuals or families which earn under 50% of the average net household income – weighted according to number and age of the persons living in the household – are defined as poor (50% borderline). Anyone with under 40% of average income is categorised as “very poor” (40% borderline). More people live below the 50% borderline than the number of people at or under the official borderline for social welfare aid or, since 2005, the basic security benefits for needy persons capable of working (unemployment benefits II). Thus about 6.6 million western Germans (9.7%) and 0.8 million eastern Germans (5.8%) were poor in 2000.

Children and adolescents are particularly threatened by poverty at present. 16% of young people under 20 live in relative poverty. Almost twice as many persons in this group are recipients of social welfare aid compared to the overall population (Bundeszentrale für politische Bildung 2004, (

Figure 21).



**Figure 21.** Poverty rates as percentage under the 50% borderline (net equivalent income)

Bundeszentrale für politische Bildung 2000, 2004

By signing the final document of the World Social Summit in Copenhagen in 1995, the Federal German Government assumed the obligation to issue a national report on poverty. Regional and national reports are issued on poverty and health at irregular intervals. Some German Länder such Berlin, Hamburg or Saxony have published social structure atlases.

## 12.3 Drug use and problem drug use among vulnerable young people

### 12.3.1 Prevalences

Current epidemiological data on substance consumption by children and adolescents in Germany has been described in detail under 2.3 (beginning on page 25). Current data is provided in the Survey of Children's and Adolescents' Health (KiGGS, Lampert & Thamm 2007), the HBSC (Settertobulte & Richter 2007), surveys by the Federal Center for Health Education (BZgA 2004, 2007a) and regional surveys among pupils such as, for example, in Hamburg (Baumgärtner 2006a).

The results of the 2003 ESPAD study (ESPAD Report 2003) do not provide much in the way of relevant correlations between socio-demographic factors which may influence the consumption of drugs in Germany. No correlation can be found between poor economic status of a family and consumption of cannabis by adolescents from these families. A weak correlation exists between cannabis consumption among adolescents and single-parent households. This correlation is somewhat higher if there is a step-parent in the family. On the other hand, there is a greater correlation between checks and monitoring by parents (measured in terms of whether the parents knew where their children were on Saturday

evening) and low cannabis consumption. The highest correlation is between cannabis consumption and truancy as well as substance use by a sibling (Björn et al. 2004).

A representative study of pupils in the 9<sup>th</sup> grade in County Rhine-Neckar and Heidelberg (n=5,832, mostly 14 and 15 years of age) enquired into the correlation between substance consumption and migration background. A distinction was made between four groups: German, Turkish, Russian and others. According to this study, there are only slight correlations between drug consumption and migration background. Adolescents with a Turkish background tend to consume less drugs, while adolescents classified under “other migration background” (neither Turkish nor Russian) are more likely to take drugs (Haffner et al. 2006).

**Table 36.** Drug consumption and migration background

Drug use	German (n=4.536)	Turkish (n=410)	Russian (n=268)	Others (n=550)
Never	87,5%	92,4%	88,4%	83,6%
Occasionally	9,2%	5,4%	8,6%	11,3%
Weekly	3,3%	2,2%	3,0%	5,1%
Total	100,0%	100,0%	100,0%	100,0%

Haffner et al. 2006

With regard to the correlation between substance consumption and the size of the community people live in, the urban group (Heidelberg) was the largest group among adolescents who occasionally consumed drugs. Regular drug consumption, on the other hand, is most prevalent in small communities (Haffner et al. 2006).

The same study demonstrates that parents scarcely perceive or do not perceive at all the consumption of illegal drugs by their children. Whereas parents of boys as well as girls assume that their children do not consume any illegal drugs, 15% of boys and 10% of girls reported engaging in illegal drug consumption (Table 37).

**Table 37.** Drug consumption by school children. Self-reports and opinions by parents.

Drug use	Self-reports of school children (n=5.541)		Opinions by parents (n=3.255)	
	male	female	male	female
Never	84,8%	90,4%	98,2%	99,0%
Occasionally	10,6%	7,6%	1,3%	0,8%
Once a week	1,6%	0,6%	0,3%	0,0%
Several times a week	1,2%	0,8%	0,1%	0,0%
Daily	1,8%	0,6%	0,1%	0,2%
Total	100,0%	100,0%	100,0%	100,0%

Haffner et al. 2006

### **12.3.2 Drug use and problem drug use among children living in homes**

A random sample of 689 children and adolescents was examined in the Children-in-Homes Study conducted in Ulm between 2002 and 2004 (Fegert 2006). The study shows that children and adolescents living in homes are becoming increasingly difficult and showing signs of disorders like those previously found in children and adolescents undergoing psychiatric treatment. According to the survey, 60% of children living in homes in southern Württemberg suffer from psychological disorders requiring treatment. A screening with the "Child Behaviour Checklist" (CBCL) found that 8.8% of children and adolescents exhibited disorders relating to alcohol or drug abuse (Fegert). Socio-demographic and diagnostic data were collected for the overall sample in this study, but were not analysed specifically for the group of persons who consume substances.

### **12.3.3 Drug use and problem drug use among children in families with addiction problems**

The "Competence Platform for Research on Addiction" has been carrying out a studies project on the topic of "experience of violence, accidents and injuries by children in families with an alcohol problem (ALC-VIOL)" since March 2005. Approximately 500 children between 12 and 18 years from families with an alcohol problem as well as control children were surveyed on *inter alia* family variables and psychological problems in interviews within the framework of ALC-VIOL (Addiction 2007).

The results of ALC-VIOL corroborate studies from the Anglo-American area, according to which around 33% to 40% of children of parents dependent on alcohol themselves develop a substance-related dependence illness (OR=6.0). A particularly salient retrospective transmission of alcohol dependence – 50% to 75% - was found among children living in homes, adolescents in juvenile detention centres, patients ordered to undergo treatment by a judge and patients in psychiatric facilities for children and adolescents. The retrospective transmission of drug dependence from one generation to the next is also high: 45% to 50% of parents of children dependent on drugs have an alcohol dependence (Klein 2007a). Men with a dependent father are dependent on alcohol twice as often as men whose father is not dependent.

### **12.3.4 Drug use and problem drug use among young offenders**

There have been no epidemiological studies on substance consumption in juvenile detention centres in Germany. There are however estimates available made at the beginning of detention with regard to vulnerability of young offenders to drug use and the need for therapy. According to these statistics, 67% of the new offenders imprisoned in a Baden-Württemberg juvenile detention centre with 750 inmates between 16 and 21 years of age in 2004 were vulnerable to the use of addictive substances, while 43% were in need of therapy. No inferences could be drawn on the scale of actual consumption during the period of incarceration (JVA Adelsheim 2007, personal memorandum).

**Table 38.** Vulnerability to addictive substance abuse and need for therapy with new offenders in the Adelsheim Juvenile Detention Centre in 2004

<b>Vulnerability</b>	<b>Proportion</b>
No perceptible vulnerability	21%
Vulnerability to opiates	39%
Vulnerability to cannabis	17%
Exzessive alcohol use	11%
Conviction because of BtMG offences, no self-use	5%
<b>Treatment demand</b>	
Treatment demand	25%
Rather "yes"	18%
Uncertain	13%
Rather "no"	11%
No treatment demand	33%

JVA Adelsheim 2007

There are few young offenders addicted to drugs under forensic psychiatric treatment. The main group of addicts following a so-called hospital treatment order is between 31 and 40 years old, with ages ranging from 21 to 65 years. The main addiction diagnosed is alcohol dependence followed by drug dependence. These diagnoses often correlate with severe personality disorders. The most frequent reason for a hospital treatment order are violent offences. A majority of patients show significant deficiencies in education and vocational training, serious problems in living conditions and their working lives, while they are frequently heavily in debt. Immaturity among young offenders also plays a role (Claßen et al. 2006).

### **12.3.5 Drug use and problem drug use among young people with migration background**

To date no representative epidemiological data has been recorded on addiction-related illnesses among people with a migration background in Germany. A regional study conducted in Bavaria on ethnic Germans from Russia between 18 and 27 years of age who were dependent on opiates and who first began consuming heroin in Germany produced very little in the way of significant socio-demographic differences between addicts and the control group. Opiate consumers, for instance, were more often from larger cities, and the control group from rural areas. There were significantly more unemployed persons among the opiate consumers, however (38% became unemployed after they developed their opium dependence), but also more working persons, while there were more trainees and pupils in the control group. There were no significant differences found with respect to the family and living situation, religious affiliation and educational career (Kazin 2006).

The differences in the data specifically relating to migration are more significant. For instance, 68% of the group of ethnic Germans from Russia who were dependent on opiates did not speak German when they immigrated into Germany (as compared to 24% in the



control group). The persons dependent on opiates were also less integrated in terms of language when the survey took place. The main reason for immigrating to Germany in both groups was because their relatives so desired. 16% of the persons dependent on opiates did not want to leave Russia, while this figure for the control group was only 8%. Three reasons for emigration in the control group were statistically significant:

- “I wanted to be together with family members who were already living in Germany”
- “Better developmental opportunities for children in Germany”
- “I did not want to be discriminated against any longer because I was an ethnic German” (Kazin 2006).

The length of the stay in the transitional home played an important role. This was significantly longer for ethnic Germans from Eastern Europe dependent on opiates – 18.0 months on average compared to 10.5 months for the control group. Even though both groups had made positive as well as negative experiences with migration to Germany, the percentage of persons who had only had positive experiences was significantly higher in the control group. Keeping up contacts with German nationals or other ethnic Germans from Eastern Europe did not play any role, on the other hand (Kazin 2006).

Almost two-thirds of the ethnic Germans from Russia consumed heroin directly as the first drug. This distinguishes this group markedly from other selected groups of opiate addicts in Germany without any specific migration background. They also developed much more dangerous consumption patterns and showed less motivation to undergo therapy (Kazin 2006).

The number of female ethnic Germans from Russia in Germany dependent on opiates is low. No inferences can be drawn on gender-specific differences in this migration group, as women either were not included in the study or data was not broken down according to gender.

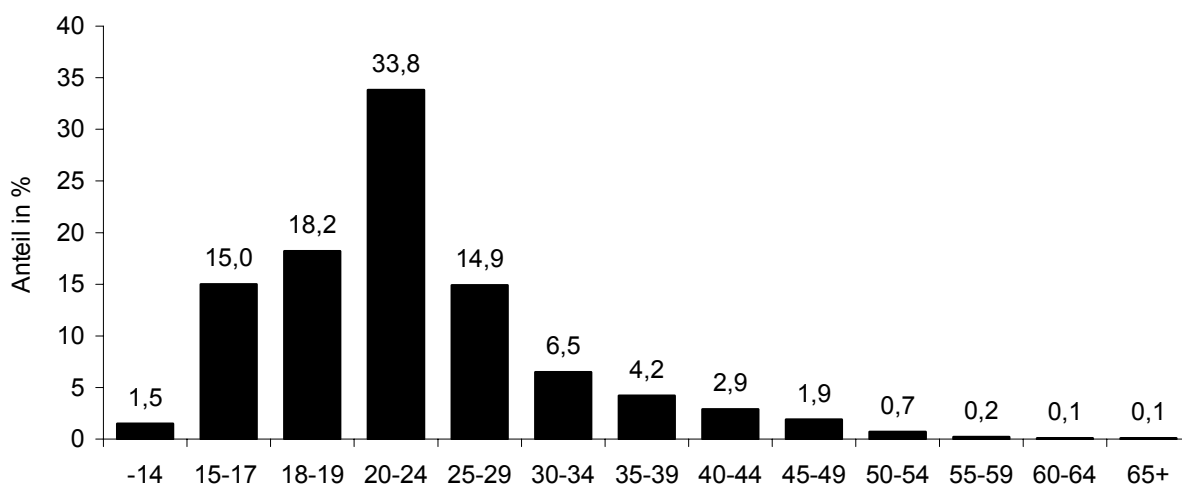
With opiates being readily available in the countries of origin of young ethnic Germans, in some cases they have already had experiences with the use of drugs before they arrive in Germany. They tend to mix alcohol and heroin, for example, greatly underestimating the dangers involved (Info-Dienst Deutsche Aussiedler 2002).

A more recent study (Heimann et al. 2007) explored explanatory models for addiction-related illnesses among ethnic Germans from Eastern Europe, migrants from Turkey and native Germans. According to the study, cultural differences in the explanatory models lead to communication problems with the staff working at aid facilities. Turkish adolescents and adolescent ethnic Germans from Eastern Europe tended to overestimate their ability to control their substance use. This can cause them to not seek out aid until later. Especially migrants from the former Soviet Union fear stigmatisation and social marginalisation.

### 12.3.6 Vulnerable groups among the treated population

The data sets of German Statistical Report on Addiction Therapy do not allow one to venture interpretations with respect to risk groups, or only allow this on a limited scale, as they are not collected according to specific risk groups. Inferences can only be made on adolescents and young adults as a whole.

Approximately 10% of the people seeking aid at counselling facilities are consumers with the main diagnosis cannabis dependence. The treatment data reflects the prevalence of drug consumption among adolescents by indicating that problems are minor in children up to 14 years of age, but then increase continuously up to the age of 24, when they decline again. 68.5% of the persons receiving ambulatory care are under 24 years old, and 83.4% are under 29.



**Figure 22.** Age distribution of people with cannabis main diagnosis seeking help at outpatient counselling and treatment facilities

Sonntag, Bauer & Hellwich 2007a

As a result of the high percentage of young people among cannabis consumers, cautious conclusions can be drawn on adolescent consumers based on other data provided by the German Statistical Report on Addiction Therapy. 90.2% of the cannabis consumers recorded by counselling offices are German, 2.3% come from the European Union (EU) and 7.4% from other countries. One can infer from this that the distribution is similar among the youth population. The same applies to the following parameters: 41% consume cannabis for the first time under the age of 14 years, another 41.1% consume cannabis for the first time at the age between 15 and 17 years. As one would expect given the young age of the majority of those seeking help, 45% of the cannabis consumers recorded in German addiction-aid statistics live with their parents. 43.7% go to school or are undergoing training. Much more than half, namely 64.1%, received counselling for the first time in 2006, which suggests improved access to the clientele. The average age was 23.6 years.

Because in the other main diagnosis groups the age distribution is much different and the average age is much higher, no inferences can be drawn on the socio-demographic traits of the young people.

There are descriptive data available from annual reports on individual regional agencies supplying aid to addicts for the risk group of street children and disadvantaged youth, youth vulnerable to drug consumption or dependent on drugs. The evaluation of one project carried out by the Berlin facility "Karuna e.V." which helps young people with addictions, provides insight into the problem of this target group. In "Zwischenland", an inpatient project which is aimed at providing adolescents stabilisation, motivation, information and a new focus, the gender ratio is three boys to every girl. The average age is 16.4 and gender-specific differences in the age groups are very low. It is clear, however, that the adolescents in the project have been growing younger and younger over the last 4 years – by a total of 9 months between 2000 and 2004. The age variance has also declined. This decline in age is statistically significant (Karuna 2004).

Among the clients, cannabis was stated to be the main drug taken by 80%, followed by opiates with 13%, alcohol with 5% and amphetamines with 3%. An examination of the consumption pattern upon inclusion in the project indicated that all adolescents had consumed cannabis, alcohol and tobacco. More than half had had experience with amphetamines and hallucinogens and 45% had already consumed cocaine once (Karuna 2004).

Almost two-thirds of clients stated upon joining the project that there were problems with addiction in their families. Usually there was no traditional family structure and many clients no longer had any contact with their fathers. Two-thirds of adolescents had experienced violence within and outside the family. The living situation of the adolescents was marked by a high degree of mobility and variance before joining the project. A majority of them had already lived in other facilities, either in crisis facilities, emergency shelters or assisted living projects. Only 30% stated that they had a single place of residence; all the others had had 2 to 6 different places of residence over the previous 6 months. Half of the young people had refused to go to school in the previous months/years. Only one-third had graduated from a secondary school when they joined the project. 35% had been arrested previously (Karuna 2004).

## 12.4 Correlates and consequences of substance use among vulnerable groups of young persons

### 12.4.1 Health correlates and consequences

Chapter 6 reports in detail on general health aspects of drug consumption. There is scarcely any information above and beyond the risk groups addressed herein. As has already become clear in the preceding chapters, however, there is a marked correlation between psychological disorders and substance consumption, although the causal direction is not always clear.

The most serious consequence of drug consumption is fatalities. The group of ethnic Germans from Russia is particularly salient here, with a fatality rate of more than 10% in 2006 (132 out of 1,296) (BKA, personal memorandum). In the 2004 Addiction Report the Federal Government drew the attention to the increase in the percent of drug-related fatalities among ethnic Germans from Eastern Europe, while the absolute number of drug-fatalities as a whole dropped (Die Drogenbeauftragte der Bundesregierung 2004).

An increasingly disquieting problem in spite of the general decline in alcohol consumption among young people on the whole is binge drinking. This frequently leads to serious intoxication on the part of young people, there even having been one fatality in the first half of 2007. The number of alcohol-related inpatient admissions in the age group 10 to 19 years rose 49% between 2000 and 2004. Especially affected by this is the group of the under 16-year-olds who account for half of the persons involved. Among this group, girls are particularly vulnerable. More than half of the children and adolescents had blood alcohol levels of more than two per mil when they were admitted to hospital (Prognos 2007).

### 12.4.2 Social correlates and consequences

Out of a total of 209,625 persons suspected of drug-related offences, almost half (45.4%) were young adults aged 18 to 25. 11.4% were children and adolescents under 18. Adolescents and young adults account for a relatively large share of suspects with respect to offences relating to cannabis and amphetamines. One-fourth of cannabis and amphetamine offences, respectively, are attributed to 18 to 21-year-olds (Bundeskriminalamt 2007b).

On the whole, however, the number of criminal offences in connection with the Narcotics Act (BtMG) in 2006 declined sharply both among children as well as adolescents and young adults, with the decline among non-Germans being particularly pronounced.

**Table 39.** Changes in the number of persons suspected of drug-related offences

Age groups	Germans		Change		non-Germans		Change	
	2006	2005	Abs.	%	2006	2005	Abs.	%
Adolescents	37.280	41.586	-4.306	-10,4	6.450	7.823	-1.373	-17,6
Young adults	20.456	26.766	-6.310	-23,6	2.527	3.404	-877	-25,8
Children	678	1.068	-390	-36,5	65	103	-38	-36,9

## **12.5 Responses to drug problems among vulnerable groups**

### **12.5.1 Policy and legislative developments**

Legal aspects and policy strategies in dealing with drugs were already discussed at length in chapters 0 and 3. The notion of vulnerability in connection with social inequality and addiction is still relatively new in Germany. This term tends to be used in the area of public health and health promotion. Vulnerability is accordingly associated with social disadvantage along with material disadvantage, poorer access to education and health care and lower social participation. Vulnerable people and groups have fewer resources and protective factors of their own and are at the same time subject to greater risks. This understanding of vulnerability has among other things influenced the risk and protection-factor model of behavioural prevention, with which risk factors are supposed to be weakened and protection factors strengthened.

### **12.5.2 Prevention and treatment**

Prevention of addiction in Germany was already addressed in detail in chapter 3. In order to counteract the danger of addiction among young risk groups, measures are frequently necessary which go beyond specific information on addictions and take aspects such as assistance, encouragement and promotion as well as structural factors more into account. This means encouraging and promoting young children in socially disadvantaged neighbourhoods and children from families with addiction problems, the strengthening of parental competence, promotion of language skills and integration for children and adolescents with a migration background and learning and training programmes for young people who turn their backs on school.

There is a broad array of programmes available in all these areas which can be researched in project and good-practice databases (see the list of links) according to different fields of action and criteria. As a result of the increasing awareness of the need for project quality, many projects carry out structural and process evaluations. Very few projects can afford to perform more detailed evaluations of results or enlist the support of scientific researchers.

Competitions are tendered by foundations or public institutions in various fields of action in order to foster the development of innovative projects (see the list of links). The competition “model community strategies in the prevention of addictions” promoting innovative approaches at the community level was already presented in the last report.

There are many good approaches to prevention and intervention in Germany which have been evaluated. One problem, however, is ensuring continuity. This means that projects are frequently developed as models and supported (in some cases by the Federal Government). When the model or promotional phase is completed, however, even if it receives a positive evaluation it is difficult for the project to obtain follow-up funding from the responsible government body or to be absorbed in the regular health-care system.

There are a broad range of programmes available in the area of counselling and treatment for addictions specifically for young people. The register of institutions kept by the German

Centre for Addiction Issues) lists 401 counselling and treatment offices which are specially focused on adolescents or offer programmes specifically for adolescents. In addition, there are 60 withdrawal clinics and 105 inpatient rehabilitation facilities which admit children and adolescents as well as 196 assisted living facilities for adolescents.

### 12.5.3 Specific measures for vulnerable groups

#### Street children

In the larger cities there are usually projects which address street children, socially disadvantaged young people and children and adolescents addicted to drugs. These offer children and adolescents easy access to survival aid with street social work, emergency shelters, contact points and cafés. Staff members act as contacts for all questions and provide support in dealing with government authorities. Moreover, these projects often reserve more limited access programmes and therapies for young people who want to change their living situation, thus serving as an interface between prevention, low-threshold practical aid and treatment.

Some examples of websites which provide tips on specific aid offers for street children are: [www.karunaberlin.de/](http://www.karunaberlin.de/) (Berlin), [www.kids-hh.de/](http://www.kids-hh.de/) (Hamburg), [www.strassenkin-der-leipzig.de/](http://www.strassenkin-der-leipzig.de/) (Leipzig), <http://www.treberhilfe-dresden.de/> (Dresden), <http://www.treber-hilfe.org/> (Berlin), [www.offroadkids.de](http://www.offroadkids.de/), <http://www.klik-berlin.de/> (Berlin), <http://www.gang-way.de/> .

### 12.5.4 Institutional measures and offers

#### Emergency service for children and adolescents

Public welfare facilities' emergency services for children and adolescents serve as central contact points for children and adolescents who are going through a crisis or are in a dire situation, taking them in and if need be placing them in suitable facilities.

#### Inpatient aid for children and adolescents

Placing children and adolescents in a home or inpatient facility can also have the aim of preventing careers as addicts or helping these young people overcome their addiction. One example of a combined approach targeting youth and addictions is the facility "Kleiner Bärenberg", a project sponsored by the Drogenhilfe-Nordhessen, which offers solely inpatient aid in raising children. Proceeding under the assumption that there is no such thing as an isolated addiction problem among adolescents, the project works with a comprehensive educational and therapeutic concept which also comprises school education and vocational orientation. The more general aim of the project is to enable young people to live without addictive substances ([http://www.drogenhilfe-nordhessen.de/boeddigerberg-boe\\_kbb.htm](http://www.drogenhilfe-nordhessen.de/boeddigerberg-boe_kbb.htm)).

Closed homes play a controversial role, as the mission of youth welfare service is to help and encourage the development of young people and not to incarcerate or punish them. If the well-being of children or adolescents is in jeopardy, they are not placed in closed facilities by

order of a juvenile or criminal court, but rather upon the order of a family-court judge. One frequent reason for ordering such intensive therapeutic assistance is children running away from home, usually in combination with deficits in the area of personality development as well as, among other things, danger of addiction, problems in school or the general danger of criminal tendencies (Deutsches Jugendinstitut 2000).

### **Programmes for drug consumers and drug addicts committing first offences in prisons**

The successful prevention and early intervention strategy “FreD” for drug consumers committing their first offence has already been reported on in earlier Reitox reports. There are also treatment possibilities for juvenile offenders who are sentenced to prison. For instance, some prisons have social and/or addiction-therapy facilities. Addiction therapy involves analysing drug addiction in group discussions, physical exercise, work therapy and learning social modes of behaviour along with basic preparation for release. In addition, drug counselling offices in all of the German Länder provide external counselling for prison inmates or persons on remand who have addictions.

## **12.5.5 Social integration**

### **Socially disadvantaged districts of cities**

There are a host of projects in this area which address different target groups or which work with multiple target groups or in several action fields such as, for example, “das Lernhaus” in Berlin ([www.lernhaus.net](http://www.lernhaus.net)), family programmes such as “Adebar” ([www.adebar-st-pauli.de](http://www.adebar-st-pauli.de)) and “Schutzengel” ([www.schutzengel-flensburg.de](http://www.schutzengel-flensburg.de)), city district and women’s meeting points ([www.tenever.de](http://www.tenever.de)), integration projects ([www.imaz.org](http://www.imaz.org) ; [www.bkk-promig.de](http://www.bkk-promig.de)) and community work projects ([www.oldenburg.de/stadtol](http://www.oldenburg.de/stadtol) ; [www.margaretenhuette.de](http://www.margaretenhuette.de)). These projects work in a preventive, comprehensive manner, basing their approach on low-threshold strategies aimed at strengthening resources and utilising integrated action concepts (see list of links).

### **Early school leavers**

The political arena, social science and the field of practice have been focusing on refusal to attend school for some years now. Initiatives and associations have further developed and improved methods and concepts fostering social, school and vocational integration. There are two focal points in these efforts:

- Strategies which promote the resources of young people and motivate them to structure their lives themselves,
- Strategies which seek to improve coordination and linkages with other action fields and promotional possibilities.

The German Youth Institute (Deutsche Jugendinstitut (DJI)) organised a network of projects between 2003 and 2005 which along with youth social workers and schools jointly undertook efforts to counteract “school fatigue” and refusal to attend school. This project was funded by

the Federal Ministry of Education and Research within the framework of the programme “Promoting Skills – Vocational Qualification for Target Groups with Special Promotional Needs”. The project was co-financed with resources from the European Social Fund ([http://cgi.dji.de/bibs/229\\_2190\\_praxisprojekte.pdf](http://cgi.dji.de/bibs/229_2190_praxisprojekte.pdf)).

### **Ethnic minorities**

Programmes on offer to ethnic groups were already discussed earlier in chapter 3.3.2.

### **Measures aimed at preserving public order**

In this area there are scattered prohibitions in communities against alcohol and drug consumption in public areas, in particular playgrounds. Persons who demonstrate problems with alcohol and display ragged appearance are subject to vagrancy laws and prohibitions in certain regions. There are no uniform Federal or Länder regulations along these lines, however.

Addiction support facilities which expect difficulties with their surrounding neighbourhoods due to the behaviour of their clientele usually seek non-bureaucratic solutions in their city districts by means of house rules, codes of conduct in the neighbourhood and “round table” neighbourhood discussions in which drug addicts can also be involved e.g. in gathering used syringes in an area frequented by addicts.

### **12.5.6 Trends and changes**

With regard to groups of younger people who are particularly vulnerable, it is evident that the topic of “children from families with addiction problems” and “addiction and migration” are now receiving greater attention from policy-makers and the interested public. Problems with young people who reject school attendance are also given increased attention. In addition to specific measures and interventions focusing on specific target groups, there are also broadly focused programmes and projects dealing at a more general level of topics and target groups (see chapter 12.5.5).

Welfare facilities for young people and addicts at the community and county levels have begun to work together and solve interface problems. The prevention of addictions is first of all an integral part of the work of schools and aid facilities for young people. Secondly, there is an increasing realisation that specialised counselling and treatment facilities are necessary. Welfare associations and non-statutory associations such as e.g. Condrops ([www.condrops.de](http://www.condrops.de)) or “Suchthilfe direct” ([www.suchthilfe-direkt.de/](http://www.suchthilfe-direkt.de/)) and other associations have reacted to this need and designed counselling and treatment projects with different modules specifically targeting young people. Practical cooperation is developing at an accelerating pace such as, for example, in Saxony-Anhalt, where the Magdeburg Drug Counselling Office is training staff in a cooperation project with a youth home and has issued guidelines on how to deal with young people who consume drugs or are vulnerable to drug consumption in inpatient youth aid facilities.



### **Early intervention strategies**

“Stop – and go!” is a family-oriented addiction-prevention project sponsored by the Landesstiftung Baden-Württemberg in cooperation with Caritas. The target groups are families with children aged 12 to 18 who consume psychoactive substances (nicotine, alcohol and drugs). The project is aimed at helping parents, adolescents and persons who are involved with young people to become aware of the health-damaging effects or risks of consuming addictive substances early on and then to provide these people speedy support when they need it. The project is integrated in the overall counselling and aid-counselling programmes of the psycho-social counselling office. In addition to personal counselling sessions with parents and children, there are also online counselling and a telephone counselling hour. Seminars are offered for interested parents as well as adolescents themselves during the project period.

The success of the project is closely linked to the early and direct involvement of possible cooperation partners at ground level. To be able to reach children, adolescents and parents on the same wavelength as much as possible, “Stop – and go!” thus attempts to achieve a close networking between existing (aid) programmes and partners from a wide range of action fields. Interfaces arise *inter alia* in the areas of youth work and help facilities for young people, school work and social work in schools, police and juvenile court aid as well as general physicians and hospitals. Training programmes and information events are offered for these institutions if they are interested. “Stop – and Go!” is provided scientific support by Esslingen University of Applied Science. Researchers supporting the programme focus on finding new paths of access to families (<http://www.caritas-ulm.de/34318.html>).

### **Selective prevention for at-risk families**

As was described in chapters 3.2.2 and 3.3.3, children and adolescents in families with addiction problems and socially disadvantaged families have become an important topic.

The Catholic University of Applied Science for North Rhine-Westphalia carries out research projects on different topics in the area of prevention of addictions and early intervention, *inter alia* on family risks in the development of addictions and on the correlation between alcohol problems and violent behaviour in families. It is involved in the European research project “ALC-VIOL”. Its competence platform for research on addictions has been carrying out the project “Experience with Violence, Accidents and Accidents Involving Children in Families afflicted by Alcoholism (ACL-VIOL)” since March 2005. The European Commission is supporting the project with funding within the framework of the DAPHNE programme – an action programme with the aim of preventing and combating violence against children, youth and women (<http://www.addiction.de/index.php?id=71>).

In Baden-Württemberg a total of 23 locations carried out addiction-prevention projects with children of parents with addictions over the period 2002 to 2007 with funding from the Landesstiftung Baden-Württemberg. 16 of these projects were selected for an evaluation study which was to provide insight into the development of children of parents with addictions

who take part in a children's group. Due to the heterogeneity of the various measures, no definitive conclusions can be drawn as to the efficacy of the programmes as of yet.

A few projects adopting different approaches are offered here as examples of strategies aimed at families with addiction problems and socially disadvantaged families. "Fitkids" in Wesel is a project which focuses especially on the needs of disadvantaged children in families with addiction problems. In addition to programmes for children, there are also programmes for parents suffering from addictions, for parents-to-be and for specialists who want to undergo additional training. Further research and sustainability have had top priority for the project (<http://www.fitkids-wesel.de/>) since the very outset. The project works at the regional level in the working group "Aid for Children of Addicts" at the NRW Catholic University of Applied Science. A "mothers' support training" (MUT) for mothers in substitution therapy is offered throughout North Rhine-Westphalia by twelve sponsoring institutions and receives research support and assistance through the programme "Transfer-Oriented Research at Universities of Applied Science" (TRAFO). The working group is linked to the European network ENCARE (<http://www.encare.info/>).

#### **Additional projects:**

- "Outpatient Social Educational Family Aid in Families with Addiction Problems (SPFH-Sucht)". Drogenhilfe Nordhessen e.V. <http://www.drogenhilfe-nordhessen.de/>
- Self-Help for Children and Adolescents: [www.nacoa.de](http://www.nacoa.de), <http://www.alanon.de/subdomains/alateen/www/>
- Strategies in which mothers or parents are at the forefront include:
  - "Liliput": <http://www.soziales.nuernberg.de/drogen/projekte.html#liliput>
  - "extra" <http://www.extra-ev.org/index.html> and
  - "Lichtpunkt" <http://www.idh-frankfurt.de/>.

"Lichtblick" is a partner organisation of the European project "Vulnerable People: addicted mothers and their young children – preventing upbringing problems by providing professional assistance" (<http://www.vulnerablepeople.org/>). This project aims at developing supra-national standards for dealing with children of addicted parents.

Prevention projects for socially disadvantaged families with children do not always focus on an explicitly addiction-related goal. Strategies which seek to help people by improving their child-raising skills also help prevent addictions, however. Examples of this approach include the Magdeburg prevention programme "Eltern-AG", which is sponsored by the Land Ministry of Health and Social Affairs in Saxony-Anhalt. Easy access and empowerment are central features of the project, which seeks to contribute to an improvement in the child-raising skills of socially disadvantaged parents. The aim is furthermore to promote the social and educational skills of parents while fostering the emotional, cognitive and social development of children during the first seven years of their lives, alleviating risk factors associated with certain socio-economic strata and stimulating the formation of neighbourhood networks of parents. "Eltern-AG" has the potential to have an impact beyond the project itself by

encouraging autonomy and self-help skills. The project receives support from social scientists and has been conferred the “good practice” label ([www.eltern-ag.de](http://www.eltern-ag.de)).

### 12.5.7 List of project databank links

#### Socially disadvantaged persons

- [www.iss-ffm.de/infoboerse/projekt/recherche.html](http://www.iss-ffm.de/infoboerse/projekt/recherche.html) Information exchange on participation and integration (Bundesministerium für Arbeit und Soziales, Institut für Sozialarbeit und Sozialpädagogik)
- <http://db.dji.de/cgi-bin/db/default.php?db=17> SINTEGRA database (Deutsches Jugendinstitut)
- [www.gesundheitliche-chancengleichheit.de](http://www.gesundheitliche-chancengleichheit.de) Database for the promotion of health among socially disadvantaged persons (Bundeszentrale für Gesundheitliche Aufklärung, Gesundheit Berlin)
- [www.good-practice.de/loesungen/](http://www.good-practice.de/loesungen/) Information exchange participation and integration (Bundesinstitut für Berufsbildung)
- <http://www.dji.de/cgi-bin/projekte/output.php?projekt=25> PRAXIMO – practical model for young people and work (Deutsches Jugendinstitut)
- [www.sozialestadt.de/](http://www.sozialestadt.de/) Bundestransferstelle Soziale Stadt
- <http://infodok.bka.de/> Bundeskriminalamt
- <http://www.kriminalpraevention.de/> Deutsches Forum Kriminalprävention

#### Competitions / Funding

- [www.deutscher-praeventionspreis.de](http://www.deutscher-praeventionspreis.de) German Prevention Prize
- <http://www.bosch-stiftung.de/content/language1/html/8186.asp> LISA projects start-up for better integration of young ethnic Germans from Eastern Europe
- <http://www.institut.de/preis/foerderpreis.htm> German Promotional Prize for Prevention of Crime)
- <http://www.eundc.de/themen/eundc.html> Federal Model Programme Development and Opportunity for Younger People in Socially Disadvantaged Districts (SPI Foundation) (completed in 2006)
- [http://www.los-online.de/content/e2717/index\\_ger.html](http://www.los-online.de/content/e2717/index_ger.html) LOS – Local Chapter for Social Purposes (Federal Ministry for Family Affairs, Senior Citizens, Women and Youth) (completed in 2006)



## 13 Drug-related research

### 13.1 Research structures

#### 13.1.1 Drug-related research in national policy-making

After various studies in the past have identified a need for more research in the area of abuse and dependence on legal substances, an “Anti-Drugs Action Plan” was adopted in 1990”. It one-sidedly focused on illicit drugs and was subsequently replaced by the “Action Plan for Fighting Drugs and Addiction” (Die Drogenbeauftragte der Bundesregierung 2003). The focal point of German drug and addiction policy since its inception has above all been on the reduction of tobacco and alcohol consumption (cf. also 1.1.3). This has led to more research in the area of legal addictive substances. The following measures are listed in the “Action Plan for Fighting Drugs and Addiction”:

Establishment of a monitoring system for early recognition of risky substance and consumption patterns,

- Promotion of research projects ...
  - ... which aim at improving prevention and treatment,
  - ... on the causes of addiction taking into account gender-specific differences and secondary prevention measures,
  - ... on the influence of drug and pharmaceutical consumption on driving and the general frequency of accidents at home, at work or in school,
  - ... examining alcohol abuse as a risk factor in the development of violent delinquency and
- Research into causal factors in the rehabilitation process to develop rehabilitation guidelines, cost-benefit analyses and individual assignment to rehabilitation.

The concrete objectives also include fighting illicit drugs (in particular cannabis) and ensuring survival of hard-core drug addicts. It is noted both in the “Action Plan for Fighting Drugs and Addiction” as well as the working programme which is based on the plan of the Board on Drugs and Addiction (DSR 2006) that current research results of the affiliated research projects supported by the Länder and the Federal Ministry of Education and Research should also always be included in these ideas in the pursuit of the objectives which have been spelled out.

#### Focal points

All the most important areas of drug-related research are covered in Germany. Disciplines such as biomedicine and biochemistry tend to conduct basic research on substance abuse, while areas such as public health, psychology and sociology tend to be application-oriented.

Research networks which were founded in 2000 with the aim of conducting interdisciplinary, application-oriented research play a significant role in this connection.

### **Limitations and constraints**

All drug-related studies are subject to financial, national, European and international ethical and statutory constraints. A German specialty is the federal structure of the country which prevents a central collection of all regional or local funded projects and activities. For this reason it is not ensured in all cases that for example experiences from regional model projects become nationally known and implemented accordingly. In this context professional societies and networks of scientists, who for example ensure an exchange of relevant research results in national bodies or journals with no consideration for local or regional borders, play an important role.

#### **13.1.2 Relationship between research – policy-making – the field of practice**

Just as policy-makers have an influence on research by virtue of the statutory framework and by funding certain studies, scientific findings also contribute to decisions made by policy-makers, even if no linear relationship is directly perceivable. Over the last few years, the Federal Highway Research Institute (Bundesanstalt für Straßenwesen) has carried out or initiated additional research projects over the last few years on behalf of the Federal Ministry of Transport, Building and Urban Affairs on the problem of “drugs and pharmaceuticals” with the aim of improving traffic safety. An additional example is provided by research results which attribute organic brain disorders and long-term damage to the consumption of illegal synthetic drugs. Political policy-makers felt encouraged by these studies to take action against the manufacture, trade and consumption of designer drugs (Die Drogenbeauftragte der Bundesregierung 2003). For this reason as well, preventative measures are on the one hand supported in order to reduce demand, while on the other hand repressive measures by the state are being strengthened to reduce the supply.

#### **13.1.3 Important national structures for drug-related research**

##### **Coordinating institutions**

There is no central coordinating institution for drug-related research in the Federal Republic of Germany. On the one hand, depending on the content of studies, there are various ministries in charge, e.g. the Federal Ministry of Health for the Heroin trial, the Federal Ministry of Education and Research for studies by networks for research on addictions or the Federal Ministry of Transport, Building and Urban Affairs for drug consumption and traffic. On the other hand, there are numerous research projects which are supported by the German Länder or local governments or by non-governmental organisations and foundations. The biggest national institutions commissioning drug-related research projects are the Federal Ministry of Education and Research, whose main focus is especially on research on use of drugs, the Federal Ministry of Health (including the Federal Center for Health Education (Bundeszentrale für gesundheitliche Aufklärung (BZgA) and the Robert Koch Institute) and

the German Research Foundation (Deutsche Forschungsgemeinschaft), which concentrates on basic research. Not only do the Robert Koch Institute or the Federal Centre for Health Education (BZgA) commission research projects – in some cases they perform such studies themselves.

### **Research institutes and organisations**

As a result of deficits in research on addictions and the health care of addicts, interdisciplinary research associations have been set up since 2000 within the framework of the Federal Health Research Programme in which specific substances and questions relating to substances in general have been explored. Application-oriented research is promoted in the research networks in close cooperation with health-care facilities with the aim of making the results of research available to institutions which provide counselling and treatment and as a result contributing to an adoption of these results in everyday health care. The four networks for research on addictions (North Rhine-Westphalia Addiction Research Association (NRW), the Baden-Württemberg Addiction Research Association (BW), the Saxony/Bavarian Addiction Research Association (ASAT) and the Northeast Addiction Research Association) each constitute regional amalgamations of reputed researchers and research institutions. While the other three addiction research associations engage primarily in research on tobacco and alcohol in addition to several projects involving basic research, the focal point in the ASAT is on the research of illegal substances.

Some important university and independent institutes include the Central Institute of Mental Health (Zentralinstitut für seelische Gesundheit, ZI) in Mannheim, the Institute for Psychology and Psychotherapy at Dresden University of Applied Sciences (Institut für Psychologie und Psychotherapie der Technischen Universität), the Centre For Drug Research (CDR) and the Institute for Social Work and Social Education (Institut für Sozialarbeit und Sozialpädagogik, ISS) in Frankfurt/M., the Centre for Interdisciplinary Addiction Research (Zentrum für interdisziplinäre Suchtforschung, ZIS) in Hamburg, the Federal Center for Health Education (Bundeszentrale für gesundheitliche Aufklärung (BZgA)), the Platform of Competence for Research on Addictions at the North Rhine-Westphalian Catholic University of Applied Science), the Faculty for Health Sciences at the University of Bielefeld and the Institute for Therapy Research (IFT) in Munich.

### **Framework funding**

Basic funding is provided for some of these institutions, especially university faculties, departments, professorships, working groups and professors such as, for example, the ZI in Mannheim, the ZIS in Hamburg and the working groups in Frankfurt. In addition, the Federal Ministry of Health, the Federal Ministry of Education and Research and the DFG either tender research projects at the national level with stipulated framework conditions (budget, term, content, etc.) or research topics which university or independent research institutes apply for, or research institutes apply for funding of a specific study from funding agencies. Regional projects receive financial support from German Länder, cities, local governments or non-governmental organisations and foundations. The budgets of the Federal Ministry of

Education and Research, the Federal Ministry of Health and the DFG distinguish between different areas of health research, but not in every case explicitly according to projects on illicit drugs.

The Federal Ministry of Education and Research provided € 9 million in financial resources for the first funding period (2001-2004) for the four addiction-research associations, with € 600,000 being added to this amount by the Baden-Württemberg Ministry of Science, Research and Art for the Baden-Württemberg Addiction-Research Association. Of the sum total of 24 projects receiving financial support, two focused exclusively on illegal consumption of drugs while five additional ones dealt generally with the abuse of licit and illicit substances. In the second funding period (2004-2007), the research associations were furnished with € 10,807,351 for 26 studies (of these, five studies dealt exclusively with illicit drugs and four with both licit and illicit drugs). Among the projects which were officially promoted within the framework of addiction-research associations, there were also a whole host of additional associated projects which are not listed in the said budget, but which profited in structural terms from the networks which were established. Out of the six associated projects in the ASAT, four of them relate to illicit drugs while the other two address both licit and illicit drugs.

## **13.2 Most recent important studies and publications**

### **13.2.1 Important studies since 2000**

#### **The Federal German demonstration project on heroin-supported treatment of people dependent on opiates (Heroin Trial)**

**Research institution:** The demonstration project is a joint initiative of the Federal Ministry of Health, the Länder of Hamburg, Hesse, Lower Saxony and North Rhine-Westphalia along with the cities of Bonn, Frankfurt, Hanover, Karlsruhe, Cologne and Munich and is supported by the Federal Chamber of Physicians (Bundesärztekammer). The Centre for Interdisciplinary Research at the University of Hamburg (ZIS) was commissioned with the research planning and execution of the study. The head of the clinical examination is Prof. Dr. Dieter Naber. The clinical project manager is Prof. Dr. Christian Haasen (both from the ZIS).

**Funding:** The project is funded with financial resources from the Federal budget (Federal Ministry of Health), the cities involved and in part the German Länder. Total expenditures between 2002 and 2004 were € 23,528,746 (v. d. Schulenburg & Claes 2006a).

#### **Abstract:**

**Background/objectives:** In this model project, heavily dependent heroin addicts who did not profit from a methadone treatment or from the therapeutic system were treated. The two main criteria for evaluating the effectiveness were whether the structured treatment of these persons with diamorphine is more effective than methadone treatment under similar conditions with regard to health stabilisation and a reduction in illicit consumption of drugs.



*Methods:* In seven cities 1,032 persons dependent on heroin were randomly selected for methadone or heroin-supported treatment. On top of this they were respectively provided intensive psycho-social assistance.

*Results:* 80% of the persons in the heroin group were able to improve their health (in contrast to 74% in the methadone group). Illicit drug consumption declined with 69.1% of the persons receiving diamorphine substitute, but only with 55.2% of the methadone-substitute patients.

*Conclusion:* Heroin appears to be superior to methadone treatment on a statistically significant scale with respect to the main criteria for evaluating success. Given these positive results, an application was filed for the licensing of diamorphine as a medication which is eligible for sale and prescription in accordance with Schedule III to § 1 of the Narcotics Act with the Federal Institute for Drugs and Medical Devices (BfArM), but has not yet been approved, as this requires that the law be changed by the Bundestag.

**Citations:**

Naber, D. & Haasen, C. (2006). Das bundesdeutsche Modellprojekt zur heroingestützten Behandlung Opiatabhängiger – eine multizentrische, randomisierte und kontrollierte Therapiestudie. Abschlussbericht der klinischen Vergleichsstudie zur Heroin- und Methadonbehandlung. Hamburg: ZIS der Universität Hamburg.

Additional information and publications, in particular reports on special studies, can be called up at <http://www.heroinstudie.de>.

**Early family therapy treatment for people addicted to opiates – a comparative cross-sectional and longitudinal study**

**Research institutions:** This study was carried out at the University Clinic Hamburg-Eppendorf at the Clinic and Polyclinic for Psychiatry and Psychotherapy under the leadership of Prof. Dr. Rainer Thomasius from 1996 to 2001.

**Funding:** The project manager for the programme funded by the Federal Ministry of Education and Research for the concentration area of addictions was the DLR. Expenditures for the entire period of time between 1996 and 2001 were DM 1,211,000 (≈ € 619,000) (P.-M. Sack, personal memorandum, 28<sup>th</sup> August 2007).

**Abstract**

*Background/objectives:* An abstinence-oriented, non-substituting ambulatory family therapy (n=86) with an adolescent or young adult who is dependent on drugs was evaluated in terms of multiple criteria. The ambulatory family therapy is compared with an inpatient control group using a “twin” design (clients of a therapeutic community, n=38) and with data from two reference groups: families with the same problem before the beginning of treatment for addiction (n=51), families with peers exhibiting no psychiatric problems (n=31).

*Methodology:* five target criteria (status of addiction, family dynamics, symptoms of disorder, psychosocial integration and satisfaction with therapy) are examined by pre-post analyses and in one to two-year catamnese.

*Results:* 72% of the families taking part and 37% of the control group completed their therapies. Among the dependent adolescents in the family therapy sample, 61% improved their addiction status significantly or very significantly (EuropASI, urine analysis). All the family members taking part experienced improvement in all of the target criteria. In spite of the more intensive treatment, the results for the clients in the therapeutic community were the same or only slightly better. In the two-year catamnesis the results of the family therapy random sample turned out to be stable. These results were better than those for the families prior to treatment for addiction and similar to those of the families not exhibiting any problems. In the family relationship there was a delay effect of two years. It was not till then that the majority of the patients treated in a family therapy had established a family relationship which was largely satisfying and allowed the relationship system to solve many other problems which occurred.

*Conclusion:* A good short and longer-term prognosis can be made for an outpatient family therapy treatment of adolescents diagnosed as “dependent on multiple substances/harmful use of opiates” or “dependent on multiple substances/episodial use of opiates” who are in regular contact with their biological families. Adolescents especially at risk of back-sliding and relapse (male, diagnosis of “dependence on opiates/harmful use of multiple substances”) should be introduced to different forms of aftercare.

**Citations:**

Thomasius, R. (Hrsg.) (2004). Familientherapeutische Frühbehandlung des Drogenmissbrauchs. Eine Studie zu Therapieeffekten und –Prozessen. Hamburg: Dr. Kovac.

**Optimisation of substitution-supported therapy by indicative assignment of substitute substances and psychosocial treatment components of patient profiles (OSTD)**

**Research institution:** IFT Munich

**Funding:** This is an official project in the ASAT addiction-research association with funding by the Federal Ministry of Education and Research under the management of Dr. Heinrich Kufner. The total budget between 1<sup>st</sup> November 2001 and 30<sup>th</sup> April 2006 was about € 523,000.

**Abstract:**

*Background/objectives:* The aim is to allocate the substitute substance and assign psychosocial treatment components to disorder profiles in the case of patients dependent on opioids and the identification of predictors of successful treatment.

*Methods:* Firstly a clinical study on effectiveness in prospective randomised-controlled design on unselected random groups of patients and secondly the examination of possible adoption, acceptance and effectiveness by clinical care facilities (Transfer Study).

*Results:* The retention rate totalled 52.1%. Substance abuse declined significantly both among the group treated with methadone as well as among the group treated with buprenorphine. The analysis has not yet been completed.

*Conclusion:* Substitution treatment is a secure and effective treatment method for drug dependence, whereby methadone and buprenorphine are both equally effective. The length of opioid consumption and the age when persons began taking opioids are important, while withdrawal symptoms are the most important predictors of drop-outs from the treatments.

**Citations:**

Küfner, H. & Hackmann, K., Schnabel, A. & Soyka, M. (2004) Optimierung der substituionsgestützten Therapie Drogenabhängiger (OSTD): Entzugssymptome und Suchtverlangen in der ersten Einstellungswoche. Suchtmed 6 (1) 95-97.

Küfner, H. & Johann, M.. Psychosoziale Behandlung von Drogenabhängigen unter Substitution. Manual 4.0. Eingereicht in Lengerich: Pabst.

Soyka, M., Zingg, C., Koller, G. & Küfner, H. (2007). Retention Rate and Substance Use in Methadone and Buprenorphine Maintenance Therapy and Predictors of Outcome: Results from a Randomized Study. The International Journal of Neuropsychopharmacology. (Submitted)

**Cost-Benefit and Risk Appraisal of Substitution Treatments (COBRA)**

**Research institution:** The study began in 2003 and was carried out by the Institute for Psychology and Psychotherapy, Working Group on Epidemiology and Health Reporting at Dresden University of Applied Science, the Max Planck Institute for Psychiatry in Munich, the Working Group for Clinical Psychology and Epidemiology and the Psychiatric Clinic and Polyclinic of Ludwigs Maximilians University of Munich as an associated research project of the Federal Ministry of Education and Research ASAT Addiction Research Association. The project head is Professor Dr. Hans-Ulrich Wittchen.

**Funding:** The project is being supported with funding from the Federal Ministry of Education and Research. No information is available on the budget.

**Abstract**

*Background/objectives:* The research project involves an evaluation of the risks, advantages and disadvantages of various intervention strategies and modalities in the field of substitution and health care practice for persons dependent on opiates in Germany. The objectives of the project are to characterise existing forms and models of facilities, traits of patients dependent on opiates at these facilities, diagnostics and indication and allocation-related decisions in health-care reality and intervention methods.

*Methodology:* Based on a national representative random sample of physicians administrating substitute substances, this is an observation and naturalistic study consisting of three major parts. The first part is a national survey of physicians administrating substitute substances (preliminary study, n = 379 physicians). The second part is a cross-sectional study (n = 223 physicians) involving a target-week recording of 2,694 consecutively recruited patients in order to ascertain the degree of difficulty in determining the problem profile, the form of application, dosage, past treatments, co-morbidity and the differences between methadone and buprenorphine substitution including secondary effects. The third part is a prospective longitudinal cohort study with 48 patients respectively receiving methadone and buprenorphine to research differences between treatment methods with respect to the success of treatment, psychosocial and other secondary effects. A follow-up survey was performed twelve months later.

*Results:* The response rate for the physicians was 57.1%, of which 71.7% of the patients they treated were entitled to participation. Initial comparisons with the substitution register demonstrate the national representativeness of the study including regional differences, different settings and execution of treatment.

*Conclusions:* The COBRA study represents a unique, comprehensive database, provides information on the original allocation, the intervention process in everyday treatment, the course and success of development of patients treated with methadone and buprenorphine.

**Citations:**

Wittchen, H.-U., Apelt, S. M., Bühringer, G., Gastpar, M., Backmund, M., Götz, J., Kraus, M. R., Tretter, F., Klotsche, J., Siegert, J., Pittrow, D. & Soyka, M. (2005). Buprenorphine and methadone in the treatment of opioid dependence: methods and design of the COBRA study. International Journal of Methods in Psychiatric Research, 14, 14-28.

For additional information see [www.cobra-projekt.de](http://www.cobra-projekt.de).

**CANDIS – “Modular Therapy for Cannabis Disorders”**

*Research institutions:* Institute for Clinical Psychology and Psychotherapy, TU Dresden  
The project manager is Dr. Eva Hoch.

*Funding:* The project is being funded by the Federal Ministry of Education and Research and received a total budget of approximately € 500,000 over the period 2004-2007.

**Abstract**

*Background/objectives:* Psychological therapy approaches and therapy programmes for cannabis-related disorders are not available either in the Federal Republic of Germany or in other European countries. The Institute for Clinical Psychology at the University of Applied Science in Dresden has developed a modular adapted treatment programme for patients with cannabis-related disorders whose effectiveness was to be analysed at the end of 2004 following several years of preliminary work. The study was funded by the Federal Ministry of Education and Research.

*Methodology:* Based on a randomised-controlled study design, n = 122 subjects were recruited from greater Dresden and assigned to three study treatments between January 2006 and December 2006: 1.) a standardised treatment (ST; n=51) in which motivation-enhancing, cognitive behaviour-therapeutic and psycho-social, problem-solving components are integrated, 2. a targeted, standardised treatment (TST; N = 39) which is composed of the same components as ST, with this treatment, however, being individually adapted to the problem profile of the patients, and 3.) a waiting-control group (DTC, n = 32).

*Results:* The structured short-term therapy was well received by the 16 to 44 year-old, primarily male (79%) group, with patients coming from all strata of the population; the retention rate for the entire course of the therapy was 67%; 84% of all therapy beginners took part in a final examination following the completion of the therapy. The majority of patients reduced their consumption considerably after the completion of the therapy, while 49% were completely abstinent following CANDIS.

*Conclusions:* As a result of the high level of acceptance by the patients and therapists taking part and the encouraging therapy results (whose stability is still being examined at present in 3 and 6-month catamnese), a follow-up study on the implementation and evaluation of CANDIS therapy in the outpatient addiction support system is to be carried out (funding: Federal Ministry of Health). It is at present being considered whether to expand the study to the European level.

**Citations:**

No articles have been published on this study to date. The data provided is all based on personal memoranda (Hoch 30th September 2007) and data contained on the website.

For additional information see [www.candis-projekt.de/](http://www.candis-projekt.de/)

**Epidemiology of consumption, abuse and dependence on licit and illicit drugs among adolescents and young adults” (EDSP)**

Another important study is the longitudinal prospective-epidemiological study on the “epidemiology of consumption, abuse and dependence on licit and illicit drugs among adolescents and young adults” (EDSP). The study was funded by the Federal Ministry of Education and Research and the DFG. The project managers were Professor Dr. Hans-

Ulrich Wittchen and Dr. Rosalind Lieb. 3,021 adolescents and young adults aged 14 to 24 (T0) from Munich and the vicinity were examined retrospectively and prospectively within the framework of the EDSP from 1995 (measurement point T0) until 2005 (T3) in four waves. Beesdo et al. (2007) have provided an overview of the methodology applied in the four waves of the study. In contrast to the five studies described in the foregoing, the focus of the EDSP was not exclusively on an examination of illicit substances, but rather on the general development of substance abuse. As a result of the representativeness of the random sample and the longitudinal design, however, this study is unique and for this reason deserves special mention here.

The basic EDSP study established that the consumption of licit (>90%) and illicit psychotropic substances (35%) is more widespread in the 14-to-24 age group than was previously assumed. The consumption of psychotropic substances among the younger age group continued to rise in the course of the study and a sizeable number of the persons surveyed developed abuse and dependence syndromes early on (Lieb et al. 2000).

Various publications have examined specific age-, gender- and substance-related vulnerabilities and risks both for first-time use, regular and problematic consumption as well as for the development of abuse and dependence syndromes. One example of this is the recently published work of Wittchen et al. (2007), which describes the connection between cannabis consumption, disorders caused by cannabis and psychological disorders such as anxiety.

### **13.2.2 Scientific peer-reviewed journals with national authors**

A literature list with articles of German experts which have been published in international, scholarly peer-reviewed journals in 2006 is contained in the annex – without any claim to being complete (cf. chapter 15).

## **13.3 Collection and dissemination of results of research**

### **13.3.1 Flow of Information**

Both the Federal Government Commissioner on Narcotic Drugs as well as the DBDD (Reitox report on the drug situation) report each year in the form of a report on current research results and thus also act as multipliers which make information available to a broader public. The collection and dissemination of research results in the research community is organised to a large extent by researchers themselves, the associations and the specialised institutions and organisations, and primarily takes place through scientific congresses and academic and research journals (cf. Table 40 and Table 41).

### **13.3.2 National scientific journals**

The eight national drug-related journals are listed in Table 40. Four of these journals are peer-reviewed and have English abstracts in addition to the German ones. The areas of concentration differ greatly in part, but none of the journals deals exclusively with illegal drugs.

Table 41 contains a small selection of national journals from other disciplines (public health, psychiatry and psychotherapy) which also publish drug-related research. Articles which relate to drugs are often published in both the disciplines mentioned above as well as in many other ones (sociology, medicine, biochemistry, economics, jurisprudence and many more). Not all of these can be listed here, however.

**Table 40.** National drug-related scholarly journals

Title	Field	Main emphasis	National/in-ternational contribution	Peer-review	Abstract-Language
Akzeptanz	Social work	Addiction and social questions	European	No	German
European Addiction Research	Epidemiology	Research results	European	Yes	English
Konturen	Addiction research	Addiction and social questions	German	No	German
Sucht	Addiction, Epidemiology	Research reports, overview articles, Conference contributions	German, European	Yes	German, English
Sucht Aktuell	Interdisciplinary	Total addiction, alcohol	German	No	German
Suchtmagazin	Interdisciplinary, Health promotion	Health promotion, youth work, prevention	German, Swiss	No	German
Suchtmedizin in Forschung und Praxis	Interdisciplinary, scientific and practical orientation	Total Addiction	German	Yes	German, English
Suchttherapie	Interdisciplinary – practical orientation, treatment	Treatment of addicts and their relatives	German, European	Yes	German, English

**Table 41.** Scholarly journals from other disciplines with drug-related research

Title	Field	Main emphasis	nationale/in-ternationale contributions	peer-review	abstract-Language
Gesundheitswesen	Public health	Health promotion	German	Yes	German, English
Psychiatrische Praxis	Psychiatry	Mental Health	German, international	Yes	German, English
Nervenarzt	Psychiatry	Mental Health	German	Yes	German, English
Psychotherapie	Psychotherapy	Mental Health	German	Yes	German, English

### 13.3.3 Other types of dissemination

#### Websites on research

More detailed information on individual research projects, research association structures and cooperation partners and research reports and literature citations are provided by the websites of the research associations (Forschungsverbände):

- Suchtforschungsverbund Baden-Württemberg: [www.bw-suchtweb.de/](http://www.bw-suchtweb.de/),
- Suchtforschungsverbund Bayern/Sachsen: [www.psychologie.tu-dresden.de/asat/](http://www.psychologie.tu-dresden.de/asat/),
- Suchtforschungsverbund Nordrhein-Westfalen: [www. www.suchtforschungsverbund-nrw.de/](http://www.www.suchtforschungsverbund-nrw.de/) and
- Suchtforschungsverbund Nord-Ost ("Early intervention in the case of substance-related disorders" (EARLINT)): [www.medizin.uni-greifswald.de/epidem/forschung/intervention/earlint.html](http://www.medizin.uni-greifswald.de/epidem/forschung/intervention/earlint.html).

#### Websites of important institutions and working groups

- Zentrum für interdisziplinäre Suchtforschung Hamburg: [www.zis-hamburg.de/](http://www.zis-hamburg.de/),
- Centre for Drug Research der Johann Wolfgang von Goethe-Universität Frankfurt/M.: [www.uni-frankfurt.de/fb/fb04/forschung/cdr/index.html](http://www.uni-frankfurt.de/fb/fb04/forschung/cdr/index.html),
- Institut zur Förderung qualitativer Drogenforschung, akzeptierender Drogenarbeit und rationaler Drogenpolitik Münster: [www.indro-online.de/](http://www.indro-online.de/),
- Zentralinstitut für seelische Gesundheit Mannheim: [www.zi-mannheim.de/](http://www.zi-mannheim.de/),
- Institut für Sozialarbeit und Sozialpädagogik Frankfurt/M.: [www.iss-ffm.de/](http://www.iss-ffm.de/),
- Institut für Klinische Psychologie und Psychotherapie der Technischen Universität Dresden: [www.psychologie.tu-dresden.de/klinische/](http://www.psychologie.tu-dresden.de/klinische/),
- Kompetenzplattform Suchtforschung an der katholischen Fachhochschule NRW: [www.addiction.de/](http://www.addiction.de/) und
- Suchtforschungsverbund an Fachhochschulen (SFFH) mit den Standorten Frankfurt/M., Köln, Aachen und Mainz: [www.suchtforschungsverbund.de](http://www.suchtforschungsverbund.de).
- Institut für Therapieforschung München: [www.ift.de/](http://www.ift.de/),

#### National drug conferences

Important national drug conferences, which usually take place at regular intervals (usually on an annual basis) include the "Congress of the German Society for Addiction Research and Addiction Therapy (Deutsche Gesellschaft Sucht), the Interdisciplinary Congress for Addiction Medicine and the scientific research meeting of the German Board on Drugs and Addiction (Deutscher Sucht- und Drogenrat). On top of this, there are various conferences and working meetings on specific topics, most of them organised by universities, funding agencies and addiction research associations.



## PART C – BIBLIOGRAPHY AND ANNEXE

### 14 Bibliography

#### 14.1 References

addiction (2007). Kompetenzplattform Suchtforschung. Available: <http://www.addiction.de/index.php?id=71> [Letzter Zugriff: 31.08.2007].

Arbeiterwohlfahrt Bundesverband e.V. (2006). Interkulturelle Öffnung der Suchtberatung. Ein Leitfaden für die Praxis. Schriftenreihe Theorie und Praxis. Bonn.

Backmund, M., Berhard-Wehmeier, W., Meyer, K., Abeck, C., Holzke, D & das Villa-Team 1991-2006 (2006). 15 Jahre qualifizierter Drogenentzugsbehandlung an einem Münchner Akutkrankenhaus. Suchtmedizin in Forschung und Praxis 8 23-28.

Backmund, M., Hinrichsen, H., Rossol, S., Schütz, C., Soyka, M., Wedemeyer, H. & Reimer, J. (2006). Leitlinien der Deutschen Gesellschaft für Suchtmedizin (DGS e.V.): Therapie der chronischen Hepatitis C bei intravenös Drogengebrauchern. Suchtmedizin in Forschung und Praxis 8 129-133.

Backmund, M. & Meyer, K. (2006). Hepatitis C-Therapie während der Substitutionsbehandlung. Suchtmedizin in Forschung und Praxis 8 115-118.

Backmund, M. & Reimer, K. (2007). Protective factors for HIV infection in IDUs. EMCDDA literature review, Final Report. Lisbon: EMCDDA.

Backmund, M., Schäfer, M., Götz, J., Kraus, M., Apelt, S., Wittchen, H.-U. (2006). Die Behandlung der Hepatitis C während der Substitutionsbehandlung – Diskussion der Ergebnisse der COBRA-Studie. Suchtmedizin in Forschung und Praxis 8 76.

Bartsch, M. & Frühlingsdorf, M. (2007). Kinder der Sucht. Der Spiegel 61(15) 38-40.

Baumgärtner, T. (2006a). Epidemiologie des Drogengebrauchs bei Jugendlichen und Heranwachsenden in Hamburg 2005. Zusammenfassender Basisbericht der Schüler- und Lehrerbefragungen zum Umgang mit Suchtmitteln. Hamburger Schulbus. Teilmodul Schülerinnenbefragung. Hamburg: Büro für Suchtprävention.

Baumgärtner, T. (2006b). Outcome-orientierte Steuerung in der Suchtkrankenhilfe. Grundlagen der Qualitätsentwicklung am Beispiel Hamburg. Konturen, 38-39.

Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz Hamburg (2006). Beschränkte Bekanntgabe zur Auswahl von Trägern für den Ausbau von Beratungsangeboten für suchtgefährdete Jugendliche und junge Erwachsene. G32/1/2006. Hamburg: Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz, Hamburg.

Berghaus, G. & Krüger, H.-P. (Hrsg.) (1998) Cannabis im Straßenverkehr. Gustav Fisher Verlag, Stuttgart.

Bergmann, E. & Horch, K. (2000). Ökonomische Bewertung von gesundheitlichen Folgen des Alkoholkonsums. Sucht Aktuell 2 14-18.

Björn, H., Andersson, B., Bjarason, T., Ahlström, S., Balakireva, O., Kokkevi, A. & Morgan, M. (2004). ESPAD Report 2003. Alcohol and Other Drug Use Among Students in 35 European Countries. Stockholm : The Swedish Council for Information on Alcohol and Other Drugs (CAN).

Bonnet U., Harries-Hedder K., Leweke F.M., Schneider U. & Tossmann P. (2004). AWMF-Guideline: Disorders Related to Cannabis. Fortschritte der Neurologie und Psychiatrie 72 318-329.

Bühler, A. & Kröger, C. (2006). Expertise zur Prävention des Substanzmissbrauchs. Bundeszentrale für Gesundheitliche Aufklärung (Hrsg.): Forschung und Praxis der Gesundheitsförderung, 29. Köln: BZgA.

Bühringer, G., Augustin, R., Bergmann, E., Bloomfield, K., Funk, W., Junge, B., Kraus, L., Merfert-Diete, C., Rumpf, H.J., Simon, R. & Töppich, J. (2000). Alkoholkonsum und alkoholbezogene Störungen in Deutschland. Baden-Baden: Nomos.

- Bundesministerium für Gesundheit (BMG) (2007). Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen stellt Gutachten 2007 vor. Pressemitteilung vom 03.07.2007. Berlin: BMG.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2007a). Cannabiskonsum der Jugendlichen und jungen Erwachsenen in Deutschland. Kurzbericht. Köln: BZgA. Available: <http://www.bzga.de> [Letzter Zugriff: 15.08.2007].
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2007b). Alkoholkonsum der Jugendlichen in Deutschland 2004-2007. Kurzbericht. Köln: BZgA. Available: <http://www.bzga.de> [Letzter Zugriff: 15.08.2007].
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2007c). Dot.sys - Dokumentation suchtpräventiver Maßnahmen in Deutschland 2006. Köln: BZgA.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2007d). Transfer von „quit he shit“ – Bericht zur Umsetzung und Qualitätssicherung des Modellvorhabens. Köln: BZgA.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2007e). Bilanzbericht 2004-2006. Köln: BZgA.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2005). ADHS...was bedeutet das? Broschüre. Köln: BZgA.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2004). Die Drogenaffinität Jugendlicher in der Bundesrepublik Deutschland 2004. Eine Wiederholungsbefragung der Bundeszentrale für gesundheitliche Aufklärung. Teilbände Alkohol, Rauchen, Illegale Drogen. Available: <http://www.bzga.de> [Letzter Zugriff: 31.08.2007].
- Bundeszentrale für Politische Bildung (2004). Sozialer Wandel in Deutschland. Informationen zur politischen Bildung. Heft 269, Bonn
- Bundeskriminalamt (BKA) (2007a). Jahreskurzlage Rauschgift 2006. Wiesbaden: BKA. Available: <http://www.bka.de>. [Letzter Zugriff: 23.08.2007].
- Bundeskriminalamt (BKA) (Hrsg.) (2007b). Polizeiliche Kriminalstatistik 2006. Wiesbaden: BKA. Available: <http://www.bundeskriminalamt.de/pks/pks2006/index.html> [Letzter Zugriff: 23.08.2007].
- Busch, M., Haas, S., Weigl, M., Wirl, C., Horvath, I. & Stürzlinger, H. [Hrsg. Deutsches Institut für Medizinische Dokumentation und Information] (2007). Langzeitsubstitutionsbehandlung Opioidabhängiger. Schriftenreihe Health Technology Assessment (HTA) in der Bundesrepublik Deutschland, HTA-Bericht 53. Köln: DIMDI.
- Christiansen, G., von Rüden, U., Töppich, J. (2005). Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2005). Entwicklung des Alkoholkonsums bei Jugendlichen – unter besonderer Berücksichtigung der Konsumgewohnheiten von Alkopops (Alkopops-Studie). Eine Befragung der Bundeszentrale für gesundheitliche Aufklärung. Projektbericht. Köln: BZgA.
- Claßen, A., Erb, M. & Knecht, G. (2006). Therapie suchtkranker Menschen im Maßregelvollzug. Konturen 27 (3) 10-14.
- Collatz, J. (2001). Bedarf und Inanspruchnahme psychiatrischer Versorgung durch Migrantinnen und Migranten. In: Th. Hegemann & R. Salman, R. (Hrsg.): Transkulturelle Psychiatrie. Bonn: Psychiatrie Verlag
- Deutscher Bundestag (2006). Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Dr. Harald Terpe, Kai Gehring, Birgitt Bender, Elisabeth Scharfenberg und der Fraktion BÜNDNIS 90/DIE GRÜNEN – Drucksache 16/2968. Berlin: Deutscher Bundestag.
- Deutsche Hauptstelle für Suchtfragen (DHS) (2007). Newsletter vom 19.03.07. Hamm: DHS.
- Deutsche Hauptstelle für Suchtfragen (DHS) (Hrsg.) (2006a). Deutscher Kerndatensatz zur Dokumentation im Bereich der Suchtkrankenhilfe. Hamm: DHS. Available: [www.dhs.de](http://www.dhs.de) [Letzter Zugriff: 27.08.2007].
- Deutsche Hauptstelle für Suchtfragen (DHS) (Hrsg.) (2006b). Du bist schwanger ... und nimmst Drogen?. Hamm: Deutsche Hauptstelle für Suchtfragen.
- Deutsche Hauptstelle für Suchtfragen (DHS) (2006c). Kinder suchtkranker Eltern. Hamm: DHS

- Deutsche Hauptstelle für Suchtfragen (DHS) (Hrsg.) (2005). Substanzbezogene Störungen im Alter. Informationen und Praxishilfen. Hamm: Deutsche Hauptstelle für Suchtfragen.
- Deutscher Städte- und Gemeindebund (DStGB) (2005). Mit starken Kommunen Aufschwung und Reformen. Bilanz 2005 und Ausblick 2006. Berlin. Available: [http://www.dstgb.de/index\\_inhalt/homepage/pressemeldungen/inhalt/dstgb\\_bildungs\\_und\\_familienoffensive\\_starten/bilanz\\_dstgb\\_2005\\_2006.pdf](http://www.dstgb.de/index_inhalt/homepage/pressemeldungen/inhalt/dstgb_bildungs_und_familienoffensive_starten/bilanz_dstgb_2005_2006.pdf) [Letzter Zugriff: 31.08.2007].
- Deutsches Jugendinstitut (2000). Wider die Ratlosigkeit im Umgang mit Kinderdelinquenz. Präventive Ansätze und Konzepte. München: DJI
- Deutsches Jugendinstitut DJI (1995.) Straßenkinder - Annäherung an ein soziales Phänomen. München/Leipzig: DJI.
- Die Drogenbeauftragte der Bundesregierung (2007). Drogen- und Suchtbericht 2007. Berlin: Bundesministerium für Gesundheit.
- Die Drogenbeauftragte der Bundesregierung (2004). Drogen- und Suchtbericht 2004. Berlin: Bundesministerium für Gesundheit.
- Die Drogenbeauftragte der Bundesregierung (2003). Aktionsplan Drogen und Sucht. Berlin: Bundesministerium für Gesundheit und Soziale Sicherung.
- Dilling, H.; W. Mombour; M.H. Schmidt (Hrsg.) (2005): Internationale Klassifikation psychischer Störungen. ICD-10 Kapitel V(F). Klinisch-diagnostische Leitlinien. 5., durchges. und ergänzte Aufl. Bern: Huber.
- Drogen- und Suchtrat (2006): Arbeitsprogramm des Drogen- und Suchtrats. Berlin: BMG.
- Elsner, H. (2006a). Die unbekannte Gefahr: Schwerwiegende Gesundheitsschäden und Todesfälle durch Schnüffelstoffe. Suchtmedizin in Forschung und Praxis 8 15-22.
- Elsner, H. (2006b). „Beigebrauch von Benzodiazepinen in der Methadonsubstitution: medizinisch korrekte Selbstmedikation gegen die Methadonassoziierten Schlafstörungen? Suchtmedizin in Forschung und Praxis 7 8-12.
- Erbas, B., Tretter, F. & Sonntag G. (2004). Ökonomie der psychoaktiven Substanzen, der Sucht und der Suchttherapie. In F. Tretter, B. Erbas & G. Sonntag (Hrsg.), Ökonomie der Sucht und Suchttherapie (S. 207-232). Lengerich: Pabst.
- Fegert, J. (2006). Die Zusammenarbeit zwischen Jugendhilfe und Kinder- und Jugendpsychiatrie unter besonderer Berücksichtigung der Versorgung von Heimkindern. Vortrag aus Anlass des 100-jährigen Jubiläums der Kinder- und Jugendpsychiatrie Viersen. Viersen.
- Finanzministerium NRW (2007). Haushaltspläne online 1998- 2007. Available: <http://www.fm.nrw.de/cgi-bin/fm/custom/pub/content.cgi?lang=1&ticket=quest&oid=1198>. [Letzter Zugriff: 27.08.2007].
- Fischer, B., Reimer, J., Firestone, M., Kalousek, K., Rehm, J. & Heathcote, J. (2006). Treatment for hepatitis C virus and cannabis use in illicit drug user patients: implications and questions. European Journal of Gastroenterology & Hepatology 18 1039-1042.
- Gerlach, R. & Stöver, H. (2005). Vom Tabu zur Normalität. 20 Jahre Substitution in Deutschland. Zwischenbilanz und Aufgaben für die Zukunft. Freiburg: Lambertus-Verlag.
- Gölz, J. (2006). HCV bei IDU: Therapeutischer Nihilismus ist nicht gerechtfertigt. Suchtmedizin in Forschung und Praxis 8 77.
- Gouzoulis-Mayfrank & Daumann (2006). Neurotoxicity of methylenedioxyamphetamanes (MDMA; ecstasy) in humans: how strong is the evidence for persistent brain damage? Addiction 101 348,
- Grotenhermen, F., Leson, G., Berghaus, G., Drummer, O.D., Krüger, H.P., Longo, M., Moskowitz, H., Perrine, B., Ramaekers, J., Smiley, A. & Tunbridge, R. (2005). Developing science-based per se limits for driving under the influence of cannabis (DUIC). Findings and recommendations by an expert panel. Available: <http://www.canorml.org/healthfacts/DUICreport.2005.pdf> [Letzter Zugriff 29.08.2007].

- Haffner, J., Roos, J., Steen, R., Parzer, P., Klett, M. & Resch, F. (2006). Lebenssituation und Verhalten von Jugendlichen. Ergebnisse einer Befragung 14- bis 16-jähriger Jugendlicher und deren Eltern. Gesundheitsbericht Rhein-Neckar-Kreis/Heidelberg, Band 3. Gesundheitsamt Heidelberg/Rhein-Neckar-Kreis, Heidelberg: Eigenverlag.
- Hallmann, H.J. & Holterhoffe-Schulte, I. & Merfert-Diete, C. (2006). Qualitätsanforderungen in der Suchtprävention. Hamm, Hannover, Mülheim. Available: <http://www.hls-online.org/download/BLK-Qualitaetsstandards.pdf> [Letzter Zugriff: 21.08.2007].
- Happel, H.-V. (2006): Wissensstand, Risikomanagement und Selbstüberzeugungen bei intravenösen DrogengebraucherInnen zur Hepatitisprophylaxe. 3. Internationaler Fachtage Hepatitis C (S. 22-37). Berlin: Aktionsbündnis Hepatitis und Drogengebrauch. Available: <http://www.hepatitiscfachtage.org/> [Letzter Zugriff: 27.08.2007].
- Hartwig, K.-H. & Pies, I. (1995). Kosten des Umgangs mit harten Drogen (S. 19-34). Mohr: Tübingen
- Havemann-Reinecke, U., Küfner, H, Schneider, U., Günthner, A., Schalast, N. & Vollmer, H.C. (2004). AWMF-Leitlinien: Post-Aktubehandlung bei Störungen durch Opiode. Sucht 50 226-257.
- Heimann, H.M., Penka, S. & Heinz, A. (2007). Erklärungsmodelle von Migranten für Abhängigkeitserkrankungen - eine Untersuchung an Aussiedlern aus der ehemaligen Sowjetunion, Migranten aus der Türkei sowie einheimischen Deutschen. Suchttherapie 8 57-62.
- Heinemann, A., Simon, R. (2005). Zum Stand der Harmonisierung der vergleichenden Erfassung der Drogenmortalität in den EU-Staaten. Rechtsmedizin 15 218-228.
- Hemme, A. (2003). Bedeutung der Gesundheit für die soziale Stadtentwicklung – Erfahrungen aus dem Programm Entwicklung und Chancen junger Menschen in sozialen Brennpunkten. In: R.-P. Löhr, R. Geene, A. Halkow (Hrsg.). Armut und Gesundheit. Themenheft 1: Die soziale Stadt – Gesundheitsförderung im Stadtteil. Berlin: Gesundheit Berlin
- Hessische Landesstelle für Suchtfragen (HLS) (2007). Forschungsbrief. Ausgabe 15. Frankfurt: HLS
- Hessische Landesstelle für Suchtfragen (HLS) (2006a). Landesauswertung der Computergestützten Basisdokumentation der ambulanten Suchthilfe in Hessen (COMBASS) – Grunddaten 2005. Frankfurt/Main: Hessische Landesstelle für Suchtfragen.
- Hessische Landesstelle für Suchtfragen (HLS) (2006b). Landesauswertung der Computergestützten Basisdokumentation der ambulanten Suchthilfe in Hessen (COMBASS) – Spezialanalyse: Cannabis. Frankfurt/Main: Hessische Landesstelle für Suchtfragen.
- Hessisches Sozialministerium (Hrsg.) (2006). Dritter Suchtbericht für das Land Hessen 2003-2004. Wiesbaden: Hessisches Sozialministerium – Referat Öffentlichkeitsarbeit.
- Hoffmann, U. & Moll, A. (2007). Entwicklung des Alkohol- und Drogenmissbrauches im Raum Greifswald / Vorpommern. Ärzteblatt Mecklenburg-Vorpommern 17(6) 199-201.
- Holzbach, R., Behrendt, K., Maylath, E., Küstner, U., Schreyer, D., von Berghes, A., Fuchs, E., Brack, J., Steenblock, R., Gabriel, K., Haasen, C. & Thomasius, R. (2006). Positionspapier zum stationären qualifizierten Entzug von Cannabispatienten. Suchtmedizin in Forschung und Praxis 8 9-14.
- Hurrelmann, K., Klocke, A., Melzer, W. & Ravens-Sieberer, U. (2003). Jugendgesundheitssurvey – Internationale Vergleichsstudie im Auftrag der Weltgesundheitsorganisation WHO. Weinheim: Juventa.
- Ilse, J., Hartwig, C. & Haasen, C. (2007). Die Epidemiologie des Mehrfachkonsums illegaler Drogen in Hamburg – eine Literaturübersicht. Suchtmedizin 9 122-128.
- Info-Dienst Deutsche Aussiedler (2002). Suchtprobleme bei Aussiedlern – Möglichkeiten der Prävention. Gemeinsame Pressemitteilung (11.12.2001) der Drogenbeauftragten der Bundesregierung und des Beauftragten für Aussiedlerfragen. Junge Welt, Heft Nr. 115, 20-22.
- Institut für Stadtforschung und Strukturpolitik (2004) Die soziale Stadt. Ergebnisse der Zwischenevaluierung. Hrsg.: Bundesamt für Bauwesen und Raumordnung, im Auftrag des Bundesministeriums für Verkehr, Bau- und Wohnungswesen. Available: <http://www.sozialestadt.de/veroeffentlichungen/evaluationsberichte/zwischenevaluierung-2004/>. [Letzter Zugriff: 31.08.2007].

- Jörger, N. (2004). Strukturindikatoren – Messung der Fortschritte im Rahmen der Lissabonner Strategie. Wiesbaden: Statistisches Bundesamt.
- Jordan, S., Tossmann, P., Tensil, M.-E., & Jonas, B. (2006). Evaluationsergebnisse des internetbasierten Cannabisausstiegsprogramms „quit the shit“. Poster. München: 7. interdisziplinärer Kongress für Suchtmedizin, 13.-15.07.2006.
- Kalke, J., Schütze, C., Klass, M., Martens, M.-S., Raschke, P. (2005). Jugendliche und junge Erwachsene in der ambulanten Suchthilfe. Empirische Befunde vor dem Hintergrund des Kinder- und Jugendhilfegesetzes. Suchttherapie 6 20-27.
- Karuna (2004) Auswertung der Klientendokumentation Zwischenland 2004. Available <http://www.karuna-berlin.de/fachinformationen> [Letzter Zugriff: 31.08.2007].
- Kazin, V. (2006). Untersuchung an opiatabhängigen und nicht-opiatabhängigen männlichen russlanddeutschen Spätaussiedlern. Eine retrospektive Vergleichstudie. Dissertation, Ludwig-Maximilians-Universität München, Medizinische Fakultät. Available <http://edoc.ub.uni-muenchen.de/archive/00006078/> [Letzter Zugriff: 31.08.2007].
- Kleiber, D. & Söllner, R.(1998). Cannabiskonsum. Entwicklungstendenzen, Konsummuster und Risiken. Juventa, Weinheim.
- Klein, M. (2007a). Kinder von alkoholkranken Eltern. Vortrag zur 10. Fachtagung für Beratungsstellen und Sozialdienste der Klinik Bad Blankenburg. 04.07.07.
- Klein, M. (2007b). „Kinder suchtkranker Eltern – Ein Überblick zu Fakten, Risiken und Hilfen“. Vortrag am 14.06.2007 während der 5. Marburger Suchthilfetage. 13.-16.06.07.
- Kolmer, C. (2003). Leitlinien der Erziehungshilfen im IB. Frankfurt/ Main: Internationaler Bund.
- Konsortium Bildungsberichterstattung (2006). Bildung in Deutschland - Ein indikatorengestützter Bericht mit einer Analyse zu Bildung und Migration. Im Auftrag der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland und des Bundesministeriums für Bildung und Forschung. Bielefeld: W. Bertelsmann Verlag.
- Kraus, L., Pfeiffer-Gerschel, T. & Stonner, T. (in Druck). Illegale Drogen, Konsummuster und Trends. Ergebnisse des Epidemiologischen Suchtsurvey 2006. Sucht.
- Kraus, L., Augustin, R. & Orth, B. (2005). Illegale Drogen, Einstiegsalter und Trends. Ergebnisse des Epidemiologischen Suchtsurvey 2003. In: Kraus, L. & Augustin R.. Repräsentativerhebung zum Gebrauch und Missbrauch psychoaktiver Substanzen bei Erwachsenen in Deutschland: Sucht 50 Sonderheft 1 19-28.
- Kraus, L., Bauernfeind, R. & Bühringer, G. (1998). Epidemiologie des Drogenkonsums: Ergebnisse aus Bevölkerungssrveys 1990 bis 1996. Bd. 107 Schriftenreihe des Bundesministeriums für Gesundheit. Baden-Baden: Nomos-Verlag.
- Kraus, L., Bühringer, G., Sonntag, D. & Augustin, R. (2006). Monitoring: Gebrauch psychoaktiver Substanzen und substanzbezogene Störungen in Deutschland. München: IFT Institut für Therapieforschung. Available: <http://www.ift.de/index.php?id=90> [Letzter Zugriff: 15.08.2007].
- Kraus, L., Heppekausen, K., Barrera, A., Orth, B. (2004). Die Europäische Schülerstudie zu Alkohol und anderen Drogen (ESPAD). Befragung Schülerinnen und Schülern der 9. und 10. Klasse in Bayern, Berlin, Brandenburg, Hessen, Mecklenburg-Vorpommern und Thüringen. Forschungsbericht 310/ Gesundheitsforschung. Berlin: Bundesministeriums für Gesundheit und Soziale Sicherung.
- Kraus, L., Semmler, C. & Augustin, R. (2005). Konsummuster und Trends des Kokaingebrauchs in Deutschland. Sucht 51 199-208.
- Kraus, L., Augustin, R., Frischer, M., Kümmler, P., Uhl, A. & Wiessing, L. (2003). Estimating prevalence of problem drug use at national level in countries of the European Union and Norway. Addiction, 98 (4), 471-485.
- Lampert, T. & Thamm, M. (2007). Tabak-, Alkohol- und Drogenkonsum von Jugendlichen in Deutschland. Ergebnisse des Kinder- und Jugendsveys (KIGGS). Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz 50 (5-6) 600-608.
- Lampert, T. , Richter, M., Klocke, A., (2006). Kinder und Jugendliche: Ungleiche Lebensbedingungen, ungleiche Gesundheitschancen. Das Gesundheitswesen, 68, 94-100.

- Landesstelle für Suchtfragen in Baden-Württemberg der Liga der freien Wohlfahrtspflege e.V. (2005): Einspareffekte in Justizvollzugsanstalten durch Vermittlung von inhaftierten Drogenabhängigen in Medizinische Rehabilitation Eine Kosten-Nutzen-Analyse für das Jahr 2004. Stuttgart: Landesstelle für Suchtfragen in Baden-Württemberg der Liga der freien Wohlfahrtspflege e.V.
- Landschaftsverband Westfalen-Lippe (LWL) (Hrsg.) (2007). Expertise „Zugang zu jungen Cannabiskonsumenten/innen“. Münster: LWL
- Lieb, R. et al.(2001). Elterliche Alkoholbelastung und die Entwicklung von Suchtproblemen bei ihren Kindern – Ergebnisse der prospektiv-longitudinalen EDSP-Studie. Suchttherapie 2(3) 125-136.
- Meyer, S., & Deterding, K., Hep-Net goes Europe with VIRGIL. (2005), Kliniker 34 146-149.
- Meyer, M.F., Handke, G.-U., Wiegand, J., Manns, M.P., Wedemeyer, H. & Lehmann, M. (2007). Verbesserung des objektiven und subjektiven Gesundheitszustandes von Drogenabhängigen nach Inhaftierung: Eine prospektive Untersuchung in der Haftanstalt Hameln. Suchtmedizin 9 113-121.
- Meyer, M.F., Wedemeyer, H., Monazahian, M, Dressman, J., Manns, M.P. & Lehmann, M. (2006). Prevalence of hepatitis C in a German prison for young men in relation to county of birth. Epidemiology and Infection 135 274-280.
- Michels., I. (2005). Substitutionsbehandlungen in Deutschland – vom Tal der Tränen in die Mühe der Ebene. In: Gerlach, R. & Stöver, H. Vom Tabu zur Normalität. 20 Jahre Substitution in Deutschland. Zwischenbilanz und Aufgaben für die Zukunft. Freiburg: Lambertus-Verlag.
- Michels, I.I., Stöver, H. & Gerlach, R. (2007). Substitution treatment for opioid addicts in Germany. Harm Reduction Journal [Open Access] 4 (5). Available: [www.harmreductionjournal.com/content/4/1/5](http://www.harmreductionjournal.com/content/4/1/5) [Letzter Zugriff: 28.08.2007].
- Ministerium der Justiz, Rheinland-Pfalz (2007). Geänderte Cannabis-Richtlinie legt Sechs-Gramm-Grenzwert fest. Pressemitteilung vom 09.07.2007
- Müller, O., Bernard, C. & Werse, B. (2007), MoSyD Szenestudie – Die offene Drogenszene in Frankfurt am Main. Frankfurt: Centre for Drug Research.
- Naber, D., & Haasen, C. (2006). Das bundesdeutsche Modellprojekt zur heroingestützten Behandlung Opiatabhängiger - eine multizentrische, randomisierte, kontrollierte Therapiestudie. Abschlussbericht der Klinischen Vergleichsstudie zur Heroin- und Methadonbehandlung gemäß Studienprotokoll. Hamburg: Zentrum für Interdisziplinäre Suchtforschung der Universität Hamburg (ZIS).
- Nabitz, U., Schaefer, A., Walburg, J. (2006). EFQM Qualitätsmanagement: Einzelfallstudie in einer Beratungsstelle. Sucht, 52, 35-47.
- Nocon, A., Wittchen, H.U., Pfister, H., Zimmermann, P. & Lieb, R. (2005). Dependence symptoms in young cannabis users? A prospective epidemiological study. Journal of Psychiatric Research 40 394-403.
- Nolting, H.-D. & Follmann, H. (2005). Evaluation der Implementierung von Qualitätsmanagement in der ambulanten Substitutionstherapie Opiatabhängiger. Eine empirische Studie zu den Wirkungen der ASTO-Projekte der Ärztekammer Westfalen-Lippe. Berlin: IGES Institut für Gesundheits- und Sozialforschung GmbH.
- Ohlmeier, M., Peters, K., Buddensiek, N., Seifert, J., te Wildt, B., Emrich, H.M. & Schneider, U. (2005). ADHS und Sucht. Psychoneuro 31 (11), 554-562.
- Patzak, J., Goldhausen, S. & Kleine, S. (2007a). Züchtung von Hochleistungscannabis in Indoor-Plantagen : Teil 1. Der Kriminalist 4 180-186.
- Patzak, J., Goldhausen, S. & Kleine, S. (2007b). Züchtung von Hochleistungscannabis in Indoor-Plantagen : Teil 2. Der Kriminalist 5 228-234.
- Perkonigg, A., Pfister, H., Höfler, M., Fröhlich, C., Zimmermann, P., Lieb, R. & Wittchen, H.-U. (2007). Substance Use and Substance Use Disorders in a Community Sample of Adolescents and young Adults: Incidence, Age Effects and Patterns of Use. European Addiction Research, 12, 187-196.
- Perkonigg, A., Pfister, H., Lieb, R., Bühringer, G. & Wittchen, H.-U. (2004). "Problematischer Konsum illegaler Substanzen, Hilfesuchverhalten und Versorgungsangebot in einer Region." Suchtmedizin 6 (1) 22-31.

- Petersen, K.U. & Thomasius, R. (2007). Auswirkungen von Cannabiskonsum und –missbrauch. Lengerich: Pabst.
- Pollähne, H. & Stöver, H. (2005). Substitution unter Verschluss – Substitutionsbehandlung in Gefängnissen und im Maßregelvollzug. In: Gerlach, R. & Stöver, H. Vom Tabu zur Normalität. 20 Jahre Substitution in Deutschland. Zwischenbilanz und Aufgaben für die Zukunft. Freiburg: Lambertus-Verlag.
- Prieto, I. (2007). Ökonomische Implikationen der Suchttherapie: Die europäische Perspektive. Suchttherapie 8 63-66.
- Prognos AG (10.04.2007). Kurzbericht zur Modellphase II, Wissenschaftliche Begleitung des Bundesmodellprogramms „HaLT – Hart am Limit“. Basel: Prognos AG
- Queri, S., Servaty, M., Eckstein, G. & Tretter, F. (2005) Patientenstromanalyse im Münchner Suchthilfesystem – eine Pilotstudie. Das Gesundheitswesen 67 763-769.
- Raschke, P., Buth, S. & Kalke, J. (2005). Jahresbericht 2004. Ergebnisse zum Konsum psychoaktiver Substanzen in Schleswig-Holstein. Moderne Dokumentation in der ambulanten Suchtkrankenhilfe. Band 6. Hamburg: Institut für interdisziplinäre Sucht- und Drogenforschung.
- Rehm, J., Room, R., van den Brink, W. & Kraus, L. (2005). Problematic drug use and drug use disorders in EU countries and Norway: an overview of the epidemiology. European Neuropsychopharmacology 15 389-397.
- Reymann, G., Gastpar, M., Tretter, F., Hähnchen, A., Köhler, W., Poethke, T. & Wolstein, J. (2003). Akutbehandlung opioidbezogener Störungen. Available: <http://www.uni-duesseldorf.de/AWMF/> [Letzter Zugriff: 28.08.2007].
- Robert Koch-Institut (2006). Zur Situation wichtiger Infektionskrankheiten in Deutschland: Virushepatitis B, C und D im Jahr 2005. Epidemiologisches Bulletin 46/2006.
- Robert Koch-Institut (2007a). HIV-Infektionen und AIDS-Erkrankungen in Deutschland. Aktuelle epidemiologische Daten (Stand vom 01.03.2007). Epidemiologisches Bulletin, Sonderausgabe A, 29. Mai 2007.
- Robert Koch-Institut (Hrsg.) (2007b). Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten für 2006. Berlin: Robert Koch-Institut.
- Rödel, B. (2007). Schulumüde – was nun? Soziale Arbeit 56 (6) 212 - 215
- Rösner, S. & Küfner, H. (2007). Arzneimittelmisbrauch bei Personen mit Abhängigkeitserkrankungen – Ergebnisse des Monitoring-Systems ebis-med. Suchtmedizin 9 (1) 7-23
- Sack, P.-M., Küstner, U. J., Ott, K., Jäger, C. & Thomasius, R. (2005). Vergleich der Komorbidität von Cannabis- und Mischkonsumenten in Behandlung. Sucht 51 240-249.
- Salize, H.J., Stamm, K. Merkel, S. & Mann, K. (2006). Gesundheitsökonomische Suchtforschung in Deutschland – Gibt es Leben in der Wüste? Sucht 52(2) 105-111.
- Schäfer, C., & Paoli, L. (2006). Drogenkonsum und Strafverfolgungspraxis. Eine Untersuchung zur Rechtswirklichkeit der Anwendung des § 31 a BtMG und anderer Opportunitätsvorschriften auf Drogenkonsumentendelikte. Berlin: Duncker & Humblot.
- Schäfer, M. (2005). Therapie der chronischen Hepatitis C bei Patienten mit psychischen Erkrankungen. Suchttherapie 6 66-69.
- Schmidt, L.G., Gastpar, M., Falkai, P. & Gaebel, W. (Hrsg.) (2006). Evidenzbasierte Suchtmedizin. Behandlungsleitlinie Substanzbezogene Störungen. Köln: Deutscher Ärzte-Verlag.
- Schmidt, B. (2004). Suchtprävention in der Bundesrepublik Deutschland – Grundlagen und Konzeption. Bundeszentrale für gesundheitliche Aufklärung (Hrsg.): Forschung und Praxis der Gesundheitsförderung 24. Köln: BZgA.
- Schröder, J. & Kettiger, D. (2001). Wirkungsorientierte Steuerung in der sozialen Arbeit. Ergebnisse einer internationalen Recherche in den USA, den Niederlanden und der Schweiz im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend. Bonn: JSB Beratungsgesellschaft..

- Schroers, A. & Schneider, W. (1998) Drogengebrauch und Prävention im Party-Setting. Eine sozial-ökologisch orientierte Evaluationsstudie. Forschungsbericht Bd. 20 INDRO-Buchreihe. Berlin: Verlag für Wissenschaft und Bildung
- Schuch, J. (2003). Jugendliche mit Migrationshintergrund - eine (interkulturelle) Herausforderung der Erziehungshilfe. In: SGB VIII – Online-Handbuch. Available: <http://www.sgbviii.de/S155.html>
- Schwabe, U. (2007). Arzneimittelsucht – Wird das Ausmaß maßlos überschätzt? Ärztezeitung 26.04.2007. Available: <http://www.aerztezeitung.de/docs/2007/04/26/077a0602.asp?cat=> [Letzter Zugriff: 28.08.2007].
- Senatsverwaltung für Gesundheit, Soziales und Verbraucherschutz (2005). Evaluation Drogenkonsumräume in Berlin. Pressemitteilung 20.7.2005.
- Settortobulte, W. & Richter, M. (2007). Aktuelle Entwicklungen im Substanzkonsum Jugendlicher: Ergebnisse der „Health Behaviour in School-aged Children (HBSC)“ Studie 2005/2006. In: K. Mann, U. Havemann-Reinecke & R. Gassmann (Hrsg.): Jugendliche und Suchtmittelkonsum. Trends – Grundlagen – Maßnahmen. Freiburg: Lambertus, 7-27
- Simmedinger, R. & Vogt, I. (2007). Auswertung der Frankfurter Konsumraumdokumentation 2006. Dokumentationszeitraum 01.01.-31.12.2006. Frankfurt: ISFF.
- Simmedinger, R. & Vogt, I. (2006). Auswertung der Frankfurter Konsumraumdokumentation 2005. Dokumentationszeitraum 01.01.-31.12.2005. Frankfurt: ISFF.
- Simon, R. (2005). Analyse der Länderkurzberichte zum Umfang substanzbezogener Störungen und zur Betreuungssituation 2004. DBDD, München.
- Simon, R. & Tischer, T. (2006). Informationen über die Situation der Sucht- und Drogenhilfe in den Justizvollzugsanstalten der einzelnen Bundesländer. Zusammenfassung von Informationen der Bundesländer auf eine Anfrage der DBDD. München: IFT.
- Single, E., Collins, D., Easton, B., Harwood, H., Lapsley, H., Kopp, P. & Wilson, E. (2001). International Guidelines for Estimating the Costs of Substance Abuse – Summary of 2001 Edition [Pdf]. Ottawa: Canadian Centre on Substance Abuse. Available: <http://www.ccsa.ca> [Letzter Zugriff: 27.08.2007].
- Single, E., Collins, D., Easton, B., Harwood, H., Lapsley, H. & Maynard, A. (1996). International Guidelines for Estimating the Costs of Substance Abuse. Ottawa: Canadian Centre on Substance Abuse.
- Sonntag, D., Bauer, C. & Hellwich, A.K. (2006). Deutsche Suchthilfestatistik 2005 für ambulante Einrichtungen. Sucht, 52 (Sonderheft 1), S7-S43.
- Sonntag, D., Bauer, C. & Hellwich, A.K. (2007a). Suchthilfestatistik 2006 für Deutschland. Tabellenband für die ambulante Suchtkrankenhilfe. Available: <http://www.dshs.de> (Letzter Zugriff: 15.08.2007)
- Sonntag, D., Bauer, C. & Hellwich, A.K. (2007b). Suchthilfestatistik 2006 für Deutschland. Tabellenband für die stationäre Suchtkrankenhilfe. <http://www.dshs.de> (Letzter Zugriff: 15.08.2007)
- Sonntag, D., Bauer, C. & Welsch, K. (2005). Deutsche Suchthilfestatistik 2004 für ambulante Einrichtungen. Sucht 51 (Sonderheft 2) 6-38.
- Soyka, M., Queri, S., Küfner, H. & Rösner, S. (2005a). Wo verstecken sich 1,9 Millionen Medikamentabhängige. Der Nervenarzt 76 72-77.
- Soyka, M., Penning, R. & Wittchen, H.-U. (2006). Fatal poisoning in methadone and buprenorphine treated patients - Are there differences? Pharmacopsychiatry 39 85-87
- Specka, M. & Scherbaum, N. (2005). Ergebnisse der stationären Entzugsbehandlung von Benzodiazepinen bei Methadonsubstituierten. Sucht 51 329-338.
- Stark, K., Herrmann, U., Ehrhardt, S, Bienzle, U. (2005). A syringe exchange programme in prison as prevention strategy against HIV infection and hepatitis B and C in Berlin, Germany. Epidemiology and Infection 134(4) 814-819.



- Statistisches Bundesamt (2007a). Diagnosedaten der Patientinnen und Patienten in Krankenhäusern (einschl. Sterbe- und Stundenfälle) 2005. Fachserie 12, Reihe 6.2.1. Wiesbaden: Statistisches Bundesamt. Available: <http://www-ec.destatis.de> (Letzter Zugriff: 15.08.2007)
- Statistisches Bundesamt (2007b). Krankheitskosten in Deutschland. Available: [www.gbe-bund.de](http://www.gbe-bund.de) [Letzter Zugriff: 27.08.2007].
- Statistisches Bundesamt (2007c). Rechtspflege, Strafverfolgung 2005. Fachserie 10, Reihe 3. Wiesbaden: Statistisches Bundesamt. Available: <http://www-ec.destatis.de> (Letzter Zugriff: 15.08.2007)
- Statistisches Bundesamt (2007d). Verkehrsunfälle 2006. Fachserie 8, Reihe 7. Wiesbaden: Statistisches Bundesamt. Available: <http://www-ec.destatis.de> (Letzter Zugriff: 15.08.2007)
- Statistisches Bundesamt (2007e). Statistiken der Kinder- und Jugendhilfe. Hilfe zur Erziehung außerhalb des Elternhauses - Hilfen am 31.12.2005 - Revidierte Ergebnisse. Wiesbaden: Statistisches Bundesamt. Available: <https://www-ec.destatis.de/csp/shop/sfg/bpm.html.cms.cBroker.cls?cmspath=struktur.vollanzeige.csp&ID=1020389> [Letzter Zugriff: 31.08.2007].
- Statistisches Bundesamt (2007f). Neue Daten zur Migration in Deutschland verfügbar. Pressemitteilung Nr. 183 vom 04.05.2007.
- Statistisches Bundesamt (2006a). Rechtspflege. Strafvollzug – Demographische und kriminologische Merkmale der Strafgefangenen zum Stichtag 31.3. Fachserie 10, Reihe 4.1. Wiesbaden: Statistisches Bundesamt. Available: <http://www-ec.destatis.de> (Letzter Zugriff: 15.08.2007)
- Statistisches Bundesamt (2006b). Statistisches Jahrbuch 2006 für die Bundesrepublik Deutschland. Wiesbaden: Statistisches Bundesamt.
- Statistisches Bundesamt (2006c). Kinder- und Jugendhilfe in Deutschland 2005. Wiesbaden: Statistisches Bundesamt. Available: <http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Publikationen/Broschueren/faltblattsozialkinderjugendhdeutschland2005.property=file.pdf> [Letzter Zugriff: 31.08.2007].
- Step (Hrsg.) (2006). Step-Jahresbericht 2005. Hannover: Step.
- Stöver, H., Kluge-Haberkorn, C. & Greif, S. (2007). Weiterentwicklung der Substitutionsbehandlung. Dokumentation des Expertengesprächs. Available: [http://www.akzept.org/pro-expert\\_gesp\\_sub.html](http://www.akzept.org/pro-expert_gesp_sub.html) [Letzter Zugriff: 28.08.2007].
- Süddeutsche Zeitung, 17.4.2006. Endstation Crystal.
- Sylvestre, D.L., Clements, B. & Malibu, Y. (2006). Cannabis use improves retention and virologic outcomes in patients treated for hepatitis C. European Journal of Gastroenterology & Hepatology 18 1057–1063.
- Thierfelder, W., Hellenbrand, W., Meisel, H., Schreier, E. & Dortschy, R. (2001). Prevalence of markers for hepatitis A, B and C in the German population. Results of the German National Health Interview and Examination Survey 1998. European Journal of Epidemiology 17(5) 429-435.
- Thomasius, R. & Gouzoulis-Mayfrank, E. (2004). AWMF-Behandlungsleitlinie: Psychische und Verhaltensstörungen durch Kokain, Amphetamine, Ecstasy und Halluzinogene. Fortschritte der Neurologie und Psychiatrie 72 679-695.
- Thomasius, R., Petersen, K., Buchert, R., Andresen, B., Zapletalova, P., Wartberg, L., Nebeling, B. & Schmoldt, A. (2003). Mood, cognition and serotonin transporter availability in current and former ecstasy (MDMA) users. Psychopharmacology 167 85-96.
- Thomasius R. & Petersen, K.U. (2006). Cannabismisbrauch neuropsychiatrisch beleuchtet. Alleingelassen in früher Jugend. Neurotransmitter 7-8 46-60.
- Thomasius, R., Zapletalova, P., Petersen, K.U., Buchert, R., Andresen, B., Wartberg, L., Nebeling, B. & Schmoldt, A. (2006) Mood, cognition and serotonin transporter availability in current an former ecstasy (MDMA) users: the longitudinal perspective. Journal of Psychopharmacology 20 211-225.
- Uhl, A. (2006). Darstellung und kritische Analyse von Kostenberechnungen im Bereich des Substanzmissbrauchs. Sucht 52 (2) 121-132

- Uhl, A. (2004). Kritische Betrachtungen zur Ökonomie der Sucht. In F. Tretter, B. Erbas & G. Sonntag (Hrsg.), Ökonomie der Sucht und Suchttherapie 174-203. Lengerich: Pabst
- Uhl, A. (2003). Editorial: Wie sinnvoll sind Angaben über die sozialen Kosten des Substanzmissbrauchs? Sucht 49(4) 209-211
- v. d. Schulenburg, J.-M., Graf & Claes, C. (2006a). Das bundesdeutsche Modellprojekt zur heroingestützten Behandlung Opiatabhängiger. Gesundheitsökonomische Begleitforschung. Endbericht. Hannover: Leibniz Universität, Forschungsstelle für Gesundheitsökonomie und Gesundheitssystemforschung.
- v. d. Schulenburg, J.M. Graf & Claes, C. (2006b). Das bundesdeutsche Modellprojekt zur heroingestützten Behandlung Opiatabhängiger – Eine multizentrische, randomisierte, kontrollierte Therapiestudie – Gesundheitsökonomische Begleitforschung. Unveröffentlichter Endbericht der Spezialstudie (Kurzfassung). Available: <http://heroinstudie.de> [Letzter Zugriff: 27.08.2007].
- Verthein, U., Reimer, J., Ullmann, W. & Haasen, C. (2007). Psychische Befindlichkeit in der Substitutionsbehandlung mit Levomethadon und d,1-Methadon – eine doppel-blinde randomisierte Cross-over-Studie. Sucht 53 32-41.
- Wartberg, L., Petersen, K. U., Andresen, B. & Thomasius, R. (2005). Neuropsychologische Defizite bei Ecstasykonsumenten. Zeitschrift für Neuropsychologie 16 47-55.
- Weissing, V. (2005). Förderung der Teilhabe am Arbeitsleben und der beruflichen (Re-) Integration bei Abhängigkeitserkrankungen aus Sicht des Fachverbandes Sucht e.V. (FVS). Suchttherapie 6 182-185.
- Wittchen, H.-U., Fröhlich, C., Behrendt, S., Günther, A., Rehm, J., Zimmermann, P., Lieb, R. & Perkonig, A. (2007). Cannabis use and cannabis use disorders and their relationship to mental disorders: A 10-year prospective-longitudinal community study in adolescents. Drug and Alcohol Dependence 88 60-70.
- Wittchen, H.-U. (2006). Substitutionstherapie in Deutschland. Ergebnisse der COBRA-Studie. Vortrag im Rahmen einer Pressekonferenz am 03.11.2006 in Berlin. Available: <http://www.cobra-projekt.de> (Letzter Zugriff: 06.07.2007).
- Wittchen, H.-U. & Apelt, S. M. (2006). Methadon- und Buprenorphinbehandlung in der Routineversorgung: Ergebnisse der deutschlandweiten COBRA-Studie von 2694 Patienten. Suchtmedizin in Forschung und Praxis 8 74.
- Wittchen, H.-U., Apelt, S. M., Mühlig, S. (2005). In: Gerlach, R. & Stöver, H. Vom Tabu zur Normalität. 20 Jahre Substitution in Deutschland. Zwischenbilanz und Aufgaben für die Zukunft. Freiburg: Lambertus-Verlag.
- Wittchen, H.-U. & Jacobi, F. (2005). Size and burden of mental disorders in Europe – a critical review and appraisal of 27 studies. European neuro-psychopharmacology 15 357-376.
- Wittchen, H.-U., Apelt, S. M., Bühringer, G., Gastpar, M., Backmund, M., Götz, J., Kraus, M. R., Tretter, F., Klotsche, J., Siegert, J., Pittrow, D. & Soyka, M. (2005). Buprenorphine and methadone in the treatment of opioid dependence: methods and design of the COBRA study. International Journal of Methods in Psychiatric Research 14 14-28.
- Zerell, U., Walz, J., Thalheim, J, Bender, C. (2007). Statistisches Auswerteprogramm Rauschgift (SAR). Zusammenfassung für den Rauschgiftjahresbericht 2007. Wiesbaden: Bundeskriminalamt, Kriminaltechnisches Institut.
- Zurhold, H. & Müller, O. (Hrsg.) (2007). Kokainkonsum zwischen Hedonismus und Verelendung. Ergebnisse einer multiperspektivischen Studie aus Frankfurt am Main. Freiburg: Lambertus.
- Zurhold, H. (2005). Entwicklungsverläufe von Mädchen und jungen Frauen in der Drogenprostitution. INDRO-Buchreihe Band 42. Berlin: Verlag für Wissenschaft und Bildung.

## 14.2 Websites

### Important bodies and organizations

Website	Content
<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 Center 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 Center for the European Monitoring Center for Drugs and Drug Addiction
<a href="http://www.dhs.de">www.dhs.de</a>	Deutsche Hauptstelle für Suchtfragen (DHS) German Centre for Addiction Issues
<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>	Regional project from 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 Center 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
<a href="http://www.psychologie.tu-dresden.de/asat">www.psychologie.tu-dresden.de/asat</a>	Technische Universität Dresden Institut für Klinische Psychologie und Psychotherapie Allocated Substance Abuse Treatments to Patient Heterogeneity
<a href="http://www.prevnet.de">www.prevnet.de</a>	The Internet portal "PrevNet" serves to network players in the field of prevention facilitating the access to information and materials
<a href="http://www.rki.de">www.rki.de</a>	Robert Koch-Institute (RKI), Berlin

In addition to the above listed websites of the most important bodies and organizations, a few innovative initiatives in the field of demand reduction are presented in the following. They constitute a selection of the myriad of addresses which exist in this field. Further information is contained in this year's selected issue "Vulnerable groups of young people".

### **Cannabis projects**

- Modular therapy of cannabis-related disorders: [www.candis-project.de](http://www.candis-project.de)
- "Quit the Shit" - cannabis cessation programme online available at [www.drugcom.de](http://www.drugcom.de) addressing people with regular cannabis consumption.
- International Cannabis Need of Treatment Study: <http://www.incant.de>
- Cannabis campaign of the city Frankfurt: [www.be-u-online.de](http://www.be-u-online.de)

### **Party projects**

- Drogenhilfe Köln e.V.: [www.party-pack.de](http://www.party-pack.de)
- SZL Suchtzentrum gGmbH Leipzig: [www.drugscouts.de](http://www.drugscouts.de)
- Verein zur Förderung der Partykultur und Minderung der Drogenproblematik e.V. Berlin: [www.eve-rave.net](http://www.eve-rave.net)
- Party Project e.V. Bremen: [www.party-project.de](http://www.party-project.de)
- chill-out - gemeinnütziger Verein zur Förderung der Kommunikationskultur e.V. Aachen: [www.chill-out.de](http://www.chill-out.de)
- Alice projekt - Frankfurt : [www.alice-project.de](http://www.alice-project.de)
- Jugend- und Suchtberatungszentrum/ Psychosoziale Beratungs- und Behandlungsstelle Hannover: [www.drobs-hannover.de](http://www.drobs-hannover.de)

### **Offers for socially disadvantaged persons, specific offers of help for street children and Internet-assisted counselling offers for children of addicted parents**

- (cf. the special topic "Vulnerable groups of young people")

## 15 Annex

### List of references for the special topic “Drug-related research“

**Note:** Articles published in German journals were not taken account of in the list. It moreover does not lay any claim to completeness.

Backmund, M., Meyer, K., Schütz, C. & Reimer, J. (2006). Factors associated with exposure to hepatitis B in injection drug users. Drug and Alcohol Dependence 84 154-159.

Bühringer, G. (2006). Research on Treatment for substance-use disorders: a case for evolution or revolution? Reply to the Commentaries. Addiction 101 (5) 655-656.

Fischer, B., Kalousek, K., Rehm, J., Powis, J., Kraiden, M. & Reimer, J. (2006). Hepatitis C, illicit drug use and public health: does Canada have a viable plan? Canadian Journal of Public Health 97 485-488.

Fischer, B., Reimer, J., Firestone, M., Kalousek, K., Rehm, J. & Heathcote J. (2006). Treatment for hepatitis C virus (HCV) and cannabis use in illicit drug user patients: questions and implications. European Journal of Gastroenterology and Hepatology 18 109-142.

Haasen, C. & van den Brink, W. (2006). Innovations in agonist maintenance treatment of opioid dependent patients. Current Opinions in Psychiatry 19 631-636.

Ilse, J., Prinzleve, M., Zurhold, H. & Haasen, C. (2006). Cocaine EU-Team: Cocaine and crack use and dependence in Europe – experts view on an increasing public health problem. Addiction Research & Theory 14 437-452.

Nocon, A., Wittchen, H.-U., Pfister, H., Zimmermann, P. & Lieb, R. (2006). Dependence symptoms in young cannabis users? A prospective epidemiological study. Journal of Psychiatric Research, 40 (5) 394–403.

Perkonig, A., Pfister, H., Höfler, M., Fröhlich, C., Zimmermann, P., Lieb, R. & Wittchen, H.-U. (2006). Substance use and substance use disorders in a community sample of adolescents and young adults: Incidence, age effects and patterns of use. European Addiction Research 12 (4) 187-196.

Perkonig, A., Settele, A., Pfister, H., Höfler, M., Fröhlich, C., Zimmermann, P., Lieb, R. & Wittchen, H.-U. (2006). Where have they been? Lifetime service use of regular substance users with and without abuse and dependence. Social Psychiatry and Psychiatric Epidemiology 41 (6) 470-479.

Soyka, M., Apelt, S.M., Lieb, M. & Wittchen, H.-U. (2006). One-year Mortality Rates of Patients Receiving Methadone and Buprenorphine Maintenance Therapy: A Nationally Representative Cohort Study in 2694 Patients. Journal of Clinical Psychopharmacology 26 (6) 657-660.

Soyka, M., Penning, R. & Wittchen, H.-U. (2006). Fatal Poisoning in Methadone and Buprenorphine Treated Patients - Are there Differences? Pharmacopsychiatry 39 (3) 85-87.

Spauwen, J., Krabbendam, L., Lieb, R., Wittchen, H.-U. & van Os, J. (2006). Impact of psychological trauma and cannabis use on the development of psychotic symptoms: relationship with psychosis proneness British Journal of Psychiatry 188 (6) 527-533.

van den Brink, W. & Haasen, C. (2006). Evidenced based treatment of opioid dependent patients. Canadian Journal of Psychiatry 51 635-646

Wittchen, H.-U., Apelt, S.M., Soyka, M., Gastpar, M., Backmund, M., Gölz, J., Kraus, M., Tretter, F., Schäfer, A., Siegert, J., Günther, A., Rehm, J. & Bühringer, G. (2006). One year retention rates and outcomes of methadone and buprenorphine maintenance treatments: a nationwide prospective-longitudinal study of 2694 patients. Abstract. European Neuropsychopharmacology 16 (Suppl. 4), 504-505.

Wittchen, H.-U., Fröhlich, C., Behrendt, S., Günther, A., Rehm, J., Zimmermann, P., Lieb, R. & Perkonig, A. (online 2006). Cannabis use and cannabis use disorders and their relationship to mental disorders: a 10-years prospective-longitudinal community study in adolescents. Drug and Alcohol Dependence 882 60-70.

## 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 is 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 at [www.dbdd.de](http://www.dbdd.de).

#	Standard Table	Title	Comments
1	<i>Online</i> Standard Table 01	Basic results and methodology of population surveys on drug use	
2	<i>Online</i> Standard Table 02	Methodology and results of school surveys on drug use	
3	Standard Table 03	Characteristics of persons starting treatment for drugs	
5	Standard Table 05	Acute/direct related deaths	Fonte
6	Standard Table 06	Evolution of acute/direct related deaths	Fonte
7	Standard Table 07	National prevalence estimates on problem drug use	Fonte
8	Standard Table 08	Local prevalence estimates on problem drug use	Fonte
9	Standard Table 09	Prevalence of hepatitis B/C and HIV infection among injecting drug users	
11	Standard Table 11	Arrests/Reports for drug law offences	
12	Standard Table 12	Drug use among prisoners	
13	Standard Table 13	Number and quantity of seizures of illicit drugs	
14	Standard Table 14	Purity at street level of illicit drugs	Fonte
15	Standard Table 15	Composition of tablets sold as illicit drugs	
16	Standard Table 16	Price in Euros at street level of illicit drugs	Fonte
17	Standard Table 17	Leading edge indicators for new developments in drug consumption	Voluntary
18	Standard Table 18	Overall mortality and causes of deaths among drug users	
19	Standard Table 19	Universal school based prevention programmes	
30	Standard Table 30	Methods and Results of youth surveys	Voluntary Fonte
34		TDI data	
22/25	Structured Questionnaire 22/25	Universal prevention	
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