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# 2012 National Report to the EMCDDA by the Reitox National Focal Point

# **GERMANY**

New Developments, Trends and In-depth Information on Selected Issues

**Drug Situation 2011/2012** 

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#### **National Experts**

In its function as national focal point for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), the DBDD assigns national experts to the five epidemiological key indicators. Serving as contact persons for the EMCDDA, these experts take part in the experts' conferences held yearly at European and national levels with a view to further harmonising and developing the key indicators. They moreover contribute to the creation of this annual report by writing texts on specific topics and giving feedback to the draft versions of the individual chapters.

- Key indicator population surveys (chapter 2)
   National expert: Dr. Ludwig Kraus, IFT Munich
- Key indicator prevalence estimate on problem drug use (chapter 4)
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- Key indicator drug-related deaths (chapter 6)
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Heiko Hergenhahn, BKA Wiesbaden (chapter 10), Boris Orth, BZgA (chapters 2 and 10), Dr. Bernd Werse, CDR Frankfurt (chapter 2).

**Note:** For better legibility, the present report refrains from using female grammatical forms that are instead subsumed under the respective male gender.

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## **ABBREVIATIONS**

Abbreviation	German	English
ADHS	Aufmerksamkeitsdefizit- /Hyperaktivitätsstörung	Attention deficit hyperactivity disorder
AIDS	Acquired Immune Deficiency Syndrome	Acquired Immune Deficiency Syndrome
AlkopopStG	Alkopopsteuergesetz	Alcopop Tax Act
APA	American Psychatric Association	American Psychiatric Association
ArbStättV	Arbeitsstättenverordnung	Workplaces Ordinance
AVerCa	Aufbau einer effektiven Versorgungsstruktur zur Früherkennung und Frühintervention jugendlichen Cannabismissbrauchs	Development of an effective care structure for the early recognition and early intervention in adolescent cannabis abuse
AWMF	Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften	Association of the Scientific Medical Societies in Germany
BAR	Bundesarbeitsgemeinschaft für Rehabilitation	Federal Association for Rehabilitaion
BADO	Hamburger Basisdokumentation im Suchtbereich	Hamburg Basic Documentation System for Addiction Issues
BÄK	Bundesärztekammer	German Medical Association
BayStVollzG	Bayerisches Strafvollzugsgesetz	Bavarian Prison Law
BAMF	Bundesamt für Migration und Flüchtlinge	Federal Agency for Migration and Refugees
BfArM	Bundesinstitut für Arzneimittel und Medizinprodukte	Federal Institute for Drugs and Medical Devices
BfR	Bundesinstitut für Risikobewertung	Federal Institute for Risk Assessment
BGH	Bundesgerichtshof	Federal High Court of Justice
BINSO	Brücke für Integration und Soziales	Bridge for Integration and Social Affairs
BKA	Bundeskriminalamt	Federal Criminal Police Office
BKiSchG	Bundeskinderschutzgesetz	Federal Child-Protection Act
BMAS	Bundesministerium für Arbeit und Soziales	Federal Ministry for Employment and Social Affairs
BMBF	Bundesministerium für Bildung und Forschung	Federal Ministry for Education and Research
BMFSFJ	Bundesministerium für Familie, Senioren, Frauen und Jugend	Federal Ministry for Family, Senior Citizens, Women and Youth
BMG	Bundesministerium für Gesundheit	Federal Ministry for Health
ВМІ	Bundesministerium des Innern	Federal Ministry of the Interior

Suchtkranker  Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz  M Betäubungsmittel MändV  Betäubungsmittelrechts- Änderungsverordnung  MG  Betäubungsmittelgesetz  Agency for Social and Customer P Narcotic drugs Amending regulation	for Youth, Family,
Rehabilitation und Integration Suchtkranker  Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz  MändV Betäubungsmittel Betäubungsmittelrechts- Änderungsverordnung  MG Betäubungsmittelgesetz  MVV Betäubungsmittelverschreibungsverordnu Rehabilitation ar Rehabilitation a	and Health
Gesundheit und Verbraucherschutz and Customer P  M Betäubungsmittel Narcotic drugs  MÄndV Betäubungsmittelrechts- Änderungsverordnung  MG Betäubungsmittelgesetz Narcotics Act  MVV Betäubungsmittelverschreibungsverordnu Narcotics Prescr	e Centre for the nd Integration of Addicts
MÄndV  Betäubungsmittelrechts- Änderungsverordnung  MG  Betäubungsmittelgesetz  MVV  Betäubungsmittelverschreibungsverordnu  Narcotics Prescr	al Affairs, Family, Health Protection
Änderungsverordnung  MG Betäubungsmittelgesetz Narcotics Act  MVV Betäubungsmittelverschreibungsverordnu Narcotics Prescr	
MVV Betäubungsmittelverschreibungsverordnu Narcotics Prescr	ation on narcotic drugs
	ription Regulation
Der Bundesverband für stationäre Federal Associa Suchtkrankenhilfe e.V.	tion for inpatient
Baden-Württembergischer Landesverband für Prävention und Rehabilitation gGmbH  Baden-Württeml Association for F	• •
ZgA Bundeszentrale für gesundheitliche Federal Centre f Aufklärung	for Health Education
Casemanagement und Beratung für Case management cannabiskonsumierende Schüler cannabis-using s	ent and counselling for school children
aSu Caritas Suchthilfe Caritas Addiction	n Help
DR Centre for Drug Research Centre for Drug	Research
ND Suchtstoffkommission der Vereinten Commission on Nationen United Nations	Narcotic Drugs of the
OBRA Cost Benefit and Risk Appraisal of Substitution Treatments Cost Benefit and Substitution Treatments	d Risk Appraisal of atments
OFOG Classification of the Functions of Government Classification of Government	the Functions of
	ted basic documentation help system in Hessen
	nittee for the Prevention hhuman or Degrading inishment
Drogenaffinitätsstudie der BZgA  Drug affinity studie for Health Education	dy of the Federal Centre ation
	nce Centre for the oring Centre for Drugs tion
Dried Blood Spots (Filterblutproben) Dried Blood Spo	

DBT	Dialektisch-Behaviorale Therapie	Dialectic behavioural therapy
DDD	Defined daily dose; Definierte Tagesdosis	Defined Daily Dose
deQus	Deutsche Gesellschaft für	German Society for Quality
	Qualitätsmanagement in der Suchttherapie e.V.	Management in Addiction Therapy
DeStatis	Statistisches Bundesamt Deutschland	Federal Statistics Office
DFB	Deutschen Fußball-Bund	German Football Association
DGPPN	Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde	German Association for Psychiatry and Psychotherapy
DGVS	Deutsche Gesellschaft für Verdauungs- und Stoffwechselkrankheiten	German Society for Addiction Medicine
DGS e.V.	Deutsche Gesellschaft für Suchtmedizin	German Society for Digestive and Metabolic Diseases
DHS	Deutsche Hauptstelle für Suchtfragen	German Centre for Addiction Issues
DHV	Deutscher Hanfverband	German Hemp Association
Difu	Deutsches Institut für Urbanistik gGmbH	German Institute for Urbanistics
DISuP	Deutsches Institut für Sucht- und Präventionsforschung	German Institute for Addiction and Prevention Research
DJI	Deutsches Jugendinstitut	German Youth Institute
DJK	Deutsche Jugendkraft	German Youth Power Sports Assocation
DKFZ	Deutsches Krebsforschungszentrum	German Cancer Research Centre
DmMV	Dopingmittel-Mengen-Verordnungen	Regulation on Doping Agent Amounts
DOSB	Deutscher Olympischer Sportbund	German Olympic Sports Association
Dot.sys	Dokumentationssystem für Maßnahmen der Suchtprävention	Documentation System for Drug Prevention
DRV	Deutsche Rentenversicherung Bund	German Pension Fund
DSHS	Deutsche Suchthilfestatistik	Statistical Report on Substance Abuse Treatment in Germany
DSM	Diagnostic and Statistical Manual of Mental Disorders	Diagnostic and Statistical Manual of Mental Disorders
DSR	Drogen- und Suchtrat	National Board on Drugs and Addiction
DZSKJ	Deutsches Zentrum für Suchtfragen des Kindes- und Jugendalters	German Centre for Addiction Research in Childhood and Adolescence
EBDD/EMCDDA	Europäische Beobachtungsstelle für Drogen und Drogensucht	European Monitoring Centre for Drugs and Drug Addiction
ECAD	European Cities against Drugs	European Cities Against Drugs

EDDP	2-Ethylidin-1,5-Dimethyl-3,3-	2-ethylidene-1,5-dimethyl-3,3-
	Diphenylpyrrolidin; Methadonmetabolit	diphenylpyrrolidine; methadone metabolite
EFUS	European Forum for Urban Security	European Forum for Urban Security
EKhD	Erstauffällige Konsumenten harter Drogen	Users of hard drugs who have come to the attention of the police for the first time
ESA	Epidemiological Survey on Addiction (früher "Bundesstudie")	Epidemiological Survey on Addiction
ESF	Europäischer Sozialfonds	European Social Fund
ESPAD	Europäische Schülerstudie zu Alkohol und anderen Drogen	European School Survey Project on Alcohol and other Drugs
EU	Europäische Union	European Union
EuropASI	European Addiction Severity Index	European Addiction Severity index
fdr	Fachverband Drogen und Rauschmittel e.V.	Federation of drug help ogranisations
FDR	Falldatei Rauschgift	Drugs Data File
FeV	Fahrerlaubnisverordnung	Driving licence regulation
FOGS	Kölner Gesellschaft für Forschung und Beratung im Gesundheits- und Sozialbereich	Cologne Society for Research and Counselling in Health and Social Affairs
FreD	Frühintervention bei erstauffälligen Drogenkonsumenten	Early intervention in drug users who came to the notice of the police for the first time
GastG	Gaststättengesetz	Restaurant Licensing Act
G-BA	Gemeinsamer Bundesausschuss	Common Federal Committee
GG	Grundgesetz	German Constitution
GKV	Gesetzliche Krankenversicherung	SHI -Statutory Health Insurance Scheme
HaLT-Projekt	Hart am Limit-Projekt	HaLT – alcohol prevention project
HBSC	Health Behavior in School-aged Children	Health Behavious in School-aged Children
HBV	Hepatitis B-Virus	Hepatitis B Virus
HCV	Hepatitis C-Virus	Hepatitis C Virus
HD	Hauptdiagnose	Main Diagnosis
HDG	Horizontale Drogen Gruppe	Horizontal Drug Group
HIV	Humanes Immundefizienz-Virus	Human Immunodeficiency Virus
HmbStVollzG	Hamburgisches Strafvollzugsgesetz	Hamburg Prison Law
HStVollzG	Hessisches Strafvollzugsgesetz	Hessian Prison Law
HVV	Hamburger Verkehrsverbund	Hamburg Transport Association

ICD	International Classification of Diseases	International Classification of Diseases
	Internationale Klassifikation der	International Classification of Functioning
	Funktionsfähigkeit, Behinderung und	Disability and Health
	Gesundheit	,
IFT	Institut für Therapieforschung	Institute of Therapy Research
IfSG	Infektionsschutzgesetz	Infectious Diseases Control Law
i.v.	intravenös	Intravenous
IVD	intravenös Drogengebrauchende	Intravenous drug user
JGG	Jugendgerichtsgesetz	Youth Courts Law
JuSchG	Jugendschutzgesetz	Youth Protection Law
JVA	Justizvollzugsanstalt	Detention facility
JVollzGB	Justizvollzugsgesetzbuch	Prison Code
KDS	Deutscher Kerndatensatz zur	German Core Data Set for Addiction
	Dokumentation im Bereich der	Help
	Suchtkrankenhilfe	KID. Halo and add for down days and add
	Hilfe für drogenabhängige Eltern und ihre Kinder	KiD - Help project for drug dependent parents and their children
	Kinder- und Jugendgesundheitssurvey	Health Interview and Examination
	Tanada and dagonagodananonoda voy	Survey for Children and Adolescents
KJHG	Kinder- und Jugendhilfegesetz	Child and Young Persons Assistance Act
	Gesetz zur Kooperation und Information	Act on Cooperation and Information in
ļ i	im Kinderschutz	the area of Child Protection
KM	Kontingenzmanagement	Contingency Management
	Kleine und mittelständische Unternehmen	Small and Medium-Sized Enterprises
KOALA e.V.	Kinder ohne den schädlichen Einfluss	Children without the harmful influence of
	von Alkohol und anderen Drogen e.V.	alcohol and other drugs - Help
		association for children from families with addiction problems
KOLIBRI	Konsum aller leistungsbeeinflussenden	Use of performance enhancing drugs for
	Mittel in Alltag und Freizeit	everyday and recreational purposes
KTL	Klassifikation therapeutischer Leistungen	Classification of Therapeutic Services
LKA / LKÄ	Landeskriminalamt / Landeskriminalämter	Land Criminal Police Office/officers
LMS	Local Monitoring System	Local Monitoring System
LSD	Lysergsäurediethylamid	Lysergic Acid Diethylamide
LWL	Landschaftsverband Westfalen-Lippe	Land association, Westphalia-Lippe
MDMA	3,4-Methylendioxy-N-Methylamphetamin	3,4-Methylendioxy-N-
		Methylamphetamine

Merkmapronie zur Eingiederung Leistungsgewandelter und Behinderter in Arbeit  MODRUS IV Moderne Drogen- und Suchtpravention MoSyD Frankfurter Monitoringsystem Drogen Frankfurt Progen Frankfurter Monitoringsystem Drogen Frankfurt Drug Trends Monitoring System  MRV Maßregelvollzug Hospital Treatment Order MuschuG Mutterschutzgesetz Maternity Protection Law Neuroscience Research NJVollzG Niedersächsisches Justizvollzugsgesetz NRW Nordrhein-Westfalen Nationales Zentrum Frühe Hilfen Nationale Zentrum Frühe Hilfen Nationale Centre for Early Aid OST Opioid-Substitutionstherapie PDU Problem Drug Use PKS Polizeiliche Kriminalstatistik PREMOS- Studie Substitution Treatment - Studie Prev@WORK Pravention in der Ausbildung Propram Polizeiliche Kriminalprävention der Länder und des Bundes Propram Polizeiliche Kriminalprävention der Länder und des Bundes Psychosoziale Betreuung Psychosoziale Betreuung Psychosoziale Betreuung Psychosoziale Betreuung RC Research Chemicals Respondent Driven Sampling REITOX Europäisches Informationsnetzwerk zu Drogen und Sucht (Réseau Européen d'Information sur les Drogues et les Toxicomanies) RKI Robert Koch - Institut RV Rentenversicherung RVO Rechtsverordnung Statutory Regulation Addiction Counselling and therapy facilities Special Severity of Dependence Skala Severity of Dependence Skala Severity of Dependence Skala Severity of Dependence Scale Social Security Codes SKOLL Selbstkontrolitraining Self-control training	MELDA	Manharatanafila man Finaliadan ara	Observator profiles for the interretion of	
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MRV Maßregelvollzug Hospital Treatment Order MuSchuG Mutterschutzgesetz Maternity Protection Law NEURON Network of European Funding for Neuroscience Research NJVollzG Niedersächsisches Justizvollzugsgesetz Lower-Saxon Prison Law NRW Nordrhein-Westfalen North-Rhine Westphalia NZFH Nationales Zentrum Frühe Hilfen Nationald Centre for Early Aid OST Opioid-Substitutionstherapie Opioid substitution therapy PDU Problem Drug Use PKS Polizeiliche Kriminalistatistik Police criminal statistics PREMOS- Predictors, Moderators and Outcomes of Studie Substitution Treatment - Studie Preve@WORK Pravention in der Ausbildung Prevention in vocational training ProPK Programm Polizeiliche Kriminalprävention der Länder und des Bundes Psycho-Social Working Committee psb Psychosoziale Arbeitsgemeinschaft Psycho-Social Working Committee psb Psychosoziale Betreuung Psycho-social care QM Qualitätsmanagement Quality management RC Research Chemicals Research Chemicals RDS Respondent Driven Sampling Respondent Driven Sampling REITOX Europäisches Informationsnetzwerk zu Drogen und Sucht (Reseau Européen d'Information sur les Drogues et les Toxicomanies)  RKI Robert Koch - Institut RV Rentenversicherung Pension Insurance RVO Rechtsverordnung Statutory Regulation SBB Suchtberatung- und -behandlungsstellen Addiction counselling and therapy facilities SDS Severity of Dependence Skala Severity of Dependence Scale SGB Sozialgesetzbuch Social Security Codes	MODRUS IV	Moderne Drogen- und Suchtprävention		
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SKOLL Selbstkontrolltraining Self-control training	SGB	Sozialgesetzbuch	Social Security Codes	
	SKOLL	Selbstkontrolltraining	Self-control training	

SLS	Sächsische Landesstelle gegen die	Saxon State Office for Substance Abuse		
	Suchtgefahren e.V.	Problems		
SQ	Strukturierten Fragebögen	Standard Questionnaire		
ST	Standardtabellen	Standard Table		
StatEval	Gesellschaft für Statistik und Evaluation	Association for Statistics and Evaluation		
StGB	Strafgesetzbuch	Penal Code		
StVG	Straßenverkehrsgesetz	Road Traffic Act		
StVO	Straßenverkehrsordnung	Road Traffic Regulations		
StVollzG	Strafvollzugsgesetz	Prison Law		
SURE	Substitutionsgestützte Rehabilitation	Substitution-Assisted Rehabilitaion		
TDI	Treatment Demand Indicator	Treatment Demand Indicator		
TG	Therapeutische (Wohn-) Gemeinschaft	Therapeutic (shared-living) community		
THC	Tetrahydrocannabinol	Tetrahydrocannabinol		
transVer	transkulturelle Versorgung von Suchtkranken	Transcultural care of addicted people		
TTM	Transtheoretisches Modell	Transtheoretical model		
TVS	Therapievorbereitungsstation	Therapy Preparation Station		
TZI	Themenzentrierte Interaktion	Theme-centred Interaction		
UKE	Universitätsklinikum Hamburg-Eppendorf	University Clinic Hamburg-Eppendorf		
VGO	Vorgaben der Vollzugsgeschäftsordnung	Guidelines for the implementation of the rules and regulations		
WFSBP	World Federation of Societies of Biological Psychiatry	World Federation of Societies of Biological Psychiatry		
WHO	Weltgesundheitsorganisation	World Health Organisation		
ZI	Zentralinstitut für Seelische Gesundheit Mannheim	Mannheim Central Institute for Emotional Health		
ZIS	Zentrum für interdisziplinäre Suchtforschung	Centre for interdisciplinary addiction research		

### Introduction

One of the major tasks of the German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction (Deutsche Beobachtungsstelle für Drogen und Drogensucht, DBDD) is to report annually to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) on the drug situation in Germany, serving as a contact partner for the latter in its function as the so-called German REITOX<sup>1</sup> focal point.

The reporting to the EMCDDA concentrates to a large extent on illegal drugs. The prevalence and consumption of other substances (especially alcohol and tobacco) are only considered in this context, for example, if they are consumed in combination with illegal substances. In contrast to the focus of the EMCDDA on illegal drugs, the German addiction and drug policy pursues a holistic approach, covering "addiction" in a broader sense and allowing for the relevance of other substances (especially alcohol and tobacco) and related problems (e.g. pathological gambling) (c.f. also the comments on national strategy in chapter 1). Due to the European reporting requirements, this comprehensive approach can only partly be applied to the annual REITOX report.

The DBDD produced the German REITOX Report 2011/2012 in accordance with the standard European guidelines issued by the EMCDDA, taking into account the quality report's feedback on previous reports. The report is mainly based on the data from the year 2011, but also includes findings from the year 2012 as far as available until completion of the report.

Each chapter of the report has an introductory passage presenting the most important and updated background information – e.g. on the structure of the health care system or the available data sources. These parts have only been revised according to the requirements and updated. They describe the most important fundamentals such as methodological aspects of regularly carried out surveys. The introductory passages are to help to see the updated information on the drug situation in context and comprehend it without having to resort to supplementary literature. These parts of the report have been marked (framed and highlighted in grey colour) so that readers, familiar with the framework conditions of the German reporting system, may, while reading, concentrate on the new developments.

The other sections of the individual chapters provide exclusively new data and findings from the reporting year. Older data are only used for comparative purposes where appropriate. Otherwise, the report refers to earlier publications or to pertaining standard tables (ST) and structured questionnaires (SQ) of the EMCDDA that contain a multitude of information. They are available from the statistical bulletin released by the EMCDDA<sup>2</sup>. They can, of course, also be obtained in electronic form, on request, from the DBDD.

<sup>&</sup>lt;sup>1</sup> Réseau Européen d'Information sur les Drogues et les Toxicomanies.

www.emcdda.europa.eu/stats12

This year's report contains two special chapters on the topics "Drug Policies of Major Cities" and "Inpatient Treatment". The choice of these topics shows once again how the collation of information on a European level is dependent on the experiences and practices based on regional experiences and models. In this respect, in Germany the local authorities (Kommunen) are an important partner and addiction treatment provider in the field. At the same time, the local authorities increasingly face the challenge of having to act and make decisions on a regional basis, where developments take place across the country - without further framework conditions (e.g. in the case of new synthetic drugs) or experiences being available as to how to deal with new phenomena.

The inpatient treatment of people with drug-related problems has an important role in the general healthcare system and ranges from detoxification in general hospitals to specialist clinics in which teams from multiple professions address the complex problems of the person concerned. The manner of services provided and borne by the community on the principle of mutual solidarity thus varies widely across Europe. This makes it even more important to present the professionalism and quality of the structures which exist in Germany.

Based on the special chapters of the national focal points, the EMCDDA will publish reports in 2013 with the addition of a European perspective.

On behalf of the German Reitox Reference Centre (DBDD) I would like to express my special thanks to all experts for their cooperation, their support and the host of valuable information they have provided us with in the reporting year. It is only thanks to the existence of such an extensive network that cross-sectional reporting within the framework of the Reitox Report is made possible.

Finally, I would like to draw your attention to the new and re-designed website of the DBDD on which you can find further information on the DBDD and on the national report (www.dbdd.de). Information on the EMCDDA, data from other EU-countries and on the European report can be found at www.emcdda.europa.eu.

Munich, August 2012

Tim Pfeiffer-Gerschel

Head of the DBDD

### Summary

The present report on the drug situation in Germany has been prepared on behalf of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), which is an agency of the European Union. The report is the result of the work performed by the German Monitoring Centre for Drugs and Drug Addiction (Deutsche Beobachtungsstelle für Drogen und Drogensucht, DBDD), in which the Institute for Therapy Research (Institut für Therapieforschung, IFT), the Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, BZgA) and the German Centre for Addiction Issues (Deutsche Hauptstelle für Suchtfragen, DHS) cooperate and join forces. The DBDD is funded by the Federal Ministry for Health and Social Affairs and the EMCDDA. The overall report is structured according to the EMCDDA guidelines and is available for download at www.dbdd.de.

#### Drug policy: legislation, strategies and economic analysis

Isolated "drug" concepts have been replaced by a cross-substance "addiction" policy that increasingly sets the focus on common aspects of the whole range of psychotropic substances. As a reaction to the new challenges posed to addiction and drug policy and to current developments, the Federal Government Commissioner on Narcotic Drugs presented a "National Strategy on Drug and Addiction Policy" in 2012. The stated aim of the drug and addition policy continues to be the reduction of the consumption of legal and illegal addictive substances as well as the avoidance of societal problems caused by drugs and addiction. The National Strategy is designed to be a healthcare guideline for a modern drug and addiction policy in Germany. The National Strategy on Drug and Addiction Policy is a part, in terms of its aims and intentions, of the general prevention strategy currently being prepared by the German Federal Government in the area of drug and addiction policy.

With the 26<sup>th</sup> amending regulation on narcotic drugs (26. BtMÄndV), schedules I to III of the German Narcotics Act (Betäubungsmittelgesetz, BtMG) were adapted to reflect the current status of scientific knowledge and 28 new synthetic, psychoactive substances (including synthetic derivatives of amphetamine, piperazine, cocaine and several synthetic cannabinoids) were adopted into the schedules of the BtMG for the purpose of health protection in order to dampen their abuse and facilitate prosecutions. Furthermore, liquid medicines containing tilidine with fast release of the active ingredient have been made subject to the narcotic law regulations through their adoption in schedule III of the BtMG.

Furthermore, again in this report year, numerous projects were carried out on a regional, federal or international level in the area of drugs with the cooperation, in particular, of the Federal Ministry of Health (BMG).

#### Drug use in the population and specific targeted groups

The results of the last Epidemiological Survey on Substance Abuse (ESA) carried out in 2009 were already presented in the REITOX Report 2010. They corroborate the findings of

earlier surveys, showing that about a quarter of the adult population in Germany has experience with drugs. The proportion of adults who took drugs in the last 12 months was still at 5%; with less than 3% using drugs in the last 30 days. Cannabis remains by far the most commonly used illicit drug. Apart from this, noteworthy figures were only reached by cocaine, amphetamines, ecstasy and mushrooms. The use of heroin, LSD and crack remains limited to a specific group that is clearly smaller in numbers.

According to the results of the latest Drug Affinity Study (DAS) of the Federal Centre for Health Education (BZgA), 17.6% of 12-17 year old adolescents in Germany have already been offered illegal drugs at least once (BZgA 2012). The proportion of adolescents who have also tried an illegal drug at least once is considerably lower, with a lifetime prevalence of 7.2%. A total of 4.9% of adolescents between 12 and 17 had consumed an illegal drug within the 12 months prior to the survey (12-month prevalence) of whom less than half (2.0%) reported that this consumption was fewer than 30 days previously (30-day prevalence). Regular consumption of illegal drugs was found in around every hundredth adolescent. In total 0.9% of 12-17 year olds stated they had taken an illegal drug more than ten times in the previous twelve months.

In the case of young adults between the ages of 18 and 25, almost two thirds of respondents (65.1%) had already experienced being offered an illegal drug. The lifetime prevalence for the consumption of illegal drugs amongst young adults was 39.8%, the 12-month prevalence 14.3%. The 30-day prevalence for the consumption of illegal drugs in this age group was 5.8% and the prevalence of regular consumption of illegal drugs was 3.7%. Illegal drugs play a larger role amongst male adolescents and young adults than amongst their female equivalents.

At the end of 2011, the findings of the German survey in the scope of the European School Survey Project on Alcohol and other Drugs (ESPAD) were presented. Pupils in the ninth and tenth grade in 5 German *Laender* were involved. Cannabis remained the most commonly consumed illegal substance, with a lifetime prevalence of 22.2%. In the year prior to the survey, 17.4% of adolescents had tried cannabis at least once. For the previous 30 days, the figure was 8.1%. More boys than girls reported having consumed cannabis at least once in their life (28.2% vs. 16.8%), in the 12 months prior to the survey (22.8% vs. 12.6%) and in the 30 days prior to the survey (11.7% vs. 4.8%). The lifetime prevalence was highest in secondary general schools (Hauptschule), at 26.8%. However, consumption in the last 30 days was reported mostly by comprehensive school (Gesamtschule) pupils (11.5%).

Complementing the current DAS study, the findings of the latest school survey were presented in 2012 in the scope of the Frankfurt MoSyD. Furthermore, the MoSyD also revealed information from the trend scout panel. Trend data from the HBSC study were also presented.

#### Prevention

Using a combination of measures for behaviour and condition oriented prevention, smoking behaviour of adolescents in Germany was reduced to a historic low.

Cannabis is the most commonly consumed illegal drug amongst 12 to 25 year olds. Thus, it remains necessary to address cannabis in suitable preventative measures. Specifically, the simultaneous consumption of alcohol and an illegal drug represents a widely spread risk behaviour. Experts in addiction prevention react to this with a large number of preventative measures related to specific substances, specifically alcohol and cannabis, in order to promote a low risk approach to alcohol and to reduce the consumption of legal and illegal addictive substances in all age groups of the population. In particular, the reduction in experience with drugs, seen amongst adolescents, should be further supported in order to achieve changes by young adults also. The access points via so-called new media such as the internet or social networks are equally significant in addiction prevention as information on (online) cessation assistance or the offer of local advice centres.

In addition to substance related prevention activities, cross-substance measures, such as the promotion of health, risk and life competence as well as the creation of critical attitudes to addictive substances in Germany are approximately equally widespread.

Within the framework of universal addiction prevention parents are, alongside children and adolescents, an important target group especially for cross-substance measures. Parents are often approached in the school setting as well as being a direct target group in respect of family based prevention. In addition to improving child raising and decision-making skills of parents or legal guardians and the strengthening of cohesion within the family, parents are made aware of their role model function for the substance use of their children. The area of free time and sport also represents, alongside the spheres of school, family and local community, an important area of activity for universally or selectively designed early prevention measures. The existence of sports clubs throughout the country enables a high degree of penetration also amongst socially disadvantaged groups.

#### **Problem Drug Use**

Based on figures from treatment facilities, police contacts and records of drug-related fatalities, estimates venturing the scale of problem (i.e. risky, harmful and dependent) drug use indicate the number of problematic users of heroin range between 63,000 and 174,000 persons (1.2 to 3.2 persons per 1,000 inhabitants) in the age group of 15-64 years. Since 2005, the estimates for the multiplier "police contacts" are on the decline. The same applies to the multiplier "drug-related deaths" for the years since 2008. The estimates based on the multiplier "demand for treatment" fell from 2008 to 2009 but rose again slightly towards 2010. In summary, one can assume that the estimated number of heroin/opioid users has continuously declined since 2008.

Moreover, the findings of the Phar-Mon project will be presented. Its aim is to record the extent of the abuse of pharmaceuticals by clients of outpatient addiction and drug therapy and to contribute to the identification of trends of abuse.

In this chapter, the findings of the DAS on the regular consumption of illegal substances will also be presented. Here, the proportion of male respondents was almost three times as high as that of the female respondents. A ZIS study on the abuse of substitution substances

showed that the proximity to substitution practices but also the substitution itself works as a protective factor for reducing concomitant use and emergencies as well as for an improved living situation and employment situation. In a further ZIS study, more than three quarters of geriatric care homes contacted reported caring for patients with addiction problems. In this context, the prevalence of an addiction problem within the facility was estimated at around 10%. On average, 39% of patients with alcohol dependence and 73% of those with a pharmaceuticals addiction were women. According to the 2012 pharmaceuticals report of the health insurance company BARMER GEK, a higher number of prescriptions of psychotropic drugs for women than for men was apparent.

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

A little under half (44.9%; 2010: 46.3%) of the clients who sought help from outpatient drug counselling facilities in connection with illicit drugs in 2011, had primary opioid-related problems; about a third (34.7%; 2010: 35.6%) suffered primarily from problems with cannabis use. Cannabis-related cases accounted for 56.6% (2010: 59.8%) of the patients who underwent therapy for the first time, while opioids played a minor role among this population (18.1%; 2010: 17.7%). In 15.0% (2010: 12.5%) of cases, stimulants were the reason for contacting an outpatient addiction counselling centre for the first time; they accounted for 10.5% (2010: 8.2%) of all newly admitted and discharged patients.

In the inpatient setting, opioids continued to play the largest role in the area of illicit drugs. As for acute (hospital) treatments, amongst substance related disorders (excluding alcohol), toxicoses caused by sedatives/hypnotics were the reason for contacting the facility in about one case in ten. Cocaine was the main reason for treatment in 6.9% (2010: 6.8%) of the cases and stimulants in 12.7% (2010: 9.7%) of the cases treated in the specialist clinics that participate in the German Statistical Report on Treatment Centres for Substance Use Disorders.

The number of substitution treatments did not rise year on year for the first time since the introduction of mandatory notification (2002) and was 76,200 in 2011 (2010: 77,400). There are still considerable regional differences regarding the supply of and demand for substitution treatments.

#### Health correlates and consequences

In 2011, 2,889 newly-diagnosed Human Immunodeficiency Virus (HIV) infections were reported to the Robert Koch Institute (RKI). The number has thus hardly decreased at all compared to 2010 (2,939). Persons who have likely contracted their HIV infection through intravenous drug use make up the third largest group, at 4% (n=90).

In addition, a total of 5,027 cases of newly diagnosed hepatitis C were reported to the RKI for 2011. The incidence of first diagnosis (6.1 per 100,000 population) was thus lower than that in 2010 (6.5) and than the median of the years 2006 to 2010 (7.6). Intravenous drug use, which is highly probably causally related to the hepatitis C discovered, was reported for 1,126 cases (70% of the cases with valid information as to the mode of transmission).

In 2011, 986 people died as a result of the use of illegal drugs. This represented a 20% reduction in comparison to the previous year (1,237) and the lowest number of drug-related deaths since 1988. Overdosing on heroin (including the consumption of heroin in connection with other drugs) was once more the most common cause of death (58%; 2010: 69%). The proportion of drug deaths in which substitution substances were found, alone or in connection with other drugs, was 22% and thus slightly increased in comparison to the previous year (2010: 14%), however still lower than 2002 when this proportion was at 40%.

#### Response to health correlates and consequences

Various measures, such as drug consumption rooms, syringe exchange programmes and other prevention programs have been established to help prevent drug-related deaths and infectious diseases. In Germany there are currently (as at June 2012) a total of 24 inpatient drug consumption rooms as well as 2 mobile drug consumption facilities in 15 cities in 6 *Laender* in Germany. Recent research also shows at least 223 facilities with syringe exchange programmes and 167 syringe vending machines.

#### Social correlates and social reintegration

The social situation of many patients in the help system, especially in low-threshold facilities, is still precarious. The life of many addicts continues to be strongly marked by homelessness, lack of regular employment and low income that is not least caused by a low level of education.

Several regional model projects are designed in particular to tackle the problem of unemployment and promote cooperation between addiction support, rehabilitation clinics and the working groups formed by the employment agencies and the municipalities (the so-called ARGEn) in order to help unemployed addicts into therapy at an early stage and to support the (re-)integration into the world of work.

#### Drug-related crime, prevention of drug-related crime and prison

In 2011, a total of around 236,000 drug law offences were recorded of which around 170,000 were general offences against the Narcotics Act (BtMG) and nearly 50,000 dealing/trafficking offences. That represented an overall increase of 2.4% in comparison to 2010 which can be seen alongside a rise in general offences (+2.3%) and in trafficking crimes (+2.7%).

The number of convictions rendered under the BtMG fell by 6.8% from 2009 (59,432) to 2010 (55,391). The slight reduction was seen in all age categories, i.e. adults, young adult and juvenile criminals. In respect of the type of offence, the decline in the overall number is in connection to the lower number of cases of unspecific consumption-related offences (Sec. 29 Par. 1 BtMG), the dealing/trafficking crimes and breaches of Sec. 30 Par. 1 No. 4.

The number of persons imprisoned due to BtMG related offences fell by 7.7% from 2010 to 2011 which means that persons imprisoned due to offences under the BtMG make up 14.7% of all prisoners.

#### **Drug markets**

All in all, there was little change in the development of purity, prices and number of seizures of illicit drugs between 2010 and 2011. The quantity of drugs seized is very much dependent on larger individual seizures. In this way, for example, the quantity of cocaine seized in 2011 fell almost to 2009 levels after several major seizures of several hundreds or thousands of kilograms set a new record in 2010. There were in part considerable increases in the quantity of amphetamine, crystal, cannabis plants and khat seized which had already been seen in previous years. The quantity of ecstasy seized almost reached 2009 levels again after 2010 set a record low (primarily because of a lack of demand due to inferior quality levels). The quantity of marijuana and hashish seized both fell by 19% year on year.

The number of seizures increased by 5.5% overall from 2010 to 2011. The most significant factor for the increased overall number of seizures was the increased number of seizures of marijuana, amphetamine and crystal. Crystal overtook ecstasy in 2011 as the second-most often seized amphetamine type stimulant (ATS). There were minimal developments in the numbers of seizures of hashish and cocaine but considerable reductions in the case of heroin.

On the street-level, prices of cocaine, ecstasy, hashish, marijuana, amphetamine and LSD either remained constant or increased slightly. In contrast, the average prices of heroin, crystal and crack throughout Germany increased markedly. Whilst the prices for wholesale volumes of heroin increased slightly and those for cocaine of 0.5 to <1.5 kg and amphetamine of 10 to <100kg increased considerably, the other wholesale prices either remained stable or fell.

The average concentration of active ingredients of amphetamine, cocaine and cannabis products have hardly changed also in comparison to the last five years. In contrast, the concentration of active ingredient in heroin undergoes relatively large fluctuations: the concentration of active ingredient in heroin in street-level trafficking reduced sharply to 11.0% after having risen continuously (exceptions aside) from 2002 to 2010 when it reached its highest level of the last 10 years of 25%. The concentration of active ingredient in heroin in the case of wholesale, experiences large fluctuations: between 2005 (36.5%) and 2009 (60.3%) the purity of heroin almost doubled before falling sharply to 34.1% in 2010 and rising to 42.2% in 2011. It is notable that once again, as in the years up to and including 2008, almost exclusively MDMA was detected as the pyschoactive ingredient in ecstasy tablets; while in contrast, m-CPP became almost irrelevant (at 0.9%) in 2011 after having been identified as the psychoactive ingredient in the majority of single substance products seized in 2009 (65.2%) and 2010 (61.1%).

#### Inpatient treatment of drug addicts in Germany

Inpatient treatment is a key element of treatment and rehabilitation forms for drug addicts. In Germany there are approx. 320 facilities with over 13,200 beds offering inpatient rehabilitation services for people with substance-related disorders. Of these, 4,000 beds are for drug addicts. The services, as well as the treatment concepts, have continuously

developed in the past decade to such a degree that various treatment needs are being met and the treatment model and programme take into account drug use, health and quality of life as well as professional and social participation. The aim of rehabilitation is to achieve and maintain abstinence, remove or offset physical and mental disorders and maintain or achieve reintegration into work, profession and society for as long as possible.

Inpatient withdrawal treatment is primarily one of the services of medical rehabilitation in Germany according to §§ 9 and 15 SGB VI. The facilities ("specialist clinics") are particularly covered by the Deutsche Rentenversicherung (German Pension Insurance Scheme). The "Agreement on dependency illnesses" concerning the cooperation between health insurers and pension insurance schemes, which came into effect in 2001, presents the form and content of treatment, selects the specialist staff, determines the organisational structure of rehabilitation and recommends the length of treatment, all in a decisive manner.

The effort to provide medical, psychotherapy and psychosocial interventions for people with substance-related disorders at the highest level of quality possible have raised the requirements for inpatient drug addiction facilities. The ongoing development of quality assurance and review of effectiveness, particularly against the background of scarce financial means will continue to remain a central topic in inpatient addiction treatment.

#### **Drug policies in major European cities**

Large cities are often disproportionately heavily affected by drug trafficking on the one hand and problems in connection with drug consumption on the other. This not only concerns open drug scenes or districts where drug problems are concentrated, but also affects public safety levels and the public health services.

The first part of this special chapter shows the drug policies and the drug strategies or action plans of twelve major German cities: Hamburg, Munich, Cologne, Frankfurt, Stuttgart, Dortmund, Essen, Düsseldorf, Bremen, Leipzig, Dresden and Rostock. This will cover the commonalities and differences with respect to management structure and drug-related programmes, the community drug strategy and its rough contents (where one exists), the coordination by a drug commissioner as well as the participation of cities in networks with focus areas relevant to drugs.

The second part of this special section discusses the drug policies of the German capital, Berlin in detail. A special feature of Berlin (as well as for Bremen and Hamburg) is that as a city-state, Berlin also performs the functions of a Federal State. Berlin's drug and addiction policies, addiction prevention and assistance, studies on the city's drug situation, the four areas of drug policy in capital cities and, as an exemplary model, the state of implementation of diamorphine treatment are covered on in detail.

#### PART A: NEW DEVELOPMENTS AND TRENDS

### 1. Drug policy: legislation, strategies and economic analysis

#### 1.1 Introduction

#### 1.1.1 Definitions

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 illegal drugs that were at the centre of the political interest. There was no comparable conception either for an alcohol or tobacco policy or for an 'addiction' policy, comprising the whole range of addictive substances. In recent years however, (1) disorders resulting from legal 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 forms of addiction<sup>4</sup> (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 legal and illegal 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 the (insufficient) term of 'addiction policy' continues to be used. As a consequence, legal substances and common strategies for both legal and illegal substances have to be taken into account in the annual reports of the German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction DBDD. In many cases, it is no longer possible 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.

#### 1.1.2 Objectives and focal points of "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 areas:

The term "addiction" no longer refers to a narrow target group, but comprises risky, harmful and addictive consumption.

There is still scientific controversy over the question whether pathological gambling should be regarded as a non-substance-related form of addiction or as a disorder of impulse control. So far, no final agreement has been reached on this. The non-uniform use of terms in this Reitox Report does not constitute a preference for either of the concepts.

- Prevention
- Counselling and treatment, cessation assistance
- Measures for harm reduction
- Repression

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

In line with the broad concept of the World Health Organisation (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 the 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 (Die Drogenbeauftragte der Bundesregierung 2003), served as a framework for the addiction policy of the Federal Government until 2009. Details on this can be found in the REITOX Report 2004.

On 15 February 2012, the "National Strategy on Drug and Addiction Policy", already announced in the last REITOX report, was adopted by the federal cabinet (Bundeskabinett), see section 1.3.1 below.

#### 1.1.3 Political framework

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

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

Currently, as part of the implementation of the drug policy, a few *Laender* are working on shifting competences especially with regard to counselling, care and general prevention

activities to the municipalities 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 schemes 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 usually 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 organisations

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 with guaranteeing outpatient medical care. Private charity organisations in particular, organise large parts of the measures of socio-therapeutic care for drug users for which they receive public funding – from national, *Laender* and municipal budgets according to certain criteria. In only a 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 (Social Security Codes, Sozialgesetzbuch, SGB VIII).

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

#### 1.2 Legal framework

#### 1.2.1 Laws, regulations, directives or guidelines in the field of drug issues

#### The Narcotics Act

The Narcotics Act (Betäubungsmittelgesetz, BtMG) as well as the legal regulations enacted on the basis of the BtMG such as the important Narcotics Prescription Regulation (Betäubungsmittelverschreibungs-Veordnung (BtMVV) contains all-important regulations on how to deal with these substances taking into account the respective UN-conventions on addictive substances. Substances that 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 prescriptions (e.g. MDMA, heroin, psilocybin).
- Schedule II: narcotics eligible for trade but not for medical prescriptions, (e.g. meprobamate, methamphetamine).
- Schedule III: narcotics eligible for trade and medical prescriptions (e.g. amphetamine, codeine, dihydrocodeine, cocaine, methadone, 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 and requires, for example, the use of special prescription forms for narcotic drugs.

#### **Social Security Codes**

The German Social Security Code (SGB) defines the framework for the financing of addiction therapy. The costs of drug addiction therapy (rehabilitation) are mainly borne by the pension insurance funds (SGB VI). Physical withdrawal (detoxification) and substitution therapy are paid for by the health insurance funds (SGB V). Other funding organs are the local or supralocal social welfare providers (SGB XII) and communities as supporting organs of youth welfare (SGB VIII).

With the fusion of unemployment aid and social aid in 2005 ("Hartz IV"), the social security codes (in particular SGB II and SGB III) have become even more important for people with drug problems. The central goal of the reform being to improve the procurement of work, efforts are undertaken to work more intensely on the removal of obstacles hindering 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 employment agencies or working groups formed between municipalities and employment agencies as well as the so-called opting municipalities are responsible for granting aid.

#### Other laws

Other important laws defining the possible legal consequences of the consumption of psychological active substances, for example with regard to participation in road traffic, are the:

- Road Traffic Regulations (Straßenverkehrsordnung, StVO) which specify for example how to conduct traffic controls,
- Road Traffic Act (Straßenverkehrsgesetz, StVG) which sets blood alcohol limits and also describes driving motor vehicles under the influence of other intoxicating substances as a regulatory offence,
- Criminal Code (Strafgesetzbuch, StGB), which also goes into the consequences of the consumption of alcohol and other intoxicating substances in road traffic and the inclusion

- of criminals with substance addiction in forensic psychiatric hospitals (Maßregelvollzug) and
- Driving Licence Regulation (Fahrerlaubnisverordnung, FeV), which deals with the conditions for driving, doubts about the qualification for driving and the revocation of driving licences for example because of an existing dependence on narcotic drugs.

#### 1.2.2 Laws implementation

A host of information on legal practice and prosecution was provided in a Selected Issue of the REITOX Report 2008 and a publication of the EMCDDA. Both documents are available from the DBDD.

#### Discontinuance of prosecution

Section 31a of the German Narcotics Act (Betäubungsmittelgesetz, BtMG) provides for the possibility to discontinue prosecution for possession of drugs under certain circumstances, namely when the offender has grown, produced, imported, exported, bought or received and possessed in any other way narcotic substances in small amounts exclusively for personal use and when his guilt is deemed as minor and there is no public interest in prosecution. This provides the public prosecutor with an instrument to stop proceedings for consumption-related offences without court approval. All Federal *Laender* have regulated details of the application of § 31a BtMG through recommendations or guidelines. These guidelines considerably diverged from each other in the individual *Laender* a few years ago, but have meanwhile largely converged. Some divergences in the *Laender* regulations do however persist (Schäfer & Paoli 2006).

#### Threshold values for "small amounts" of cannabis and other substances

Most of the *Laender* have introduced comparable threshold values for "small amounts" (upper/lower limit) of cannabis. The limits set by the individual *Laender* are guideline values from which public prosecutors and judges may diverge in individual cases. It is important to note that there exists, also in respect of these regulations, no legal claim whereby in the relevant cases the prosecution of the possession of small quantities of drugs shall be discontinued. If a sentence is not handed down, this does not automatically mean that the crime has no consequences. Public prosecutors have the right to stop proceedings under certain conditions (e.g. community service, fines or counselling in a social institution).

On 3 December 2008, the Federal German Court of Justice (Bundesgerichtshof, BGH) lowered the "non-small" amount for methamphetamine from 30 grams methamphetamine base to 5 grams in a principle-establishing ruling. In view of the scientific findings gathered on the toxicity of methamphetamine over the last ten years, the Senate considered it necessary to change the existing law and lower the threshold value. Contrary to a *Land* Court, the BGH fixed the threshold value not to five gram methamphetamine hydrochloride but to methamphetamine base (for more details see also Patzak 2009). With its ruling of 17 November 2011, the BGH stipulated the non-small amount of racemic methamphetamine as

10g of the effect inducing base. Upwards of this amount, the offender is no longer merely committing a misdemeanour as per Sec. 29 Par. 1 BtMG which provides as possible sanctions monetary fines or imprisonment up to five years, rather he would be facing imprisonment of no less than one or two years.

Already in April 2007, the Federal Court of Justice (BGH) rendered a ruling defining the "non-small amount" of buprenorphine. With that, the Federal High Court of Justice added another decision to the series of landmark rulings on "non-small amounts" in which it dealt for the first time with a substance used in substitution therapy that has also made its appearance on the illicit market causing some concern (Winkler 2007). The "non-small amount" in the wording of the BtMG does not refer to – contrary to the term "small amount" – the weight of the seized substance but to the active ingredient contained in the substance.

Only a few federal states have explicitly defined regulations for discontinuing prosecution in connection with other narcotic drugs. They provide for the possibility to discontinue prosecution in the case of heroin (1 g), cocaine (depending on the federal state: 0.5 - 3 g), amphetamines (0.5 - 3 g) and ecstasy (between 3 and less than 20 tablets) (Patzak & Bohnen 2011).

#### Act on diamorphine-assisted substitution therapy<sup>5</sup>

With the "Act on diamorphine-assisted substitution therapy" which came into effect on 21 July 2009 (German Federal Law Gazette, BGBI., I of 20 July 2009, p. 1801) the legal preconditions were created for a transfer of the diamorphine-assisted therapy from the German national model project into regular care by changing the Narcotics Act (BtMG), the Medical Products Act (AMG) and the Regulation on the Prescription of Narcotic Drugs (BtMVV). The act stipulates primarily that diamorphine (pharmaceutically produced heroin, provided it is approved as a medicinal product for substitution purposes under pharmaceuticals law) becomes eligible to prescription – on very narrow criteria – for the substitution treatment of heavily dependent opioid addicts (c.f. REITOX reports 2007 and 2008).

Government funding for the *Laender* and municipalities which originally participated in the clinical pharmaceuticals study funded by the Ministry for Health ("Heroin Study") expired at the end of February 2008. The Federal Government funded the documentation and monitoring of the diamorphine assisted therapy in Germany until 2011 in order to ensure continuous monitoring was undertaken for the purpose of quality assurance, which included the therapy standards and effects.

# 26<sup>th</sup> Amending regulation on narcotic drugs (26. BtMÄndV)

The *Bundesrat* passed the 26<sup>th</sup> regulation to amend the narcotics law provisions (26. BtMÄndV). With the 26<sup>th</sup> BtMÄndV, Schedules I to III of the Narcotics Act (BtMG) are brought up to the current state of scientific knowledge and several new synthetic, psychoactive

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<sup>&</sup>lt;sup>5</sup> Bundesgesetzblatt (2009). Teil I Nr. 41, Bonn: 20.07.2009.

substances (among other things, synthetic derivatives of amphetamine, piperazine, cocaine and several synthetic cannabinoids) were included, for the purposes of health protection, in the schedules of the BtMG in order to stem their abuse and facilitate prosecutions. Liquid medicines containing tilidine with fast acting release of the active ingredient were also included in Schedule III of the BtMG and thus brought under the provisions of the Narcotics Act. In the Narcotics Prescription Regulation (BtMVV) the maximum prescribable amount for one narcotic substance (methylphenidate) was altered to reflect the requirements of medical therapy; for three narcotic substances (cannabis extract, dexamphetamine and flunitrazepam) maximum prescribable amounts have been stipulated for the first time to ensure the safety and control of the narcotics trade (Bundesrat Printed Paper (Drucksache) 317/12).

Furthermore, the *Bundesrat* demanded the Federal Government examine the extent to which a group assumption of similar psychoactive substances could be legally and practically possible under the BtMG. So far, psychoactive substances have been individually assumed under the law, even if their chemical structures are extremely similar. As a result, derivatives of these substances, which are probably chemically easy to produce, are available on the market, although they have the same or similar effects as the substances listed in Schedules I and II of the BtMG.

In its explanatory memorandum for this recommendation, the *Bundesrat* stated: "In the 22<sup>nd</sup> and 24<sup>th</sup> Amending Regulations on Narcotic Drugs several psychoactive substances were (...) assumed under the BtMG which were manufactured as so-called designer drugs through small chemical modifications to well-known narcotic substances: cannabinoids, amphetamine, cathinone and piperazine derivatives. No end of this series is in sight as it is possible quite simply to chemically alter these substances without any physiological effect being lost. In the time which elapses before the present regulation comes into force, several more substances have been noticed by the monitoring authorities (...)" (Bundesrat Drucksache 317/12 (B)).

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

#### 1.3.1 National action plan

On 25 June 2003, the Federal Cabinet passed the "Action Plan for Fighting Drugs and Addiction" as a continual agenda to reduce addiction and drug problems in Germany. The implementation of this action plan was accompanied from 2005 by the National Board on Drugs and Addiction (DSR).

The DSR is composed of representatives of socially relevant groups and institutions that are involved in the prevention and reduction of addiction-related problems and in the provision of help for addicts. The areas of focus of the DSR until 2008 were evaluated through representative surveys performed by the BZgA (for the findings of this evaluation, see the REITOX reports 2009 and 2010).

The DSR of the 17<sup>th</sup> legislative period began work in its constitutive session on 10 November 2012. The DSR remains an advisory committee of the federal government's Commissioner on Narcotic Drugs and comprises, as in the past, experts and specialists from science, politics, administration, associations and health system facilities. The chairperson of the DSR is the federal government's Commissioner on Narcotic Drugs. The members and rules of procedure of the DSR can be found on the website www.drogenbeauftragte.de.

On 15 February 2012, the "National Strategy on Drug and Addiction Policy", as announced in the last REITOX report, was passed by the Federal Cabinet (Bundeskabinett) (see also REITOX Report 2011). This policy replaces the "Action Plan Drug and Addiction" from 2003 (Die Drogenbeauftragte der Bundesregierung 2012b)<sup>6</sup>. According to the National Strategy, the aim of the drug and addiction policy remains the reduction of consumption of legal and illegal addictive substances as well as the prevention of drug and addiction related problems in society. The National Strategy sees itself as a health political guideline for a modern drug and addiction policy in Germany. It formulates the areas of focus and addiction political challenges with drug and addiction policy taking into account current developments, the existing addiction support system, the surrounding legal framework and proven concepts in addiction prevention. The Strategy also draws on international initiatives and activities on a European level as well as on the level of the WHO and the United Nations. The National Strategy on drug and addiction policy is, in terms of its targets and intentions, a part of the Federal Government's general prevention strategy in the area of drug and addiction policy which is currently being prepared. Both strategies stress the central importance of health promotion and prevention in the overall health politics. In this context, Germany has at its disposal many years' experience with successful measures of universal, selective and indicated prevention and sets its focus on children and adolescents, in order to promote healthy development at an early stage, as well as on adults, to preserve their health.

Within these strategies, quality and efficiency assured measures are designed enduringly to secure or improve health and quality of life and meet current challenges resulting, amongst other things, from the demographic changes in an aging population. In this, prevention is given central importance alongside existing offers of counselling and treatment, cessation assistance, measures to reduce ill effects as well as law enforcement.

The Federal Government continues to follow an integrative approach in its addiction policy. Unlike in other European countries, legal and illegal addictive substances are addressed together. Particular consideration is given, due to their wide popularity, to the legal addictive substances alcohol, tobacco and psychotropic pharmaceuticals when further developing addiction prevention and the assistance system. The National Strategy directs particular attention to new challenges in drug and addiction politics which arise from, amongst other things, demographic change, societal changes, old and new addiction forms and addictive substances and the resulting consumption trends. Now, more than in the past, it is not only

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http://drogenbeauftragte.de/presse/pressemitteilungen/2012-01/pm-nationale-strategie.html (Accessed 24.07.2012)

addiction which is focused on but also risky use behaviour, which is harmful to health and limits personal development even if it does not necessarily lead to an addiction

## Recommendation for the "Promotion of Participation of Addicts in Working Life"

On 7 December 2011, the DSR acknowledged and approved the recommendation for the "Promotion of Participation of Addicts in Working Life". In connection with this document, the DSR recommended, amongst other things, the development of the specialist concept "addiction" by the job centres or employment agencies, the targeted and early stage use of the instrument of addiction counselling, the inclusion of other social services and specialist integration services, specific addiction related training for employees in the employment agencies and the development of further labour market policy instruments, especially for people for whom there is no short or medium term perspective to enter the primary labour market. The DSR still considers there to be a need for action in respect of the promotion of the participation of addicts in working life (Drogen- und Suchtrat 2012).

## 1.3.2 Implementation and evaluation of the National Strategy

#### German addiction research network

In 2001, addiction research was initiated as a focal area of Germany's drug and addiction policy that was continued in the second funding period until 2008. In four research networks, funded by the Federal Ministry for Education and Research (BMBF), scientists from different fields cooperated with facilities of primary care and addiction support within the framework of application-oriented research projects in their region.

Even though government funding for the research networks stopped in 2007, the formed networks continue to carry out common research activities and identify new funding possibilities. A series of results presented in this REITOX Report and pertaining publications stem from the projects carried out within the framework of the research networks or their follow-up initiatives.

### **Addiction and Violence**

The research association, CANSAS, funded by the Federal Ministry of Education and Research (BMBF) is examining the connection between substance abuse and neglect. The association is embedded within the research network, "Abuse, neglect and violence" which emerged from the work of the round table, "Sexual Abuse of Children in Relationships of Power and Dependency in Private and Public Institutions and in the Family Sphere". Children and adolescents of parents who use addictive substances are more often victims of neglect or violence. At the same time, an above average number of such children and adolescents themselves fall into substance abuse related problems. The scientists participating in CANSAS are researching the causes and possible interventions.

## Influence of Drug Use on the Brain

Also with financial support from the BMBF, research is being undertaken in the framework programme on health research, as to how drugs affect the human brain. Scientists at the Technical University of Dresden (TU Dresden) are examining, with the help of imaging techniques, how drugs affect the development of the adolescent brain. The same methods are being used by the Central Institute of Mental Health in Mannheim (CIMH) in the scope of the Network of European Funding for Neuroscience Research (NEURON). The Mannheim researchers are focusing on finding the mechanisms through which alcoholism influences the nervous system in order to judge how medication based therapy approaches work.

# Further model programmes and research projects funded by the Federal Ministry of Health

An overview of the model programs and research projects funded by the federal government are shown below in tabular form in Table 1.1. The table is ordered according to the arrangement of the REITOX report. The respective proposal is examined in greater detail where necessary in the respective individual chapters (provided this was not already undertaken in the last REITOX report).

Table 1.1 Model programmes and research projects funded by the federal government

Funded Project	Project Period	Notes
Prevention		
Focus: Innovative prevention	03/11 – 08/12	7 projects in first phase;
concepts in pregnancy, evaluation	07/12 – 06/14	3 projects in second phase
Trampolin – children from families affected by addiction	10/08 – 09/12	Modular prevention concept
Prev@work	03/11 – 02/12	Primary addiction prevention in training, implementation of the concept in 3 other Laender
Drug use in the population and in spe	ecific subgroups	
Schulbus	02/12-12/13	Development, testing and preparation of tablet PC based school and teacher surveys on approaches to addictive substances
Spice und synthetische Cannabinoide	01/11 – 12/12	Co-Financing EU Project
Drug-related treatment		
Chancen nahtlos nutzen – Self-help for addicts as an active partner	07/11 – 09/12	Promotion of a better cooperation between professional addiction help and volunteers
Web based parent advice	05/12 – 10/13	Development of an internet based counselling programme for parents of children and adolescents at risk of addiction
Preventative and promotional factors for the implementation of addiction preventing approaches in small and	03/12 – 02/13	Development of concepts for counselling and intervention of affected persons in the area of KMU

Funded Project medium sized enterprises (SME)	Project Period	Notes
Alcohol and drugs as risk factors for a successful completion of education	04/12 – 03/15	Representative survey
Quality assurance of the diamorphine treatment	03/08 – 06/12	Securing results of the "Heroin Model Project"
Trends in court ordering of drug therapy as per Sec. 35 BtMG	11/11 – 12/12	Effectiveness and trends of court ordered therapy
Other projects funded by the BMG wi	nich are related to	drugs
Self-control training (SKOLL) – Early stage intervention for at-risk users of psychotropic substances	10/08 – 02/12	Testing a substance, age and gender unspecific approach across Germany at 16 locations
Further training of house doctors in individual practices	10/10 – 09/12	Early identification of elderly addicts
Focus: Addiction in old age	10/10 – 12/12	8 model projects for the improved cooperation between addiction assistance and elderly care
Focus: Migration and addiction	04/09 – 08/12	6 projects for the improved access of migrants to the addiction help system

# Activities undertaken by the Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, BZgA)

The addiction prevention work of the BZgA is aimed at motivating potential and actual consumers of addiction-inducing substances to reflect critically on their consumption behaviour and to achieve low risk consumption patterns or to cease consumption. The prevention activities of the BZgA are primarily directed towards the legal drugs alcohol and nicotine but also illegal drugs. Further prevention areas are "combating pathological gambling" and "pathological internet and computer game use" as well as campaigns to promote life competence and early addiction prevention9. Two projects are outlined below, by way of example, to provide a small extract of the addiction-specific prevention activities of the BZgA:

• Alcohol prevention campaign for adolescents, "Alcohol? Know your limit." ("Alcohol? Kenn dein Limit."). The youth campaign "Alcohol? Know your Limit." was launched in 2009 by the BZgA and supported by the Association of Private Health Insurers (Verband der Privaten Krankenversicherung e.V., PKV) and is directed at adolescents and young adults between the ages of 16 and 20. The aim of the campaign is to motivate adolescents to deal with alcohol responsibly. A mix of different educational materials is designed to encourage them to reflect critically on

www.check-dein-spiel.de

<sup>8</sup> www.ins-netz-gehen.de

<sup>9</sup> www.kinderstarkmachen.de

their own alcohol consumption. Girls and young women drink far less alcohol than males of the same age. The further development of the campaign in the autumn of 2012 saw the campaign increasingly utilise a gender-specific style across all media. In this way, the differing consumption motives and the differing consumption behaviour of the sexes is more strongly taken into account. The central information medium of the multi-level prevention strategy of the campaign is the internet portal www.kenn-dein-limit.info.

 PrevNet – the dedicated internet portal for addiction prevention professionals: proven cooperation between the Federal and Land Governments

The network, PrevNet<sup>10</sup> is a cooperation project between the BZgA and the *Land* coordinators for addiction prevention from 14 German *Laender*. PrevNet is the knowledge and information database for specialists working in addiction prevention in Germany. The portal bundles all available information on facilities, persons and entities involved, events, projects, studies and materials in the area of addiction prevention. PrevNet is a dynamic portal which grows with every new entry from its members. Currently, over 900 facilities and around 1,400 members are registered. The portal also helps a greater degree of networking to be undertaken amongst addiction prevention professionals. Through online forums and the creation of virtual offices, the direct exchange of specialist information and cooperation amongst those involved is promoted.

The coordinated internet portal for addiction prophylaxis has, since its launch in 2004, utilised the resources of the existing regional networks and links educational measures for addiction prevention of the Federal and *Land* governments with one another. A relaunch was undertaken in July 2012. Since then, PrevNet has been available to experts with a simplified navigation structure, new design and extended interaction and communication possibilities.

## Projects and research projects funded by the European Commission

German experts participate in a series of international projects and research projects in the area of drugs that are (co-)funded by the European Commission within the framework of various funding programmes. The REITOX Report 2011 contained an overview of projects related to illegal drugs in which German partners were involved or active as coordinators in 2010/2011. Many of these projects were continued into the period related to this report (see REITOX Report 2011, information on project periods).

The basis for this overview was a brochure of the European Commission which listed a summary of all projects which had a connection to drugs from the three grant programmes of the European Commission<sup>11</sup> for which an updated version for 2012 was not available. The brochure, which also contains short descriptions of the projects (as well as descriptions of

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www.prevnet.de

Drug Prevention and Information Programme (DPIP) (DG Just); Public Health Programme (PHP) (DG SANCO); Seventh Framework Programme (FP7) (DG Research).

older and completed projects), can, for example, be downloaded from the EMCDDA website<sup>12</sup>. Current new involvements of German partners can be found, for example, in the project ALICE-RAP<sup>13</sup> (7<sup>th</sup> Research Framework Program, DG Research and Innovation).

## Activities undertaken by the Laender

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 exist considerable regional differences in how substance-related disorders are dealt with. As a consequence, different guidelines and rules as well as different drug and addiction programmes exist in the individual *Laender*. However, the *Laender* 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, however, adopted at a technical level by professional and scientific associations as well as by the funding agencies. Compliance with and application of these guidelines are, however, not mandatory (see chapter 5.5). Therefore, a multitude of different approaches and methods or instruments are currently used in the individual *Laender* and municipalities. Furthermore, large differences with regard to the availability of resources are to be found between the *Laender*.

The *Laender* have a very well developed network at their disposal to deal with people suffering from addiction problems. It is based on the cornerstones of prevention, treatment and aftercare. The countrywide offers made range from prevention, outpatient counselling, qualified detoxification treatments, adaptation facilities, complementary measures (low-threshold facilities, day-care facilities, job programmes and employment projects, assisted living, youth housing, socio-therapeutic transitional residential facilities, hostels for the homeless), other specific offers (nursing homes and treatment ordered by a judge) to self-help initiatives. The work of the large majority of the care facilities is governed by an integrative approach (legal and illegal substances, pathological gambling, addictive problems linked to computer or internet use, eating disorders, etc.), which is, if necessary, complemented by specific measures for certain target groups. As for the preventive activities undertaken for at-risk groups, both local approaches and countrywide available projects like early intervention in drug users who have come to the attention of the police for the first time (FreD) or the implementation of the intervention programme "Realize it" in the *Laender* have proven successful.

The *Laender* too, have set a focus on children and teenagers as well as on legal 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 optimisation of the aid system through improved cooperation, cost control and work sharing. Some of the activities deployed by the *Laender* are also presented under the respective topics of the chapters.

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www.emcdda.europa.eu/themes/research

<sup>13</sup> www.alicerap.eu

There are numerous projects carried out in the Federal *Laender* addressing a series of target groups with different settings and focuses. They range from specific services offered, like for example to migrants or socially disadvantaged families over school projects or initiatives undertaken by sport clubs to differentiated interventions, for example in drug users who have come to the attention of the police for the first time.

**Note:** In the reporting year 2011/2012, the drug and addiction commissioners of the federal states reported numerous activities and projects that focused on inpatient treatment which have been addressed in this year's special chapter. The following list therefore does not take these measures into account.

The reported projects and measures only represent a selection of the numerous activities undertaken with the support of the *Laender* and are based on an active reporting of the respective *Laender* to the DBDD.

## Bavaria

The Munich municipal drug counselling centre started a project in 2011 to offer long-term drug addicts the opportunity to find a job again on the secondary labour market. In contrast to conventional reintegration within a company, the clients can also take on a job for just a few hours, dependent on their capacity to work. The providers – Condrobs, Laufer Mühle, mudra or Weißer Rabe – also offer a series of further projects as well as further education and training courses. Since March 2011, Condrobs has offered substitution based rehabilitation in the "Augsburg Outpatient Centre". The outpatient centre has initially been recognised for two years as a facility which provides outpatient rehabilitation treatment involving the transitional use of a substitution substance. The DRV Schwaben (German statutory pension insurance scheme, Swabia) has approved this provision and an evaluation is being undertaken in cooperation with other statutory pension insurance schemes.

## Saxony

In 2011, 27,709 persons were advised and treated in the Saxon addiction counselling and therapy facilities. The share of clients whose problems lay in the area of illegal drugs increased as it had done in the previous years and amounted to 21%. The largest proportion of illegal substances used was made up of stimulants (41%), cannabis (26%) and opioids (26%). In this, a clear difference could be ascertained to the nationwide distribution figures. Cannabis and opioids in Saxony are more than 10 to 20% under the national average; stimulants however were more than 30% above. Over 90% of clients with stimulant use come to the counselling centres due to problems with crystal (methamphetamine). That percentage of clients increased by nearly 30% compared to 2010. (Report on outpatient addict help in Saxony, 2011, SLS 2012). The increase in crystal related problems in Saxony can also be seen, according to the State Office of Criminal Investigation, in the statistics of reported crimes for Saxony. In the current examination of the problem, a symposium took place on the matter in July 2012. In addition, the brochure "Crystal – Baseline Two" ("Crystal – Bestandsaufnahme Zwei") was reissued.

In Saxon correctional facilities, external addiction counselling is provided by employees of addiction counselling and treatment facilities. This offer is currently provided by professionals in what amounts to almost 13 full-time positions. In 2011, 1,946 men and 269 women received counselling, 65% of them due to an illegal drugs problem (SLS 2012).

## Baden-Württemberg

The Ministry for Employment and Social Affairs, the Family, Women's Issues and Senior Citizens in Baden-Württemberg developed the concept "Good and secure work" ("Gute und sichere Arbeit"). This is aimed at, amongst others, the target group of long term unemployed with multiple impediments to placement in work and is intended to improve their work capabilities and secure lasting integration through intensive assistance. A model for a cross-system approach is being tested with the state program "Social Labour Market / Passive Active Transfer": firstly, the insufficient promotion of contract-based employment on the basis of the SGB II is afforded further necessary elements (supervision, incentive for employers) and financed via the passive-active exchange. Secondly, within the scope of the model project it could be revealed that the limitations of capability to work suffered by some of the project participants are not temporary and thus that the SGB II system requires further development — equivalent to the model for integration undertakings for persons who are disabled. This element can also be applied under local responsibility directly to users of illegal addictive substances.

The Baden-Württemberg Ministry of Justice is currently preparing the ground for providing substitution treatments using diamorphine for the most seriously drug addicted prisoners. For this purpose, the relevant administrative regulation on substitution in correctional facilities ("Die Justiz" 2011, 210) has been amended. That regulation stipulates that substitution with diamorphine is undertaken in accordance with the relevant administrative regulation of the Ministry of Social Affairs of 29 June 2010 (Joint Official Journal, GABI., 306). Diamorphine substitution is to be made possible in the Baden Württemberg justice system centrally in the Stuttgart prison (JVA Stuttgart) and at the weekend in the Hohenasperg prison hospital. Prisoners who are to be substituted with diamorphine will then be transferred to the Stuttgart Prison. In total, only a few cases are anticipated. At the present time, efforts are being made to implement the relevant structural and other standards required for such a substitution treatment to be provided in Stuttgart Prison.

The project SURE (Substitutionsgestützte Rehabilitation, substitution assisted rehabilitation) in the Specialist Clinic for Drug Assistance in Tübingen has been running since January 2011. The project has initially been planned to run for three years and will be implemented by the DRV Baden-Württemburg (German statutory pension insurance scheme, Baden-Württemberg). The target group is opiate dependent persons who are basically capable of rehabilitation but cannot get involved in an abstinence oriented therapy without the substitute. The readiness to reduce dosing and abstinence is the requirement for acceptance. The reduction in dosing is undertaken under doctor supervision and can be temporarily suspended or terminated for medical reasons. The project is supported by a steering committee made up of the three participating organisations; the project status is

recorded and evaluated several times a year. The target group was described according to a model set of criteria. These were checked before being adopted; a joint examination of facilities and providers is possible in individual cases of deviation from these criteria.

## Mecklenburg-Western Pomerania

The DRV-Nord (German statutory pension insurance scheme, North), has been funding projects, in 2011 and 2012, of the drug counselling centres on the subject of "Addiction and Work". This has led to drug counselling centres carrying out various measures together with the ARGEn and/or the job centres.

As a result of the ruling of the interface committee of the Drug and Addiction Board on the "Promotion of Participation of Addicts in Working Life", a working group has been formed at state level under the leadership of the Mecklenburg-Western Pomerania Ministry for Labour, Equality and Social Affairs. This working group comprises members from the areas of addiction assistance and labour administration and it works on the implementation of the recommendations mentioned in the ruling on a state level. The Mecklenburg-Western Pomerania State Office for Addiction Issues (Landesstelle für Suchtfragen Mecklenburg-Vorpommern e.V.) has been chosen to assume control by the Mecklenburg-Western Pomerania Ministry for Labour, Equality and Social Issues.

## Saxony Anhalt

Since 2011, the research project "Interdisciplinary work related case management in addiction therapy aftercare as key to reintegration into employment and relapse prevention" ("Schnittstellenübergreifende, arbeitsbezogene Fall-Begleitung in der suchttherapeutischen Nachsorge als Schlüssel zu Erwerbsintegration und Rückfallprophylaxe", SaBiNE) has operated as a joint research project of the specialist addiction clinic, Diakonie-Krankenhaus Harz, AHG Klinik Römhild, Medinet AG Alte Ölmühle Magdeburg, SOTERIA Klinik Leipzig and the Martin-Luther University Halle Wittenberg which is funded by the DRV-Mitteldeutschland (German statutory pension insurance scheme, Central Germany) and the Federal Employment Agency (Bundesagentur für Arbeit). The focus of this project is the research question as to what extent the reintegration into the workforce can be improved through a case management approach.

The regional office of the Federal Employment Agency in Saxony Anhalt, Thuringia, published the "Action guidelines for the implementation of cooperation agreements (between the DRV Mitteldeutschland and the BA RD SAT) – treatment of addicts requiring support", a helping hand for all job centres for recognising and properly intervening in the case of unemployed people with addiction problems in the sphere of the "SGB II" (Social Security Code II).

#### Hamburg

The 2011 report, published in late summer 2012, will deal with the topic of substitution, focusing, in particular, on parents in substitution treatment.

## **Conferences and working groups**

As in previous years, a host of conferences and working sessions were held also in the reporting year. From the large number of administrative, organisational, specialist and scientific events, only a very small and arbitrary selection will be presented serving as examples for the wide range of events on offer.

- 4<sup>th</sup> German Addiction Congress in Frankfurt (4. Deutscher Suchtkongress) The 4<sup>th</sup> German Addiction Congress 2011 in Frankfurt was attended by over 600 participants. This was the fourth time that experts from addiction therapy, prevention and research came together to discuss models for "best practice" and innovations in the area of assistance for addicts. The German Addiction Congress was able to successfully realise its aim of presenting a comprehensive overview of new findings from basic research, applied science research and health services research.
- 20<sup>th</sup> Congress of the German Society for Addiction Medicine (20. Kongress der Deutschen Gesellschaft für Suchtmedizin)
   The 20<sup>th</sup> Congress of the German Society for Addiction Medicine (DGS) took place from 4-6 November 2011 in Berlin under the slogan, "20 years of the German Society for Addiction Medicine has it made the grade?". The focus of the congress was, in addition to the numerous events covering wide ranging topics, a critical look at the role of addiction medicine in the past, present and future as well as the challenges which lie ahead.
- 35<sup>th</sup> Federal Drug Congress of the Professional Association for Drugs and other Intoxicants (35. Bundes Drogen Kongress des Fachverbands für Drogen und Rauschmittel).
  - The 35<sup>th</sup> Federal Drug Congress "fdr update Theory and Practice in Addiction Help" took place in Bremen on 14 and 15 May 2012. The Professional Association for Drugs and other Intoxicants (fdr) has hosted the Federal Drug Congress as a symposium on addiction help with a focus on illegal drugs. It is a specialist conference which deals with creating a forum for practitioners to exchange information and experiences, present projects and improve the practice overall. The current congress topics set immediately important discussion processes in motion. The documentation of the congress can be found at www.fdr-online.info.
- Symposium of the German Centre for Addiction Issues (Fachkonferenz der Deutschen Hauptstelle für Suchtfragen (DHS))
   The DHS Symposium on the topic of "Addiction help and additional policy international - what do we gain from Europe and Europe from us?" took place from 14-16 November 2011, attended by numerous national and international contributors and partners.
- Self-Help Conference of the German Centre for Addiction Issues (Selbsthilfekonferenz der Deutschen Hauptstelle für Suchtfragen (DHS))
   The DHS Self-Help Conference took place from 27-29 April 2012 in Erkner near

Berlin on the topic "Medication: don't just swallow anything anymore! Self-help and the secret people's drug".

 Interdisciplinary Congress for Addiction Medicine (Interdisziplinären Kongress für Suchtmedizin)

The 13<sup>th</sup> Interdisciplinary Congress for Addiction Medicine was held in Munich in July 2012, an opportunity for specialists from addiction medicine and addiction therapy to meet. The congress offers the possibility of exchanging the latest scientific findings and obtaining fundamental knowledge on addiction medicine.

## **International Cooperation**

Germany actively cooperates with international institutions in the area of drugs and addiction. Its most important partners in the EU are the European Commission, the Horizontal Drugs Group (HDG) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Germany is also an active partner, in addition to numerous bilateral contacts on an international basis, in the negotiations of the Commission on Narcotic Drugs of the United Nations (CND) as well as supporting, as one of the most important donor countries, the work of the United Nations Office on Drugs and Crime (UNODC). Furthermore, Mr. Werner Sipp, former head of the department on in the Federal Ministry of Health on "Narcotics law, narcotics trade, international addiction questions" an internationally recognised, independent German expert in the addictive substance control office of the United Nations (International narcotics control board INCB). When representing Germany in the European and other international bodies dealing with drug policy the Federal Government's Commissioner on Narcotic Drugs has an important coordinating function. She shares her function with the special agencies of various ministries (Ministry of the Interior, Ministry for Health, Ministry of Foreign Affairs) or experts from other areas when representing Germany on the international stage. German representatives also actively participate in the Civil Society Forum on Drugs of the European Commission.

During the reporting period and beyond, Germany engaged in various bilateral cooperation projects with regard to drugs and addiction with Turkey (IPA III Project of the EMCDDA), Central Asia (Central Asian Drug Action Programme) and participated in various international projects in which German experts cooperated with colleagues from countries within and outside of the EU.

# 1.3.3 Other drug policy developments

There are no new developments to report in this area.

## 1.3.4 Coordination arrangements

Coordination between the Federal Government and the *Laender* takes place in the conferences of government departments and their working groups. The national Board on Drugs and Addiction (Drogen- und Suchtrat, DSR) also plays an important role in this field since they facilitate both the vertical and horizontal exchange between the different

institutions and the federal and *Land* ministries. The working group 'Interface problems in the care of addicts' of the DSR also deals with coordination tasks. It mainly strives to improve the transfer of addicted people from treatment to work, to facilitate the transfer at the interface between prison and reintegration, as well as to improve early-intervention in counselling and treatment of people suffering from addiction and the cooperation with youth aid and the help system for the homeless. In addition, cooperation between Federal and *Laender* governments takes place, for example in the Working Group on Addiction Aid (AG Suchthilfe) of the Highest *Land* Health Authority (AOLG) and the Coordinating Group on Addiction Prevention (Koordinierungskreis Suchtprävention) of the BZgA as well as on a project basis.

On a national level, the Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, 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 Drugs and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte, BfArM) is responsible for the licensing of pharmaceuticals. Affiliated with the BfArM is the Federal Opium Agency which, among others, grants the licences to trade in narcotic drugs and precursors and supervises the trade in narcotic drugs and precursors among licence holders. It also keeps the national substitution register. The central institution of the Federal Government in the area of disease control and prevention is the Robert-Koch-Institute (RKI). The RKI is the central facility of the Federal Government in the area of application and response oriented biomedical research, whose core responsibilities are the identification, prevention and combating of diseases, in particular infectious diseases.

## 1.4 Economic analysis

#### 1.4.1 Overview

A detailed overview of the data sources available in Germany giving an insight into public expenditures as well as the presentation of the problems linked to the collection and analysis of these data were the subject of a Selected Issue of the REITOX Report 2007 which is available in German and English on the DBDD website. In spring 2008, the EMCDDA additionally published a summary of the information provided by the EMCDDA member states on the subject matter which is also available from the DBDD.

To understand the structure of funding, one needs to have a grasp of the Federal structure of Germany and the principle of subsidiarity, which has led to a complex system of responsibilities at the Federal, *Laender* and local levels along with social insurance schemes with respect to the funding and execution of tasks. In particular, information on financial resources which the *Laender* 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. Another problem posed by the compilation of public expenditures for drug-related issues is the fact that the German care system no longer differentiates between

individual substances or legal and illegal substances respectively, rendering the task of ascertaining the share of illicit drugs in the costs expended almost impossible. It is furthermore particularly difficult to identify *non-labelled* costs specifically relating to addiction in the cross-sectional areas of police and judiciary, detention and social welfare system which would however account for a considerable portion in a comprehensive estimation of the overall costs.

It is apparent, then, that the identification of costs incurred alone (prior to the calculation of specific shares for legal or illegal substances) is associated with considerable effort. A research project financed by the BMG and implemented by the DBDD tackled this subject in 2008 (see following section).

## 1.4.2 Public expenditures and budgets

Funded by the Federal Ministry for Health, the DBDD carried out a study in 2008 in cooperation with the chair of medical management of Essen University to venture for the first time an overall estimate of the direct (labelled and non-labelled) government expenditure and funds provided by the statutory social insurance schemes in the area of illicit drugs (Mostardt et al. 2010).

Various approaches were combined for data collection: At the level of the central, regional and local authorities, the budget documents available to the public were analysed and ministries and subordinate authorities as well as other key persons were interviewed. Where expenditures were assumed but not stated separately in the budgets or could not be specified by those questioned, alternative calculation or estimate methods were developed with the help of data from published studies and statistics. The data on the expenses incurred by the social insurance institutions were collected by means of paper-based interviews. In addition to the German Pension Fund (Rentenversicherung Bund), 40 or the largest state health insurance companies were contacted by means of standardised questionnaires. The data from the participating insurers was then extrapolated for the entirety of the state health insurance system.

From the varying expenditures identified and calculated, one arrives at a figure of between 5.2 and 6.1 billion EUR spent in the reference year 2006 for the area of illicit drugs. This overall result should be viewed, however, due to missing data and methodological limitations, as a conservative estimate.

The expenditures are broken down in more detail in standard table STPE for the year 2008 as well as in the publication of the findings (Mostardt et al. 2010).

In view of the great expense associated with a comprehensive collection of data and estimation of public expenditures, the findings of the 2008 study have not been followed up. In the following section, for the purposes of continuity, at least a few expenditure areas, for which information is publicly available, shall be named and specified anew.

## **Federal Budget**

Expenditure connected to addiction problems can be presumed to be in the budgets of numerous federal ministries. However, only in the budget for the Federal Ministry of Health is an entry item specifically allocated to the area of addiction and addictive substance abuse and this therefore constitutes the only budget information on a federal level which is directly available on a budget level (without requiring further analysis or estimates). According to the federal budget, the expenditure of the Federal Ministry of Health for "measures in the area of drug and addictive substance abuse" in 2010 amounted to €14.4m. However, this sum also contains spending in connection to legal addictive substances or non-substance related addiction. The share which is exclusively available in connection with illegal drugs cannot be specified.

## Laender Budgets

The budgets of the *Laender* also each only contain one expenditure item which explicitly mentions the planned expenditure in the area of "addiction". This item is mostly located in the ministries for health and/or social affairs and contains both expenditures in connection with illegal and legal addictive substances, non-substance-related addiction as well as (often cross-substance) addiction prevention. In 2010, the budget plans of the *Laender* contained in total around €91m for addiction prevention, addict assistance and similar measures. The share which is explicitly associated with illegal drugs cannot be specified.

A further important entry in the budgets of the *Laender* in connection with the consumption of addictive substances is the expenditure for hospital order treatment. However, only the total expenditure is estimated in the budget plans, a large proportion of which contains expenditure for placement in psychiatric hospitals on the basis of diminished responsibility or insanity (as per Sec. 63 German Criminal Code, StGB). The proportion which is related to the placement in a rehabilitation facility (as per Sec. 64 StGB) and moreover which is explicitly related to the consumption of illegal drugs, could not be determined.

## **Statutory Pension Insurance Scheme**

Outpatient and inpatient rehabilitation with the aim of "restoring the capacity to work" is financed by payments from the pension insurance scheme. In 2010 – the year for which the most up-to-date statistics are available – the expenditure of the statutory pension insurance schemes (DRV 2011c) for (outpatient and inpatient) medical rehabilitation and complementary treatments due to addictions (incl. alcohol and medication) amounted to €559.5m. The proportion of the total concluded rehabilitation therapies which relates to drug addicts and multiple addiction patients in 2010 was 29.7%. If one therefore estimates the proportion of the budget for this group accordingly, this amounts to a sum of €166.0m.

## Police, Courts, Penal System

It is assumed that a considerable portion of state expenditure in connection with illegal drugs is incurred in the scope of the responsibilities of the police, the courts and the penal system.

Estimates can be made for these three areas on the basis of publicly available data. The calculation steps are shown in detail in Table 1.2 in order to make transparent and comprehensible how the results were arrived at but also to reveal the methodological limitations of the approach. It should be noted that the calculation formula, in the case of the estimates for the areas of the courts and the penal system in particular, only includes the number of persons sentenced and imprisoned under the German Narcotics Act (BtMG) − in this case, therefore, in contrast to the expenditure estimates for the area of the police, other offences committed by drug users are not considered. Overall, these calculations lead to a figure for expenditure on law enforcement and thus also crime prevention measures of around €3.3bn.

In terms of funding bodies, further public expenditure, for which a figure cannot be determined due to a lack of data, is incurred in particular by local authorities as well as the state health insurance companies.

A detailed breakdown of all expenditure mentioned can be found in standard table STPE.

#### 1.4.3 Social Costs

So far, there have been no studies carried out on the social costs of the use of illegal substances in Germany.

PART A: New developments and trends

Table 1.2 Estimated costs in connection with illegal drugs, 2010 (listed according to responsibilities)

	Costs/Code- Description	Quantity/Amount/ Share	Comment/Source
P1	Total costs of the state for the area of responsibility of the police (COFOG 03.1)	18,600 m €	Source: Eurostat http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset= gov_a_exp⟨=de
P2	Total crimes – solved cases (excluding offences committed in road traffic and constitutional offences)	3,322,320 cases	Source: Bundeskriminalamt, Polizeiliche Kriminalstatistik (PKS) 2010
P3	Drugs crime <sup>14</sup> – solved cases	220,695 cases	Source: Bundeskriminalamt, PKS 2010, Tabelle 12
P4	Proportion of drug offences of all crimes	(P3) / (P2) = 0.066 (6.6 %)	
P5	The proportion of crimes by hard drug users (HDUs) <sup>15</sup> as part of solved crimes overall	7.3 % (241,579 cases)	Source: Bundeskriminalamt, PKS 2010, Tabelle 12
P6	Proportion of crimes of HDUs of solved total crimes minus the HDU from 03 (to avoid double counting)	5.0 % (165,932 cases)	
Police by	Estimate of the costs in the area of police in connection with drug offences	(P1) x (P4) = 1,227,600,000 €	Under the assumption that the costs of the police duties for all offences are the same Under the assumption that the costs of the police duties for all offences are the same
P8	Estimate of costs in the area of responsibility of the police in connection with crimes committed by users of hard drugs	(P1) x (P6) = 930,000,000 €	Under the assumption that the costs of the police duties for all offences are the same
P9	Estimate of the costs in the area of responsibility of the police in connection with narcotics offences in the narrow sense of the word (incl. Direct crimes for the procurement of narcotics	(P7) + (P8) = 2,157,600,000 €	Under the assumption that the costs of the police duties for all offences are the same

Definition: in Germany the police summarise under the term "drug crime" all offences under the German Narcotics Act (BtMG) as well as robbery to acquire narcotics, theft of narcotics from pharmacies, doctors practices, hospitals, from manufacturers and wholesalers, theft of prescription forms and their forgery to obtain narcotics.

The definition Hard Drug User (HDU) covers all users who use the substances and preparations listed in the schedules I-III of the Federal Narcotics Act, including medicinal products covered by the Narcotics Act with the exception of exclusive use of cannabis products (hashish, marijuana, hashish oil), psilocybin (mushrooms) and of "exempt preparations". It is irrelevant, how the substances or the preparations can be administered to the body. If persons known to be users of hard drugs use so-called alternative substances due to a lack of narcotics – "exempt preparations" or other medication or substance which is not governed by the BtMG – this should also be seen as the use of hard drugs. The most important hard drugs are heroin, cocaine, amphetamine/metamphetamine and their derivatives in powder or liquid form or in tablets or capsule form (including ecstacy) and LSD. The characteristic "user of hard drugs" is designed to be an indication of an indirect narcotics related criminality.

Table 1.2 (continued) Estimated costs in connection with illegal drugs, 2010 (listed according to responsibilities)

		-	·	
	G1	Total state costs for the area of "Courts" (COFOG 03.3)	10,470 m €	Source: Eurostat http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset= gov_a_exp⟨=de
Courts	G2	Sentenced person <sup>16</sup> total (crimes without traffic related offences and without constitutional offences in order to create a comparison with the data shown above	815,337	Source: Federal Statistics Office (2011). Judicature. Strafverfolgung 2010. Series 10, Part 3 (Table 2.1)
ၓ	G3	Person sentenced under the BtMG	62,404	
	G4	Proportion of sentenced persons due to offences under BtMG	(G3) / (G2) = 0.077 (7.7 %)	
	G5	Estimate of the costs in the area of responsibility, courts, in connection with offences under the BtMG	(G1) x (G4) = <b>806,190,000</b> €	Under the assumption that the costs of the police duties for all offences are the same
	J1	Total state costs for the area of responsibility of court enforcement (COFOG 03.4)	2,550 m €	Source: Eurostat http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset= gov_a_exp⟨=de
Penal System	J2	Inmates and suspended sentence individuals at 31 March 2011 in total (open rehabilitation, including juvenile punishment)	60,067	Source: Federal Statistics Office (2011). Administration of justice. Penal system – demographic and criminal characteristics of inmates as at 31 March, Series 10, Part 4.1 (Table 5)
ਰ	J3	Inmates on 31 March 2011 due to offence against BtMG	8,841	
Pen	J4	Proportion of all inmates represented by those sentenced under the BtMG	(J3) / (J2) = 0.147 (14.7 %)	
	J5	Estimate of costs in the area of responsibility, courts in connection with offences under BtMG	(J1) x (J4) = <b>374</b> ,8 <b>50</b> , <b>000</b> €	Under the assumption that (1) the costs of prison for all offences are the same and (2) the number of inmates with a connection to drugs as a proportion of all inmates has stayed constant through the years

Sentenced persons are defendants against whom sentences have been passed down or for whom criminal proceedings are concluded in a legally binding manner after commencement of main proceedings through a judgement or a dismissal ruling. Its number consists of the sentenced persons and those against whom other rulings were made (incl. acquittal). When sentencing a defendant who has broken multiple criminal laws in one offence or several, the only fact which is statistically recorded is that related to the law with the harshest punishment. If one person is sentenced across several proceedings for several crimes all committed by him, the defendant is thus paid extra, for each proceedings.

# 2. Drug use in the population and specific targeted groups

#### 2.1 Overview

#### Introduction

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 lifetime is therefore only a rough indicator of the extent of drug use at a given point of time. The figures also 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. More significant is the information provided by surveys on drug use 30 days prior to the survey. The clear difference that 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.

#### National data sources and international studies

- In Germany, epidemiological sources for drug use data are mainly available through regular national representative surveys and prevalence studies which are complemented by regional quantitative and qualitative studies. Furthermore, international studies in which individual *Laender* and regions are taking part will also be mentioned in this chapter. Due to their international comparability, these surveys are also grouped under "national data" although studies like ESPAD (see below) or HBSC (see below) have so far not been carried out by all *Laender*. The short descriptions also contain information on the participating countries.
- The Drug Affinity Study (DAS) carried out by the Federal Centre for Health Education (BZgA) investigates the use, the motives for use 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 every 3 to 4 years since 1973. Initially designed as a personal interview, it has been carried out as a telephone interview (CATI) with a sample of 3,000 interviewees. The last DAS survey was carried out in 2011 with a sample of 5,000 interviewees. The findings were published by the BZgA in 2012 and are presented in this REITOX Report under sections 1.2 and 1.3<sup>17</sup>.
- In addition to the DAS, the BZgA published the findings of representative surveys conducted on cannabis use among adolescents of 12-19 years old and 12-25 years old

The results of the DAS 2011 are based on a multi-level random sample on the basis of the ADM telephone sampling system (computer generated random telephone numbers). It is a random selection of 12-25 year olds in households, the exhaustion quota was 60.9%, the sample size was N=5,001 interviewees.

- respectively in 2007 and 2011 (BZgA 2007, 2011), and these findings were presented in the REITOX Reports of 2007 and 2011.
- The Epidemiological Survey on Substance Abuse (ESA) (formerly the Federal Study on the abuse of psychoactive substances among adults in Germany) is a paper-based national 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 64 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 of the Laender have provided additional funding for a regional expansion of the sample to create a statistical basis for regional evaluations. The design of the study, methods used (Kraus & Pabst 2010) and results (Kraus et al. 2010; Pabst et al. 2010) of the ESA 2009 were presented in the REITOX Report 2010.
- The "European School Survey Project on Alcohol and other Drugs" (ESPAD; European School Survey Project on Alcohol and other Drugs<sup>18</sup>) has been carried out since 1995 in numerous European countries. In 2011, several *Laender* participated for the third time in the survey after 2003 and 2007: Bavaria, Berlin, Brandenburg, Mecklenburg-Western Pomerania and Thuringia. In 2007, Hesse and Saarland also took part. Initiated by the Pompidou-Group at the Council of Europe and coordinated by CAN<sup>19</sup> (Stockholm) 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 year groups 9 and 10. In 2011, the adjusted sample size comprised 6,192 pupils from 352 classes (Kraus et al. 2012). In part, data for individual *Laender* are also available for the ESPAD.
- The WHO-funded study on "Health Behaviour in School-aged Children" (HBSC), is carried out every four years and has today grown to include 41 countries. The study investigates the health behaviour of school children from 9 to 17 years old. Trend data from the most recent HBSC survey in Germany was published in 2012. Individual findings of past surveys have already been published in previous REITOX Reports (Nickel et al. 2008; Settertobulte & Richter 2007). The trends reported in 2012 (see chapter 2.3.1) are based on data from the surveys in 2002 (n=5,650), 2006 (n=7,274) and 2010 (n=5,005). The data from 2012 is based on data from four *Laender* (Berlin, Hesse, North-Rhine Westphalia, Saxony); in 2006 the German data set comprised (Berlin, Hamburg, Hesse, North-Rhine Westphalia and Saxony). The 2010 data is based on information from 15 *Laender* (on the study design and methods used in the scope of the HBSC c.f. Ottova et al. 2012 Ottova et al. 2012).
- Early in 2007, the first results of the Health Interview and Examination Survey for Children and Adolescents (Kinder- und Jugendgesundheitssurvey, KiGGS) were presented (Lampert & Thamm 2007). The findings are based on countrywide

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www.espad.org

Swedish Council for Information on Alcohol and Other Drugs.

representative data on the state of children's and adolescents' health 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 use, the data from the interviews conducted among the 11 to 17 year old boys and girls and their parents were used. The most important results of the evaluation have already been presented in the Reitox Reports 2007 and 2008. Schleswig-Holstein made its own contribution to the national health survey by publishing a report on the health state of children and adolescents in Schleswig-Holstein (RKI 2007a; Schütze et al. 2007) which was presented in the REITOX Report 2008.

## Data from the Laender and the regional monitoring systems

Apart from these surveys, most of which are conducted on a regular basis, various studies commissioned by some individual *Laender* are carried out irregularly at a regional and local level focusing among others on the extent and effects of the use of a specific substance, use patterns or characteristics of a specific group of users. These studies are based in part on individual evaluations carried out within the framework of larger national studies which have already been mentioned under the rubric of the national data sources (e.g. regional evaluations of KiGGS, HBSC and ESPAD).

Another source that has been providing information on drug trends at a local level for many years is the Monitoring System Drug Trends (MoSyD) from Frankfurt/Main. MoSyD is made up of several components: a representative school survey, a trend scout panel<sup>20</sup>, a scene-based survey and an expert survey. In the study period 2011/2012 (the study could only be performed in the new year due to organisational problems in one school or five classes) N=1,516 valid questionnaires were included in the analysis in the scope of the pupil survey of the MoSyD (out of all those surveyed from the 10<sup>th</sup>-12<sup>th</sup> grade or the 1<sup>st</sup>-3<sup>rd</sup> year of a traineeship), of which N=1,068 respondents were between 15 and 18 years old (Werse 2012). The findings presented below are based on this partial sample. Furthermore, findings of the trend scout panel of the MoSyD are available. The findings are reported in chapters 2.3.2 and 2.4.

In May 2009, the findings of the MODRUS IV study (*Moderne Drogen- und Suchtprävention – Modern Drug and Addiction Prevention*) were presented in Saxony-Anhalt. In the fourth sociological - empirical MODRUS study, students and teachers from grade six to twelve were asked about their experience with and attitude towards legal addictive substances, drugs and their use of the computer and the internet (N=2.432). The results have already been presented in the REITOX Report 2009.

The trend scout panel used by MoSyD is a partly standardised survey instrument of a qualitative, ethnographic nature. The primary goal of the instrument is to track new trends and changes with respect to the use of illicit drugs in Frankfurt/Main. To this purpose, recreational scenes are selected especially from youth cultures. The selection of the different settings is focused on the scenes for which a relatively high use prevalence of illicit drugs can be assumed. The trend scout survey is designed as a panel survey that measured the same sample of respondents in regular intervals (twice a year since 2006). The survey is based on a half-open quideline-based interview.

After the last data collection in 2007/2008, a survey called "Hamburg School bus" was carried out for the fourth time in 2009 within the framework of the Local Monitoring System LMS) among students aged 14 to 18 years at schools providing general or vocational education. The results of the survey 2009 were presented in the REITOX Report 2010 (Baumgärtner 2010).

#### Use of available data sources

This report presents the respectively relevant results of the most recent studies focusing on the national epidemiological studies on substance and drug abuse (Epidemiological Survey on Substance Abuse, ESA and Drug Affinity Study, DAS). Insofar as no new data were published in the period under review, this report confines itself to presenting only a few basic data.

When interpreting the results of population surveys, it needs however to be taken into account that the figures may be not inconsiderably underestimated given the fact that particular persons with a high use of illegal drugs are more difficult to reach by such studies and often have a tendency to underreport the frequency and quantity of their use. Therefore, especially in the case of heroin addicts, estimation methods tap into other data sources (e.g. police files, cf. chapter 4.2). In addition to quantitative data, qualitative studies have also been taken into account.

## 2.2 Drug use in the general population

## 2.2.1 Overview of the use of various drugs

Table 2.1 presents a minimal estimate of the prevalence of the use of illicit drugs in Germany. It is based on the last two epidemiological surveys conducted on substance abuse (ESA 2006, 2009) and the most recent DAS (2008).

Table 2.1 Prevalence of illegal drugs in Germany

	Source	Age	Prevalence	Absolute <sup>1)</sup>
Lifetime	ESA 2009	18-64	26.7 %	13,812,000
	DAS 2011	12-17	7.2 %	344,000
12 Months	s ESA 2009	18-64	5.1 %	2,638,000
	DAS 2011	12-17	4.9 %	234,000
30 Days	ESA 2009	18-64	2.6 %	1,345,000
	DAS 2011	12-17	2.0 %	95,000

<sup>1)</sup> Figures are rounded. Population figures in the age categories:

BZgA 2012a; Pabst et al. 2010.

The lifetime prevalence is not suitable as an indicator for current changes since it does not give any valuable clues to the current use behaviour of the interviewees. In literature, the 12-month prevalence is generally used as a reference value since, on the one hand, it is referred to a reasonably limited time window of past use and, on the other, it provides interpretable prevalence values (whereas the 30-day prevalence of the use of illicit drugs with the exception of cannabis often only gives extremely low figures) (details on the population surveys are also contained in the online standard table 1).

While the lifetime prevalence of the use of illicit drugs among adults in the age group 18-64 years (ESA) slightly increased between 2006 and 2009 (2006: 23.7%; 2009: 26.7%), the figures for the use of illicit drugs in the 12-month category remained practically unchanged between the two data collection years 2006 and 2009 (2006: 5.0%; 2009: 5.1%). The situation is similar for the use within the last 30 days prior to the survey (2006: 2.5%; 2009: 2.6%) (Pabst et al. 2010).

As the prevalence of the use of illicit drugs (total) significantly depends on the use experience with cannabis (and is nearly the same), the findings of the ESA 2006 indicate a stabilisation of the decline of the current use of cannabis in the general population, which had already been observed by the ESA 2006. Within the framework of the ESA 2009, only 7.4% of the interviewees (2006: 5.8%) report experience with other illicit drugs in the lifetime category. Even lower are the values for the 12-month (1.3%) and 30-day prevalence (0.6%), which have remained practically unchanged in comparison with the survey carried out in 2006 (1.2% and 0.7% respectively) (cf. also Table 2.2).

<sup>18-65</sup> years: 51,773,467 (year 2006); 51,729,010 (year 2007, more recent figures are not available) (Source: Statistisches Jahrbuch 2009, Statistisches Bundesamt); figures from the Federal Statistical Office for the age groups 18-65 in comparison with 18-64 in ESA, therefore slight deviations in the above-mentioned absolute figures;

<sup>12-17</sup> years: 4,778,270, year: 2011) (Source: Federal Statistics Office 2012b).

## 2.2.2 Comparison of the use of individual drugs

## **National data**

The most recent data on the prevalence of use of individual drugs among adults stem from the ESA 2009 and were reported in the REITOX Report 2010.

New results of the DAS were presented in 2012 on the use of illegal substances amongst adolescents and young adults. The 12-month prevalences rates according to gender and substance are shown, and compared to the data of the last ESA, in Table 2.2.

Table 2.2 12-month prevalence of the use of individual illicit drugs amongst 12-17 year old adolescents and 18-25 year old adults in 2011

Source		DAS 2011 12-17 Yea			DAS 2011 (%; 18-25 Years)			Comparison: ESA 20 (%; 18-64 Years)		
Substance	Total	М	F	Total	M	F	Total	M	F	
Cannabis	4.6	6.2	2.8	13.5	17.2	9.6	4.8	6.4	3.1	
Amphetamines	0.4	0.5	0.3	1.6	2.7	0.6	0.7	1.1	0.4	
Ecstasy	0.2	0.3	0.1	1.0	1.3	0.6	0.4	0.6	0.2	
LSD	0.1	0.2	0.1	0.3	0.6	0.0	0.1	0.2	0.1	
Heroin	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.0	
Cocaine	0.2	0.1	0.3	0.9	1.3	0.4	8.0	1.2	0.4	
Crack	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.0	
Mushrooms	0.41)	$0.7^{1)}$	$0.0^{1)}$	$0.7^{1)}$	1.1 <sup>1)</sup>	0.31)	0.1	0.4	0.1	
Volatile substances	0.1	0.3	0.0	0.2	0.1	0.3				
Any illicit drug	4.9	6.6	3.1	14.3	18.3	10.2	5.1	6.7	3.4	
Illicit drugs besides Cannabis	1.0	1.6	0.4	2.8	4.3	1.3	1.3	1.9	8.0	

<sup>1)</sup> Psychoactive Plants

BZgA 2012a; Kraus et al. 2010; Pabst et al. 2010.

In total 17.6% of 12-17 year old adolescents in Germany have been offered an illegal drug at some point, according to the findings of the DAS 2011 (BZgA 2012a). The proportion of adolescents who have also tried an illegal drug at some point in their lives is significantly lower, at 7.2%. This means that less than half of those who have ever been offered drugs also accepted them. In total, 4.9% of adolescents between 12 and 17 years old had also used an illegal drug within the 12 month period prior to the survey (12-month prevalence), while less than half of them (2.0%) reported that this use was less than 30 days previously (30-day prevalence). Regular use of illegal drugs was seen in the case of approximately every hundredth adolescent. In total 0.9% of 12-17 year olds reported having taken an illegal drug more than ten times in the previous 12 months.

In the case of young adults between 18 and 25 years old, the experience with and use of illegal drugs is more prevalent than in the case of 12 to 17 year old adolescents. In the young adult age category, nearly two thirds of respondents (65.1%) have already experienced being offered an illegal drug. The lifetime prevalence of use of illegal drugs amongst young adults is 39.8%, the 12-month prevalence 14.3%. That means that for over half of 18-25 year olds with use experience, the last drugs use was over a year ago. The 30-day prevalence for the use of illegal drugs for this age group is 5.8% and the prevalence of regular consumption of illegal drugs is 3.7%. Illegal drugs play a greater role for male adolescents and young adults than their female counterparts. In respect of the indicators studied here, significantly higher values were returned for male 12-17 year old adolescents and 18-25 year old men than for female respondents in the respective age category aside from one exception: in the case of the prevalence of regular use of an illegal drug, the difference between male and female 12-17 year olds is statistically insignificant.

The examination of gender differences makes it clear that for both 12-17 year old adolescents as well as for 18-25 year old young adults, the use of "any illegal drug" as well as that of cannabis and that of "any illegal drug aside from cannabis" in the last twelve months is far more common amongst male respondents than female respondents.

Eul und Stöver (2012) have for the first time and with the help of three surveys based on random samples and an internet survey from 2000, 2002 and 2010, brought together data on the use, personal risk assessment and desired legal situation for cannabis amongst the German population from 14 years old<sup>21</sup>. The lifetime use experience amongst 18-60 year olds was around 4 percentage points higher in 2010, at around 25%, than it had been ten years before. Of the estimated three million cannabis users in 2010, it is assumed that three quarters used this drug at least once a month and half used it every two days. The individual risk assessment of cannabis is, in the opinion of the authors, of central importance and serves as a threshold for the first and consequent uses of the drug. This fell with increasing use experience. The risk assessment also determined the desired legal situation in respect of this drug. The majority of the sample questioned was against the same legal treatment for cannabis as for alcohol as 60-70% considered cannabis a greater risk than alcohol. However, approximately 60% regardless of when a survey is taken, of the German population was for a decriminalisation of the personal use of cannabis.

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The surveys of the population on use behaviour and risk assessment as well as on desired legal status of cannabis were conducted in the years 2000, 2002 and 2010, commissioned by the authors (as with the Emnid survey 2010, with financial support of the LAG Drogen Berlin, the DHV and akzept e.V.), by the opinion survey institute this Emnid, whereby in total around 4,000 persons randomly selected representative of Germany by telephone landline dialling computer of 14 years and above were interviewed, who largely reflected the normal socio-demographic constitution of Germany for the population of 14 years old and above. In the scope of a follow-up internet survey conducted by the authors themselves from January 2009 to end of 2010, the same parameters on cannabis (and nine other illegal drugs) were asked of 4,100 online survey participants who were primarily recruited via fee paying web adverts in search engines to be displayed for the search term "drugs". The participants of the internet survey were considerably younger than those of the Emnid survey (average age 26 vs. 47 years old), predominantly male (81% vs. 49%), had a higher average level of education (45% vs. 20% of respondents with school leaver certificate) and had considerably more use experience with cannabis in the year before the survey (75% vs. around 4%).

There have been hardly any changes in the adult population between the two ESA surveys conducted in 2006 and 2009 (with the exception of slight differences in the lifetime prevalence rates). Current use (12-month prevalence) of amphetamines and cocaine was found to slightly increase, at an extremely low level though. Given the stimulating effects of the two substances, both changes do however point in the same direction.

In the reporting year 2009, the herbal mixture "spice" was included for the first time in the catalogue of questions<sup>22</sup>. A complete overview of the lifetime, 12-month and 30-day prevalence rates broken down by gender and age group from the ESA 2009 is provided by Table 2.3 of the REITOX Report 2010. Table 2.4 of the REITOX Report 2010 presents an overview of the trends in the lifetime and 12-month prevalence rates of the use of illicit drugs among young adults in the age group 18 to 39 years that are based on the seven surveys conducted between 1990 and 2009.

Use of illicit drugs is a phenomenon occurring primarily in younger age groups. The portion of the 12-month-users among the below-30 year olds lies on average around 14%, among older users however, it is only about 2%. For many substances (except cannabis), the current (i.e. 12-month) consumption prevalence rates are already low among younger age groups, among the above-30 year olds they lie for all older age groups consistently below 1%. Apart from cannabis, only amphetamines and cocaine play a major role among the 20-29 year olds, although consumption experience with ecstasy, LSD and hallucinogenic mushrooms in the age groups above 30 years is quite common in the lifetime category. Looking at the relation between lifetime prevalence rates and current consumption, it is to be assumed that use of these substances is only of a transitional nature in the majority of users.

Trend data provided by the DAS for the lifetime prevalence rates for the use of cannabis by adolescents and young adults between 12 and 25 years of age will be presented in chapter 2.3.

## 2.3 Drug use in the school and youth population

With a prevalence of about 5-6%, psychological disorders linked to the use of illicit drugs in children and adolescents continue to be among the epidemiologically most important psychiatric disorders occurring during childhood and adolescence (Sack et al. 2008). Current studies moreover suggest that cannabis use has a much more harmful effect on the brain in adolescents than in adults (Aden et al. 2011; Sonnenmoser 2008; Thomasius & Petersen 2008). The vast majority of adolescents stop using drugs when entering adulthood. Early interventions can help to prevent the onset of substance-related disorders and the beginning of an addiction career (Stolle et al. 2007). Alongside the majority of young people who do not develop any persisting disorders, there is a non-negligible group, though, which displays

In this context, it should be noted that comparable herbal mixtures (that are proved to contain synthetic cannabinoids) had already disappeared from the market at the beginning of 2009 as a result of changed legislation although in the years that followed, numerous me-too products have appeared on the market especially via online trading. Representative data is available from the Frankfurt MoSyD for the city of Frankfurt on the use of herbal blends and related products.

highly problematic use patterns already at an early age and, in many cases, also develops psychological co-morbidities at a later stage such as disturbed social behaviour, affective disorders and anxiety disorders (e.g. Thomasius & Stolle 2008b). For this group of persons it is particularly important to be provided with specific treatment offers as described, for example, by Küstner and colleagues (2008; see also Thomasius & Stolle 2008a).

The prevention of nicotine consumption (both universal and selective) clearly assumes a key role in preventing the later onset of substance-related disorders in adolescents, since nicotine dependence is highly associated with other disorders as a result of the use of illegal substances (Perkonigg et al. 2008b). In view of the particular importance assumed by the use of also legal psychotropic substances (especially alcohol and tobacco) by teenagers and young adults, findings on the use of legal substances will be cursorily presented in the following.

So far, research on trend prognoses for substance use disorders especially for childhood and adolescence is scarce. A few individual surveys however identified abetting and protective factors for the development of substance disorders (c.f. REITOX Report 2010, quoted from Sack & Thomasius 2009; Thomasius 2009).

## 2.3.1 Use of legal psychotropic substances

#### **Alcohol**

According to the findings of the current DAS (BZgA 2012a) the proportion of 12-17 year old adolescents who have drunk alcohol within the 30 days prior to the survey is 42.0% (30-day prevalence), 14.2% of this age group drink alcohol regularly (i.e. at least once a week), 15.2% of adolescents have drunk five glasses of alcohol one after the other at a drinking occasion at least once in the last 30 days (binge drinking) and 3.7% at least four times (frequent binge drinking). In the case of young adults in the age of 18-25, the 30-day prevalence of alcohol consumption is 81.9%, 39.8% regularly consume alcohol. The 30-day prevalence rate for binge drinking is 41.9% and the prevalence of frequent binge drinking is 12.9%. The alcohol consumption levels for male adolescents and young adults are higher than that of their female counterparts in all the described consumption indicators. Alcohol consumption amongst adolescents from 12-17 years old has declined in the last few years. The 30-day prevalence of alcohol consumption as well as the regular consumption of alcohol, binge drinking in the last 30 days and frequent binge drinking were not as common in 2011 as they were still in 2004. Trends amongst 18-25 year old young adults since 2004 have varied. In addition to downward trends, increases have also been observed so that no clear trends can be ascertained for this age group.

Data on the consumption of alcohol amongst adolescents from the Health Interview and Examination Survey for Children and Adolescents (KiGGS) (Lampert & Thamm 2007) and the MODRUS IV study (Modern Drug and Addiction Prevention – Moderne Drogen- und Suchtprävention) were already reported in the REITOX Reports 2007, 2008 and 2009. Data on alcohol consumption of adolescents is also available from the HBSC study which has

already been presented in part in previous REITOX Reports. Trend analyses from the HBSC were reported by Richter et al. in 2012 (Richter et al. 2012). According to those, following a sharp rise in consumption rates of alcohol in the years 1994 to 2002, a just as sharp decline in consumption frequency has been observed since 2002, whereby the period from 2002 to 2006 was clearly of crucial significance (the same applies for tobacco and cannabis).

## **Tobacco**

Current data on tobacco consumption amongst adolescents and young adults is also available from the DAS (BZgA 2012a). In 2011, 70.8% of 12-17 year old adolescents in Germany have never smoked, 11.7% smoke. 4.8% smoke on a daily basis, 2.0% smoke 10 cigarettes or more per day and 0.3% smoke more than 20 cigarettes per day. 17.5% have tried smoking at least once but are currently non-smokers. In the case of young adults between the ages of 18-25, 27.6% have never smoked; the smoker quota is 36.8%. 23.1% smoke every day, 16.5% consume at least 10 cigarettes per day and 4.8% smoke at least 20 cigarettes per day. Amongst adolescents and young adults, no differences in smoking behaviour between the sexes can be seen. Smoking is declining amongst males and females between the ages of 12 and 17 as well as between 18 and 25. Amongst adolescents, the rate has more than halved over the last decade from 27.5% (2001) to 11.7% (2011). Trend analysis of the existing HBSC studies on tobacco consumption is also available. This shows that regular smoking in the period 2002 to 2010 decreased significantly overall, whereby the stronger reduction was in the period 2002 to 2006. The rate of smoking amongst 13 year olds fell from 14.1% in 2002 to 3.0% in 2010; amongst 15 year-olds from 33% to 14.9%. This decline was observed for girls as well as boys to the same extent (Richter et al. 2012).

Findings on tobacco consumption of adolescents from the KiGGS and the MODRUS IV study were reported in the REITOX Reports 2007 and 2009.

## 2.3.2 Use of illegal drugs

## **National data**

## **ESPAD**

In 2011, Germany took part in the European School Survey Project on Alcohol and other Drugs (ESPAD) for the third time, after also taking part in 2003 and 2007. The aim of the study is to examine the extent of, attitudes to and risks of alcohol, tobacco and drug consumption amongst adolescents (see 2.1).

With a lifetime prevalence of 22.2%, cannabis remained the most commonly consumed illegal substance (Table 2.3). In the year prior to the survey, 17.4% of adolescents had tried cannabis at least once. For the 30 days prior, this figure was 8.1%. More boys than girls reported having used cannabis at least once in their life (28.2% vs. 16.8%), in the 12 months prior to the survey (22.8% vs. 12.6%) and in the 30 days prior to the survey (11.7% vs. 4.8%). The lifetime prevalence was highest in respect of secondary general schools (26.8%).

However, use within the last 30 days was reported by significantly more comprehensive school pupils (11.5%).

Table 2.3 Lifetime, 12-month and 30-day prevalence of cannabis use

		Ge	nder	Type of School						
	Overall	Boys	Girls	Hauptschule	Realschule	Realschule Gymnasium				
Lifetime	22,2	28,2	16,8	26,8	23,3	19,3	22,7			
12 months	17,4	22,8	12,6	17,8	18,4	16,1	18,6			
30 days	8,1	11,7	4,8	8,0	7,7	7,8	11,5			

Kraus et al 2012.

A frequent consumption of cannabis was rare. In the 30 days 2.5% of adolescents reported having used cannabis more than five times in the last 30 days. As a proportion of cannabis users, 13.3% registered a frequent consumption of at least 20 times in the last month. This pattern of use was particularly common in secondary general schools (Hauptschule) (26.8%).

Problematic cannabis use was studied in the Cannabis Abuse Screening Tests (CAST). According to those, boys (1.9%) showed twice as high a risk for cannabis related problems than girls (1.0%). Overall, 1.4% of respondents and 8.3% of users showed a problematic use of cannabis over the last 12 months, which included significantly more secondary general school and intermediate secondary school pupils than pupils from comprehensive schools (Gesamtschule) and grammar schools (Gymnasium).

The percentage of cannabis users has declined considerably compared to the first study in 2003 (Table 2.4). In contrast to this, no further significant changes have occurred since 2007. Overall, the lifetime prevalence of cannabis use in the last nine years fell from 30.8% to 22.2%, the 12-month prevalence from 24.6% to 17.4% and the 30-day prevalence from 13.5% to 8.1%. The proportion of girls with experience of cannabis declined to a greater extent than the proportion of male users, falling significantly even in comparison to 2007 (lifetime prevalence: 21.1% vs. 16.8%). A comparison according to type of school showed a decline from 2003 levels especially in intermediate secondary schools (Realschule) and grammar schools (Gymnasium). The downward trend of cannabis use was observed in all *Laender* except for Berlin.

Table 2.4 Lifetime prevalence, 12-month prevalence and 30-day prevalence of cannabis use, 2003-2011

		Ge	nder				
	Overall	Boys	Girls	Hauptschule	Realschule	Gymnasium	Gesamtschule
Lifetime pre	evalence						
2003	30.8*	34.6*	27.2*	29.0	31.8*	29.3*	33.7
2007	25.1	29.6	21.1*	24.5	25.3	23.5	30.0
2011	22.2	28.2	16.8	26.8	23.3	19.3	22.7
12-month p	-month prevalence						
2003	24.6*	27.7*	21.7*	22.9	24.3*	25.1*	26.2
2007	16.9	21.0	13.3	15.1	16.3	17.6	18.9
2011	17.4	22.8	12.6	17.8	18.4	16.1	18.7
30-month p	revalence						
2003	13.5*	16.7*	10.5*	14.9*	12.9*	12.7*	15.0
2007	7.8	10.5	5.4	7.8	7.7	7.2	9.7
2011	8.1	11.7	4.8	8.0	7.7	7.8	11.5

<sup>\*</sup> p<.05 for comparison with reference year 2011; logistical regression to prediction of prevalence with year, age, *Land*, (gender). Kraus et al 2012.

The development of problematic cannabis use over time can only be viewed for the period of the last four years as the respective indicators were not collected in 2003 (Table 2.5). Accordingly, there was no significant change in the percentage of problem users either for the group of 12-month users or for the entire sample group. No statistically significant effects can be seen in the gender specific analysis either. However, notable differences can be seen in the varying types of school. There were no changes in respect of intermediate secondary schools (Realschule) and grammar schools (Gymnasium), which was similar to the sample group as a whole. In contrast to that, the proportion of adolescents in comprehensive schools (Gesamtschule) who developed problems as a result of their use of cannabis fell considerably (2.6% vs. 0.4% in the sample as a whole; 13.7% vs. 2.2% amongst users). A completely different development was observed in respect of secondary general schools (Hauptschule) where the prevalence of problematic cannabis use increased from 0.7% to 2.9% (overall sample) and from 5.0% to 17.0% (users).

8.3

8.5

2011

2.2

4.5

9.7

	_	Ge	nder	Type of School						
	Overall	Boys	Girls	Hauptschule	schule Realschule Gymnasium		Gesamtschule			
Total										
2007	1.4	2.1	0.7	0.7*	1.6	1.1	2.6*			
2011	1.4	1.9	1.0	2.9	1.8	0.7	0.4			
Users										
2007	8.2	10.2	5.5	5.0*	9.9	6.2	13.7*			

Table 2.5 12-month prevalence of problematic cannabis use, 2007-2011

8.0

17.0

In respect of other illegal drugs, 23.7% of pupils reported having tried some type of illegal drug (cannabis, amphetamine, ecstasy, LSD, cocaine, crack, heroin or mushrooms). Furthermore, 8.9% registered having used an illegal drug other than cannabis. Of the other illegal substances, amphetamine was the most commonly tried (6.0%), followed by cocaine (3.1%) and then ecstasy and magic mushrooms (each 3.0%). Boys displayed a higher level of lifetime experience of the use of any kind of illegal substance than girls. The highest lifetime prevalence for other illegal drugs was reported by pupils at secondary general schools (Hauptschule) (13.3%) followed by comprehensive schools (Gesamtschule) (10.8%), intermediate secondary schools (Realschule) (9.3%) and grammar schools (Gymnasium) (6.3%). It was also in secondary general schools (Hauptschule) that the highest percentage of adolescents could be found who had used each illegal drug at least once, except for magic mushrooms. Magic mushrooms were more widely used amongst intermediate secondary school (Realschule) and comprehensive school (Gesamtschule) pupils.

The lifetime prevalence of the use of illegal drugs except for cannabis has remained unchanged since 2003 (10.5% vs. 8.9%). Differences in the development over time of consumption behaviour could be seen in respect of ecstasy and magic mushrooms whose lifetime prevalence rates displayed a decreasing trend between 2003 and 2011. In contrast to this, an increase in male cocaine users in comparison to 2003 was witnessed. The increase of gamma-hydroxybutyrate (GHB) use across all subgroups between 2003 (0.2%) and 2007 (2.4%) did not continue after that.

## Drug affinity study of the Federal Centre for Health Education, BZgA (DAS)

Trend data on the use of illicit substances by adolescents (12 to 17 year olds) and young adults (18 to 25 year olds) have been provided by the DAS since 1979 (BZgA 2010). From 1979 to 1993, the development of the lifetime prevalence rates for illicit drugs among adolescents between 12 and 17 years of age vary only slightly on the whole running almost parallel for females and males until 1989. Afterwards, the portion of those who have already had experience with any illicit drug is subject to diverging developments in female and male

<sup>\*</sup> p<.05 for comparison with reference year 2011; logistical regression to prediction of prevalence with year, age, *Land*, (gender). Kraus et al 2012.

adolescents: among female adolescents, the portion of those with consumption experience with illicit drugs jumped from 4.5% (1993) to 15.2% (1997)<sup>23</sup>. From 2001 (11.7%) onwards, the lifetime prevalence declined again and was at 8.0% in 2008. The lifetime prevalence among male adolescents continually increased from 8.7 percent in 1993 to 19.0 percent in 2004 and fell back to 12.0 percent in 2008 (for a graphic presentation of this development, see REITOX Report 2010, figure 2.1).

Use experience with illicit drugs among 18 to 25 year olds is significantly higher across all categories measured than among 12 to 17 year olds. In this age group, gender differences are also more pronounced across the board. The portion of male young adults who have already had experience with drugs is between 5 and 14.7 percentage points higher than the one of the female young adults over the whole reporting period. Since the beginning of the 1980s, the lifetime prevalence of the 18 to 25 year olds declined for both genders: the portion in female young adults sank from 24.5% (1982) to 16.3% (1993) and in male young adults from 32.5% (1982) to 26.8% (1989). From then onwards, the gender specific lifetime prevalence rates significantly increased until the year 2004. After that, the values hardly changed and were at 47.3% (male young adults) and 35.8% (female young adults) in 2008 (for a graphic presentation of this development, see REITOX Report 2010, figure 2.2).

Based on the results of the current DAS (BZgA 2012a) the use of illicit drugs, in relation to the group of all adolescents and young adults in Germany, is still largely determined by the use of cannabis. The parts ecstasy, LSD, amphetamine, cocaine, crack, heroin, inhalants and psychoactive plants play are much less significant than cannabis. This applies for the 12-17 year olds and the 18-25 year olds overall, as well as for the male and female respondents in these age categories (Table 2.2). The examination of the differences between the sexes makes it clear that for both 12-17 year old adolescents as well as for 18-25 year old young adults, the use of any illegal drug, the use of cannabis and the use of any other illegal drug apart from cannabis, is far more common among male than among female respondents.

The proportion of adolescents and young adults who have used cannabis at least once in their lives (lifetime prevalence) is slowly changing in Germany. After an initial stagnation and then a slight reduction in lifetime prevalence from 1979 to 1986, the proportion of 12-17 year olds who have tried cannabis at least once in their lives has risen continuously from a level of 3.3% (1986) to 15.1% in 2004. In this period, an increase could also be seen amongst 18-25 year old young adults, which was particularly sharp between 1997 (25.2%) and 2004 (43%). In 2004, the lifetime prevalence of cannabis use in both groups reached record levels.

In the case of adolescents, the lifetime prevalence reduced significantly thereafter, falling to just 6.7% in 2011. This effect is due to there being a new generation without any experience of use. In the case of young adults, the lifetime prevalence of cannabis use has also fallen

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<sup>&</sup>lt;sup>23</sup> This increase was mainly attributable to the increase in the use of ecstasy as a "new party drug" in the context of the then-forming techno party scenes and the increase in use of cannabis.

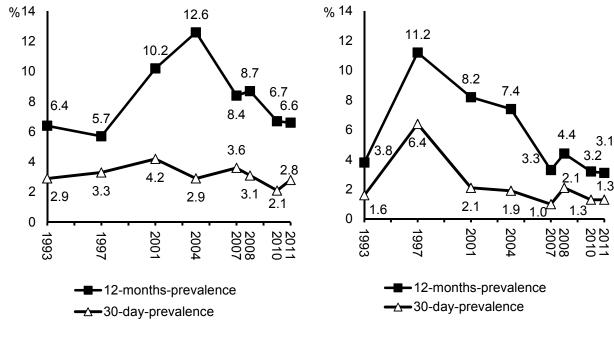
and was significantly lower in 2011 than in 2004 – even if the lower levels of 2010 are currently not being matched.

Young men and women of the ages 18 to 25 show a similar trend pattern to the overall group, however, on a different level. In the 1990s, an increase in the lifetime prevalence of cannabis use begins for young adults of both sexes. The highest levels of cannabis use experience for male and female 18-25 year olds was evident in the year 2004. The values for lifetime prevalence from the 2011 survey remain for young men at 2004 levels, for young women, however, the current value is significantly lower than in 2004.

From an overall perspective, the development of various indicators of cannabis consumption for the last few years has shown a decline amongst adolescents in Germany. Regular cannabis use is currently, according to 2011 findings, at 0.8% of all 12-17 year olds. In the studies from 1993 to 2007 the respective percentage values are statistically significantly higher. Amongst young adults from 18-25 years old, the 12-month and 30-day prevalence rates as well as the regular cannabis consumption rate do not follow the lifetime prevalence over time.

The sharp increase shown by the lifetime prevalence of cannabis use from 1993 to 2004 has not been observed in the other indicators (12-month, 30-day). That means that an increased tendency to try drugs did not lead to an increase in current and regular consumption. In contrast to the group comprising adolescents (12 to 17 years old), the lifetime prevalence amongst young adults (18-25 years old) indicator also more often shows a cannabis use which is a few years past (Figures 2.1 and 2.2).

Aside from the trend of lifetime prevalence, an inconsistent picture emerges for the changes to current consumption behaviour of 18 to 25 year old young adults from 1993. The 12-month prevalence of cannabis use remains unchanged for young adults. The 30-day prevalence and regular cannabis use have declined, statistically significantly, amongst young adults compared to the years 1993 and 1997. However, since 2001 the 30-day prevalence and regular cannabis use has stagnated.



Male adolescents (12-17 years)

Female adolescents (12-17 years)

BZgA 2012a.

Figure 2.1 Trends of the 12-month and 30-day prevalence of cannabis use among adolescents 1993-2011

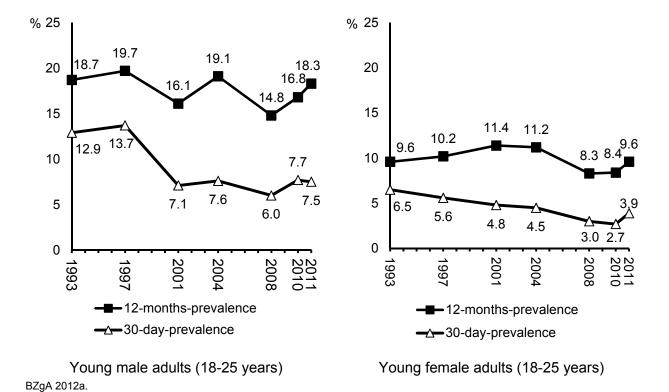


Figure 2.2 Trends of the 12-month and 30-day prevalence of cannabis use among young adults 1993-2011

In 1993, the average age at which 12-25 year old adolescents and young adults use cannabis for the first time amongst those who had at least taken cannabis once in their life, was 17.3 years old (Table 2.6). By 2004 this had shifted almost one year back (to 16.4 years old). After this, the age of first use has slightly increased again. In the 2011 study, the average age of first time cannabis use was 16.7 years old. The results for male and female 12-25 year olds are not statistically significantly different in any study period.

Table 2.6 Average age of first cannabis use amongst 12-25 year olds, overall and according to gender, from 1993 to 2011

Year	Overall	Male	Female
1993	17.3	17.5	17.0
1997	16.7	16.8	16.5
2001	16.5	16.5	16.5
2004	16.4	16.5	16.3
2008	16.5	16.5	16.4
2011	16.7	16.8	16.7

Basis: Respondents who have already used cannabis at some point.

BZgA 2012a.

Findings of local studies underline time and again how much consumption patterns can vary from region to region. Significantly higher prevalence rates were reported, for example in the MoSyD than in the DAS (see below). In February 2012, in Delmenhorst (urban district in Lower Saxony with a population of around 75,000) a survey was conducted for the second time (the first time had been in 2008) amongst 12-17 year old pupils in general education (N=1,715; Aktionsbündnis Riskanter Konsum 2012). With lifetime prevalence rates of 14.5% (in total; male: 19.0%; female: 9.9%), a 12-month prevalence of 11.3% (14.6%; 8.0%) and a 30-day prevalence of 6.5% (8.2%; 4.8%), the comparative values of the pupils are around twice that of the German national average. It is conceivable that the higher prevalence rates observed on a regional level can be explained at least in part by the methodological differences in the collection of data in comparison to the studies on a national level.

The use of illegal drugs is equally common amongst pupils in grammar schools (Gymnasium), comprehensive schools (Gesamtschule), intermediate secondary schools (Realschule) and secondary general schools (Hauptschule). In the case of the older respondents outside the secondary school level, that is to say those having completed sixth form and vocational school level, there are almost no social or educational differences reflected in the consumption prevalence and the regular consumption of illegal drugs. Amongst pupils in schools providing vocational education, the lifetime prevalence and the 30-day prevalence is higher than amongst male and female sixth form pupils at grammar schools (Gymnasium). Amongst employed persons, the 12-month prevalence of the

consumption of illegal drugs is lower than in the reference group grammar school secondary level II.

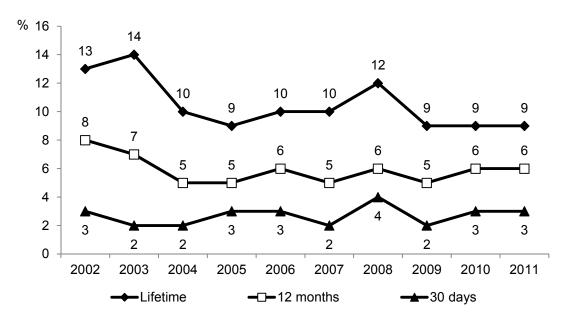
# Survey on the use of "legal highs"

In an online survey conducted on a national basis, which was aimed at persons with experience of use of legal highs, it was found that repeat legal high users already demonstrated extensive existing experience with illegal drugs (Werse & Morgenstern 2012). In the study, different types of regular users were identified: in addition to a small group of users who have completely replaced their use of illegal drugs with the use of legal highs primarily due to concerns about formal and informal sanctions, there is a large group of persons who use cannabis or so-called herbal blends depending on availability. A further important group is the "psychonauts", who are open to experimentation and seek to expand their spectrum of substance use with research chemicals and other legal highs.

## Data from the Laender and the regional monitoring systems

## Frankfurt (MoSyD)

In 2011, as in the previous two years, 9% of 15-18 year old Frankfurt school pupils reported experiences with at least one illegal drug<sup>24</sup> apart from cannabis (Figure 2.3). The 12-month prevalence was in 2011 also comparable to that of the previous year, as was the 30-day prevalence. Overviews of the lifetime and 12-month prevalence rates for the use of individual substances are shown in Tables 2.7 and 2.8.

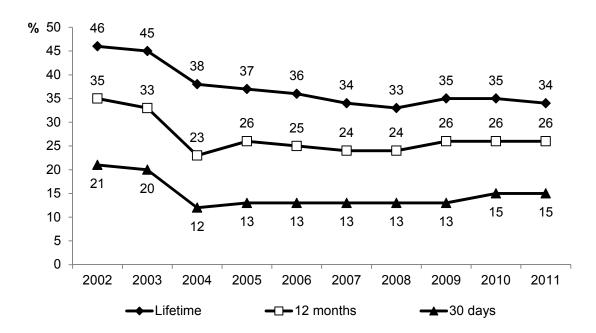


Werse et al. 2012.

Figure 2.3 Lifetime, 12-month and 30-day prevalence of the use of illicit drugs (except cannabis) among Frankfurt students aged between 15 and 18 years old - 2002-2011 (MoSyD)

Summary of the substances: psychoactive mushrooms, ecstasy, speed, cocaine, LSD, crack, heroin, crystal and GHB.

As in the previous year, 3% of the students reported in 2011 that they had used ecstasy at least once in their lives; the 12-month prevalence also remained stable (2%). The lifetime prevalence of "speed" stayed at the level of 2010, continuing to display the highest percentage value since 2002, namely 6%. The 12-month prevalence was at 4% in 2011 and thus reached a figure comparable to 2008. The proportion of 15-18 year old Frankfurt pupils who have had experience with cocaine is at 3% (2010: 4%); 2% of the pupils had used cocaine at least once in the year prior to the survey. The lifetime prevalence of methamphetamine which is one of the drugs most rejected by 15 to 18 year olds, remained at 1%. Since 2007, use experience with psychoactive mushrooms (2011: 4%) and LSD (2011: 3%) has practically remained unchanged and still only a small minority (2011: <1%) of the 15 to 18 year olds has experience with heroin (Werse et al 2012). As regards use of cannabis, the findings of the school survey conducted within the framework of the Frankfurt MoSyD in 2011 did not show any changes in the respective prevalence rates (Werse et al 2012) (Figure 2.4).



Werse et al. 2012.

Figure 2.4 Lifetime, 12-month and 30-day prevalence of cannabis use among Frankfurt students aged between 15 and 18 years old - 2002-2011 (MoSyD)

Despite the unchanged low prevalence rates, there is a group of cannabis users with intense use patterns (> 10 times within a month), the size of which as a percentage of the total fell back in the current reporting year to 2009 levels (4%) after having temporarily increased in 2010 (6%).

Table 2.7 Lifetime prevalence (%) of various substances in the age group 15-18 years old according to year of survey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Sig.
Inhalants	17	17	21	14	15	17	15	16	13	14	***
Laughing gas	5	5	3	6	5	5	5	6	6	5	n.s.
Cocaine	4	5	4	4	5	4	6	3	4	3	n.s.
Psych. Mushrooms	8	9	5	4	6	5	5	4	4	4	***
Speed	5	5	4	3	5	4	5	3	6	6	**
Ecstasy	5	5	3	3	4	3	3	3	3	3	**
LSD	3	3	2	2	3	2	2	2	3	3	n.s.
Crack	1	2	1	2	1	2	1	2	2	1	n.s.
Crystal	а	а	а	а	а	1	1	1	1	1	n.s.
Heroin	1	1	1	1	1	1	<1	<1	1	<1	*
GHB/GBL	<1	1	1	1	<1	1	1	<1	1	<1	n.s.
Hormonal drugs	а	а	3	4	2	3	4	3	3	3	n.s.

<sup>&</sup>lt;sup>a</sup> Not collected

Werse et al. 2012.

Table 2.8 12-month prevalence (%) of various substances in the age group 15-18 years old according to year of survey

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Sig.
Inhalants	7	7	8	7	7	9	8	8	6	8	n.s.
Laughing Gas	2	2	1	1	1	2	2	3	2	2	n.s.
Cocaine	3	3	2	3	2	2	3	2	3	2	n.s.
Psych. Mushrooms	4	4	2	2	3	2	2	1	1	3	***
Speed	3	2	2	2	3	2	4	2	3	4	**
Ecstasy	3	2	1	1	2	2	2	2	2	2	n.s.
LSD	1	1	1	1	2	1	1	1	1	1	n.s.
Crack	1	1	<1	1	1	1	1	1	1	<1	n.s.
Crystal	а	а	а	а	а	1	1	1	<1	1	n.s.
Heroin	<1	<1	<1	<1	<1	1	<1	<1	<1	0	n.s.
GHB/GBL	<1	<1	<1	<1	<1	1	1	<1	1	<1	n.s.
Hormonal drugs	а	а	2	2	1	2	2	2	2	1	n.s.

a Not collected.

Werse et al. 2012.

In 2008, data on the use of herbal smoking blends, which had first come to the fore in that year under the name "spice" (cf. also the REITOX Reports 2009 and 2010), was collected for the first time, within the framework of the Frankfurt school survey MoSyD. According to the findings of the survey, about 6% of the 15-18 year olds reported in 2008 that they had used "spice" at least once in their lives, 3% also in the last 30 days (Werse et al. 2009). In 2009, the lifetime prevalence was at 7% whereas the 30-day prevalence dropped to 1%. In 2010, the lifetime prevalence increased again (9%); the 30-day prevalence was at 2%. The latest survey (2011) saw the lifetime prevalence fall to 7%, current use (30-day) remains at a low level (1%) (Werse et al. 2012).

In 2010 and 2011, data was also collected within the framework of the school survey conducted on the so-called legal highs (which, ignoring the legal culpability under the pharmaceuticals law, misleadingly sold e.g. as bath salts, fertilizer pills or "research chemicals"). With a lifetime prevalence of 3% (2010) and 2% (2011) and a 30-day prevalence of 1% (in both study years), these substances seem to continue to play only a minor role. However, the respective prevalence rates should be viewed with reservation as a significant part of those with lifetime prevalence clearly relates not to new synthetic substances but to medication or herbal drugs.

The results of the trend scout panel also indicate that the so-called legal highs only have a marginal significance in Frankfurt. Smoking mixtures with synthetic cannabinoids only have a minor importance in terms of demand in comparison to conventional cannabis products, however they play the largest role amongst available legal high products. Further research chemicals in the area of "party drugs" have up until now only obtained a limited resonance in extremely specific scenes which are especially open to experimentation. The bulk of users continue to rely on the offers of the illegal market structures, giving reasons such as, amongst other things, lack of experience with RCs, the associated risk and the relatively unchartered nature of the substances for example in relation to risk minimising practices. Only individual cases were reported from drug assistance facilities, cases in which clients had ordered synthetic drugs on the internet. The Frankfurt police force also sees no noticeable indication of a developing trend in the area of legal highs.

#### Bavaria

Erbas and Arnold (2011) carried out a study in 2010 amongst addiction assistance facilities in Bavaria, in which information was sought on the availability of 13 different substances (i.a. modafinil, methylphenidate, appetite suppressants, D-amphetamine, fentanyl, tramadol, GHB/GBL, dextromethorphan)<sup>25</sup>. In comparison to the previous year, the most common response was that an increase had been seen for fentanyl abuse, for GHB/GBL, D-amphetamines and herbal blends. For codeine, there was a notable decline.

<sup>&</sup>lt;sup>25</sup> Of N=257 facilities contacted, n=74 responded, n=66 questionnaires were included in the evaluation.

# Project, "Saving and Empowering Young Lives in Europe" (SEYLE)

The SEYLE Project (Saving and Empowering Young Lives in Europe) is an EU study conducted across ten European countries and Israel and which deals with the topic of promoting the health of adolescents through the prevention of risky and self-destructive behaviours<sup>26</sup>. The main aim of the study was in the collection of data on risky and self-destructive behaviours amongst adolescents in the ages of 14-16 as well as the reduction of these behaviours with the help of various prevention programmes. In Germany, the baseline of the SEYLE Project was conducted in January 2010 at 26 participating schools from Heidelberg and the Rhine-Neckar region<sup>27</sup>. From Germany, a series of epidemiological data is already available some of which have collected data on substance use with much better precision. In light of this, the findings of the SEYLE survey on substance use are relatively general and do not contradict the data already reported from other sources.

# **Summary and trends**

Tables 2.9 and 2.10 summarise respectively for illegal drugs and cannabis the results of the currently available studies on the prevalence of use amongst adolescents and young adults.

Current information from the trend scout panel from Frankfurt is available, which was published in the summer of 2012 (see 2.1). Contrary to the trend of the previous year, when an overall reduction in the use of legal and illegal drugs was seen, in 2011 a certain increase was observed in the case of various substances.

According to that panel, the availability of cannabis is rated as extremely high. High priced cannabis with increased THC levels ("Haze") has considerably increased in popularity across various "scenes". The degree of popularity of cannabis overall is on roughly the same level as in the previous year after the use had declined in the years prior to that. In terms of popularity, marijuana is far above hashish, the latter only being bought in the majority of cases where no marijuana was available.

The prevalence and intensity of use of speed/amphetamine remained at a constant high level. Amongst all "hard" drugs, the availability of speed is considered to be the highest. Medium to strong fluctuations in quality were reported in certain environments. The palette of adulterants was extended, according to the statements of the trend scouts to include several, similarly acting but less potent research chemicals. Ecstasy tablets with an increased MDMA

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<sup>&</sup>lt;sup>26</sup> www.seyle.eu/

After an appropriate randomisation, every school participated in February 2010 in one of the four prevention programmes. The first follow-up investigation (Follow-Up 1) was conducted three months after the end of the intervention in June 2010, the second follow-up investigation (Follow-Up 2) in January 2011. Beyond the 26 schools, a total of n=1,444 pupils of a possible N=2,056 in the baseline survey of the SEYLE Project. This represents a participation rate of around 69%. The survey was conducted in the grammar schools (Gymnasium) and intermediate secondary schools (Realschule) with pupils of the 9<sup>th</sup> grade; at the secondary general schools (Hauptschule) pupils from the 8<sup>th</sup> and the 9<sup>th</sup> year group took part. In the scope of Follow-Up 1, three months after the intervention, n=1,390 pupils filled the questionnaire out; in the scope of Follow-up 2, after a year, the same year groups were questioned again (then 9<sup>th</sup> and 10<sup>th</sup> grade), this time n=1,184 pupils participated in the survey. In total n=977 pupils took part in all three surveys.

content are more widely available. Consequently, the image of ecstasy amongst users has improved slightly over the past year (after having declined in previous years when its reputation suffered as a result of the high market share of ecstasy with m-CPP as active ingredient) and the prevalence of MDMA based preparations increased once more in 2011. Nevertheless, the supply still largely comprises tablets which have been adulterated or "cut" or in which a completely different active ingredient has been used. In relation to ecstasy, MDMA crystals continue to enjoy a better reputation amongst users due to their purity. The availability was rated as high with a downward trend towards the end of the year. The price level fell slightly.

The use of LSD and psychoactive mushrooms was limited, just as in the preceding years, to individual "scenes" and is only found sporadically. The general availability is classified as low.

Unlike in the previous year, the prevalence of ketamine did not increase, after problems in connection with its narcotising and dissociative effects occurred directly at events in certain circles. According to reports of the trend scouts, the risk awareness in respect of this substance increased and its image tended to worsen.

For the first time, specific reports were made on the popularity and supply of methamphetamine. The use has, however, so far been limited to a few scenes more open to experimenting and was only undertaken by a minority. That being said, the substance was also sold at a few individual events. Information was also supplied on the margin about sporadic cases of GHB/GBL use, which continued to be limited to certain social groups. Other illegal substances such as heroin, opium or crack played practically no role at all.

Scherbaum and colleagues (2011) point out that addictive substances are present on the internet in large numbers and only a minority of the relevant websites are run by institutes devoted to factual education such as universities. As the internet represents an extremely important source of information for young people as well as a fundamental part of their free time activities, the authors consider the often use-affirming presentation of drugs on the internet as problematic. It is not clear to what extent the presence on the internet of numerous addictive substances which are little known even to experts (e.g. mephedrone; Schifano et al. 2011), is of epidemiological relevance. In the EU funded project, ReDNeT, information on new substances is being systematically collected and made available to experts online.

Table 2.9 Prevalence rates for the use of illicit drugs except cannabis (exception: BZgA) among school populations and adolescents in various German studies

				Prevalence (%)		
Source <sup>1)</sup>	Year	Age group	Region	30 Days <sup>2)</sup>	12 Months	Lifetime
BZgA	2011	12-17	National	0.4	1.0	1.8
BZgA	2011	18-25	National	1.0	2.8	9.1
BZgA	2008	12-17	National	0.6	2.0	2.7
BZgA	2008	18-25	National	0.9	2.9	9.2
BZgA	2004	12-17	National	0.1	1.6	2.6
BZgA	2004	18-25	National	0.5	3.1	11.2
ESPAD	2011	15-16	5 Laender			8.9
ESPAD	2007	15-16	7 Laender			10.1
ESPAD	2003	15-16	6 Laender	3.8	8.3	12.3
MoSyD	2011	15-18	Frankfurt	3	6	9
MoSyD	2010	15-18	Frankfurt	3	6	9
MoSyD	2009	15-18	Frankfurt	2	5	9
MoSyD	2008	15-18	Frankfurt	4	6	12
MoSyD	2007	15-18	Frankfurt	2	5	10
Schulbus	2009	14-18	Hamburg	2		6
Schulbus	2007	14-18	Hamburg	2		7
Schulbus	2005	14-18	Hamburg	5		12

<sup>1)</sup> BZgA: cannabis, heroine, cocaine, amphetamine, ecstasy and LSD. Data on use of "illegal drugs excluding cannabis" is not available before 2008. The presented data from the year 2004 are the result of a re-analysis carried out by the BZgA. Therefore, figures can diverge from those of previous years.

ESPAD: amphetamines, LSD, ecstasy, cocaine, crack and heroin. ESPAD interviews students from grades 9 and 10, the focus is therefore on the 15-16-year age range, but also a few students aged 14 and 17 years were included.

MoSyD: psychoactive mushrooms, ecstasy, speed, cocaine, LSD, crack, heroin, crystal and GHB/GBL.

Schulbus: ecstasy, mushrooms, LSD, speed/amphetamine, cocaine, crack and heroin.

<sup>2)</sup> Corresponds to "present use" (BZgA until 2008) or respectively "current use" (Schulbus).

Table 2.10 Prevalence rates for the use of cannabis among school populations, adolescents and young adults in various studies

				Use in Period (%)		
Source	Year	Age group	Region	30 Days <sup>1)</sup>	12 Months	Lifetime
HBSC	2010	15	National*)		7.4	
HBSC <sup>2)</sup>	2006	15	5 Laender	7.1/4.3	10.6	18.1/13.8
HBSC	2002	M=15.7	4 Laender		17.5	24.0
KiGGS <sup>2)</sup>	2003-2006	11-17	National		9.2/6.2	
BZgA	2011	18-25	National	5.4 (3.3) <sup>3)</sup>	13.5	39.2
BZgA	2011	12-17	National	1.9 (0.8) <sup>3)</sup>	4.6	6.7
BZgA	2010	18-25	National	5.3 (3.2) <sup>3)</sup>	12.7	35.0
BZgA	2010	12-17	National	1.7 (0.2) <sup>3)</sup>	5.0	7.4
BZgA	2008	18-25	National	4,5	11,6	40,9
BZgA	2008	12-17	National	2,6	6,6	9,6
BZgA	2007	18-25	National			
BZgA	2007	12-17	National	2,3	5,9	9,0
BZgA	2004	18-25	National	6,1	15,2	43,0
BZgA	2004	12-17	National	2,4	10,1	15,1
ESPAD <sup>4)</sup>	2011	15-16	5 Laender	8.1	17.4	22.2
ESPAD <sup>4)</sup>	2007	15-16	7 Laender	8.1	17.2	25.2
ESPAD	2003	15-16	6 Laender		24.0	31.0
MoSyD	2011	15-18	Frankfurt	15	26	34
MoSyD	2010	15-18	Frankfurt	15	26	35
MoSyD	2009	15-18	Frankfurt	13	26	35
MoSyD	2008	15-18	Frankfurt	13	24	33
MoSyD	2007	15-18	Frankfurt	13	24	34
Schulbus	2009	14-18	Hamburg	11		27
Schulbus	2007	14-18	Hamburg	10		28
Schulbus	2005	14-18	Hamburg	17		39
Schulbus	2004	14-18	Hamburg	17		40

<sup>1)</sup> BZgA (DAS 2004: 30 days = "present"), Schulbus ("current use" = 30 days).

<sup>2)</sup>  $\,$  HBSC (2006) and KiGGS: First figure: boys, second figure: girls.

<sup>3)</sup> In brackets: Regular use (> 10 times in the last year).

<sup>4)</sup> ESPAD interviews students from grades 9 and 10, the focus is therefore on the 15-16 year age range, but also a few students aged 14 and 17 years were included.

<sup>\*)</sup> Except for Baden-Württemberg.

When comparing the data, the following should be taken into account:

- The age groups surveyed by the individual studies are not identical.
- There are no separated prevalence rates available for the BZgA data until 2008 for "illegal drugs excluding cannabis".
- ESPAD and HBSC were only conducted in some of the 16 Laender (HBSC 2010: All Laender except Baden-Württemberg).
- Some of the divergences in the prevalence estimates may also be attributable to different methods used (telephone vs. face-to-face interviews) or different wording in the questionnaires.

Details on surveys in the population are contained in Online Standard Table 2, on youth surveys in Standard Table 30.

After the considerable increase of the prevalence rates for cannabis use from around the mid-1990s onwards, the most recently presented study findings give the impression of a certain easing with regard to the use and spread of cannabis, especially among adolescents and young adults.

Prolonged changes in the use of other substances have not been reported recently. However, there are still significant regional differences to be observed in the use behaviour and characteristics of the markets (e.g. prices and/or purity levels of various substances).

Moreover, individual substances or groups of substances (e.g. GHB/GBL, methamphetamines, biogenic drugs, tilidine) have repeatedly come to be the focus of attention, often in connection with intense media reporting. It is a problem that regular monitoring systems are not available (exception: Frankfurt) for all of these substances. Moreover, some of the appearances of these substances are transitional phenomena that cannot be necessarily taken as indicators of prolonged changes in the use patterns.

In connection with the use of illegal substances by teenagers and young adults it is important to note that the use of illegal and legal substances (especially alcohol, tobacco but also medical drugs) is often closely linked so that important developments may possibly be neglected when looking at the use of illegal substances in an isolated manner.

#### 2.4 Drug use among targeted groups

# Repatriates and migrants

Substance abuse among migrants is in third place on the list of 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 upon referral continues to constitute a special problem. Mediators speaking the mother tongue of the immigrants could contribute to overcoming barriers both in preventive and curative care and facilitate access to the health care system (Walter et al. 2007).

Studies analysing the explanatory models for addiction-related illnesses of repatriates from the former Soviet Union, migrants from Turkey or native Germans confirm that cultural differences assumed by the explanatory models with regard to substance abuse may lead to communication problems with the personnel of addiction support facilities (Heimann et al. 2007; Penka et al. 2008). The lower usage of health care offers by patients with a migrant background in comparison with native Germans also results from a different conceptual understanding of "addiction" and care structures which are to be called on if necessary. It is not possible to convey medical terms or everyday conceptions beyond merely linguistic notions without taking into account the respective cultural context and related connotations of language. More recent studies on the therapy of people with substance abuse disorders and a migration background can also be found in chapter 5.

# (Techno) party scenes

The popularity of amphetamines, which last year overtook cannabis as the most-used illegal drug within the Frankfurt techno/house party scene, increased slightly further according to the findings of the trend scout survey of the MoSyD (see above). Similar to amphetamine, MDMA also kept its status (as the second most important synthetic dug) in techno party environments. The decline in the significance of cocaine in the electronic dance scene continued. The substance now only plays a subordinate role in comparison to speed or ecstasy. Mostly due to its high price, cocaine differs greatly, particularly in the frequency of its use, from those other drugs. A little more commonly and for several subculture segments, the emergence of higher quality and higher priced cocaine ("flakes") was reported. Especially in the techno scene, cannabis is viewed more negatively than in the past or in other "scenes" due to its association with listlessness and limited social behaviour. The substance, methamphetamine which has been widely discussed in recent times still occupies an extremely minor role, at least in the Frankfurt party scene.

## **Cannabis use amongst students**

Pauly and Klein (2012) investigated the question as to why students use cannabis to a much greater extent than the non-student population<sup>28</sup>. Overall, the presented study (which is based on data which is already over ten years old) offers an overview of how people who are studying use addictive substances in comparison with non-studying members of the population of the same age. It also examines how the addiction problems affect the students'

On this subject, epidemiological data was collected on substance use in the scope of the BMBF funded study, "Addictive behaviour amongst students" which was conducted from September 2002 to February 2004 with N=2,624 students from North-Rhine Westphalia in the ages of 19-30 years old. The findings are based on a questionnaire method and subsequent personal interviews amongst students at the higher education locations, Cologne, Aachen and Paderborn. lives as well as their studies. The data points to huge differences in some areas between students and non-students of the same age category. The collection of information on the prevalence of alcohol and drug consumption amongst non-students was performed through the re-analysis of existing earlier data sets (BZgA Drug Affinity Study, 2001; ESA 1998). The comparison of the student sample group with the non-student subjects in respect of cannabis use in the year before the survey suggests a problem which can only be described as serious: although the same cohorts were surveyed in terms of age, the status of being a student seems to represent an increased risk factor for the use of the illegal drug cannabis. Looking at the picture as a whole, no clear pathogenetic implications can be drawn from the currently available epidemiological individual findings.

## 2.5 Further research results and findings with a focus on diagnostics

# Attachment patterns of cannabis and ecstasy users

Schindler and colleagues (2012) examined attachment patterns of cannabis and ecstasy users with harmful or dependent use, following on from the findings of earlier studies which have shown a connection between opiate dependency and the anxious-avoidant attachment pattern. Their exploratory study investigated whether this connection was also to be found amongst other groups of users<sup>29</sup>. The authors report that the cannabis group demonstrated mostly avoidant and unexpectedly often also secure attachment patterns. In the ecstasy group, all forms of insecure attachment were equally common but there were hardly any secure attachment patterns to be found. According to the authors' estimates, the clear differences between the groups contradict the notion that a general connection exists between the individual attachment patterns and substance based disorders. Due to the small sample and the exploratory nature of the study, the findings would require replication using a larger sized group.

# The Heidelberg Drug Questionnaire (Der Heidelberger Drogenbogen, HDB) – Survey of cognitive-behavioural risk and protective factors in relation to the use of illegal psychoactive substances

Aguilar-Raab, Weinhold and Verres (2011) presented the Heidelberger Drogenbogen (Heidelberg Drug Questionnaire, HDB) as an instrument to collect risk relevant level of knowledge and specific use behaviour for the substance groups cannabis, amphetamine, ecstasy, cocaine and hallucinogens<sup>30</sup>. With its questionnaire items based on the model of drug, set and setting, the HDB has been designed to support all forms of preventive work in practice by operationalising knowledge and behaviour as risk and protective factors. Knowledge which is relevant to action in practice can be an important resource when dealing

On this, the attachment patterns of two groups of cannabis (N=19) or ecstasy (N=31) dependent or abusing young adults who undertook a "clean" form of use of the respective substance was examined using the attachment interview according to Bartholomew.

The inventory was tested using an internet version of a sample of N=2,404. For all modules of the instrument, medium to high reliability coefficients could be achieved, for the behaviour module, very good validity coefficients were identified.

with drugs. In addition to the frequency of use, other important aspects of the use behaviour can be diagnostically collected in order to evaluate the degree of risk of a specific type of use behaviour for a further pathological development.

# Gender differences in patterns of cannabis use

Noack, Höfler and Lueken (2011) examined differences between the sexes in respect of patterns of use of cannabis amongst a sample of N=3,904 students at German universities. The authors reached the conclusion that there are in part considerable differences between the sexes (e.g. in respect of the use of water pipes or the use before going to sleep at night) and that the examination of patterns of use can be an important tool in identifying high risk groups.

## **Validation of the Cannabis Abuse Screening Test**

Following on from the work of Piontek et al. (2011), Legleye and colleagues (2012) compared two versions of the Cannabis Abuse Screening Test (CAST) on a sample of N=140 adolescents and young adults from the ages of 15 to 26 years old who had sought treatment due to their cannabis related problems. In respect of cannabis-related disorders, both versions of the screening instrument displayed comparable and good sensitivity and specificity at a cut-off value of 3, leading the authors to conclude that the full version of the CAST can be used as a screening instrument in clinical setting.

#### 3.1 Introduction

## 3.1.1 Institutions involved and Organisational framework

The primary goal of prevention is to promote the health of the individual, maintain abstinence, prevent and reduce abuse and addiction. The prevention of addiction is - alongside addiction therapy and repressive measures — an integral part of the comprehensive addiction and drug policy of the Federal Republic of Germany. Apart from severe psychological and physical harm done to the individual, substance abuse and addiction also cause enormous damage to the national economy. Prevention of addiction therefore assumes a central position in Germany. Prevention is one of the four main areas of German addiction and drug policy is based on (cf. chapter 1.1.2).

The importance of prevention of addiction has been underlined by the fact that the *National Strategy on Drug and Addiction Policy* (Die Drogenbeauftragte der Bundesregierung 2012a) with its specific measures and aims has been embedded in a wide ranging prevention strategy.

Responsible for the implementation of the *National Strategy on Drug and Addiction Policy* and the pertaining prevention activities are the respective ministerial agencies, in particular the Federal Centre for Health Education (BZgA), the *Laender*, communal administration and the self-governmental bodies of the social insurance funds. Obligated to the principle of subsidiary, this multitude of players makes sure that the preventive measures are broadly spread across all federal levels of the Federal Republic of Germany.

#### 3.1.2 Current developments and trends

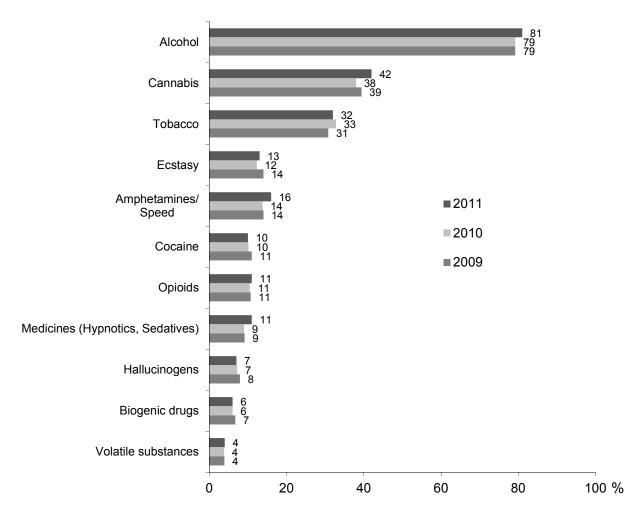
Current substance-related developments and trends have been described in detail in chapter 2. This chapter will therefore only refer to a few particularly relevant aspects.

The study titled "Juvenile Drug Affinity in the Federal Republic of Germany 2011" of the Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, BZgA) examines the illegal substances of cannabis, ecstasy, LSD, amphetamines, cocaine, crack and heroin in addition to the consumption of alcohol and tobacco. In summary, a decrease in consumption comprising the whole range of addictive substances among 12 to 17 year-old adolescents has been recorded between 2001 and 2004. Experience with and the consumption of illegal drugs among 18 to 25 year old young adults is more widespread and appears inconsistent. In fact, even the lifetime prevalence of cannabis use in 2011 has significantly dropped in comparison with 2004, however the low results of 2010 for this age group could not be reached<sup>31</sup> (BZgA 2012).

Lifetime prevalence of cannabis use for 18 to 25 year-old young adults: 2004: 43.0 % - 2010: 35.0 % - 2011: 39.2%. Lifetime prevalence of cannabis use for 12 to 17 year-old adolescents: 2004: 15.1 % - 2010: 7.4 % - 2011: 6.7%.

Cannabis is the most frequently used illegal drug in Germany. Overall, alcohol is the most widespread addictive substance whose consumption often contains risky forms of behaviour. The simultaneous consumption of alcohol and an illegal drug is particularly widespread amongst adolescents (EMCDDA 2009a; Laging 2005). In addition, children and adolescents are particularly at risk due to the use of alcohol. The earlier they start drinking alcohol, the greater the risk that they damage their health and/or develop dependency later on (BZgA 2011).

In order to promote a low-risk approach towards alcohol in all age groups of the population and to reduce cannabis consumption, skilled addiction prevention professionals react with a high number of specific substance-related measures. The data of the documentation system for addiction prevention Dot.sys correspondingly show a concentration of measures specifically related to the substances alcohol and cannabis (Figure 3.1).



Number of prevention activities recorded in Dot.sys with respect to substances: N(2011) = 18,904, N(2010) = 16,373, N(2009) = 16,059

Dot.sys 2011, own presentation.

Figure 3.1 Development of the substances addressed between 2009 and 2011

The use of illegal drugs in Germany is dominated by the use of cannabis (BZgA 2012). For this reason, 42% of the measures documented in Dot.sys<sup>32</sup> broach the issue of the substance cannabis, on the other hand, only 16% of the measures deal with amphetamines/speed: addiction prevention experts orientate the focus of addiction-prevention measures corresponding to the prevalence in target groups.

Notwithstanding the overall decreasing trend of cannabis use by adolescents and young adults, it remains necessary to communicate the risks of the illegal substance cannabis in suitable preventative measures in order to reduce the all too high prevalence of cannabis use in Germany, particularly among young adults. The positive trend of substance use amongst 12 to 17 year-olds will also be accompanied by and supported through suitable addiction prevention measures. Findings from socialisation research and developmental psychology suggest that developments during youth are formative for subsequent stages in life. By preventing young people from getting into substance use, positive effects can be obtained at an adult age: if adolescents have less experience with drugs, both they and young adults will consume drugs less frequently. Furthermore, there are plans to increasingly communicate the existence of aids for quitting (such as www.quit-the-shit.net) in addiction prevention or the programmes of local counselling centres (BZgA 2012).

Compared to the previous year, the substance-related percentage of the measures documented using Dot.sys in 2011 has increased: 59% of the measures (also) deal with one or more substances. In 2010 this number was 48%<sup>33</sup>.

The percentage breakdown of the substance-related measures in 2011 largely corresponds to the breakdown of the previous years (Figure 3.1). It is important to highlight an increase of 4% in addiction prevention measures indicating a substance related to cannabis compared to 2010. The percentage of addiction prevention measures related to the substance alcohol has also increased again: from 79% in previous years to 81% in 2011.

Male adolescents and young adults consume illegal drugs more frequently than female adolescents and young adults (ibid.). In total, the gender-specific approach is not very widespread in addiction prevention. Only 26% of the documented measures were indicated as having a particularly feminine or particularly masculine focus or a focus on both genders (17%). The remaining measures have no particular gender-specific or gender-sensitive focus.

#### 3.1.3 Effectiveness and efficiency in addiction prevention

Prevention activities are carried out by various players in Germany. This makes it possible to take a broad approach and to transfer promising and successful measures into actual practice.

The monitoring system Dot.sys is the documentation system in addiction prevention in Germany (cf. 3.1.3).

A specific substance relation was indicated in 2011 for 18,904 of the measures documented with Dot.sys. In 2010 there were 16,373. This increase lies in the change of input modality in the question based on the content reference: the category system was expanded from the single response in 2010 by the option of selecting multiple categories as an answer in the reporting year 2011.

Central starting points for increasing effectiveness and efficiency in addiction prevention are evaluation, networking and transfer of good-practice examples. In order to guarantee a structured and systemic sustainable exchange and transfer, structures and co-operations at various levels with almost all relevant players have been successfully developed in recent years. Among these are for example also the development of quality standards and the further development of existing quality assurance measures in addiction prevention. In this connection, the BZgA-*Laender*-cooperation group "addiction prevention" (a cooperation between the *Laender* representatives and the BZgA) is equally trend-setting as the events and experts' meetings organised by the German Monitoring Centre for Drugs and Drug Addiction (Deutschen Beobachtungsstelle für Drogen und Drogensucht, DBDD), the BZgA, the German Centre for Addiction Issues (Deutsche Hauptstelle für Suchtfragen, DHS) as well as by many other players, and last but not least the monitoring system Dot.sys (documentation system used for addiction prevention), a joint project of the BZgA and the *Laender*.

The computer-based documentation system of addiction prevention "Dot.sys" is used for creating and presenting addiction prevention measures on a federal, *Laender*, and local level. The system was further developed in 2011 and since then has become available as an online database at www.dotsys-online.de<sup>34</sup>.

The new version Dot.sys 3.0 offers comprehensive evaluation options as a fundamentally new feature. Evaluations are created as tables and graphs in an MS Excel file and saved locally on your computer by request. There the tabular and graphic evaluations of skilled employees and country coordinators are available for further processing. This simplifies reporting on a facility and country level overall, for example the preparation of annual reports.

## Dot.sys

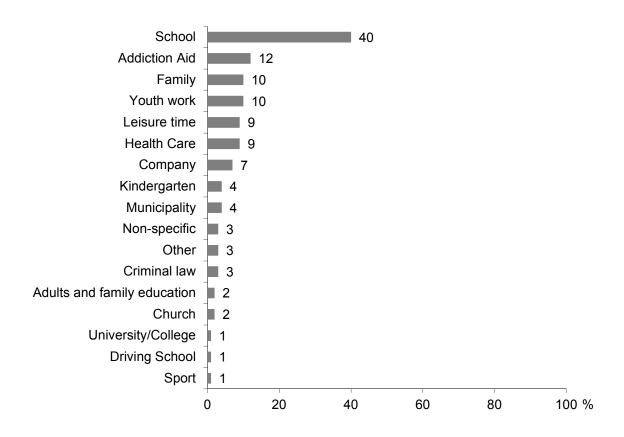
The project *Dot.sys* that is jointly carried out by the BZgA and the *Laender* provides comprehensive information on the prevention activities implemented in Germany within one calendar year. With this, Dot.sys makes an important contribution to reporting on prevention and improving also the quality and transparency in prevention practice. The participating counselling centres, authorities, associations, specialised ambulatories and coordination agencies at Land level permanently document their activities in the electronic data collection system. Documentation takes place on a voluntary basis; therefore no claim can be laid on completeness of the documented prevention measures.

The new version Dot.sys 3.0 is not compatible with the previous version. This means that measures documented in Dot.sys 2.3 could not be transferred to the new system of Dot.sys 3.0. Due to the conversion of the documentation system (software update or switching to the online version), a minor drop in the number of documented addiction prevention measures by

The new version Dot.sys 3.0 has been available to professionals since 2011 and can be used offline on a computer with the Microsoft Windows operating system or online using an internet browser. The two modules of the original Dot.sys system (the input and evaluation module) were integrated into a uniform system. This way the measures can be both documented and evaluated in an application.

an estimated 2,000 measures in 2011 must be highlighted. However, this still has no effect on the interpretation of the addiction prevention measures performed in Germany since the feedback from the individual *Laender* clearly shows that there was no general decrease in their number or no substantive shift as regards the contents of the addiction prevention measures carried out. Due to non-compatibility of versions, the measures carried out in the reporting year 2011 and documented in Dot.sys 2.3 are not considered in the analyses, however.

In reporting year 2011, over 32,000 addiction prevention measures, projects and programmes were documented in Dot.sys 3.0. At the same time 57% of the measures can be allocated to universal prevention, 17% were carried out as indexed prevention and 16% as selective prevention. 11% of the measures must be allocated to structural or situational prevention. As in previous years, the setting "school" is the primary field of action of addiction prevention activities in Germany in 2011 with 40% of the methods performed and documented with Dot.sys (Figure 3.2).



Dot.sys 2011, N=32,095, own presentation.

Figure 3.2 Settings for prevention measures, all prevention types, in 2011

77% of the measures that were carried out in the setting "school" can be allocated to universal prevention. 13% are allotted to selective prevention. 4% or 5% of the measures were carried out in the form of indicated or structural prevention in the setting "school".

68% of the measures in the setting "school" are targeted at end users and 32% at multipliers. 70% of the measures in the setting "school" with the target group of end users are primarily targeted at adolescents between the ages of 14 and 17 and 40% at children under 13. Young adults between the ages of 18 and 27 are addressed by 13% of the measures<sup>35</sup>.

Measures with a specific substance use are performed most frequently with a percentage of 64%. The substances alcohol, tobacco and cannabis also dominate here proportionally. 48% of the measures carried out for end users in the setting "school" represent measures for promoting life skills.

Other selected results show the following:

- In 2011, 54% of the measures carried out were directed at end users. The percentage of
  measures directed at target groups of multipliers fell by 5% to 40% compared to the
  previous year. The trend of declining measures emerging since 2008 directed at
  multipliers continued in Germany for the benefit of an increase in the measures with a
  target level of end users.
  - Some 7% of the entries can be assigned to the area of public relations organisation.
- In 2011, 18,904 measures specifically related to a substance were carried out (59% of the documented measures). The 10% increase of this percentage compared to the previous year <sup>36</sup> can be primarily traced back to a modified input modality. On the subject of substantive focus of the measures, the three categories of life skills (non-substance related), specific relation to substance and behavioural addictions are indicated. Of the approx. 5,500 measures with multiple answers to the question as to the aim of the measure, 49% further stated that the focus was essentially on the specific relation to the substance. Strengthening the participants' life skills was the main focus in 42% of multipurpose measures.
- The focal point of prevention on a federal and Laender level continues to be alcohol, cannabis and tobacco prevention. The measures with a specific substance use concentrated on the substances alcohol (81 %), cannabis (42 %) and tobacco (32 %) as in previous years.
- 44% of the measures were non-substance-specific and aimed mainly at promoting life skills and teaching alternative ways to experience enjoyment.
- 18% of the measures address non-substance related addictions (behavioural addictions). This doubling of the percentage from 9% in 2010 to 18% in 2011 can be explained firstly by the new method of entry (see above) and secondly by looking at the category system: in 2010 a distinction was made between measures with a substantial reference to the internet and other media (4%) and pathological gambling/betting (2%). The category system was further developed for the reporting year 2011 based on feedback on the need for documentation of the skilled professionals working with Dot.sys in addiction

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Multiple answers to the question of which age group a measure is directed at are possible.

<sup>&</sup>lt;sup>36</sup> In 2010, 16,373 measures (48%) specifically related to a substance were carried out.

prevention. The increased percentage of measures with reference to non-substance related addictions reflects the previously reported skilled professional's need to differentiate between the topics addressed. The increase in the percentage of measures against behavioural addictions shows the significance in the field of action of prevention of pathological gambling and prevention of problem video games and internet use in Germany. The sharper delimitation of the categories for the reporting year 2011 reveals that the category of internet/computer addiction accounts for 11%, the category of problematic use of other media accounts for 7% and pathological gambling accounts for 8%: in addition to the exchange of information (73%), the forming of critical opinions (52%) and promotion of skills (40%) are in the foreground of addiction prevention measures.

- The setting "school" still is the primary field of action in addiction prevention with 40% of the documented measures. It is followed by 12% of the measures that were carried out in the setting "addiction help" as well as by measures in the settings "family" and "youth services" with 10% each.
- 28% of the measures are being or already have been evaluated; these were generally internal evaluations.

# 3.2 Situational prevention

#### 3.2.1 Statutory provisions on alcohol consumption

Risky consumption of alcohol or the combined consumption of alcohol and tobacco cause an estimated 74,000 deaths in Germany annually (Gaertner et al. 2012). Compared to alcohol prevention, Germany's policies on tobacco prevention tend more strongly towards combining behavioural and situational prevention. The statutory provisions on the consumption of alcohol are described below.

#### Sale of alcohol

The sale of alcoholic beverages is regulated by the law governing catering establishments (Gaststättengesetz, GastG). If the sale of alcoholic beverages is allowed, non-alcoholic drinks must also be offered for consumption on request regardless of whether alcoholic drinks are ordered or not. At least one non-alcoholic beverage must be provided at a price no higher than the cheapest alcoholic beverage in the same quantity (§ 6 GastG). In addition, the sale of alcoholic beverages to visibly drunk persons is prohibited (§ 20 GastG).

The *Laender* governments determine an off-time for eating and drinking establishments as well as for public places of entertainment. This off-time can be extended, shortened or lifted (§ 18 GastG). Off-times have been replaced in many *Laender* by the so-called maintenance period (Putzstunde) between 5 and 6 a.m. Municipal departments of public order can determine how long a catering establishment is allowed to stay open in derogation thereof. Motorway rest stops are generally excluded from off-times, however no alcohol is sold between 00:00 and 07:00.

§ 19 of the GastG "Prohibition of the sale of alcoholic beverages" states that the commercial sale of alcoholic beverages can be completely or partially prohibited on a temporary basis for a specific amount of time or in a specific area for specific reasons if this is required to maintain public safety or order.

#### Alcohol tax

"The taxation of alcoholic beverages in Germany is distinguished according to the type of beverage" (Gaertner et al. 2012). Spirits and sparkling wine have a tax of €13.03 and €13.60 per litre of pure alcohol, beer has an average tax of €1.97 per litre of pure alcohol. Wine is not subject to taxation.

Gaertner et al. (2012) support a uniform taxation of alcoholic beverages based on the amount of alcohol contained as well as an alignment of the alcohol tax in Germany with the EU average (increase), not least to take advantage of the health care policy potential of the alcohol tax. Elder et al. (2010) were able to show that a significant reduction in alcohol consumption can be achieved with increased tax rates.

The revenues from alcohol tax in Germany in 2009 were €3.1 billion, which corresponds to a decrease of 4.7% compared to the previous year.

## **Drink driving**

The statutory provisions with respect to drink driving are regulated in the Road Traffic Act (Straßenverkehrsgesetz, StVG) and the Criminal Code (Straßgesetzbuch, StGB).

Blood alcohol limits vary according to the group of people (novice drivers, experienced drivers). Novice drivers are banned from having alcohol in their system while driving vehicles during the two-year probationary period. Experienced drivers are allowed to drive vehicles with a maximum BAC limit of .05. If, however, the driver is involved in an accident with a BAC of less than .05, this is considered a punishable act according to the Criminal Code (Strafgesetzbuch, StGB), which under certain circumstances may be punished through a driving licence revocation. A BAC of .03 is punishable if there is indication of insecure driving behaviour.

Penalties can vary greatly for a BAC of .05 or above: from a fine up to driving licence revocation on a permanent basis.

With a BAC over .11, the driver becomes punishable even if there is no indication of driving behaviour or if a traffic accident ensues. Driver's licence revocation, fine or penalty of imprisonment (up to 5 years) as well as compensation/damages to the accident victim is provided as punishment.

If underage cyclists get involved in an accident while under the influence of alcohol, they cannot readily acquire their driving licence. Even a pedestrian under the influence of alcohol can have his or her right to drive revoked by the driving licence authorities in individual cases if he or she has caused an accident.

# Children and Young Persons Act (Jugendschutzgesetz, JuSchG)

The Children and Young Persons Act<sup>37</sup> deals with the topic of "Alcohol" in § 9 "Alcoholic Beverages".

Distributing any type of alcohol to people under the age of 16 is prohibited in Germany. According to the law, spirits may be purchased starting at the age of 18. The distribution and consumption of other alcoholic beverages (e.g. wine, beer and the like) is exceptionally permitted if adolescents are accompanied by a custodial person (parent/guardian) (§ 9 Para. 2 JuSchG).

With the law on levying a special tax on soft drinks containing alcohol (alcopops) to protect young people (AlkopopStG), a message stating "Sale to persons under 18 is prohibited, § 9 Youth Protection Law" is mandatory for the commercial sale of sweet beverages containing alcohol.

There is practically no limit to alcoholic beverages in Germany. In addition, drinking alcohol is socially widely accepted. Only the Children and Young Persons Act offers statutory restrictions on the consumption of alcohol in Germany.

## Consumption of alcohol in public

Regulations on the consumption of alcohol in public are controlled by the *Laender*. For example, as the first major German city, the city-state of Hamburg has had a regulation in place since September 2011 stating that the consumption of alcohol in all forms of public transportation is prohibited within the city. Passengers are neither allowed to drink alcohol nor carry open containers in any underground or city train of the Hamburg Transit Association (Hamburger Verkehrsbund, HVV) or at any stations. This is supposed to prevent alcohol-induced excessive behaviour and violence. Additionally, the authorities are verifying whether it is possible to ban the consumption of alcohol in specific areas or at defined times. Since 1 January 2010, there has been a night-time ban (between 10 p.m. and 5 a.m.) on the sale of alcohol at petrol stations, kiosks and supermarkets. Taking the provisions of the Child and Young Persons Act into consideration, alcoholic beverages can be basically purchased in supermarkets, kiosks and petrol stations during opening hours.

Whether a night-time ban on the sale of alcohol at petrol stations and kiosks is a good idea as a preventive measure is a controversial discussion topic in Germany. The Youth Protection Law already regulates the ban on the distribution of alcoholic beverages to children and adolescents. People keep making stronger demands stating that the existing provisions of the Child and Young Persons Act must be controlled more strictly before more restrictive measures concerning the distribution of alcohol are implemented. Targeted information campaigns and the strengthening of the role model function of adults in dealing with alcohol are also considered a good strategy for reducing the consumption of alcohol among adolescents in Germany.

The Children and Young Persons Act serves to protect children and youths in public. In terms of this law, children are people under the age of 14. Adolescents are people between the ages of 14 and 18.

# 3.2.2 Legal regulations on tobacco consumption

The consumption of tobacco is the leading cause of premature mortality in Germany. In order to successfully curb smoking in all social sections of the population as much as possible, a mixture of structural and legal measures as well as educational and support programmes are required.

Raising tobacco taxes, bans on smoking, bans on distribution of tobacco products to adolescents under 18 or making access to cigarette vending machines more difficult for adolescents are a few examples of structural measures which aim at changing the social conditions of smoking.

Germany ratified the WHO's Framework Convention on Tobacco Control, which came into effect in 2005 and obligated itself in doing so to undertake certain measures of tobacco control<sup>38</sup>.

# Protection against passive smoking

Thanks to the workplace regulations (Arbeitstättenverordnung, ArbStättV) and the Maternity Protection Act (Mutterschutzgesetz, MuSchuG) enacted in 2004, employers are obligated to fundamentally protect non-smoking employees from the dangers of passive smoking. In addition, the Federal Non-smokers' Protection Act (Bundesnichtraucherschutzgesetz, BNichtrSchG) came into effect in Germany on 1 September 2007. Federal employees and public transport passengers are legally entitled to protection from passive smoking, which corresponds to an effective ban on smoking. Additional regulations are controlled by the *Laender* in laws on the protection of non-smokers<sup>39</sup>.

#### **Youth Protection**

The Youth Protection Act<sup>40</sup> deals with the topic of "Smoking" in § 10 "Smoking in Public, Tobacco Products". According to the Youth Protection Act, it is prohibited to distribute tobacco products to children or adolescents or to permit them to smoke at eating and drinking establishments, points of sale or in public. The ban on distribution of tobacco products to adolescents less than 18 years of age has been in place since 2007. There is also a regulation in place that states that tobacco products may only be sold in vending machines if it is guaranteed that children and adolescents cannot purchase them.

#### **Tobacco tax**

Tobacco products are subject to a tobacco tax and VAT. The tobacco tax has been raised step by step in the past few years. Since January of 2012 it has been 9.26 cents per

<sup>38</sup> http://www.who.int/fctc/en/

A good summary of the laws of the *Laender* on protecting non-smokers as well as additional links can be found at: www.rauchfrei-info.de/informieren/gesetzliche-regelungen/laendergesetze-zum-nichtraucherschutz

<sup>40</sup> See footnote 36.

cigarette plus 21.87 percent of the retail price<sup>41</sup>. On average the tax rate is approx. three fourths of the sale price of a cigarette.<sup>42</sup> Cigars and cigarillos as well as fine-cut and pipe tobacco are also taxed. Chewing tobacco and snuff are exempt from taxes as they are not counted as smoking tobacco.

The revenues from tobacco tax in Germany in 2010 were €13 billion, which corresponds to a decrease of 1.5% compared to the previous year.

#### **Tobacco sales**

Under consideration of the Youth Protection Act, tobacco products in Germany can be freely sold and are available in supermarkets, kiosks and petrol stations. The general availability of tobacco products is made complete with additional distribution via cigarette vending machines.

## Advertising tobacco products

The advertising of tobacco products on radio and television has been prohibited since 1975. In January 2007, the German legislation was adjusted to the Tobacco Advertising Directive of the EU (2003/33/EG)<sup>43</sup>. Thereby advertising tobacco products has been banned in newspapers, periodicals, and magazines and on the internet since the start of 2007. Publications that are intended for employees of the tobacco industry as well as print media that do not target the EU market are exempt. It is still permitted to advertise tobacco in cinemas, on posters and on objects such as lighters and ashtrays. Sponsoring events that are directed at multiple EU member states or have other cross-border effects (e.g. Formula 1) is also prohibited. It is also prohibited to distribute free tobacco products at such events.

#### Smoking cessation treatments:

The German Cancer Research Centre (Deutsches Krebsforschungszentrum, DKFZ) together with the BZgA has made available a smoking cessation database online with different programmes at http://www.anbieter-raucherberatung.de/. There, future non-smokers have the ability to find quality-assured, evidence-based programmes for smoking cessation near their homes.

Young adults or adolescents can be easily reached with online programmes for smoking cessation. BZgA has made two target-group-specific online cessation programmes available at www.rauchfrei-info.de (adults) und www.rauch-frei.info (adolescents) (Tossmann et al. 2008).

The retail price of a tobacco product may vary depending on the producer or brand, therefore the respective tax rate is different.

<sup>&</sup>lt;sup>41</sup> The retail price is determined by the producer.

The tobacco guidelines of the EU (2003/33/EG) provide a uniform regulation on tobacco advertisements and sponsoring for all EU member countries. The guidelines are available online at: http://europa.eu/legislation\_summaries/public\_health/health\_determinants\_lifestyle/c11571\_de.htm. The German tobacco law is available online at: http://www.gesetze-im-internet.de/lmg 1974/index.html.

Another example is the nationwide group course "Rauchfrei-Programm" (Smoke-free Programme) <sup>44</sup> offered by certified trainers, which corresponds to the recommendations of the World Health Organisation (WHO Europe) on treating tobacco dependency. Evaluation results verify a high rate of abstinence of 34% to 40% six months after completion of the course.

In order to meet the needs for effective measures to promote smoking cessation among adolescents, an established cognitive-behavioural group programme with motivational elements was developed with "losgelöst". The cessation course includes six 90-minute meetings over three weeks as well as follow-up support components via SMS/phone call in the subsequent four weeks. A multicentre efficacy study with a non-randomised, controlled design and 6-month follow-up showed that "losgelöst is an evidence-based smoking cessation programme for adolescents, which achieves the efficacy of an internationally evaluated smoking cessation programme" (Bühler et al. 2012: 119)<sup>45</sup>.

Another evidence-based programme is pro-active telephone counselling. BZgA phone counselling on smoking cessation with at least three counselling sessions leads to abstinence rates of 34% after one year compared to 21% for one-time counselling sessions (Lindinger et al. 2012).

Since 2011, the electric or electronic cigarette (e-cigarette) has received increasing attention in Germany. E-cigarettes are advertised by manufacturers as a healthier way to smoke. The long-term health effects of using e-cigarettes are unknown, however. Short-term damaging effects on respiratory organs were documented after only a few puffs on an e-cigarette. In a statement from January 2008, the Federal Institute for Risk Assessment (Bundesinstitut für Risikobewertung, BfR) counselled caution with the approach to electronic cigarettes and recommended in a further statement in February 2012 to prohibit smoking e-cigarettes in non-smoking areas. There is no clarity with respect to the health assessment of using e-cigarettes. There is also no legal clarity as to how the e-cigarette product is assessed.

Currently e-cigarettes and liquids are not subject to any uniform regulation or quality control in Germany. The controversy concerning the health hazards of e-cigarettes is accompanied by a legal dispute in Germany.

# 3.3 Universal prevention

Universal prevention forms the mainstay of the prevention activities undertaken in Germany. Universal prevention comprises programmes, projects and activities that address the general population or parts of it that run a low or average risk of developing addiction or dependence. Prevention or help measures are ideally provided in the everyday world of the targeted groups, this also applies to universal prevention measures. Typical activity areas for

http://rauchfrei-programm.de/. The course was developed by the Institute for Therapy Research (Institut für Therapieforschung, IFT) in Munich and commissioned by the BZgA.

<sup>45 14%</sup> of all adolescents who had originally smoked were smoke-free six months after the intervention was completed. The programme was developed by the Institute for Therapy Research (Institut für Therapieforschung, IFT) in Munich and commissioned by the BZgA.

universal prevention measures are schools, workplace settings, communal facilities or sports clubs, to mention just a few (Springer & Phillips 2007).

Universal prevention comprises behavioural and condition prevention measures (BZgA 2007) and are split up into substance-specific, non-substance-related and cross-substance projects. Cross-substance prevention activities are mainly referred to as activities serving to teach life skills or to promote forming critical opinions.

In the last REITOX Report, the German demonstration project "Prev@WORK" was presented as an example of an integrated programme for addiction prevention in career guidance, preparation and training. Prev@WORK is based on current scientific knowledge and is aimed at preventing drug-related work impairment or absenteeism and is based on current scientific findings<sup>46</sup>. A total of 90 skilled professionals from different fields of work were trained as "Prev@WORK" trainers during the duration of the project from 1 March 2011 to 29 February 2012. They conducted 19 pilot training sessions in six *Laender* for a total of 245 apprentices (Schmidt 2012a). Implementation of the project in the *Laender* was incumbent upon the specialist office for addiction prevention in the *Land* Berlin.

The demonstration project was scientifically accompanied and evaluated by the institute StatEval/Free University of Berlin (Freie Universität Berlin): the trained skilled professionals give a positive review of the seminar concept and the transferability to different areas. Participating apprentices expand their knowledge of addiction and consumption of addictive substances as well as the risk competence when dealing with their own consumption behaviour. Apprentices also give a positive review of "Prev@WORK" (StatEval 2012). The evaluation of coach training and pilot trainings as well as of practical application show that "Prev@WORK" is very well-suited for carrying out addiction prevention in professional education in various settings. The aim is long-term implementation of the programme (Schmidt 2012a).

#### 3.3.1 School

Schools are an ideal setting for carrying out universal prevention measures. They provide the broadest access to the main target group of universal prevention and make it possible for preventive measures to be integrated into the school curriculum. Schools are equally suited for substance-related, non-substance-related and cross-substance-related activities.

The programmes run in the setting "school" have been successfully implemented all over Germany for many years. Be Smart – Don't Start, Smoke free School and Class 2000 are mentioned here as examples. The aforementioned programmes are generally made up of different modules ranging from promoting social skills and conveying information to motivating to lead a healthy lifestyle.

The effectiveness of addiction prevention measures at primary school has been intensively examined. Measures that build on the psychosocial approach (promotion of life skills, interventions modifying behaviour) are particularly promising (Bühler & Kröger, 2006). An

http://www.berlin-suchtpraevention.de/Betriebliche Suchtpraevention-c1-I1-k56.html

early start to the consumption of legal drugs has a negative effect on psychosocial development, which is why the application of addiction prevention measures in primary school seems particularly useful. In addition, later consumption of illegal drugs can be predicted if legal drugs are consumed early on (Brook et al. 2002; Hanna et al. 2001; Maruska et al. 2011 McGue et al. 2001). Of the 40% of addiction prevention measures documented in Dot.sys that were carried out in the setting "school" in 2011, 13% were targeted at the social system "primary school". The aim of the measures is to promote (life) skills and to strengthen the resources of children as well as to reinforce (or change) opinions. Additionally, the measures aim to expand knowledge and affect the awareness of children.

The prevention programme "Klasse2000"<sup>47</sup>, developed in 1991 by a team of medical and educational experts from the Klinikum Nürnberg, is allegedly "the most widespread programme on promoting health at the primary level" (Maruska et al. 2011: 303). As part of "Klasse2000", 15 lessons on the topics of life skills and health sciences each (including addiction and violence prevention) were conducted by teachers and specially trained skilled professionals in the first four school years. During the school year of 2011/2012, "Klasse2000" reached over 400,000 children from more than 17,300 primary school classes in all *Laender*.

The project is under constant evaluation<sup>48</sup>. Findings on the implementation and effectiveness are used as a basis for updating and optimising the programme (concept and lessons). This way the teaching materials were revised and tested for all four grades in cooperation with special education teachers: the worksheets of "Klasse2000" are available in three different versions that can be used in special needs schools, mixed-age classes or inclusive education classes.

Even the first efficacy study of 1991/1992 through 1994/1995 showed that "in Klasse2000 classes, fewer children than ever smoked cigarettes than in control classes at the end of the fourth school year" (Maruska et al. 2011: 302). Indications of the effectiveness of "Klasse2000" with respect to substance use refer to the end of the four-year intervention – in other words to the end of primary school. Until now, two follow-up interviews have examined whether and which effects there are beyond primary school: a spot check on primary school children in Hessen was carried out approx. 16 months after the end of the intervention<sup>49</sup> (in the 6th grade). The results of this follow-up interview are seen "as very promising" based on the use of substances (IFT-Nord 2010: 3): there is a mid-term effect with respect to delaying the start of substance use (starting cigarette and/or secret alcohol consumption) The same spot check on primary school children in Hessen was repeated in early summer 2011, this

Every year, teachers, pupils and parents complete a questionnaire on their experience and satisfaction with "Klasse2000": the programme's contents are well rated, are considered to be practical and have a high rate of approval.

<sup>47</sup> http://www.klasse2000.de/index.php

<sup>&</sup>lt;sup>49</sup> Controlled group study with repeated evaluations throughout primary school years (academic years 2004/2005 to 2007/2008).

time on the 7th grade<sup>50</sup>. This evaluation found effects on substance use and health behaviours still present three years after the end of intervention. "Klasse2000" achieves "long-term effects especially in terms of substance use" (IFT-Nord 2012: 3) compared with children who have never taken part in the programme.

Approximately one in ten interventions follows the approach of peer education. Peer education approaches are based on the assumption that fellows of the same age (peers) are better suited than for example teachers or counselling experts to create favourable preconditions for initiating learning processes. This is, among others, attributable to greater social closeness between peers, the use of common language codes and thus to greater authenticity (Backes & Schönbach 2002). Teenagers, who are willing to assume the roles of peers, are trained to provide support as experts in problem situations and to promote problem-solving skills among their fellow students. Peers thus serve as prevention helpers at ground level, i.e. also at places where legal and/or illegal drugs are consumed.

As early as 2004, a mobile learning and hands-on project on the topic of addiction was developed in Prignitz, Brandenburg using the components of the "Multiplier Project", "Creative and Design Project" and "Peer Project". The drug prevention recourse "ERZ 05"<sup>51</sup> has the theme of "Don't teach me - let me learn" and is aimed at students in grades 7 to 10 (starting at age 13), at children and young people in clubs, youth welfare institutions as well as teachers, social workers and parents. The substances alcohol, nicotine and cannabis are also discussed as well as the risks of PC gaming, eating disorders and the help system in the region at a station of the course each. Children and teenagers tackle the issue of addiction in a playful and independent manner and get to know the range of different addictions and get the opportunity to examine the level of addiction in their own behaviour.

The course is accompanied by technical students undergoing educator training. They receive training for the job in a multiplier project for one year. The project is embedded in the curriculum for training nationally recognised educators in Prignitz<sup>52</sup> (Die Drogenbeauftragte der Bundesregierung 2012a).

Children at the end of grade 7 are approx. 14 years old and are thereby at the age to start consuming tobacco and alcohol.

www.shp.suchtpraevention-brb.de/Projekte/Parcours/parcours.html

<sup>&</sup>lt;sup>52</sup> 58 technical students have been trained so far. More than 2,000 students, approx. 75 teachers and 35 parents have taken part in the parcours.

## **3.3.2** Family

As the most important and constant socialisation instance for children and adolescents, the family assumes an important role in the field of work of prevention. Until the start of puberty, the family exerts the largest influence, positive or negative, on the norms and values adopted by children and thus also on forming different modes of behaviour. Parents and siblings, but also close relatives and acquaintances often serve as role models whose lifestyles are consciously or unconsciously - imitated and adapted to. Given this, the family also has a great influence on the health education and thus on the health condition of the child.

10% of the measures documented in Dot.sys in 2011 were implemented in the setting "family". The majority of addiction prevention measures that reach the social space of the family come in the form of indicated prevention at 43%. The percentage of measures that are carried out as universal prevention is somewhat lower at 31%. 21% of the measures are allotted to selective prevention. End users (78%) are addressed first and foremost. Parents and family members (43%), adolescents with experience in consumption (22%) and/or children and adolescents (17%) are contacted with the measures that are aimed at achieving a change in attitude or reinforcement of the intention to remain abstinent, expanding knowledge and promoting skills / strengthening the resources of the respective target group. The substance-specific measures conducted in the setting "family" are concentrated on alcohol (69%) and cannabis (51%) as in the previous years. In total, 54% of the measures were carried out related to a specific substance. The category of life skills (non-substance-related) accounts for 35% of the measures and the content level of behavioural addictions accounts for 28%.

Parents and guardians have a major influence on the psychological development of their children. Part of the federal government's strategy to promote children's health is supporting them in their parenting skills and promoting better health as well as more equal opportunity for children and young people<sup>53</sup>.

The project "Strong Parents - Strong Children" provides help for better mental health of children and youth and is a service of the German Child Protection Association. "Strong Parents - Strong Children" is a range of courses for parents which has continuously evolved in the last 10 years on the basis of evaluations (evaluations in 2002 and 2009)<sup>54</sup>. Parents who participate in the course raise the level of their positive parenting, reduce negative behaviour patterns and are able to perceive the positive characteristics and strengths of their child sand thereby promote the psychosocial protective factors of the child (personal protective factors). The project supports parents in building family protective factors,

http://www.bmg.bund.de/fileadmin/redaktion/pdf\_misc/psychische-Gesundheit\_01.pdf

http://www.sesk.de/CONTENT/SHOWPAGE.ASPX?CONTENT=637&TPL=7

<sup>55</sup> http://www.starkeeltern-starkekinder.de/content/start.aspx

strengthening the child's basic skills and thereby counteracting the child's development of an addiction<sup>56</sup> (Lyssenko et al. 2011).

Another example for strengthening parenting skills is the prevention programme "Elterntalk" that has been offered in Bavaria by the Aktion Jugendschutz Landesarbeitsstelle Bayern e.V.<sup>57</sup> for 10 years. The low-threshold and everyday-world-oriented outreach education by parents for parents with children up to the age of 14 reaches out to parents of different backgrounds and lifestyles in panel discussions on the topics of media, drug use and addiction prevention. "Elterntalk" is based on the peer-to-peer method and aims at strengthening the ability of parents to raise their children with the help of parents. The discussions take place in a private environment and are moderated by parents who previously received special training. The sharing of experiences can take place in Turkish, Russian, and German or in a different language upon request.

Increasing demand and sustained development based on (internal and external) evaluations has led to the development of a Bavaria-wide network. "Elterntalk" is carried out at 35 locations in Bavaria.

## 3.3.3 Community

To be holistic and sustainable, addiction prevention needs to involve not only family and school but also the social environment of children and teenagers. It is imperative for communities, cities, regions and districts to participate in the development and implementation of prevention measures. In this context, communities are not only to serve as a setting for the implementation of these measures but they are to assume a more active role. Generally speaking, the role of a community as an active player in addiction prevention strongly depends on its size or more specifically on the number of inhabitants. Small municipalities often do not have the staff and financial resources to implement preventive measures at the local government level.

Community-based addiction prevention activities are often carried out in inter-community and supra-local cooperation projects with various local partners being involved like for example addiction prevention facilities, churches, self-help organisations, local clubs and institutions, parties and associations, etc. Apart from kindergartens and schools, especially organised and non-organised recreational settings as well as the public health sector serve as fields of works for community-based prevention.

Cinema is particularly suited for extra-curricular learning as an attractive leisure destination. Moreover, close cooperation of all parties involved in drug prevention is critical to the success of early prevention measures. As a result, the JugendFilmTage (Youth Film Days) "Nicotine and alcohol – On the lookout for everyday drugs" are held by the BZgA in close

This is based on the assumption that psychosocial protective factors may contribute to the prevention of addiction illnesses. Life skills such as communication, relationship and problem-solving skills are considered as important factors in the prevention of addictions, eating disorders and depression in resilience research.

http://www.elterntalk.net

cooperation with regional partners for drug prevention<sup>58</sup>. In 2011, events were held for pupils aged 12-19 in 16 cities. At the same time, teachers receive further training in order to follow up on hands-on activities and films from the JugendFilmTage in the classroom.

# 3.3.4 Recreational and sports settings

Apart from the aforementioned fields of work (school, family and community), recreational and sports settings are important areas of activity for universal prevention measures. More than 70% of all children and teenagers are, at least for a short time, members of a sports club. Sports clubs exist throughout the country and thus guarantee high accessibility to children of different social strata including the socially disadvantaged ones with a low risk of stigmatisation of this target group.

Addiction issues frequently start in childhood and adolescence, long before young people come into contact with legal or illegal drugs. In order to prevent the development of addiction, prevention therefore must be applied early on and on a comprehensive basis.

The aim of the campaign "Making children strong" by the BZgA is for example to strengthen the self-confidence and self-esteem of adolescents and to encourage their conflict-resolving and communication skills (cf. REITOX Report 2010, 2009). It is essential for children and adolescents to learn how to say "no" to all types of drugs even under peer pressure.

In addition to parents and teachers, coaches and their staff in sports clubs are important people in a position of trust who can "make children strong". Cooperation with grassroots sports is particularly important in this case. The campaign has for many years successfully cooperated with sporting associations that have many members in Germany. In 2011, about 2,700 multipliers were sensitised and trained for addiction prevention in athletic associations and 1,400 support packages <sup>59</sup> were sent to sports clubs to support their own measures.

Strong association ideas, or in other words good examples from the associations for addiction prevention in connection with "Making children strong", are presented on the website www.kinderstarkmachen.de.

In 2011, the "TEAM 2011" competition was held as part of the Women's Football World Cup together with the German Football Federation (DFB). More than 800 cooperative projects have been completed between schools and football clubs. On this successful foundation, the DFB is planning a new initiative under the motto of "Doppelpass 2020", which is actively supported by the BZgA campaign "Making children strong". The initiative enables multipliers from schools and football clubs to be informed on the important issue of early addiction prevention under the motto of "Making children strong" and to raise awareness and motivate each other to take action individually or together.

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Approx. 120,000 students as well as approx. 7,500 teachers have taken part in the JugendFilmTagen so far.

The BZgA provides sports clubs and facilities with free packages of materials in connection with the events under the motto of "Making children strong" on request, including brochures and pamphlets on the subject of addiction and prevention as well as T-shirts, games and promotional materials (balls, lesson plans, string games, balloons).

## 3.4 Selective prevention

Selective prevention is addressed to groups of people who have a significantly higher risk of developing addictions than the average population. This risk can be imminent or a group of people can carry a higher risk of developing addiction through their whole lives (Springer & Phillips 2007). Biological, psychosocial, social and environmental influences are to be taken into account as risk factors. Selective prevention measures are for example developed for:

- early school leavers
- socially disadvantaged people
- homeless youths
- people with a migrant background
- children and teenagers from families with addiction problems
- teenagers with use experience
- clubbers

The target groups of selective prevention measures are often addressed in recreational settings. Interventions for socially disadvantaged youths or children and teenagers from families with addiction problems are often carried out in school and pre-school settings. Generally speaking, this approach has the advantage of using existing resources at an early stage. However, the risk of stigmatising target groups by selective prevention activities cannot be denied. Therefore, advantages and disadvantages need to be carefully weighed.

To reach the target group of problematic drug-using young people under the age of 18 outside of school, the approach of street work (street-based social work) offers access to (socially disadvantaged) young people in difficult, stressful or dangerous life situations. Other approaches include for example the multidimensional family therapy and family outreach therapy.

The demonstration project "Family outreach therapy for risky drug-using adolescents and their families" was conducted from August 2008 to July 2011. The main target group of the project are (socially disadvantaged) families whose children have attracted attention through risky alcohol and cannabis consumption. To apply the approach of the outreach family services (AFT), the existing network of support structures has been intensified in the model region.

The project was scientifically monitored. The analysis of the project's progress, the follow-up as well as the structural features of the region showed that the studied approach can reach out very well to the group of vulnerable adolescents up to the age of 18 who use cannabis and alcohol problematically. In addition to successful reduction in drug use among young people, the project improved the communication structure in the family, raised parenting skills and the self-efficacy of young people and led to a change in attitude, so that the families could achieve basic readiness for treatment in the case of recurring problems. The

Federal Ministry of Health (BMG) recommends implementing this approach, "where young people are effectively met with problematic mixed use of alcohol and cannabis before the age of 18, and where diverse and well-established cooperation between youth welfare and addiction care facilities already exists on a regional level "(BMG 2012).

# 3.4.1 At-risk groups

# Socially disadvantaged groups

People living in socially difficult circumstances are very often placed at particular health risks. Statistically, the risk of falling seriously ill or dying earlier is twice as high for people from a lower social class than for those from higher social strata. Social disadvantages thus create inequality in health conditions (BMG 2008). Poverty, unemployment and a low social status are further risk factors favouring the onset or aggravation of addiction-related problems. It is therefore particularly important to promote and strengthen this group of people in the development as early as possible. However, children and teenagers with promotional needs often do not have the personal, social and/or cognitive skills to sufficiently translate prevention contents so that the "usual" prevention measures are hardly useable for the work with these children and teenagers.

# Addiction prevention for people with a migration background

Addiction prevention for people with a migration background comprises a multitude of measures ranging from establishing contact with a public addiction facility over activating and supporting self-help initiatives to strengthening the personality and reducing the risk of developing addictions. These activities are generally embedded in comprehensive measures to promote the social and societal integration of immigrants, which are for example funded by the Federal Ministry for Families, Senior Citizens, Women and Youth (Bundesministerium für Familie, Senioren, Frauen und Jugend, BMFSFJ) or by the Federal Agency for Migration and Refugees (Bundesamt für Migration und Flüchtlinge, BAMF).

In comparison to the German population, the education and income level of the population with a migrant background is lower, although this group of people is heterogeneous (cf. REITOX Report 2011). Migrants are faced with barriers to the help system. Communication problems, lack of information or fear of sanctions on legal residence may prevent migrants from looking for addiction support facilities (Süzen 2010). In addition, questions of addiction and addiction prevention are a taboo in many families with a migrant background. This is where the project titled "Training of "Neighbourhood Mothers Berlin" in the 'addiction prevention' project component" of the Fachstelle für Suchtprävention im Land Berlin e.V. comes in. Women with a migrant background, so-called neighbourhood mothers, are trained for health and education issues, look for families at home and speak to the mothers and fathers about education issues, healthy upbringings, nutrition, media consumption and drug use over ten meetings. They help those affected make contact with counselling centres and then accompany them there. Basic knowledge and interview techniques are taught to

neighbourhood mothers in training modules that take into account the diversity<sup>60</sup> of the participants. Information materials in multiple languages, practical seminar organisation and close cooperation with the patron associations of the neighbourhood mothers allow the goals to be reached. The aim of the project is, among others, to qualify and sensitise the "Neighbourhood Mothers of Berlin" with respect to addiction prevention and awareness, thereby creating and strengthening role models. The neighbourhood mothers contribute to improvements in the healthy development of children from socially disadvantaged families, strengthen family networks and support systems for families and help break down barriers to access to the help system.

Particular strains during childhood and adolescence, such as separation of parents, failure in school, lack of parental support and also radical separation from their homeland can interfere with the development of children and young people and make them more susceptible to potential drug use. In addition to training leaders and key individuals, parents and family members, social training courses, as with experiential learning activities have proven to positively influence attitudes and enhance problem-solving behaviour. The "Integration Through Sport" programme of the German Olympic Sports Federation (DOSB), sponsored by the Federal Ministry of the Interior (BMI) aims to provide immigrants with framework and orientation by strengthening their self-esteem through athletic success and the fixed system of norms and rules so that they become less prone to addiction (Die Drogenbeauftragte der Bundesregierung 2012a).

Other objectives of (integration) projects for people with a migrant background who receive support from the BMI or BMFSFJ, for example, include enabling immigrants equally to participate in social life, to strengthen their skills or to improve the acceptance of immigrants by the host society (Die Drogenbeauftragte der Bundesregierung 2012a).

The aims of the regional project titled "Equal or different or what?" of the Wuth-Farnroda community in Thuringia include improving the self-esteem of children from problem families in particular, providing alternatives to substance use and conflict resolution mechanisms and the integration of young foreigners into their "new home" without losing touch with their country of origin. The project is aimed at children with and without a migrant background, as well as children and young people with a problematic family environment, who spend their free time in the "Nest" Children's Club or the integration project of the children's leisure centre<sup>61</sup>.

As a person with his or her own culture, language and experience, a child has the chance to play a part in the programmes intensively supervised by the skilled professionals in a group of a maximum of 12 children aged 10 to 15 years. These programmes allow children to learn tolerance and acceptance and to develop perspectives for the future in their new country.

<sup>&</sup>lt;sup>60</sup> "Diversity describes the characteristics and contexts in which people differ or are similar to each other" (Altgeld 2011, p. 53). In this respect, diversity refers to the primary dimensions of age, gender, ethnic/cultural background and religion/world view, among others.

The "Nest" children's club is located in the Wutha-Farnroda community. More people with a migration background/asylum status live in the community than in comparable neighbourhoods in the region.

The project has been carried out since 1998 and its aim is to promote understanding among the children and to encourage communication and mutual tolerance. Parents become involved through group work.

#### 3.4.2 At-risk families

## Children and adolescents from families with addiction problems

At present, about 2.65 million children and teenagers living in Germany have a parent affected by an alcohol-related disorder (abuse or dependence) and another 40,000 children and adolescents live with a drug-dependent parent. An estimated 6 million adults grew up as children in families with addiction problems<sup>62</sup>. Substantive scientific findings show that children from families in which at least one parent is affected by alcohol or drug dependence run a higher risk of developing addictive diseases themselves than children from families without addiction problems. Therefore, children and adolescents from addiction-stricken families form one of the largest known target groups of selective prevention measures. Reasons for the higher risk of developing addiction are among others domestic violence, separation and divorce of the parents, physical and emotional abuse or also sexual abuse that occur more frequently in addiction-stricken families than on average (Thomasius et al. 2008).

In order to help children and young people from families with addiction problems, a coordinated action of all participating organisations and institutions is necessary, as called for in the Federal Child Protection Act (Bundeskinderschutzgesetz, BKiSchG)<sup>63</sup> and in the Act on Cooperation and Information in Child Protection (Gesetz zur Kooperation und Information im Kinderschutz, KKG). Prevention and intervention programmes in Germany for children and their drug-addicted parents are offered by outpatient and inpatient addiction support services, self-help and as online projects, for example, "KOALA e. V. – Kinder ohne den schädlichen Einfluss von Alkohol und anderen Drogen e.V." as well as "Drogenhilfe Köln e. V." and "Interessenvertretung für Kinder aus Suchtfamilien e. V." Difficulties in the implementation of measures for children and adolescents from families with addiction problems are often caused by the lack of financing, recruitment problems and poor networking (DZSKJ 2012).

That is why cooperation and networking are important criteria for the 5th competition presented in the REITOX Report 2011 titled "Exemplary local addiction prevention strategies" on the topic of "drug prevention for children and young people in particular life situations" (DifU 2011).

As an example, one of three projects of the winning contest entry of the Free and Hanseatic City of Hamburg is presented below with "KisEl – Help for children of addicted parents". In

Art. 1 Act on Cooperation and Information in Child Protection (Gesetz zur Kooperation und Information im Kinderschutz, KKG), http://www.bmfsfj.de/BMFSFJ/kinder-und-jugend,did=119832.html

65 www.nacoa.de

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<sup>62</sup> www.fruehehilfen.de

<sup>64</sup> www.kidkit.de

2005, Hamburg created the concept of "drug-free childhood and adolescence" in collaboration with multiple agencies and in the process put a focus on young people in particular life situations. The network project "Lina - Pregnancy and child addiction" <sup>66</sup> and "connect – help for children of addicted parents" of the Hamburg regional office and the Office of Drug Prevention were summarised under the project "KisEl".

"Lina" addresses at-risk families as early as pregnancy and enables holistic and comprehensive care for pregnant women who are at risk of addiction or who are already addicted and their families with children up to the age of one through the cooperation of the contributors involved<sup>68</sup>. In addition, the database of the web portal offers an overview of all programmes available in Hamburg as well as opportunities for the contributors to communicate.

The objective of the expert network "connect" is to provide an effective support network for the target group of families with dependency sufferers. Interdisciplinary case discussions are in the foreground. To improve the situation of children on a resource-oriented basis, the network is oriented towards the regional context, which is provided through the cooperation of the areas of addiction support services, youth services, obstetrics and general medical care, day care, school and leisure facilities in the district (social space).

The basis for binding and lasting cooperation is cooperative agreements between the various partners and institutions in which standards and objectives of the assistance were established. The quality of the programmes for children and young people from families with addiction problems in Hamburg is backed by a high level of standardisation, e.g. in case-related counselling, and by scientifically conducted evaluations and impact studies (DifU 2011).

The federal demonstration project "Trampolin" was presented in the 2010 REITOX Report. It is a modular approach to prevention for children aged 8 to 12 from families affected by addiction problems<sup>69</sup>. The German Centre for Addiction Research in Childhood and Adolescence (Deutsches Zentrum für Suchtfragen des Kindes- und Jugendalters, DZSKJ) and the German Institute for Addiction and Prevention Research (Deutsches Institut für Sucht- und Präventionsforschung, DISuP) developed, implemented and revised the design and evaluation of "Trampolin" during the project period from 1 October 2008 to 31 March 2012. The scientific study of the effectiveness of "Trampolin" was a prospective, randomised controlled study design. The survey of parents and children took place at three times of measurement. There are plans to publish the evaluation results in scientific journals.

<sup>66</sup> www.lina-net.de; cf. REITOX report 2009.

www.sucht-hamburg.de/projekte/connect; cf. REITOX report 2010.

<sup>&</sup>lt;sup>68</sup> More than 60 institutions and organisations signed a framework agreement on cooperation in February 2008.

<sup>69</sup> www.projekt-trampolin.de

<sup>&</sup>quot;Trampolin" aims to prevent negative developmental trajectories in children of families with addiction with methods of resilience promotion and encourage children to build their own resilience and protective factors.

There are also plans for more training opportunities for skilled professionals and expansion of the "Trampolin" website as well as to develop long-term follow-up history in relation to the children involved. The issues of specific measures and challenges for research and practice resulting from the evaluation were discussed as part of the final conference in February 2012. Hence, strengthening the network of youth services and medicine, the abandonment of strict separation between prevention and treatment and the establishment of "Trampolin" as a standard programme for children of families with addiction issues were discussed as challenges to the practice (DZSKJ/DISuP 2012).

Overall, work is being done in Germany to further improve networking in the context of "early support" for children and adolescents from families with addiction problems in order to complete the cooperative task of the institutions and contributing parties involved, which was formulated in the BKiSchG and in the KKG. "For a coordinated action of prevention, early support, advice and care facilities are essential for protecting the children in affected families" (Schmidt 2012).

## 3.4.3 Selective prevention in recreational settings

Prevention measures carried out in recreational settings offer the possibility of addressing a very heterogeneous group of children and teenagers. These may be teenagers meeting in a youth centre, early school leavers in a youth welfare centre or clubbers. Among them often are teenagers with drug use experience, socially disadvantaged youths or juvenile delinquents who require different prevention responses than youths without substance use experience.

Generally speaking, recreational settings may be split into an organised and a non-organised area. The prevention measures undertaken in the organised area (youth aid institutions, church-run organisations, community-based youth centres) are often derived from the Law on children and youth welfare (Social Security Codes, SGB VIII). These measures mainly aim at promoting children and teenagers in their development and helping them to become social individuals capable of living in a community.

The described heterogeneity clearly shows the importance of taking into account the different life spheres of the adolescents and not restricting prevention measures merely to achieving abstinence or use reduction but aiming them instead at teaching risk competence and risk management skills.

In the non-organised area, prevention of addiction is more open. This means that activities and offers are low-threshold and generally voluntary. They mainly aim at minimising behaviours that are harmful to health and at promoting responsible substance use. In the non-organised area, prevention work is based among others on the guidelines of acceptance-based drug work and resource-oriented prevention. These approaches are to be found in numerous scene or party-based projects offered in many, mostly larger cities. Activities undertaken within the frame of such party projects are mostly carried out by drug

agencies or addiction prevention facilities respectively in cooperation with local clubs, discotheques or organisers of music and party events.

The "Drugstore music scene project"<sup>70</sup> is such a low-threshold drug prevention project in the non-organised recreation area in Thuringia, which is funded by the Thuringian Ministry of Social Affairs, Family and Health. There is a good network of other information centres available through the sponsorship of the SiT addiction support services in Thüringen GmbH.

"Drugstore" is aimed at teenagers and young adults, who may come into contact with, experiment with or use drugs. The main objective of the project is to minimise the target group's risks that arise from the use of illegal and legal drugs and to raise awareness of a health-promoting attitude towards their own bodies. The music scene project reaches approx. 1,000 people annually at music events (7-10 parties and 2 multi-day festivals per year) and receives a daily average of 375 hits on the website for news and advice with the low-threshold counselling programme at music events. It offers a mobile home, education or counselling via e-mail and telephone, safer use campaigns, continuous updates of information on the website as well as other programmes.

The success of the project's work so far is reflected in the constantly growing number of visitors to the website, in the growing demand for the project's information materials as well as in the numerous contacts to cooperative organisers of the music scene in Thuringia.

# 3.5 Indicated prevention

The target group of indicated prevention measures are persons who have a high risk of developing addiction. In this connection, the necessity of indicated prevention measures is derived from the existence of important individually attributable indicators that promote the later development of addiction. In contrast to selective prevention, indicated prevention is generally carried out at an individual level, and this means it is not about the identification of groups of persons who fit the mentioned criteria (EMCDDA 2009b).

# 3.5.1 Children and teenagers at risk with individually attributable risk factors

Behavioural disorders in children are a central risk factor for the development of addiction-related problems at teenage and adult age. There are indications of psychological problems for a total of about a fifth of all children and teenagers. About 10% display psychological problems, i.e. specific disorders ranging from anxieties over depression to social behaviour disorders (RKI 2007b). Psychological disorders are significantly more common in children and teenagers with a lower socio-economic background than in children and teenagers with a higher socio-economic background. These children and teenagers generally have lower social and personal resources and thus run up against additional problems (cf. also the passage on socially disadvantaged youth in Chapter 3.3.1).

<sup>&</sup>lt;sup>70</sup> http://www.drogerie-projekt.de/

Explanatory models of psychological disorders meanwhile comprise both risk factors and protection factors. Family cohesion has a protective effect with respect to psychological disorders, i.e. it considerably lowers the risk of developing psychological disorders. Family cohesion is also a central protection factor with regard to the development of substance-related addictions. These risk and protection factors should by all means be taken into account both in the prevention of addiction and in the treatment of behavioural disorders in children and teenagers.

#### 3.5.2 Children with ADHD

It is currently estimated that about 3-10% of children and teenagers are affected by an attention deficit/hyperactivity disorder. Numerous studies showed that children with ADHD run a significantly higher risk of developing an addictive disorder (Thomasius et al. 2008).

There is currently no information available on prevention measures currently carried out for children and teenagers with ADHD.

# 3.5.3 Early recognition and early intervention

At the interface between indicated prevention and therapy, measures have meanwhile been established which are assignable to the term "early intervention". The target group of early intervention measures is characterised by problems caused by increased substance use and/or problems that are closely linked to it. This group of people has a very high risk of developing addiction. However, at the time of the intervention, it does not meet the criteria of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) or the International Classification of Diseases (ICD-10) criteria (yet) (EMCDDA 2009b). In general, treatment can only be initiated if dependence has been established by a diagnosis according to DSM-IV or ICD-10.

In 2011, 24% of the addiction prevention measures were attributable to an early intervention programme. As can be seen in the data of the Ot.sys monitoring system, 68% of the measures for early detection intervention are directed at end users, while the measures targeting group multipliers amount to 32%. Mainly the substances alcohol (56%) and cannabis (32%) are discussed.

The federal demonstration project "SKOLL (self-control training) – early intervention for risky drug users of psychotropic substances and people with risky behaviours" was already presented in the REITOX Report 2011<sup>71</sup>. The project, which was funded by the Federal Ministry of Health from November 2008, lasted about three years<sup>72</sup>. During this period, "SKOLL" was implemented in 27 locations throughout Germany and 150 courses were held with an average of eight participants. In the two-year monitoring study conducted by the

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The aim of "SKOLL" is to motivate people with risky drug use or behaviour to develop a responsible attitude or to reduce/quit their use of drugs. To this end, "SKOLL" pursues a cross-substance strategy.

The final conference presenting the results of the evaluation took place in February 2012.

University Medical Centre Hamburg-Eppendorf (UKE), "SKOLL" was examined for its broad impact and treatment effects of programme implementation.

The following evaluation results can be reported:

"SKOLL" is a powerful programme for early intervention against the risk of dependency and has made "several months of stable health gains" (Kliche 2012) among participants. The risk behaviour of participants (drug use and risky behaviours) can be stably reduced over the course of several months. In a subjective evaluation, participants additionally confirm the achievement of programme goals such as reducing consumption, risk awareness and the development of self-confidence, finding alternatives to risky behaviour or making and maintaining social contacts. Since "SKOLL" supports skills of conduct and self-control, the project is equally well suited for all groups of people, regardless of the demographic variables of the participants. In addition to the independence of the participants' individual characteristics, it is evident that the different forms of dependencies and types of risk have no effect on the success of the project either. Those who benefited most were participants who each displayed a more distinct risky behaviour (separate, particularly distinct risky behaviour or low/multiple/or high-risk behaviour).

"SKOLL" has been continued at most locations. Since the groups are composed on a cross-drug basis, "SKOLL" may fill a possibly existing gap in the programme of the specialist office, making it especially attractive for sparsely populated areas. Experience has shown that no existing programmes were terminated. Instead the programmes were generally supplemented with "SKOLL". "SKOLL" additionally creates new access paths and offers opportunities for communication. In the care facility it is able to enhance cooperation with schools, judiciary or educational institutions, for example.

The internet portal of the BZgA on drugs and addiction prevention www.drugcom.de, which was established in 2001, offers quality-assured information and advice on legal and illegal drugs, and is aimed at drug-savvy teenagers and young adults in the age group of 15 to 25 who occasionally or regularly use drugs. Another relevant target group are multipliers in the field of addiction help, drug prevention and school and youth recreation. www.drugcom.de is the central element of the BZgA for the prevention of substance abuse and substance dependence on illicit drugs and continues to strengthen its position as an interface element between drug dependence and addiction.

In addition to a multitude of information services, such as the drug lexicon as a module for imparting knowledge, the internet portal offers various communication and consultation opportunities, such as the "Check Your Drinking" self-test and "Cannabis Check" for people to examine their own consumption behaviour for the most widespread psychoactive substances in Germany, alcohol and cannabis. So far 1,053,029 people have tested their consumption behaviour using a self-test at www.drugcom.de (Status as of: 30 June 2012). The aim of the self-test is to encourage participants to critically reflect on their consumption and to motivate them to change their behaviour if possible. In 2011, 2,700 users visited www.drugcom.de daily; in its starting year there were 330.

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Internet-based interventions for the treatment of problematic substance use can be successfully applied in drug prevention. In addition, the internet is used and adopted by adolescents and young adults as a low-threshold information and counselling offering (Van Eimeren & Frees 2010). With its internet-based short-term intervention programme for young cannabis users "Quit the Shit", BZgA has offered effective support for those who want to control or reduce their cannabis use since 2004<sup>73</sup>. Since August 2004, 3,572 people have taken part in "Quit the Shit" (status as of: 30.06.2012).

To see whether people who are ambivalent towards their substance use or show a low propensity for changing their behaviour can also be offered low-threshold counselling services, the BZgA conducted a study of single chat interventions in the period 30.09.2010 to 28.02.2011 at www.drugcom.de.

The study examined whether and what effects can be achieved in the aforementioned group of people in a single chat intervention. The intervention was controlled using a randomised controlled trial and two follow-up interviews (after one and three months). Participants were recruited via the self-test, among others (Jonas et al. 2012).

One-time chat intervention against problematic substance use (alcohol and cannabis) could not achieve any change in attitude or behaviour (reduction of consumption) or an increased use of professional help among ambivalent users. Willingness to change does increase and a significant decrease in alcohol consumption can be observed in the control and intervention group, however, this was not statistically secure and attributable to the intervention.

The short duration of the intervention and the form of the chat (text-based) in addition to the small sample size  $(n = 207)^{74}$  are indicated as possible reasons for the lack of significant effects of one-time interventions. Since internet-based interventions are estimated to be a "promising addition to traditional assistance programmes" (Jonas et al. 2012: 180) in the treatment of addiction illnesses, it is recommended to make online interventions for drug users with ambivalent attitudes to change longer (than a one-time intervention) and more binding by adapting them for example to the successful model of "Quite the Shit".

### 3.6 National and regional media campaigns

National and regional media campaigns are instruments of universal prevention activities. Providing information on risks that emanate from a substance forms an integral part of a multi-level prevention strategy. Taking in and processing information and potentially changing one's behaviour is all the easier if the information is provided in an interactive manner. For this reason, it is necessary to support the provision of information by mass media and strengthen it by a targeted interactive internet offer.

Cf. REITOX Report 2011: a control group study (study period: 2006 – 2008) examined what effects "Quit the Shit" achieved. The final summary report of the controlled study of the effects of the reduction and cessation programme for cannabis users "Quit the Shit" shows that a complete program of use of at least 45 days is associated with a significantly higher probability of significantly reducing cannabis use.

A total of 302 people were included in the evaluation. Of these, however, only 207 people took part in all the follow-up interviews (Jonas et al. 2012).

Since alcohol is the most widely used psychoactive substance in Germany, this drug is especially discussed in national and regional (media) campaigns. About 74,000 people die from risky consumption of alcohol alone or consumption of alcohol combined with tobacco in the high-consumption country of Germany (cf. Gaertner et al. 2012).

The starting age for alcohol consumption is currently at 14.5 years. Thus, the age in which children and adolescents consume alcohol for the first time has increased slightly (BZgA 2012). An aim of the BZgA's "NA TOLL!" alcohol prevention campaign for 12 to 16 year-old adolescents or "Null Alkohol – Voll Power" is to strengthen this trend and to delay entry into substance abuse in children and adolescents. It also aims to provide better information to young people on alcohol and to promote a critical attitude towards alcohol. Since 2012, the "NA TOLL!" alcohol prevention campaign, which has been carried out by the BZgA since 2006, has continued on a current basis under the slogan "Zero Alcohol – Full Power" Tolumpaign.

Education and the promotion of autonomous, alcohol-critical and appropriate behaviour takes place via the connection between mass communication and personal communication activities, whereby the website of the campaign www.null alcohol-full power.de allows the two areas to be linked. The interactive test features and the text messages were particularly popular here in 2011<sup>76</sup>. Nationwide, the peer-action campaign reaches about 20,000 drugusing and partially at-risk adolescents annually in personal interviews<sup>77</sup>. The results of extensive scientific evaluations of peer actions will be published in 2013.

In order to help particularly young adults quit smoking and to learn about its health risks, the internet platform www.rauchfrei-info.de of BZgA's "rauchfrei" campaign was released in advance of the World No Tobacco Day 2012 with a new design, new features and updated content. Targeted group-specific information, tests and interactive tools on the subject of (non-) smoking have been integrated into the website. The portal has been online since 2005 and reaches up to 30,000 people every month. The core is the evaluated online cessation programme that coaches smokers who want to quit on smoking cessation for up to four weeks. According to the intention-to-treat analysis, 13.5% of users are smoke-free which is comparable to the success rate of other online cessation programmes (BZgA 2012a).

The Berlin-based campaign "Na klar - unabhängig von Alkohol und anderen Suchtmitteln!" pursues a cross-substance approach and provides information and activities on the topics of

Alcohol prevention is a significant focal area of the BZgA. To reach different age groups in alignment with target groups, the partial campaigns "Alcohol? Know your limit" for the age group of 16-20 and "Alcohol? Know your limit" for the adult age group (over 20) are part of the overall strategy in addition to "Zero Alcohol – Full Power" (cf. REITOX Report 2011, 2010).

<sup>&</sup>lt;sup>76</sup> In 2011, approximately 150,000 requests were listed on the website of the previous campaign www.bist-du-staerker-als-alkohol.de.

More information on peer measures are available at http://www.null-alkohol-voll-power.de/reden/voll-power-peers/die-aktion/.

http://www.praevention-na-klar.de/front\_content.php

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alcohol, cannabis, ecstasy, knockout drops, methamphetamines and research chemicals 79.

Thanks to the wide variety of initiatives and campaign partners, it is possible to carry out addiction prevention measures for specific target groups. One example is "Alcohol, drug and tobacco use as well as gambling addiction" for female family members of migrants in the Berlin district of Tempelhof-Schöneberg. Additionally, there was a variety of actions that took place city-wide or in the individual districts in 2011: street football tournaments, rap concerts, alcohol prevention days, action days and weeks in schools and in the districts, and other drug prevention events with interactive counselling and information services on the topics of alcohol abuse, drug use, nutrition and/or exercise.

The campaign, which has existed since 2008, will be continued in 2012 on a setting-oriented and modified basis with a focus on "leisure behaviour of children, adolescents and young adults in relation to drug use and risky behaviours". Achieving goals, dealing with risky as well as dependent use of alcohol, cannabis and party drugs preventatively is, among other things, supported through the development of adequate prevention services.

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<sup>&</sup>quot;Na klar" is a drug prevention campaign of the Berlin districts, the Senate Administrations of Health and Welfare and of Education, Youth and Science, the Berlin police, HaLT Berlin, the Landesstelle Berlin für Suchtfragen e.V. (Country office in Berlin for Addiction Issues) and the Bureau for Drug Prevention in Land Berlin.

# 4. Problem drug use

### 4.1 Introduction

### 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. the prevalence estimation of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)). Generally speaking, consumption is regarded as problematic if at least one of the following criteria is fulfilled:

- risk carrying use (risky use)
- harmful use (F1x.1) or addiction (F1x.2) in respect of a clinical diagnosis (International Classification of Diseases (ICD) or Diagnostic and Statistical Manual of Mental Disorders (DSM))
- harm inflicted on other persons
- negative social consequences or delinquency.

In addition to the collection of clinical diagnoses "dependent use" and "harmful use", for which the international criteria of the ICD-10 (Dilling et al. 2005) apply, the German Core Data Set proposes a definition for "risky drug use" (German Centre for Addiction Issues, (DHS 2012). According to expert opinion, "risky drug use" shall be recorded for any substance or disorder, if neither the ICD-criteria for addiction nor for harmful use are fulfilled and thus no diagnosis can be made and if at the same time the number of consumption days during the last 30 days exceeds zero. In this case, the recommendations of the WHO, the British Medical Association and the board of trustees of the DHS apply to the evaluation of the individual "risky alcohol consumption". 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 & 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 from 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

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clinical tests to differentiate. A relatively safe classification is possible in therapy facilities where staff has been trained or is experienced in diagnosing such cases. The aforementioned definition of "risky consumption" in the German Core Data Set includes any consumption (within the last 30 days) of a substance of the categories F11 (opioids) – F19 (multiple substance use and other substances) of the ICD-10 classification. Specifically defined threshold values only exist for alcohol (F10).

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 drugs like heroin or cocaine tend to report only the consumption of 'soft' drugs like for example cannabis correctly while denying using for example heroin or correcting down 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, for example, 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. Hence, the draft for the fifth edition of the classification system, DSM, by the American Psychiatric Association (APA), published on 10 February 2010, proposed abandoning the differentiation between substance abuse and substance dependence and instead defining a substance use disorder and classifying different degrees of severity: mild, moderate and severe (Rumpf & Kiefer 2011). The amalgamation of substance abuse and substance dependence to one clinical definition is supported by a series of findings which cast doubt on the ability to differentiate between abuse and dependence and rather suggest replacing a categorised differentiation with a dimensional disorder model defining differing levels of severity.

Furthermore, differentiating between legal/illegal 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 estimates 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 opioids, cocaine or amphetamines" (Kraus et al. 2003).

However, as it would not have been possible to exclude multiple references in police records when reviewing several substances, and as valid mortality estimates are only available for

opioid users, the prevalence estimates for Germany were restricted to the target group of opioid users.

In view of the particular risks carried by intravenous drug use, this use pattern is of particular interest when trying to minimize secondary harm. Although injecting drug use has been on the decline among the patients of addiction aid facilities in Germany for several years now, it continues to be strongly linked to heroin. Therefore, differentiation among user groups for estimating prevalence rates and describing patients is done in terms of main drug and not in terms of administration route.

# 4.2 Prevalence and incidence estimate of PDU<sup>80</sup>

# 4.2.1 EMCDDA estimate methods (indirect estimates)

For the year 2011, two multiplier methods were recalculated and based also on results of the previous years:

- Estimate based on police contacts
  - Assuming an average consumption period of 8 to 10 years, the numbers of heroin users who have come to the attention of the 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.
- 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.

Moreover, the estimate based on the treatment data of the year 2010 was recalculated. Since some of the data (diagnostic data of the patients in hospitals) that are needed for the estimation calculation, are generally made available only with considerable delay, it is not possible for the current Reitox Report to venture an estimate for this multiplier based on the data for the year 2011.

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.

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. All multiplier methods as such are subject to considerable qualifications. Changes in prevalence rates, for example, are not necessarily reflected by the therapy demand. The

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collection of data on users, who come to the attention of the police for the first time, is significantly influenced by the prosecution pressure exercised by the police. The absolute figures of drug-related deaths only allow cautious interpretation. Other estimation methods (e.g. capture-recapture studies or other multiplier methods) have not been used since 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 63,000 and 185,000 persons (with the estimates of the year 2010 serving as a calculation basis). This corresponds to a quota of 1.2 to 3.4 persons per 1,000 population in the age group of 15 to 64 year olds (Table 4.1).

Table 4.1 Estimate of the prevalence of problem opioid use from 2005 to 2011 (Figures in 1000s, age group 15-64 years old)

	Reference Year						Prevalence	
Data source	2005	2006	2007	2008	2009	2010	2011	per 1000
Treatment	155- 184	136- 162	131- 156	155- 184 <sup>1)</sup>	144- 171 <sup>1)</sup>	154- 185 <sup>1)</sup>	2)	2.9-3.4
Police contacts	128- 166	117- 159	108- 149	99-137	89-127	81-117	79-106	1.5-2.0
Drug-related deaths	79-96	103- 130	99-113	117- 178	91-119	82-137	63-91	1.2-1.7

<sup>1)</sup> New calculation basis: Facility register of the DBDD (N=1,332 outpatient facilities).

In comparison to 2009, the estimate for the year 2010 is higher as a result of the multiplier "therapy demand". This is presumably attributable mainly to the fact that the number of therapy admissions increased in 2010 compared to 2009. For the year 2010, the methodological basis for the calculation of the estimate of the total number of outpatient facilities and thus the extrapolation was partially adjusted. The estimates since then have been undertaken on the basis of the total number of outpatient facilities, taken from the facilities register (Süss & Pfeiffer-Gerschel 2011). A more detailed presentation of the methods used can be found in the REITOX Report 2010.

The number of heroin users who have come to the attention of the police for the first time has been on a strong decline for some years (2000: 7,914; 2011: 2,742). At the same time, the portion of drug-related deaths that had been recorded before as users who had come to the attention of the police for the first time, remained constant between 2005 and 2008 (n=40). After a slight reduction in 2009 (n=38) and an unchanged value in 2010, this value fell

<sup>2)</sup> Cf. chapter 4.2.1 on the missing calculation of the estimate based on therapy data for 2011. DBDD 2012, special calculation.

sharply once more (n=34). Therefore, one can say that the estimates based on this indicator have been on a continual decline.

The estimates based on the multiplier "drug-related deaths" are based on the mortality rate amongst clients in outpatient treatment and the number of drug-related deaths. The former remained relatively constant in comparison to the previous year (2010: 0.9%-1.5%; 2011: 1.1%-1.6%), the latter fell sharply in 2011 compared to 2010 (2010: 1,237; 2011: 986). The estimates based on the multiplier "drug-related deaths" thus declined sharply for 2011 in comparison to 2010.

The estimates for the multiplier "police contacts" have been falling since 2005. The same applies for the multiplier "drug-related deaths" for the years since 2008. The estimates based on the multiplier "treatment demand" fell from 2008 to 2009 before rising slightly again in 2010. One can, therefore, not observe any clear tendency.

The range of values (1.2-3.4/1,000) still lies within the prevalence rate calculated by a European meta study for the dependence on illicit substances for the age group 15 to 64 (Range for opioid dependence: 1.0 - 7.0 with an expert based "best estimate" of 1.0 - 4.0; range for cannabis dependence: 0.0 - 9.0 with an expert based "best estimate" of 3.0 - 18.0) (Wittchen & Jacobi 2011). Further details can be found under 4.2.2.

If one takes a broader definition of the target group which includes users of other opioids, 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 would be taken into account, possibly leading to an overestimation of the prevalence

Updated calculations on the basis of treatment data from 2010 which includes clients with cocaine and amphetamine problems produce a prevalence of 187,000 - 222,000 (2009: 200,000 - 238,000). This corresponds to a prevalence of 3.7 - 4.4 (per 1,000 population) amongst 15-64 year olds (2009: 3.4 - 4.0%) which reveals that after a sharp reduction from 2008 to 2009, this rate has increased once more. Estimates based on police data and fatalities are not undertaken for the extended target group, due to the difficulties mentioned above.

The results of the national prevalence estimates are contained in standard table 7 and of the local prevalence estimates in standard table 8.

### 4.2.2 Incidence estimates of problematic drug use

The incidence of problematic opioid consumption (the number of new cases registered in a specific year) makes it possible to exactly measure changes over time serving as an early indication of future developments with respect to prevalence rates and treatment demand. However, the estimation models used are based on several assumptions and only make it possible to perform partial incidence estimates since they are solely based on cases that

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have been registered by the drug treatment facilities. The EMCDDA developed guidelines for incidence estimates in cooperation with a group of European experts with a view to stimulate further progress in this area (Scalia Tomba et al. 2008). No new studies have been conducted in Germany on the subject matter.

### 4.3 Data on PDUs from non-treatment sources

### Estimates in the general populations

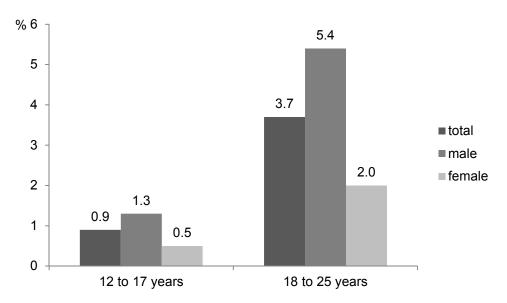
The data on cannabis-, cocaine- and amphetamine-related disorders that were collected within the framework of the last Epidemiological Addiction Survey (ESA) in the year 2009 according to the Severity of Dependence Scale (SDS) have already been presented in the REITOX Report 2010.

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

# 4.4.1 Description of the forms of use falling outside of the PDU-definition of the EMCDDA

Various studies have been conducted in recent years to collect data on "problematic" or "risky" use of cannabis. However, terminology and operationalisation differ from study to study so that data comparability is very limited. It appears nevertheless necessary to include cannabis use in the investigation of problem and risky patterns of use given the data available on the possible long-term effects of cannabis use.

This section will present the findings of the Drug Affinity Study of the BZgA (DAS) (see chapter 2 for the methodology) on regular use of illegal substances (BZgA 2012a). This is defined as the proportion of those who have taken a substance more than ten times in the last twelve months. Figure 4.1 shows that 0.9% of 12-17 year olds demonstrate this frequency of use (2008: 1.2%) and 3.7% of 18-25 year olds (2009: 3.3%). In both age categories, the percentage of male respondents was almost three times as high as that of female respondents.



BZgA 2012a.

Figure 4.1 Use of an illegal drug amongst 12-17 year old adolescents and 18-25 year old adults, overall and by gender, in 2011

The findings of the last European School Survey on Alcohol and other Drugs (ESPAD) conducted in 2011 on the prevalence of and influencing factors on cannabis-related problems in adolescents were already presented in chapter 2. The findings of a survey in Delmenhorst on the subject of "Risky use: a topic for adolescents in Delmenhorst!?" can be found in chapter 2.

# 4.4.2 Prevalence estimates of intensive, frequent, long-term and other problematic forms of use not included in the PDU definition

### Other data on adolescents and young adults

In the following, selected findings from the most recent studies analyzing the connections between problematic, risky or regular use and the later onset of substance-related disorders will be reported to complement the already presented data from the repeat surveys. The high-risk phases for first substance use and the onset of regular consumption and substance use disorders (substance abuse and dependence) lie in the second decade of life. It is of note that large parts of the transitions from initial use to regular use and from initial use to substance use disorders occur in the first few years after initial consumption. In this context, the shortest transition period was found for cannabis and nicotine (in comparison with alcohol). After initial use, the age range from 15 to 18 years is the decisive period in which the transition to substance use disorders takes place (Wittchen et al. 2008). Behrendt and colleagues (2009) could not only show for cannabis but also for alcohol and nicotine that an early onset of substance use in adolescence compared to a later start of substance use in adolescence is connected with a higher risk of developing substance abuse and dependence. However, cannabis use is not necessarily a transitory youth phenomenon: in people with a raised use frequency during adolescence, cannabis use persists into the third

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or fourth decade of life. Alcohol dependence and straining life circumstances also form risk factors for the persistence of cannabis use into the third or fourth decade of life (Perkonigg et al. 2008a).

Data on this is available from the current MoSyD study. This comprises several components, a representative pupil survey, a trend scout panel, a "drug scene" survey and interviewing experts. Detailed information on the methodology can be found in chapter 2.1. According to this study, 15% of those who had used cannabis in the last month are intensive users with daily consumption. This amounts to 2% of all 15-18 year olds surveyed in the year 2011. In the last 30 days, 3% of the pupils had used at least one of the substances, generalised under the term "hard drugs"<sup>81</sup>.

# 4.4.3 Medical drug abuse

### Introduction

Estimates of the prevalence of dependence on medical drugs in Germany range from 700,000 (Schwabe 2007) to 1.9 million people addicted to pharmaceuticals (Kraus & Augustin 2001; Soyka et al. 2005). According to the findings of the 2009 epidemiological addiction survey, 4.0% of all respondents between the ages of 18 and 64 demonstrated a problematic use of pharmaceuticals, as defined by the criteria in the short questionnaire on medical drug abuse (Pabst et al. 2010). Despite the high prevalence of the dependence on medical drugs, the disease - often named "the quiet addiction" - is hardly perceived by the public in contrast to drug and alcohol addiction (Rabbata 2005). Medical drug addiction often affects older people (Ruhwinkel 2009) and women (Tetrault et al. 2008). However, also teenagers, young adults and people afflicted by psychopathological disorders as well as people with substance use disorders represent important groups at risk of developing disorders in connection with medical drug abuse. For opioid addicts, for example, it is easier to get access to the black market. They have a higher tendency of misusing pharmaceuticals as effect modulators for drugs (Küfner & Rösner 2008).

Even if disorders caused by the use of benzodiazepines are not a new topic any more, benzodiazepine addicts – and people dependent on other drugs – very seldom undergo addiction-specific medical treatment. Holzbach (2008) surmises that the reasons for the countrywide low usage of withdrawal treatment by medical drug addicts are connected with the absent balancing of the pros and cons of long-term treatment and the overestimation of the difficulties and distress associated with the withdrawal treatment. Medical drug addicts represent a group in their own right among dependent patients since they differ from for example alcohol addicted patients in terms of onset and processing of the disease. Dependence on medical drugs often remains much longer undetected due to the socially inconspicuous behaviour of the people affected and is also often negated by the dependents. Generally, medical drug addicts gain access to medical drugs through contact with the medical care system and not via black markets or the free market.

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<sup>&</sup>lt;sup>81</sup> The following also constitute hard drugs here: ecstasy, LSD, speed, cocaine, crack and heroin.

Changes of conceptual framework conditions possibly also have an influence on the misuse of medical drugs. In this way, the quantities of prescribed substitution substances (methadone, buprenorphine) increased steadily in Germany in parallel with the extension of offers of substitution therapy in Germany in the years prior to 2009 (Böger & Schmidt 2010). The number of reported substitution patients also rose steadily between 2002 and 2010 to 77,400; 2011 showed a slight reduction to 76,200 patients (BOPST 2012). According to the substitution register, the predominant reported substitution substance is still methadone. However, the proportions of buprenorphine and levomethadone have been rising since 2003 (BOPST 2012). The prescribed quantities of other prescription drugs (especially: opioid analgesics) have increased greatly over the last few years (Böger & Schmidt 2011).

In addition to the problem posed by the misuse of analgesics and benzodiazepines that has been known for many years, new trends have been recently discovered in the misuse of medical drugs like for example the misuse of antidepressants (Küfner et al. 2009), or the performance enhancing (doping) drugs (Die Drogenbeauftragte misuse of Bundesregierung 2009). Doping at work has developed into a new phenomenon of medical drug abuse over the last years. It is estimated that more than 2 million people in Germany have taken medical drugs at least once in their lifetime to enhance their performance at work (Die Drogenbeauftragte der Bundesregierung 2009). A study commissioned by the Federal Ministry of Health (BMG) in 2010 found that the vast majority of students (88 per cent) had no personal experience of so-called "brain doping". Around 5 per cent of all students partake in pharmacological brain doping, i.e. they take prescription medicines, analgesics, psychostimulants tranquilisers, or amphetamines (Die Drogenbeauftragte Bundesregierung 2012). In order to counteract this new trend of medication misuse, the Act on Improving Measures Against Doping in Sports (Gesetz zur Verbesserung der Bekämpfung des Dopings im Sport) and the Regulation on Doping Agent Amounts (Dopingmittel-Mengen-Verordnungen, DmMV) have been in force since 2007. The main aim of these laws is to impede the activities of international criminal networks.

In 2012, a review on the "Misuse of Medicines in the European Union" was published (Casati et al. 2012). The aim of this review of the literature was to obtain an overview of the extent of abuse of analgesics, substitution substances and sedatives/hypnotics (with the exception of benzodiazepine) in the EU. Opioid analgesics, methadone, buprenorphine and Z-drugs proved to be the main group of misused medicines. Heterogeneity across the EU in respect of the type of medicine misused was indicated by various regional trends in medicine misuse. Furthermore, in addition to the presentation of prevalence rates, high-risk groups (e.g. patients with chronic pain, drug addicted persons, elderly persons) and factors contributing to medicine misuse (e.g. misuse potential, availability, development of tolerance) were identified and discussed. Finally, the implications for prevention, treatment and health policy were considered.

In 2011, the Centre for Interdisciplinary Addiction Research (Zentrum für Interdisziplinäre Suchtforschung, ZIS) published a study on the subject of substitution substance abuse (Reimer, Götzke, Hiller & Schulte 2011). This was a cross-sectional study in ten German

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cities which investigated the misuse of substitution substances in two different settings: clients in the vicinity of a substitution practice which were all exclusively receiving substitution treatment (known as the "practice group") or drug addicts in the open drug scene (some of whom receiving substitution treatment) (known as the "drug scene group"). According to the ZIS study, respondents from both groups most commonly used methadone and methaddict without prescription (hence misuse), in fewer cases, the substances consumed without prescription were Subutex and Suboxone (buprenorphine) (Reimer et al 2011). Overall, the ZIS study showed that being in the vicinity of a practice and also the substitution itself work as protective factors for concomitant use, emergencies, living situation and other employment situations.

A further study, which comes from the ZIS, examines alcohol and medication misuse of elderly persons in care facilities (Kuhn & Hansen 2012). In this study, estimates were made, through means of a questionnaire, of the prevalence of alcohol and medication addiction problems amongst the patients. This therefore does not cover medical diagnoses but rather addiction problems which may not be perceived or diagnosed by doctors. The guestionnaire was also designed to provide information on how alcohol and medication addiction were dealt with and a further estimation on the level of training of employees as to how to deal with such problems. Over three quarters of the elderly care facilities contacted who took part in the study (79.9% outpatient or inpatient facilities) stated that they cared for patients with addiction problems. The average prevalence of addiction problems within the facilities was estimated to be 10%. The prevalence estimates were significantly higher in both the inpatient and outpatient facilities than the number of persons who had been medically diagnosed. Furthermore, the estimates of gender proportions differed according to the substance being abused. On average, 39% of patients with alcohol addiction and 73% with medication addiction were women. Almost all facilities reported taking action in cases of alcohol and medication abuse. The most common reaction was to involve a doctor (in 97% of inpatient facilities and 92.3% of outpatient facilities); the least common was to contact the addiction help system (in 19.2% of inpatient facilities and 18.6% of outpatient facilities). Within the 986 facilities, 236 reported that their employees were adequately trained to act appropriately in cases of addiction problems amongst their patients. The authors noted that the proportion of people who demonstrated an alcohol or medication misuse, seemed to be higher in elderly care facilities than for this age group in the general population. In light of this, as well as of the fact that the prescription of benzodiazepines, which have a high risk of addiction and can be life-threatening in combination with alcohol, increases with age, it is important that addiction problems in elderly care facilities are identified at an early stage, that the care personnel are supported and that the contact between care facilities and addiction help facilities is strengthened (Kuhn & Hansen 2012).

According to the 2012 pharmaceuticals report of the health insurance company, BARMER GEK (Glaeske & Schicktanz 2012), women in 2010 had on average 56% more daily dosages of psychopharmaceuticals than men (33.4 defined daily dose, DDD, compared to 21.0 DDD). A higher number of prescriptions overall was also shown for women than men. Between the

ages of 20 and 30, in 2011 51.1% of insured men but 69.7% of insured women were prescribed a medication. Whilst men were prescribed medication which combat physical symptoms more often (cardiovascular medicines, anti-diabetics), the predominant proportion of prescriptions for women were for mental-health symptoms (antidepressants, sleeping medication), including benzodiazepine. The group of pharmaceuticals which showed the greatest difference between the sexes is anti-depressants (tetracyclic and tricyclic: 75.1% of the prescriptions were made out to women, serotonin reuptake inhibitor: 74% of prescriptions made out to women) and sedatives/hypnotics (tranquilisers: 72.9% of prescriptions made out to women). This shows that women were prescribed such medications 2 to 3 times more often than men and are thus in danger of developing a dependence. Therefore, the authors demand a DRUG-LIST-FOR-WOMEN which, analogous to the PRISCUS list (a list of the substances which may represent a danger for elderly persons), contains gender specific information on all substances which can represent a danger for women (Glaeske & Schicktanz 2012).

### Data from the monitoring system Phar-Mon

Funded by the BMB, the Phar-Mon project has been investigating medical drug abuse among clients of a random sample drawn among outpatient addiction counselling facilities in Germany since 1988. The goal of the project is to collect data on the misuse and addiction potential of medical drugs and to contribute to the identification of trends of medical drug abuse.

In the period from January to December 2011, data was collected from N=33 reference facilities participating in the project. 32 of the 33 facilities which were invited to participate, reported a total of N=797 recordings of the abuse of medical drugs by N=577 clients. These recordings come mostly from men (71.4%) and persons with the main diagnosis of addiction or harmful use of opioids (67.8%). Overall, substitution substances were the most commonly misused medication, with 47.3% of the recordings, which represents an increase of 7.3% in comparison to the previous year.

Substitution substances are misused in particular by clients with a main diagnosis of opioids. In respect of the active ingredient, this main diagnosis group remains dominated by recordings of misuse of methadone (27.9%) and buprenorphine (18.4%). In 2011, however, the abuse of levomethadone tripled in comparison to the previous year (2010: 4.3%; 2011: 12.1%). The high number of recordings of misused substitution substances is in contrast to the reduced prescription numbers (-10.5% in 2010 compared to the previous year) (Böger & Schmidt 2011).

Amongst clients with the treatment-relevant, main diagnosis (MD) of dependency or harmful use of alcohol and sedatives/hypnotics, the abuse of sedatives/hypnotics continues to dominate (27.9% of all recordings in the MD alcohol and 58.1% of all recordings in the MD sedatives/hypnotics). As a whole, the sedatives/hypnotics recordings of all main diagnosis groups relate primarily to benzodiazepine (i.e. 93.7%). Amongst benzodiazepines, most

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commonly diazepam (15.6% of all recordings) and flunitrazepam (5.9% of all recordings) were misused.

An increase in anti-epileptics (anticonvulsant) abuse year-on-year was also seen in 2011 (2010: 2.8%; 2011:4.8% of all recordings). In this context, the benzodiazepine clonazepam was recorded most often (27 of 38 recordings). Clonazepam was mainly obtained on the black market (23 of 27 recordings). Clients who misused that substance were primarily from the main diagnosis group, opioids. According to the Drug Prescription Report (Schwabe 2011) prescription numbers for clonazepam fell by 1.2% in comparison to the previous year. The sedative and anxiolytic effects of clonazepam lead, as with other benzodiazepines, to an increased risk of misuse, particularly amongst clients with an existing dependence problem.

The second most commonly misused anticonvulsant was pregabalin (8 of 38 recordings on anticonvulsant misuse) which is predominantly sold under the trade name, Lyrica. Pregabalin, which is approved for the treatment of peripheral and central neuropathic pain, epilepsy and for therapy of generalised anxiety disorder, is by far the most commonly prescribed new anticonvulsant according to the Drug Prescription Report (Schwabe 2011). In a pilot study on new trends in substance and medication abuse, conducted in the scope of the Phar-Mon in 2011, Lyrica was mentioned several times. The pilot study covered substance and medication misuse in facilities outside of the classic addiction assistance system. In the study, semi-standardised interviews were conducted in, amongst other places, a pharmacy, a substitution ambulance, a youth centre and with the police drug squad (Rauschgiftdezernat). It was revealed that Lyrica is predominantly misused amongst persons with opioid dependence in order to achieve a stimulating and performance enhancing affect. Within the recordings in the Phar-Mon project, the proportion of pregabalin misuse recordings increased from one recording in 2010 (0.2% of all recordings) to 8 recordings (1% of all recordings). As a result of the findings of the pilot study as well as literature on the subject and warnings the addiction and abuse potential on of pregabalin (Bundesärztekammer 2011; Schifano et al. 2010) its development will be monitored in further Phar-Mon analyses.

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

### 5.1 Introduction

### **Treatment phases**

People willing to overcome their substance dependency with professional support are offered a wide range of cessation counselling and therapeutic services. On the one hand, there are substitution offers with a limited target orientation aiming at stabilising 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 can be subdivided in four basic phases ("phase model"):

- 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 the addictive disease treated. All measures undertaken should be embedded in a treatment and help plan for the therapy that 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 that 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" programme. 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 stabilise the abstinence achieved in the detoxification phase and to put a definitive end to addiction. Rehabilitation therapies can be carried out in an outpatient, inpatient or a day-patient setting. The standard therapy duration is six months.

The integration and after-care phase comprises, on the one hand, a "phase of assimilation", and, on the other, assisted living or other outpatient after-care measures. In the assimilation phase, individual therapeutic measures move into the background in favour of an outward orientation with a view to promoting 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.

#### **Data sources**

Information on the characteristics and consumption patterns of clients in treatment is available from various sources.

Based on the German Core Data Set on the Documentation of Addiction Treatment (Deutscher Kerndatensatz, KDS), the Statistical Report on Substance Abuse Treatment (Deutsche Suchthilfestatistik, DSHS) (Pfeiffer-Gerschel et al. 2011b) provides extensive data on outpatients from the large majority (2011: N=778; 2010: N=777) of the outpatient facilities funded by the *Laender* and municipalities (Pfeiffer-Gerschel et al. 2012d). Since January 2007, most of the addiction aid facilities in Germany have used the new Core Data Set (DHS 2012). Due to revisions made in connection with the introduction of the new Core Data Set, the results of the evaluations of the statistical report for the out and inpatient facilities from 2007 onwards may only be cautiously set in relation to the data of the previous years (on the introduction of the new core data set see also REITOX Report 2008, chapter 4.3).

Since 2010, in the below reported DSHS-data from previous years up until 2009, no facility was excluded due to too high a missing quota<sup>82</sup> (>33%) – contrary to previous years – in order to avoid an overestimation of the missing figures and to achieve a maximum facility sample for each table. Therefore, caution needs to be exercised when comparing data of 2010 with the ones of the years 2007 to 2009.

The "Treatment Demand Indicator (TDI)" of the EMCDDA is integrated in the Core Data Set. However, there are still divergences between the TDI and the Core Data Set because the German treatment system orients itself to the International Classification of Diseases (ICD-10) classification, which renders substance-based analyses difficult or impossible.

The DSHS is also a rich statistical source for data from the inpatient setting. N=166 (2010: N=189) facilities took part in the national evaluation 2011 of the DSHS (Pfeiffer-Gerschel et al. 2012b).

A lot of the larger, especially psychiatric clinics which also offer addiction-specific treatment are not represented in the DSHS. In order to fill these gaps as far as possible, two other sources were tapped for data on clients with addiction problems in inpatient therapy.

• The Statistical Report on Hospital Diagnoses, whose most recent data are available for the reporting year 2010 (Statistisches Bundesamt 2011b) documents the diagnoses on the discharge of all patients from inpatient facilities. Apart from the main diagnosis it also records age and gender. The Report of the Federal Statistical Office thus serves as an information basis for the data from the DSHS. Though complete, the Statistical Report on Hospital Diagnoses is not addiction-specific and offers little detailed information for the area of interest. It does however allow a differentiation of the number of cases according

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By default, a facility-related missing quota of 33% or less is required for an inclusion in the overall evaluation for all tables with single choice questions. Facilities with a missing quota of more than 33% in such a table are not taken account of in the data merge in order to prevent that overall data quality is overproportionally impacted by few facilities with a high missing quota. Although this will inevitably lead to a reduction of the facility sample (N) for the respective table, this can be disregarded in the interpretation of the results due to the higher validity of the included data (Pfeiffer-Gerschel et al. 2010b).

to the ICD-classification (F10-F19). Apart from accounting information on services provided by hospitals, there is no systematic compilation of comprehensive statistical data on hospital treatments. However, general documentation standards do exist, for example, for psychiatric clinics or facilities for child or adolescent psychiatry. These contain, amongst other things, information on the treatment of patients with addiction problems. So far, no systematic analysis has been carried out for the transfer of these data into the standard of the Core Data Set.

- The statistics from the German Statutory Pension Insurance (Deutsche Rentenversicherung, DRV) document all cases for which the costs were borne by the pension insurer (DRV 2011c). However, the part of inpatient therapies which were acute treatments or which were financed by other sources, is missing.
- The distribution of main diagnoses in the two statistical reports is identical to a large extent, if one takes into account the substantially higher portion of undifferentiated diagnoses in respect of F19 (multiple substance use and consumption of other psychotropic substances) in the data recorded by the DRV.
- Since 1 July 2002, data on substitution therapy is recorded by the substitution register with the purpose of avoiding double prescriptions of substitution drugs and monitoring the implementation of specific quality standards in therapy. The short-term use of substitution drugs in detoxification is not recorded by this register. Since 2010, this data source has provided information on the number and gender distribution of treated clients and on the substitution drugs used, complete with a list of names of the doctors in charge of therapy.
- 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.

As a result of the different data sources, it is more difficult to describe the profile of drug-addicted patients in treatment than of drug-addicted patients out of treatment. While it is necessary to use various sources at the same time, one needs to bear in mind that each source has a different type of selectivity.

Information on the characteristics of the treated drug users are to be found in standard table TDI.

# 5.2 Strategy, policy

According to the facility register of the German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction (Deutschen Beobachtungsstelle für Drogen und Drogensucht (DBDD), that has been built up since 2006 with the support of the Federal ministry for Health, the charity organisations, the *Laender* and specialised drug treatment facilities (Süss & Pfeiffer-Gerschel 2009), there are about 1,300 specialised ambulatory addiction counselling facilities operating in Germany, in which notably substance-related

disorders are treated<sup>83</sup>. In approximately 300 specialised hospital wards at least 7,500 beds are provided for people with substance use disorders. More than 190 facilities (>2,000 treatment slots) provide qualified withdrawal treatment (OPS 8-985). At least 320 facilities (>13,200 treatment slots) offer inpatient rehabilitation measures and more than 100 facilities (>1,000 treatment slots) offer day care rehabilitation measures (including alcohol and other measures). These measures are complemented by more than 115 adaptation facilities (>1,200 therapy slots), 268 impatient (>10,700 slots) and 112 day care (>1,200 slots) social therapy facilities as well as by services provided in the area of assisted living (in at least 460 facilities >12,000 places) and more than 250 job and employment projects (>4,800 places) (Flöter & Pfeiffer-Gerschel 2011). The majority of the help facilities are independent non-profit organisations. Public and private providers can especially be found in the area of inpatient therapy.

Low-threshold and counselling services (approximately 300 facilities countrywide) 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 *Laender* and municipalities. However, the institutions have no legal claim to these funds.

Acute treatments of drug-related problems and withdrawal treatments are generally carried out in hospitals. The costs for this withdrawal phase are in general borne by the statutory health insurance. The main diagnosis for all patients treated in German hospitals is reported to the Federal Statistical Office which regularly publishes these data (Statistical Report on Hospital Diagnoses).

Rehabilitation is to stabilise long-term abstinence and to restore the earning capacity of the patient. Therefore, the costs of rehabilitation are generally borne by the statutory health insurers. These also decide on the type, scope and duration of the therapy. Statistical data on the services rendered are available from the social administration authorities.

The addiction departments of specialised psychiatric clinics and of psychiatric departments of general hospitals and university clinics are - alongside the counselling and rehabilitation centres - the second mainstay of the addiction care system in Germany. In addition to low-threshold qualified withdrawal treatment, they also provide emergency care services, crisis intervention and complex treatment in the case of comorbidity. Closely linked with these services are in-depth diagnostics and re-integration planning. In the addiction psychiatric facilities, all forms of addiction are treated either in an impatient, outpatient or day care setting by a multi-professional team. In this way, medical, psycho-social and psychotherapeutic care is guaranteed. Holding consultations and improving the cooperation with the addiction help system also form an integral part of the areas of work. (Die Drogenbeauftragte der Bundesregierung 2012a).

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This is an estimate of the total number of outpatient psycho-social counselling centres among which facilities that exclusively or primarily treat users of illicit drugs, represent a minority.

Information on the addiction patients in psychiatric institutions provides psychiatric hospitals, psychiatric departments and university hospitals with the survey titled "Basic Record of Addiction Psychiatry" initiated by the Addiction Committee of the Federal Conference of Directors from 2011. In summary, it can be stated that the addiction psychiatric facilities provide a central outpatient and inpatient care structure for addicts. A total of 75 clinics participated in the survey, or approximately 19% of clinics with psychiatric beds. The participating hospitals keep 28% of psychiatric beds in Germany. Projections show that in 2010 approximately 300,000 inpatient addiction treatments took place in psychiatric clinics. In addition there are 300,000 quarterly treatments that were carried out in psychiatric outpatient institutions of the clinics. It follows that 31% of inpatient psychiatric cases and 14% of outpatient cases involved patients with dependencies. By comparison, only 150,000 treatments were performed in facilities for internal medicine as a result of alcohol or drug addictions according to the report on health by the Federal Government. Most patients were primarily alcohol-dependent (approx. 70 %). Disorders related to opioid consumption or consumption of multiple substances were the reason for inpatient treatment in approximately 10% to 13% in each case. Use of other substances became a treatment-related problem in about 10% of the patients in outpatient treatment as well. In inpatient cases, about 40% of patients were additionally diagnosed with psychiatric disorders and about 60% in outpatient cases. Affective disorder was the most common secondary diagnosis (ICD-10 F3: 20 % to 25 %). This was followed by neurotic, stress-related and somatoform disorders (ICD-10 F4). They were found in about 10% of patients. Personality and behavioural disorders were present to the same extent (ICD-10 F6). Patients receiving outpatient treatment additionally also showed indications of schizophrenic disorders, also up to approx. 10% (ICD-10 F2). No significant differences were found between the different clinic types in relation to the patients treated or regional differences (quoted by: Die Drogenbeauftragte der Bundesregierung 2012a).

A shift in treatment demand towards increasingly intensive treatment forms has been observed for a long time. Outpatient care of addicted people in psychiatric facilities has been strongly expanded especially through the set-up of psychiatric ambulatories in institutes tasked to carry out treatment for addicts.

At the local and regional level, psychiatric-psychotherapeutic facilities closely cooperate with the psychosocial counselling facilities and the out and inpatient rehabilitation facilities. In some *Laender*, such as for example Baden-Wuerttemberg, well-structured help-networks for drug patients have meanwhile been established at a local level.

Except for a few specific cases, there is no legal funding basis provided by the Social Security Codes (SGB IV and XII) for the integration or after-care phase. Here, the legally and economically responsible bodies of the facilities have to resort to financing models tapping federal government budgets or budgets of the social security funds and job agencies.

# 5.3 Treatment systems

The German treatment system for people with drug-related problems or their relatives is – as described above – very elaborate ranging from institutions offering first low-threshold contacts over counselling services to intensive treatment and therapy in specialised inpatient facilities and a large offer of substitution treatments. Planning of the treatment demand in the various segments of the medical and/or social help system at a national level does however not match with the federal structure of the Federal Republic of Germany. Planning is done instead at *Laender* or community level.

A differentiation between drug-free and pharmacologically assisted treatment – especially substitution – is of limited use in describing the therapy system in Germany. The question as to whether psycho-social counselling facilities, which play a central role in the care for drug addicts, are to be assigned to drug-free or pharmacologically-assisted treatment, is problematic to answer especially in the case of psycho-social care provided within the framework of substitution programmes (with the exception of a few cases in which the counselling facilities themselves dispense the substitution drugs according to existing guidelines). Generally, medical substitution treatment takes place outside of the counselling facilities. Psychosocial care or therapy, by contrast, take place in the counselling facilities and are thus, per se, neither obligated to a drug-free nor a medication-assisted approach.

There is also a host of self-help organisations working in parallel or cooperating with professional help services in the area of addiction. So far however, they have mostly been addressed to alcohol addicts and older target groups.

### 5.3.1 Organisation and quality assurance

# **Organisation**

Contact, motivation and outpatient treatment are mainly offered by outpatient counselling facilities; withdrawal treatments/detoxifications are for the most part done in general hospitals but also in a few specialised clinics (often in the psychiatric ward). In the withdrawal treatment of opioid 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 Report on Hospital Diagnoses.

Outpatient counselling facilities are the first place of call for drug users insofar as their drug problems are not treated by primary care, i.e. generally speaking by office-based doctors. In most cases, counselling is free of charge. The facilities are mainly funded by the municipalities and *Laender* as well as by their, non-inconsiderable, own resources (donations, church taxes, etc.).

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 is associated with some administrative effort and it needs to be clarified who will take over the costs for inpatient therapy (generally the statutory pension insurance fund, patients without employment are subject to other regulations). In some cases, inpatient therapy does not suit the client's situation - if for example existing employment would be jeopardised 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 the gender distribution.

Withdrawal treatments are carried out by specialised clinics or therapeutic communities. 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 stabilising abstinence from drugs.

Since 2001, drug-maintenance therapy has been regulated in detail by the Narcotics Law and in the meantime has become a medically fully recognised treatment form. This treatment offer reaches a large number of drug addicts and has been proven to produce beneficial effects on the psychological and physical well-being of the patients within the framework of numerous studies (Michels et al. 2007). The results of a study conducted by Wittchen and colleagues (Wittchen et al. 2008a) underline again the effectiveness of various types of substitution treatments with methadone and buprenorphine and show a retention quote of the patients undergoing substitution treatment that is comparable to the results of controlled clinical studies. Co-consumption (especially of cannabis and benzodiazepines as well as of opioids and cocaine) is in many cases the decisive factor for dropping out of therapy or other complications occurring during therapy. Patients in long-term substitution therapy appear furthermore to be a group of patients subject to an extremely high level of distress caused by somatic and psychological disorders.

The state of the art in opiate substitution treatment (OST) has already been established in 2002 by the guidelines passed by the German Medical Association (Bundesärztekammer, BÄK). In 2010, a revised version of the guidelines was presented by the BÄK (cf. also chapters 1.2.2, 5.5.2 and chapter 11 of the REITOX Report 2010). In 2003, OST was acknowledged by the statutory health insurance without any qualification as a SHI-accredited care service to be borne by the SHI. Substances eligible for substitution therapy in Germany are levomethadone, methadone and buprenorphine. Codeine and DHC can only be prescribed in exceptional cases for this type of treatment. In July 2009, legal provisions were also passed on diamorphine-based substitution (cf. chapter 1.2.2 in the REITOX Report 2009).

The majority of substituted patients are treated by office-based doctors or in specialised ambulatories. Doctors carrying out substitution therapy need to be qualified in addiction medicine. If they do not have this additional qualification they may treat up to three patients

under the supervision of a colleague. Meanwhile, a few inpatient facilities have started to accept patients for opiate substitution therapy.

In the current discussion on opiate substitution therapy that is firmly established in the care system, the question as to what goals are to be pursued by drug-related therapy continues to play an important role. The success criteria diverge indeed with the perspective adopted by the viewer. The reduction of co-consumption of other psychotropic substances can be rated as much a success as the (long-term) termination of opioid dependence or the successful treatment of other (somatic and psychological) disorders.

Psychosocial care has been established as a part of OST by the Regulations on the Prescription of Narcotic Drugs and the guidelines passed by the Common Federal Committee and the National Medical Association in so far as it is regarded "necessary". As a result of diverging interpretations of psychosocial care in the *Laender* and communities, psychosocial care is at a national level subject to great variations in terms of organisation, funding and treatment offer.

The revised guidelines of the German Medical Association of 2010 (BÄK 2010) determine the type and scope of psychosocial care noting that the provision and integration of measures suitable to eliminate psychosocial problems is mandatory for the treatment of opiate addiction. The guidelines furthermore underline the necessity of coordinating psychosocial care and medical care (see also chapter 1.2.2. and 5.5.2 of the REITOX Report 2010).

It was confirmed by a judgement of the Hamburg Administrative Court in April 2008 that there is a legal claim to the service of necessary psychosocial counselling/care for substitution patients (provided the necessary preconditions according to SGB XII are fulfilled) to be provided by the local social administration authorities.

The status of integration between general health care and special drug care nationwide is still rather dissatisfying. At a regional level however, cooperation and coordination of the offers are clearly better. Any attempt to give an overview of the care situation in Germany is associated with major problems as a result of the diverging goals and the regional differences they bring about.

# **Quality assurance**

Various professional societies and experts have worked together over recent years to develop guidelines for the treatment of drug dependence and addiction problems (see also chapter 11 of the REITOX Report 2010). 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. 2002), for the post-acute treatment of opioid addicts (Havemann-Reinicke et al. 2006), for patients with cannabis-related disorders (Bonnet et al. 2006) 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 medizinischwissenschaftlichen Fachgesellschaften, AWMF) published the 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-emotionalise 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 (Backmund et al. 2006).

Moreover, the revised version of the S3-Guideline of 20044 on "Prophylaxis, diagnostics and therapy of the Hepatitis-C-virus (HCV)-Infection, AWMF-Register No. 021/012" of the German Society for Digestion and Metabolic Diseases (DGVS) was published in 2010 (Sarrazin et al. 2010) (see also chapter 7.3 of the REITOX Report 2010).

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 programmes at universities and technical colleges) work specifications for therapeutic staff in addiction aid have to be newly developed and defined. At present, a lot of university or college courses are restructured in Germany and in many other European countries.

In the meantime, it has already become possible to take a post-graduate course and earn a Master's degree (Master of Science) in substance abuse and addiction counselling. In the restructuring of the courses for social workers, psychologists and medical staff in the area of addiction aid, post-graduate education plays a very important role. Cooperation between different professional groups from social work/education, psychology, psychiatry and other medical fields forms an integral part of the addiction treatment standards. 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 *Laender* and municipalities. The responsibility for detoxification and rehabilitation however lies with the respective insurance carriers (statutory health and pension insurance organisations). With also outpatient treatment offers being increasingly funded by social security administration, the above mentioned standards have also gained in importance in this setting, especially in the area of alcohol, but not so much with regard to drugs. In many *Laender*, cooperation between the different fields of work and organisations is promoted by *Laender*-financed institutions.

Several articles have appeared on a whole range of aspects of addict rehabilitation in a special issue of the journal KONTUREN that deal with the rehabilitation budget of the German Statutory Pension Insurance (Deutsche Rentenversicherung, DRV) (Koch 2011), current developments in rehabilitation from the perspective of the German Pension Fund (Deutscher Rentenversicherung Bund) (Hebrant 2011), demands made on the facilities and the latest developments in rehabilitation from the perspective of a regional funding agency (Zellner 2011) and instruments and procedures used for quality assurance in addiction rehabilitation, (Klosterhuis et al. 2011) among others.

Against the background of increasing relevance of multiple substance use by drug addicts, Körkel and colleagues (2011) carried out an up-to-date analysis of the existing treatment programmes and came to the conclusion that, among other things, a more realistic approach towards evaluation and follow-up history standards for drug treatments should be maintained and that life-long "complete abstinence" should no longer be considered the expected outcome.

# 5.3.2 Availability and diversification of treatment

Planning of the treatment demand in the various segments of the medical and/or social help system at a national level does not match with the federal structure of the Federal Republic of Germany. Planning is done instead at *Laender* or community level. A detailed presentation of the generally available treatment forms has already been given above (see chapters 5.1, 5.2 and 5.3.1) and shall not be repeated here. With regard to the availability of treatment and help offers, there are differences to be found between the *Laender*. For example, not all *Laender* offer consumption rooms as an element of harm reduction measures. It has moreover repeatedly been reported that there are difficulties in providing region-wide care for patients who would like to undergo substitution treatment in rural areas (in particular in the eastern *Laender*).

All in all, the situation with regard to the help offers made has not much changed recently. The only partially existing legal basis for the funding of outpatient services continues to lead to financing problems. The municipalities that provide the funds for most of these services are 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 professionalisation of their operational and technical procedures.

Based on the data of the DSHS (Statistical Report on Substance Abuse Treatment in Germany) Hildebrand and colleagues Hildebrand and Colleagues (2009) reported estimates for achievement ratios of outpatient and inpatient addiction treatment facilities. According to these estimates, the specialised addiction help system is able to reach between 45% and 60% of the estimated persons with harmful use or opioid dependence but only between approximately 4% and 8% of the cannabis users. The information on the availability of treatment can be found in standard table 24.

The offers made by counselling and treatment facilities are, especially in the outpatient setting, not exclusively limited to users of specific substance groups. The large majority of the therapy services provided by specialised drug aid facilities are related to primary alcohol problems (approximately half of the outpatient therapies documented within the framework of the DSHS and about three quarters of the treatment episodes in the inpatient setting with specialised treatment facilities). But also people with problems related to the use of illicit drugs and other disorders (e.g. eating disorders, pathological gambling, tobacco dependence) are treated. Correspondingly, most of the facilities hold offers in readiness for very different user groups, taking into account not only substance-specific aspects but also a series of psychological, social and health aspects that are - irrespective of the respective substance involved – in part associated with certain periods of life or age groups (e.g. adolescents and young adults, pregnant women and elderly users). There exist very different counselling and treatment concepts within the framework of person-centred addiction help. One task of the addiction help facilities is to define very different problem fields with the respective counselling and treatment needs together with different intervention goals. The underlying broad conception of treatment comprises various forms of intervention in very different areas and denotes the reduction or cessation of substance use and the combat against associated problems as equally valid therapy goals. Such an understanding of intervention can be transferred to the treatment of all substance-related problems and all types of addictive diseases (DHS 2001).

Given the significant increase in the prevalence of cannabis use especially at the end of 90s of the last century (until about 2003), a series of studies and projects dedicated to the development of specific intervention concepts for cannabis users under various framework conditions were launched. Many of these projects (e.g. "realize it!"<sup>84</sup>, INCANT<sup>85</sup>, CANDIS<sup>86</sup>, CAN stop<sup>87</sup>, AVerCa<sup>88</sup> or "Quit the shit"<sup>89</sup>) have already been presented in the REITOX Reports of recent years. Although all projects have (problematic) cannabis use as a starting point for intervention, some of them are very complex programmes whose goals go far beyond the goal of abstinence or use reduction.

Diamorphine-assisted therapy, addressed to the group of heavily dependent opioid users, is also a further development of an intervention that primarily defines itself over the disorder-relevant main substance, but which is linked to a series of psychosocial and health interventions.

Even though current intervention studies on other substance groups (e.g. stimulants, cocaine, LSD) are not available to a comparable extent, addiction aid facilities do offer well-founded, professional support to these substance users as well. Treatment guidelines do not

<sup>84</sup> www.realize-it.org/

www.incant.eu

<sup>86</sup> www.candis-projekt.de/

<sup>87</sup> www.canstop.med.uni-rostock.de/

<sup>88</sup> www.averca.de/

<sup>89</sup> www.drugcom.de/

only exist for opioid and cannabis-related disorders but also for psychological and behavioural disorders caused by cocaine, amphetamines, ecstasy and hallucinogens (see also the Selected Issue of the REITOX Report 2010 on the development, methods and implementation of national treatment guidelines).

### 5.4 Characteristics of treated clients

### 5.4.1 Outpatient treatment

The data presented in the following are based on the detailed data of the table volumes published within the framework of the Statistical Report on Substance Abuse Treatment in Germany (Deutsche Suchthilfestatistik, DSHS) of the year 2011 (Pfeiffer-Gerschel et al. 2012a,b,c,d). The data used in the presentation are taken from the partial evaluation corresponding to outpatient counselling and treatment. Detailed information on the variables of the treatment demand indicator (TDI) can be found in standard TDI. The presented tables include references to the relevant TDI tables. Information on clients undergoing treatment or receiving counselling while in prison and some information on clients of low-threshold facilities is contained in chapters 8 and 9.

In the year 2011, data of a total of 313,604 therapies (without one-off contacts) carried out in N=778 outpatient facilities were collected within the framework of the DSHS. For this REITOX Report only data from clients primarily treated for illicit substance use (including sedatives/hypnotics and volatile solvents) were taken into account (patients treated primarily for alcohol-induced disorders accounted alone for 54% of all recorded cases in 2011).

### Diagnostic data

For the year 2011, the German Statistical Report on Treatment Centres for Substance Use Disorders contains data on the main diagnoses of a total of 60,169 treatments from N=778 facilities that were started or completed in outpatient psychosocial addiction support centres because of problems with illicit drugs. The main diagnoses are based on the diagnostic categories of the international classification system of the World Health Organisation (WHO), the ICD 10, for disorders caused by psychotropic substances (harmful use or dependence).

When looking at the DSHS data and confining oneself to illicit substances, one finds that less than half of the clients (44.9%; 2010: 46.3%) sought treatment or counselling primarily for dependence on or harmful use of opioids<sup>90</sup>. The proportion of persons primarily treated for disorders in connection with the use of opioids has been on a continual decline since 2007. In more than a third of the cases (34.7%; 2010: 35.6%), clients were treated for primary cannabis problems. After having increased over the last years, this portion has stabilised. On the rise is the proportion of clients who receive counselling and treatment because of problems connected to the use of stimulants (10.5%; 2010: 8.2%). The comparative values

The portions presented hereinafter were calculated on the basis of the values given by the TDI-tables 14.1.1 (all clients treated) and 14.1.2 (first time clients) set up for the outpatient treatment centres for substance use disorders.

for cocaine (5.8%; 2010: 5.9%) and other substances remained practically unchanged in comparison with the previous year.

Table 5.1	Main diagnosis in outpatient therapy (DSHS outpatient data, 2011)

Main diagnosis harmful use/addiction	All p	All persons treated <sup>1)</sup>			Persons treated for the first time			
(ICD10: F1x.1/F1x.2x)	Males <sup>2)</sup>	Females	Total <sup>2)</sup>	Males <sup>2)</sup>	Females	Total <sup>2)</sup>		
Opioids	43.4%	50.5%	44.9%	17.2%	22.0%	18.1%		
Cannabinoids	37.7%	23.6%	34.7%	60.5%	40.5%	56.6%		
Sedatives/Hypnotics	1.3%	5.9%	2.2%	1.3%	7.1%	2.4%		
Cocaine	6.3%	4.0%	5.8%	6.4%	4.5%	6,0%		
Stimulants	9.6%	13.8%	10.5%	13.0%	23.6%	15.0%		
Hallucinogens	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%		
Volatile substances	0.1%	0.2%	0.1%	0.1%	0.4%	0.2%		
Multiple/other substances	1.5%	1.8%	1.6%	1.4%	1.7%	1.4%		
Total (N)	47,447	12,667	60,114	13,998	3,327	17,325		

<sup>1)</sup> All persons treated are in this case all patients newly admitted and patients who completed therapy in the reporting year.

Pfeiffer-Gerschel et al. 2012c, d.

Among the persons who underwent addiction therapy for the first time, cannabis clearly led the league with a nearly unchanged share in all substances (56.6 %; 2010: 59.8 % of all clients) and was followed at a clear distance by the portion of clients treated for opioids for the first time. Their portion remained nearly unchanged (18.1 %; 2010: 17.7 %) whereas the portion of users of stimulants (15.0 %; 2010: 12.5 %) increased (Table 5.1). The proportion of persons with cocaine-related disorders declined even further also among the patients treated for the first time in comparison with the previous year (6.6 %; 2010: 6.6 %). The proportions of all other substance groups practically remained unchanged in respect of the previous year.

Secondary addiction diagnoses made in addition to the main diagnosis are relatively common. Out of the clients with primary opioid-related problems<sup>91</sup> about one in four clients (26.5 %) also displayed an alcohol-related disorder (dependence or harmful use) or a disorder in connection with the use of cocaine (21.9 %) (Table 5.2). Dependence on or harmful use of cannabis continued to represent the most common non-opioid secondary diagnosis in this patient group (32.2 %).

<sup>2)</sup> The columns correspond to the categorisation of the TDI-tables: all patients treated: 12.1.1, 13.1.1, 14.1.1, patients treated for the first time: 12.1.2, 13.1.2 and 14.1.2.

TDI table 24.1.1; all subsequent data on clients with primary opiod-related problems are referred to a total number of N=23,307. A direct calculation of a total number from the TDI-tables is not possible since several entries are possible for the additional substance related diagnoses.

Among clients with primary cocaine-related problems<sup>92</sup> cannabis, alcohol, amphetamines and ecstasy played a dominant role as substance-related secondary diagnoses. As in previous years, almost one client in ten with a primary cocaine diagnosis additionally fulfilled the diagnostic criteria of a heroin-related disorder (8.9 %).

Almost one in five of the clients with primary cannabis-related problems<sup>93</sup> also displayed harmful use of or dependence on amphetamines (18.8 %). Almost one client in ten with a cannabis-related main diagnosis showed also harmful use of or dependence on cocaine (9.1%). More than a quarter of the clients with a primary disorder caused by the use of cannabinoids also fulfilled the diagnostic criteria of an alcohol-related disorder (27.4 %). Seen across the board of all substances, approximately more than a quarter of the clients had a disorder caused by the use of alcohol in addition to the primary reason for treatment admission (Pfeiffer-Gerschel et al. 2012d)

Table 5.2 Main diagnosis and additional substance-related diagnosis (DSHS outpatient data, 2011)

Single diagnosis <sup>1)</sup>	Main diagnosis							
	Opioids	Cannabis	Sed./Hypn.	Cocaine	Stimulants			
Alcohol	26.5 %	27.4%	30.6%	40.3%	28.6%			
Heroin	85.4 %	2.3%	4.7%	8.9%	3.9%			
Methadone	37.6 %	0.3%	1.7%	1.1%	0.4%			
Buprenorphine	9.1 %	0.2%	1.0%	0.3%	0.2%			
Other opiates	10.8%	0.5%	3.9%	1.4%	1.0%			
Cannabinoids	32.2%	100.0%	9.9%	44.9%	49.1%			
Benzodiazepines	14.2%	1.2%	72.5%	3.7%	2.0%			
Other Sedatives/Hypnotics	0.5%	0.2%	18.3%	0.3%	0.3%			
Cocaine	21.9%	9.1%	4.5%	93.7%	11.6%			
Crack	3.6%	0.3%	0.2%	6.5%	0.4%			
Amphetamines	9.0%	18.8%	4.9%	20.0%	81.7%			
MDMA	4.5%	5.9%	2.5%	7.0%	16.9%			
Other stimulants	0.8%	1.6%	0.9%	1.4%	17.7%			
LSD	3.3%	2.6%	1.1%	4.2%	4.6%			
Total (N)	23,303	18,202	1,135	2,968	5,898			

<sup>1)</sup> Multiple entries possible.

The data correspond with the TDI-table 24.1.1.

Pfeiffer-Gerschel et al. 2012d.

<sup>&</sup>lt;sup>92</sup> TDI table 24.1.1; referred to a total number of N=2,968.

<sup>&</sup>lt;sup>93</sup> TDI table 24.1.1; referred to a total number of N=18,202 (Main diagnosis: cannabinoids).

# Socio-demographic information, consumption patterns and treatment duration

In 2011, 78.9%<sup>94</sup> (2010: 79.4%) of all outpatient clients N=60,114<sup>95</sup> with drug problems recorded within the framework of the German Statistical Report on Treatment Centres for Substance Use Disorders were male. 50.9% (2010: 53.5%) of all treated patients were between 15 and 29 years of age<sup>96</sup>. 83.1% (2010: 82.8%) of them were of German nationality, 3.0% (2010: 2.9%) were from other countries of the European Union (EU), 8.6% (2010: 8.3%) from non-EU countries such as Turkey or the former Soviet Union (unknown nationality: 5.3%). Since living conditions of the clients vary considerably depending on the main diagnosis or the drugs used, the characteristics presented in Table 5.3 are broken down by main drugs.

Further information can be found in standard tables 8 and 9 as well as in the TDI-tables.

Table 5.3 Socio-demographic data broken down by main drug (DSHS outpatient data, 2011)

	Main diagnosis					
Characteristics	Opioids	Cannabis	Cocaine	Stimulants		
Years of age when starting treatment (m) <sup>1)</sup>	35.3	24.7	32.6	26.5		
Years of age at first drug use (m) <sup>2)</sup>	21.2	15.3	21.4	17.9		
Gender (ratio males) <sup>3)</sup>	76.3 %	85.7 %	85.5 %	72.3 %		
Living alone <sup>4)</sup>	51.7 %	59.3 %	43.5 %	52.2 %		
Working status <sup>5)</sup>						
without work	62.5 %	35.9 %	40.2 %	45.7 %		
in school/education	2.5 %	28.3 %	5.4 %	13.4 %		
Homeless <sup>6)</sup>	2.7 %	0.7 %	1.7 %	1.1 %		

<sup>1)</sup> TDI table 6.1.1 for data on all persons (not broken down by main drug).

Table 5.4 shows the most common use pattern for various substances. Heroin continues to be mainly injected by more than half of the clients. The trend of recent years which saw the intravenous use of heroin falling in favour of smoking since 2003, (in 2003 heroin was still injected in two-thirds of all cases) has not continued. While the proportion of people who smoke heroin has virtually remained unchanged compared to the previous year (2011:

<sup>2)</sup> TDI table 23.1.1 for data on all persons (not broken down by main drug).

<sup>3)</sup> TDI table: 12.1.1, 13.1.1 and 14.1.1 (for corresponding data).

<sup>4)</sup> TDI table 7.1.1 for data on all persons (not broken down by main drug).

<sup>5)</sup> TDI- table 9.1.1 for data on all persons (not broken down by main drug); on the day before the start of therapy.

<sup>6)</sup> TDI- table 8.1.1 on the stability of the life situation (no directly corresponding data): on the day before the start of therapy. Pfeiffer-Gerschel et al. 2012d.

<sup>&</sup>lt;sup>94</sup> TDI tables 12.1.1, 13.1.1 and 14.1.1

<sup>&</sup>lt;sup>95</sup> For whom data on the gender and main diagnosis were available.

<sup>&</sup>lt;sup>96</sup> TDI table 14.1.1

27.0 %; 2010: 26.8 %), intravenous use has increased (2011: 58.9 %; 2010: 57.8 %) and nasal use has fallen (2011: 8.4 %; 2010: 9.9 %). Injecting use was also found in every fifth cocaine user. All other substances are mainly orally consumed, sniffed (especially cocaine) or smoked (especially crack). The most diversified use pattern was found for amphetamines.

Table 5.4 Drug administration form (DSHS outpatient data, 2011)

	Form of application							
Substance	Injection	Smoking	Oral	Inhalation	Other	Total		
Heroin	58.9 %	27.0 %	5.2 %	8.4 %	0.4 %	17,861		
Methadone	2.7 %	2.1 %	94.6 %	0.2 %	0.3 %	9,272		
Buprenorphine	3.2 %	1.7 %	86.0 %	6.2 %	3.0 %	2,157		
Other opioids	12.5 %	11.7 %	72.1 %	1.4 %	2.3 %	2,459		
Cocaine	19.4 %	20.5 %	1.6 %	58.0 %	0.5 %	9,924		
Crack	9.0 %	85.9 %	1.9 %	3.1 %	0.1 %	981		
Amphetamine	1.3 %	12.0 %	28.7 %	56.8 %	1.3 %	10.533		

Multiple entries possible.

TDI-table 17.1 (exception: TDI does not differentiate between buprenorphine and other opiates).

Pfeiffer-Gerschel et al. 2012d.

The DSHS also contains some basic data on the therapy intensity<sup>97</sup>. The average number of contacts during therapy was the highest for opiate clients amounting to 20.7 (2010: 21.8) and the lowest for cannabis clients amounting to 10.2 (2010: 9.8). Women generally have more contacts than men with comparable main diagnoses (Table 5.5). The average treatment duration corresponds in its distribution to the contact figures. On average, opioid clients have the longest treatment duration and cannabis clients the shortest.

Due to the small number of cases of clients with primary problems associated with hallucinogens (n = 120) and volatile substances (n = 60), these two groups were not taken into account in the comparisons.

Table 5.5 Number of contacts and treatment duration (DSHS outpatient data, 2011)

	Numbe	er of contac	contacts (M) Duration of treatment (N			
Main diagnosis	Males	Females	Total	Males	Females	Total
Opioids	19.2	25.3	20.7	49.0	55.7	50.6
Cannabinoids	9.9	12.0	10.2	25.7	26.2	25.8
Sedatives/Hypnotics	12.8	17.6	15.4	31.7	37.0	34.6
Cocaine	13.7	15.3	14.0	30.3	30.8	30.4
Stimulants	10.7	11.7	11.0	30.8	27.4	29.8
Hallucinogens	11.5	7.0	10.5	21.7	24.8	22.4
Volatile substances	7.9	8.1	8.0	19.2	20.7	19.8
Multiple/other substances	15.2	20.4	16.4	31.2	35.0	32.1

<sup>1)</sup> in weeks.

Pfeiffer-Gerschel et al. 2012d.

### 5.4.2 Inpatient treatment

In general, inpatient treatment in Germany is carried out under drug-free conditions. Since documentation standards discriminate by type of funding and not by type of treatment, all inpatient treatments carried out for persons with main diagnoses F11-F16 or F18-F19 are presented in the following, discriminating between acute hospital treatment (statistical report on hospital diagnoses) and rehabilitation therapy (statistical report of the German Statutory Health Insurance Scheme). There is moreover data available from the DSHS that provides information on some of the specialised clinics and facilities based on the Core Data Set.

### Diagnostic data

Out of the total of 37,354 inpatient treatments of substance-related disorders documented by the DSHS in the year 2011, 8,050 were related to illicit substances (including sedatives/hypnotics and volatile solvents) (Pfeiffer-Gerschel et al. 2012b). Among them were 6,468 treatments for males, this corresponds to a male portion of 80.3% (2010: 78.0 %). In three quarters of the cases (72.3%), alcohol-related disorders were the primary reason for inpatient therapy (23,603 therapies; 2010: 29,569). Only completed treatments were recorded. In the inpatient setting too, the main diagnoses are based on the diagnostic categories of the international classification system of the WHO.

According to the data recorded within the framework of the DSHS, treatments with a main diagnosis based on dependence on or harmful use of opioids (without main diagnosis alcohol) still represent the largest single group in the inpatient setting (34.2%; 2010: 38.3 %)<sup>98</sup>. This segment has been on the decline since 2007 (48.6%). The second largest

The portions presented hereinafter were calculated on the basis of the figures provided in the TDI-tables 14.1.1 (all patients treated) und 14.1.2 (all patients treated for the first time).

group is formed by treatments for disorders caused by cannabis use (26.3%; 2010: 25.5%), whose portion has been continually increasing since 2007. Then follow treatments for polydrug use (15.6%; 2010: 15.0 %). Their portion too, was found to increase over four years. Problems in connection with cocaine or stimulants were in 6.9% (2010: 6.8%) or respectively 12.7% (2010: 9.7%) of the cases the primary reason for treatment (Table 5.6).

Ahead of poly-drug use, cannabis-related disorders recorded in the DSHS have been the second common reason for therapy for four years. This is probably the expression of the increased importance of cannabis also in the inpatient setting of specialised clinics. Among the inpatients recorded within the framework of the DSHS, cannabis still plays a significantly minor role among women than among men: only 18.8% (2010: 16.9%) of the women vs. 28.1 % (2010: 25.5%) of the men had a cannabis diagnosis. Gender differences of this scale are to be found in the DSHS only for sedatives/hypnotics for which the ratio is reversed roughly by the factor 1:6 and for cocaine, which is to a larger extent the main reason for therapy in men (7.5% vs. 4.4 %; 2010: 7.7% vs. 3.6 %).

However, this distribution does not directly tally with data from rehabilitation and acute treatments where opioids and multiple substance use (that practically always correlates with the use of opioids) account for the large majority of the cases. In the acute setting (hospitals) about half of the drug cases (43.2%; 2009: 45.3%) were related to poly-drug use in 2010, in the statistics of the German Pension Insurance Fund (DRV) the figure even amounts to 51.6% (2009: 54.9%) of all cases in the same year. In both statistical reports however, this portion has been on a continual decline for several years. In the DSHS, the use of opioids is more often coded as the main reason for therapy<sup>99</sup>. According to the data on acute treatments (statistical report on hospital diagnoses) and the statistical data from the DRV, the shares of clients treated for cannabis use are on the rise (but still account for a significantly smaller portion).

Intoxications caused by sedatives and hypnotics continue to be relatively common in acute treatment (Statistical Report on the Hospital Diagnoses). About one in ten addiction diagnoses in the hospital treatments is related to these substances. They play a rather minor role in rehabilitation treatments (DRV) and in the DSHS (Table 5.6).

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This is partly due to the fact that the German Core Data Set that forms the basis for the DSHS (deliberately) provides a definition that deviates from ICD-10 for the classification of a F19 diagnosis, which leads to a lower portion of these diagnoses in the DSHS.

Table 5.6 Inpatients broken down by addiction diagnosis

	Hospital	Hospital DRV		DSHS				
	2010	2010	2010		2011			
Main diagnosis	Total	Total	Total <sup>1)</sup>	Total <sup>1)</sup>	Males <sup>2)</sup>	Females <sup>3)</sup>		
opioids	33.9%	24.1%	38.3%	34.2%	34.5%	33.3%		
Cannabinoids	8.5%	14.4%	25.5%	26.3%	28.1%	18.8%		
Sedatives/Hypnotics	9.7%	2.4%	4.3%	3.8%	1.8%	12.1%		
Cocaine	1.1%	3.4%	6.8%	6.9%	7.5%	4.4%		
Stimulants	2.9%	3.9%	9.7%	12.7%	12.1%	15.2%		
Hallucinogens	0.4%	0.1%	0.1%	0.4%	0.4%	0.3%		
Vol. substances	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%		
Multiple/other substances	43.2%	51.6%	15.0%	15.6%	15.6%	15.9%		
Total (Number)	95,884	14,507	8746	8050	6468	1582		

<sup>1)</sup> The data correspond with the TDI-table: 14.1.1.

DRV 2011c, Pfeiffer-Gerschel et al. 2012b, Statistisches Bundesamt 2011b.

When comparing the data from the inpatient facilities participating in the DSHS to the statistics on the acute treatments carried out in hospitals and the measures paid for by the German National Statutory Pension Insurance, one gets the following picture: opioids continue to rank first among the illicit substances in all sources. If one adds the cases of multiple-substance use which, in most cases, probably involves a combination of opioid addiction and cocaine and other drug-related addiction problems, the portion amounts to 50%-80% of the clients treated in the inpatient setting. An exception is formed by the cases reported within the framework of the DSHS (which shows a considerably higher portion of patients with primary cannabis-related problems). It is very likely that – apart from the treatment orientation of the participating facilities – also different coding habits can be held responsible for the divergences found between the statistics.

### Socio-demographic information and treatment duration

In analogy with the presentation of the data for the clients in outpatient treatment, Table 5.7 summarises some socio-demographic characteristics of the inpatient cases documented within the framework of the DSHS for the main diagnosis groups. In comparison with the outpatients recorded within the framework of the DSHS (see Table 5.3) the opioid users treated in the inpatient setting tend to be somewhat younger and cannabis users somewhat older; differences between users of cocaine and stimulants tend to be minor. After the portion of the homeless among the inpatients with the main diagnosis opioids and cocaine doubled respectively and among the ones with the main diagnosis stimulants more than quadrupled

<sup>2)</sup> The data correspond with the TDI-table: 12.1.1.

<sup>3)</sup> The data correspond with the TDI-table: 13.1.1.

in respect of the previous year when comparing 2009 to 2010, this also slightly increased in 2011. Indications that inpatients represent a different group of clients can be inferred from the fact that there are more unemployed and single persons among them – in comparison with outpatients. A comprehensive comparison of the two client groups would however require a careful comparative analysis of the use parameters which would for example give more information about the intensity of use and thus about the severity of the substance-related disorder.

Table 5.7 Socio-demographic data broken down by main drug (DSHS inpatient data, 2011)

	Main diagnosis					
Characteristics	Opioids	Cannabis	Cocaine	Stimulants		
Years of age when starting treatment (m) <sup>1)</sup>	33.8	26.9	32.4	27.6		
Years of age at first drug use (m) <sup>2)</sup>	21.0	15.2	20.2	17.9		
Gender (ratio males) <sup>3)</sup>	80.9%	86.0%	87.5%	76.5%		
Living alone <sup>4)</sup>	57.3%	63.5%	48.9%	60.4%		
Working status <sup>5)</sup>						
without work	69.2%	62.0 %	59.9 %	64.8 %		
in school/education	0.9%	5.8%	1.0%	4.0%		
Homeless <sup>6)</sup>	2.2%	1.3%	2.6%	1.9%		

<sup>1)</sup> TDI-table 6.1.1 for data on all persons (not broken down by main drug).

The data from the DSHS shows significant differences in the average treatment duration broken down by main diagnoses (Figure 5.1). In 2011, the average treatment duration for patients with primary disorders caused by the use of cannabis was 14.1 weeks (2010: 14.9), 15.2 weeks (2010: 15.3) for stimulants, 14.0 weeks (2010: 14.0) for cocaine, 13.8 weeks (2010: 13.6) for opioids and 11.4 weeks (2010: 12.2) for sedatives/hypnotics. The treatment duration for alcohol, given as a comparative value, is on average 11.8 weeks (2010: 11.8).

Some of the treatment durations diverge considerably. A striking statistic is that with 14-16 weeks, the average treatment duration for disorders caused by illicit substances is on average at least two weeks longer than for alcohol and sedatives/hypnotics. This is primarily attributable to the clearly smaller portion of patients with treatment duration >= 9 months for alcohol and sedatives/hypnotics. The average treatment duration for alcohol-related disorders has slightly declined for five years, though despite slight decreases when

<sup>2)</sup> TDI- table 23.1.1 for data on all persons (not broken down by main drug).

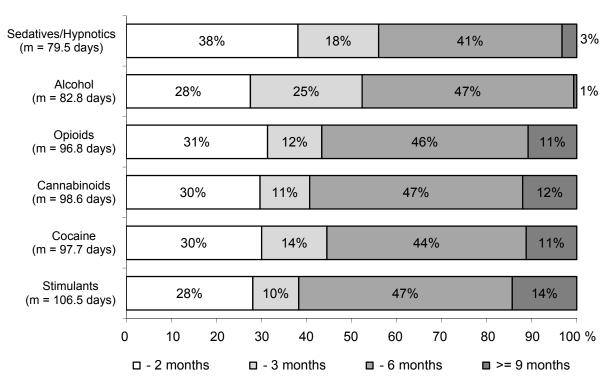
<sup>3)</sup> TDI table: 12.1.1, 13.1.1 and 14.1.1 (for corresponding data).

<sup>4)</sup> TDI- table 7.1.1 for data on all persons (not broken down by main drug).

<sup>5)</sup> TDI- table 9.1.1 for data on all persons (not broken down by main drug); on the day before the start of therapy.

<sup>6)</sup> TDI- table 8.1.1 on the stability of the life situation (no directly corresponding data): on the day before the start of therapy. Pfeiffer-Gerschel et al. 2012b.

compared to the previous five years, the other substance groups do not show a clear trend for the past few years.



Pfeiffer-Gerschel et al. 2012b.

Figure 5.1 Duration of inpatient treatment broken down by substance use disorders (DSHS inpatient data, 2011)

In addition to the nationwide data collected within the framework of the DSHS, there are separate evaluations by individual associations. For example, "buss" (Federal Association for inpatient addiction help, Bundesverband für stationäre Suchtkrankenhilfe) reported the basic data of the discharge year 2010 in an association's own evaluation that is based on a total of 16,067 cases from 95 institutions (buss 2010). In addition, buss has a follow-up history study which is based on N = 1,497 cases of the discharge year 2010 (for drug facilities only).

Based on the experience that monocentric studies of inpatient detoxification of opiate addicts exhibit considerable variability with regard to the success of treatment, Specka and colleagues (2011) conducted a multicentric study to shed some light on the extent to which patient characteristics can explain the different discharge rates between treatment facilities. To this purpose, N=1,017 opiate dependent patients from 12 detoxification facilities with comparable structures were surveyed. The results indicate that regular discharge was significantly associated with existing plans for a follow-up treatment, previous detoxification or other completed inpatient treatments, a smaller number of unsuccessful detoxification treatments, older age, later onset of opiate use and a longer duration of use. The authors therefore conclude that regular discharge can be best predicted through plans for a follow-up treatment on the part of patients and earlier treatment results. Despite the comparability of

treatment facilities in terms of their structural features and statistical control of the patient characteristics, a significant facility effect could be detected overall.

#### 5.5 Trends of clients in treatment

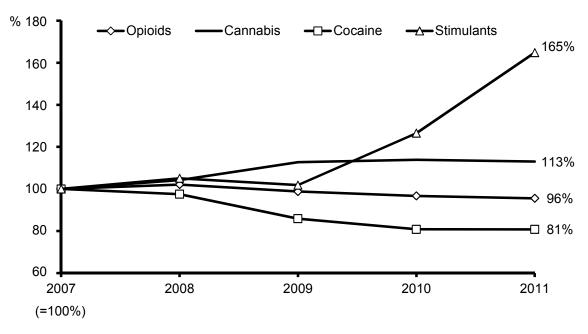
## 5.5.1 Developments in the outpatient and inpatient setting

All in all, disorders caused by the use of heroin continue to play a predominant role among the illicit drugs in outpatient and inpatient facilities. However, cannabis is in the first place of the treatment requests made by persons seeking outpatient therapy for the first time (first patients), whereas opioids are the reason for making contact with a treatment facility only in less than five users. Seven years ago, this portion was still at about a third of the first-time patients. Among all the admissions to outpatient therapy, clients with disorders caused by the use of opioids still represent the largest individual population among the clients of illicit drugs, but their portion has been shrinking continually for several years.

When calculating the changes in admissions of clients to the outpatient setting broken down by main diagnoses since the introduction of the new Core Data Set in the year 2007 (Index=100%), one finds a slight increase in the share of patients with main diagnosis cannabis between 2007 and 2009, a continual decline in patients with cocaine problems, hardly any changes in opiate users and a very strong increase in clients with the main diagnosis stimulants since 2009 (Figure 5.2).

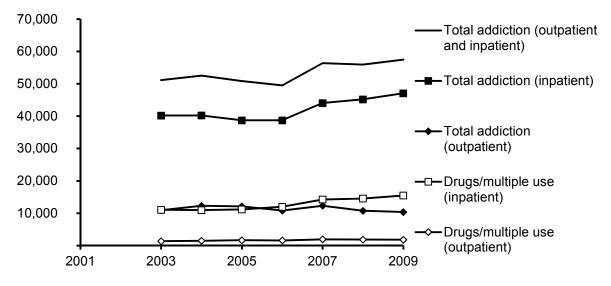
In the inpatient setting, (rehabilitation statistics by the RV, DSHS), cannabis users form the second largest patient group after the opioid users. Inpatient treatment of cannabis disorders also plays an increasingly important role. This development becomes most apparent in the data collected by DHDS, while acute treatments for cannabis (statistical report on hospital diagnoses), by comparison, are still relatively rare.

The total number of rehabilitation services funded by the Pension Insurance in the addiction area has remained virtually unchanged when comparing between 2009 and 2010, however in comparison with 2003, it increased from a total of 51,123 by more than 10% to 56,997 (Figure 5.3). The largest part of the services (69.6%) is provided for alcohol-related disorders; disorders caused by the use of illicit drugs and multiple drug use account together for about 30% of the funded services (medical drugs: 0.7%). This share increased from 24.3% in 2003 by about 5%, this means that since 2004 the share of rehabilitation services funded by the Pension Insurance for the therapy of primary alcohol problems has continually been shrinking.



Pfeiffer-Gerschel et al. 2012d.

Figure 5.2 Changes in admissions to outpatient therapy broken down by main diagnoses (DSHS outpatient data)



DRV 2011c.

Figure 5.3 Changes in out and inpatient rehabilitation therapies

The ratio between inpatient and outpatient treatments is more than 4:1 (across all services provided). This ratio shifted slightly between 2003 and 2008 (especially since 2005) in favour of the inpatient treatments (from 3.7:1 to 4.4:1). Looking only at the rehabilitation services funded for drugs and multiple use, one finds that the ratio between inpatient and outpatient treatment has, with 8:1, even more markedly shifted towards the inpatient treatments. The number of rehabilitation cases (according to the DRV) since 2003 increased for drug patients

(drugs/multiple use) in both the inpatient and outpatient area until 2007 and have remained stable since then (Figure 5.3).

So far, the available statistics do not show the treatments carried out in day hospital care in a discriminating manner. The attempt to take a differentiated look at the statistical data could contribute to going deeper in the analysis of changes in the reporting years to come.

The overall figures of the acute addiction or respectively drug treatments slightly increased as well between 2009 and 2010 as in the previous years (statistical report on the hospital diagnoses). Significant increases were found for the number of treatments for intoxications with stimulants (+51.8%) and, as in the previous years, cannabinoids (+12.3%). The number of inpatient hospital treatments in connection with cocaine (+2.5%) as well as the number of patients with main diagnosis Opioids (+3.3%) has remained almost unchanged between 2009 and 2010 after considerable decreases in the previous years (Table 5.8).

Table 5.8 Inpatient treatment of drug problems in hospitals 2007-2010

_		Changes			
Main diagnosis	2007	2008	2009	2010	2010 vs. 2009
Alcohol	316,119	333,804	339,092	333,357	-1.7%
Opioids	31,638	30,776	31,496	32,538	3.3%
Cannabinoids	5,790	6,297	7,251	8,145	12.3%
Sedatives/Hypnotics	9,091	9,294	9,094	9,270	1.9%
Cocaine	1,300	1,388	1,050	1,076	2.5%
Stimulants	1,672	1,868	1,848	2,805	51.8%
Hallucinogens	532	482	431	430	-0.2%
Tobacco	236	281	258	310	20.2%
Volatile substances	138	152	194	171	-11.9%
Multiple/other substances	39,727	42,399	42,468	41,449	-2.4%
Total addiction	406,243	426,741	433,182	429,551	-0.8%
Total drugs	89,888	92,656	93,832	95,884	2.2%

Statistisches Bundesamt 2008, 2009, 2011a, 2011b.

Based on the data of the DSHS, Kipke, Steppan and Pfeiffer-Gerschel (2011b) indicate that the proportion of clients with a primary diagnosis of cannabis in the German drug help system, which has significantly risen since 2000, may be linked to the increasing number of special programmes for the treatment of cannabis-related disorders. Overall, it can be noted that the proportion of clients with a primary cannabis problem has risen significantly since 2000 in relation to all clients (especially among those treated for the first time) who took advantage of outpatient addiction help. According to the authors, this trend is reflected in both the increased prevalence of cannabis use (especially in the second half of the 1990s)

as well as in the growing awareness that this is a treatment-related disorder. The authors see the increase in latency between first use and start of care as remarkable. This result contradicts the objective, according to which latency should be shortened as much as possible in order to reduce the risk of further manifestation of cannabis-related disorders.

Missel and Koch (2011) indicate the high rates of comorbidity of the treated patients particularly for inpatients. In addition, there is another significant problem with respect to other characteristics (primarily integration into the labour market). Based on a detailed analysis of data collected as part of DSHS for inpatient treatment of people with addiction-related disorders, the authors see the need for optimisation, among others, to develop specific target group concepts for comorbid patients and in the field of vocationally-oriented medical rehabilitation. The high unemployment rate of people receiving treatment represents a major challenge for the help system in addition to the immediate treatment of substance-related disorders also in an inpatient context.

#### 5.5.2 Substitution treatment

The most recent census carried out within the framework of the substitution register permits making inferences about the number of persons reached on a set day but not over the course of the year.

The number of reported substitution patients since the beginning of the reporting obligation (2002) has risen continuously until 2010 up to 77,400 patients as of 1 July 2010. In 2011, the number dropped for the first time on 1 July 2011 to 76,200 (BOPST 2012). It should be noted that in 2011 an above-average number of doctors had their databases updated by "inventory reports" as part of corrective action, so that missed cancellations could be registered later, for example.

Approximately 150 double treatments (in 2010: approx. 190) could be detected in the year 2011 through the substitution register and were subsequently terminated after notifying the corresponding physician.

A total of 2,703 substitution doctors have reported patients. The medical associations report approximately 8,100 physicians who are qualified for addiction therapy, far more than those who actually provide substitution treatment. About 19 percent or 513 substituting doctors have used the supervision of a colleague in 2011: based on this, doctors without addiction therapy qualification can also substitute up to three patients simultaneously if they involve an accordingly qualified physician. The average number of registered substitution patients per substitution doctor varies considerably between the individual states and its nationwide average is 28 (Die Drogenbeauftragte der Bundesregierung 2012a).

Access to substitution treatment is subject to strong regional divergences: firstly, the proportion of substitution patients in the total population is much higher in the city-states (especially Bremen and Hamburg), than in the large-surface states possibly because of surrounding countryside effects (Die Drogenbeauftragte der Bundesregierung 2012a), secondly it is significantly higher in the western *Laender* than in the eastern *Laender*. Still

only 3.0% (N=2,266; 2010: 3.0%; N=2,195) of the patients reported to the register (cut-off date: 01.10.2011) and 5.3% (N=140; 2010: 5.2%, N=130) of the substituting doctors are from the eastern *Laender* (excluding Berlin) (BOPST 2012).

According to the register of the Federal Institute for Drugs and Medical Devices, 8,122 (2010: 7,805) doctors were registered for substitution treatment in 2001<sup>100</sup>. From the perspective of the treatment supply situation, however, it is by far more relevant that only 2,703 (2010: 2,710) doctors reported to the substitution register in 2010 (BOPST 2012). The number of actually substituting doctors has been stagnating at a practically unchanged level since 2004. Looking at the relation between reported substitution patients and population figures in the individual Laender, the three city states Hamburg, Bremen and (at a considerable distance) Berlin are at the top of the list as in the previous years. The lowest numbers of substituted patients per inhabitant were reported by the three eastern Laender Brandenburg<sup>101</sup>, Mecklenburg-Western Pomerania and Saxony as in the previous year. Still only 3.0% (N=2,266; 2010: 3.0%; N=2,195) of the patients reported to the register (cut-off date: 01.10.2011) and 5.3% (N=140; 2010: 5.2%, N=130) of the substituting doctors are from the eastern Laender (excluding Berlin). The number of registered patients per substitution doctor is accordingly also subject to considerable variations between the Laender. Whereas a substitution doctor in Hamburg treated on average 46.2 patients in 2011 (followed by the Saarland with an average of 43.0 and Hessen and Berlin with 32.2 each), the average in Brandenburg was only 7.3 (Mecklenburg-West Pomerania: 9.8; Thuringia: 14.0).

In summer 2011, the president of the Medical Association of Rhineland-Palatinate and the Chairman of the Committee of the German Medical Association also pointed out the shortage of doctors for substitution treatment and difficulties in providing care, which can appear in rural areas in particular as a result of qualified addiction specialists withdrawing for agerelated reasons (aerzteblatt.de 2011).

The share of substances used in substitution treatment has shifted in the past few years at the cost of methadone (2011: 54.8 %) and to the benefit of levomethadone (2011: 25.4 %) as well as buprenorphine (particularly between 2002 and 2007), which was used in about every fifth substitution (Table 5.9).

The actual number of doctors with a corresponding additional qualification is presumably higher since some *Laender* automatically granted this qualification to all doctors specialised in psychiatry and psychotherapy (at least for a temporary period of time) without them being fully registered in the register.

<sup>&</sup>lt;sup>101</sup> For the *Land* Brandenburg it can be assumed that numerous users change over to the metropolis Berlin to undergo substitution treatment.

		,							
Substitution drug	2003	2004	2005	2006	2007	2008	2009	2010	2011
Methadone	70.9%	68.3%	66.2%	64.1%	61.4%	59.7%	58.9%	57.7%	54.8%
Levomethadone	14.8%	15.0%	15.8%	17.2%	19.0%	20.6%	21.8%	23.0%	25.4%
Buprenorphine	12.9%	15.6%	17.2%	18.0%	18.6%	18.9%	18.6%	18.6%	19.2%
Dihydrocodeine	1.2%	0.9%	0.7%	0.6%	0.5%	0.4%	0.3%	0.3%	0.2%
Codeine	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Diamorphine					0.4%	0.3%	0.3%	0.3%	0.4%

Table 5.9 Type and portion of the substitution drugs reported to the substitution register (2003-2011)

BOPST 2012.

Langer and colleagues (2011) recently submitted an updated overview of substitution treatment of opioid addicts, which summarises the basics of the care situation and existing problem areas in Germany. In the process, the authors particularly mention the data that was collected as part of the Addiction Research Network ASAT and both studies, Cost Benefit Appraisal of Substitution Treatments (COBRA) and Predictors, Moderators and Outcomes of Substitution Treatment – Study (PREMOS) (cf. REITOX Reports of previous years).

Based on the data of the PREMOS study, Soyka and colleagues (2012) surveyed the mortality of opioid addicts in substitution therapy in Germany. To enhance comparability with other studies, the "Conditional Mortality Risk (CMR)" was used, which relates the number of deaths to person-years of the observation period. According to the results of the investigation, the standardised annual mortality risk was 1.15% per 100 person-years. The most frequent causes of death were complications or consequences of somatic disorders, overdose of illegal drugs / poly intoxication and suicide. The substitute itself presented no significant cause. Older age, social disintegration, duration of medical addiction history, unemployment, high addiction severity, mental disorders and disruption and discontinuation of treatment were predictors of early mortality. The findings confirm the authors' view that substitution therapy effectively reduces the risk of mortality of patients and that phases without substitution temporarily constitute a high-risk phase of increased mortality.

Wittchen and colleagues (2011) surveyed the differences between substitution facilities in Germany with respect to their abstinence orientation and investigated the question as to whether these differences are associated with differences of aspects of clinical treatment practice in treatment philosophy. This study was carried out based on data from the PREMOS study. In summary, the data from the study point to a number of systematic and substantial effects of abstinence orientation, which suggest a relevance of this concept for explaining the variance in the substitution practice. It became evident, for example that facilities with high abstinence orientation conducted urine tests more frequently and provided psychiatric or psychotherapeutic treatment more frequently. The abstinence orientation of treating facilities seems to have little impact on the realisation of psychosocial measures. Moreover, freedom from opiates is not a realistic treatment goal for the majority of the data of

the substituting physicians analysed in the context of PREMOS and is extremely rare in long-term stable form. Strong abstinence orientation at the facility is obviously associated with increased negative progress risk for patients. In practice, the wishes of the patient, the status of his or her disease and progress as well as the assessment of chances and risks are crucial in individual cases. Institutions with a strong abstinence orientation exhibit a significantly increased risk of long-term disruptions in substitution as well as discontinuation and an increased mortality risk of the patients treated.

Based on the data from the PREMOS study (Wittchen et al. 2011c,d,g; cf. the REITOX Reports from previous years) Wittchen and colleagues have established a series of conclusions and recommendations for the need-based and target group-related design of long-term opiate substitution for opiate addicts (Wittchen et al. 2011f). According to the authors, opiate addicts undergoing substitution treatment are characterised by a severe multi-morbid disease with a chronic course. The authors basically view the results of the PREMOS study as evidence for the effectiveness of substitution therapy, which is associated with significant improvements of the clinical picture throughout the course of the substitution. Substitution enables the treatment of comorbid disorders. However, the mental morbidity of affected individuals needs continued treatment, even in the long term. The concomitant use of additional substances also requires a still-differentiated analysis of the underlying causes in individual cases. The authors point out that a discontinuing substitution for disciplinary reasons should be carefully checked and be absolutely restricted to critical individual cases and must be viewed against the background of an existing need for long-term and highly specialised treatment in individual cases.

Wittchen and colleagues evaluated the intensity of treatment as extremely low given the complexity of the patients' problems. With respect to the necessity observed in individual cases and the actual use of psycho-social counselling, there is still considerable uncertainty. Therefore it is often obviously impossible to meet the respective psychosocial help needs of multi-year substitution based on the patient's needs in regions with a particularly poor treatment infrastructure. The authors identify women with children who need better care as a specific target group. Overall, the authors could not identify any general model of influence factors for favourable or unfavourable long-term progression. The authors found evidence of a likely present differential medical indication strategy for the choosing the means of substitution to be used in individual cases. This indication strategy could explain why patients with buprenorphine frequently show a better course of treatment and better results in comparison with those with levomethadone or methadone (Wittchen et al. 2011h).

Based on a random sample of patients examined within the framework of the PREMOS study, Wittchen and colleagues also examined the stability of PREMOS long-term findings (Wittchen et al. 2011a, b). In the process, the authors observed a reduction in the proportion of stably substituted patients and an increase in non-substituting patients or unstably-substituting patients with longer breaks and a significant lowering of the percentage of abstinent patients. The concomitant use of opioids, cannabis and other illicit drugs continued to fall, the additional use of benzodiazepines remained high. This confirms the authors'

opinion that a long-term course is characterised by a remarkable variability. Based on their study results, the authors have come up with a series of recommendations that include, among others, demonstration programmes, preventive measures, research programs, guidelines, testing of organisational and financial concepts, targeted improvements of treatment of selected disturbance areas and problem groups and adaptation of the care structure and concepts as well as of the statutory provisions to the principles of treatment of a chronic disease.

As part of a pilot study (N=60 patients), Soyka and colleagues (2011b) compared the cognitive function of patients under maintenance treatment with heroin, methadone or buprenorphine with a healthy control group. Results of the investigation showed significantly worse results for patients taking heroin compared to the healthy control subjects. Patients who were taking heroin also achieved worse results compared to those patients treated with methadone or buprenorphine, particularly in subtests for motor performance under conditions of stress and monotony. Under the consideration of a series of methodological limitations, the authors evaluated the results of the investigation as evidence that cognitive function in patients with reduced heroin maintenance therapy are more restricted than the peer group of the population treated with buprenorphine or methadone (or that was healthy).

Specka and Scherbaum (2011) have investigated the extent to which concomitant psychiatric/psychological treatment is realised for the high degree of comorbid mental disorders, especially in the case of opiate addicts in substitution treatment. Based on a literature review, the authors conclude that the efficacy particularly in the case of cognitive behaviour therapy and contingency management with regard to the reduction of drug use in substitution patients can be considered proven. The authors suggest the likely lack of knowledge about the data available in combination with a common "therapeutic nihilism" in the treatment of drug addicts, as well as limited financial and human resources as barriers to the development of psychotherapeutic care. There is also a lack of reliable data to draw conclusions on the issue of differential indication of different psychotherapeutic methods or on its compatibility.

#### 5.5.3 Other current developments

## Effects of trainer variables in group interventions

As part of the "CAN Stop" study (cf. REITOX Reports from past years), Weymann and colleagues (2011) examined the extent to which the intervention success can be predicted from analysing trainer characteristics and aspects of how well the trainer and patient variables match in group intervention conducted in the study for young cannabis users. Results of the investigation showed that the trainer's age is a significant predictor in terms of the success criteria of "symptom reduction" and "retention rate". As regards the reduction of symptoms, disagreement on the training goals (abstinence versus controlled use) between trainers and patients at the beginning of the intervention has a certain predictive value. The authors concluded that a relevant importance is to be attached and recommend based on the results of trainer variables and that trainer and matching variables must be included in the

analysis to enhance understanding of the impact processes in studies of the effectiveness of interventions.

## Use control training

"CONTRADDICT", a use control training programme was developed at Notdienst Berlin e.V. (Westermann & Mörsen 2012), which targets drug addicts (specifically substitute opiate addicts) who want to reduce or quit their substance use<sup>102</sup>. This involves an open, manual-based programme with seven modules, in which the module sequence and the processing duration of the training programme are customised to the needs of addicts. The results of the accompanying study indicate that it is possible to significantly reduce use intensity and increase control over substance use with both minimal and moderate participation in the training.

## Treatment under special conditions (especially forensic psychiatric hospitals)

In a review article, Vogt (2012) pursues the questions as to what extent formal and institutional pressures play a role as variables for deciding on addiction treatment. The analysis focuses in particular on forensic psychiatric treatment and other treatment contexts in which particular external reasons are important for undergoing treatment (e.g. treatment in order to avoid a jail term, re-acquire a driving license, or get a job). Overall, the author comes to the conclusion that about half of the treated people benefit from interventions, even under framework conditions in which primarily external factors are the key factors for abandoning the treatment. In such contexts, Vogt also stresses the particular importance of the therapeutic alliance between therapists and patients without this being sufficiently reflected in the available concepts so far. Von der Haar (2012) also emphasises the opportunities that exist in forensic psychiatric treatment for long-term and in-depth treatment of people with addictions, although they show many adverse criteria for successful treatment. Von der Haar particularly emphasises positive approaches that appear in the field of after-care and points out the relevance of gradual integration into the "normal" system of care (outside of forensic psychiatric treatment or prison facilities). The cooperation between facilities and other forensic psychiatric hospitals require further development to enhance the goal of reintegrating the affected person in the future. Wittmann (2012) also emphasises the basic effectiveness of forensic psychiatric hospitals for both the individual patient and public safety. but points out that the efforts of all those responsible must go towards enabling reintegration into a delinquency-free life for a much higher proportion of institutionalised addicts than before. In this context, further differentiation between treatment concepts (disorder specificity, medication-assisted treatment, focusing on the themes of family/partnership, employment/finances and relapse management) is necessary.

cooperation, a further 30.1% had not completed the training programme by the end of the evaluation.

<sup>102 170</sup> substitution patients, who received psychosocial treatment at Notdienst Berlin e.V. between January 2007 and January 2010, took part in the accompanying evaluation. The intensity of use as well as additional use-related variables were assessed as target criteria at four stages. 30.1% of participants were able to complete the training successfully and achieve their individual goals. At 26.5%, the training was cancelled due to lack of

## Treatment of patients with addiction disorders and other mental disorders

Trauma: Schäfer, Schulze and Stubenvoll (2011) have presented an overview of the current state of therapeutic trauma interventions for people with addiction disorders. Here they have placed an emphasis on empirically tested therapies. According to the results of the authors, all interventions that have proven successful in the context of trauma therapy are successfully used on addicts in everyday clinical practice. It is now clear that approaches from both areas (trauma and addiction) should be combined with each other from the beginning of therapy. The existing randomised controlled trials refer to a stabilising therapy programme whose effectiveness can now be regarded as proven. The treatment of people suffering from addiction disorders with comorbid post-traumatic stress disorder has strongly developed in recent years according to the authors, but so far few systematic findings would be available for trauma exposure in this group of patients.

Borderline personality disorders: based on a systematic literature search Daig, Bermpohl and Kienast (2011) have created an overview of psychotherapy for patients with borderline personality disorders and comorbid addictive diseases. According to the authors, the small number of studies that have examined the effectiveness of psychotherapy for personality disorders and co-existing comorbid addictive diseases was striking. Dual-focus scheme therapy and dialectical-behavioural therapy are considered to be evaluated therapies for the treatment of this comorbidity, both of which appear to be effective in reducing substance abuse and pathological symptoms. Neither therapy is superior in this case. The authors see advantages of dialectical-behavioural therapy in the strictly modularised form of therapist training and the easy-to-teach therapeutic approach.

Depression: Loeber, Dinter and Mann (2011) have conducted a systematic literature search to identify both randomised treatment comparison studies and other clinical trials evaluating the effectiveness of integrated treatment of addictive diseases and depression. The results of this study show that through an integrative treatment approach, in which both the addictive disease and the depressive disorder are treated, a reduction in depressive symptoms and an increase in the abstinence rate can be achieved. The authors point out, however, that methodological flaws of the present studies or the pending replication of findings currently restrict the present positive results. Moreover, the establishment of integrated treatment approaches is difficult due to the on-going separation of the drug help facilities and general psychiatric facilities.

*Psychoses:* similar to the treatment of effective disorders in patients suffering from addictive diseases, Schnell and Gouzoulis-Mayfrank (2011) consider structures that integrate the traditionally separated concepts of mental health care and addiction treatment to be necessary, also when treating comorbid psychosis and addictive diseases. In addition, the authors point out that the therapies should have a long-term perspective and, especially in the outpatient setting, aim at strengthening the motivation for a reduction in consumption or abstinence.

# 6. Health correlates and consequences

#### 6.1 Introduction

Drug use has an influence on morbidity and mortality of the users. Data on drug-related fatalities are collected by two countrywide systems: The Drugs Data File (Falldatei Rauschgift, FDR) kept by the Federal Criminal Police Office (Bundeskriminalamt, BKA) and the General Mortality Registry of the Federal Statistics Office (Statistisches Bundesamt). 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.

#### 6.1.1 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<sup>103</sup>. According to the German Regulation on Laboratory Reports and the Infectious Diseases Control Law (Infektionsschutzgesetz, IfSG) introduced in 2001, all laboratories in Germany are obliged to report confirmed HIV-antibody tests anonymously and directly 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 routes of transmission. These data are complemented by supplementary anonymous reports of the doctors in charge, by limited clinical data and HIV-related laboratory parameters.

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 easier 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 (HBV and HCV) 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 updated data are published yearly by the Robert Koch Institute in Berlin in the "Yearbook – Infection epidemiology of notifiable infectious diseases" (Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten) (RKI 2012b) or respectively in the Epidemiological Bulletin of the RKI (RKI 2011).

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<sup>103</sup> www.rki.de

Since 2007, the German statistical report on treatment centres for substance use disorders also records data on the HBV- and HCV-status of patients in addition to the HIV-status. Since the number of facilities which report these data is very small and only patients with test results are recorded, these data require cautious interpretation.

## 6.1.2 Drug-related deaths

#### **Case File: Narcotics**

In general, drug-induced fatalities are recorded by the Land Criminal Police Offices in the individual *Laender*. 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-induced fatalities differ between the individual *Laender*. The portion of autopsied drug-induced deaths as a measurement for the quality of the assignment of drug-related fatalities varies (in some cases considerably) between the *Laender*. Toxicological reports on body fluids and tissue play an important role in determining the cause of death providing clarifying information on the drug status at the time of death. 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 taken into account in the classification of drug-related fatalities only to a limited extent.

In order to facilitate the recording of drug-induced deaths and reduce mistakes, the following categories for drug-related fatalities were defined in a leaflet by the Federal Criminal Police Office (BKA 1999):

- drug-induced deaths 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 (= long term health damage),
- 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 Registry 104

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.

The usage of the term "General Mortality Registry" is oriented to the terminology of the EMCDDA. The data reported hereinafter is from the "Statistical report on the causes of death" ("Todesursachenstatistik") of the Federal Statistics Office (special series 12, part 4).

Only cases that correspond to the definition of "direct causality" are selected from the General Mortality Registry to be reported to the EMCDDA. The goal here is to record death cases within the framework of a sensitive data collection as shortly as possible after the use of opioids, cocaine, amphetamine (derivates), hallucinogens and cannabinoids, i.e. in particular after fatal intoxications. 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 druginduced fatalities, the assumed underlying disorder (ICD10-Codes F11-F19) or the assumed cause of death (ICD10-Codes X, T, and Y) in the case of accidents and suicides is used respectively. This means that long-term secondary diseases, accidents not directly caused by intoxications and suicides are not comprised by this definition although individual cases of this type may be included due to faulty death certificates or coding errors. In 2006, new coding rules of the World Health Organization (WHO) entered into force. According to the new rules, the acute causes of death are to be generally coded, if possible, in form of the substance underlying the intoxication in lieu of the F1x.x-codes. In Germany, the new coding has, however, not led to the desired increase in the specificity.

The data collected by the Federal Criminal Police Office, by contrast, explicitly set out long-term secondary diseases, suicides and accidents that have come to the knowledge of police. It is however not possible to completely isolate the registered cases of intoxication to achieve data comparability with the General Mortality Registry on the basis of the aggregated data recorded by the BKA due to the usage of not completely disjunct categories.

Comparisons with other European countries should only be made on the basis of the General Mortality Registry, as this registry largely follows common standards. Due to the broader definition of the term 'drug-induced 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 that 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.

## 6.2 Drug-related infectious diseases

#### 6.2.1 HIV/AIDS and viral hepatitis B and C

The figures presented hereunder stem from the data on new HIV and hepatitis C diagnoses, as well as acute hepatitis B cases reported to the Robert Koch Institute in the year 2011. Data from other sources gives additional insight into the problems of specific, often regional populations of drug users (e.g. consumption room users, clients of outpatient addiction aid facilities) affected by HIV and hepatitis.

Comprehensive epidemiological studies on the prevalence of hepatitis B, C and HIV among injecting drug users are not available in Germany.

Data on the prevalence of hepatitis B and C and of HIV in injecting drug users are also contained in standard table 9.

## **Development of HIV reported data**

A total of 2,889 HIV infections were reported to the RKI for the year 2011. This translates to a nationwide incidence of 3.5 cases per 100,000 population. The total number of newly diagnosed HIV infections thus hardly declined in comparison to 2010 (2,939). Information about the route of transmission was available for 77% of newly diagnosed HIV infections. The group of persons (n=90) who likely contracted their HIV infection through intravenous drug use represented the third largest group (4%).

Amongst those intravenous drug users newly diagnosed with HIV, information on their origin was lacking on 19% of the reports. 43% of persons newly diagnosed with HIV originated from Germany, 38% from abroad. Of the intravenous drug users from other countries, probably around 38% had contracted the infection in Germany, the same number in Eastern Europe. At least two thirds of the newly diagnosed HIV infections amongst intravenous drug users occurred in Germany, most of the others in other European countries (24%) – in particular Eastern Europe (17%) (RKI 2012a, b).

#### **HIV Data from other Sources**

From Hamburg, data is available on the HIV prevalence among clients of the outpatient addiction help facilities. The HIV prevalence among the opioid clients was 4.6% in 2010, (2009: 5.2%) whereby women (5.3%) were more frequently HIV positive than men (4.4%). The prevalence remained stable in comparison to the previous years (Martens et al. 2011).

In the Frankfurt documentation on consumption rooms (Simmedinger & Stöver 2011) 3.7% of consumption room users (2009:4.4%) reported being infected with the HIV virus (men: 2.8%; women: 8.2%). In terms of new admissions, the HIV infection rate is much lower (at 1.4%) than for clients continuing treatment (5.0%).

The Statistical Report on Substance Abuse Treatment in Germany (DSHS) also records data on the HIV-infection status of the treated patients (Pfeiffer-Gerschel et al. 2012d). The HIV prevalence among the tested opioid clients in outpatient facilities was 3% (N=503), although status is unknown in 42.5% of cases. If one just looks at those who have been tested, the HIV prevalence is 5%. Among tested patients with any illegal substance problem 4% (N=610) showed an HIV infection.

## **Development of Hepatitis-B reported data**

In the year 2011, a total of 1,928 hepatitis B cases were reported to the RKI. Out of these, 806 cases (42%) corresponded to the reference definition - 1% more than in the previous year (767). The incidence in Germany was at 1.0 infection per 100,000 population. No

seasonal variations were found in the temporal course. The incidence in 2011 slightly increased in comparison with the incidence in 2010 (0.9 pro 100,000).

Due to the change in the data collection software and the new method of recording modes of transmission, the data on modes of transmission are not comparable with those of the previous years. In the case of 87 (11%) of the diseases reported as per the reference definition, solid information was available on the mode of transmission. Multiple mentions were reduced to the most probable mode transmission (RKI 2012b).

## **Development of Hepatitis-C reported data**

For 2011, 5,027 cases of newly diagnosed hepatitis C were reported to the RKI<sup>105</sup>. This corresponded to a national incidence of 6.1 new diagnoses per 100,000 population. Thus the calculated incidence of new diagnoses was lower than that of 2010 (6.5) and than the median of the years 2006 to 2010 (7.6). No seasonal variations were found in the temporal course. The incidence varied between *Laender* from 2.4 new diagnoses per 100,000 population in Mecklenburg Western Pomerania to 17.0 in Berlin.

In Berlin, the *Land* with the highest incidence of new diagnoses, a high rate of new diagnoses has existed since 2004. Possible causes for this are, in addition to the more complete registration and reporting of newly diagnosed cases where sometimes the infection has existed for some time (chronic cases), also the above average number of persons in risk groups such as intravenous drug users, especially in urban centres. Evaluations for the Berlin districts reveal a cluster of cases in districts where a correctional facility is located and where more tests are conducted than in other districts.

Due to the change in the data collection software and the new method of recording modes of transmission, the data on modes of transmission are not comparable with those of the previous years. Solid information was available on the mode of transmission in the case of 1,617 (32%) of the diseases reported as per the reference definition. This information usually comes from the attending doctor or the affected person himself. It can be assumed that behaviour which carries a social stigma such as intravenous drug use and sexual contact between men will be underrepresented. Multiple mentions were reduced to the most probable mode of transmission. Intravenous drug use which is highly likely to be causally linked to the diagnosed hepatitis C, was reported for 1,126 cases (70% of cases with valid information on mode of transmission), of those 867 cases were men (77%). The fact that men are overrepresented amongst intravenous drug users explains the considerably higher

sense of a virus replication of more than 6 months). The reference definition, which has, since March 2003 formed the basis for figures published in the weekly epidemiological bulletin and is applied retrospectively to the reported data from 2001 and 2002, is based on reported cases with first time laboratory detection of an HCV infection, irrespective of the clinical picture as the majority of new infections of hepatitis (around 75% are asymptomatic). The accordingly modified reference definition means that cases will also be taking into

account for which the clinical picture is not fulfilled or no information is available.

<sup>105</sup> Case definition: as it is barely possible from a laboratory diagnostic or a clinical perspective to distinguish between acute and chronic HCV infections, all newly diagnosed reports are recorded in the statistics, however, cases for which an earlier HCV laboratory test already exists, are excluded. Thus, the overall number of recorded cases contains a considerable percentage of already chronic hepatitis C cases (in the sense of a virus replication of more than 6 months). The reference definition, which has, since March 2003

incidence of first diagnosis of hepatitis C for men in comparison to women. Amongst men for whom "intravenous drug use" was the most probable mode of transmission for the hepatitis C infection, 113 persons (13%) were 20 to 24 years old, 175 persons (20,2%) were 25-29 years old, 308 persons (35.6%) 30-39 years old and 165 persons (19%) 40 to 49 years old (RKI 2012b).

#### Hepatitis B and C - Data from other sources

In the framework of the DSHS, data was also collected in 2011 on the hepatitis B and hepatitis C infection status of addiction patients in outpatient treatment (Pfeiffer-Gerschel et al. 2012d). The prevalence of hepatitis B among the tested opiate clients is at 9% (n=720), among the tested clients with illicit drug problems at 7% (n=811). The prevalence of hepatitis C among the tested opiate clients is at 52% (n=5,321, out of these acute in 520, chronic in 5,105), among the tested clients with any illicit drug problem at 38% (n=6.172).

In a survey conducted at the end of 2010/beginning of 2011 by the Centre for Interdisciplinary Addiction Research (Zentrum für Interdisziplinäre Suchtforschung (ZIS)) in ten cities, amongst 420 drug users with a proximity to the respective social "scene" as well as 404 persons with a proximity to substitution practices (in total 667 substituted and 157 non-substituted patients), it was shown that the HCV infection rate (according to information provided by the respondents themselves) was 58.7% (proximity to practices) and 58.3% (proximity to the scene) as well as HBV infection rates of 14.0% (proximity to practices) and 14.1% (proximity to the scene). Only half of all respondents were immunised against hepatitis B whereby this proportion was only slightly higher for respondents in the "practice" group" at 52.3% than those in the "scene" group at 49.0% (Reimer 2011).

According to the Hamburg base documentation system of the outpatient addiction help system (BADO), 44.5% of opioid users were infected with hepatitis C in 2010 (2009: 48%). The infection rate was still, however, able to be significantly reduced since 2005 (57%) (Martens et al. 2011).

In the Frankfurt drug consumption room documentation (Simmedinger & Stöver 2011), in 2010 48% of the users for whom a hepatitis test result has been obtained, have a hepatitis infection (2009: 52%). The most commonly stated infection (44%) is infection with hepatitis C, a further 2% are infected with hepatitis B and C. 2% report only a hepatitis B infection. Gender differences are minimal. Differentiating the data by age groups, one finds, as in past years, that the younger users (up to 33 years old) display markedly lower hepatitis infection quotas than the older ones (above 33 years).

A study from Munich has been conducted using two cohorts from the period 1991 to 1996 and 2005 to 2010 to investigate the extent to which prevalence and risk factors for HCV infection have changed. For the study, all patients who were admitted for a qualified inpatient withdrawal treatment to a Munich clinic in the respective time periods were tested to establish the presence or not of anti-HCV and, if possible, of HCV-RNA in their blood. Furthermore, information was collected on age, gender, contact to drug counsellor, cohabitation with drug addicts, family member with drug addiction, past imprisonment.

suicide attempts, overdoses, inpatient withdrawal treatments etc. Cohort 1 consisted of 1,049 patients, cohort 2 of 1,001 patients. The prevalence of anti-HCV reduced from 61.3% (cohort 1) to 52.6% (cohort 2). The significant risk factor in cohort 1 "past withdrawal treatment" was not significant in cohort 2, however past imprisonment in cohort 2 became one of the most important risk factors for a HCV infection (Backmund & Buchner 2011).

# Prevalence of HBV, HCV and HIV amongst intravenous drug users in towns with larger drug scenes – the DRUCK Study of the RKI

In order to obtain a greater understanding of and to collect data on the prevalence of HBV, HCV and HIV amongst intravenous drug users (IVU) and their behaviour, attitudes and knowledge in relation to these infectious diseases in cities with larger drug scenes, the DRUCK Study (Drugs and chronic infectious diseases in Germany, <u>Drogen und chronische Infektionskrankheiten in Deutschland)</u> was initiated by the Robert Koch Institute (RKI). The results should then form part of a targeted prevention proposal for the protection against HIV and hepatitis amongst IVUs.

After having the study design piloted in Berlin and Essen in 2011, and its feasibility demonstrated, the DRUCK main study is currently beginning. Funding has been supplied by Federal Ministry for Health (Bundesministerium für Gesundheit (BMG)) since April 2012 and this will fun for three years.

The DRUCK Study is a multi-centric cross-sectional study, conducted in six cities with larger drug scenes. In addition to serological parameters for hepatitis C, hepatitis B and HIV, behaviour information (see 6.2.3) will be collected<sup>106</sup>. The study will be coordinated by the RKI and conducted in cooperation with drug assistance facilities and where possible with public health authorities and doctors.

Methodology of the DRUCK Study: study participants are persons who currently inject drugs, are at least 16 years of age and who live in the respective *Land* where the study is being conducted, irrespective of their infection status. Participants are recruited from the open drug scene via low threshold drug facilities using a modified snowball system known as Respondent Driven Sampling (RDS): starting with selected starter persons (so-called "seeds"), recruited participants recruit further participants from their group of friends and acquaintences and are financially compensated for their participation in the study as well as for successful recruitment. This process has proved itself in international studies in order to investigate groups who are hard to reach and well networked (such as IVUs). When it comes to the assessment, the size of each participants network of persons who also fulfilled the inclusion criteria is recorded and also his ranking in the recruitment chain. The weighting enables the calculation of seroprevalences which are representative for the population of IVUs (in the respective city).

In addition to the detailed questionnaire which is completed in assisted, anonymised interviews and collects information on demographic characteristics, drug consumption, treatments, risk behaviour, prior imprisonment, prior tests (HIV/ hepatitis) and knowledge of the infections and their transmission, several drops of capillary blood from each participant are placed on a special filter paper (so-called Dried Blood Spots, DBS), which are then tested in the laboratory for anti-HIV, anti-HCV, HCV RNA, HBsAg, anti-HBs, anti-HBc and HBV DNA. The test validations and performance of serological tests on the filter blood samples (DBS) were undertaken for the pilot study by the national reference centre for hepatitis C in Essen.

## Initial findings of the pilot study in Berlin and Essen, 2011

The study design was piloted and feasibility assessment performed in Berlin at the end of May to end of July 2011 in four recruitment facilities (all drug assistance facilities in different Berlin districts), conducted by Fixpunkt e.V. The group of 337 persons participating in the study in Berlin comprised 274 men (82%) and 62 women (18%) with a median age of 35 (18-60 years old). 70% of the participants were born in Germany, around a quarter originated in Eastern and Southern Europe. The study population in Essen (n=197) was recruited from 20 October to beginning of December via drug assistance facilities. The proportion of women in this group was just 20% (n=39) and as such similarly low to the Berlin group. This reflects the known gender distribution for IVUs. The median age in Essen was 38 years old (19-55 years old) and was thus higher than in Berlin, determined primarily by the lower proportion of under 30s and higher proportion of 41-50 year olds in the Essen study population. In Essen, 80% of the study participants came from Germany. The proportion from Central Europe (Poland, Turkey, Romania) but also that of persons born in Eastern Europe, North Africa or the Middle East was around 15%.

The serological tests revealed 13 positive HIV results in Berlin (3.9%) and 12 positive (including one seroconverter) HIV tests in Essen (6.1%). According to the weighting of seroprevalence, the HIV prevalence for current intravenous drug users in Berlin is thus 3.9% (95 % KI [1.3 %; 7.2 %]) and in Essen of 3.0 % (95 % KI [1.0 %; 6.2 %]). Of the 25 positive HIV tests, 8 were for women and 17 for men, 7 for persons from Eastern or Central Europe, 18 for persons from Germany or Western Europe. 19 of the HIV infections were already known to the participant concerned, 6 were newly discovered. Eleven persons reported that they were currently receiving anti retroviral treatment. 24 of the 25 HIV infected persons also had antibodies against hepatitis C, of these 17 with a positive HCV-PCR.

Anti-HCV was present in 57.3 % of the Berlin tests and 73.0 % of the Essen tests; HCV-RNA present in 37.0 % (Berlin) and 45.0 % (Essen) of the tests. After weighting, the seroprevalence of antibodies against hepatitis C as a marker for contact with HCV amongst currently injecting drug users in Berlin is 52.5% (95 % KI [44.5 %; 60.6 %]) and in Essen is 79.7 % (95 % KI [69.3 %; 86.9 %]) and the prevalence of HCV-RNA in Berlin is 37.1 % (95 % KI [36.9 %; 44.7 %]) and in Essen 58 % (95 % KI [43.7 %; 70.1 %]).

The first (univariant) analyses of the entire study population reveal that the proportion of HCV positive persons increases with age (proportion of HCV positive persons amongst under 25s, 31%, amongst 25-24 year olds, 57%, and amongst >34 year olds, 72%; p<0.001) and also with the duration of intravenous use (up to 4 years, 33%, 5-9 years, 56%, 10-14 years, 57%, over 15 years, 77%; p<0.001). Amongst persons with a school leavers certificate or a middle school certificate, the proportion of HCV positive persons was at 56%, lower than for persons with a secondary general school qualification or without any school leaving qualification (67 %; p=0.012) ( (RKI 2012a).

## 6.2.2 Sexually transmissible diseases, tuberculosis and other infectious diseases

Following a cluster of anthrax cases amongst intravenous drug users in 2009 and 2010 in Germany and Great Britain (see REITOX Report 2010), in June 2012 another three cases emerged in Germany amongst injecting drug users. Two of these were near Regensburg, one in Berlin. One of the infections resulted in the death of the patient. The fact that the anthrax strains which were isolated in the two 2012 Regensburg cases were identical or at least very closely related to the strains of the German and British cases from 2009/2010 suggests that the same infection source could still be active. Health authorities and drug help facilities across Germany were informed so that they would consider the possibility of anthrax in similar cases and therefore a timely diagnosis and treatment can be given 107.

Current data on drug users suffering with other infectious diseases is not available.

#### 6.2.3 Behavioural data

Behavioural data is also available from the DRUCK Study of the Robert Koch Institute (RKI) (see above for study population and methodology) in respect of the contraction of infectious diseases.

Imprisonment and intravenous drug use in prison were associated, with a high degree of probability, with testing positive for hepatitis C: of persons who stated that they had never been in prison 52% were HCV positive, of persons who had been imprisoned in total for up to 2 years it was 55% and of those who had spent over two years in prison it was 73% (p<0.001). Participants who stated that they had injected drugs in prison had a higher percentage of HCV positive test results (80%) than those who said they had not (57%; p<0.001). Having a tattoo applied under non-professional conditions could be a further risk of HCV infection: 70% of such persons were HCV positive in comparison to 59% of those who said they had not had tattoos applied in an unprofessional setting (p=0.014).

The questions on HCV pre testing revealed a high rate of testing amongst the study population: 471 persons (88%) (Berlin: 85%; Essen: 93%) declared that they had already taken a hepatitis C test. Only 44 persons (8%) (Berlin: 10%; Essen: 5%) had never been tested for HCV. An HCV positive status in the last test was stated by a total of 318 persons (60%) (Berlin: 54%; Essen: 69%).

Questions on "unsafe use" behaviour such as sharing syringes or needles were only related to the last 30 days. As Table 6.1 shows, this type of risky behaviour was indicated by some of the study participants. More common than sharing syringes and needles (12%) was the passing on of filters, spoons and other materials which the participant themselves had already used (16%) as well as the use of filters and spoons which others had already used (19%) and sharing water from one receptacle for rinsing and preparing the injection (22%). Passing on used syringes/needles was indicated in 63% of cases of participants who knew that they were HCV positive, passing on used filters, spoons and other utensils was indicated in 64% of cases and sharing water was indicated in 70% of cases of patients with a positive

http://www.rki.de/DE/Content/InfAZ/A/Anthrax/aktuell.html (accessed: 20 August 2012)

HCV test result. This could be a sign that more prevention measures are required here (see Table 6.1).

Table 6.1 Risky behaviour amongst the participants in the DRUCK study

In the last 30 days		N	of those HCV+ (client information)
Used syringes / passed on needles	yes	43	67.4 %
	no	332	70.5 %
Used syringes / used needle	yes	44	75.0 %
	no	336	69.6 %
Used spoon / gave away filter	yes	61	63.9 %
	no	318	71.1 %
Used spoon / used filter	yes	72	72.2 %
	no	306	69.3 %
Shared water	yes	84	70.0 %
	no	293	69.3 %

RKI 2012a.

More in-depth analysis of the behavioural data which takes into account the reported infection status of the study participant and thus allows conclusions to be drawn about the actual risk behaviour are only possible with a larger total study population. The preparations for conducting the DRUCK main study are currently underway. This is provisionally scheduled to be carried out between Autumn 2012 and mid-2014 in Leipzig, Frankfurt, Cologne, Hannover, Munich and Hamburg. Findings of the overall study are expected in 2015 (RKI 2012a).

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

## 6.3.1 Non-fatal overdoses and drug-related emergencies

The Centre for Interdisciplinary Addiction Research of the University of Hamburg (ZIS) conducted a study in 2010/2011 on the misuse of substitution substances in which information on overdoses and life-threatening emergencies was also collected. For the purpose of the study 420 persons were surveyed in the "scene" environment and 404 persons in a substitution practice/outpatient facility in ten cities. Of the participants, n=667 were receiving substitution therapy, n=157 were not. The occurrence of overdosing or a life-threatening emergency within the last 30 days was reported by 5.4% of the "practice" group and 6.4% of the "scene" group. Categorising according to substitution setting shows that almost every tenth non-substituted respondent (9.6%) has experienced an overdose within the previous 30 days or reported that an emergency had occurred, whilst amongst the

substituted respondents this is still high, at 5.1%, it is only half as high as for the non-substituted persons. (Reimer 2011).

## 6.3.2 Other topics of interest

#### Somatic and psychiatric comorbidity in drug users

In addition to the suffering induced by the infectious disease described above, drug users are to a great extent affected by a series of other somatic and psychiatric comorbidities. Comprehensive national or representative analyses on this topic are not available, however, several regional studies provide an impression of the breadth of the health problems in random samples of drug users from the drug scene as well as clients of various addiction help facilities.

The basis documentation on outpatient addiction assistance in Hamburg in 2010 includes both information on physical as well as mental health of the treated clientele (Martens et al. 2011).

The 5,143 clients from the opioid group constitute 26% of the overall clients and are mostly poly drug users but who all have an opioid dependence. On average, this group displays 3.8 problem areas including gambling and eating disorders, not including tobacco, with negligible differences between the sexes: ( $\mathcal{P}$ : 3.7,  $\mathcal{P}$ : 3.9). In addition to opiates, in particular alcohol, cannabis, cocaine, crack and sedatives are consumed. 15% of the clients also had an eating disorder.

21% of people in this group are seen by employees in the out-patient addiction assistance to be suffering substantially or extremely from a health perspective, in the case of a further 32%, a medium health impairment. Only 8% of this group with chronic addiction disorders and numerous other illnesses have a recognised disabled status. 36% of clients are extremely to substantially mentally burdened whereby women (43%) are affected to a greater extent than men (33%). The psychological symptoms suggest that the majority of these clients will require a further psychiatric-psychotherapeutic case management in future in addition to the existing addiction specific treatment in order to stabilise themselves for the longer-term. 43% of the female and 28% of the male opiate addicts report at least one suicide attempt in their lives. For 30% of the clients, it is noted that in addition to the existing list of symptoms, other serious psychological problems are present; in this context, a far higher value exists for women (40%).

Cannabis clients displayed a mixed picture during treatment in relation to physical health impairments. For every fifth client these are medium serious, for only about 7% are they substantially or extremely burdened. Every third client (35%) demonstrates a low level of impairment and a slightly larger group (38%) has no impairment at all. Women are more burdened than men. As was to be expected, the clients who only have cannabis problems are less impaired than those who also have difficulties with alcohol consumption. Of the former group, almost every other client is completely free of physical health impairments (47%). This only applies to 30% of the THC/ALK subgroup. In contrast, that 11% group, who

suffer from substantial or extreme physical impairments – in the THC group this is merely 4% of the clients who have them. Looking at individual disorders, the overall impression is reflected once again when looking at individual afflictions: women suffer from nervous system disorders more often than men (10 vs. 6%), they more often experience cardiovascular problems (14 vs. 8%) and sleeping disorders (56 vs. 41%). Women are also more likely to be affected by further, serious illnesses (34%) than men (17%). Men, however, have a greater need for treatment on their teeth (21%) than women (13%). The comparison between cannabis subgroups shows that the doubly burdened THC/ALK group contains more hepatitis C infected persons (3 vs. 1%), a higher incidence of damage to the nervous system (10 vs. 2%), current liver damage (13 vs. 1%), delirium (4 vs. 1%), epileptic attacks (5 vs. 0.4%), cardio-vascular complaints (13 vs. 4%) or respiratory illnesses (14 vs. 10%). Further serious illnesses also affect the THC/ALK group (25%) more than the exclusively THC clients (13%) and this group is also more likely to have teeth requiring treatment (26 vs. 12%). A psychological problem will more often affect a cannabis client than a physical problem, a distribution between the sexes and between the two sub-groups, however, is very similar to the physical illnesses. Only 10% of cannabis clients are not mentally affected at all  $(\mathcal{L}: 4\%)$ , in contrast 27% of them suffer from a substantial or even extreme impediment  $(\mathcal{L}: 4\%)$ 42%). Amongst the individual problem areas, there are significant numbers who to a considerable or even extreme extent suffer from in particular anxiety (17% of all clients; 2: 24 %), depression (all: 14 %; ♀: 25 %) and excessive self-confidence (all: 13%). More than one in seven cannabis clients has already attempted suicide at least once (15%) – amongst female clients this applies to nearly one in three (30%)! The same applies even to this most serious of predicators of a disorder: clients with the double burden or cannabis and alcohol considered themselves, more often than those with just a cannabis problem, to be in a situation where suicide was their last means of escape (THC: 10 %; THC/ALK: 19 %).

More recent findings on the treatment of a series of mental disorders where there is a simultaneous addiction problem are addressed in chapter 5.5.3.

#### 6.4 Drug-related deaths and mortality in drug users

## 6.4.1 Drug-induced deaths (overdose/intoxication)

## Data from the police register on drug-induced deaths

The reliability of information on drug-induced deaths strongly depends on the question as to whether autopsies and toxicological examinations have been used to validate the initial classification as drug-induced death or not (cf. chapter 6.1). The autopsy rate of all drug-induced deaths in the reporting year 2011 was on average at 65% (2010: 66%; 2009: 66%), whereby individual *Laender* considerably diverged from this value either upwards or downwards (minimum: 35%; maximum 100%).

In the year 2011, a total of 986 people died because of the use of illicit drugs which corresponds to a decline of 20 percent in comparison with the previous year (1,237) and the lowest level for the number of drug-related deaths since 1988. Overdose of heroin (including

use of heroin in connection with other drugs) remains with 569 cases the most common cause of death (58%; 2010: 69%; 2009: 70%). The portion of drug-related deaths in which substitution substances alone or in combination with other drugs were detected, was at 22% (2010: 14%; 2009: 13%) and thus slightly up in comparison with recent years, however it is still lower than 2002, as this proportion was at 40%. Since 2006, the statistics of the federal criminal police office discriminate in the detected substitution substances between methadone/polamidone and Subutex® (buprenorphine). According to the BKA data, the majority of death cases that were attributable to one substitution substance alone happened in connection with methadone/polamidone (N=51; 96%). Among the 160 cases of death, in which substitution drugs in combination with other drugs were found, there were also two cases in which buprenorphine was detected (see also Table 6.2) (BKA 2012b).

Generally, it is however to be assumed that in the presentation of the involvement of substances in the recorded deaths, the number of mixed intoxications (combination categories) but also the involvement of substitution substances is underestimated due to frequently missing exact toxicological data on a death case.

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Since the data collected by the Land Criminal Police Offices 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 cocaine overdose. 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 that do not contain any 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, but only estimated as an approximate value (see Table 6.2).

Table 6.2 Drug related deaths 2006-2011 by substance

	Percent of Total N <sup>1)</sup>						Number <sup>1)</sup>
Cause of death	2006	2007	2008	2009	2010	2011	2011
1. Overdose <sup>1)</sup> :							
Heroin	38	39	42	43	43	28	279
Heroin + other drugs	27	26	24	27	26	29	290
Cocaine	2	1	1	1	2	2	22
Cocaine + other drugs	9	10	7	8	7	6	62
Amphetamine	<1	<1	1	1	2	2	17
Amphetamine + other drugs	3	2	3	2	4	5	49
Ecstasy	<1	<1	<1	<1	0	0	2
Ecstasy + other drugs	1	1	1	<1	0	1	8
Substitution substances <sup>2)</sup>	5	4	3	3	4	5	53
- of those: methadone/polamidone		3	3	3	4	5	51
- of those: Subutex (buprenorphine)			<1	<1	0	0	2
Substitution substance + other drugs <sup>3)</sup>	12	9	9	10	9	16	160
- of those: methadone/polamidone		8	8	9	9	15	150
- of those: Subutex (buprenorphine)		<1	<1	<1	0	1	7
Other narcotic/type of drug unknown	8	10	10	13	12	11	111
2. Suicide <sup>1)</sup>	6	6	6	4	5	6	58
3. Long-term ill effects	11	12	17	20	17	21	211
4. Accident/Other	13	12	11	8	1	10	99
5. Total (N) <sup>1)</sup>	1,296	1,394	1,449	1,331	1,237		986

<sup>1)</sup> Due to multiple entries in the categories "overdose" (different types of drugs/substances) and "suicide", the sum of the recorded causes of death is higher than the overall number of drug-induced deaths.

BKA 2012b.

## Data from the general mortality register

The most recent data on drug-related deaths recorded by the general mortality register are from the year 2010. In that year, data on 1,205 persons were collected – this corresponds to a decline of 5.6% in respect of 2009 (n=1,276). The last time the number of cases recorded was at this level was 2006. Among these were 239 females and 966 males (percentage men: 80.2%) who died in connection with illegal drug use. With this, the number of death cases recorded by the general mortality registry in respect of the definition of the EMCDDA

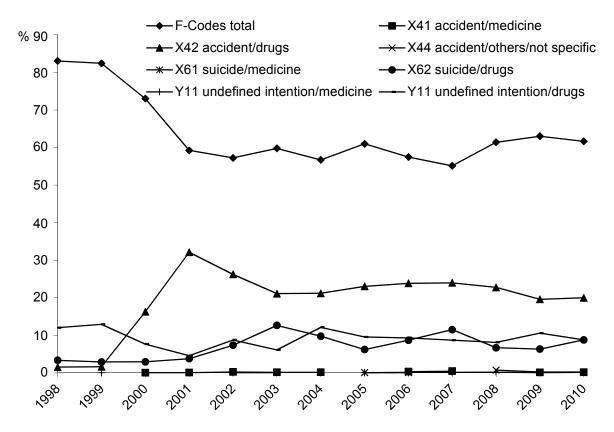
<sup>2)</sup> Since 2006: substitution substance; before that medication/substitution substance.

<sup>3)</sup> Since 2006.

developed – as in the previous year – in parallel to the declining number of deaths recorded by the BKA (-7%). As for the previous years, the BKA register gives somewhat higher case figures, however it also includes "indirect" cases which cannot be precisely separated from the "direct" cases as especially the category "suicides" and where applicable the category "accidents/other" does not clearly differentiate between direct and indirect cases. However, even without including the clearly defined category "long-term secondary diseases" of the BKA register, the number of cases for 2010 was, at n=1,023, markedly below the case figure of direct death cases recorded by the general mortality register. The general mortality register thus apparently continues to include somewhat more "direct" cases than the BKA Register but the difference is not very great.

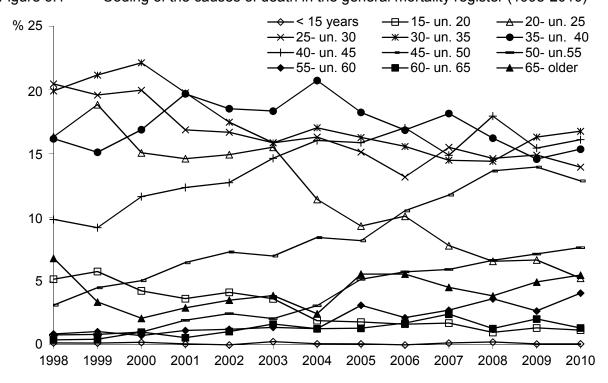
In 2010 the underlying disease was given a code in 61.7% of fatalities (2009: 63.0%) (dependence, harmful use of drugs, other disease from the group F1x.x of the International Classification of Diseases (ICD)); however, in these cases information on the acute cause of death is lacking (Figure 6.1). Those concerned have not been able to provide a code, as per the changes to the WHO coding rules which came into effect in 2006, where possible for the acute cause of death in the form of a substance which has caused an intoxication. This is why, at the level of the BKA, intensive efforts continue to be made to bring about a situation where all substance related information available in the case of drug related deaths would be recorded in detail in a systematic manner. The general mortality register of the Federal Statistics Office will be in less of a position to fulfil this desire. For both registers, there remains the fundamental problem that the substance which has led to the death cannot be ascertained in the vast majority of cases without an autopsy and a toxicology report.

Looking at the age distribution of the drug-related deaths over the last ten years, one notices an increase in the portion of older drug users over the last few years (Figure 6.2). In 2010, the age group of over 50 year olds attained their highest shares since the introduction of the data analysis standards as harmonised for Europe under ICD-10. At the same time, the shares of younger age groups have been on the decline for several years, whereby the effect was not stronger in 2010 in comparison with the previous year. The development of the drug-induced deaths still does not allow any inferences to be drawn on a new trend in young users of hard drugs – rather the age group of under 25s had the lowest share of the total, with 6.5%, in the last decades.



Statistisches Bundesamt, special evaluation.

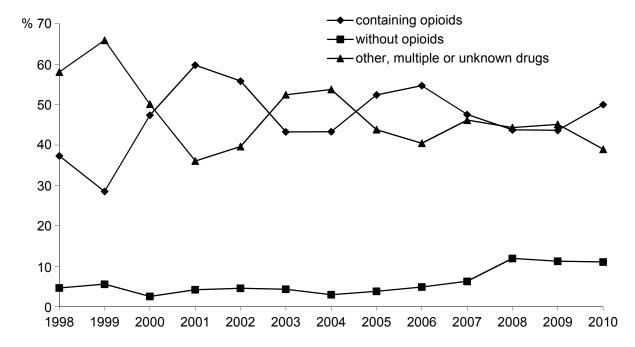
Figure 6.1 Coding of the causes of death in the general mortality register (1998-2010)



Statistisches Bundesamt, special evaluation.

Figure 6.2 Drug-induced deaths according to age groups (1998-2010)

Only the coding of drug-induced deaths under the ICD-10 classification with the additional X/Y code for external causes allows inferences to be drawn on the substance spectrum involved in intoxications as this would allow a substance specific recording according to T-codes. In 2010, this applied to only 38.3% of registered cases. (Monovalent) Opiate related intoxications accounted for approximately 50.0% of the death cases in this subgroup in 2010 (Figure 6.3). In 11.0%, other substance groups were recorded, in 39.0%, intoxications were not specified. This applied especially to cases with poly drug use involving several substance groups. It may of course be assumed however that opiates played a predominant role again, leading the field of substances. There were hardly any changes observed in comparison with the previous year. Qualifications need however to be attached to the validity of the data since it is not exactly known how many of these classifications are actually based on the findings of chemical toxicological analyses on the spectrum of substances that caused the deaths.



Statistisches Bundesamt, special evaluation.

Figure 6.3 Opiate induced intoxications in fatal drug overdoses 1998-2010 with ICD X/Y- coding

#### **Drug related deaths involving fentanyl**

As a result of the large proportion of drug related deaths showing an involvement of the narcotic, fentanyl in 2005 and 2006, especially in Estonia, in Germany also, particular attention was paid to the involvement of fentanyl in deaths related to drug use. Analysis performed by the BKA from 2007 has since revealed a low but growing number of drug related deaths in connection with the sole or combined use of fentanyl (2007; 12, 2008: 14; 2009: 30; 2010: 34; 2011:69) (BKA 2012, personal communication). However, these cases of death were only those where fentanyl was toxicologically proven. In order to find out whether in Germany, in the case of drug related deaths, fentanyl screening was even widely performed or whether the fentanyl cases were merely a regional phenomenon (the majority

of the reported cases were in Bavaria) and whether there are particular characteristics of fentanyl related deaths, all 31 forensic medicine institutes in Germany were contacted by the Institute for Therapy Research (IFT) in 2009 (T1) and 2011 (T2) and asked if they could answer a few questions on how deaths related to fentanyl are dealt with. The response rate for T1 was 80.6%, for T2 it was 90.3%. In this context, Fentanyl screening was technically possible at T1 in 21 of 25 (84%) forensic medicine institutions, one institute sent its samples in cases of suspicion to another institute and 2 institutes did not provide any information on that. At T2, fentanyl screening was possible in 24 of 28 institutions (86%) (no information: 1). At T1 (documentation period 2006-2008) fentanyl screening was performed on 28% of drug related deaths, of those 5% were positive. At T2 (documentation period 2009-2010) fentanyl screening was performed in 65% of drug related deaths of which 11% were positive. This shows that fentanyl screening would be technically possible across the board and that its use in cases of drug related death considerably rose in just a few years. From the information of the institutes, there are also indications that cases of death in connection with fentanyl are not a regional (Bavarian) phenomenon but that they are, in particular, documented differently so that fentanyl is often not the cause of death but is detected in low concentrations in addition to opioids and benzodiazepine. In addition, it shows that through increased regular prescription of fentanyl products, the availability for drug users and thus for misuse also increased (Kipke et al. 2011a).

#### 6.4.2 Mortality and cases of death among drug users (mortality cohort studies)

There is no survey available on the mortality of the overall population of drug users nor have there been any regional cohort studies carried out recently. It is however possible to get at least closer to the question by resorting to the data that exist on drug addicts in therapy.

According to the German Statistical Report on Treatment Centres for Substance Use Disorders (Pfeiffer-Gerschel et al. 2012d) for 2011, for 1.6 % (2010: 1.5 %) of opioid clients, the treatment ended with the death of the client (opioid clients accounted for 86% of all clients registered with the DSHS who had a drug problem and who died during an outpatient treatment.) In order to eliminate the effect of the duration of the treatment which had been extended since 2000 by an average of 10 weeks, a treatment period of 12 months was calculated and used as a basis. The resulting mortality per year was thus in 2011 at a similar level to the year before (Table 6.3).

However, when looking at these data, it needs to be taken into account that the treatment 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 6.3 Mortality of opioid users in outpatient treatment – Trend

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Proportion of cases of death amongst treatment outtake	1.2 %	1.2 %	1.2 %	1.4 %	1.3 %	1.4 %	1.2 %	1.5 %	1.5 %	1.6 %
Treatment duration (days)	280.7	282.1	297.5	305.2	301.7	314.3	321.2	336.4	343.3	354.3
Mortality p.a.	1.6 %	1.5 %	1.5 %	1.7 %	1.6 %	1.6 %	1.4 %	1.6 %	1.6 %	1.6 %

Pfeiffer-Gerschel et al. 2012d and own calculations.

Data on the mortality among drug users are contained in standard table 18.

## 6.4.3 Specific causes of mortality indirectly related to drug use

Data on road accidents in connection with drug use are presented in chapter 9. Other data is currently not available.

# 7. Responses to health correlates and consequences

#### 7.1 Introduction

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 specialised facilities or as part of a specific program.

#### General health care

Data on general health care do not provide any information that could be specifically referred to the group of drug addicts. Except for a few individual cases, there are no data available on the overall number of emergency cases 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 that is generally provided by office-based doctors in their function as medical consultants. Dental treatments that have been put off for a long time and other medical treatments are commonly carried out during inpatient addiction therapy. Basic data hereto are available from the German Annual Statistical Report on Addiction Therapy. In a few *Laender*, specific projects on dental hygiene and infection prophylaxis are offered as part of low-threshold drug aid.

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

Various targeted approaches are used to prevent drug-related deaths: they range from programmes for drug emergency prophylaxis that comprise training in the use of naloxone over offers providing immediate help ("therapy now"), the provision of drug consumption shelters to the expansion of substitution therapy as the most important measure. Apart from data on substitution treatment (see chapter 5) there is also updated information available on some consumption rooms.

#### **Drug consumption rooms**

In view of the still highly risky use pattern linked with heroin, drug consumption rooms and low-threshold facilities play an important role in offering help for addicted people at an early stage. 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 stabilisation of the health conditions of the drug users as well as to attract drug users who can otherwise not be reached by the system ("harm reduction") 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 *Laender* may pass regulations specifying the authorisation criteria to be fulfilled for setting up and running drug consumption rooms.

As at June 2012, there are a total of 24 stationary drug consumption rooms in six German *Laender* (Berlin, Hamburg, Hesse, Lower Saxony, North-Rhine Westphalia and Saarland) across 15 cities and two mobile drug consumption stations in Berlin. A consumption room in Aachen was closed at the beginning of the year<sup>109</sup>.

More precise data on use and clientele of consumption rooms are at present only available for individual facilities who publish their annual reports on the internet. In addition, the DBDD sent a request by email in 2012 to those consumption rooms that do not make data available on their websites. From this request, together with internet research, data from 20 consumption rooms is available 110. This data shows that in 2010, a total of 630,649 consumptions took place in these facilities in 2010 (although one should note that the definition of a "consumption" varies considerably from facility to facility – in some consumption rooms, each visit is recorded as one consumption, irrespective of whether substances are consumed multiple times or if multiple substances are consumed during that one visit; in other facilities each "consumption unit" is reported as its own consumption). Furthermore, in 2010 17 consumption rooms reported a total of 944 drug emergencies which could be treated in the facility directly or which could be transferred for further medical treatment.

The working group "consumption room" created by the operators of the consumption rooms is currently considering how a future joint document could look.

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

## Safer use initiatives

Prevention of drug-related infectious diseases by low-threshold drug help facilities consists mainly of providing information on infectious diseases and risks as well as distributing safer use articles. Distribution of needles and needle exchange is explicitly permitted by the Narcotics Act and is also practised by many facilities.

Following on from the findings of the project, presented in the last REITOX Report, to produce a situational report on existing syringe exchange programmes in Germany (Flöter et al. 2011), internet research was once more carried out to confirm facilities identified in the last report and possibly to identify further facilities offering syringe exchange. This research reveals in total 223 facilities with syringe exchange programmes (mainly contact sites of drug help facilities and the German AIDS Service Organisation (Deutsche AIDS Hilfe, DAH)) as well as 167 syringe dispensing machines. One should note that these figures possibly

A survey on drug consumption rooms and their offers can be found in a brochure published by the German AIDS Service Organization (Deutsche AIDS-Hilfe) and the German Association for acceptance-oriented drug work and human drug policy (akzept e.V.): http://www.akzept.org/pdf/aktuel\_pdf/DKR07web.pdf.

<sup>110</sup> Including the drug consumption room in Aachen which has been closed in the meantime.

represent an underestimation of syringe exchange programmes actually available in Germany as they only include facilities that have either taken part in the syringe exchange project of the IFT or specifically mention their syringe exchange programme on their website.

Further information on syringe exchange programmes can be found in Standard Table 10.

The only *Land* in which a regular survey is conducted on a local level on the distribution of single use syringes by the DAH (AIDS-Hilfe), is North-Rhine Westphalia. In 2011, the DAH NRW reported 1,927,626 (2010: 2,113,242) loose syringes were handed into drug facilities as well as 228,262 (210: 251, 072) syringes handed in via automatic machines (AIDS Hilfe NRW e.V. 2012).

## Prevention of hepatitis amongst drug users

From October 2008 to June 2011, the Berlin drug aid association, Fixpunkt e.V. carried out the federal model project "Early intervention as a measure for the prevention of hepatitis C". The funding was provided by the Federal Ministry of Health, commissioned by and funded by the *Land* of Berlin, the scientific evaluation was provided by the Centre for Interdisciplinary Addiction Research (ZIS) in Hamburg.

The aim of the pilot project was to use interventions appropriate to the respective living situation to help prevent infection with the hepatitis C virus (HCV) infections amongst drug users 111. The pilot project was aimed at users of mobile and stationary drug consumption rooms who stated that they were not infected with the hepatitis C virus. The purpose of the project was to try various short interventions and to use the interventions to improve the level of knowledge as to modes of transmission and the prevention of hepatitis C infections amongst the target group and to encourage more health-aware use behaviour. The interventions tried included for example first contact conversations, target group conversations, so-called prophylactic impulses including hand-washing training and hepatitis test consultation and testing.

The intended target group could not be reached to the extent desired and the number and type of interventions conducted remained short of original expectations, however the project delivered valuable information on the feasibility of interventions in the scope of HCV prevention. On the basis of the evaluation, the ZIS created a series of recommendations or research and practice related to the further development and trial of various interventions:

The extension of the interventions also to addicts who are already infected with HCV is worthwhile in order to further spread knowledge of appropriate prevention methods in the drug scene. A sustainability of the interventions could be achieved through the provision of manuals and further information on network meetings and the like. As the HCV quiz experienced a high level of acceptance amongst the target group as an intervention, the manualisation of the intervention is recommended and to make the manual available to other facilities. The offer of an HCV antibody test – in particular the use of quick tests – should be further developed and used more frequently. The evaluation has shown, amongst other

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<sup>111</sup> www.fixpunkt-berlin.de

things, that around 30% of consumption room users only visit the facilities once. In this context, a motivational first contact conversation can possibly contribute to an improved attachment of the addict. It is also recommended that younger users, for example in the party scene, should also be targeted through diversification and further development of HCV-specific interventions in order to prevent or impede an early transition to higher risk i.v. use<sup>112</sup> (Die Drogenbeauftragte der Bundesregierung 2012a; Fixpunkt e.V., personal reports).

## 7.4 Responses to other health correlates among drug users

There is currently no information on offers in respect of other health correlates amongst drug users.

<sup>&</sup>lt;sup>112</sup> The final report on the model project is available for download on http://www.berlin.de/lb/drogen-sucht/bilanz/.

# 8. Social correlates and social reintegration

#### 8.1 Introduction

Drug use is often linked to difficult family and personal life circumstances. While it may, on the one hand, be a consequence of these circumstances, it can also, on the other, aggravate the situation and worsen the drug user's future prospects. The social framework conditions under which drug use takes place illustrate the marginalisation especially of individuals with intensive drug use.

Some indication of the aggravated general living conditions of drug users can be gleaned from socio-demographic data of treatment documentation. Opioid-addicted members of the open drug scene are affected the most. Insight into the situation can be gained from data provided by the German statistical report on treatment centres for substance use disorders, the short reports of the *Laender* and the regional monitoring systems used for example in Hannover, Frankfurt/M. and Hamburg.

# 8.2 Social exclusion and drug use

# 8.2.1 Social exclusion of drug users

According to the data from the Statistical Report on Substance Abuse Treatment in Germany (Deutsche Suchthilfestatistik, DSHS), 18.4% of the clients of outpatient therapy facilities with primary opioid problems, 16.9% of the clients with primary cocaine related problems and 25.9% of the cannabis clients do not (yet) have a school leaving qualification at the beginning of the therapy (12.2% of the cannabis clients are still at school at the start of therapy). 57.2% of opioid clients and 45.2% of cocaine clients as well as 53.3% of cannabis clients have not completed vocational training (16.1% of cannabis clients are currently in further education or vocational training). Almost two thirds of clients with primary opioid related problems (62.4%) are jobless at the start of the therapy and so are a little more than a third (35.9% and respectively 40.2%) of the clients with primary cannabis and cocaine related problems (Table 8.1). In general, this situation does not change by the end of therapy. While as for cannabis clients, this may be simply due to the relatively young age, the rest (in particular opioid addicts) are mostly early school leavers (Pfeiffer-Gerschel et al. 2012d).

The status report of the Hamburg basic documentation (Martens et al. 2011) also collected data on the social situation of a total of 5,143 opioid clients registered in 2010 (2009: 5,023). Of these, 68% lived in their own apartment (2009: 78%). Overall, 88% (2009: 89%) had at least a lower secondary school leaving qualification but only 66% (2009: 66%) also had a completed vocational qualification. If the qualification situation seems problematic and is often determined by an early onset of addiction, the employment situation can be described as desolate. 70% of clients are unemployed and only 19% have a full-time or part-time job. In light of the high levels of abstinence amongst this client group, the authors believe that urgent measures are needed to aid reintegration into working life. The main income

corresponds to the employment situation. Only 16% reported income from employment or a self-employed activity as their main income. German unemployment benefit I (Arbeitslosengeld I) represents only a negligible, 3%, part of the financial resources of the clients. Over 95% of unemployed persons have been out of work longer than 12 months. 22% of the female clients reported receiving income from prostitution. Only 21% of clients have no debts. 52% have debts ranging up to 25,000 Euro. For 18% of clients, the debt level is unknown.

In the 2010 Hessian *Land* evaluation of the computer-based basic documentation of the outpatient addiction help system (COMBASS), the social situation of the opioid clients looks similar: 81% live in their own apartment or with relatives/parents, however 13% have a precarious living situation, only 21% are in employment or have a place on a vocational training course, over half (58%) receive German unemployment benefit II (Kalke & Neumann-Runde 2011).

Since 2007, data has also been available within the framework of the DSHS based on evaluations carried out by low-threshold facilities (2011: N=27) themselves. According to these evaluations, the socio-economic conditions of the clients who sought help from low-threshold facilities in 2011 are even worse than those found in other help areas. As can be seen from Table 8.1 the figures for missing school leaving qualifications, unemployment and homelessness are for all substances significantly higher than in clients in outpatient therapy. However, the figures can only be interpreted with limitations, since the total number, N=27, of the low-threshold facilities participating in the DSHS only give a small glimpse of all offers made in this area in Germany (cf. chapter 5.2) and no data is available on the representativeness of the sample (Pfeiffer-Gerschel et al. 2012f).

Table 8.1 Social situation of persons in outpatient therapy and low-threshold facilities (2011)

	Outpa	tient Treatme	ent		Low-threshold facilities				
	No school leaving qualification	Un- employed <sup>1)</sup>	Home- less <sup>2)</sup>	_(	No school leaving qualificatio	Un- employed <sup>1)</sup> า	Home- less <sup>2)</sup>		
Main diagnosis		%				%			
Alcohol	5.1	38.7	0.5		12.9	57.9	5.8		
Opioids	17.9	62.4	2.7		23.7	76.6	12.6		
Cannabinoids	13.7	35.9	0.7		27.7	43.8	5.8		
Sedatives/Hypnotics	5.9	33.1	0.6		36.4	75.0	14.3		
Cocaine	15.8	40.2	1.7		28.6	62.8	14.0		
Stimulants	11.5	45.7	1.1		17.2	50.0	8.3		
Hallucinogens	9.0	48.5	0.9		0.0*)	100.0*)	0.0*)		
Tobacco	5.4	14.8	0.4		11.1	77.8	0.0		
Volatile substances	3.4	41.0	0.0						
Mult./other substances	15.2	48.1	1.3						

<sup>1)</sup> On the day before the start of treatment; according to SGB III (ALG I) or SGB II (ALG II).

Pfeiffer-Gerschel et al. 2012d, f.

#### 8.2.2 Drug use among socially excluded groups

There is no current data available on the drug use of socially excluded groups.

### 8.3 Social reintegration

The German Social Security Codes, revised over the last decade, have 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 the REITOX Reports 2005, 2007 and 2008.

The "Law on the further development of the basic social assistance for people in search of work" which came into effect 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 came into effect on 1 April 2007, not only parentchild-cures and geriatric rehabilitation, but also medical rehabilitation for addicted individuals were included in the catalogue of standard insurance benefits.

<sup>2)</sup> On the day before the start of treatment.

<sup>\*)</sup> n=1

The project "Buddy Care" of the "integrated drug assistance" centre (integrative drogenhilfe e.V.) in Frankfurt addresses the problem that long-term drug users continue to be socially excluded even after a stabilisation. In the scope of this project, volunteers (so-called "buddies"), after receiving special "buddy training", meet once a week for a year for around 3 hours each time with an addict to undertake some activity together. In 2011, 14 buddy-pairs were brought together, 12 were continued from the previous year and 11 were not renewed at the end of the period (idh 2012).

# 8.3.1 Housing

There is a series of offers available for drug addicts to help them through periods of homelessness. These include firstly socio pedagogic/therapeutic accompanied services for outpatient managed living, adaptation facilities or inpatient social therapy facilities (care homes or temporary accommodation). Secondly, the general offers of homeless assistance are also used by drug users. However, current data on that is not available.

# 8.3.2 Education, vocational training

In the last few years a series of measures have been tested to facilitate the integration of jobless people with handicaps into working life. 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 Security Code 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 qualifications 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.

# 8.3.3 Employment

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

The integrative approach adopted by the Social Security Codes II (SGB II) enables sociointegrative services to be provided in addition to the instruments of employment promotion. An integral part of these supporting integration services is addiction counselling (§ 16a SGB II). Addiction counselling, as a service to be provided in respect of SGB II, falls – like the other socio-integrative integration services - under the organisational and financial responsibility of the municipalities. The Federal Ministry for Employment and Social Affairs assumes supervisory functions defined by SGB II insofar as the Federal Employment Agency is the service provider but not with regard to services provided by the municipalities. These are placed under the supervision of the *Laender*. This is the reason why the Federal Government currently does not have any computed data at hand on specific measures or activities carried out with regard to drugs and addiction in the field of basic social care for people in search of work.

In the German *Laender*, various projects are carried out to improve the (re)integration of (former) drug users into the employment market. The projects, which were reported to the DBDD this year by representatives of the *Laender*, have already been briefly described above in section 1.3.2 (Activities of the *Laender*).

In the second session of the National Board on Drugs and Addiction (DSR) on 7 December 2011, a paper of the working group "Interface problems in the care of addicts" was adopted containing proposals to improve participation in working life. With the presented consensus paper, the DSR considers there still to be considerable need for action in respect of the promotion of participation of addicts in working life. In particular, the Federal Employment Agency as an institution for employment promotion as well as the institutions for the basic social care for job seekers are called upon to greater accommodate the special significance of the promotion of participation in working life for people at risk of addiction and job seekers and unemployed persons (formerly) suffering from addiction, within the scope of their respective integration efforts. For this purpose, various measures/strategies are proposed:

- An improved level of care for these specific clientele who require a qualified case management
- The provision of a specialist concept for addiction with binding rules for work processes, practices, cooperation agreements, quality standards etc. in each employment agency and job centre.
- The targeted use of the instrument of addiction counselling as per Sec. 16a SGB II, if
  possible in the scope of a contractually agreed cooperation between the administrative
  offices of the funding agencies as per SGB II and SGB III and the addiction counselling
  facilities.
- The involvement of addiction counselling at an early stage in respect of the details of the arrangement of the respective integration agreement
- The consultation of other relevant social services (e.g. debt counselling, psychosocial care)
- An addiction specific training of the specialist employees within the employment agencies/job centres who deal with persons possibly or actually suffering from addiction

- Counselling for unemployed addicts in respect of their reintegration into working life to be started already during the medical rehabilitation treatment.
- And more

The consensus paper can be downloaded from the website of the Federal Commissioner on Narcotic Drugs<sup>113</sup>.

# **Promotion by the German National Statutory Pension Insurance**

Within the framework of the content-related and structural further development of existing rehabilitation offers, the targeted promotion of employment opportunities of jobless rehabilitants by the Pension Insurances 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 training for job application. From the viewpoint of the social security administration, the central goal of addiction therapy is to restore the working capacity. Apart from somatic aspects also psychological factors – i.e. personal and social competences of the clients – are taken into account to prepare clients for working life.

Persons with drug-related problems do not seldom form part of the target groups of specific programmes 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.

# Social assistance and welfare benefits

People suffering from addiction are entitled to the same social assistance services and welfare benefits from the government, employment agencies and social insurance funds as other indigent groups. Outreach services form part of these. Discriminating statistical material is however not available.

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http://drogenbeauftragte.de/drogenbeauftragte/drogen-und-suchtrat.html

# 9. Drug-related crime, prevention of drug-related crime and prison

#### 9.1 Introduction

Since, in addition to the purchase of or trafficking in illegal drugs, the possession of drugs is also illegal, penal sanctions form some of the more common corollaries of drug use, not only in the Member States of the European Union (EU). The Federal Criminal Police Office (Bundeskriminalamt, BKA) distinguishes 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 crime. Punishable acts of the first group are recorded according to the following four categories:

General offences as per § 29 BtMG (especially possession, purchase and distribution, socalled consumption-related offences)

Dealing/trafficking in and smuggling of narcotics as per § 29 BtMG,

Illegal import of narcotics in non negligible quantities as per § 30 BtMG

Other offences against the BtMG

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

# 9.2 Drug-related crime

# 9.2.1 Drug law offences

In 2011 in Germany, a total of 236,478 narcotics offences were recorded (2010: 231,007), of which 170,297 were general offences against the German Narcotics Act (BtMG) and almost 50,000 were dealing/trafficking offences. Drug related crime has thus increased overall by 2.4% compared to the previous year (BMI 2012).

### **Direct economic compulsive crimes**

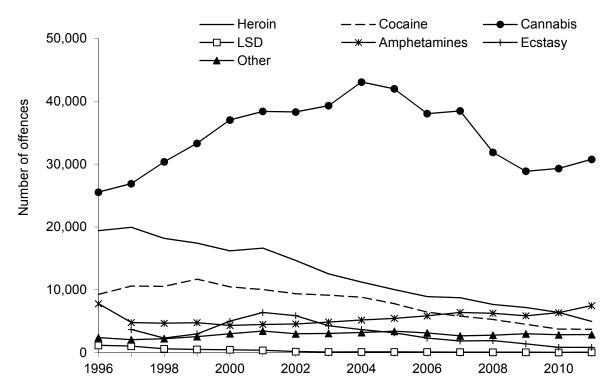
Direct economic compulsive crimes are understood to refer to all criminal offences committed in order to obtain narcotic drugs, substitute or alternative drugs. In 2011, 3,013 cases (2010: 2,556) of direct economic compulsive crimes were recorded by the Police Criminal Statistics (Polizeiliche Kriminalstatistik, PKS), which corresponds to an increase of 17.9% compared to the previous year. With this, the number of this type of offence has, after four years (2007-10) in which there were only minor changes, risen markedly from 2010 to 2011. Almost three quarters (72.9%) of these offences are related to prescription forgery or theft for the purpose of obtaining narcotics (BMI 2012).

# Drug dealing/trafficking crimes

These crimes are related to offences committed in connection with commercial/professional dealing in narcotic drugs or smuggling of larger quantities of narcotic drugs. All drug

dealing/trafficking crimes recorded by police are - just as consumption-related crimes - taken account of in this report irrespective of the outcome of later legal proceedings.

Both in terms of proportion and absolute figures, cannabis played the most important role in drug dealing/trafficking crimes (30,765 crimes, 60.6% of all crimes; 2010: 29,306 crimes, 59.1%), followed at a large distance by heroin (4,980, 9.8%; 2010: 6,403, 12.9%; 2009: 7,205, 14.1%) (Figure 9.1). Similar to heroin, the number and proportion of trafficking crimes related to cocaine (3,731, 7.6%; 2010: 3,763, 7.6%; 2009: 4,522, 8.9%) have slightly decreased in recent years. Since 2000, the proportion of trafficking crimes involving amphetamines has been on a continual rise and the case figure too slightly increased again after a slight decline in 2008 and 2009. In 2011, amphetamines accounted for 14.8% (7,497 crimes; 2010: 6372, 12.8%) of all dealing/trafficking crimes and thus overtook heroin for the first time, ranking third on this list (BMI 2012).



BMI 2012.

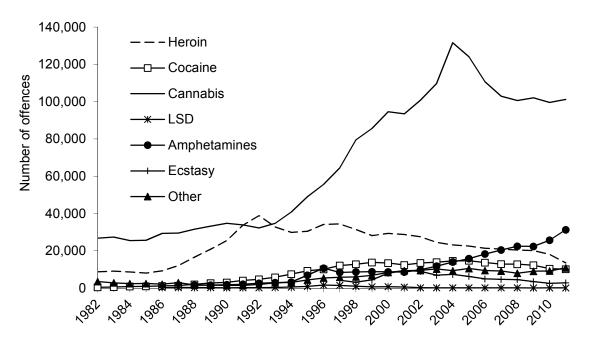
Figure 9.1 Development of dealing/trafficking offences (1996-2011)

# **Consumption-related offences**<sup>114</sup>

This section is about narcotics offences that are - due to the related conditions (quantity, persons involved) - classified by police as "general offences" and are therefore taken as referring to consumption-related offences (Figure 9.2). The police criminal statistics (BMI 2012) show that cannabis plays a predominant role also in the case of consumption-related

The term "consumption-related offences" is used to describe general offences committed against the Narcotics Act (Betäubungsmittelgesetz, BtMG). The offences committed in violation of § 29 BtMG comprise possession, purchase and distribution of narcotic drugs and similar offences.

offences: 59.4% of all respective cases in 2011 are related to cannabis. Heroin (8.0%), amphetamines (18.4%) and cocaine (6.0%) together account for 32.4% of the recorded cases. The remaining proportion is split between ecstasy, LSD and other drugs. In 2011, the total number (170,297) increased by 2.7% in comparison with the previous year (2010: 165,880). The number of consumption-related offences in connection with amphetamines increased by 21.9% from 2010 (25,695) to 2011 (31,330) and thus continued the trend which began in the mid 1990s. In addition to the number of consumption related offences in connection with amphetamine, an increase was seen in the number in connection with ecstasy (+12.3%) and other substances (+18.3%). Aside from these, there were minimal changes in respect of cannabis (+1.6%), cocaine (-2.8%) and LSD (+6.8%) as well as a significant reduction in the case of heroin (-25.1%).



BMI 2012.

Figure 9.2 Development of consumption-related offences (1982-2011)

# Users of hard drugs who have come to the attention of the police for the first time (first offence hard drug users)

Alongside data on narcotics offences, the Federal Criminal Police Office also publishes statistics on persons who have come to the attention of the 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 (generally, the data are stored for a period of ten years for adults, for a period of five years for adolescents and for two years for children; in cases of minor importance, the periods may be shortened respectively). In this way, an unknown number of repeat offenders is wrongly

classified as "having come to the attention of police for the first time" and the measured incidence overestimates the actual value.

When analysing 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. Narcotics crimes are crimes of low reportability so they are only discovered through active checks, i.e. the more frequently the police perform such checks, 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.

The overall figure for first-offence hard drug users increased from 2010 to 2011 by 14.5% to a total of 21,315 (2010: 18,621). As in the previous years, pronounced declines were found for heroin (2011: 2,742; 2010: 3,201; -14.3%). The number of first-offence hard drug users remained unchanged where the offence was in connection with cocaine (2011: 3,343; 2010: 3,211; +4.1%) and LSD (2011: 135; 2010: 141; -4.3%). For the first time since 2004, the number of first-offence users of ecstasy rose (2011: 942; 2010: 840; +12.1%).

As in the previous years, the number of amphetamines users who came to the attention of the police for the first time<sup>115</sup> increased (+11.5%) and reached a new peak in 2011 (12,709 cases; 2010: 11,401).

At respectively low overall figures, the figures for first-offence methamphetamine users increased dramatically (2011: 1,693; 2010: 642; +163.7%) as did those for other hard drugs (2011: 897; 2010: 333; +169.4%). The figures for crack (2011: 438; 2010: 311; 40.8%) also increased considerably.

First-time offenders in connection with amphetamines and methamphetamines accounted for a little less than 2/3 (62.9%) of the total of first-time offenders (heroin: 12.0%; cocaine: 1.6%, ecstasy: 4.1%, crack: 1.9% and others including LSD: 4.5%)<sup>116</sup> in 2011. In this statistical documentation cannabis users are not taken account of since only so-called hard drugs are recorded (BKA 2012a).

# Sentencing under the Narcotics Act (BtMG) and the penal system

According to the sentencing statistics of the Federal Statistical Office (Statistisches Bundesamt 2011c) 55,391 persons (2009: 59,432) were convicted in 2010 for offences committed against the Narcotics Act (data for 2011 not yet available). 48,572 convictions were rendered under the general criminal law (relating to adults) (2009: 51,723) and 6,819 (2009: 7,709) relating to juvenile offenders. As for the convictions rendered in respect of the general criminal law, 16,905 (2009: 18,013) prison sentences were passed – out of these

<sup>&</sup>lt;sup>115</sup> Excluding first-offence methamphetamine users

Each person is only counted once in the overall figure under the acronym "EKhD" (Erstauffaelliger Konsument harter Drogen - first-time offender using hard drugs). However, to shed some light on the polytoxicomanic use behaviour, it is possible to count one person several times for several drug types so that the percentage breakdown by drug type exceeds 100%.

10,809 (2009: 11,706) were suspended sentences - and 31,666 (2009: 33,710) fines were imposed.

The overall figure declined once more (-6.8%) in comparison to the previous year (2008-2009: -3.0%). The slight decline is to be observed in all age groups, i.e. in adult, young adult<sup>117</sup> and juvenile<sup>118</sup> offenders. With regard to the type of crime, the decline is equally attributable to the lower case figures for the unspecific consumption-related offences (§29 para.1 BtMG), 44,920 cases (2010: 44,920 cases; 2009: 49,801; 48,317; 2009-2010: -7.0%), the dealing/trafficking crimes (2010: 6,040; 2009: 6,164; -2.0%) and the offences in respect of §30 para.1 no. 4 BtMG (2010:2,003, 2009: 2,286; -12.4%) (Figure 9.3).

As in the two previous years, convictions rendered for violations of the Narcotics Act accounted for around 7% of all convictions imposed in 2010, whereby the proportion of convicted males (7.7%) was about twice as high as that of convicted females (3.9%). Amongst juveniles, the share of convictions imposed for violations of the Narcotics Act was 3.5%. Amongst young adults aged between 18 and 21 years old had a considerably higher share at 8.4%. As a result, narcotics offences committed by this age group have an above-average share in the overall crime rate. 63.6% of those convicted for offences committed against the Narcotics Act have already been sentenced at least once before (males: 64.7%, females: 53.2%); in 64.0% of these cases, the crimes were committed by repeat offenders who had been sentenced at least three times before (Statistisches Bundesamt 2011c).

Young adults means persons who are aged 18-20 years old 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.

Juveniles means individuals who are 14-17 years old at the time of the offence (§ 1 JGG). They are adjudicated under the criminal law relating to juvenile offenders.

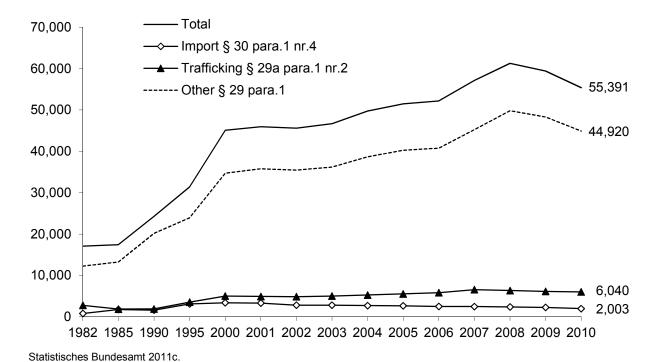


Figure 9.3 Convictions under the Narcotics Act (BtMG)

As in the previous years, about nine times more men than women were convicted for violations of the Narcotics Act in 2010 (males: 50,044; females: 5,347). The development trends of the previous 28 years also show marked differences. Using the figures of 1982 as an index (=100%), the number of convictions of men has more than tripled while that of women has more than doubled up to 2010. Significant differences were found between juveniles and young adults. For juvenile (46%) and young adult (81%) females the number of convictions rendered in 2010 remained under that of 1982, whilst the number of convictions of male juveniles (190%) and young adult males (153%) has considerably increased. This enormous rise in the convictions of male juveniles and young adults mainly occurred between 1995 and 2000. Between 2000 and 2005, there were hardly any changes in these two groups. From 2005 to 2008, the number of convicted juvenile male offenders dropped by almost half (43%), whereas between 2008 and 2010 no further changes were found. The number of female juvenile convicts has been on a continual decline since 2002 (index: 118) and amounted to only 46% in 2010 in comparison with 1982. Among the young adult offenders, the number of convictions has been on the decline since 2001 (index: 222) (Index 2010: 108), while it has hardly changed among female young adults between 2001 (index: 108) and 2009 (index: 96) (Figure 9.4), the number fell sharply in 2010 (index: 81). Information on violations of the Narcotics Act can be found in standard table 11.

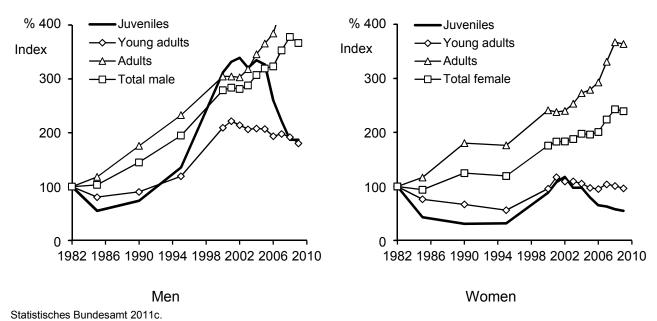


Figure 9.4 Trends in convictions under the BtMG

According to the Hamburg basic documentation system BADO 2010 (Martens et al. 2011), more than a third of the clients of the Hamburg outpatient addiction help system had problems with criminal justice authorities (35%) in 2010. With this, the portion fell back below the 2005 level after having increased in between to 42%. in particular the proportion of clients currently serving a prison sentence declined in the last five years (from 17% to 11%). At the same time the proportion of individuals who have been awarded probation conditions has increased (from 6% to 9%). Opiate clients have the most problems with judicial authorities. Roughly half of opiate clients (48%) report that they are currently in conflict with the law. They account for the largest proportions of clients serving a prison sentence (17%) and are involved particularly often in judicial proceedings (13%) or are awarded probation conditions (12%). Within the cannabis group, a distinction must be drawn between male and female clients (32% with current legal problems). Currently, 37% of men but only 10% of women are having problems with judicial authorities and the proportion of persons in prison is also many times higher for male clients (11%) than female (1%).

More than half of the clients documented by the BADO Hamburg in 2009, have been convicted at least once in their lives (51%). This proportion thus declined by five percent in respect of the year 2005. As regards the type of crime in this period, there was a decline to be observed especially in the proportion of drug law offences (from 37% to 31%), the economic compulsive crimes (from 29% to 25%) and the other or respectively unknown offences (from 28% to 25%). The highest share of convicts is to be found again in the group of opiate clients (78%). Almost two thirds have already been convicted because of violations of the Narcotics Act (62%), half of them because of economic compulsive crimes and more than a third because of unknown or respectively other offences (40%) and a quarter because of bodily injury offences 26%). One third of cannabis clients has been convicted at least once in their lives (33%). The most common offences were assault and other/unknown offences

with 15% respectively, followed by narcotics offences (10%), economic-compulsive offences (8%) and driving under the influence of alcohol or drugs (6%). Just as for the current problems with the judicial authorities, there are also significant gender differences to be found in relation to convictions: women are less frequently convicted overall (females: 32%; males: 58%) and they have lower shares in the convictions for all offences than males. Particularly striking is the divergence in relation to the offence of assault for which about one male in four (23%) but only one woman in sixteen (6 %) was convicted.

In 2010, 41% of all clients reported that they had already been in prison at least once in their lives. That is five percentage points fewer than in 2005. By far the largest proportion of clients with prison experience is in the group of opiate clients (69%). In contrast, only 22% of cannabis clients have experience of prison. A comparison of the sexes reveals that the proportion of those with prison experience was around twice as large for men (48%) than for women (24%).

# 9.2.2 Other drug-related crime

# Drug use and road accidents

Since 2003, the Statistical Report on Road Accidents published by the Federal Statistical Office has been providing information on the question as to whether the operator of a motor vehicle involved in an accident was under the influence of intoxicating substances other 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 cannot be taken as constituting an acute impairment of the fitness to drive (Bundesverfassungsgericht 2004).

In the year 2011, police-registered accidents on German roads totalled 306,266 cases with injury to persons and with 465,342 operators of vehicles being involved (Table 9.1). Out of these, 15,114 persons involved in accidents (4.9%) were under the influence of alcohol and 1,392 (0.4%) were under the influence of "other intoxicating substances" (Statistisches Bundesamt 2012a). This means that the downward trend observed between 2003 and 2010 in the total number of accidents with personal injury as well as the number of accidents under the influence of alcohol was halted as both rates increased again from 2010 to 2011.

In 2011, the number of accidents under the influence of other intoxicating substances was slightly above the level of the previous two years. However, since alcohol is easier to detect than drugs, it is still to be assumed that drug-related cases are under-represented in German road accident statistics.

Table 9.1 Drug use and road traffic accidents – human causes

Year	Accidents with	Incorrect driving	Drivers unde	Drivers under the influence of			
	damage to persons	behaviour	Alcohol	Other intoxicating substances			
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			
2007	335,845	410,496	19,456	1,356			
2008	320,641	388,181	18,383	1,440			
2009	310,806	377,733	16,513	1,281			
2010	288,297	350,323	14,237	1,151			
2011	306,266	371,821	15,114	1,392			

Statistisches Bundesamt 2012a.

In a meta analysis on the basis of nine studies with almost 50,000 persons, Asbridge and colleagues (2012) calculated, for the first three hours after using cannabis, an increased risk of a road traffic accident of 92% (OR 1.92; KI: 1.35-2.73). With an odds ratio of 2.10 (1.31-3.36), the danger of a fatal crash was somewhat higher.

By way of comparison: in a study cited by Asbridge, an alcohol concentration of 0.8mg/ml increased the risk of a traffic accident by a factor of 2.69 and the risk for young drivers was much higher. Most studies put the limit for the active ingredient THC at 1ng/ml THC, in one study it was 2ng/ml.

### Crime experienced by drug users themselves

Since 2005, the Hamburg Basic Documentation System BADO has been showing a stable share of approximately 60% of the clients who have had experience with physical violence (Martens et al. 2011). As for sexual violence, the share has been at a good 20% for years. Comparing the different substance groups, one finds that the clients who have sought help from the Hamburg ambulatory addiction help system for opiate-related problems are particularly affected in this respect. Among these, more than two thirds stated that in the relevant period (2010) they have already been victims of physical violence (69%) and more than one in four have been victims of sexual violence (26%). Experience with sexual violence is least common in cannabis clients (12%). Experience with physical violence is also comparatively somewhat less prevalent among cannabis clients (54%) as well as among alcohol clients (51%).

The differences between the gender groups, however, are far more pronounced than they are between the substance groups. This applies to the experience with physical violence (females: 66%; males: 58%) and, to a much larger extent, to sexual violence. In 2010, 50% of all female clients report that they had fallen victim to sexual violence; amongst male clients

the share is 8%. Among women, opiate clients are the ones who are the most affected by crime. More than two thirds of them report experience with physical violence (79%) and a little less than two thirds experience with sexual violence (65%) at some point in their lives.

# 9.3 Prevention of drug-related crime

Apart from consequent repression, multifarious measures of criminal prevention are also required to combat crime successfully. Therefore, the police have set a particular focus on prevention measures at a national level with the programme "Police criminal prevention of the *Laender* and the Federal Government". The goal of this programme is to inform the population, multipliers, media and other groups who are active in prevention about different forms of crime and the possibilities of preventing them. This is done, among others, by criminal preventive PR-work and the development and publication of media, measures and concepts that support the local police offices in their preventive activities.

The increase in the crystal problem can also be seen, according to information from the Land Office of Criminal Investigation (Landeskriminalamt, LKA) in the spotlight of the police criminal statistics for Saxony. In the scope of the current examination of the problem, an expert conference under the title "Crystal in Saxony – a challenge for the addiction help system". The exchange of ideas and experiences was hosted by the Leipzig Health Authority (drug department) in conjunction with the City Mission (Stadtmission) Chemnitz, the Youth and Drug Counselling Centre, Dresden (Jugend- und Drogenberatungsstelle Dresden) as well as the Saxon State Ministry for Social Affairs and Consumer Protection. They ascertained that the problem had massively increased over the preceding two years and a resulting requirement for the strengthening of comprehensive preventive measures as well as specific offers in the framework of addiction counselling and addiction therapy<sup>119</sup>.

# 9.4 Interventions in the criminal justice system

### 9.4.1 Alternatives to prison

According to §63 and §64 of the Penal Code (Strafgesetzbuch, StGB) it is possible under certain circumstances to order the placement of mentally ill or addicted offenders in special closed correctional facilities (like psychiatric facilities or withdrawal clinics).

The Narcotics Act (Betäubungsmittelgesetz, BtMG) allows 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 *Laender* in line with the guidelines passed by the Federal Constitutional Court. Further details can be found in

<sup>119</sup> www.leipzig.de/de/buerger/service/dienste/gesundheit/sucht/

# chapter 1.2.2.

It is moreover possible to defer a prison sentence of up to two years to provide the drug addict with the chance to undergo therapy ("therapy not punishment", §35 BtMG).

The Federal Ministry of Health (BMG) is currently funding a study, planned for 14 months, on "Trends in judicial drug therapy sentences under Sec. 35 BtMG". This study is a retrospective examination of the practice of courts suspending sentences under Sec. 35 BtMG in favour of drug withdrawal therapy. The focus of the study is the question as to whether a decline in the judicial application of the "therapy not punishment" principle has occurred and if so, why that might be.

Furthermore, the effect of withdrawal treatment is more closely observed using the criteria of regular cessation. An investigation is made into whether a difference in efficacy can be witnessed between those drug users who commenced rehabilitation measures with and those without a judicial therapy order.

By way of investigation of this problem, various sources of data are being evaluated. These include data from the Statistical Report on Substance Abuse Treatment in Germany (DSHS) and data from the addict assistance systems of the *Laender*, Hamburg and Schleswig-Holstein. In addition, the analysis is to include criminal prosecution as well as public prosecutor investigation related statistics. In order to obtain a more detailed picture of the situation in the rehabilitation facilities, at least 10 facilities from Hamburg, Schleswig Holstein and North-Rhine Westphalia will be selected. The employees of the selected facilities will be interviewed in person on their experience and their assessment of the situation. Furthermore, judges and public prosecutors will be interviewed in order to explore the application of Sec. 35 BtMG from the perspective of the judicial authorities. The plan is to interview in total 6 representatives of the judiciary in the three *Laender*. Additionally, in the city of Hamburg, five court cases on the application of Sec. 35 BtMG will be observed and recorded (Die Drogenbeauftragte der Bundesregierung 2012a).

# 9.4.2 Other interventions in the criminal justice system

There are possibilities, under certain circumstances, to cease criminal proceedings at all levels. Often, a few hours of community service are a first response of authorities to deal with problematic behaviour in connection with drugs.

There is a series of other possibilities available to curb drug crime 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<sup>120</sup>.

At public prosecution level, it is possible to stop prosecution of crimes committed by adolescents<sup>121</sup> and young adults<sup>122</sup>, who fall under the juvenile law or to discontinue

A move-on direction is a police measure to avert danger. It is limited to 24 hours. A banning order is an administrative act that can be passed by a municipality and can be referred to a longer period of time and a larger area than a move-on direction.

proceedings in respect of the Juvenile Offenders Act (JGG, §§ 45 und 47). This is mostly applied in cases involving only small quantities of cannabis.

In nearly all *Laender*, local prevention measures, such as the widely spread programme "Early Intervention in First-Offence Drug Consumers – FreD" are used as a possibility to intervene without starting criminal proceedings straight away. The programme addresses 14 to 18 year olds but also young adults up to 25 years old who have come to the attention of the police for the first time due to their consumption of illegal drugs (for more information on the programme FreD see also the REITOX Reports 2007 and 2008 as well as chapter 1).

# 9.5 Drug use and problem drug use in prisons

Because the percentage of addicts and consumers of illegal drugs in German penal institutions cannot be clearly quantified, the number of persons incarcerated as a result of violations of the Federal Narcotics Act (*Betäubungsmittelgesetz*) is frequently used. This estimate is relatively imprecise, however, because first of all it counts people who, although they have violated the law in connection with drugs, may not themselves have consumed any illicit substances, as could be the case, for example, with some dealers. Secondly, a large percentage of drug consumers are not taken into account because for example persons who are sentenced as a result of offences in connection with procurement of drugs are listed under other categories of violations against the Federal Narcotics Act in the statistics.

As of 31 March 2010, there were a total of 8,841 persons (14.7% of all inmates) serving time in prison institutions as a result of violations of the Federal Narcotics Act (BtMG). Of these, 5.5% (511) were female, while 3.3% (294) were serving sentences as juvenile offenders. From 2006 (total: 64,512; BtMG: 9,579) to 2011, the total number of inmates increased by 6.9% whilst the number of inmates serving sentences due to BtMG offences decreased by 7.7% (Table 9.2). The number of inmates convicted for BtMG offences as a percentage of all inmates has remained constant for adults since 2006. For juveniles and young adults (in particular males) it is slightly decreasing (Statistisches Bundesamt 2011d).

Adolescents are taken as referring to individuals aged 14 to under 18 years old at the time of the offence (§ 1 JGG). They are adjudicated under the criminal law relating to adolescent offenders.

Young adults are taken as referring to individuals who are aged 18 to under 21 years old 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.

Table 9.2 Imprisoned persons and narcotics offences

			Prisoners and persons in protective custody			Custodial sentences for adults		enile hments	Custodial sentence
		Total	Men	Women	Men	Women	Men	Women	
2011	Inmate N	60,067	56,746	3,321	50,388	3,076	5,857	242	504
	BtMG N	8,841	8,330	511	8,061	485	268	26	1
	BtMG %	14.7	14.7	15.4	16.0	15.8	4.6	10.7	0.2
2010	BtMG %	14.6	14.5	16.2	15.8	16.7	5.0	10.2	0.2
2009	BtMG %	15.0	14.9	16.5	16.2	17.0	5.1	10.5	0.4
2008	BtMG %	15.3	15.1	18.2	16.3	18.9	6.7	9.8	0.7
2007	BtMG %	14.9	14.8	17.4	16.2	15.0	6.2	8.9	0.2
2006	BtMG %	14.8	14.7	18.2	15.7	18.8	6.8	11.4	0

Note: "BtMG N": Number of persons imprisoned due to offences against the BtMG, "BtMG %": proportion of persons imprisoned due to offences against the BtMG.

Statistisches Bundesamt 2011d.

In 2009, a total of 62,054 tests were performed in the Berlin correctional facilities, on an average of 5,000 inmates; of these 60,049 were immunoassays. The results revealed that the rate of tests showing the presence of a substance or substances was markedly lower than the rate otherwise stated by prison institutions for positive tests. In particular in the area of cocaine, tilidine, benzodiazepine, opiate and monoacetylmorphine (heroin marker), only extremely low rates of positive tests were found. The rate of positive tests in the case of cannabis was, as expected, 13%, in the case of cocaine the rate was 1.8%, for opiates the rate was 6% whilst for benzodiazepine, although it is widely administered therapeutically, the rate was 5%. In the test for EDDP (methadone metabolite) the positive test rate was 32% which reflects expectations on the basis of the monitoring of substitution treatments for positive monoacetylmorphine tests, as a heroin metabolite for positive opiate tests led to 28% positive results. The tests were conducted primarily to monitor abstinence subject to judicial order and to monitor opiate substitution therapy. One area of focus of the tests was in the area of juvenile detention. However, the results remained below those expected and those published in the literature on substance use in correctional institutions. Possible reasons for this certainly include test manipulation on the one side as well as the selection of target group with increased monitoring and testing pressure amongst juveniles on the other. The data collected gave cause to organise the urine control programme in Berlin correctional facilities in a more targeted fashion and in particular to effectively exercise the pressure of testing (Lehmann & Binscheck 2011).

# Legal framework conditions

The German Prison Law (Strafvollzugsgesetz) from 1976 still applies in most of the German *Laender*. It governs "the act of imprisonment in penal and correctional institutions" (§1

StVollzG). Since the reform of the Federalist system, which was adopted by the German Bundestag on 30 June 2006 and came into force on 1 September 2006, law-making power has been devolved from the Federal Government to the *Laender*. The German Prison Law is being replaced step by step by the respective *Laender* prison laws and administrative regulations (§125a of the German Constitution (GG<sup>123</sup>)), which in part cite the German Prison Law. The German Prison Law still applies in 11 German *Laender*. There are *Laender* prison laws now in Baden-Wuerttemberg (JVollzGB since 1 January 2010), Bavaria (BayStVollzG, since 1 February 2010), Lower Saxony (NJVollzG, since 14 December 2007), Hamburg (HmbStVollzG, since 14 July 2009) and Hesse (HStVollzG, since 28 June 2010). The *Laender* prison laws are largely based on the Federal German Prison Law and usually only differ in terms of various details. The type and scope in the rendering of services in the area of health care is based on the Federal Social Code (SGB V)<sup>124</sup> in all five of the German *Laender* with their own prison laws, for example.

The seventh title of the German Prison Law lays down regulations governing health care for prisoners. Generally speaking, there is an obligation to care for the physical and mental health of prisoners (§56 StVollzG). In addition to this, prisoners are "entitled to treatment when they are ill if this is necessary to diagnose or heal an illness, prevent it from becoming more acute or to alleviate it". This means *inter alia* treatment by a physician and the supply of medication, bandages and dressings (§58 StVollzG). The provisions of Social Code V apply to the type and scope of health services (§61 StVollzG). No individual references are made in the German Prison Law to drugs, substitution or addictions. Medical care of inmates is paid for by the ministries of justice of the *Laender*. A health insurance scheme or the *Laender*'s respective accident insurance scheme assumes the costs of work-related accidents (BMJ 2009).

Although the *Laender* codes scarcely differ from the German Prison Law or from each other, there are nevertheless subtle differences. The Hessian Prison Law stipulates a right on the part of inmates to psychological or psychotherapeutic treatment or care (§26, section 2 HStVollzG). In Lower Saxony the need to inform inmates about healthy living habits is codified (§23, section 1 HStVollzG and §32, section 1 JVollzGB). The codes of Hesse and Baden-Wuerttemberg furthermore state that it is possible to exercise controls to combat abuse of addictive substances (§4 HStVollzG and §64 JVollzGB).

# Implementation of the principle of equivalency

Resolution 37/194 of the General Assembly of the United Nations (Office of the United Nations High Commissioner for Human Rights 1982) states that health-care personnel in prisons have a duty to ensure that prisoners in custody receive protection of their physical and mental health and, if they are ill, that they receive treatment of disease commensurate in

Grundgesetz (German Basic Law, or German Constitution).

SGB V governs the organisation, insurance obligation and services provided by statutory health insurance schemes as well as their legal relationship to other service providers such as, for example, physicians, dentists and chemists.

quality and standard to that afforded to persons who are not imprisoned or detained. In dealing with prisons and detained persons, the Council of Europe recommends under the caption "Equivalence of care" that health policy in prisons accord with national health policy and be integrated in it. Furthermore, conditions in prison which constitute violations of human rights cannot be justified by a lack of resources (CPT 2010).

In Germany penal laws and regulations themselves stipulate what medical services prisoners are entitled to and with regard to the type and scope of such refer to the Social Code (SGB V) (Meier 2009). Under these provisions, prisoners are not entitled to the entire spectrum of health services which statutory health insurance schemes (GKV) are obligated to provide.

#### **Treatment**

The DSHS has kept a series of tables on ambulatory counselling during prison sentences since 2008 (Pfeiffer-Gerschel et al. 2012e). As this series of tables only comprises twelve facilities for the reporting year (2010: 8 facilities) and it cannot be ruled out that individual results are only available for one or two facilities or heavily influenced by them, these figures must be interpreted extremely cautiously, as no information whatsoever is available on the mechanisms for selecting participation, nor can anything be said regarding the representativeness of the participating prisons. In addition there are indications that there are problems with the documentation. For instance, some persons crop up in the overall data set, but not in the separate tables on external counselling in prisons. The average age of men with illegal drug problems who made use of ambulatory aid in prison in 2011 was 29.7 (N=1,161) (2010: age was 28.3) while the average for women was 30.8 (N=27) (2010: 32.2; It is particularly noteworthy that 70.4% (2010: 71.4%) of women serving sentences in prison who underwent treatment as a result of a drug problem were treated for a primary opioid problem, while this percentage among men was only 31.6% (2010: 24.2%). In prison the percentage of men whose main diagnosis (MD) is stimulants (34.1%) and who are undergoing treatment is significantly higher than among persons who undergo outpatient treatment outside of prisons (c.f. Table 5.1). In contrast to this, treatment of men in prison as a result of cocaine (8.6%) is of a similar magnitude to that of life outside prisons and a primary cannabis problem (24.5%) plays a smaller role than with ambulatory treatment outside of prison. In the case of imprisoned women, only four cases are documented as a result of an MD stimulants, two cases as a result of an MD cannabis and no cases as a result of an MD cocaine (Table 9.3).

Main diagnosis	Men		Wo	men	To	otal
	N	%	N	%	N	%
Opioids	367	31.6	19	70.4	386	32.5
Cocaine	100	8.6	0	0.0	100	8.4
Stimulants	396	34.1	4	14.8	400	33.7
Hypnotics/Sedatives	5	0.4	2	7.4	7	0.6
Hallucinogens	3	0.3	0	0.0	3	0.3
Cannabinoids	285	24.5	2	7.4	287	24.2
Multiple/other substances	5	0.4	0	0.0	5	0.4
Total	1161	100.0	27	100.0	1188	100.0

Table 9.3 Outpatient treatment of drug problems in prisons

Pfeiffer-Gerschel et al. 2012e.

### 9.5.1 Prevention, treatment and care of infectious diseases

Detailed information on prevention, treatment and care in respect of infectious diseases in prisons can be found in the Selected Issue Chapter 11 of the REITOX Report 2010/2011.

# Placement on a hospital order

In the Asklepios Clinic in Nord-Ochsenzoll/Hamburg, 50 opioid addicts on hospital orders under Sec. 64 took part in a substitution programme. All participants had a hepatitis C infection (HCV), nine were infected with the human immunodeficiency virus (HIV). The results showed that, in comparison with a non-substituted control group, the relapse rate was markedly reduced. Similarly, the number of "special incidents" such as violence or escape attempts was reduced. Overall, the rate of unsuccessful treatment (abort treatment due to no chance of success) to 10% (Jahn & Stöver 2012).

# 9.5.2 Prevention of overdose risk upon release

In its action plan on the implementation of the HIV/AIDS strategy, the Federal Government established that prisons represent a setting that requires specific health care measures to be undertaken. Therefore, talks are being held with representatives of the ministries for justice of the *Laender* with a view to promote substitution therapy in prison. In particular the transition from prison to life in freedom carries a special risk of overdose.

Given the high mortality risk of intravenous drug use (IDU) after prison release, the revised guidelines passed by the German Medical Association (BÄK) on opioid substitution therapy – (OST) (BÄK 2010) explicitly allow an OST to be commenced also in the case of currently abstinent dependents.

# 9.6 Reintegration of drug users after release from prison

With regard to the preparation of the release of detainees from prison, the legal framework establishes that detainees are to receive assistance upon prison release (§ 74 Prison Law in connection with § 15 Prison Law) with a view to promoting societal integration after prison. In order to reach this goal prison services are to cooperate at inter-departmental level (§ 154 Prison Law).

Moreover, providers of social security services are to form networks and cooperate with the competent agencies to complement each other in the pursuit of the same goal (§ 68 paragraph 3 Social Code XII and § 16 paragraph 2 Social Code II). Corresponding strategies and measures are developed and implemented under the term transition management. On the one hand, it is tried to facilitate a smooth transition from prison to freedom with integration into training, work and employment, on the other, to tackle problems linked with detention and criminal careers. The main task of transition management is to improve the situation of the clients by offering them counselling and care but also possibilities of professional qualification and training as well as job placement. Although from an historic viewpoint there have been corresponding efforts undertaken already 150 years ago with the introduction of assistance for offenders and the introduction of the probation service in the 1950s, the discussion and the implementation of a transition management still require further development.

Sack und Thomasius (2012) have summatively evaluated a newly implemented therapy preparation station (Therapievorbereitungsstation, TVS) for inmates in the Hamburg correctional system who are addicted to and abusing drugs when they enter an institution. The complex setting of the therapy preparation station comprised an access group, skills training according to Linehan, relapse prophylaxis training, a free conversation group and supportive recreational group activities. Negative results in the urine tests were the precondition for admission and stay at the preparation station. A total of 26 male detainees from two Hamburg detention facilities took part in the study. The retention quote at the therapy preparation station was at a total of 92.3%. 80.3% of the inmates were reached for follow-up tests 3 months after discharge from the TVS (t<sub>3</sub>) and 69.2% were reached 6 months after discharge (t<sub>4</sub>). Following on from the TVS measures, 33.3% (at t<sub>3</sub>) and 61.1% (at t<sub>4</sub>) of the study participants who had been released from prison had begun a further treatment. 45.5% of those who began a follow-on treatment completed it on schedule. Results also showed that abstinence confidence in dealing with relapse critical situations was increased just as the experienced competence in emotion/mood regulation and impulse control. All improvements were primarily demonstrated in pre-post comparison (t<sub>1</sub> t<sub>2</sub>) during the stay at the TVS, after discharge, on the whole they remained stable 125.

<sup>125</sup> s.a. http://www.uke.de/zentren/suchtfragen-kinder-jugend/index.php

# 10. Drug markets

#### 10.1 Introduction

Indicators of the situation on the illicit drug market are, apart from the perceived availability and supply of illicit substances, also the number and size of seizures, prices and levels of active ingredients or purity of the substances respectively. The attempt to get a grasp of new drugs, their structure and effects, is associated with considerable expense in the form of complex chemical analyses. Such analyses are carried out for example by the Forensic Science Institute (KT 34) of the Federal Criminal Police Office (BKA). Information on seizures is also available from the BKA or the Land Criminal Police Offices (Landeskriminalämter, LKÄ).

# Availability and supply

Availability and supply are two different perspectives of the drug market: the perspective adopted by the buyer on the one hand and by the supplier on the other. 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) (most recently in 2003), the Drug Affinity Study (DAS) carried out by the Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, BZgA) and within the framework of regional monitoring systems (e.g. MoSyD Frankfurt). The perceived availability reflects the situation on local and regional drug markets but also personal opinions. Other aspects of availability are indicators like the price, purity and seizures. Seen from the perspective of the suppliers, the market situation is reflected by the number, quantity, price 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, police and customs authorities identify the country of departure, origin or transit. The BKA statistics presented in the following contain all data on the seizures made by the police offices of the *Laender*, the BKA and the customs offices.

#### **Price**

At the end of the year 2002, the Land Criminal Police Offices and the Federal Criminal Police Office agreed on an expanded collection of data on domestic narcotics prices. Since then, apart from the highest and lowest prices, the so-called "predominant market prices" at street and wholesale level have been recorded, whereby, based on an agreement made at European level on the initiative of the EMCDDA, data collection for the latter is differentiated for the first time in terms of trade volumes from 0.5 to < 1.5 kg (respectively 500 to < 1,500

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consumption units), 1.5 to < 10 kg (1,500 to < 10,000 consumption units) and 10 kg to < 100 kg (10,000 to < 100,000 consumption units). In order to guarantee a maximum of representativeness of the price survey, data are generally collected at four to six locations in the *Laender* (by police offices in urban and rural areas) and then transferred to the respective LKA. The Land Criminal Police Offices join the data from the measuring locations and further available information in a standardized table and transfer the current market prices of narcotics in their Land to the BKA once a year. Based on these data, the BKA calculates the average narcotics prices for Germany.

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.

In 2010, the EMCDDA published a manual with guidelines on the collection of data on narcotics prices at street-level. In addition to describing methodological difficulties, for example geographic coverage, representativeness and weighting, the manual also provides examples of drug price calculations from several European countries. In France, Norway or the Netherlands for example, expert groups from the health area and criminal prosecution or respectively from various "scenes" give estimates of current narcotics prices (EMCDDA 2010).

The trend scouts and scene surveys conducted in the scope of the Frankfurt MoSyD also provide estimates on the prices of various drugs.

### **Purity**

Apart from establishing prices, the Federal Criminal Police Office 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, irrespective 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 data provided by the BKA upon request of the DBDD. 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 or fillers (e.g. sugar).

# 10.2 Availability and supply

# 10.2.1 Perceived availability of drugs, exposure and access to drugs

Within the framework of the DAS 2008<sup>126</sup>, the teenagers and adults aged 12-25 years were asked: "How easy would it be for you to get hold of hashish or marijuana within 24 hours?". A little less than 37.1% of the interviewees answered that it would be "very easy" or "rather easy" and a third said that it would be impossible to get hold of cannabis within a day. Striking is the finding that each category that comprises possible availability within the next 24 hours in comparison with the category "not possible at all" is significantly larger among males than among females. This means, conversely, that it is impossible for more female than male teenagers and young adults to get hold of marijuana within 24 hours (Table 10.1).

Table 10.1 Perceived availability of cannabis broken down by gender (DAS 2011)

Question: How easy would it be for you to get hold of hashish or marijuana within 24 hours?

	Total	Male	Female
Very easy	17.1	19.6	14.5
Fairly easy	20.0	20.8	19.2
Fairly difficult	18.5	18.6	18.4
Very difficult	11.0	11.5	10.4
Impossible	31.9	27.9	36.1
Don't know/Not specified	1.5	1.6	1.4

All data in percentages.

Bold print: Figure diverges at a statistically significant scale from the figure for the female interviewees.

Multinomial logistic regression with the covariates age and gender. Reference category: "Impossible".

Results are weighted.

BZgA 2012a Special evaluation.

obtained prior to interviewing.

In the drug affinity study 2008 (BZgA 2010) a representative sample of 3001 adolescents and young adults aged 12-25 years was surveyed. Data collection was done with computer-based telephone interviews (CATI). The interviews were conducted in February and March 2008. The random sample was drawn according to the ADM-sampling design for telephone interviews. From a telephone master sample containing all relevant telephone numbers, landline numbers were drawn by means of an unrestricted random sampling with equal selection probability. After calling the numbers, it was established if a private household, in which adolescents and young adults were living, had been sampled. If there were one or more adolescents and young adults aged between 12 and 25 years living in one of the households reached, the person who last had his birthday was selected. In the case of children in the age of 12 and 13 years, permission of one the parents was

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The group of interviewees who stated in the DAS that it would be "very easy" to obtain cannabis, were also asked where they would get the cannabis from. Almost three quarters of the interviewees (72.0%) obtain their cannabis from friends or acquaintances and less than half get it on the street (44.4%). Approximately a sixth of the interviewees (17.8%) think that they could buy cannabis in head-shops. There are considerable differences between the sexes (m: 47.6%; f: 40.0%) in respect of availability on the street (Table 10.2).

Table 10.2 Places of cannabis availability in persons with perceived "very easy" availability (DAS 2010)

Question: Where do you get the drugs from? Total Male **Female** Friends and acquaintances 72.0 71.8 72.4 On the street 44.4 47.6 40.0 Discos 38.6 39.2 37.6 Coffee Shops 27.2 28.2 25.8 Pubs 21.1 20.5 22.1 School 20.2 22.0 17.6 Holiday resorts 18.5 18.7 18.1 Hemp shops 17.8 16.6 19.5 Youth centres 10.2 10.7 9.4 4.9 4.1 6.1 Family or relatives 0.9 8.0 1.1 None of the above

All data in percentages. Multiple answers possible.

Bold print: Figure diverges at a statistically significant scale from the figure for the female interviewees.

Binary logistic regression with the covariates age and gender.

Results are weighted.

BZgA 2012a Special evaluation.

Looking at the trends since 1997, one finds that, similar to the prevalence trends (see chapter 2) of the same time period, the availability was at a peak at the beginning of the 2000s and has been declining since. More than three times as many young adults (18-25 years old) have very easy access to hashish or marijuana than adolescents (12-17 years old). The difference has become ever more pronounced since 1997 because the quick availability of cannabis has declined faster for adolescents than for young adults (Table 10.3).

Table 10.3 Trends of the "very easy" cannabis availability (DAS 1997-2011)

Question: How easy would it be for you to get hold of hashish or marijuana within 24 hours?

	12 to 25 years			12 to 17 years			18 to 25 years		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1997	20.4	21.8	18.9	15.3	13.6	17.1	23.9	27.6	20.1
2001	27.3	30.7	23.7	19.8	20.9	18.7	32.9	38.1	27.5
2004	20.8	24.2	17.3	13.8	15.7	11.8	26.1	30.5	21.5
2008	19.2	21.6	16.7	10.4	11.7	9.0	25.1	28.3	21.9
2011	17.1	19.6	14.5	7.2	9.1	5.2	23.4	26.3	20.3

All data in percentages.

Bold print: Figure diverges at a statistically significant scale from the figure of the year 2011.

Binary logistic regressions with the covariates year and age (total as well as gender columns).

Results are weighted.

BZgA 2012a Special evaluation.

Information on the (subjective, perceived) availability of illegal drugs in various party scenes can be taken from the trend scout panel of the Monitoring System on Drug Trends (Monitoring System Drogentrends, MoSyD) in Frankfurt am Main (Werse et al. 2012). According to this information, the availability of cannabis in the respective scenes or subcultures is considered to be very high across all scenes. High price cannabis with increased THC content ("Haze") has grown in popularity considerably in various scenes. The existing opinion on cannabis is heterogeneous across the various environments: whilst the substance enjoys an unchanged, positive image in some scenes, it is viewed very negatively in techno scenes in particular due to its association with lethargy and a restricted social ability. The popularity of cannabis overall remains on the level of the previous year after use had declined over the years before that. Marijuana remains far more popular than hashish which is only bought in exceptional cases, mainly where marijuana is not available. In the case of speed/amphetamine, the popularity of use and intensity has remained high. Amongst the "hard" drugs, the availability of amphetamine is considered to be the highest. For the first time supply and use of methamphetamine was reported on for the first time, after only vague information had been available in the preceding years and loose speculation as to how widespread its use was. In techno and underground party settings with a high affinity to drugs and which are open to experimentation, a slightly increasing use was reported as well as the existence of smaller dealer networks however it was always stressed that no general scene trends exist (yet). The respondents from the head shop reported that there were rumours that persons who had moved to the area from East Germany were using methamphetamine in Frankfurt clubs and had offered it on occasion to other party goers. The increased availability of MDMA crystals and MDMA powder as well as an increase in their use as highlighted last year, did not continue. However, people were generally educating

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themselves about that precise topic in seven of nine scenes from techno party circles. The quality was rated as "consistently very good"; however, a marked worsening of the offering was perceived after it had previously remained constant at the level of the year before. A worsening from the supply side was reported for a total of three scenes so that a group specific singular phenomenon could be ruled out. Furthermore, a "new" application form appeared increasingly, with the MDMA capsules (crystals filled into conventional gel capsules). In terms of popularity, MDMA in crystal or powder form which is considered far higher quality, continued to be preferred to ecstasy tablets. The decline in the significance of cocaine in the electronic dance scene continued. The substance now only plays a subordinate role in comparison to speed or ecstasy. Mostly due to its high price, cocaine differs greatly, particularly in the frequency of its use, from those other drugs. A little more commonly and for several subculture segments, the emergence of higher quality and higher priced cocaine ("flakes") was reported. The use of LSD and psychoactive mushrooms was limited, just as in the preceding years, to individual "scenes" and is only found sporadically. The general availability is classified as low. Unlike in the previous year, the prevalence of ketamine did not increase, after problems in connection with its narcotising and dissociative effects occurred directly at events in certain circles. According to reports of the trend scouts, the risk awareness in respect of this substance increased and its image tended to worsen. Information was also supplied on the margin about sporadic cases of GHB/GBL use, which continued to be limited to certain social groups. Other illegal substances such as heroin, opium or crack played practically no role at all. The use of hormonal drugs to enhance muscle development was only reported from the bodybuilding scene.

So-called research chemicals (RCs) are a relatively new phenomenon which, due to their not (yet) having been made subject to the BtMG, are misleadingly labelled "legal highs" with total disregard for criminal liability under the pharmaceuticals law. "RC" is the abbreviation used in circles of experimental drug users for synthetic psychoactive substances of different substance categories (e.g. piperazine, cathinone or also cannabinomimetic substances) that have not (yet) been made illegal and that have in part similar effects to better known drugs which are outlawed under the BtMG (e.g. amphetamines, ecstasy, cannabis). Under the guise of "bath salts", "fertilizer tablets", "air fresheners" or similar things, such substances are available on the open market or from online shops and even from the bricks and mortar outlet of head-shops (without indication of the precise ingredients) (Werse et al. 2010).

According to the trend scout panel of the MoSyD (Werse et al. 2012) these products only have a marginal level of significance. Smoking mixtures with synthetic cannabinoids are seen as being of low value in comparison to conventional cannabis products. Specifically, they are only used by people as a substitute if none of the customary forms of cannabis is available. A further reason given for the use, is the avoidance of consequences in relation to the user's driving license. Further research chemicals in the area of "party drugs" have so far only met with a muted response and that in extremely special social scenes which are more open to experimentation. The bulk of consumers continues to rely on the offers from illegal market structures, amongst other reasons due to a lack of experience with RCs, the associated risk

and the present lack of research on the substances including in relation to risk minimising usage practices.

# 10.2.2 Drugs origin: national production versus imported

According to the Federal Criminal Police Office (Bundeskriminalamt, BKA, 2011), in the last years illicit drugs, apart from cannabis (c.f. Kipke & Floeter 2009) and to a comparatively small extent also synthetic drugs are almost exclusively imported from abroad.

According to the BKA (2012a), cannabis was extensively cultivated outdoors and indoors again in 2011. The number of detected and seized outdoor plantations almost doubled from 46 (2010) to 98 (2011) whilst that of indoor plantations also increased to a similar extent from 348 to 619. The 717 cannabis plantations seized contained a total of 121,799 plants. Among the 98 outdoor plantations, there were two professional plantations (cultivation capacity of more than 1,000 plants), nineteen large plantations (100-999 plants) and 77 small plantations (20-99 plants) with a total of 7,661 (+40.1%) seized cannabis plants. The 619 indoor plantations comprised 32 professional plantations, 188 large plantations and 399 small plantations with a total of 114,138 (53.2%) impounded cannabis plants. The highest number of outdoor plantations was recorded in Bavaria (14 small and 3 large plantations) and Rhineland Palatinate (12 small plantations), the most indoor plantations were found in Baden-Wuerttemberg (76 small, 8 large and one professional plantation) and Lower Saxony (35 small, 27 large and 9 professional plantations).

# 10.2.3 Trafficking patterns, national and international flows, routes, modi operandi and organisation of domestic drug markets

According to a press conference of the Federal Government's Commissioner on Narcotic Drugs and the President of the BKA on 26 March 2012, the high quantities of amphetamine and methamphetamine seized which was destined for the German market, was predominantly smuggled from neighbouring countries. Internationally, Eastern and Southern Africa are increasingly becoming, alongside West Africa, transit regions for the smuggling of heroin from Afghanistan and cocaine from South American states (Die Drogenbeauftragte der Bundesregierung & BKA 2012). According to the report of the BKA (BKA-Pressestelle 2012) Afghanistan remained in 2011 the main country of origin for heroin trafficked in Europe and in Germany. According to studies by the United Nations, the total area cultivated for opium poppies grew by 7 percent in 2011 to over 130,000 hectares. The main cultivation and production countries for cocaine remain Columbia, Peru and Bolivia whereby Peru has gained in significance as a country of origin in the last few years. Alongside the USA, Europe remained a target sales market for cocaine from South America. The Eastern Europe has gained in significance in recent years both as a sales market and a transit area for cocaine. In terms of the production of synthetic drugs, the African continent is becoming more significant: the first major laboratories for the production of methamphetamine in West Africa have been seized in Nigeria since mid 2011. In addition, Mexico is becoming one of the world's leading countries for the illegal production methamphetamine. Laboratories have been raided in Mexico which had the capacity to produce methamphetamine by the ton.

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### 10.3 Seizures

# 10.3.1 Quantities and numbers of seizures of all illicit drugs

In comparison to the years 2010 and 2011, the seized quantities of heroin (+5.0%) amphetamine (+16.3 %), crystalline methamphetamine (Crystal; +48.8 %), khat (+51.1 %), ecstasy (+110.5 %) and LSD (507.1 %) all increased, whilst the seized quantities of crack (-11.9 %), psychoactive mushrooms (-17.0 %), hashish (-18.5 %) and marijuana (-188 %) declined. Whilst the seized quantities of khat and crystal (for comparatively low total quantities) has been steadily rising for some years, a development which seems to be a "real" trend, the hugely increased quantities of ecstasy and LSD seized in comparison to the previous year seem to have been caused by the lower values in 2010. The main reason for these fluctuation are large individual seizures which greatly increase the numbers or, if such seizures a lacking in comparison to the previous year, reduce the numbers. For example, the increase in quantity of cocaine seized from 2009 to 2010 (+77%) was largely down to a few major seizures (1.3t, 351 kg and 341 kg). As such large seizures did not occur in 2011, the amount of cocaine secured, the quantity of cocaine seized remained in 2011 on a similar level to 2009 (BKA 2012a). In contrast to that, the quantity of methamphetamine seized (for a comparatively small total amount) almost tripled. Table 10.4 provides an overview of the quantities of illegal drugs seized from 2009-2011.

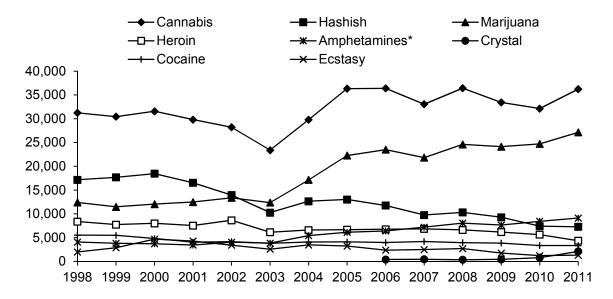
Table 10.4 Quantity of illegal drugs seized in Germany, 2009 to 2011

Substance	2009	2010	2011	Change
				2010-2011
Heroin	758.4 kg	474.3 kg	497.8 kg	+5.0 %
Cocaine	1,707.0 kg	3,030.8 kg	1,940.6 kg	-36.0 %
Crack	4.6 kg	3.2 kg	2.8 kg	-11.9 %
Amphetamine	1,375.5 kg	1,176.9 kg	1,368.4 kg	+16.3 %
Crystal	7.2 kg	26.8 kg	40.0 kg	+48.8 %
Ecstasy	521,272 KE	230,367 KE	484,992 KE	+110.5 %
Hashish	2,220.0 kg	2,143.7 kg	1,747.5 kg	-18.5 %
Marijuana	4,298.0 kg	4,874.7 kg	3,957.4 kg	-18.8 %
LSD	20,705 Tr.	4,279 Tr.	25,978 Tr.	+507.1 %
Khat	24,004.5 kg	30,389.3 kg	45,913.8 kg	+51.1 %
Mushrooms	12.2 kg	16.0 kg	13.2 kg	-17.0 %

BKA 2012a.

A more precise indicator for (short term) trends is the number of seizures (Figure 10.1). The total number of seizure cases of heroin, opium, cocaine, crack, amphetamine, crystal, ecstasy, cannabis products and LSD in 2011 (55,756 cases) was 5.5% higher than the equivalent figure for 2010 (52,841 cases). The most important reasons behind the increased

overall number of cases were the increased number of cases of seizure of marijuana (+9.9%), amphetamine (+8.3%) and crystal (+164.3%). Crystal (2011: 2,112 cases) thus overtook ecstasy (+9.3%; 2011: 1,322 cases) as the second most often seized amphetamine type stimulant (ATS). The number of seizures also increased (for a comparatively low overall number) in respect of LSD (+26.9%), mushrooms (+7.5%) and opium (+9.5%). Minimal changes were observed in terms of the seizures of hashish (-1.9%) and cocaine (-0.4%), and considerable declines for heroin (-22.7%) and (for a comparatively low total figure) for crack (-26.9%) (BKA 2012a).



\*) Seizures of so-called "crystal" are included in the category "Amphetamines" until 2005 (incl.); data on seizures of crystal after that point collected separately.

BKA 2012a.

Figure 10.1 Number of seizures of Narcotic drugs in the Federal Republic of Germany from 1998 to 2011

When looking at the seized quantities and the number of seizures, one can see that figures have increased considerably since 2000 especially for amphetamines (+419% and respectively +202%) and declined for ecstasy (-72% respectively -70) (Table 10.5). The case figures in 2011 for heroin (-46%) and cocaine (-31%) each declined considerably in comparison to 2000 although changes in the quantity seized (heroin: -38%; cocaine +113%) read very differently (BKA 2012a).

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	2011 vs.	Heroin	Cocaine	Amphe- tamine*	Ecstasy	Can- nabis	Mush- room	Khat
Cases	2010	-23 %	-0.4 %	+22 %	+9 %	+7 %	+8 %	+46 %
Quant.	2010	+5 %	-36 %	+17 %	+111 %	-19 %	-17 %	+51 %
Cases	2000	-46 %	-31 %	+202 %	-72 %	+13 %		
Quant.	2000	-38 %	+113 %	+419 %	-70 %	-60 %		

Table 10.5 Changes in the number of seizures and quantity seized

Note: Increases >10% are marked by framed fields and decreases >10% by shaded fields.

In 2011, in 1,804 cases (2010: 1,517), 133,650 cannabis plants (2010: 101,549) were seized (Table 10.6) which in both instances represents a market increase (+18.9% cases; +31.6% plants seized). The quantity seized thus reached the level of 2009 once more, the number of cases is the highest since 2003 (BKA 2012a). The increased number and quantity of plants seized as well as the doubling of the seized small plantations (see 10.2.2) imply on the one hand an increased (own) cultivation of cannabis in Germany and on the other, if one considers the increasing seizure numbers for marijuana and the falling numbers for hashish (see 10.3.1), an increased preference for marijuana and a diminished preference for hashish.

Table 10.6 Seizure of cannabis plants

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Quantity <sup>1)</sup>	35,863	68,133	93,936	190,241	135,252	121,663	127,718	101,549	133,650
Cases	750	1,008	1,035	1,121	1,463	1,526	1,359	1,517	1,804

<sup>1)</sup> in units.

BKA 2012, personal reports.

# 10.3.2 Quantities and numbers of seizures of precursor chemicals used in the manufacture of illicit drugs

In addition to the base substances and chemicals seized in the illegal drug laboratories (see 10.3.3) in 2011 6,000kg of phenyl acetic acid, 2,500 kg of potassium acetate, 200 kg acetophenone, 63 l Methyl ethyl ketone, 20.2 kg ephedrine, 3 kg pseudoephedrine, 0.3 kg norephedrine and 654 tablets containing a pseudoephedrine were seized which was clearly intended for the illegal manufacture of narcotics (BKA 2012a).

### 10.3.3 Number of illegal laboratories and other production sites

In 2011, 19 illegal drug laboratories were uncovered, which corresponds to a slight increase in comparison with the previous year (16 laboratories). As in the previous year, the detected production sites were mainly (15 sites) small laboratories that produced ATS to meet the

<sup>\*) &</sup>quot;Crystal" is also subsumed under the category "Amphetamine". BKA 2012a.

operators' personal demand or to supply a limited circle of local buyers. One laboratory was set up to produce GHB (BKA 2012a).

Overall, in the laboratories, 16.8 kg amphetamine, 0.14 kg methamphetamine and 12ml GHB were seized in the detected laboratories. In addition, basic material found included acetic anhydride (2.7 kg), phenyl acetic acid (0.25 kg), hydrochloric and sulphuric acid (76.8 l and 7.6 l respectively), acetone (16.6 l), ethyl ether (4.6 l), benzyl methyl ketone (BMK; 24.2 kg), toluol (8.6 l), pseudoephedrine (0.01 kg) and pills containing pseudoephedrine (1,236 consumption units) (BKA 2012a).

An overview of the most recent seizures is contained standard table 13.

# 10.4 Price / purity

# 10.4.1 Prices of illicit drugs at retail level

As far as the average drug prices (Table 10.7) are concerned, there were hardly any changes of any significance observed from 2010 to 2011.

At retail level, the prices for cocaine (+-0%), ecstasy (+-0%), hashish (+1%), marijuana (+2%), amphetamine (+5%) and LSD (+9%) either stayed constant or rose slightly. The prices for heroin (+17%), crystal (+17%) and crack (+18%), however, rose on a nationwide to a noticeable degree.

Prices at wholesale level are difficult to compare to the previous years: an international expert group led by the EMCDDA initiated a harmonisation of the data collection procedures for wholesale drug processes in Europe which led, in a first step, to a clearer differentiation of large quantities in the categories from 0.5 to < 1.5 kg (or respectively 500 to < 1,500 consumption units), 1.5 to < 10 kg (1,500 to < 10,000 consumption units) and 10 kg to < 100 kg (10,000 to < 100,000 consumption units) and larger<sup>127</sup>. This differentiation was also implemented by the BKA.

Whilst the prices for wholesale volumes of heroin rose slightly and for cocaine more starkly at the 0.5 to <1.5kg level, the other wholesale prices either remained stable or fell.

An overview of the current drug prices can be found in standard table 16.

Fundamentally, data are also supposed to be collected in the category above 100 kg. However, due to the very thin data basis, the BKA does not have any substantive representative values (Bundeskriminalamt, SO 51).

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Table 10.7 Prices of various drugs 2009 - 2011 (all prices in €)

		Heroin	Cocaine	Crack	Ecstasy	Amphe- tamines	Crystal	Mari- juana	Canna- bis resin	LSD
Small	2011	42.2	65.7	58.5	6.6	13.1	78.7	8.9	7.2	9.8
quantities1)	2010	36.2	65.6	49.5	6.6	12.5	67.3	8.7	7.1	9.0
Change		+17%	0%	+18%	0%	+5%	+17%	+2%	+1%	+9%
Larger quantities <sup>2)</sup>										
0.5 to <1.5kg (500 to <1,500KE)	2011	25,429	45,875		2,193	4,453		4,151	2,912	
	2010	24,548	40,383		2,797	4,832		4,285	2,836	
1.5 to <10kg (1,500 <10,000KE)	2011	21,000*	35,400		2,808	3,050		2,889	1,929	
	2010	17,000*	37,625*		2,725*	3,627*		3,831	1,897	
10 to <100kg (10,000-100,000KE)	2011		33,000*			2,350*		4,333*	1,900*	
	2010					1,626*		4,650*	2,500*	

<sup>1)</sup> Price per gram.

Bundeskriminalamt SO 51 2012, personal reports.

According to the trend scout panel of the MoSyD annual report in Frankfurt (Werse et al. 2012) the prices for cannabis produces rose steadily throughout the last few years. In 2011, the estimated average price for marijuana increased once more to 9.50 € (2010: 9 €) and that of hashish to  $7 \in (2010: 6.80 \in)$ . The reasons for the repeated price rises are presumably the improved availability and general popularisation of sativa varieties ("haze") which are traditionally sold at higher prices on the market than indica varieties due to their higher potency and longer cultivation period. The average price difference is around 5 € (sativa: 12€; indica: 7€). The average price for MDMA crystals is calculated to be just under 50 Euro and thus considerably below that of the previous year. It is assumed that greater sales volumes and increased competitive pressure due to the improved supply at least towards the beginning and middle of the year led to the price correction on the part of the dealers. There are also differentiated estimates from the trend scouts for ecstasy tablets: "normal" ecstasy was normally offered in a nightclub for an average price of 5 Euro, the price for "pills" with (at least supposedly) increased MDMA content was around 8 Euro. The price for amphetamine was relatively constant across all scenes in Frankfurt at 11 Euro per gram. The estimated price for a gram of cocaine amounted to around 70 Euro which represents a slight rise in comparison to the previous year but this rise is possibly connected to the improved quality. The price of LSD was described as variable, being between 10 and 15 Euro per "ticket". Ketamine was sold for around 30 Euro per ampoule or 40 Euro per gram.

<sup>\*</sup> Median value is based on a very small data basis (less than five Laender)

<sup>2)</sup> Price per kilogram.

# Profits from the sale of marijuana

According to the information provided by the forensic institute of the Land Criminal Police Office in North Rhine-Westphalia, it is possible to obtain at least 25 g consumable marijuana from the appropriate cultivation of a full-grown cannabis plant. The average value of about 50 cannabis plantations with plants ready for harvesting or harvested plants respectively has been slightly higher than 40 g of consumable dried marijuana in North Rhine-Westphalia. Professional plantations even reach 50 g. The average value assumed for the profit and loss calculation is rounded down to 40 g. For the calculation of the proceeds of an indoor cannabis plantation, the minimum and average value are established by multiplying the number of plants by the minimum quantity (25 g) or respectively the average quantity (40 g) of potentially consumable marijuana. The calculated weight is then multiplied by the current street price (2011: 8.90 €/g)) or by the wholesale price respectively (2011: 2,889 €/kg). From these values the costs for the plants (one cutting costs for example 2.50 € in the Netherlands) and the pro-rata re-usable technical equipment to the total amount of 10 € per plant are then deducted. The costs for the energy supply are not included in the calculation here since the electricity needed for the operation of an indoor plantation was illegally branched off in the large majority of seizure cases. To summarize, 1000 cannabis plants yield profits ranging between 212,500 € and 346,000 € at retail level and between 62,225 € and 105,560 € at wholesale level.

For the year 2011, this means a non-realized profit from 133,650 seized plants of between 8.3 million € and 14.1 million € at the wholesale level and between 28.4 million € and 46.2 million € at the retail level (Bundeskriminalamt, SO 22 and own calculations).

# 10.4.2 Purity / Potency of illicit drugs 128

# Composition of illicit drugs and drug tablets

## Heroin, cocaine and amphetamine

The basis for the figures on active ingredient contained in amphetamines, cannabis, ecstasy, heroin and cocaine is forensic data provided by the BKA (KT 34) upon request of the DBDD (see also chapter 10.1/purity). Figure 10.2 offers an overview of the development of levels of active substance for amphetamine, cocaine and heroin since 2002.

In 2011, a total of 3,102 (2010: 2,773) amphetamine samples were tested for their potency. As the potency of amphetamine does not depend on the size of the seized amount, no differentiation is drawn between street level dealing and the wholesale level. The most common ingredient in the samples tested was caffeine, the most common cutting agent was lactose. The active ingredient content of amphetamine, after continually falling between 2004 (7.9%) and 2009 (4.8%), rose again in the years 2010 (6.6%) and 2011 (6.9%).

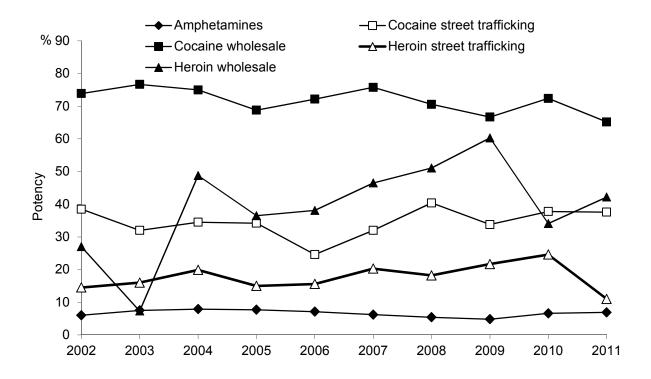
<sup>&</sup>lt;sup>128</sup> The data on the contents of active ingredient come from the forensic laboratories of the BKA (KT 34). The interpretation of the data was performed by the DBDD.

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Cocaine comes onto the market primarily as hydrochloride. Cocaine hydrochloride and cocaine base are, however, shown together here. Overall, 2,970 (2010: 3,116) cocaine samples were tested. Although the potency of cocaine in wholesale trade in 2011 represented the lowest value in the last ten years, taken as a whole, the potency has remained stable over the time period (around 70% +/- 5%) as it did for the street trade (around 35%; excluding an exceptional figure of 24.6% in 2006), for which the value for 2011 was 37.6% (2010: 37.8%). Additives detected were primarily tetramisole/levamisole, phenacetin and lidocaine and cutting agent, lactose. Canadian Harm Reduction (Canadian Harm Reduction 2010) warns of the side effects of levamisole, which is apparently already mixed with the cocaine at source and is contained in 60-90% of worldwide cocaine stocks.

For 2011, 2,915 (2010: 4,111) heroin samples were tested for their potency (Figure 10.2). Additives detected were, as in the previous years, primarily caffeine and paracetamol; the most common cutting agent was lactose. Following a continuous rise (certain peaks and troughs aside) from 2002 to 2010 when it reached a level of 25%, the highest value for the last ten years, in 2011 it fell sharply back to 11.0%. On a wholesale level, the potency of heroin fluctuates greatly: between 2005 (36.5%) and 2009 (60.3%), the purity of heroin nearly doubled before it then fell back massively in 2010 to 34.1% and rising again to 42.2% in 2011.

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



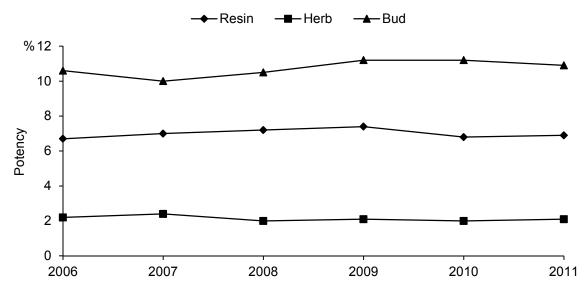
Bundeskriminalamt, KT 34.

Figure 10.2 Amount of active ingredients in Heroin, Cocaine and Amphetamines

Elsner and colleagues (2011) report on six cases of destructive additional substances in street heroin at the end of September/beginning of October 2011 in Bochum. Amongst intravenous drug users (IVUs) a greenish skin fluorescence could be seen at the latest on the second day post injection (p.i.) around the puncture mark from which quickly developed hard and soft defects. The IVU reported having bought heroin as a powder which looked "like it always does" and produced an opiate like high. The authors conclude from the symptoms that the adverse symptoms were caused by desomorphine (street name: "crocodile/croc") used to cut the street heroin or by other as yet unknown agents.

#### Cannabis

Since 2006, all participating laboratories have examined marijuana separately according to the cannabis plant and the bud as the more potent buds have been increasingly appearing on the illegal drug market without the plant. The determination of the THC content<sup>129</sup> was achieved in 2011 on the basis of the reported data sets on 2,714 samples of cannabis plant, 5,516 samples with buds and 1,976 samples of hashish resin by the laboratories of BKA, LKÄ and the border authorities. The flower buds had a potency of 10.9 % in 2011 (2010: 11.2%), the cannabis plant had a potency of 2.1% (2010: 2.0%). Since the time of the first separate recordings in 2006, there have been no significant changes either in the buds (around 11%) nor the cannabis plant (around 2%) (Figure 10.3).



Bundeskriminalamt, KT 34.

Figure 10.3 Amount of active ingredient in Cannabis

The German Hemp Association (Deutsche Hanfverband, DHV), lists the 250 newest cutting agents for cannabis on its website<sup>130</sup>. Since 25 May 2009, the DHV has received over 4,000

<sup>&</sup>lt;sup>129</sup> In the case of the reported active ingredient content, the tetrahydrocannabinol (THC) additionally created through heat is also taken into account.

<sup>130</sup> http://hanfverband.de/index.php/themen/streckmittel

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reports of dilution/cutting. The categorisation of the cutting agent is usually undertaken on the basis of assumptions based on unusual burning properties, abnormalities in the ash, effects or side-effects. The most commonly mentioned cutting agents are Brix, Sand, hairspray and sugar.

# Ecstasy

In 2011, the potency was reported for a total of 754,876 tablets and capsules (2010: 140,895) – referred to in the following as a consumption unit (CU). 99.6% (i.e. 751,904) of all consumption units (2010: 97.1%) contained one psychotropic active ingredient (single substance preparation). Among the single substance preparations, 3.4 methylenedioxy-N-methylamphetamine (MDMA) was dominant with a frequency of 95.3% followed by methamphetamine (3.3%), 1-(3-Chlorphenyl)-piperazine (m-CPP; 0.9%), amphetamine (0.5%) and 2C-B (<0.1%).

It is noticeable that once more, as in the years up to 2008, almost all ecstasy tablets were found to have MDMA as their psychoactive ingredient. In contrast, m-CPP, which was identified as the psychoactive ingredient in the majority of seized single substance preparations in 2009 (65.2%) and 2010 (61.1%) became almost insignificant in 2011.

Table 10.8 shows the potency calculated as a base for the individual psychoactive substances in single substance preparations. According to the table, the average potency of MDMA has risen in the years since 2008/09 (51 to 50 mg/CU) to 58 mg/CU (2010) and 73 mg/CU (2011). The potency of amphetamine has also steadily risen since 2008 (0.8 mg/CU): in 2011 it was 5 mg/CU. The potency of methamphetamine has fluctuated greatly since 2008, reaching a relatively high level in 2011 (12mg/CU), like MDMA and amphetamine. Since 2008, the potency of m-CPP has hardly changed (2011: 29 mg/CU).

In the case of the single substance or combination preparations, the most common cutting agents were lactose, caffeine and cellulose.

Table 10.8 Amount of active ingredients in ecstasy in mg/KE

	Quantity			Median				
Active Ingredient	2008	2009	2010	2011	2008	2009	2010	2011
MDA	9.9 <sup>1)</sup>				9.9 <sup>1)</sup>			
MDE								
MDMA	0.2-168	0.6-170	0.1-140	6-242	51	50	58	73
Amphetamine	0.5-20	0.2-37	0.3-21	0.4-54	8.0	2	3	5
Methamphetamine	0.4-26	0.1-15	1.7-33	7-14	13	0.5	5	12
m-CPP 1(-3-Chlorphenyl)- piperazine	0.7-43	2.7-53	0.1-100	0.2-39	28	27	30	29

<sup>1)</sup> Only one seizure.

Note: Amounts of active ingredients were calculated as base.

Bundeskriminalamt, KT 34.

Analogous to the analysis data of the BKA, the trend scout panel of the MoSyD in Frankfurt also reports of a return of ecstasy tablets with an increased MDMA content in the techno scene. Users had the tablets checked at the "drug checking" institutes in Switzerland. The results showed a value of up to 150mg, far exceeding the average (50mg to 100mg). In this context, the image of ecstasy in most social scenes is in a state of change. However, the vast majority of users are still extremely sceptical because in past years a considerable proportion of tablets sold as ecstasy contained no MDMA at all but piperazine (BZP or m-CPP) whose effect was considered unpleasant (Werse et al. 2012).

# Synthetic Cannabinoids

In the scope of the EU Project on "Spice and synthetic cannabinoids" (see also chapter 1.3.2), publications on the (first) identification of synthetic cannabinoids as well as on the targeted use of (new) analytic measures to detect and to differentiate between different derivatives (Hutter et al. 2012; Kneisel et al. 2011a,b; Moosmann et al. 2012).

As the literature on cannabinomimetics contains insufficient mass spectrometric data thus requiring time consuming research into the structure of each newly discovered derivate, Kneisel und colleagues (2011b) provide mass spectrometric and, where available, infrared spectroscopic data on 16 new cannabinoid mimetics. In another work, Hutter and colleagues (2012) report on the identification of main metabolites of seven widely found synthetic cannabinoids (JWH-018, JWH-073, JWH-081, JWH-122, JWH-210, JWH-250 und RCS-4) in human urine and thus point to the possibility for consequent drug screenings.

# PART B: SELECTED ISSUES

# 11. In-patient treatment of drug addicts in Germany

## 11.1 History and general conditions

#### 11.1.1 Overview

Inpatient treatment is a key element of treatment and rehabilitation forms for drug addicts. In Germany there are approximately 320 facilities with over 13,200 beds offering inpatient rehabilitation services for people with substance-related disorders. Of these, 4,000 beds are for drug addicts. The aim of rehabilitation is to achieve and maintain abstinence, remove or offset physical and mental disorders and maintain or achieve sustained reintegration into work, profession and society.

This focus chapter is based on the specifications of the EMCDDA, which has encouraged the description of inpatient care at a country level to allow an EU-wide comparison. The historical developmental trends and the current role and developments in the primary addiction support system as well as the availability and features of inpatient treatment programmes are presented accordingly. A description of quality assurance systems and a forecast of future developments complete the chapter.

Following the provisions of the EMCDDA, "in-patient treatment" is defined as a bandwidth of in-patient treatment models and programmes, therapeutic or other offers for drug users who go through medical and psycho-social interventions in the context of in-patient placement. A decisive criterion of such programmes is that they correspond to different treatment needs and consider drug use, health and quality of life as well as professional and social participation. The focus section explicitly does <u>not</u> deal with

- inpatient detoxification,
- programmes that are solely dedicated to the provision of social support for drug addict (e. g. emergency shelters, residential homes) and
- programmes for drug users in prisons or for drug-addicted prisoners in forensic psychiatric hospitals according to § 61 StGB.

These areas, primarily inpatient detoxification, are of course significant components of inpatient care. In order to ensure the comparability of inpatient care on an EU level, the focus is placed first and foremost on medical rehabilitation, which is closely linked to social rehabilitation measures. Abstinence obtained through detoxification should be stabilised here and dependency should be stopped on a long-term basis.

Different sources are used in order to allow an image of inpatient treatment that is as comprehensive as possible. However, they can only be compared with each other conditionally due to their selectivity. In addition to the German figures for rehabilitation treatment, basic data for addiction psychiatry, diagnostic statistics of the Statistisches

Bundesamt (Federal Statistics Office), the statistics of the Deutsche Rentenversicherung-Bund (German Pension Fund), the basic and catamnesis data of the Bundesverband für stationäre Suchtkrankenhilfe (Federal Association for Inpatient Addiction Care), basic documentation of the Fachverband Sucht (Addiction Association) as well as regional monitoring systems provide key data for inpatient treatment.

## 11.1.2 History of inpatient treatment

In the post-war period, addiction-care services in Germany were poorly organised and worked primarily with volunteers. In 1962, the number of inpatient facilities for alcoholics throughout Germany stood at 18 and in 1968 the number was 26. In total there were between 1,000 and 2,000 beds available. There were no specific facilities for people addicted to illegal drugs (Vogt & Scheerer 1989). In light of the rise in the number of adolescent drug users at the end of the 1960s/start of the 1970s as well as the setting of a new direction by transforming the Federal Law on Opium into the Narcotics Act (1981), the expansion of inpatient drug dependence treatment began. An important milestone was the recognition of addiction as a disease in 1968 (Federal Social Court decision of 18 June 1968) through which the costs of addiction treatment and rehabilitation had to be taken over by public insurance funds (Schmid & Vogt 1998). As a result, both demand for treatment centres for alcoholics and the need for suitable treatment programmes for drug addicts rose. Professional and systematically supported programmes developed from so-called "Release Groups" which previously served as shelters for adolescents dependent on opiates.

The necessity for differentiated programmes for alcoholics or drug addicts was confirmed in respect of inpatient treatment, in particular through the "Aktionsprogramm zur Bekämpfung des Drogen- und Rauschmittelmissbrauchs (Action Programme for Combating Drug Abuse)" from 1970:

"The lumping together of drug addicts with alcoholics or the mentally ill in psychiatric clinics should be rejected from a therapeutic point of view. The lack of individual facilities and specific departments in clinics for these groups is alarming" (BMJFG 1972).

A comprehensive support programme of the Federal Government was initiated which became known as the "Großmodell zur Beratung und Behandlung drogen- und alkoholgefährdeter und -abhängiger junger Menschen (Large-scale model on counselling and treating young people abusing drugs and alcohol)" (Schmid 2003). As part of this, rehabilitation clinics and Therapeutic (shared-living) Communities (therapeutische (Wohn-) Gemeinschaften (TG)) were promoted in addition to drug help centres. "Minimum criteria" were developed for inpatient drug treatment as part of scientific support. In particular, the employment of skilled psycho-social personnel led to increasing professionalisation of treatment facilities.

Being accepted into a Therapeutic Community (TC) was subject to significant bureaucratic hurdles, not least because of the programme's still-limited capacity (Bühringer 1996). Inpatient and outpatient drug treatment was formed from the paradigm of abstinence as well as from a rigid therapy concept of "post-maturation" and "resocialisation". However, these

therapeutic approaches based on confrontation and repression led to high dropout rates and subsequently low rates of success (Schmid & Vogt 1998).

On 20 November 1978, the "Empfehlungsvereinbarung Sucht" (recommendation agreement on addiction) was adopted between health insurance funds and pension insurance institutions (Association of German Pension Schemes 1978 (Verband deutscher Rentenversicherungsträger 1978). This established a maximum size of 30 beds for drug treatment centres. The reasons at the time are still applicable today: this moderate size provides drug addicts with better orientation and contributes to their comprehensive and individual support (DHS 2008). This additionally established that health insurance funds are the primary cost carriers for detoxification treatment and pension insurance funds are responsible for inpatient withdrawal treatment. This should be allowed if long-term reintegration into working life and society seem possible. Furthermore, withdrawal treatment was able to be administered only at facilities and financed by pension schemes if they were recognised by them (Verband Deutscher Rentenversicherungsträger (Association of German Pension Schemes) 1978 (Verband deutscher Rentenversicherungsträger 1978). Therapeutic Communities especially had problems meeting the requirements for financing through pension schemes since neither diagnoses were given nor treatment plans or physicians were available. In order to be recognised by pension schemes based on their quality standards, treatment facilities professionalised their concepts, strengthened their co-operation with the medical sector and focused more strongly on additional treatment qualifications (Schmid 2003).

In the 1980s, Therapeutic Communities lost their monopoly position of treating drug addicts (Schmid & Vogt 1998) (see chapter 2.2.1). Inpatient halfway homes and so-called "compact treatments" were expanded (see chapter 2.2.4) and long-term treatments were shortened as part of the Therapeutic Communities The approach to dealing with relapses changed to the extent that they were increasingly understood as a part of the therapeutic process and no longer led to direct dismissal. Different forms of medically assisted withdrawal treatment programmes were established in addition to "cold" withdrawal treatment (Schmid & Vogt 1998).

Starting in 1980, for-profit organisations supplemented the previously exclusive sponsorship of addiction services through the association of voluntary social welfare work (Täschner et al. 2010).

A significant milestone was the Betäubungsmittelgesetz (BtMG) (Law on Narcotics) that came into effect on 1 August 1981, which targeted co-operation between judicial policy, addiction support and cost centres in order to be able to combat drug addiction and associated criminality (Kraatz-Maček 2011; Künzel et al. 2012). It was now possible to allow drug addicts subjected to punishment to be treated for their dependencies outside of the penal system. Corresponding to § 35 BtMG (Law on Narcotics), the execution of penalties in particular cases can be deferred in favour of therapeutic care, counted as part of the sentence or the remaining part of the sentence can be suspended. Until 1992, this rule applied only to treatment at inpatient facilities. Since then it has been possible to allow those

convicted to comply with court-ordered conditions as part of an outpatient treatment (Schmid & Vogt 1998).

Furthermore, the renouncing of relatively uniformly-targeted, therapeutic concepts in favour of the development of addiction support programmes specific to target groups can be seen in the past two decades in the German addiction support system. A significant milestone in 2001 was the replacement of recommendation agreements from 1978 with the "Agreement on co-operation between health insurers and pension schemes for acute treatment (detoxification) and medical rehabilitation (withdrawal treatment) of dependence sufferers" (dependence illnesses agreement). This is where the form and content of treatment are presented, the specialist staff selected, the organisational structure of rehabilitation determined and the length of treatment recommended, all in a decisive manner (DRV et al. 2001c).

# 11.1.3 Strategies and basic framework conditions of inpatient care

According to the landmark decision of the Office of Social Affairs, Family, Health and Consumer Protection (Behörde für Soziales, Familie, Gesundheit und Verbraucherschutz, BSG) of 18 June 1968, this involves an illness requiring treatment in the case of alcohol or drug dependency (buss 2012). Under the consideration of other conditions, (see chapter 11.2.1) people with a substance-related disorder are entitled to have their costs for required acute medical (withdrawal or detoxification) and weaning-oriented treatment (medical rehabilitation) covered.

Inpatient withdrawal treatment is primarily one of the services of medical rehabilitation in Germany according to §§ 9 and 15 SGB VI. 85% of the measures for medical rehabilitation in the indication area of dependencies are funded by the German Retirement Insurance-Federation (DRV) as a pension insurer (Koch 2011). The basis for this is the "dependence illnesses agreement" from 2001. If there are no claims with respect to the statutory pension insurance (Rentenversicherung - RV) according to SGB VI, a check is performed to determine whether a claim towards cost absorption exists in the case of statutory health insurance (gesetzliche Krankenversicherung - GKV). If there are no claims with respect to RV or GKV, the competent welfare agency intervenes to finance inpatient addiction treatment in accordance with SGB XII as part of the subsidiary principle (subordinate competence) (Jungblut 2004). Unemployed and elderly citizens also have an enforceable claim to withdrawal treatment or the financing of it. In the case of officials, the respectively applicable civil servant pension arrangements are to be taken into account. Most private health insurance companies have excluded addiction treatment from their benefits on a contractual basis. Either cost transfer can be obtained on a goodwill basis or the patients must pay for treatment themselves (buss 2012). In cases involving a lack of financing for treatment, patients can resort to programmes free of charge, such as self-help.

The aim of rehabilitation is to achieve and maintain abstinence, remove or offset physical and mental disorders and maintain or achieve sustained reintegration into work, profession and society (DRV et al. 2001c).

The costs for drug rehabilitation in 2010 amounted to 17% (500 million Euros out of 3.011 billion Euros without transitional allowance) of the total cost of medical services of the DRV (German Public Pension Insurer) (Beckmann & Naumann 2012). The total expenses of the RV (Public Pension Scheme) in connection with illegal drugs in the form of medical rehabilitation, services for participating in work life and pensions as a result of reduced earning allowance amounted to approx. 171.7 million Euros in 2006. Furthermore, drug addicts receive acute medical treatment in psychiatric addiction centres of psychiatric specialist clinics and psychiatric wards of general hospitals and university clinics, for example through emergency care, crisis intervention or qualified withdrawal treatment. The expenditure of statutory health insurance companies for medication, hospitalisation, rehabilitation, etc., in connection with illegal drugs is estimated at 1.4 billion Euros (Mostardt et al. 2010).

## 11.2 Availability and characteristics

## 11.2.1 Nation-wide availability and access

#### Access

Medical rehabilitation is only taken into account for dependency sufferers if a need and readiness exist for rehabilitation as well as a positive rehabilitation prognosis. The approval for rehabilitation therapy requires a notification procedure in which formal and content-related criteria for approval must be met (buss 2012). The application procedure includes a medical opinion in which the necessity for withdrawal treatment is confirmed, and as a rule, a social report that is prepared by an information centre or a social service. In addition, the minimum insurance periods / payments of contributions that are individually provided depending on the insurer are required. All insurers require a minimum insight into the disorder by the affected parties and motivation for treatment and aftercare. Voluntary action is a compulsory condition for approving treatment<sup>131</sup>. Additionally it is expected that performance in working life can be re-established following withdrawal treatment (DRV et al. 2001c). In order to begin withdrawal treatment as early as possible, the DRV for Central Germany for example has been gradually simplifying access paths since October 2003 and eliminated the obligatory preparation of the social report in November 2011 (DRV 2012 quoted by the Federal Government Commissioner on Narcotic Drugs 2012 (Die Drogenbeauftragte der Bundesregierung 2012a). Since general practitioners are the first point of contact in 80% of cases of addiction, the decision to undergo rehabilitation can be made based on the physician's findings alone (ibid.)

The selection of the form of service is directed at the commonly established criteria of pension insurance and insurance companies (DRV et al. 2001a).

<sup>&</sup>quot;Performance and utilisation of addiction care are based on the principle of voluntary action with the exception of Section § 35 BtMG "Treatment instead of penalisation". According to § 63 and § 64 of the Strafgesetzbuch (StGB) (Penal Code), psychiatric treatment under a hospital order (Maßregelvollzug - MRV) can be mandated in special forensic psychiatric hospitals under particular circumstances for offenders with mental illnesses or addictions.

# Criteria for approving inpatient rehabilitation (Dependence illness agreement, appendix 3)

- There exist severe disorders in a mental, physical or social area that bring successful completion of out-patient rehabilitation into question.
- Removal from a pathological social environment (e. g. in the case of massive family conflicts or destructive relationships with partners) is required to guarantee successful rehabilitation.
- The social environment of the dependency sufferer has no supporting function. (Note: the place of treatment alone cannot take over the function of an intact social environment.)
- The dependency sufferer is not integrated professionally and as a result requires specific services to prepare for professional reintegration, which cannot be provided on an outpatient basis.
- Lack of a stable living situation.
- It is evident that the ability to actively co-operate, regularly participate in or maintain the treatment plan in relation to the requirements of outpatient withdrawal treatment is insufficient.
- The dependency sufferer is not ready or not in the position to lead an abstinent life during outpatient withdrawal treatment and to participate in an outpatient treatment program drug-free in particular.
- A long or intensive history of addiction can be an indication of inpatient withdrawal treatment in particular against the background of the aforementioned criteria.

Fundamentally, a decision must be made on the application within six weeks (approval procedure); an "accelerated procedure" is possible in special cases. If all requirements are met, the funding agency must approve the measure. If there is no positive prognosis concerning reintroduction to occupational activity, insurance companies or welfare agencies must fund treatment according to the Federal Association for Inpatient Addiction Care (buss 2012). A negative decision must be justified, against which an objection (free of charge) can be filed.

Once approved, the rehabilitation facility invites the affected person on a short-term basis. Patients' entitlement to express their wishes and make their choices in accordance with § 9 SGB IX must be taken into account here so as not to endanger the treatment's chances of success before it even starts. Their wishes are to be taken into account when making decisions – generally concerning the type, scope and location of the services rendered – as well as during their execution – type, scope, intensity and quality of the withdrawal method. This could be understood to mean for example a treatment location nearby or the desire to receive outpatient withdrawal treatment. The suggestions are maintained in coordination with the affected person in the social report or in the medical opinion. If the wishes of the beneficiary are not in conflict with the duties of the rehabilitation service providers and the

principals of sound financial management are maintained, they are complied with (DRV et al. 2001c). Adaptation treatment for supporting reintegration can be included if necessary.

## **Facility types**

Through their service guarantee, rehabilitation service providers are (§ 19 Paragraph 1 SGB IX) are responsible for there being a sufficient amount of rehabilitation facilities <sup>133</sup> available, which meet the corresponding quality requirements. Depending on the diagnosis and indication, medical rehabilitation can start either:

- in a recognised psychosocial information centre (outpatient rehabilitation) or
- in an outpatient clinic (all-day outpatient or semi-inpatient rehabilitation) or
- in a specialised clinic or weaning ward of a psychiatric hospital (inpatient rehabilitation (buss 2012)

All facilities have to meet minimum requirements with respect to structure and quality (see Chapter 3). In addition, the configuration contains some flexibility so that there are major differences with reference to length of treatment, treatment models, treatment methods and not least the qualifications of the treatment personnel between facilities (Klosterhuis et al. 2011).

#### **Duration**

Long-term treatment in the scope of illegal drug addicts can generally last up to 26 weeks, short-term treatment 12 to 16 weeks, repeat treatments 16 weeks and interceptive treatment (relapse management and renewal following previous withdrawal treatment) 10 weeks. In addition, adaptation treatment from eleven to twelve weeks is possible. Furthermore, treatment combined with all-day outpatient and/or outpatient rehabilitation while working (with varying lengths of the inpatient module) is possible. Extending or shortening the duration of inpatient rehabilitation can be applied in case of existing medical necessity and/or negative prognosis within the framework of the reference values provided to the facilities (time budget) (DRV 2010a).

<sup>&</sup>lt;sup>132</sup> In the case of immediate treatment, such as the "Therapie sofort (Immediate Treatment)" programme of the emergency drug services in Berlin, the offering cannot always comply with the patients' entitlement to express their wishes and make choices, due to direct transition to a treatment facility. As a result of immediate appointment, selection of a facility is determined by available bed capacity (Notdienst für Suchtmittelgefährdete und -abhängige Berlin e.V. 2012).

<sup>&</sup>lt;sup>133</sup> "The service guarantee regulates first and foremost the target to be reached: functionally and regionally required rehabilitation services and facilities must be available in sufficient number and quality. Which rehabilitation services and facilities are required at all, how their number and quality are to be measured and how the professionalism and regional presence are to be arranged is not defined. However, this can be specifically deduced from the requirements resulting from the type, scope, quality and other requirements of services for participation" (Welti et al. 2007).

#### Number of facilities and beds

In Germany there are approx. 320 facilities with over 13,200 beds offering full inpatient rehabilitation services for people with substance-related disorders (Table 11.1) (Pfeiffer-Gerschel et al. 2011). In addition, there are at least 7,500 beds available in about 300 specialised hospital wards. There are also about 300 inpatient psychiatric facilities dealing with addiction in which about 220,000 patients suffering from dependency are treated throughout the course of a year (Pfeiffer-Gerschel et al. 2011).

Table 11.1 Overview of inpatient addiction services offers

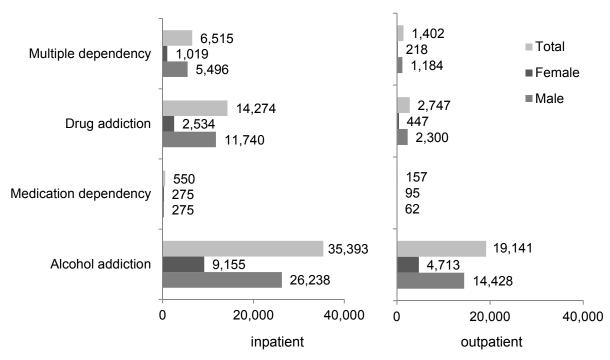
Type of facility	Number	Beds
Full inpatient withdrawal treatment facilities	>320	>13,200
→ including for drug users*		4,000*
Semi-inpatient withdrawal treatment facilities	>100	>1,000
Adaptation facilities	>115	>1,200
Social therapy facilities		
→inpatient	268	>10,700
→semi-inpatient	112	>1,200
Assisted living*	275*	7,500*
→including for drug users*	80*	2,750*
Inpatient psychiatric facilities for addictions	approx. 300	n/a

<sup>\*</sup>Information pursuant to country summaries on the situation in the field of drug abuse 1998 to 2004 and forward projections by J. Leune quoted in Fachverband Sucht e.V. 2011.

Pfeiffer-Gerschel et al. 2011.

Based on the data of the Statistical Report on Substance Abuse Treatment in Germany (Deutsche Suchthilfestatistik, DSHS), Hildebrand and colleagues (2009) reported estimates for response ratios of outpatient and inpatient addiction treatment facilities. Between 45% and 60% of the estimated people who harmfully use or have a dependency on opioids is reached, however only about 4% to 8% of the corresponding cannabis users (Pfeiffer-Gerschel et al. 2011).

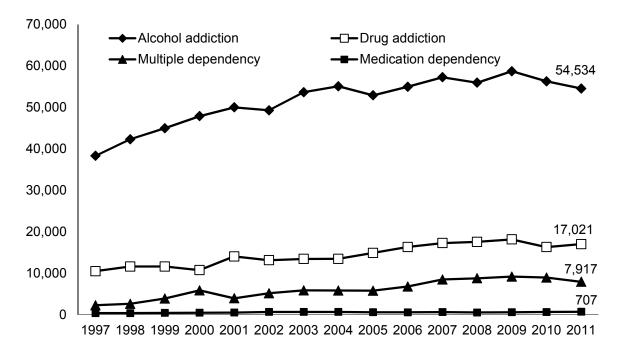
Within the framework of the facilities participating in the DSHS, the predominant share of inpatient facilities are financed by voluntary welfare agencies or other non-profit organisations with a share of 56%. 13% of inpatient facilities have a public sponsor, 3% have a commercial sponsor and 3% have a different type of sponsor (Pfeiffer-Gerschel et al. 2011). Two-thirds of the facilities participating in the DSHS also address users of illegal drugs.



DRV 2012, personal notification.

Figure 11.1 Approvals of withdrawal treatments according to the type of approved service as well as gender in 2011

In total, the number of approvals for inpatient services rose from 42,795 in 2007 by 32.6% to 56,732 approvals in 2011 (see Figure 11.1 for inpatient and outpatient approvals in 2011). The increase in approvals of outpatient services in the same period was more considerable, at 255.6% (1997: 8,653, 2011: 30,767) (DRV quoted by the Federal Government Commissioner on Narcotic Drugs 2012). In total, the number of approvals for withdrawal treatment for drug addicts between 1997 and 2011 rose by 62.2% (1997: 10,491, 2011: 17,021) (Figure 11.2).



Without integration services according to § 31 Par.1No. SGB VI with follow-up treatment followed by withdrawal treatment. DRV-Bund quoted by Die Drogenbeauftragte der Bundesregierung 2012a.

Figure 11.2 Development of approvals for withdrawal treatment for the entire German Pension Insurance between 1997 and 2007 (itemised according to the type of dependency illness)

In 2011, the DRV-Bund provided a total of 41,733 services in inpatient withdrawal treatment, of which 27,982 were for alcohol, for the diagnostics area F10-F19 mental and behavioural disorders using psychotropic substances. Table 11.2 illustrates that approximately 47% of all services are based on polyvalent consumption. 3,404 services (24.7%) concern initial diagnoses of opioid consumption, 2,237 services (16.3%) concern cannabinoid consumption. While the average age in the F10-F19 area amounts to 40.4 years, the lowest average age in the area of illegal drugs relates to the main diagnosis of cannabinoids at 28.1 years, and the highest average age relates to sedatives/hypnotics at 44.8 years (see Table 11.2). The percentage of men who completed inpatient withdrawal treatment due to drug addiction is 83 % (DRV 2012, personal notification).

Table 11.2 Completed services provided for medical rehabilitation in the reporting year of 2011 - inpatient withdrawal treatment for adults

Main diagnosis	Services	Average age
Opioids	3404	34.8
Cannabinoids	2237	28.1
Sedatives/hypnotics	244	44.8
Cocaine	515	34.3
Stimulants	867	28.7
Hallucinogens	15	28.9
Volatile solvents	41	35.9
Multiple/other substances	6421	31.5

DRV 2012, unpublished data source.

# **Treatments: Psychiatry**

To support the data of the DSHS and the DRV-Bund, obtaining the basic data set for addiction psychiatry can be included. The number of addiction treatments is additive due to potential overlapping with the data of DSHS or the DRV-Bund. The psychiatric addiction facilities of the psychiatric specialist clinics and psychiatric addiction wards at general hospitals and university clinics are the second major pillar for addiction care in Germany behind the facilities for consultation and rehabilitation. These facilities also conduct lowthreshold qualified withdrawal treatments, however emergencies and crisis interventions are also treated and complex treatments are provided in the case of co-morbidity. In-depth diagnostics and reintegration planning are also carried out. A multi-professional team treats all types of addiction illnesses on an inpatient, part-time inpatient or outpatient basis. This guarantees all-round medical, psycho-social and psychotherapeutic treatment. Projections show that in 2010 approximately 300,000 inpatient addiction treatments took place in psychiatric clinics. This includes about 300,000 quarterly treatments that were carried out in psychiatric outpatient institutions of the clinics. 31% of inpatient psychiatric cases involved patients with dependencies. By comparison, the Federal Government performed only 150,000 treatments in facilities for internal medicine as a result of alcohol or drug addictions according to the report on health. Most patients were primarily alcohol-dependent (approx. 70 %). Disorders related to opioid consumption or consumption of multiple substances were the reason for inpatient treatment in approximately 10 to 13% in each case (DGPPN/Bundessuchtausschuss der psychiatrischen Krankenhäuser (Federal Committee for Addiction of Psychiatric Hospitals) in 2011 quoted by Die Drogenbeauftragte der Bundesregierung 2012a).

## **Treatments: Diagnostic statistics for hospitals**

The diagnostic statistics for hospitals of the Statistisches Bundesamt (Federal Statistical Office) includes the discharge diagnoses of all patients of inpatient facilities, analogue to ICD

diagnoses (F10-F19) among others. This also involves statistics that overlap with the previously mentioned data source. Short-term treatment takes place in hospitals, for example as a result of acute intoxication. In reporting year 2010, a total of 95,844 patients with a diagnosis of addiction to illegal substances were treated in hospital on an inpatient basis (Statistisches Bundesamt 2011b; see Table 11.3). 43.2% of all acute drug cases were based on polyvalent consumption, however the declining trend of the past few years has continued (2008: 45.8 %, 2009: 43.2% An increase in acute treatment of cannabis users can be observed (2010: 8.5 %, 2009: 7.7 %). It must be assumed that in 50-80% of cases opioid consumption plays the greatest role since substance use mainly involves a combination of opioid and cocaine and/or other substances (see Pfeiffer-Gerschel et al. 2011).

Table 11.3 Patients diagnosed with addictions to illegal substances receiving inpatient care based on hospital statistics in 2010

	Hospital s	tatistics 2010
Main diagnosis	Absolute	Percentage
Opioids	32,538	33.9%
Cannabinoids	8,145	8.5%
Sedatives/hypnotics	9,270	9.7%
Cocaine	1,076	1.1%
Stimulants	2,805	2.9%
Hallucinogens	430	0.4%
Volatile solvents	171	0.2%
Multiple/other substances	41,449	43.2%
Total	95,884	100.0%

2011e; Statistisches Bundesamt 2011b.

# 11.2.2 Features of inpatient addiction treatment facilities

# General approaches

Throughout the year, different treatment concepts have developed further. They are based on different theoretical foundations and are implemented in professionally run inpatient facilities. In order to guarantee quality of the facilities, uniform standards of the funding agency apply (see Chapter 3). These are located in the area of dependency illnesses, including in the "Gemeinsamer Leitfaden der Deutschen Rentenversicherung und der gesetzlichen Krankenversicherung zur Erstellung und Prüfung von Konzepten ambulanter, ganztägig ambulanter und stationärer Einrichtungen zur medizinischen Rehabilitation Abhängigkeitskranker" ("Common guidelines of the German Pension Insurance Scheme and Statutory Insurance for the Creation and Monitoring of the Concepts of Outpatient, All-day Outpatient and Inpatient Facilities for the Medical Rehabilitation of Dependency Sufferers" that came into force in 2012 (DRV 2011a). Regardless of the form of service, the same

minimum requirements apply in principle to all services for medical rehabilitation with respect to structure and quality.

A basic requirement for rehabilitation concepts are evidence-based treatment processes (e.g. in consideration of the guidelines of the Association of Scientific Medical Societies (see Chapter 3.1)), which are based on the biopsychosocial model of the International Classification of Functioning, Disability and Health (ICF). Mono-methodical use of a specific procedure did not prove successful in psychotherapy. Instead, so-called "integrative" crossprocedural therapies were utilised. This is how psychotherapy and sociotherapy are used for "psychosocial treatment" for example (Täschner et al. 2010). The most common form of psychotherapeutic measure is motivational treatment and is based on the principles of "Motivational Interviewing" (Miller & Rollnick 1999). After targeted development of motivation to change, targets and procedures are subsequently worked out. The procedure is treated as suitable particularly for drug users with minimal motivation for treatment and abstinence. Furthermore, a diversified range of measures based on behavioural therapy (including cognitive therapy, competence training, etc.) is often offered. Two focal points here are motivation according to Miller and Rollnick as well as relapse prevention (Marlatt & Gordon 1985). Furthermore, pharmacotherapy and psychotherapy are frequently linked in drug treatment. The principle holds true: no medical intervention without additional motivation (ibid.). Pharmacological treatment of opium dependency and abuse is oriented towards the guidelines of the World Federation of Societies of Biological Psychiatry (WFSBP) published in 2011 (Soyka et al. 2011a).

# Excursus: The Therapeutic Community (TC)

Patients are not just "treated" in therapeutic communities. TCs are equally formed by the activity and application of patients and therapists; they are based on mutual aid and support; learning from one another and with each other is an operating principle of treatment (DHS 2008). There is only a very small number of TCs that still exists in Germany as in their original sense. They lost their monopoly on the treatment of drug addicts in the 1980s (CaSu 2007; DHS 2008).

Nevertheless, numerous specialist clinics involved with medical rehabilitation are working according to the principle of TCs. These include first and foremost the structuring of daily routines, psychodynamic procedures for promoting abstinence as well as observing specific rules for living with other drug users (Jungblut 2004 (Jungblut 2004). Medical clinics specialising in medical rehabilitation integrating the principle of the therapeutic community into their concept generally have between 25 and 50 treatment rooms and therefore belong to the smaller rehabilitation facilities (DHS 2008). TCs primarily admit young adults (including their children), who in the genesis and consequence of their dependency illness frequently are affected by profound personality disorders, serious deficits in development, distinct tendencies towards neglect and partially heavy strains in their history such as massive violence, being uprooted or forced prostitution. The concepts of specialist clinics are involved in quality assurance programmes and are recognised by the leading funding agencies.

However, facilities that invoke the operating principle of the TCs fear for their economic existence due to the shortening of treatment times, capping of standard rates or budgeting of time quotas (CaSu 2007). A statistic of specialist clinics that are specifically based on the operating principle of TCs is not available due to the low number of cases. The numbers on beds and yearly clients are even harder to determine since in some communities those affected spend their entire lives there (e. g. Synanon<sup>134</sup> in Berlin).

# Integration of programmes

# Significant components of drug treatment

The significant components of rehabilitation are described below. This description is oriented towards the Common Guidelines of the German Pension Insurance Scheme and Statutory Insurance for the Creation and Monitoring of the Concepts of Outpatient, All-day Outpatient and Inpatient Facilities for the Medical Rehabilitation of Dependency Sufferers from 23.09.2011 (DRV 2011a). There are comments on the following components:

- Admission procedures
- Rehabilitation diagnostics
- Medical treatment/rehabilitation
- Psychotherapy-oriented individual and group discussions
- Work-related interventions
- Sport and exercise therapy, relaxation therapy
- Leisure activities
- Social service
- Health education/health training and nutrition
- Care provided by family members
- Relapse management

An examination by a specialist and the *initial diagnosis* including documentation are carried out on the day of admission. The time and form of institutionalisation of the person undergoing rehabilitation are also determined on the first day (DRV 2011a).

Rehabilitation diagnostics are the basis for creating an individual rehabilitation and treatment plan. Various instruments are used here, for example, screening procedures, checklists or structured and standardised interviews (e. g. the "Action Severity Index" (EuropASI)). These are used at the start, throughout the duration and completion of medical rehabilitation and cover the present disorders, resources and possible potential for change. The diagnosis has a biopsychosocial aim and is oriented according to the ICF (DRV 2011a).

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<sup>134</sup> www.synanon-aktuell.de

Medical rehabilitation/treatment is exclusively carried out at facilities with multi-professional teams. The facilities are under the responsibility and supervision of physicians. Healthpromoting measures, physiotherapy, and smoking cessation expand the spectrum of medical services (DRV 2011a). Detoxification is not included in the services of a withdrawal treatment facility of the DRV. This is carried out in addiction-specific specialist wards in hospitals or psychiatric facilities. Although drug addicts generally should lead abstinent lives from the time they are admitted to withdrawal treatment, emergency treatment cannot be ruled out. Treating *comorbidities* is a further component. Hepatitis particularly caused by viral infections is the classical consequence of intravenous drug use that is treated in withdrawal treatment. The guidelines of the Deutsche Gesellschaft für Suchtmedizin (German Society for Addiction Medicine) (DGS e.V) published in 2006 provide orientation in the treatment of hepatitis C (DGS e. V.) (Backmund et al. 2006) published in 2006 provide orientation in the treatment of hepatitis C as well as the S3 guidelines revised in 2010 by the Deutsche Gesellschaft für Verdauungs- und Stoffwechselkrankheiten e.V. (German Society for Digestive and Metabolic Disorders) (DGVS) (Sarrazin et al. 2010). Treatment for Human Immunodeficiency Virus (HIV) and sexually transmitted diseases is also the rule at inpatient facilities for drug treatment. An additional overview of the differentiated forms of treatment is provided by Täschner et al. (2010).

Psychotherapy-oriented individual and group discussions are core components of withdrawal treatment on the basis of scientifically substantiated psychotherapy methods. As a general rule, the combination of individual and group discussions is provided for. The arrangement of the groups depends on the needs of those undergoing rehabilitation and the therapy concept. A therapeutic member is essentially responsible for a group whereby it must be made guaranteed prior to arrangement that the therapeutic member will be substituted if on holiday or in case of illness (so-called "co-therapy system"). The size of the group is 6 to 8 people undergoing rehabilitation for drug addiction. Group discussions last about 100 minutes, individual discussions normally last 50 minutes (DRV 2011a). Furthermore, genderspecific or otherwise specific group therapies are offered.

Work-related interventions are a significant component of medical rehabilitation. They are used for professional orientation and re-integration, which demonstrably represent a stabilising factor for enduring abstinence in the case of dependency illnesses and minimise the "risk of illness-related relapse". Work-related interventions for drug addicts focus more strongly on the practice of basic competences before additional services are introduced, whereas professional education and specific professional experience are often present in the case of alcoholics and the advancement of professional reintegration is in the foreground.

Within the framework of overall responsibility of the medical and therapeutic management of treatment, the occupational therapy department of a facility is responsible for the occupational therapy that has been adjusted to the limitations, is able to support patients and has been determined within treatment management. Apart from the qualitative aspects such as diagnostics/recording of findings (supported by standardised procedures, such as "Merkmalprofile zur Eingliederung Leistungsgewandelter und Behinderter in Arbeit (MELBA)

("Feature profiles for integration of underperforming and disabled persons"), the quantitative level (duration, intensity, context) is also relevant for assuring the success of rehabilitation and supporting further target levels (improvement of symptoms on a psychosocial and somatic level, increasing awareness and insight into the disease) (Hylla & Peter-Höhner 2010). Work-related interventions include occupational therapy, ergotherapy, occupational/crafts therapy and employment-integration measures.

People undergoing rehabilitation with mental disorders, physical or mental disabilities are introduced to the basic requirements of working life as part of their *occupational therapy*. Also system-maintaining services for the facility, such as activities in the kitchen, dining area and housekeeping or repairs are partially, though not exclusively, part of occupational therapy measures (DRV 2011a). The use of occupational therapy is not mandatory. Work-related interventions can also take place through occupational integration measures such as stress tests, practical training, employment and in training or PC training courses. This also includes for example the "Problem-solving at the workplace" module in which behavioural strategies are put to the test in order to maintain employment and in order to learn and test competences for dealing with authorities, criticism, excess and insufficient workloads and in communicating.

# Occupational participation: Exemplary models

The "accompanied rehabilitation" model project is directed towards people dependent on alcohol, medications and drugs with employment-related problems. Since 2007, the DRV in Rhineland Palatinate has involved 16 specialist clinics in Rhineland Palatinate and Saarland in the project. Dependency sufferers, who have been unemployed for a long time or whose professional histories are greatly disturbed and have gone through withdrawal treatment without sustained success or have not entered authorised withdrawal treatment, are assigned a rehabilitation case worker even before rehabilitation services are performed. A personal integration plan is worked out together with the case worker. This plan will then be implemented step by step accompanied by continuous monitoring. Monitoring includes targeted interventions in order to strengthen the affected person and to motivate them to use all aids until occupational reintegration. This should not only motivate those undergoing rehabilitation to enter withdrawal treatment but also contribute to guaranteeing the success of rehabilitation. This programme provides good support for the majority of those insured (Die Drogenbeauftragte der Bundesregierung 2012a).

The DRV in Rhineland Palatinate together with specialist clinics for dependency sufferers offers specific assessment in the Southern Palatinate The а region. Berufsorientierungscenter für die Rehabilitation und Integration Suchtkranker (BORIS) (Career Guidance Centre for Rehabilitation and Integration of Dependency Sufferers) addresses people undergoing rehabilitation for alcohol, prescriptions and narcotics whose employment history is seriously impaired. As long as they are in withdrawal treatment for at least eight weeks and are sufficiently motivated, a one-day stay at a career guidance centre can be made possible. To supplement the routine and standard diagnostics in specialist

clinics, work related assessment procedures and role-playing with video recordings are carried out. Standardised behavioural testing of social and communicative behaviour displays how the person behaves in daily work situations. Every year about 150 people undergoing rehabilitation take part in the project (ibid.).

"Step by step" is a project for the advancement of reintegration of people with problematic drug consumption on the general job market. The project is led by the Baden-Württembergischer Landesverband für Prävention und Rehabilitation gGmbH (Baden-Wurttemberg association for prevention and rehabilitation) (bwlv) and the Fischer-Haus specialist clinic. It is financed through the European Social Fund (ESF) and the Job Centre of the Rastatt region and the city of Baden-Baden. The target group are people receiving social security benefits (SGB II) (Basic security for people seeking employment) with placement handicaps for the general job market due to problematic substance use. The project aims to improve the reintegration of such persons into the general job market and to help stabilise their mental and physical health. Companies in the surrounding area that offer placement positions are significant cooperative partners. The concept involves the qualification of case managers/job centres, special psychosocial and occupational incentive measures for those affected (tiered programme), the inclusion of the existing "Übungswerkstatt (Exercise Workshop)" project by the Fischer-Haus and the mediation/acceptance into an employment relationship or an upstream rehabilitation measure. The initial experience shows that the dropout rate is low because of the low-threshold approach. On the other hand, a large part of the assigned clients cannot be entered into placement training promptly or at all since other primarily aids are indicated in part (e.g. inpatient treatment) or longer motivation and relationship activities are required. The high synergetic effects are underscored through direct co-operation between job centres and addiction support (Höhner 2012).

The aim of *ergotherapy* is to improve lost or still-unavailable physical, mental or psychological functions using appropriate measures in co-operation with other occupational groups. For this purpose, life skill activities, manual activities and creative processes are utilised as targeted therapeutic measures (DRV 2011a).

Playful, creative ways of handling materials and the self-awareness aspect are in the foreground of occupational and creative therapy in order to encourage expression using symbolic means. Specific topics of psychotherapy can be taken up in dealing with various materials and processed this way using a different medium (DRV 2011a).

Therapeutic exercise measures are an additional component of treatment since physical movement demonstrably improves many physical illnesses. As a result, participation-relevant aims of improved physical performance can be additionally achieved (DRV 2011a). Useful recreational activities are also part of the services for participating in social life and are decisive for maintaining abstinence as well as returning to work. People undergoing rehabilitation are encouraged to spend their free time actively and in a self-reliant manner. An appropriate qualification is required for the person running recreational activities (e. g. sports teacher or physical education instructor) (DRV 2011a).

Furthermore, treatment facilities cooperate with internal or external social services that offer accompanying help in the social environment (e. g. advice in matters of social law, measures for professional reintegration, preparation of after-care and contact with self-help groups). These co-operations are based on the joint recommendation of "Social services" (BAR 2005b).

Patient training and health education are also therapy components as the lifestyle of drug addicts is a cause of increased risk of somatic and psychological illnesses. The DRV-Bund has made available the "Promote active health" programme, which concerns the model of health promotion and offers seminars on protective factors, nutrition, exercise and stress among others (DRV 2011b).

An intact social environment is a significant prognostic factor for an abstinent life. It is essential for interventions, within the framework of working with family members, that there is a continuous relationship that requires adaptation in the view of the person undergoing rehabilitation or the therapist. This is particularly important for those undergoing rehabilitation alone. Care by family members is provided on an accompanying and supportive basis (e.g. family seminars). Proximity to home facilitates the inclusion of family members in therapeutic family care (DRV 2011a).

Relapsing or threats of relapsing are natural when dealing with dependency illness. Treatment facilities have a *relapse concept* which regulates prophylaxis and the handling of relapses. Measures include regular indication-dependent sobriety checks dependent (e. g. breath tests or ethyl glucuronide (EtG) tests) as well as prescription and illegal drug screening (DRV 2011a).

#### Target group-specific offers

Providing offers in the area of caring for dependency sufferers makes sense in order to allow specific topics to be processed. On the other hand, this allows employees to create competences in order to therapeutically combat special topics accordingly and to help those affected (Korsukéwitz 2010). There are a few specific inpatient offers for women, parents with children, minors or migrants. At the same time, the limits to differentiation need to be pointed out since special therapeutic services cannot be comprehensive, but rather provided only at competence centres (ibid.).

# Women/ pregnant women

The DRV-Bund currently funds four inpatient facilities for drug addiction nationwide, whose treatment programmes are directed exclusively at women. Regional funding agencies fund additional facilities (Korsukéwitz 2010). Even male-specific facilities in which men's roles and their behaviours in gender-specific groups or questions are a subject of discussion have proven effective.

#### Parents with children

There are family therapy programmes at inpatient addiction and rehabilitation facilities for drug-using parents. In addition, seminars that promote the parenting skills of parents are

offered (as an example for offers that are directed at parents) (Pfeiffer-Gerschel et al. 2011). A good example is the specialist clinic Böddiger Berg, which offers a target-group specific programme as part of inpatient rehabilitation for drug-using parents. Furthermore, the special section titled "Drogenkonsumenten mit Kindern (Abhängige Eltern und kindesbezogene Themen) (Drug users with children (Dependent Parents and Child-related topics))" of the drug and addiction report from 2011 is referenced.

## Adolescents and young adults

With respect to adolescent drug users, two different help systems come into conflict with each other: youth welfare and addiction services. Interface problems or problems with financing inpatient measures result from the transition from adolescence to adulthood. According to the information of the Fachverband Drogen und Rauschmittel e.V. (Professional Association for Drugs) (fdr 2011)) youth welfare offices are increasingly refusing aid once adolescents have reached the age limit of 18. This occurs regardless of the fact that SGB VIII (Children and Youth Support) still provides a claim for first-aid services up to the age of 21 and follow-up care is guaranteed up to the age of 27. The legislator has arranged an amendment to the law here (§ 78, SGB VIII), which has the aim of establishing new age limits.

In child and youth psychiatry, inpatient post-acute treatment - the actual addiction therapy in this sense - runs for 8-10 weeks. In the case of long-term substance use, a negative environment and many pre-treatments, inpatient post-acute treatment is required as rehabilitative long-term therapy (12-18 months) in facilities specialising therein and financed by SGC V (Health Fund) and/or SGB VIII (Youth Support). If there is no social support, particularly in the case of dysfunctional families, patients can be placed in an appropriate youth welfare institution (Child and Youth Support) (Kinder- und Jugendhilfsgesetz (KJHG)) (KJHG §§ 34, 35, 35a and 41 SGB VIII) (fdr 2011).

The "Youth Addiction Network" expert's report shows an excerpt from inpatient facilities for adolescents (fdr 2011). It is a common feature for withdrawal treatment facilities (e. g. treatment stations "COME IN!" in Hamburg, "Teen Spirit Island" in Hannover, Jugendbauernhof "Freedom" in Neureichenau/Bavaria, Inizio Munich or JELLA Stuttgart) that they aim at developing maturity, identity building and reintegration into an age-appropriate social framework. This is obtained on the basis of therapeutic community, positive bonding and relationship experience, psychotherapy, combined with (curative, social and socio-) education and social programmes. The age of those supervised is between 11-18 and it can last approx. 12 months. The funding agencies are pension insurance schemes, health funds, youth and social welfare services. The youth welfare institution "Balance" in Gransee/Brandenburg is a facility that admits adolescents between the ages of 14 and 22 after detoxification treatment. The psychosocial programmes are financed by the competent youth welfare offices (§§ 34, 35a and 41 SGB VIII), and by health insurers in exceptional

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cases (individual agreements) (fdr 2011). Currently the DRV-Bund is funding five inpatient specialised clinics for this group of people (Korsukéwitz 2010).

# People with a migration background

Gaps in provision for people with migration backgrounds were also closed in the past few years through a variety of native-language and culturally sensitive concepts and programmes that have developed in the meantime. An example is the Landschaftsverband Westfalen-Lippe (LWL) specialist clinics in Warstein participating in the current federal pilot project "TransVer - Transkulturelle Versorgung von Suchtkranken (Transcultural Care for Addiction Sufferers). Their services are directed at drug-using migrants from Russian-speaking areas. With the help of Russian-language therapy groups, individual preparations for release and family care groups, those affected should be motivated to continue and complete treatment. At the same time, the connections to follow-up outpatient offers should be improved.

Another participant in the project is the funding agency mudra e.V., to which the treatment facility "dönus" belongs, which has existed since 1995 (mudra e.V. 2012). Drug-users from the Turkish-Oriental cultural area whose special situation as migrants is taken into account in daily therapeutic life are treated here. The team consists of native-speakers and German employees and the facility has over 22 beds. The results of the project will be presented at the end of 2012 (FOGS 2012).

# Elderly persons

Studies and statistics today indicate a larger percentage of older drug users than 10 years ago. The average age has increased during this period. Alcoholics and drug addicts however are not included in the target groups in most facilities for elderly mentally ill people. In the study titled "Ältere Drogenabhängige in Deutschland (Elderly Drug Addicts in Germany)" (Vogt et al. 2010), it arose that drug and addiction services specifically target older addiction sufferers with some programmes. Nine inpatient treatment facilities in Berlin that can be used by older addiction sufferers are listed as examples (ibid.).

## Complementary facilities

A long-term treatment programme is required for drug addicts with significant impairments with regard to activities and participation in particular (BAR 2005a). Social aid and programmes for providing a daily structure with the aim of having a life that is as autonomous as possible and not dependent on help are in the foreground. These aid programmes could also be taken into account for guaranteeing the success of rehabilitation as follow-up services (after-care measures, adaptation). For example, if withdrawal treatment therapy at an addiction treatment facility is insufficient in reaching the goals of rehabilitation due to the specific effects and consequences of dependency (particularly in the case of a significant risk of relapse due to homelessness and/or joblessness) when treating dependency sufferers, a test must be conducted under everyday conditions to see whether the person undergoing treatment can stand up to the requirements of working life and leading an independent lifestyle. A therapeutically indicated change of environment can be a measure for this

The adaptation phase is embedded in the medical rehabilitation system for dependency sufferers and covers the improvement in performance and strength of the person undergoing rehabilitation, support for preparation for leading an independent life as well as therapeutic services in individual and group therapy in an accompanying form that decreases in its intensity. As a general rule, the adaptation phase aligns itself seamlessly to the treatment phase (withdrawal) as a second component of medical rehabilitation services (DHS 2008).

Aftercare and adaptation facilities are either embedded in a network of inpatient addiction treatment facilities or are geographically separated facilities of inpatient addiction treatment facilities. Such care programmes are particularly available in the form of residential communities, assisted living, halfway homes and sociotherapeutic homes.

## Integration of substitutions in inpatient care

As a rule, addiction rehabilitation means guiding people towards abstinence or therapy under the conditions of abstinence. Medical rehabilitation of dependency sufferers with the temporary use of methadone should be viewed as an exception. Since 2001, it has been possible to admit substituted patients to withdrawal treatment. In appendix 4 of the "dependence illnesses agreement" between health insurance companies and pension insurance companies, the Health Insurance Fund and Pension Insurance Scheme established objectives and aids to decision-making for medical rehabilitation of drug addicts at rehabilitation facilities for dependency sufferers with respect to the temporary use of a substitute substance (DRV et al. 2001b). Complete abstinence from drugs is the aim in the case of medical rehabilitation services using substitute substances as well. This also applies in reference to the substitute substance. Their use is "transitional" in this sense.

Nationally there is only a small number of inpatient programmes for substitute drug addicts. These clinics have partially established a maximum number of patients receiving substitutes while undergoing rehabilitation in order to prevent substitution from becoming the sole dominant topic (Korsukéwitz 2010). The Deutsche Rentenversicherung Bund (German Pension Insurance Association) funds two inpatient facilities in this area, namely the Psychosomatic Clinic in Bergisch Gladbach and the Specialised Facility for Psychosomatic Medicine of the Wied Clinics. Regional funding agencies fund additional facilities. In Baden-Württemberg in particular, an expansion of the programmes for this group of persons is expected since the DRV Baden-Württemberg has supported appropriate concept modifications in special facilities (Korsukéwitz 2010).

One of these for example is the SURE project (Substitutionsgestützte Rehabilitation) (substitution rehabilitation). Since January 2011, the three-year project has been carried out in the Fachklinik Drogenhilfe (Specialised Addiction Clinic) in Tübingen on an inpatient basis and in the "Tagwerk" rehabilitation facility in Stuttgart on an all-day outpatient basis. The target group are opiate addicts, who in principle are eligible for rehabilitation but cannot begin abstinence-oriented treatment without a substitute. The attempt is made for these people to reintegrate on a professional level and to participate in society and social life. The readiness to reduce dosage and abstinence is a requirement for being admitted. The substitute

substance is reduced step-by-step under the supervision of authorised substitution physicians and then discontinued entirely. The patients undergoing rehabilitation are integrated into the conventional treatment programme of both facilities. Eleven admissions were made up to February 2012, of which 5 people were still undergoing treatment, therefore only a few results can be reported. At the time of reporting, a patient had reduced dosing over eight weeks as scheduled and completed treatment normally and successfully after a total of 24 weeks (Drogenhilfe Tübingen & Tagwerk Stuttgart 2012).

# Cooperation and networking

According to the SGB IX ("Rehabilitation und Teilhabe behinderter Menschen - Rehabilitation and participation of disabled persons"), rehabilitation is not a closed sector of the health care system or of an individual funding agency. The legislative authority calls for joint planning and coordination of different rehabilitation agencies, services and facilities in the interest of those affected. Therefore SGB IX stands for a new form of rendering services in the sense of comprehensive participation that goes beyond the specific demands of SGB V and SGB VI (DHS 2008). The aim is to join participation services as seamlessly as possible in order to offer aid measures that have been aligned as individually and specifically as possible to the needs and resources of those affected. 136 In its guidelines on concept assessment, (DRV 2011a) the DRV-Bund requests rehabilitation facilities to provide support through and in cooperation with companies, particularly in the areas of alcohol, prescription medication, drugs, tobacco and gambling. The DHS shows the current status and the optimal arrangement of forms of association in the document titled "Suchthilfe im regionalen Behandlungsverbund (Addiction assistance in the regional treatment association)" (DHS 2010b). Specifically the document illustrates the linking of the support segments of acute treatment, monitoring and consultation in the integrated system of addiction service, in health care and in social security as well as in the support segments for promoting participation and treatment. Selected examples for regional integrated systems give an impression of the status of implementation as well as advantages and disadvantages of regional integrated systems.

The increasing combination treatments can be named for the inpatient sector in particular. The flexible design of outpatient, all-day outpatient and inpatient treatment possibilities in the form of modules allows for customised aid programmes for dependency sufferers. Furthermore, interface problems are being reduced through closer cooperation between service providers in order to raise the effectiveness and efficiency of the measures as a result.

# Combined models: Regional examples

The DRV in Braunschweig-Hannover, the DRV in Oldenburg-Bremen and the DRV Nord together have been running "Kombi-Nord", a combined treatment facility for dependency

<sup>&</sup>lt;sup>136</sup> See for example the project titled 'Step by Step", Chapter 2.2.2, in which cooperation between job centres and addiction services is described.

sufferers in Northern Germany since 2009/2010. 2012 will bring an improvement whereby handover discussions will be able to take place between the facilities involved via video conference. In addition, there will be a uniform release report in the future (Federal Government Commissioner on Narcotic Drugs 2012a).

An additional model for combined treatment, the Kombi Saar, can be found in Saarland. The model by SHG Specialised Clinic for Dependency Illnesses in Tiefental and the IANUA Gesellschaft für Prävention und Sozialtherapie mbH (association for prevention and social therapy) addresses insured persons with alcohol, prescription medication and drug addictions, with the exception of heroin addicts and people participating in substitution programmes. At the start there is an outpatient preliminary talk with IANUA in order to determine whether abstinence was achieved during previous detoxification. If not, qualified detoxification measures must be initially carried out before a treatment agreement can be concluded. Combined treatment is approved as an overall service with established inpatient and outpatient phases. As a rule they should not exceed one year. Inpatient treatment takes place in the Tiefental Specialised Clinic and lasts eight weeks. During the outpatient phase, the person undergoing rehabilitation attempts to make steps towards changes and deepen them. This generally includes 80 therapy sessions (TS) as well as eight TSs for family members (ibid.).

The DRV in South Bavaria has recognised a combination therapy for cannabis dependency in the Grafrath therapy centre as a supplementary programme. Rehabilitation begins on an inpatient basis, which lasts twelve weeks as a rule. This is followed by 40 outpatient therapy units in the cooperating outpatient places of treatment (ibid.).

# 11.3 Quality management

#### 11.3.1 Guidelines and standards for inpatient addiction assistance

The effort to provide medical, psychotherapy and psychosocial interventions for people with substance-related disorders at the highest level of quality possible was promoted with lasting effect by the standards of the "Recommendation agreements for addiction" from 1978.

Current foundations for providing services for inpatient medical rehabilitation are firstly the agreement titled "Dependency illnesses" (DRV et al. 2001c) Secondly, the BAR<sup>137</sup>work assistance for rehabilitation and participation of people with dependency illnesses is a basis for work in the inpatient addiction assistance sector (BAR 2005a). Work assistance provides an overview of the general principles and foundations for services for rehabilitation and

The Bundesarbeitsgemeinschaft für Rehabilitation e.V. (Federal Working Committee for Rehabilitation) (BAR) promotes and coordinates the rehabilitation and participation of disabled persons. In accordance with the statutes, it pursues the primary target to work towards providing rehabilitation services according to the same principles for the benefit of the disabled and the chronically ill. It represents funding agencies of the statutory health insurance, statutory accident insurance, statutory pension insurance and the Federal Employment Agency. Additional members include the Federal States, the Federal Association of German Employers' Associations, the German Trade Union Confederation, the Federal Association of Integration Offices and Main Welfare Associates, the Federal Task Force on Supra-Local Welfare Agencies as well as the National Association of Statutory Health Insurance Physicians (www.bar-frankfurt.de).

participation, substance-related disorders and dependency illnesses (incl. diagnostics, rehabilitation aims, treatment principles, indications), the arrangement and organisation of the addiction assistance system for people with dependencies, the available rehabilitation programmes and the basis for claims from a social law point of view.

An additional basic requirement of inpatient treatment facilities is the orientation of the therapy concept towards the guidelines of the Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF) (Association of Scientific Medical Societies). Currently the guidelines on "Cannabis-related disorders", "Opioid-related disorders" (Acute treatment and post-acute treatment), "Psychological and behaviour-related disorders resulting from cocaine, amphetamines, ecstasy and hallucinogens" and "Medication dependency (sedatives, hypnotics, analgesics, psychostimulants)" as well as on the substances of alcohol, tobacco are being revised (see Special section of the REITOX report 2011, Pfeiffer-Gerschel et al. 2011).

In order to guarantee uniform documentation in psychosocial counselling centres and inpatient facilities for people with substance-related disorders, eating disorders and pathological gambling behaviour, the Deutsche Kerndatensatz (KDS) (German Core Data Set) has been utilised in the current version nation-wide since January 2007 for documentation in the area of addiction help. It was created in 1998 as a common minimum statistical data set in the scope of a consensus process between many involved institutions and persons, which took place in the Fachausschuss Statistik (Trade Statistics Committee) (previously Statistik-AG) of the DHS. Since 2002, the core set of data has been determined as a nation-wide uniform data set for documenting addiction treatment by Working Group for the Statistical Report on Substance Abuse Treatment in Germany (AG Deutsche Suchthilfestatistik, AG DSHS), in which federal, Laender, pension insurance and statutory health insurance are represented in addition to the service providers. The data collected using the KDS of the individual facilities are sent using different software solutions in aggregated form to the Institute for Therapy Research where they are bundled and evaluated in the DSHS project funded by BMG. Significant aims of the German Addiction Statistics (Deutsche Suchthilfestatistik, DSHS) are to present and analyse the quality of the health care system, early detection of new problem areas as well as to prepare suggestions for improvement in order to optimise care for consumers with (primarily) substance-related disorders. Furthermore it is used as a monitoring system on a federal state, association and consumer level. The DSHS has developed into a recognised and highly valued monitoring instrument in the area of German addiction treatment, which also enables trend analyses of data for care research (DHS 2010a).

In order to promote cooperation among rehabilitation agencies in quality assurance, a joint declaration was made for the first time in 1999 by the association of pension, health and accident insurance companies on cooperation on quality assurance. This applies to facilities of outpatient and inpatient rehabilitation and inpatient preventative treatment. In the process, specific requirements, aims and content of external quality assurance and internal quality management were established. In accordance with § 135a SGB V, providers of preventative

services or rehabilitation measures as well as facilities with which a preventative care agreement has been signed in accordance with § 111a are obligated to do the following:

- participate in measures of quality assurance across facilities, which particularly aim at improving the quality of results and
- introduce quality management and further develop it internally.

The contents of the agreement take into account the rules of the Common Recommendation in accordance with § 20 par. 1 SGB IX. Since October 2009, a quality management procedure is mandatory for all providers of inpatient services for medical rehabilitation. To complete this statutory task, the "Vereinbarung zum internen Qualitätsmanagement nach § 20 Abs. 2a SGB IX (Agreement on internal quality management according to § 20 par. 2a SGB IX)" was worked out on the level of the Bundesarbeitsgemeinschaft für Rehabilitation (Federal Working Group for Rehabilitation) (BAR 2009), in which the fundamental requirements of a quality management procedure are regulated. Additionally, it defines a uniform, independent certification procedure.

# Requirements of internal quality management (BAR 2005a)

- Participation-oriented model
- Facility concept
- Indication-specific rehabilitation concepts
- Responsibility of quality management at the facility
- Basic elements of a quality management system
- Relations with those undergoing rehabilitation/reference persons/relatives, clinicians, service providers, self-help
- Friendly management of complaints
- External quality assurance
- Internal results measurement and analysis (procedure)
- Error management
- Internal communication and personnel development

Inpatient rehabilitation facilities are required by law to conduct a quality management procedure that is recognised by the BAR. Most quality management systems (QM systems) in medical rehabilitation are based on DIN EN ISO 9001:2000 (DHS 2008). The Deutsche Gesellschaft für Qualitätsmanagement in der Suchttherapie e.V. "deQus" (German Society for Quality Management in Addiction Treatment), founded in 2001, supports addiction treatment facilities in the introduction and certification of QM (deQus 2000). The rehabilitation facility must issue a release report based on the "Leitfaden zum einheitlichen Entlassungsbericht in der medizinischen Rehabilitation der gesetzlichen

Rentenversicherung" (Guidelines on uniform release reports in medical rehabilitation of statutory pension insurance) after every service rendered for medical rehabilitation (DRV 2009). The guidelines provide information on how reporting in medical rehabilitation is to be structured in terms of content and which rules apply to social medicine documentation. Further guidelines are additionally used<sup>138</sup>. Extensive information on development, methods and implementation of national treatment guidelines can be found in the REITOX Report 2010 (Pfeiffer-Gerschel et al. 2010a).

The pension insurance companies' quality assurance programme for medical rehabilitation is based on a system of structure, process and results quality. The survey of persons undergoing rehabilitation, the peer-review procedure, evaluations of the rehabilitation performance data as part of the classification of therapeutic services (KTL) and the rehabilitation treatment standards for alcohol dependency are part of the practiced procedure of rehabilitation quality assurance (DRV 2012a; Klosterhuis et al. 2011). Rehabilitation quality assurance of pension insurance is initially supported by routine data, which are documented during the application process, decision-making and implementation of rehabilitation measures. Features such as age, gender, severity of addiction and social situation are fundamental for assessing the person undergoing rehabilitation. (Klosterhuis et al. 2011). The continuous survey of persons undergoing rehabilitation concerns the satisfaction of rehabilitation patients with treatments and consultations carried out as well as the assessment of the success of rehabilitation from the patient's point of view (ibid.). The figures are calculated according to the principle of optimum quality (=100 quality points). In the process, the individual results are converted to quality points. In 2011, 76% of all patients undergoing rehabilitation with dependency illnesses rated the rehabilitation measures carried out as successful on average, which consequently corresponds to 76 of 100 quality points. 74 quality points were achieved for satisfaction by patients undergoing rehabilitation, which corresponds to an average mark of "2" on a scale of "1" (very good) to "5" (bad). In the assessment of individual rehabilitation processes in the peer-review procedure, the addiction facilities received 74 quality points in 2011, which corresponds to the results of the previous year (DRV quoted by the Federal Government Commissioner on Narcotic Drugs 2012a). Furthermore, the therapeutic range of services is rated and compared by evaluating the routine documentation of the treatments performed according to the release reports. Looking at the services provided by 66 addiction treatment facilities, you get an average of 74 out of 100 possible quality points. The best facility had 82 and the worst 68 quality points (ibid.).

#### Personnel

Only professionals with relevant training can work in addiction treatment. The German Pension Insurance enacted guidelines on advanced training of professionals for individual and group therapy within the framework of medical rehabilitation of addiction sufferers, in which advanced training courses can receive a "recommendation for recognition". As part of restructuring the education system in Germany according to European guidelines

<sup>138</sup> Clear presentation found at http://www.suchthilfe.de/themen/basis.php.

(introducing Master's and Bachelor's degrees at universities and colleges) the requirements for therapeutic employees of addiction support are also defined and designed anew. Postgraduate educations play a particularly important role when redesigning training courses for social workers, psychologists and physicians. Cooperation between different professional groups from social work/education, psychology, psychiatry and other fields of medicine is one of the significant standards of treatment when dealing with drug addiction (Pfeiffer-Gerschel et al. 2011).

The description of the establishment plan of the DRV-Bund is largely based on the "Abhängigkeitserkrankungen" (Dependency Illnesses) agreement (DRV et al. 2001c), which stipulates different group sizes in psychotherapy for people dependent on alcohol, prescription drugs and those dependent on illegal drugs. A therapist with suitable qualifications should be available for group and individual therapy for drug addicts with 6 to 8 patients each (either physician, psychotherapist, social worker/educator or ergotherapist). Furthermore, additional generally-active therapists should be available in sufficient numbers including medical personnel if necessary (ibid.). Personnel assessment is generally directed at the latest structural requirements. It is individually established in connection with the therapy concept of treatment facilities (DRV 2010a).

When comparing across indications, it makes sense to refer employee numbers to a uniform number of patients undergoing rehabilitation. With respect to personnel assessment, the DRV-Bund has selected such a ratio where the number of employees required for a facility with an average occupancy of 100 rehabilitation patients is listed (DRV 2010b). The specifics of smaller ward sizes must be taken into account precisely for facilities dealing with dependency illnesses. Table 11.4 brings together the required professional groups in function groups in order to make meeting personnel requirements more flexible. Assessment of the number of required employees takes place on the level of function groups. In this respect, it should be noted, particularly in the case of dependency illnesses, that graduate social educators and workers in addition to physicians and graduate psychologists could also be employed on a psychotherapeutic or addiction treatment level as long as they also have completed recognised additional therapeutic training. The group of social workers, however, is also responsible for the duties part of clinical social work.

Table 11.4 Personnel requirements – Number / 100 people in rehabilitation

		Dependency illnesses				
	Alcohol / prescription medication		Illegal	drugs		
Professional groups	Number / 100	Functional group	Number / 100	Functional group		
Physicians	3	3	3	3		
Graduate psychologists	5		5			
Graduate social workers / graduate social ed. pedagogues	5* 	10	9*	14		
Care workers	6	6	6	6		
Physiotherapists						
Graduate phys. ed. teachers	2.5	2.5	2.5	2.5		
Phys. ed. teachers / Gymnastics teachers		2.0		2.0		
Diet assistants / Ecotrophologists	0.5	0.5	0.5	0.5		
Ergotherapists						
Occupational therapists						
Vocational therapists	4.5	4.5	4.5	4.5		
Creative therapists	7.0	7.0	7.0	7.0		
Gestalt therapists, art therapists						

<sup>\*</sup> including 1 graduate social worker for clinical social work.

abridged according to DRV 2010b, p. 21.

Regular advanced training of employees must be guaranteed according to the requirements of the "Dependency illnesses" agreement from 2001 (see appendix 1, number 7, attachment 2 number 8). Facilities that are public and non-profit organisations are generally bound to the respective tariff schemes. The Working Hours Act must also be taken into consideration when organising the employment of staff. Employment costs are 70% of the total costs of a specialised addiction clinic. In the past few years it has become more and more difficult to occupy positions at facilities due to the lack of skilled professionals and the strict requirements of funding agencies. The situation with respect to this and to physicians is problematic, and especially for small facilities (DHS 2008). The problem concerns assistant and medical specialist positions as well as medical director positions.

# Link between funding and effect

Particularly in times of limited resources, funding agencies demand quality certificates from facilities. Nonetheless, there are only a few evaluation studies available on the issue examining the extent to which the measures of inpatient rehabilitation contribute to

abstinence and social and professional integration of drug addicts. Catamnestic studies show a limited response rate due to a lack of agreement to participation in follow-up reports, invalid addresses of the patients listed or because of people who refuse, people who are unavailable or have died or patients who are incapable of being interviewed. Fischer et al. (2007a, b) examined two abstinence-oriented drug rehabilitation facilities in Rhineland-Palatinate within the drug catamnesis research project in a prospective study. Among the 429 patients involved, data was gathered at four measurement times (Start/end of treatment, 6 and 12-month follow-up history). The rate of response for the 6-month follow-up history was 55.3% and 41.5% for the 12-month follow-up history. Due to methodical difficulties, "success records" hover between conservative and optimistic. If one were to follow conservative estimates in this study, the rate of success hovers between 21.5% and 25%. Optimistic estimates are between 41% and 55%. Sonntag und Künzel (2000) documented a response rate between 30% and 60% as well as abstinence rates between 23% and 37% for 12-month follow-up histories in their review of different catamnesis studies. They state that approx. one quarter of drug addicts remain abstinent one year after their inpatient treatment (ibid.). Overall, treating drug addicts is more successful catamnestically if the end of treatment goes according to plan, the length of treatment is 16 weeks, patients undergo treatment voluntarily and display a rather short length of dependency of a maximum of 10 years. Other beneficial factors include being female and a rather young age when entering treatment (Fischer et al. 2007b).

Studies on cost-effectiveness with respect to illegal drugs are rare in Germany. As part of the German model project on heroin-assisted treatment of opiate addicts, <sup>139</sup> general information on treatment costs was also gathered in the accompanying research in addition to the specific costs and benefits of heroin-assisted treatment (v.d.Schulenburg & Claes 2006). The costs of drug treatment, outpatient and inpatient (psychiatric) treatments per week are listed in Table 11.5. These are fundamentally applicable not only to the project itself, but toward the addiction support system in general. Inpatient drug-free treatment is estimated at €3,047 per patient per week, staying at a therapeutic community is listed at €700 and €1,048 for psychiatric clinics. Most of the information is based on estimates or calculations using secondary data (e. g. DSHS, Bundesarbeitsgemeinschaft der Träger psychiatrischer Krankenhäuser (Federal Working Committee for Psychiatric Hospital Agencies). The percentages for staff or material costs cannot be estimated.

The German Federal Model Project on heroin prescription deals with a scientific drug investigation study that took place between 2002 and 2004 in seven cities with a total of 1,015 study participants. As part of this, serious addicts received injectable heroin as medication. A control group received the replacement drug in parallel.

Table 11.5 Costs of various treatments per week

	Costs of treatment per week
Outpatient detoxification treatment	€ 32
Inpatient detoxification	€ 2,469
Outpatient substitution (without costs of the substitute)	€ 32
Psychosocial monitoring	€ 37
Outpatient drug-free treatment	€ 52
Inpatient drug-free treatment	€ 3,047
Therapeutic community (complementary)	€ 700
Day clinic	€ 700
Psychiatric clinic	€ 1,048
Outpatient psychiatric clinic (complementary)	€ 50
Other clinics/stations	€ 3,047
Other treatment	€ 700

v.d.Schulenburg & Claes 2006.

#### 11.4 Discussion and outlook

Inpatient treatment of drug addicts is a significant component of the differentiated and effective addiction support system in Germany. Not only scientific results and experience-oriented knowledge based on practice have led to continuous further development, modification and innovation of service programmes. Also, increasing economisation and rationalisation entail expanded organisational requirements for inpatient facilities for drug addicts (DHS 2008). Finally, the effects of demographic change lead to challenges for inpatient addiction treatment.

From the point of view of the DRV-Bund, the question arises with great urgency as to how the few resources can be applied with greater efficiency and even better individual accuracy (Hebrant 2011). It is stressed that despite the general scarcity of financial resources, the DRV-Bund's policy of "no rehabilitation based on cash situation!" still remains and therefore every application is reviewed according to the guidelines and no reduction in the approval rate can be seen (Hebrant 2011). Nevertheless, experts are talking about a "financial crisis for rehabilitation" (Koch 2011). Professional addiction associations warn that the addiction rehabilitation system is coming under massive pressure (see buss et al. 2011). The resources for medical rehabilitation are scarce due to the capped budget for rehabilitation of the German Pension Insurance Scheme and the implementation of austerity measures. The effects of the austerity measures are visible in the decision titled "Anpassung und Harmonisierung der Richtwerte für die Verweildauern (Adjustment and harmonisation of the reference values for length of stay" of 21 September.2010 (Koch 2011)). As part of these austerity measures, the tendency to shorten the length of stay for inpatient facilities treating drug addictions or increasing outpatient or combined treatments as well as stricter controls

for approving rehabilitation measures is becoming evident (Koch 2011; Zellner 2011). As a result, specialised clinics in particular that work according to the principle of therapeutic communities have been placed in a precarious situation (DHS 2008). In the past few years it has become clear that the budgetary situation for rehabilitation remains tense and no clear relief is expected in the coming years. Increasing the budget for rehabilitation is advocated by many sides, however it seems unlikely that the legal framework will be changed in the near future (Koch 2011).

Improved flexibility in the programme structure becomes evident primarily in the expansion of part-time inpatient and outpatient treatment programmes. Starting in 2012, the DRV-Bund has allowed patients undergoing rehabilitation to switch from inpatient to all-day outpatient facilities in their proximity as a so-called "extended all-day outpatient release form". Previously this was possible only in individual cases if the insured person happened to be living close to the respective inpatient rehabilitation facility (Hebrant 2011). Four of the 35 all-day outpatient rehabilitation facilities funded by the DRV-Bund (Status as of: February 2010) are exclusively specialised in rehabilitation of drug addicts, 22 treat only alcohol and prescription medication dependency and seven rehabilitate all three indications together (Korsukéwitz 2010). A regular combination of inpatient and all-day outpatient rehabilitation is targeted as an alternative and supplement for the market (Hebrant 2011). The definition of short-term and long-term treatment is thus broken down and the length of treatment is made more flexible.

The Kombi-Nord model represents good practice. The previous model for combination treatment "inpatient/outpatient" provides only an inpatient start to the procedure in principle. Flexible handling of outpatient and inpatient elements that allows for need-based entry into and transfer between rehabilitation treatments is needed (DHS 2008).

The fact that patients with increasingly worse health conditions are entering inpatient rehabilitation must be taken into account (Fachverband Sucht e.V. 2012). Furthermore, it is also clear that the detoxification phase has become significantly shorter due to the flat-rate system and austerity measures. Patients cannot be motivated sufficiently in such a short time span of the detoxification phase and prepared for inpatient withdrawal treatment. As a result, the withdrawal phase is more difficult or the cost of care increases (Fachverband Sucht e.V. 2012; Zellner 2011). Seamless integration between acute care and rehabilitation facilities is important to avoid a possible "revolving door" effect in the field of detoxification. However, the time after rehabilitation must not be ignored in the networking structure. Rehabilitation after-care as well as the inclusion in a self-help group, assist in securing sustained success of the treatment (DHS 2008).

The on-going development of quality assurance and review of effectiveness, particularly against the background of scarce financial means will continue to remain a central topic in inpatient addiction treatment. The significance of certifications will increase due to legal requirements. This leads to significant improvement of treatment quality (DHS 2008). The use of new technologies will also enter the field of rehabilitation treatment (Fachverband Sucht e.V. 2012). This includes for example online applications, improved data exchange or

clinic information systems. However, sufficient and above all qualified staff must be available for this. Since neither fair or customary salaries can be paid using grants, allowances or cost rates, there are signs of a lack of skilled professionals in all professional groups for addiction treatment (Leune 2012). The situation appears problematic especially in the case of physicians particularly in this respect and for small facilities (DHS 2008).

Work-related measures are an indispensable component of rehabilitation with the aim of restoring the ability to work. More attention will also have to be paid in the future so that professional rehabilitation services for the transition to working life is secured during and at the end of medical rehabilitation for the transition to working life (DHS 2008). Finally, even more intensive cooperation is required between individual treatment facilities and companies that take SGB IX into account due to the increasing flexibilisation and differentiation of services.

The observation and analysis of trends and changes among clientele is of great importance for the development of the programmes. The total population of addicts portrays an increasingly heterogeneous image: people with multiple dependencies or additionally diagnosed with psychiatric disorders, people with a migration background, the homeless or the long-term unemployed (DHS 2008). The consumption of multiple psychoactive substances in particular is more frequently described as "normal" (Zellner 2011). In the case of drug addictions, double diagnoses can be seen in up to 70% of cases depending on the examination (DHS 2008). A tendency can be observed whereby the leading diagnosis for multiple dependencies turns the balance and decides on the patient's allocation, appearing as a result as the only diagnosis statistically (Hebrant 2011). Depending on the severity of the disorder, different requirements arise for the profile of the rehabilitation facilities, such as the treatment of lesser comorbid disorders, combined treatment or specialised treatment with a particular focus on the comorbid disorder (DHS 2008). In addition, the size of the facility must be adjusted to the needs of the clientele. Longer duration of treatment must be made possible particularly in individual cases. A modified cost structure arises from this even with respect to equipment. Patients with comorbidities require not only a specially qualified staff. but oftentimes higher expenditures on supplies (medication) as well (DHS 2008). Rehabilitation and the measures used in individual cases will be increasingly adapted to individual needs and person-related aims with respect to the type, compactness and scheduling of services (DHS 2008).

# 12. Drug policies in large European cities

Large cities are often disproportionately heavily affected by drug trafficking on the one hand and problems in connection with drug consumption on the other. This concerns not only open drug scenes or districts where drug problems are concentrated, but also affects safety and public health services. Here the number of drug-related offences displays an inverted U function or J function (Tretter & Jaedicke 2002). This means that the burden falls the least on the provinces, then increases with the number of residents in cities and is the highest in smaller major cities. It decreases then somewhat in large metropolises. Consequently, this special section will provide an overview of the drug policies of twelve large German cities first and foremost. Detailed descriptions of the situations in the respective cities are located in the appendix. Finally, the drug policies of the German capital of Berlin will be discussed in detail.

## 12.1 Drug policies in major German cities

This section shows the drug policies and the drug strategies or action plans of twelve major German cities: Hamburg, Munich, Cologne, Frankfurt, Stuttgart, Dortmund, Essen, Düsseldorf, Bremen, Leipzig, Dresden and Rostock. They will be presented without taking Berlin into account as it will be discussed in detail in chapter 12.2. This will cover the commonalities and differences with respect to administration structure, drug-related programmes, the presence of a drug strategy and its rough contents, coordination by a drug commissioner as well as participation of cities in networks with focus areas relevant to drugs. Table 12.1 provides an overview of the relevant information for the individual cities.

#### 12.1.1 Administration structure

A mayor presides over the administration of all the cities covered in this chapter (First or Lord Mayor if other mayors are subordinate to him). Additionally, the mayor is the president of the municipal council, which is responsible for all matters of urban administration. Urban administration is divided into special function offices that refer to themselves as departments, municipal offices, and senate or administrative divisions depending on the city. Their numbers vary greatly between the cities (between three and eleven).

Specifics arise for the city-states of Bremen and Hamburg, for which the *Land* and municipal structures are identical with each other. Here the Senate, led by the First Mayor, is at the top of municipal and Land administration. The members of the Senate (Senators) are each in charge of a special function department and can also be compared to the ministers of states as well as to the heads of departments of other major cities.

Table 12.1 Overview

City	Number of residents 140	Diamorphine dispensaries	Special Drug-related programmes <sup>141</sup>	Drug strategy	Drug Commissioners	Regional and trans-regional networks
Hamburg	1,786,448.		Youth addiction counselling centres	Yes  "Cessation-oriented reform of drug help Hamburg" circular  "Drug-free childhood and youth; concept for prevention and early intervention of drug use and abuse in children and adolescents" circular	Yes; Specialist ward for drugs and addiction	Coordinating body for drug services and drug prevention
			CAN Stop			Head official group for drugs
			Counselling programmes for women, including special			Permanent work group for addiction prevention
			women's injection rooms for drug-addicted prostitutes for intravenous use of illegal drugs			Specialist board for drugs and addiction
			Special counselling programmes			Integration assistance panel
			for dependency sufferers identified by work agencies			Various permanent work groups, such as the Drug Expert Committee of the Hamburg State Centre for Addiction Issues, AG CONNECT, AG LINA-NET, MA of substitution treatment physicians
			Child protection officer at addiction counselling centres			
			Native-language programmes			
			Age and addiction demonstration project			
			Differential help with measures of integration assistance			
	1,353,186	36 Yes	Munich Help Network for Children and their Drug-Addicted Parents	Yes; Guidelines (started in 1995, updated in 2009); no measures plan, rather a description of state of knowledge	Yes; Coordinator for Psychiatry and addiction help	EFUS Network (European Forum for Urban Security) (http://efus.eu)
			Special programme for older drug addicts			
			Special programme for drug- using women			

 $<sup>^{140} \ \</sup> Source: https://www.destatis.de/DE/ZahlenFakten/LaenderRegionen/Regionales/Gemeindeverzeichnis/GVOnlineAbfrage.html$ 

<sup>&</sup>lt;sup>141</sup> This information comes from the cities and does not claim to be exhaustive.

City	Number of residents 140	Diamorphine dispensaries	Special Drug-related programmes <sup>141</sup>	Drug strategy	Drug Commissioners	Regional and trans-regional networks
Cologne	1,007,119	Yes	Mobile medical service for basic and emergency care (drug treatment outpatient clinic)	No; The city's drug policy is oriented towards the	Yes; Drugs consultant	Participation in several working groups and advisory boards
			Drug injection room	functional specifications of the "Land programme against addiction"		
Frankfurt	679,664	Yes	Information programmes for young people, parents and leaders	Yes; "Frankfurter Weg": is consistent with the legal regulations and provisions of the Federal Government and the Land Hessen	Yes; Drugs consultant	Frankfurt was involved with EXASS Net until the withdrawal of Germany from
			Early intervention, for example CaBS (Case Management und			the Pompidou Group in 2011  Monday Group:
			Beratung für cannabiskonsumierende Schüler) (case management and counselling for cannabis users) outreach programme for schools Selective addiction prevention, for example BINSO (Brücke für Integration und Soziales) (Bridge			interdisciplinary cooperation model
				Annual monitoring system of drug trends in Frankfurt on the Main		Coordination of various working groups for example "Youth, drugs and addiction prevention work group", "Alcohol Roundtable" or "Friday Group"  Participation in committees e.g. Youth Services Committee
			to integration and social issues): Programme for persons at risk of addiction with migration background in cooperation with cultural associations			
			Women-specific help			
			Low-threshold programmes:4 injection rooms for intravenous use of illegal drugs			
			Crack smoking room			
			Needle exchange			
Stuttgart	606,588		Special native-language counselling for people with a migration background	No	Yes; Addiction help planning	EFUS Network (European Forum for Urban Security) (efus.eu)

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City	Number of residents 140	Diamorphine dispensaries	Special Drug-related programmes <sup>141</sup>	Drug strategy	Drug Commissioners	Regional and trans-regional networks
						Addiction support services in the national Professional Association for Drugs and Narcotics (Fachverband Drogen und Rauschmittel e.V. (fdr))
Dortmund	580,444		None	No;	No;	Akzept e.V.
			Development of the "Dortmunder path" 20 years ago	Psychiatry coordination and direction of the social psychiatric service	Twinning projects of the Landschaftsverband Westfalen-Lippe (Regional Association of Westphalia- Lippe) (LWL)	
					Advisory Board of the National Office for Addiction	
						Commission for "addiction and drugs" of the Medical Association
Essen	574,635	Drug use room with possibility of hepatitis vaccination  Programmes for children and young people	Drug use room with possibility of hepatitis vaccination	Yes; Drug policy is based on	Yes; Drug assistance	Coordination and cooperation in various regular work groups
			the "Guidelines for Drug Policy in Essen" (first adopted in 1993, revised	department	in collaboration with the authorities, associations, organisations and institutions	
			Programmes for girls and women	in 1999)		of the welfare work
Dusseldorf	588,735	counselling for people with a migration background Inter-cultural programmes Advisory services for Russian-speaking drug users	counselling for people with a	No; The city's drug policy is oriented towards the functional specifications of the "Land programme against addiction"	Yes; Addiction coordination	Addiction and drugs work group of the Düsseldorf Health Conference
			Inter-cultural programmes			Addiction prevention planning
						group
					Substitution drug work group	
			Contact and counselling centre for women (over 27) who use			

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City	Number of residents <sup>140</sup>	Diamorphine dispensaries	Special Drug-related programmes 141	Drug strategy	Drug Commissioners	Regional and trans-regional networks
			drugs, are homeless and/or engage in prostitution			
			Emergency shelter for girls and young adults up to 27 years (primary care)			
			Drug use room with possibility of hepatitis vaccination			
Bremen	547,340		(ESC)ape – Outpatient clinic for young people with drug problems	No; Bremen's drug policy is based on the national	Yes; Drugs help control body of the Health Office and	Association of Drug and Addiction Help, national)
			CAN Stop	drug policy	consultant for addiction	Drug Coordination
			OAN GIOD		help of the Land Bremen	Committee (interagency work group at the Land level)
						Addiction expert committee (local level)
						Drug help managing committee (local level)
						Prevention work group (local level)
Leipzig	522,883		transVer: Transcultural care of	Yes;	Yes;	Drug advisory board
		since 1999, hased on the sta	Addiction commissioner staff officer	Addiction prevention WG		
			Emergency shelter and motivational living	National Strategy of Drug		WG homeless and addicts
			WG "pregnant" Network for drug-	and Addiction Policy		Drugs rapport (monthly group
			addicted pregnant women, parents and their children			Crime prevention council
		Needle exchange			Quarterly meetings of the addiction commissioner of major cities in Sachsen with the consultant for addiction issues with the state ministry for social issues and consum	

City	Number of residents <sup>140</sup>	Diamorphine dispensaries	Special Drug-related programmes <sup>141</sup>	Drug strategy	Drug Commissioners	Regional and trans-regional networks protection.
						Democracy Project , Cities & Drugs II of the European Union (EU) (2008 to 2011)
Dresden	523,058	Child and youth-specific programme of the youth and drug counselling centre with a special emphasis on illegal drugs	programme of the youth and	Yes; Cooperation agreement	Yes; Municipal Drug	"Addiction Prevention Dresden" work group
			drug assistance Dresden; Collaboration agreement on coordination and quality assurance of support for children, adolescents and young adults with drug problems in Dresden	Commissioners	"Illegal drugs Dresden" work group	
					Meetings with the heads of addiction counselling and treatment centres	
Rostock	202,735	Programmes for drug-depende or at-risk children and young	CANStop	No :	No; Office of Addiction Psychiatry Coordination	Addiction work group in the
			Programmes for drug-dependent			Health Office
			or at-risk children and young people			Community crime prevention

#### 12.1.2 Drug-related programmes

The area of drug-specific aid in all cities covers prevention, consulting, treatment, survival assistance and also repression in so much as it comes under local government. The latter generally is under the responsibility of the municipal department of public order and the police. Coordination of drug-specific assistance is generally the task of the special function departments. The services are provided primarily by non-governmental agencies, charitable associations and youth welfare offices. They are financed using public funds of the municipalities, partially subsidised by the Land (e. g. in Dresden and Leipzig) or other administration units such as the districts (in Munich). The following programmes are offered in most cities for treating users and addicts of illegal drugs: prevention, low-threshold support (e. g. street-work, drop-in centres, needle-exchange or overnight shelters), basic or emergency medical care, substitution outpatient clinics, outpatient addiction consulting and treatment centres, psychosocial care as well as social and occupational reintegration.

In addition, the cities offer various unique programmes for drug addicts. Thus there are special programmes in many cities for children and youths (Hamburg, Munich, Düsseldorf, Dresden, Frankfurt, Essen, Rostock) or special native-language counselling for people with a migrant background (Hamburg, Frankfurt, Stuttgart, Düsseldorf, Leipzig). There are also counselling centres for drug-dependent women, primarily for those pursuing prostitution (Hamburg, Munich, Düsseldorf, Frankfurt, Essen) and injection rooms in certain cities (Hamburg, Frankfurt, Essen, Cologne, Düsseldorf) as well as separate counselling and treatment for cannabis consumers (Frankfurt, Rostock, Hamburg, Bremen).

Within the framework of the German federal model project on heroin-assisted treatment of opiate addicts ("Heroin Study"), drug addicts for whom previous drug treatment was not successful or for whom substitution was not satisfactory received injectable, synthetically produced heroin (diamorphine) as medication on a trial basis in the period between March 2002 and December 2003; a control group received the substitute drug methadone in parallel. Both groups received regular medical care and received psychosocial concomitant treatment. In total, 1,032 people were randomly assigned to heroin or methadone treatment in seven treatment centres in Hamburg, Frankfurt, Hannover, Bonn, Cologne, Munich and Karlsruhe. These seven cities still allow heroin distribution for drug addicts in question. The cities found in this chapter are Hamburg, Munich and Frankfurt.

#### 12.1.3 Drug strategy

Five of the twelve cities presented have their own drug strategy or drug-specific guidelines, namely Munich, Frankfurt, Essen, Leipzig and Dresden. They are analogous to the legal provisions of the Federal Government and the respective State, in other words the national strategy and the corresponding State's addiction concept. The drug policies of most cities are based on the cornerstones of prevention, counselling and treatment, harm-reduction and repression. The guidelines for addiction policy in Munich in contrast do not provide an action plan, but rather are limited to a description of the state of knowledge. In Dresden there is the "Kooperationsvereinbarung Drogenhilfe Dresden (Cooperation agreement for drug support

services Dresden)" which serves as the binding framework for cooperation in providing care for users of illegal drugs who need help in Dresden. The cooperating partners recognise the binding quality standards in the process.

Cities that do not have their own drug strategy or action plan are generally oriented towards the technical specifications of the state's addiction concept. Accordingly the "Landesprogramm gegen Sucht (state programme against addiction)" of Nordrhein-Westfalen applies for Düsseldorf and Cologne, while the Baden-Württemberg Strategy for Addiction Prevention and Support applies for Stuttgart, for example. In states without their own drug strategy or action plans, the cities are oriented towards the 4-pillar model of the national drug policy, such as Bremen, Hamburg and Mecklenburg-Vorpommern, for example.

#### 12.1.4 Drug Commissioners

Questions on the topic of addiction and drugs belong to the working range of the local health authority in almost all cities. This falls under the responsibility of one of the special function departments which can be responsible for different parent roles depending on the city, e.g. social issues or health. In Frankfurt on the Main, the responsibility lies with the drug department of the city, which has the status of a government agency. In almost all cities there is someone responsible for drug issues in the municipal health office (in Munich, Cologne, Stuttgart, Essen, Düsseldorf, Bremen, Leipzig and Dresden); in Hamburg it is located in the Land agency. The title and specific function varies greatly between the cities. The position may be called addiction support planning, drug commissioner, drug consultant or drug coordinator. The scope of duties are partially looked after by individual persons and partially by small work groups and generally covers coordination and control functions in the area of prevention and care of dependency sufferers and risk group members as well as their family. In Bremen, all measures for the area of drugs and addiction are conducted in close coordination between the addiction coordinator of the State of Bremen and the drug advice management centre of the health office of Bremen.

There are no designated drug commissioners in some cities. For example, in Rostock the task of the drug commissioner is carried out by the addiction and psychiatry coordinator and by the psychiatry coordinator and the management of the social-psychiatric services in Dortmund.

#### 12.1.5 Networks on a regional or trans-regional level

Nearly all cities organise regional, interdisciplinary work groups, panels and advisory boards in the area of drugs and addiction in which the participants regularly exchange information on questions on the issue of drugs, prevention and treatment.

In addition, most cities indicate they are organised in different trans-regional or national networks that are presented here as an example. For example, Leipzig takes part in quarterly meetings between the addiction commissioners of major cities in Saxony and the consultant for addiction issues of the state ministry for social issues and consumer protection. The addiction support services in Stuttgart are a member of the national Fachverband Drogen und Rauschmittel (Professional Association for Drugs and Narcotics) e.V. (fdr). The head of

the social-psychiatric services in Dortmund is an adviser of the national agency for addiction and member of the "Addiction and Drugs" commission of the Medical Association.

Individual cities are (or were until recently) additionally members in international networks. Dortmund took part for example in twinning projects of the Landschaftsverband Westfalen-Lippe (Regional Association of Westphalia-Lippe) (LWL). Munich and Stuttgart were involved in the international EFUS networks (European Forum for Urban Security<sup>142</sup>)<sup>143</sup>. Until 2011, Leipzig took part in the EU project "Democracy, Cities & Drugs II" which aims at promoting a local and integrated approach towards the problem with drugs. Until recently, Frankfurt was involved with EXASS Net<sup>145</sup>, a European network initiated by the Pompidou group on the exchange of experiences between local people involved who had to react on the front lines of the drug problems.

## 12.2 Case study: the capital city of Berlin<sup>146</sup>

In Berlin there are 3.46 million residents living in an area of 892 km<sup>2</sup>. 14.5% of residents are under 18 and 19.1% are over 65 years old. Migrants, at 472,000 people make up around 13.6 % of the population. 1.57 million people are registered as employed. The unemployment rate in 2012 was on average 13.4 % (Amt für Statistik Berlin-Brandenburg 2011).

About every seventh resident of Berlin is affected by drug abuse or drug dependency, either directly themselves or as a family member. Estimates assume that about 185,000 people abuse alcohol or are already dependent; about 370,000 people drink hazardous amounts of alcohol. About 135,000 are problem-users of prescription drugs. Approx. 165,000 people currently use illegal drugs, mainly cannabis and approx. 15,000 people are dependent on cannabis. (Kraus et al. 2008a) Approximately 8,000 to 10,000 people are dependent on opiates in Berlin (Kirschner et al. 1994). In 2011, 114 drug users died from an overdose (Berlin State Office of Criminal Investigation, personal disclosure).

Berlin is not only the capital, but also a city-state with all political functions of a *Land*. This means that Berlin is responsible for the development and implementation of drug policy on a state level as the other 15 Federal States are. Just as in all other Federal States, a full-time drug and addiction commissioner assumes the coordination and control of drug and addiction policy, coordination with other involved departments and the tasks within the framework of coordination on a Federal Council level.

#### 12.2.1 Drug and addiction policies of Berlin

The Berlin "Programme for combating drug abuse" has existed since 1977. This programme was extensively described in the so-called drug reports from 1978, 1983 and in the drug and

http://www.coe.int/t/dg3/pompidou/activities/exassnet EN.asp

<sup>142</sup> http://efus.eu/de/about-us/the-efus/public/1450

<sup>&</sup>lt;sup>143</sup> EFUS is working on all important issues of municipal crime prevention and supports contacts between European cities through the exchange of experience, coopreration and continuing education.

<sup>144</sup> http://www.democitydrug.org/

<sup>&</sup>lt;sup>146</sup> This contribution was written by Monika Wojak, research assistant at the Senate Administration for Health and Social Affairs, Berlin.

addiction report from 1993 for the Berlin Congress of Deputies and also coordinated on the state and district level on an interdepartmental basis. Since 1994, further development has not been established in the form of a new drug report or as a programme fixed in writing, however many building blocks were kept in writing, for example as a senate proposal to the parliament.

The aims of Berlin's drug policy are based on the strategy of four equal pillars of prevention, counselling and treatment, harm reduction and survival assistance as well as repression just as on the federal level and in other federal states and major cities. In the process, the drug policy, which was previously narrowly defined, was replaced with a comprehensive drug and addiction policy which is oriented towards the National Strategy on Drug and Addiction Policy as well as towards the drug strategy of the European Union and the corresponding applicable EU drug action plan.

The aims of Berlin's drug and addiction policy are to promote a responsible approach towards legal addictive drugs among the population and to prevent illegal drug use; to support addicts and their family members in becoming free of their dependence on drugs or gambling; to assist addicts with survival and help them improve their health conditions; to protect the population from crimes associated with drugs and addictions and other side effects of drug use.

Berlin's drug and addiction support programme is coordinated and implemented by the drug commissioner and her employees at the Senate Administration of Health and Social Security. The range of tasks includes basic issues of the situation of dependency sufferers, the health care system of addiction support services, addiction prevention as well as drug and addiction policy. At the same time, the drug commissioner is the contact partner for media and interested citizens. In addition, the responsible unit is financed through so-called austerity financing by non-governmental agencies for prevention and drug addiction support services. The annual budget amounts to roughly €6.5 million. Funding today is largely given to the facilities within the framework of three to five-year contracts, which leads to greater planning security for both assistance facilities and the State of Berlin.

#### 12.2.2 Addiction prevention

A central aim of addiction prevention is the avoidance of dangerous use or dependency. As a result, addiction prevention reduces the number of young people entering addiction and drug careers on a medium and long-term basis and contributes to safety in the city and to social cohesion.

The aims of prevention were consensually established in the "Guidelines on addiction prevention" <sup>147</sup> and by the Congress of Deputies in 2006. The guidelines form the backbone of today's addiction prevention and are supported by all significant participants and brought to life. Among other things they state the following: "Addiction prevention is the task of all people, social groups and institutions…. The central aim of addiction prevention is to prevent

Available at: http://www.berlin.de/imperia/md/content/lb-drogen-sucht/leitlinien.pdf?start&ts= 1172759262&file=leitlinien.pdf.

the hazardous use of drugs such as nicotine, alcohol, prescription medication or cannabis and also excessive behaviours such as slot machine or video games or to at least significantly reduce them in order to prevent psychosocial problems and dependencies.... Addiction prevention needs an overall strategy that is directed at all children, adolescents and adults in different areas. In the process, high-risk groups need to be supported in particular. This particularly concerns those people who previously could not be reached by current programmes. Therefore effective addiction prevention must be carried out where people come together, learn and spend their free time. Addiction prevention is oriented towards the life environment of people and their social circle. It must be created on a group-specific and gender -specific basis.... Addiction prevention measures are embedded in long-term and sustainable processes. The intention of addiction prevention is directed both at the behaviour of individuals and long-term structural changes." (Berliner Senat 2006)

In 2004/2005, addiction prevention in Berlin was restructured based on the recommendations from the "Expert opinion on addiction prevention" that was prepared by scientists. The setting up of the central "Specialist office for addiction prevention" of the private agency pad e.V. 148 was the beginning of a new addiction prevention policy in the city in December 2005. Today the specialist office for addiction prevention together with other participants such as schools and youth help centres, district and senate administrations, non-governmental agencies, health insurers and many other cooperating partners organises comprehensive campaigns, provides information material and makes sure that addiction prevention is increasingly perceived as a joint task.

The Berlin addiction prevention facility is oriented towards:

- Strengthening of the effect of prevention for the entire city
- Good networking with all significant cooperating partners
- Strengthening measures of early intervention in order to reduce drug use and to stop drug careers in time, thereby avoiding long-term high costs

Focuses and fields of action of the specialist office include:

- Addictive substances, in particular tobacco, alcohol, cannabis and gambling
- Measures specific to target groups and model projects
- Further training of multipliers, e.g. on the subject of children in families with addiction issues
- Improvement of quality of addiction prevention and its evaluation

Programmes were initiated as part of the early intervention network<sup>149</sup> for early interventions in the case of cannabis-related issued and excessive alcohol consumption. Regional alcohol and drug counselling centres offer the early intervention programme named "FreD" ("Frühintervention bei polizeilich erstauffälligen Drogenkonsumenten (Early intervention in

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<sup>&</sup>lt;sup>148</sup> www.berlin-suchtpraevention.de.

www.netzwerk-fruehintervention.de

connection with first-time drug offenders")) and "Realize it" for cannabis users as well as the "Break" programme for reducing alcohol consumption. "HALT", a project for young consumers of alcohol who were hospitalised following alcohol intoxication, is another early intervention programme and is offered throughout Berlin.

The legal drugs tobacco and alcohol as well as illegal cannabis are the drugs most frequently consumed among adolescents and young adults. Bearing this fact in mind, Karuna e.V.<sup>150</sup> developed a join-in circuit on not smoking titled "Do you still smoke or are you already alive?", a join-in circuit on alcohol prevention titled "Full power life - even without alcohol" and a join-in circuit on prevention titled "Foolproof healthy living", all of which are very successful. Another join-in circuit on cannabis prevention is currently being designed. Karuna e.V. has additionally developed particular programmes specific to target groups for street children and other adolescents with dangerous drug use in cooperation with youth help centres. These include the "Cleanpeace" project offered in cooperation with child and adolescent psychiatric centres as well as the therapeutic community "Villa Störtebecker" and programmes assisting with employment or daily structure.

#### 12.2.3 Drug and addiction care services

The aims of drug and addiction support services have also been fundamentally enhanced over the past 15 years. The ultimate aim of a structured needs-based outpatient assistance offering is to provide aid to all people looking for help and their family members regardless of the substance and consumption status, age, gender, nationality or migration status, without a waiting period and within close proximity to their homes (or to organise help) that they require. Achieving this aim was the result of a comprehensive and fundamental restructuring process that took several years. This was made possible since it was based on a scientific foundation and because non-governmental agencies were included in efforts to combat drug abuse as partners and equals. The compound system of drug and addiction support services in Berlin today offers a broad spectrum of regional, in other words local and trans-regional assistance programmes for dependency sufferers and their family members.

#### Excursus: The emergence of integrated and regional addiction care services

At the end of the 1990s, alcohol support services in Berlin were already in a good position and were organised corresponding to the district (local) structures. There were alcohol counselling centres and self-help groups in operation and even an inpatient assistance offering detoxification and withdrawal treatment for alcoholics in proximity to their residences. Although there was a sufficient number of counselling centres and low-threshold assistance for illegal drug addicts, the quality of the work was not satisfactory everywhere. Not all programmes were in sufficient demand by the target groups, which mainly consisted of opium users and there were almost no programmes in the eastern half of Berlin. Some people looking for help had to accept long commutes and all facilities had waiting lists. Since there was virtually no cooperation between the two separate support systems for people dependent on legal and illegal drugs, agreements, case management or cross-network

<sup>150</sup> http://www.karuna-berlin.de/

activity adapted to the needs of those looking for help were non-existent. Against this background, it was evident that the structure of the support systems urgently needed to be reworked. The aim was to construct a balanced support structure for people with dependency problems proportionate to their needs.

This large-scale restructuring effort required not only the streamlining of all of those involved but it also had to be based on solid scientific knowledge. The Cologne-based Society for Research and Counselling in the Fields of Health and Social Issues (FOGS GmbH)<sup>151</sup> received for this reason the task of preparing a demand analysis based on indicators of high-exposure and coming up with suggestions for restructuring. The partners in the following restructuring process were on the state and district level in Berlin along with the drug commissioners and the drug and addiction coordinators of the districts as well as non-governmental agencies for drug support and their associations.

#### Conditions for restructuring

A requirement for the following process was the conversion from the existing grant funding for drug support facilities on a yearly basis to a public contract with a term of five years between the State of Berlin and the League of Charities. The contractually established aim of restructuring outpatient drug support was the most important component. However, further important liabilities were stipulated to which the State and the associations agreed:

- Defining the addiction support regions.
- A clear description of tasks and services (prevention, harm-reduction, counselling and outpatient treatment as well as cooperation between all parties involved)
- Low-threshold access without waiting periods
- Mandatory participation in documentation in the German Core Data Set
- A guarantee of the grant amount for the duration of the contract

The partners of the agreement agreed to carry out the process of restructuring in mutual agreement. The suggestion had to take into account the current situation of non-governmental agencies, their respective profiles and their human resources. Future planning regions of Berlin were oriented towards the district structure, however since the prevalence of the consumption of illegal drugs is significantly lower than that of alcohol use, two districts each were pooled together for every single planning region. This meant that a drug counselling centre per district was not considered necessary in all cases – as for counselling and treatment of alcoholics – rather that these programmes only have to be maintained at least in each region.

#### The demand analysis

25 experts in the fields of science, administration and practice such as non-government agencies and their umbrella organisations were interviewed and asked to evaluate the significance of a series of indicators. These indicators were suggested by scientists from

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<sup>151</sup> www.fogs-gmbh.de

FOGS as so-called pressure indicators in order to measure the strain of drug problems on the respective regions. The indicators allowed for information from the areas of epidemiological data of substance abuse, special drug-related problems, health factors, demand and treatment (the so-called "Treatment Demand Indicator") or from the social index of the districts.

Although some of the indicators suggested by the experts were determined to be very important, their recommendations could not be followed through in all areas. This was mainly because the available data were only available on a citywide level and not on a regional or district level. The results from the addiction survey carried out every five years are available for all of Berlin but not for the individual districts. The social index on the other hand is available on a district level, however the methods for defining them are fundamentally different from the analysis using indicators of exposure and as a result, it was not possible to link these data with each other.

The results of the expert ratings were the following five indicators of exposure through which their strain on every region could be measured:

- 1. The number of counselling and treatment cases at drug counselling facilities differed depending on place of residence and treatment location
- 2. Number of cases of hepatitis B and C
- 3. Number of patients being treated by physicians providing substitution treatment
- 4. Number of rescue situations the fire department responded to because of psychotropic substance overdose
- 5. Drug-related deaths differ according to place of residence and where the body is discovered

The results of the pressure analysis and subsequent restructuring

Scientists worked out a ranking of the six regions and developed a proposal for the reconstruction of outpatient centres. This proposal contained an exact specification of the necessary staffing positions and counselling centres per region. Since the results would lead to substantial modifications in the previous structures of outpatient drug support services, a work group was set up, which came up with a proposal for the future structure. All non-governmental agencies were represented just like their associations, the FOGS institute and the participating administration teams (including district representatives). As soon as the work group agreed on a proposal for restructuring in a region, it was presented at a regional conference to all participants from education, health care or the police and its implementation was promoted. In cases where reorganisation proved to be difficult, solutions were searched for that took all participants' interests into account.

Multiple drug counselling centres had to relocate to a different district or even to a different region. Some facilities received additional staff, others had to release some. These changes raised significant concerns, but no participating facility refused to cooperate and all were convinced of the necessity and significance of such restructuring.

After several years of intensive work, it has been made possible to create a network of cooperation for outpatient drug addiction support in every region. Drug addicts in prisons or hospitals received counselling in the region of their place of residence. People seeking aid were no longer rejected and all were entitled to treatment without waiting periods in proximity to their place of residence. On the other hand, addicts retained the freedom to look for those counselling centres that they wanted. However, they did know that in this case people seeking help from the region were treated with priority and thereby had to account for possible waiting periods.

Not all facilities were included in restructuring. Since not all programmes have to be provided in every region due to the small size of the target groups, the decision was made to have some specialised programmes only once or twice on a cross-regional basis. For example this affects a special treatment programme for cannabis users, which in addition to drug counselling centres offers treatment for cannabis users, and an outpatient treatment for cocaine addicts, "Therapie sofort (Immediate Treatment)," a facility with the emergency drug services which enables drug addicts in acute crises to be immediately placed into detoxification and subsequent treatment at an inpatient treatment facility in Berlin. Also round-the-clock availability of the emergency drug services is required only in the city. Both injection rooms and the drug injection mobile are exempt from the regional obligation to provide care.

As a result, six Regional Addiction Support Centres arose from outpatient drug addiction support services. In a second step, cooperation networks between the outpatient drug assistance network and the counselling system for alcoholics and prescription drug dependency sufferers were created in each region and integrated addiction support services emerged. All facilities were committed to cooperating in their region on an institutional level as well as on a client level, which means that within each of the six planning regions all agencies of low-threshold contact efforts and drug counselling are obligated, by the common overall concept, to cooperate with the alcohol and prescription drug counselling centres to provide an integrated addiction support. They fulfil a joint requirement and performance scope and agree on user-oriented operating hours, gender-oriented and youth-friendly as well as migrant-specific programmes, organise joint advanced training, regional conferences, etc. so that in this way they can guarantee a responsible service for all people in the region that abuse and are dependent on drugs and narcotics (including their family members and caregivers).

The scope of services of the regional addiction support services includes measures in the area of low-threshold contact efforts and care, counselling, support as well as mediation for prevention. The system of harm-reduction and survival support is integrated into the outpatient care of the city and contains all so-called low-threshold programmes: street work, mobile counselling programmes, drop-in centres, overnight shelters or injection rooms. An important agency in this field is Fixpunkt e. V. 153, which offers numerous programmes in the

<sup>152</sup> www.drogennotdienst.org

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<sup>&</sup>lt;sup>153</sup> www.fixpunkt.org

field of HIV and preventative treatment for hepatitis infections as well as health promotion. Alongside vista gGmbH<sup>154</sup>, a funding agency of multiple drug counselling centres, Fixpunkt runs two drug injection rooms which serve as contact and drop-in centres and, amongst other things, offer drug users a space for hygienic consumption at two central headquarters in the districts of Mitte and Friedrichshain-Kreuzberg. The drug injection room programme is supplemented by a vehicle, e.g. a "drug injection room on wheels" that can flexibly react to the requirements of the drug scenes and is used in different locations throughout the city. Adult dependency sufferers not receiving substitutes can consume substances they have brought with them in the injection rooms, including heroin, cocaine, amphetamine as well as their derivatives without becoming infected. Trained staff is ready to provide assistance in crisis or emergency situations.

Other drop-in centres are oriented towards specific target groups, such as the women's meet-up group "Olga"<sup>155</sup>, a drop-in centre for female drug-addicts and prostitutes located directly on Kurfürstenstraße, the drug-related prostitution area of Berlin. "Druckausgleich (Pressure Balance)", a drop-in centre belonging to the agency Fixpunkt e. V., was founded in 1990 as a self-help meeting point by, for and with methadone-substituting drug addicts and following restructuring of outpatient drug assistance, it is now responsible for low-threshold drug addiction support in the region of Neukölln-Treptow-Köpenick in coordination with Vista GmbH.

The integrated system of support in Berlin covers inpatient and outpatient treatment programmes as well as facilities for assisted living and job projects in addition to outpatient contact and counselling centres. Treatment facilities have also undergone significant enhancement in the past 10 to 15 years in terms of contents and organisation. The spectrum ranges from so-called therapeutic communities for particular target groups such as women or migrants and the large self-help community Synanon all the way to special outpatient programmes for treating cocaine or cannabis users 160.

Funding agencies of highly professional abstinence-oriented rehabilitation facilities include Drogenhilfe Tannenhof<sup>161</sup>, Anti-Drogen-Verein (Anti-Drug Association)<sup>162</sup> or Drogentherapiezentrum (Drug Treatment Centre)<sup>163</sup>, which also provide outpatient treatment and facilitate integration into working life. The programme is supplemented by a special detoxification facility as well as by specialised detoxification stations at hospitals and, with respect to alcohol, by specialised programmes of qualified detoxification and rehabilitation at

155 http://drogennotdienst.org/angebote/Frauentreff-Olga/

159 http://www.kokon.de/Kokon/kokon.html

<sup>154</sup> www.vistaberlin.de

<sup>&</sup>lt;sup>156</sup> www.frausuchtzukunft.de

<sup>157</sup> www.nokta-suchthilfe.de

<sup>158</sup> www.synanon.de

<sup>&</sup>lt;sup>160</sup> www.therapieladen.de

www.tannenhof.de

<sup>&</sup>lt;sup>162</sup> www.adv-suchthilfe.de

<sup>&</sup>lt;sup>163</sup> www.drogentherapie-zentrum.de

several hospitals. All alcohol counselling centres additionally offer outpatient treatment. Self-help, which has a long tradition and a broad network of self-help groups in the city in the alcohol sector, is still underdeveloped with respect to drug addiction.

In addition to classical abstinence treatment, substitution treatment using methadone or buprenorphine plays a major role. Established physicians also perform it in other Federal States. In Berlin, it is compulsory for people undergoing heroin-substituted treatment in the first few years to receive psychosocial care, (psc) from a drug-counselling centre. Their social problems are first and foremost worked on here that is dependency sufferers learn with the aid of a drug counsellor how to construct a regular routine again, make friends and build relationships, find a home, possibly even find a job or start an education. Financing for psychosocial care was regulated through a special agreement with the districts (e.g. local governments) in such a way that every person receiving substituted treatment is entitled to psc as a measure of reintegration assistance and the hours offered by the drug counselling centres or their affiliated institutions of psychosocial care could be settled with the district authorities. Service agreements of psc agencies must be recognised and concluded with the district social security offices in accordance with §§ 53 f SGB XII. Psychosocial care is guaranteed either as outpatient support or as part of assisted living for patients receiving substituted treatment. The services required are listed in detail in the service agreements and must be verified. A regulated assistance planning procedure provides those affected with security as well as the authorities with the required control over qualified performance.

Currently (May 2012), there are approx. 4,700 heroin addicts receiving substitute-based treatment, of which approx. half is receiving psychosocial treatment at a drug-counselling centre. For the group of so-called "heavy addicts", four specialised practices currently offer medical and psychosocial assistance programmes under one roof. A treatment facility offering original diamorphine is currently under construction in the city.

#### 12.2.4 Monitoring systems for drugs

There is no regular monitoring system in place. The last study to estimate the scope and structure of the so-called "heroin scene" was performed in 1993 (Kirschner & Kunert 1994).

#### 12.2.5 Studies of the drug situation in Berlin

Since 1990, Berlin has participated about every five years in the nationwide Epidemiological Addiction Survey with an increase in sampling and thus has obtained reliable data on the situation of drug use in the city. Recurrent periodic surveys additionally allow for statements to be made on trends. The data provide findings on the consumption and abuse of illegal drugs, alcohol, tobacco and prescription drugs. Both adolescents and adults between the ages of 15 and 64 are each surveyed in Berlin. There is up-to-date data available for 2006 (Kraus et al. 2008b). The next addiction survey will take place in 2013: In total, 37% of all people surveyed in 2006 reported having had experience with illegal drugs. Projected over the resident population between the ages of 15 and 64, more than 884,000 people in Berlin therefore have experience with the use of illegal drugs. Consumption of illegal drugs in the past 12 months was reported by about 1 in every 10 people (10.8%; approx. 260,000

people), and 6.9% (approx. 165,000 people) reported consumption in the past 30 days. Cannabis is the most widely used illegal substance. Cannabis is the most widely used illegal substance. In the last 12 months, about 10% of those surveyed have used cannabis. Nearly one in every ten cannabis users (9.7%) indicated to have used cannabis daily or almost daily in the past 12 months. Cannabis dependency was estimated for about 0.6% of the 15-64 year old population and cannabis abuse was estimated for 1.4% according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Problematic cannabis use, which was defined using the Severity of Dependence Scale (SDS), was found in 3.2%.

Problematic consumption forms of alcohol (risky and dangerous consumption, high consumption) were the most frequent in both of the oldest age groups (40-49 year-olds: 14.5%; 50 to 64-year-olds: 20.4%). In the over 50 age group, 1 out of every 5 people surveyed consumed amounts of alcohol on average that are associated with a health risk. Projected over the population between the ages of 15 and 64, about 121,000 people met the criteria for alcohol abuse and an additional 65,000 people were classified as alcohol dependent according to DSM-IV (12-month prevalence).

In the past 30 days, 36.7% of men between the ages of 15 and 59 and 32.3% of women in the same age group smoked. 28.0% of men and 24.2% of women were counted as former smokers. Among cigarette smokers, heavy smoking (20 cigarettes or more per day) was more frequent among men than among women (31.2% vs. 24.0%). According to DSM-IV, nicotine addiction among 15-59 year-olds was estimated at 7.7% (men: 8.3%, women: 7.0%).

Almost two-thirds of all people surveyed (64.6%) had taken at least one medication from the medical drug classes covered by the survey (pain killers, sleep aids, sedatives, stimulants, anorectic drugs, antidepressants, neuroleptics) in the 12 months prior to the survey and a total of 17.6% of those surveyed indicated to have taken one of the mentioned drugs once a week or more in the 30 days prior to the survey.

The results for various types of gambling show that almost three quarters (74%) of the population of Berlin between 18 and 64 years of age have previously gambled and that about half (52.7%) have gambled in the 12 months prior to the survey.

The most recent results of the European School Survey Project on Alcohol and Other Drugs (ESPAD), in which Berlin participated for the third time, show that the use of so-called legal drugs such as alcohol or tobacco is declining among adolescents. The use of cannabis among adolescents in Berlin however is far more widespread than among adolescents of other Federal States. Of the adolescents in Berlin that were surveyed - equal in all forms of school - around 14% had consumed cannabis in the previous 30 days (19% boys and 10% girls). The lifetime prevalence (of having used cannabis once in a person's lifetime) in Berlin overall is 29% higher than in other federal states. At the same time the percentage of cannabis users at secondary schools (Hauptschule) (45%) is noticeably high.

#### 12.2.6 Drug policy agreements

In September 2010, the Drug Commissioner for Berlin signed the so-called "Prague Declaration on the Principles of effective regional (local) drug policy" on the occasion of the conference in Prague. The principles of this declaration are founded upon regional and reality-based drug policies, the observance of human rights and the guarantee that decision-making would be based on scientific knowledge as well as the compatibility between public safety and health policy issues. These principles also are supported by Berlin drug and addiction policies.

#### 12.2.7 Four areas of drug policy in capital cities

Three areas of drug policy in capital cities are presented below. Statements on the fourth section "Low-threshold facilities for problematic drug users" can be found in the description of the outpatient support system (in Chapter 12.2.3).

## Local legislative strategies against drug scenes/drug-trafficking

In the nineteen seventies, many hundreds of drug addicts in open drug scenes gathered over a long period of time – just as in the cities of Frankfurt or Hamburg – and thus caused big problems for the affected area. These scenes were dispersed by the police and the strategy was aimed at motivating the addicts through street workers and low threshold drug work facilities to take up such offers. Since the end of the 1970s, there have been no major open drug scenes in Berlin. Instead a maximum of 30-40 drug addicts gather in scenes at certain focal points in the inner city. However, problems keep reappearing at such focal points between residents and dealers, which must be jointly solved by the police, the responsible district authorities and the drug commissioner.

In 2003, the facility of the drug injection room took up where drug-scene meeting points led to conflicts with residents. The ordinance issued in 2002 for granting licences, which is a requirement for the operation of drug injection rooms according to the Narcotics Act, therefore also establishes that the operation of drug injection rooms must be aligned with "reducing the strain on the public through use-related behaviours" among other things. For this reason, the ordinance sets out that the operator of the drug injection room must prevent crime in the vicinity of the facility. § 9 of the ordinance regulates the following: "(1) The funding agency of the drug injection room must closely and continuously cooperate with the responsible district office, department of health, the police and the public prosecutor's department. The essential features of cooperation are binding and must be set out in writing in an agreement. (2) The essential features of cooperation according to paragraph 1 particularly state that the management of the drug injection room

- (1) maintains constant contact with the police and agrees with them on their measures to prevent disturbances to public safety in direct proximity of the drug injection room in an early stage
- (2) in the event of impairment to third parties, disturbances of the public safety and order or expected offences in the immediate environment of the drug injection room, attempts to

achieve the aim of a change in behaviour in the users and those present at an emerging drug scene; if this proves unsuccessful, the management of the drug injection room is obligated to notify the police immediately."

The cooperation agreement between the agencies and the respective district authorities, the police and the public prosecutor's department establish the tasks and measures that are used for preventing problems in the environment of the injection rooms. Regular briefing of the Senate Administration for Health as an authorising and supervisory body by the cooperating partners supplements the voting and has contributed to the fact that injection rooms can successfully perform their work to the benefit of the people affected.

#### Interventions in the party scene/nightlife

There are no special projects in this field in Berlin. The specialist office for addiction prevention provides information and also develops new material. People seeking help can turn to those drug counselling centres and for example request their programmes for early intervention. The epidemiological data on the use of "party drugs" such as ecstasy, amphetamine, etc., are relatively few in Berlin. With respect to minors, their use virtually plays no role. In 2006 the 12-month prevalence for 18 to 24 year olds for amphetamine was 2.9% (2.4% nationwide in 2006), 2.2% for ecstasy (1.9% nationwide), 0.9% for LSD (0.4% nationwide) and 2.0% for cocaine (1.8% nationwide). In the 25-29 age group, the figures for Berlin were somewhat higher than the rest of the nation, which primarily would be attributable to the urban environment phenomenon (Kraus et al. 2008a).

#### Reactions to headshops/smart shops:

Headshops/smart shops (shops for drug use paraphernalia) do exist in Berlin, however they do not play a problematic role as far as the sale of drugs is concerned.

For example, patients take so-called legal highs, particularly synthetic cannabinoids, as a substitute for cannabis while in treatment, which initially led to difficulties. These patients showed all of the symptoms of problematic cannabis use; however no cannabis consumption could be proven through urine testing and therefore were not sufficiently talked about in the treatment process. In the meantime, the problems are known and urine tests are also analysed with respect to synthetic cannabinoids and are correspondingly positive.

#### 12.2.8 Current topics

In addition to the topics previously mentioned in the text, only the implementation of diamorphine treatment can be mentioned here by way of example. Since the law on diamorphine-assisted substitution treatment came into effect (German Federal Law Gazette, BGBI., I of 20 July 2009, p. 1801) in July 2009, there have been efforts to create the preconditions for these treatment forms in Berlin as well. With these provisions, legal conditions were created under which heavy opioid addicts, for whom diamorphine treatment is indicated as part of an abstinence-oriented comprehensive treatment, could be treated.

In connection with diamorphine-assisted substitution treatment, the State of Berlin has several tasks. Together with the Physician's Association, it must make sure that access to treatment is enabled for heavy opioid addicts so that the legal entitlement to treatment can be realised. As part of the State's control function, it must be ensured that treatment is embedded in the overall concept of addiction aid services and that the requirements for granting approval are established. In addition, safety precautions must be established guaranteeing the safety of the procurement, storage and dispensing of drugs in order to prevent diamorphine abuse.

Due to the high costs that arise when setting up a diamorphine centre, the Senate Administration for Health has made provisions by allocating special funds in the current budget. They are available for the adaptation of existing services and security measures. In addition, the competent Senate Administration has been working with established physicians, who are qualified for the treatment, hospital representatives and addiction support representatives on implementing diamorphine based substitution treatment in Berlin since summer 2009. In particular due to the high demands that the Joint Federal Committee has made towards human and material resources of a facility, it has been yet possible to establish such treatment in Berlin. Accordingly, other cities that did not participate in the former federal model project have not yet had any success in this respect. In the meantime, however, a physician with experience in diamorphine treatment has decided to found a facility with the support of the Senate Administration. Preparations are currently being made. The facility is scheduled to open in the first half of 2013.

### PART C: BIBLIOGRAPHY AND ANNEXES

# 13. Bibliography

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#### 13.2 Websites

Apart from the websites of the most important bodies and organizations, the table contains a selection of some innovative initiatives carried out in the area of demand reduction. The list is an extract of the myriad of addresses that exist in this field.

#### Important institutions

Website	Content
www.bmg.bund.de	Bundesministerium fuer Gesundheit (BMG) Federal Ministry for Health
www.bzga.de	Bundeszentrale fuer gesundheitliche Aufklaerung (BZgA) Federal Centre for Health Education (FCHE)
www.dbdd.de	Deutsche Beobachtungsstelle fuer Drogen und Drogensucht (DBDD) German Monitoring Centre for Drugs and Drug Addiction
www.dhs.de	Deutsche Hauptstelle fuer Suchtfragen (DHS) German Centre for Addiction Issues
www.drogenbeauftragte.de	Drogenbeauftragte der Bundesregierung Commissioner of the Federal Government on Narcotic Drugs
www.drugcom.de	BZgA Informationen fuer junge Leute und Partygaenger Federal Centre for Health Education information for young people and party goers
www.drugscouts.de	Land project in Saxony for young people
www.emcdda.europa.eu	Europaeische Beobachtungsstelle fuer Drogen und Drogensucht (EBDD) European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)
www.prevnet.de	"PrevNet" serves as a network between persons involved in drug prevention and facilitates access to information and material
www.rki.de	Robert Koch-Institute (RKI), Berlin

#### Websites of research institutions

Further information on individual research projects, network structures and cooperation partners as well as research reports and literature references can be found at the websites of the research associations:

Website	Content
https://www.fh-	Institut für Suchtforschung der Fachhochschule
frankfurt.de/de/fachbereiche/fb4/forschu	Frankfurt/Main
ng/forschungsinstitute/isff.html	Institute for Addiction Research of the Technical College

Website	Content
	Frankfurt/Main
http://www.katho-nrw.de/katho- nrw/forschung-entwicklung/institute-der- katho-nrw/disup/	Deutsches Institut für Sucht- und Präventionsforschung (DISuP; ehemals Kompetenzplattform Suchtforschung) an der katholischen Fachhochschule NRW German Institute for Addiction and Prevention Research (DISuP; former Competence Platform for Addiction Research at the Catholic University of Applied Sciences in North Rhine-Westphalia
www.dg-sucht.de	Deutsche Gesellschaft für Sucht German Association for Addiction
www.heroinstudie.de	Deutsche Heroinstudie German Heroin Study
www.ift.de	Institut für Therapieforschung München Institute for Therapy Research Munich
www.medizin.uni- greifswald.de/epidem/forschung/interve ntion/earlint.html	Suchtforschungsverbund Nord-Ost ("Frühintervention bei substanzbezogenen Störungen" (EARLINT) Addiction Research Association North-East, "Early intervention on substance-related disorders" (EARLINT)
www.premos-studie.de	Premos-Studie Premos-Study
www.psychologie.tu-dresden.de	Technische Universität Dresden Institut für Klinische Psychologie und Psychotherapie Technical University Dresden Institute for Clinical Psychology and Psychotherapy
www.suchtforschungsverbund.de	Suchtforschungsverbund an Fachhochschulen (SFFH) mit den Standorten Frankfurt/M., Köln, Aachen und Mainz Addiction Research Association at Universities of Applied Sciences in Frankfurt/Main, Cologne, Aachen and Mainz
www.suchtforschungsverbund-nrw.de	Suchtforschungsverbund Nordrhein-Westfalen Addiction Research Association Northrhine-Westfalia
www.uke.de/zentren/suchtfragen-kinder-jugend/index.php	Universitätsklinikum Hamburg Eppendorf Deutsches Zentrum für Suchtfragen des Kindes- und Jugendalters (DZSKJ) University Clinic Hamburg Eppendorf German Centre for Addiction Problems among Children and Adolescents
www.crdr-uni-frankfurt.de	Goethe Universität Frankfurt am Main Goethe University Frankfurt/Main Centre For Drug Research (CDR)
www.zi-mannheim.de	Zentralinstitut für seelische Gesundheit Mannheim Central Institute for Mental Health Mannheim
www.zis-hamburg.de	Zentrum für interdisziplinäre Suchtforschung Hamburg Centre for Interdisciplinary Addiction Research

### Websites of other relevant institutions/working groups

Website	Content
transit.gangway.de	Transit - Projekt für transkulturelle Suchtarbeit Transit – Project for transcultural addiction work

Website	Content
www.500Fragen.de	Forum for substitution and law dealing with legal aspects of treatment from a practical point of view. Therapists working in substitution therapy receive valuable information on the legal situation that forms the background for their daily work
www.fachstelle-faire.de	Fachstelle für Arbeitsmarktintegration und Reintegration Suchtkranker Department for Labour Market Integration and Reintegration of Addicts
www.indro-online.de	Institut zur Förderung qualitativer Drogenforschung, akzeptierender Drogenarbeit und rationaler Drogenpolitik Münster Institute for the Promotion of High Quality Drug Research, Addiction Work and Rational Drug Policy in Muenster
www.iss-ffm.de	Institut für Sozialarbeit und Sozialpädagogik Frankfurt/M. Institute for Social Work and Social Education in Frankfurt/Main
www.suchthh.de	Hamburgische Landesstelle für Suchtfragen e.V. Büro für Suchtprävention Hamburg Land Centre for Addiction Problems Department for Addiction Prevention

# **Cannabis-specific projects**

Website	Content
www.be-u-online.de	Cannabis campaign of the city of Frankfurt
www.candis-projekt.de/	Modular therapy of cannabis-related disorders
www.canstop.med.uni-rostock.de	The group training programme "Can Stop" was developed on behalf of the German Ministry of Health by the German Centre for Addiction among Children and Young People (DZSKJ). "Can stop" is a manual treatment programme for young people with cannabis disorders
www.dhs.de/projekte/abgeschlossene- projekte/cannabis.html	The goal of the project "AVerCa" is to set up an effective care service for the early detection and intervention in cannabis misuse among young people
www.incant.eu	International Cannabis Need of Treatment Study
www.quit-the-shit.net	Available since 2004 at www.drugcom.de, the cannabis cessation programme "Quit the Shit" addresses people with regular cannabis use
www.realize-it.org	Counselling service for cannabis use, offered in Germany and Switzerland

### Party projects

Website	Content
www.alice-project.de	Alice Project - Frankfurt
www.chill-out.de	Chill-Out – Gemeinnütziger Verein zur Förderung der Kommunikationskultur e.V. Aachen chill-out – non-profit association for the promotion of communication culture in Aachen
www.drobs-hannover.de	Jugend- und Suchtberatungszentrum/ Psychosoziale Beratungs- und Behandlungsstelle Hannover Centre for young people with addiction problems / psychosocial counselling and treatment centre in Hannover
www.drugscouts.de	SZL Suchtzentrum gGmbH Leipzig Addiction Centre Leipzig
www.eve-rave.net	Verein zur Förderung der Partykultur und Minderung der Drogenproblematik e.V. Berlin Association for the promotion of party culture and the reduction of drug problems in Berlin
www.partypack.de	Drogenhilfe Köln e.V. Drug Aid Cologne
www.party-project.de	Party Project e.V. Bremen

#### Safer Use / Harm Reduction

Website	Content
www.konsumraum.de	Information platform for staff working in drug therapeutic ambulatories and consumption rooms
www.saferuse-nrw.de	Safer use pages of the AIDS Help of Northrhine-Westfalia e.V.
www.spritzenautomaten.de	Deutsche AIDS-Hilfe e.V. – Projekt Spritzenautomaten JETZT German Aids Help Organisation AIDS-Hilfe – Project Syringe dispensing machines NOW

### In-patient treatment of drug addicts in Germany

Website	Content
www.bar-frankfurt.de	Bundesarbeitsgemeinschaft für Rehabilitation e.V. (BAR) Federal work association for rehabilitation (BAR)
www.suchthilfe.de	Bundesverband für stationäre Suchtkrankenhilfe e.V. (buss) Federal association for in-patient addiction aid
www.synanon-aktuell.de	Suchtselbsthilfe/Suchthilfegemeinschaft Synanon, Berlin Addiction self-help/Addiction aid community Synanon, Berlin

# Drug policy in large European cities

Website	Content
rathaus.rostock.de	Rostock
www.berlin.de	Berlin
www.bremen.de	Bremen
www.dortmund.de	Dortmund
www.dresden.de	Dresden
www.duesseldorf.de	Dusseldorf
www.essen.de	Essen
www.frankfurt.de	Frankfurt
www.hamburg.de	Hamburg
www.leipzig.de	Leipzig
www.muenchen.de	Munich
www.stadt-koeln.de	Cologne
www.stuttgart.de	Stuttgart

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