



European Monitoring Centre  
for Drugs and Drug Addiction



Tim Pfeiffer-Gerschel, Lisa Jakob & Daniela Stumpf  
IFT Institute for Therapy Research

Axel Budde, Federal Centre for Health Education

Christina Rummel, German Centre for Addiction Issues (DHS)

Assisted by

Alicia Casati, IFT Institute for Therapy Research

## **2014 NATIONAL REPORT (2013 data) TO THE EMCDDA**

**by the Reitox National Focal Point**

**New Developments and Trends**

**GERMANY**

**Drug Situation 2013/2014**

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

*Responsible for chapters 1, 2, 4, 5, 6, 7, 8, 9 and 10*

Dr. Tim Pfeiffer-Gerschel (Head of DBDD)      Parzivalstr. 25  
Lisa Jakob      D - 80804 München  
Daniela Stumpf      Tel.: +49 (0) 89 - 360804-40  
Alicia Casati      Fax: +49 (0) 89 - 360804-49  
E-Mail: pfeiffer-gerschel@ift.de

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

*Responsible for chapter 3*

Axel Budde  
Michaela Goecke

Ostmerheimer Str. 220  
D - 51109 Köln  
Tel.: +49 (0) 221 - 8992-529  
Fax: +49 (0) 221 - 8992-300  
E-Mail: axel.budde@bzga.de

**German Centre for Addiction Issues  
(DHS) (Treatment)**

*Responsible for chapter 5*

Christina Rummel  
Gabriele Bartsch

Westenwall 4  
D - 59065 Hamm  
Tel.: +49 (0) 2381 - 9015-24  
Fax: +49 (0) 2381 - 9015-30  
E-Mail: rummel@dhs.de

## 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' annual conferences, held 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. Daniela Piontek, IFT Munich
- Key indicator prevalence estimate on problem drug use (chapter 4)  
National expert: Dr. Ludwig Kraus, IFT Munich
- Key indicator drug-related infectious diseases (chapter 6)  
National expert: Dr. Ruth Zimmermann, Robert Koch-Institut
- Key indicator Treatment demand (chapter 5)  
National expert: Dr. Barbara Braun, IFT Munich
- Key indicator drug-related deaths (chapter 6)  
National expert: Dr. Axel Heinemann, Universitätsklinikum Hamburg-Eppendorf (UKE)

In addition to the persons mentioned above, the following experts have also contributed to the creation of this annual report:

Michael Hoffmann, BKA Wiesbaden (chapter 10), Boris Orth, BZgA (chapters 2 and 10), Dr. Bernd Werse, CDR Frankfurt (chapter 2).

**Notice:** For reasons of improved readability, the following refrains from using female grammatical forms that are instead subsumed under the respective male form.



# Contents

## Introduction

## Summary

**PART A: NEW DEVELOPMENTS AND TRENDS .....1**

**1 DRUG POLICY: LEGISLATION, STRATEGIES AND ECONOMIC ANALYSIS..... 1**

1.1 Overview ..... 1

1.1.1 Definitions .....1

1.1.2 Objectives and focal points of “drug and addiction policy” .....1

1.1.3 Political Framework .....3

1.2 Legal framework conditions ..... 4

1.2.1 Laws, regulations, directives or guidelines in the field of drug issues .....4

1.2.2 Implementation of legal framework conditions .....6

1.3 National action plan, evaluation and coordination ..... 10

1.3.1 National Strategy .....10

1.3.2 Implementation and evaluation of the National Strategy .....11

1.3.3 Other drug policy developments .....18

1.3.4 Coordination arrangements .....18

1.4 Economic analysis ..... 19

1.4.1 Introduction .....19

1.4.2 Public expenditures and budgets .....19

1.4.3 Social Costs .....20

**2 DRUG USE IN THE POPULATION AND SPECIFIC TARGETED GROUPS..... 21**

2.1 Overview ..... 21

2.2 Drug use in the general population ..... 25

2.2.1 Overview of the use of various drugs .....25

2.2.2 Comparison of the use of individual drugs .....26

2.3 Drug use in the school and youth population ..... 30

2.3.1 Use of legal psychotropic substances .....30

2.3.2 Use of illegal drugs .....32

2.4 Drug use among targeted groups ..... 43

2.5 Further research results and findings ..... 45

<b>3</b>	<b>PREVENTION .....</b>	<b>53</b>
3.1	Overview.....	53
3.1.1	Institutions involved and organisational framework.....	53
3.1.2	Current developments and trends .....	53
3.1.3	Effectiveness and efficiency in addiction prevention .....	61
3.2	Universal prevention .....	64
3.2.1	School.....	64
3.2.2	Family .....	66
3.2.3	Community Prevention .....	67
3.2.4	Recreational settings and sports clubs.....	68
3.3	Selective Prevention .....	68
3.3.1	At-risk groups.....	69
3.3.2	At-risk families .....	71
3.3.3	Selective prevention in recreational settings .....	73
3.4	Indicated prevention .....	73
3.4.1	Children and teenagers with behavioural disorders .....	74
3.4.2	Children with ADHD.....	74
3.4.3	Early recognition and early intervention .....	74
3.4.4	National and regional media campaigns .....	76
<b>4</b>	<b>HIGH RISK DRUG USE .....</b>	<b>79</b>
4.1	Overview.....	79
4.2	Prevalence and incidence estimate of problem drug use .....	81
4.2.1	EMCDDA estimate methods (indirect estimates).....	81
4.2.2	Incidence estimates of problem drug use.....	83
4.3	Data on problem drug use from non-treatment sources .....	84
4.4	Intensive frequent, long-term and other problematic forms of drug use .....	85
4.4.1	Description of the forms of use falling outside of the HRDU-definition of the EMCDDA.....	85
4.4.2	Prevalence estimates of intensive, frequent, long-term and other problematic forms of use not included in the HRDU definition.....	85
4.4.3	Medical drug abuse .....	86
<b>5</b>	<b>DRUG-RELATED TREATMENT: TREATMENT DEMAND AND AVAILABILITY .....</b>	<b>91</b>
5.1	Overview.....	91
5.2	Strategy, Policy.....	93
5.3	Treatment system .....	96
5.3.1	Organisation and quality assurance .....	96
5.3.2	Availability and diversification of treatment.....	100

5.4	Characteristics of treated clients.....	101
5.4.1	Outpatient treatment.....	101
5.4.2	Inpatient treatment.....	107
5.5	Trends of clients in treatment .....	111
5.5.1	Developments in the outpatient and inpatient setting.....	111
5.5.2	Substitution treatment.....	114
5.5.3	Other current developments .....	118
<b>6</b>	<b>HEALTH CORRELATES AND CONSEQUENCES .....</b>	<b>121</b>
6.1	Overview.....	121
6.1.1	Drug-related infectious diseases .....	121
6.1.2	Drug-related deaths .....	122
6.2	Drug-related infectious diseases .....	123
6.2.1	HIV/AIDS and viral hepatitis B and C .....	123
6.2.2	Sexually transmissible diseases, tuberculosis and other infectious diseases.....	131
6.2.3	Data on risky behaviour.....	131
6.3	Other drug-related health correlates and consequences.....	131
6.3.1	Non-fatal overdoses and drug-related emergencies .....	131
6.3.2	Other topics of interest.....	133
6.4	Drug-related deaths and mortality in drug users.....	134
6.4.1	Drug-induced deaths (overdose/intoxication).....	134
6.4.2	Mortality and cases of death among drug users (mortality cohort studies).....	140
6.4.3	Specific causes of mortality indirectly related to drug use.....	141
<b>7</b>	<b>RESPONSES TO HEALTH CORRELATES AND CONSEQUENCES.....</b>	<b>143</b>
7.1	Overview.....	143
7.2	Prevention of drug-related emergencies and reduction of drug-related deaths.....	143
7.3	Prevention and treatment of drug-related infectious diseases.....	144
7.4	Responses to other health correlates among drug users .....	148
<b>8</b>	<b>SOCIAL CORRELATES AND SOCIAL REINTEGRATION .....</b>	<b>149</b>
8.1	Overview.....	149
8.2	Social exclusion and drug use .....	150
8.2.1	Social exclusion of drug users.....	150
8.2.2	Drug use among socially excluded groups.....	153
8.3	Social reintegration .....	156
8.3.1	Education, vocational training.....	157
8.3.2	Employment.....	157

<b>9</b>	<b>DRUG-RELATED CRIME, PREVENTION OF DRUG-RELATED CRIME AND PRISON .....</b>	<b>161</b>
9.1	Overview .....	161
9.2	Drug-related crime .....	161
9.2.1	Drug law offences .....	161
9.2.2	Other drug-related crime.....	168
9.3	Prevention of drug-related crime .....	170
9.4	Interventions in the criminal justice system .....	170
9.4.1	Alternatives to prison .....	170
9.4.2	Other interventions in the criminal justice system .....	171
9.5	Drug use and problem drug use in prisons.....	171
9.5.1	Prevention, treatment and care of infectious diseases.....	175
9.5.2	Prevention of overdose risk upon release .....	175
9.6	Reintegration of drug users after release from prison .....	176
<b>10</b>	<b>DRUG MARKETS .....</b>	<b>177</b>
10.1	Overview .....	177
10.2	Availability and supply .....	179
10.2.1	Perceived availability of drugs, exposure and access to drugs.....	179
10.2.2	Drugs origin: national production versus imported.....	181
10.3	Seizures.....	182
10.3.1	Quantities and numbers of seizures of all illicit drugs .....	182
10.3.2	Quantities and numbers of seizures of precursor chemicals used in the manufacture of illicit drugs .....	185
10.3.3	Number of illegal laboratories and other production sites .....	185
10.4	Price / purity.....	186
10.4.1	Prices of illicit drugs at retail level.....	186
10.4.2	Purity / Potency of illicit drugs.....	188
	<b>PART B: BIBLIOGRAPHY AND ANNEXES .....</b>	<b>193</b>
<b>11</b>	<b>BIBLIOGRAPHY .....</b>	<b>193</b>
11.1	Literature.....	193
11.2	Websites .....	211
<b>12</b>	<b>TABLES .....</b>	<b>215</b>
<b>13</b>	<b>FIGURES.....</b>	<b>217</b>



## Abbreviations

Abbreviation	German	English
ABDA	Bundesvereinigung Deutscher Apothekerverbände	Federal Union of German Associations of Pharmacists
ADHS	Aufmerksamkeitsdefizit-/Hyperaktivitätsstörung	Attention Deficit Hyperactivity Disorder
AG	Arbeitsgemeinschaft	Working group
AIDS	Acquired Immune Deficiency Syndrome	Acquired Immune Deficiency Syndrome
AMG	Arzneimittelgesetz	Medical Products Act
AOLG	Arbeitsgemeinschaft der Obersten Landesgesundheitsbehörden	Working Group on Addiction Help of the Supreme Federal States' Public Health Offices
APA	American Psychiatric Association	American Psychiatric Association
APAAN	$\alpha$ -Phenylacetonitril	$\alpha$ -Phenylacetonitril
AWMF	Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften	Association of the Scientific Medical Societies in Germany
BADO	Hamburger Basisdokumentation im Suchtbereich	Hamburg Basic Documentation System for Addiction Issues
BAG	Bundesarbeitsgemeinschaft Wohnungslosenhilfe	Federal Working Group for Assistance to the Homeless
BÄK	Bundesärztekammer	German Medical Association
BAS	Bayerische Akademie für Suchtfragen e.V.	Bavarian Academy for Addiction Issues
BayStVollzG	Bayerisches Strafvollzugsgesetz	Bavarian Prison Law
BAMF	Bundesamt für Migration und Flüchtlinge	Federal Agency for Migration and Refugees
BbgJVollzG	Brandenburgisches Justizvollzugsgesetz	Prison law of Brandenburg
BfArM	Bundesinstitut für Arzneimittel und Medizinprodukte	Federal Institute for Drugs and Medical Devices
BGBI	Bundesgesetzblatt	German Federal Law Gazette
BGH	Bundesgerichtshof	Federal High Court of Justice
BISS	Modellprojekt "Berufliche Integration nach Stationärer Suchtrehabilitation"	Pilot project "Employment Integration after Inpatient Addiction Rehabilitation"
BKA	Bundeskriminalamt	Federal Criminal Police Office
BKiSchG	Bundekinderschutzgesetz	Federal Child-Protection Act
BLKA	Bayerischen Landeskriminalamt	Bavarian State Criminal Police Office
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
BMG	Bundesministerium für Gesundheit	Federal Ministry for Health
BMI	Bundesministerium des Innern	Federal Ministry of the Interior
BMJ	Bundesministerium der Justiz	Federal Ministry of Justice
BMJFG	Bundesministerium für Jugend, Familie, Frauen und Gesundheit	Federal Ministry for Youth, Family, Women's Affairs and Health
BMK	Benzylmethylketon	Benzyl methyl ketone
bng	Berufsverband Niedergelassener Gastroenterologen	Association of Gastroenterologists in Private Practice
BtM	Betäubungsmittel	Narcotic drugs
BtMÄndV	Betäubungsmittelrechts-Änderungsverordnung	Amending regulation on narcotic drugs
BtMG	Betäubungsmittelgesetz	Narcotics Act
BtMVV	Betäubungsmittelverschreibungsverordnung	Narcotics Prescription Regulation
buss	Der Bundesverband für stationäre Suchtkrankenhilfe e.V.	Federal Association for Inpatient Addiction Help
BZE	Benzoylcegonin	Benzoylcegonine
BZgA	Bundeszentrale für gesundheitliche Aufklärung	Federal Centre for Health Education
CAN	Swedish Council for Information on Alcohol and Other Drugs	Swedish Council for Information on Alcohol and Other Drugs
CAN Stop	Projekt zur Entwicklung und Evaluation eines Gruppentrainings für junge Menschen mit problematischem Cannabiskonsum	Project for the development and evaluation of a group training for young people with problem cannabis use
CATI	Computer Assisted Telephone Interview	Computer Assisted Telephone Interview
CBD	Cannabidiol	Cannabidiol
CDR	Centre for Drug Research	Centre for Drug Research
CI	Konfidenzintervall (KI)	Confidence Interval
CND	Suchtstoffkommission der Vereinten Nationen	Commission on Narcotic Drugs of the United Nations
CNN	Projekt „Chancen nahtlos nutzen – Sucht-Selbsthilfe als aktiver Partner im Netzwerk“	Project - "Seamlessly Seize Opportunities - addiction self-help as an active partner in the network"
COMBASS	Computergestützten Basisdokumentation der Suchthilfe in Hessen	Computer-assisted basic documentation of addiction support in Hessen

CPT	European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment	European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment
CU	Konsumeinheit (KE)	Consumption Unit
DAH	Deutsche Aidshilfe	German AIDS Service Organisation
DAS	Drogenaffinitätsstudie der BZgA	Drug Affinity Study of the Federal Centre for Health Education
DBDD	Deutsche Beobachtungsstelle für Drogen und Drogensucht	German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction
DDD	Definierte Tagesdosis (defined daily dose)	Defined Daily Dose
DEGS	Deutsche Epidemiologische Gesundheitssurvey	German Epidemiological Health Survey
DeStatis	Statistisches Bundesamt Deutschland	Federal Statistics Office
DGPPN	Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde	German Association of Psychiatry, Psychotherapy and Psychosomatics
DG-SPS	Deutschen Gesellschaft für Suchtpsychologie	German Association for Addiction Psychology
DG-Sucht	Deutsche Gesellschaft für Suchtforschung und Suchttherapie	German Society for Addiction Research and Treatment
DGVS	Deutsche Gesellschaft für Verdauungs- und Stoffwechselkrankheiten	German Society for Digestive and Metabolic Diseases
DGS	Deutsche Gesellschaft für Suchtmedizin	German Society for Addiction Medicine
DHC	Dihydrocodein	Dihydrocodeine
DHS	Deutsche Hauptstelle für Suchtfragen	German Centre for Addiction Issues
DISuP	Deutsches Institut für Sucht- und Präventionsforschung	German Institute for Addiction and Prevention Research
Dot.sys	Dokumentationssystem für Maßnahmen der Suchtprävention	Documentation System for Drug Prevention
DPH	Diphenhydramin	Diphenhydramine
DPIP	Drug Prevention and Information Programme	Drug Prevention and Information Programme
DROBS	Jugend- und Drogenberatungsstelle Kehlheim	Youth and Drugs Counselling Centre, Kehlheim
DRUCK	Studie zu Drogen und chronischen Infektionskrankheiten	Drugs and Chronic Infectious Diseases
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
ECHO-Studie	Epidemiologie der Hepatitis-C-Virus Infektion bei Opioidsubstituierten	Study on the epidemiology of the hepatitis C virus infection amongst opioid substitution clients
ECDC	Europäisches Zentrum für die Prävention und die Kontrolle von Krankheiten	European Centre for Disease Prevention and Control
ECJ	Europäischer Gerichtshof (EuGH)	European Court of Justice
EKhD	Erstauffällige Konsumenten harter Drogen	Users of hard drugs who have come to the attention of the police for the first time
ELSA	Online-Plattform „Elternberatung bei Suchtgefährdung und Abhängigkeit von Kindern und Jugendlichen“	Online platform “Parent Counselling in cases of Children and Youths at Risk of Addiction and Dependence”
ESA	Epidemiological Survey on Addiction (früher „Bundesstudie“)	Epidemiological Survey on Addiction
ESA	Europäisches System Volkswirtschaftlicher Gesamtrechnung (ESVG)	European System of Accounts
ESPAD	Europäische Schülerstudie zu Alkohol und anderen Drogen	European School Survey Project on Alcohol and Other Drugs
ETHOS	Europäischen Typologie für Obdachlosigkeit, Wohnungslosigkeit und prekäre Wohnversorgung	European Typology of Homelessness and Housing Exclusion
EU	Europäische Union	European Union
fdr	Fachverband Drogen und Rauschmittel e.V.	Professional Association of Drug Help Organisations
FDR	Falldatei Rauschgift	Drugs Data File
FeV	Fahrerlaubnisverordnung	Driving Licence Regulation
FOGS	Gesellschaft für Forschung und Beratung im Gesundheits- und Sozialbereich	Society for Research and Advice in Health and Social Care
FreD	Frühintervention bei erstauffälligen Drogenkonsumenten	Early intervention in first-offence drug users
G-BA	Gemeinsamer Bundesausschuss	Common Federal Committee
GBL	γ-Butyrolacton	γ-butyrolactone
GDP	Bruttoinlandsprodukt (BIP)	Gross Domestic Product
GG	Grundgesetz	German Constitution

GHB	Gammahydroxybutyrat	Gamma-Hydroxybutyric Acid
GIZ	Giftinformationszentrum	Poisons Information and Treatment Centre
GKV	Gesetzliche Krankenversicherung	SHI -Statutory Health Insurance Scheme
GVS	Gesamtverband für Suchtkrankenhilfe im Diakonischen Werk der Evangelischen Kirche in Deutschland e. V.	Association of Addiction Help Services offered by Germany's protestant churches
HBSC	Studie "Health Behaviour in School-aged Children"	Health Behaviour in School-aged Children
HBV	Hepatitis B-Virus	Hepatitis B Virus
HCV	Hepatitis C-Virus	Hepatitis C Virus
HD	Hauptdiagnose	Main Diagnosis
HDG	Horizontale Gruppe "Drogen" des Rates der Europäischen Union	Horizontal Drugs Group of the European Union
HIV	Humanes Immundefizienz-Virus	Human Immunodeficiency Virus
HmbStVollzG	Hamburgisches Strafvollzugsgesetz	Hamburg Prison Law
HRDU	High Risk Drug Use	High Risk Drug Use
HStVollzG	Hessisches Strafvollzugsgesetz	Hessian Prison Law
ICD	International Classification of Diseases	International Classification of Diseases
IFT	Institut für Therapieforschung	Institute for Therapy Research
IfSG	Infektionsschutzgesetz	Infectious Diseases Protection Act
IMAGE	International Multicenter ADHD Genetics Projekt	International Multicenter ADHD Genetics Project
INCB	Suchtstoffkontrollrat der Vereinten Nationen	International Narcotics Control Board
IPA	Instrument für Heranführungshilfe	Instrument for Pre-Accession Assistance
ISFF	Institut für Suchtforschung Frankfurt/Main	Addiction Research Institute Frankfurt/Main
ITMS	Infratest Telefon Mastersample	Infratest Telephone Master Sample
i.v.	intravenös	Intravenous
IVD	intravenös Drogengebrauchende	Intravenous Drug User
JDH-Studie	Studie „Jugend, Drogen, Hintergründe“	Study "Adolescence, Drugs, Backgrounds"
JGG	Jugendgerichtsgesetz	Youth Courts Law
JVA	Justizvollzugsanstalt	Detention facility
JVollzGB	Justizvollzugsgesetzbuch	Prison Code
KBS	Koordinierungsstelle der bayerischen Suchthilfe	Coordination Office of the Bavarian Addiction Support Service

KDS	Deutscher Kerndatensatz zur Dokumentation im Bereich der Suchtkrankenhilfe	German Core Data Set for Addiction Help
KFN	Kriminologisches Forschungsinstitut Niedersachsen	Criminological Research Institute of Lower Saxony
KiGGS	Kinder- und Jugendgesundheitssurvey	Health Interview and Examination Survey for Children and Adolescents
KKG	Gesetz zur Kooperation und Information im Kinderschutz	Act on Cooperation and Information in the area of Child Protection
KOALA e.V.	Kinder ohne den schädlichen Einfluss von Alkohol und anderen Drogen e.V.	Children Without the Harmful Influence of Alcohol and Other Drugs - help association for children from families with addiction problems
KT	Kriminaltechnisches Institut	Forensic Institute
LJVollzG	Landesjustizvollzugsgesetz	Prison Law of a <i>Land</i>
LKA / LKÄ	Landeskriminalamt / Landeskriminalämter	<i>Land</i> Criminal Police Office/Officers
LMS	Local Monitoring System	Local Monitoring System
LSD	Lysergsäurediethylamid	Lysergic Acid Diethylamide
LWL	Landschaftsverband Westfalen-Lippe	Regional Authority of Westphalia-Lippe
LZ	Lebenszeit	Lifetime
M-CIDI	Münchener Composite International Diagnostic Interview	Munich Composite International Diagnostic Interview
m-CPP	1-(3-Chlorphenyl)-piperazin	1-(3-Chlorophenyl)-piperazine
MDA	3,4-Methylenedioxyamphetamin	3,4-Methylenedioxyamphetamine
MDFT	Multidimensionale Familientherapie	Multi-Dimensional Family Therapy
MDMA	3,4-Methylenedioxy-N-Methylamphetamin	3,4-Methylenedioxy-N-Methylamphetamine
MDPV	Methylenedioxypropylamphetamin	Methylenedioxypropylamphetamine
MODRUS IV	Vierte Studie "Moderne Drogen- und Suchtprävention"	Modern Drug and Addiction Prevention
MoSyD	Frankfurter Monitoringsystem Drogen	Frankfurt Drug Trends Monitoring System
MRV	Maßregelvollzug	Hospital Treatment Order
MS	Multiple Sklerose	Multiple Sclerosis
MSM	Männer, die Sex mit Männern haben	Men who have Sex with Men
NJVollzG	Niedersächsisches Justizvollzugsgesetz	Lower-Saxon Prison Law
NPS	neue psychoaktive Substanzen	New Psychoactive Substances
NRW	Nordrhein-Westfalen	Lower-Saxon Prison Law
ODAS	Opiate Dosage Adequacy Scale	Opiate Dosage Adequacy Scale
OMT	Aufrechterhaltender Substitutionsbehandlung	Opioid Maintenance Treatment

OR	Odds ratio	Odds ratio
OST	Opioid-Substitutionstherapie	Opioid substitution therapy
PHP	Public Health Programme	Public Health Programme
PKS	Polizeiliche Kriminalstatistik	Police Criminal Statistics
PREMOS	Predictors, Moderators and Outcomes of Substitution Treatment - Studie	Predictors, Moderators and Outcomes of Substitution Treatment - Study
ProPK	Programm Polizeiliche Kriminalprävention der Länder und des Bundes	Program Police Criminal Prevention of the <i>Laender</i> and the Federal Government
RARHA	Projekt „Reducing alcohol-related harm“	Project “Reducing alcohol-related harm”
RC	Research Chemicals	Research Chemicals
REITOX	Europäisches Informationsnetzwerk zu Drogen und Sucht (Réseau Européen d’Information sur les Drogues et les Toxicomanies)	REITOX- European Information Network on Drugs and Addiction
RKI	Robert Koch - Institut	Robert Koch Institute
RV	Rentenversicherung	Pension Insurance
SächsSt-VollzG	Sächsisches Strafvollzugsgesetz	Saxon Prison Law
SANOPSA	Sucht im Alter – Netz- und netzwerkbasierte Optimierung der ambulanten und stationären Pflege	Addiction in the elderly - Web and network-based optimization of outpatient and inpatient care
SCHULBUS	Schüler- und Lehrerbefragung zum Umgang mit Suchtmitteln, Hamburg	Student and teacher survey on the use of addictive substances, Hamburg
SD	Standardabweichung	Standard Deviation
SGB	Sozialgesetzbuch	Social Security Codes
SKOLL	Selbstkontrolltraining	Self-control Training
SLStVollzG	Saarländisches Strafvollzugsgesetz	Prison Law of Saarland
SQ	Strukturierten Fragebögen	Standard Questionnaire
ST	Standardtabellen	Standard Table
SROM	Slow-Release Oral Morphine	Slow-Release Oral Morphine
StGB	Strafgesetzbuch	Penal Code
StVG	Straßenverkehrsgesetz	Road Traffic Act
StVO	Straßenverkehrsordnung	Road Traffic Regulations
StVollzG	Strafvollzugsgesetz	Prison Law
StVollzG M-V	Strafvollzugsgesetz Mecklenburg-Vorpommern	Prison Law of Mecklenburg-Vorpommern
SVR	sustained virologic response	sustained virologic response

TDI	Treatment Demand Indicator	Treatment Demand Indicator (epidemiological key indicator of the EMCDDA)
THC	Tetrahydrocannabinol	Tetrahydrocannabinol
TK	Techniker Krankenkasse	A German health insurance provider
UKE	Universitätsklinikum Hamburg-Eppendorf	University Clinic Hamburg-Eppendorf
UNODC	Büro der Vereinten Nationen für Drogen- und Verbrechensbekämpfung	United Nations Office on Drugs and Crime
WHO	Weltgesundheitsorganisation	World Health Organisation
WINEG	Wissenschaftliches Institut der TK für Nutzen und Effizienz im Gesundheitswesen	Scientific Institute of the TK for Benefit and Efficiency in Health Care
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 report for 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 is only partly reflected by the annual REITOX report.

The DBDD produced the German REITOX Report 2013/2014 in accordance with the standard European guidelines issued by the EMCDDA, taking into account the feedback from past years’ quality reports. The report is mainly based on the data from the year 2013, but also includes findings from the year 2014 to the extent they are available by the time the report is completed.

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 surveys that are carried out on a regular basis. The introductory passages are intended to place the updated information on the drug situation in context without the need for supplementary literature. These parts of the report have been marked (framed, with a grey background) so that readers who are familiar with the framework of the German reporting system can concentrate on the new developments.

The other sections of the chapters provide exclusively new data and findings from the reporting year. Older data is only used for comparative purposes where appropriate. Otherwise, the report refers the reader 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>1</sup> Réseau Européen d’Information sur les Drogues et les Toxicomanies.

<sup>2</sup> <http://www.emcdda.europa.eu/data/2014> (last accessed, 14 August 2014).

Since 2013, the EMCDDA has, in the course of producing its annual report, published a comprehensive, interactive information package which also includes the topic specific, "Perspectives on Drugs", which is available at <http://www.emcdda.europa.eu/edr2014>. The 2014 edition looks in particular at the topics of "Wastewater analysis", "Europe's cannabis market", "Injection of synthetic cathinones", "Healthcare services for methamphetamine users", "Internet-based drug treatment" and "Treatment for cocaine dependence".

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 website of the DBDD, where you can find further information on the DBDD and on the national report ([www.dbdd.de](http://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](http://www.emcdda.europa.eu).

Munich, August 2014

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](http://www.dbdd.de).

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

German drug and addiction policy follows a cross-substance approach which focuses on aspects common to all psychotropic substances. In 2012, the "National Strategy on Drug and Addiction Policy" was passed by the German Federal Cabinet (see also 2012 and 2013 REITOX Reports) which replaced the "Action Plan for Drugs and Addiction" from 2003. The objective of the German Drug and Addiction Policy continues to be the reduction of the consumption of legal and illegal addictive substances as well as the avoidance of social problems caused by drugs and addiction.

On 15 January 2014, Marlene Mortler was officially appointed Federal Government Commissioner on Narcotic Drugs by the Cabinet. There has been no change to the responsibilities of the Federal Government Commissioner on Narcotic Drugs in the 18th legislative period.

The 28th Amending Regulation on Narcotic Drugs (BtMÄndV) was still at the hearing stage at the time of creation of the REITOX Report 2014. The intention is to subject 32 new psychoactive substances (NPS) to the BtMG.

A special agreement between the public health insurance providers in Baden-Wuerttemberg and the Land Pharmacists Association has, since 1 November 2013, enabled not only substitution drugs for opiate addicts to be dispensed in pharmacies but also that pharmacists be remunerated for this service.

The Umbrella Association of Statutory Health Insurance Schemes (GKV Spitzenverband) and the manufacturer of the active substance, cannabis sativa, reached an agreement on the compensation amount in the scope of an add-on therapy for the relief of symptoms amongst patients with medium serious to serious spasticity due to multiple sclerosis (MS).

The German Medicinal Products Act (AMG) cannot be used without further reasons to prohibit the trade with so-called "legal highs". The European Court of Justice (ECJ) issues a judgement to this effect on 10 July 2014.

Furthermore, in this reporting year, numerous projects were once more 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 findings of the Epidemiological Survey of Substance Abuse (ESA) conducted in 2012 were already presented in the REITOX Report 2013. They show that about a quarter of the adult population in Germany has experience with drugs, as was the case in previous studies. 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, only cocaine, amphetamines and ecstasy (12-month prevalence) reach noteworthy levels. The use of heroin, LSD and crack remains limited to a specific group that is clearly smaller in number. In the general adult population the lifetime prevalence for so-called "new psychoactive substances" (NPS) is also less than one per cent and thus comparable to the prevalence for heroin.

In the early summer of 2014, a representative survey on the cannabis use of adolescents and young adults (12-25 years old) which came from the "Alcohol Survey 2012" was presented by the BZgA in addition to the DAS findings (BZgA 2014). According to findings of the study, in 2012 every thirteenth adolescent in Germany between the ages of 12 and 17 years old (7.8%) had used cannabis at least once in their life (lifetime prevalence). 5.6% of 12 to 17 year olds had consumed cannabis in the 12 months prior to the interview (12-month prevalence) (269,000) and 1.3% (63,000) had regularly used cannabis in the previous 12 months, i.e. more than ten times.

In addition to the fact that the data from regional monitoring systems (Frankfurt and Hamburg) had already indicated stagnation in the previous year (also: ESA 2012) or even the reversal of the continual decline in consumption of illegal substances which has been observed for several years (primarily: cannabis) amongst youths, the data from the BZgA (survey year: 2012) provides further information supporting the initial perception. This development is also compatible with the fact that the Trend Scout Panels of the Frankfurt MoSyD 2013 reported the perception of a clear improvement in the image of cannabis in the scope of the worldwide legalisation debate. According to that panel, in 2013 a wide openness to and acceptance of the consumption was reported in almost all scenes.

Clearly, it is still the case that the target group of "regular" users (as differently as they are defined in the individual studies) are not reached to a satisfactory extent, whilst there are indications that the established prevention programmes and services can successfully increase the age of first use.

The findings from the current trend scout, expert and pupil surveys in the scope of the Frankfurt Monitoring System Drug Trends (MoSyD). In addition, there are results from numerous individual studies (e.g. from Berlin, Saxony and Lower Saxony) and on individual aspects (target group and substance specific) of drug consumption in the population.

## **Prevention**

The comparative analysis of information from various data sources provides indications that under-25 year olds have far fewer problems overall through the use of illegal drugs.

The substance class of opioids has become less significant since 2000 in respect of problem use. This trend is especially pronounced amongst under 25 year olds. In this period, cannabinoids and stimulants were much more commonly the cause of contact between drug users and the police, health care facilities or the courts. Amongst 25 year olds, cannabinoids are today the most common reason for hospital treatments and for people using drug support facilities.

From the perspective of prevention, cannabis should therefore remain the most important topic in terms of substance specific prevention. There is a question as to how the observed increase in problem use of stimulants including methamphetamine should be assessed. Most statistics do not list methamphetamine in its own category which makes the assessment more difficult. Recording methamphetamine in its own category would be helpful in particular for designing measures for selective and indicated prevention.

The topic "evidence base" received particular attention in 2013 in Germany and was heavily debated. The specialist journal "Suchttherapie" ("Addiction Therapy") devoted a special edition to the topic. The Federal Centre for Health Education (BZgA) organised, together with the Bavarian Health and Food Safety Authority, an expert conference on the topic and the Federal Ministry of Health funded a week-long scientific conference in spring 2014 on preparing a memorandum.

## **Problem Drug Use**

Based on figures from treatment facilities, police contacts and records of drug-related fatalities, estimates of the scale of problem drug use indicate that the number of problematic users of heroin range between 62,000 and 203,000 persons (1.1 to 3.8 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 estimated values on the basis of the multiplier "demand for treatment" fell between 2005 and 2007, rose again between 2008 and 2011 before falling significantly once more in 2012. One can, therefore, not observe any clear trend.

The findings of the last Epidemiological Survey of Substance Abuse (ESA) will be presented, namely dependence on and abuse of illegal substances. Based on the overall sample, 0.5% of interviewees fulfilled the DSM-IV criteria for cannabis abuse and dependence. In total 0.2% exhibited cocaine dependence. An abuse of amphetamines was exhibited by 0.2% of interviewees; a further 0.1% fulfilled the criteria of dependence. Multiple diagnoses (abuse and/or dependence) applied in 6.6% of the sample.

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

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

When looking at the DSHS data and confining oneself to illicit substances, one finds that in 37.6% of cases (2012: 41.1%; 2011: 44.9%) clients sought treatment or counselling primarily for dependence on or harmful use of opioids. In more than a third of the cases (2013: 38.7%; 2012: 36.5%) clients were treated for primary cannabis problems.

Amongst persons who received addiction specific treatment for the first time, cannabis was by some distance the most used substance, with its share once more increasing slightly (59.5%; 2012: 58.4% of all clients). By a considerable margin, the second largest group is first-time clients with the main diagnosis stimulants (18.7%; 2012: 16.6%), followed by first-time clients with opioid-related disorders (12.7%; 2012: 15.0%). The proportion of first-time clients with cocaine-related disorders (5.5%; 2012: 6.0%), as well as all other substance groups, have remained practically unchanged in size since last year.

In the area of inpatient treatment, those patients with a main diagnosis based on dependence or harmful use of cannabis (28.3%; 2012: 26.8%) for the first time exceeded the proportion of treatments on the basis of opioids (27.1%; 2012: 30.0%) and thus represented the largest single group in inpatient treatment. In the area of acute treatment (hospitals) about half of the drug cases in 2012 (44.7%; 2011: 43.5%) were related to poly-drug use; in the statistics of the German Statutory Pension Insurance Scheme (DRV) the figure even amounts to 42.2% (2011: 46.7%) of all cases in the same year. Hospital stays caused by sedative and hypnotics use continue to be relatively common in acute treatment (Statistical Report on Hospital Diagnoses); about one in ten addiction diagnoses in hospital treatments is related to these substances. In the specialist clinics which participate in the Statistical Report on Substance Abuse Treatment in Germany (DSHS), problems in connection with cocaine or stimulants are reported as the primary reason for treatment in 7.2% (2012: 6.7%) and 18.3% (2012: 15.5%) of cases respectively.

From 2002, when reporting became obligatory, the number of substitution patients reported continuously increased until 2010 – as of 1 July 2010 the number was 77,400. In contrast, the number has remained largely stable since 2011 and was 77,300 patients on 1 July 2013. There are still considerable regional differences regarding the supply of and demand for substitution treatments.

## **Health correlates and consequences**

In 2013, 3,263 newly-diagnosed Human Immunodeficiency Virus (HIV) infections were reported to the Robert Koch Institute (RKI). The number has thus increased by 9.6% compared to 2012 (2,976). Persons who have likely contracted their HIV infection through intravenous drug use make up the third largest group, at 4%.

In addition, a total of 5,156 cases of newly diagnosed hepatitis C were reported to the RKI for 2013. With that, the incidence of reported new diagnoses of 6.3 per 100,000 population was higher than in 2012 (6.1) but lower than the median of the years 2008 to 2012 (6.5). Intravenous drug use, which has a high probability of being causally related to the hepatitis C

discovered, was reported for 1,157 cases (87% of the cases with valid information as to the mode of transmission).

In 2013, the number of drug-related deaths rose for the first time for six years. In total, 1002 (2012: 944) people died as a result of using illegal drugs. Overdosing on heroin/morphine (incl. poisoning through heroin/morphine in conjunction with other substances), with 474 cases, remained the most common cause of death (47%).

### **Responses to health correlates and consequences**

A variety of measures are intended to help avoid drug-related emergencies and deaths and prevent infectious diseases. Currently in Germany there are a total of 23 in-patient drug consumption rooms in 15 cities in six Laender and one mobile drug consumption unit. Needles can be exchanged in many drug support facilities, and there are also needle dispensing machines, which form part of the harm reduction measures for injecting drug users. There is a variety of facilities and projects that use offers of low-threshold testing and other prevention and safer-use programmes to raise awareness of infectious diseases among their clientele and to motivate them to engage in health promoting behaviour. Safer-use initiatives in prisons remain far behind what is possible. The treatment of infectious diseases, in particular hepatitis C, has become an increased issue among drug users in recent years with studies showing time and again that under certain conditions these populations can and should also be effectively treated.

### **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 "Jobcentern"). Their aim is to help unemployed addicts into therapy at an early stage and to support their (re-)integration into the world of work.

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

In 2013 a total of 253,525 narcotics offences were recorded in Germany, of which 189,783 were general offences against the German Narcotics Act (BtMG) and 44,555 were dealing/trafficking offences. Overall drug-related crime increased slightly at a rate of 6.9% compared to the previous year.

The number of prosecutions under the BtMG decreased slightly from 2011 (55,391) to 2012 (53,544). This decline is reflected across all age groups, i. e. adult, young adult and juvenile offenders. An increase in convictions was only seen in the case of female juvenile offenders. The decline of the overall number can mainly be traced back to a reduction in the number of

cases of unspecified consumption-related offences (Sec. 29 (1) BtMG) to 43,361 (2012: -4.2%).

The number of persons imprisoned due to BtMG-related offences fell by 7.0% from 2012 to 2013; in 2013, people imprisoned due to offences under the BtMG make up 13.4% of all prisoners.

### **Drug Markets**

Comparing the years 2012 and 2013, the seized quantities of ecstasy, psychoactive mushrooms, amphetamine, heroin, cocaine and crystalline methamphetamine increased whilst the seized quantities of khat, hashish, crack, LSD and marijuana fell. The total number of seizures remained relatively stable from 2012 to 2013. This was due to an increase in the number of cases involving seizures of crystal, ecstasy, LSD and amphetamine as well as a fall in the number of cases involving seizures of crack, heroin and cannabis. The crystal problem in Germany remains mainly concentrated in Bavaria. Despite the reduction in the number of cases, the quantity seized saw a considerable increase.

As far as average retail drug prices are concerned, noteworthy changes from 2012 to 2013 were only recorded for amphetamine (-18%), heroin (+14%) and ecstasy (+12%). The street prices for cocaine, crystal, marijuana, hashish and LSD remained almost unchanged. Only the average price for crack increased significantly from 2012 to 2013. In comparison to 2012, the prices for wholesale quantities of heroin as well as for quantities between 0.5 and < 1.5 kg and quantities between 1.5 and < 10 kg rose. Increases were also witnessed in the prices of marijuana for quantities between 0.5 and < 1.5 kg, in the price of cocaine for quantities between 1.5 and < 10 kg as well as in the price of amphetamine for quantities between 10 and < 100 kg. All other wholesale prices either remained constant in comparison to the previous year or decreased.

The active substance content of amphetamine, after falling from 2011 to 2012, rose sharply again. In street trafficking, the active substance content of cocaine reached by far its highest level in the last ten years. The active substance content of heroin in street-level dealing also increased. In wholesale trafficking, the active substance content of heroin fluctuated wildly before falling steadily since 2011. The active substance content of cannabis buds has risen continuously since a low in 2007; the content of herbal cannabis has not changed significantly since 2008. Cannabis resin rose in 2013 beyond the previous high in 2003. The median active substance content of MDMA has risen continuously since 2008/09.



## PART A: NEW DEVELOPMENTS AND TRENDS

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

#### 1.1 Overview

##### 1.1.1 Definitions

Until the end of the last century, the term ‘drug policy’ referred solely to illegal drugs that were in the focus of political interest. There was no comparable concept either for an alcohol or tobacco policy or for an ‘addiction’<sup>3</sup> policy, comprising the whole range of addictive substances. In recent years however, disorders resulting from legal psychotropic substances (eg. alcohol, tobacco and medication misuse) and cross-substance aspects (e.g. in universal prevention or in patients with multiple abuse) as well as non substance-related forms of addiction (e.g. pathological gambling) have increasingly been the subject of attention from politicians. This is the reason why the terms ‘drug and addiction policy’ or ‘addiction policy’ are found more frequently, gradually replacing the term ‘drug policy’. As a result of the differences in the policy objectives pursued and strategies deployed in the area of legal and illegal substances, the term ‘drug and addiction policy’ finds preferred usage in Germany.<sup>4</sup>

Moreover, the range of topics addressed has expanded, from the original main focus on substance-related addiction, to include risky and harmful usage behaviour and thus to a broader understanding of a health policy for substance-related disorders and risks. However, in the German language there is no succinct term reflecting this expansion of the concept, so the (inadequate) 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 addressed in the annual reports of the German Monitoring Centre for Drugs and Drug Addiction (DBDD) for the European Monitoring Centre for Drugs and Drug Addiction. 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, only 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”

The drug and addiction policy in Germany is coordinated by the Federal Government Commissioner on Narcotic Drugs. The basis for the national drug and addiction policy is formed by the following four “pillars”:

<sup>3</sup> The term “addiction” here comprises risky, harmful and addictive consumption.

<sup>4</sup> The issue of whether pathological gambling should be regarded as a non substance-related form of addiction or as a disorder of impulse control remains the subject of scientific debate. So far, no final consensus 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 is to create a balance between measures aimed at reducing demand and those aimed at reducing supply. Addiction policy includes psychotropic substances as well as other related phenomena such as pathological gambling and their risks whilst taking into account European and international developments. The “National Strategy on Drug and Addiction Policy”, passed by the German Federal Cabinet on 15 February 2012 defines in detail the current areas of focus and challenges for Germany (see Section 1.3.1). 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 addiction should be made available as early and comprehensively as possible. Prevention of addiction plays a fundamental role in addiction policy. It aims at preventing or at least significantly reducing risky consumption, harmful use and substance dependence. Existing measures and treatments are to be further complemented and their quality ensured.

### **New Federal Government Commissioner on Narcotic Drugs**

On 15 January 2014, Marlene Mortler was officially appointed Federal Government Commissioner on Narcotic Drugs by the Cabinet. A press release was published on 15 January 2014 covering the decision of the Cabinet and the inauguration of the Commissioner on Narcotic Drugs by the German Federal Minister for Health<sup>5</sup>. There has been no change to the responsibilities of the Federal Government Commissioner on Narcotic Drugs in the 18th legislative period. Upon assuming office, the Commissioner stated that an important issue for her is improving the situation of children in families impacted by addiction. The new Commissioner announced that she would reconvene a "National Board on Drugs and Addiction" as an advisory body. According to the Commissioner, the National Board on Drugs and Addiction will comprise representatives from the competent federal and *Land* ministries, from the municipalities, addiction support, research and self-help organisations.

The main areas of responsibility of the Commissioner for Narcotic Drugs will still include promoting and supporting initiatives and activities for addiction and drug prevention, developing new methods and new areas of focus in addiction and drug policy for timely and appropriate help with the aim of preventing or alleviating health, social and mental problems as well as representing the German Federal Government's addiction and drug policy on an international level and in public (Deutscher Bundestag 2014).

---

<sup>5</sup> <http://www.bmg.bund.de/ministerium/presse/pressemitteilungen/2014-01/marlene-mortler-neue-drogenbeauftragte.html> (last accessed, 14 August 2014)

## **German Federal Government Drug and Addiction Report 2014**

In May 2014, the new Drug and Addiction Report of the German Federal Government was presented<sup>6</sup>. The Government's objective remained reducing the consumption of illegal drugs with all its associated negative health and social impacts as well as limiting the availability of drugs through the prosecution of drug trafficking. According to the Federal Government's assessment, the health and mental risks associated with the consumption of cannabis, as the most commonly used illegal substance, are underestimated. For this reason, the Federal Government continues to support targeted prevention measures. In the opinion of the Government, there is also a need for action in the area of synthetic drugs.

## **Alternative Drug and Addiction Report**

On 2 July 2014, the "Alternative Drug and Addiction Report", compiled jointly by the German Aids Service Organisation (DAH) and the JES Association (Junkies, Former, People in opiate treatment) was presented to the public for the first time<sup>7</sup>. According to statements of its authors, it addressed amongst other things issues of short-, medium, and long term objectives of drug policy and how such objectives could be achieved and controlled within action programmes as well as issues of the success and suitability of drug control through criminal sanctions, the effects of the present form of drug control, the effects of selective prohibition on drug support and their specific possibilities for input and thereafter the extent to which the prohibition on drugs hinders the work related to the consequences of addiction. The report's authors announced that the report would be issued annually from 2014.

### **1.1.3 Political Framework**

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

The Federal Government, the Laender and municipalities share responsibilities for drug and addiction policy. According to the German Basic Law, the Federal Government has legislative competence for narcotic drugs law, criminal law and social welfare law. On this basis, it defines the legal framework for drug policy and prescribes 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 statutory provisions and common goals.

Currently, as part of the implementation of the drug policy, a few Laender are working on shifting responsibilities to the municipalities, especially with regard to counselling, care and general prevention activities, in order to, among others, improve integration between youth

<sup>6</sup> <http://www.drogenbeauftragte.de/presse/pressemitteilungen/2014-02/drogen-und-suchtbericht.html> (last accessed: 14 August 2014).

<sup>7</sup> <http://alternativer-drogenbericht.de/> (last accessed: 14 August 2014).

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 agencies**

Funding of treatment and rehabilitation is, for the most part, provided by the public 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 treatments.

### **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. associations of practice-based doctors) are tasked with guaranteeing outpatient health 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 – provided by national, *Land* and municipal budgets according to defined 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 and services for persons with addiction problems. Youth welfare also relies on the joint work of governmental and non-governmental institutions (German Code of Social Law, Volume 8, SGB VIII).

A general outline of the institutional framework conditions and policies can be found in the structured questionnaire 32 of the EMCDDA which can be obtained from the DBDD.

## **1.2 Legal framework conditions**

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

#### **The German Narcotic Drugs Act (BtMG)**

The German Narcotic Drugs Act (Betäubungsmittelgesetz, BtMG) as well as the legal regulations enacted on the basis of the BtMG, such as the important Narcotics Prescription Regulation (Betäubungsmittelverschreibungsverordnung (BtMVV)), contain all the central regulations on how to deal with these substances, taking into account the three UN-conventions on addictive substances. Substances that are deemed to be narcotic drugs under the law, in terms of the German Narcotic Drugs Act, are listed in three schedules encompassing, amongst other things, all substances mentioned in the international treaties 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 prescribable (e.g. meprobamate, methamphetamine).
- Schedule III: narcotics eligible for trade and for prescription (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.

### **Social Law Codes**

The German Code of Social Law (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 organisations are the local or supra-local 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 German social law codes (in particular SGB II and SGB III) have become even more important for people with drug problems. With the central goal of the reform being to improve the procurement of work, efforts are undertaken to address more intensively 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 German Code of Social Law, Volume 2 (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 psychoactive substances, for example with regard to participation in road traffic, are the:

- Road Traffic Regulations (Straßenverkehrsordnung, StVO) which specify, for example, how traffic checks should be conducted,
- 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 placing of offenders with substance addiction in forensic psychiatric hospitals (Maßregelvollzug) and

- Driving Licence Regulation (Fahrerlaubnisverordnung, FeV), which deals with the conditions for driving, doubts about fitness for driving and the revocation of driving licences, for example because of an existing dependence on narcotic drugs.

### 1.2.2 Implementation of legal framework conditions

Extensive information on legal practice and criminal prosecution was provided in a special chapter of the REITOX Report 2008 and a respective publication of the EMCDDA. Both documents are available from the DBDD.

#### Refraining from prosecution

Section 31a of the German Narcotic Drugs Act (Betäubungsmittelgesetz, BtMG) provides for the possibility to refrain from prosecution of possession of drugs under certain circumstances, namely when the offender has handled narcotic substances only for his own use and in small quantities (for example purchase and possession), when his guilt is deemed as minor and there is no public interest in prosecution. As such, the public prosecutor has an instrument at its disposal to stop proceedings for consumption-related offences without court approval. All Federal Laender have introduced more detail as to the application of section 31a BtMG through recommendations or guidelines. A few years ago there were still considerable differences between the Laender but in recent years these have become smaller. Some divergence in the regulations of the Laender do however persist (c.f. Körner et al. 2012; Schäfer & Paoli 2006).

#### Threshold values for “small amounts” of cannabis and other substances

Almost all 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 deviate in individual cases. It is important to note that even though these regulations exist there is no legal right in the relevant cases of possession of small quantities of drugs, that these will not be prosecuted. If no criminal prosecution is pursued, this does not automatically mean that the crime has no consequences. Public prosecutors also have the right to halt proceedings with the imposition of certain conditions (e.g. community service, fines or counselling in a social institution).

On 3 December 2008, the German Federal Court of Justice (Bundesgerichtshof, BGH), in a landmark decision, lowered the “non-small” amount for methamphetamine from 30 grams methamphetamine base to 5 grams. 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 case law and lower the threshold value. Contrary to a Regional Court judgement, the BGH fixed the threshold value at five grams, not of methamphetamine hydrochloride but of 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 10 grams 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.

Back in April 2007, the German 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 Laender have explicitly defined regulations for refraining from prosecution in cases related to other narcotic drugs. Insofar as such regulations exist, they provide for the possibility of halting 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>8</sup>**

With the “Act on diamorphine-assisted substitution therapy”, which came into effect on 21 July 2009 (German Federal Law Gazette, BGBl., I of 20 July 2009, p. 1801) the narcotic drugs law requirements were created for a transfer of the diamorphine-assisted therapy from the German national model project into regular care by amending the Narcotic Drugs 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 for prescription and sale – under strict conditions – for the substitution treatment of the most seriously dependent opiate 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. In Berlin and Stuttgart, new diamorphine practices were opened.

### **28th Amending Regulation on Narcotic Drugs (28th BtMÄndV)**

The draft 28th BtMÄndV was, at the time of completion of the REITOX Report 2014, within the so-called notification procedure at the European Commission. Amongst other things, Art. 1 of the draft regulation provides for bringing 32 new psychoactive substances (NPS) within the BtMG.

---

<sup>8</sup> German Federal Law Gazette (2009). Part I No. 41, Bonn: 20.07.2009.

### **Supervised consumption of substitution drugs in pharmacies**

A special agreement between the public health insurance providers in Baden-Wuerttemberg and the *Land* Pharmacists Association has, since 1 November 2013, enabled substitution drugs for opioid addicts not only to be dispensed in pharmacies but also that pharmacists be remunerated for this service. The background to this new regulation is the declining number of services provided by doctors, especially in the rural regions of Baden-Wuerttemberg.

Recently, doctors have been experiencing increasing capacity problems for the relatively time consuming task of supervised consumption. Without having to change the fundamental rule of supervised consumption in the doctor's practice, the attending doctor can, in the scope of the new agreement, assign this task, following appropriate training, to a pharmacist. As this voluntary service had previously been unremunerated but was associated with considerable time and effort, it was not attractive for pharmacists to take on the responsibility.

For Baden-Wuerttemberg, the *Land* Pharmacists Association and the health insurance providers have entered into an agreement which amends the existing Medicines Supply Contracts (Arzneiliefervertrag) and regulates the dispensing of substitution drugs by pharmacists. An evaluation of supervised consumption in pharmacies is planned to be conducted in three years. The group potentially affected in Baden-Wuerttemberg comprises 9,600 (2012) heroin addicts<sup>9</sup>.

### **Amount refunded for the pharmaceutical product, Sativex<sup>®</sup>, containing the active ingredient cannabis sativa**

In September 2013, the Umbrella Association of Statutory Health Insurance Schemes (GKV Spitzenverband) and the pharmaceutical company Almirall Hermal GmbH reached an agreement on the compensation amount for the pharmaceutical product, Sativex<sup>®</sup>, which contains the active ingredient cannabis sativa. Sativex<sup>®</sup> is based on two cannabinoids - delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD). It is approved as an add-on therapy for alleviating the symptoms in patients with medium serious to serious spasticity due to multiple sclerosis (MS), which have not responded suitably to other antispastic medications<sup>10</sup>.

The basis for the negotiations between the health insurers and the manufacturers was a decision on the benefit assessment by the Federal Joint Committee of 21 June 2012, in which the medicinal product was attributed a hint of minor additional benefit.

### **Discussion on the amendment of statutory regulations for substitution based treatment**

The 116th German Physicians Conference and several expert associations have made proposals for revising the legal framework conditions. The authors make suggestions as to

<sup>9</sup> [http://www.vdek.com/LVen/BAW/Presse/Pressemitteilungen/2013/Gem\\_PM\\_Drogenersatztherapie.html](http://www.vdek.com/LVen/BAW/Presse/Pressemitteilungen/2013/Gem_PM_Drogenersatztherapie.html);  
<http://www.aerzteblatt.de/nachrichten/55884> (last accessed: 31 October 2014).

<sup>10</sup> <http://www.aerzteblatt.de/nachrichten/55989/Kassen-und-Hersteller-einigen-sich-ueber-Cannabis-Praeparat-in-der-MS-Therapie?s=sativex> (last accessed: 14 August 2014).



how the law regarding substitution could be modified to reflect the current status of scientific knowledge and medical practice (in summary, i.a.: Backmund & Meyer-Thompson 2013). The discussion then led initially, in 2013, to an expert debate in the German Federal Ministry of Health. At the core of the discussion are demands to remove those parts of the provisions on substitution in the German Regulation on the Prescription of Narcotic Drugs (BtMVV) which govern the doctor's activities and the treatment itself. Similar demands were issued by the 72nd Bavarian Physicians Conference in October 2013<sup>11</sup>. The Conference spoke out in favour of granting doctors who provide substitution treatment the option of issuing substitution drugs in special cases for a maximum of one day without any great bureaucratic workload. The German Federal Ministry of Health is currently examining the many proposals and ideas.

### **Change in calculation of GDP**

In future, the areas of the shadow economy such as drug trafficking and tobacco smuggling will be included in how the Federal Statistical Office calculates gross domestic product (GDP). That was announced by a spokesperson for the statistics authorities, confirming a report in the "Süddeutsche Zeitung" newspaper<sup>12</sup>. The value of illegal activities will, according to the authorities, be estimated based on model calculations. The data will be collected from September 2014 as at that point the system for calculating GDP was switched to the new European System of Accounts (ESA)<sup>13</sup>.

### **New psychoactive substances (NPS) represent a challenge for law enforcement**

In a review paper, Duffert (2014) discussed some of the difficulties faced by legislators in dealing with new psychoactive substances (NPS). A considerable challenge mentioned was, in particular, the need to list each substance individually under the BtMG as the suppliers of such products are often able to alter their product extremely quickly and thus to react rapidly to any related NPS being subject to the BtMG by the German government. The alternative option discussed by Duffert in his paper, of imposing sanctions from the perspective of the German Medicinal Products Act (AMG), has become more difficult following a decision of the European Court of Justice of 2014 (see below).

### **ECJ: so-called "legal highs" are not medicinal products in a legal sense**

In the opinion of the ECJ in two cases referred by the German Federal Court of Justice, the German Medicinal Products Act (AMG) cannot be used without special justification to prohibit the trade in so-called "legal highs". The European Court of Justice (ECJ) issued a judgement to this effect on 10 July 2014. According to the judges at the ECJ, herb mixtures which are consumed as cannabis substitutes are not medicinal products in the sense of the legal

---

<sup>11</sup> [http://www.blaek.de/presse/aerzteblatt/2013/BAB\\_11\\_2013\\_564\\_571.pdf](http://www.blaek.de/presse/aerzteblatt/2013/BAB_11_2013_564_571.pdf) (last accessed: 14 August 2014).

<sup>12</sup> <http://www.sueddeutsche.de/wirtschaft/neue-berechnung-des-bip-kiffen-fuer-die-konjunktur-1.1921011> (last accessed: 14 August 2014).

<sup>13</sup> <http://www.spiegel.de/wirtschaft/soziales/bruttoinlandsprodukt-bip-kuenftig-mit-drogenhandel-und-tabakschmuggel-a-960620.html> (last accessed: 14 August 2014).

definition. The court stated that, a medicinal product must “*entail immediate or long-term beneficial effects for human health*”. The herb mixtures, however, merely serve to induce a state of intoxication and are also hazardous to health.

With their judgement, the judges were delivering a position on two criminal cases before the German Federal Court of Justice (BGH) which concerned the legal (criminal law) assessment of bringing synthetic cannabinoids onto the market. The substances in question were, at the time of their being brought onto the market, not (yet) subject to the BtMG. The courts had therefore convicted the defendants, under criminal law, on the basis of violations of the German Medicinal Products Act, as a result of which the defendants filed an appeal with the BGH. The BGH approached the ECJ for clarification through means of the referral procedure. In their decision, the judges at the ECJ stressed that the mixtures at issue were not consumed for therapeutic purposes but solely for “relaxation purposes” (see, i.a.: pharmaceutical journal, Pharmazeutische Zeitung Online<sup>14</sup>).

### 1.3 National action plan, evaluation and coordination

#### 1.3.1 National Strategy

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. On 15 February 2012, the “National Strategy on Drug and Addiction Policy” was passed by the German Federal Cabinet (see also REITOX Reports 2012 and 2013) which replaced the “Action Plan for Drugs and Addiction” from 2003. The targets and objectives of the National Strategy on Drug and Addiction Policy are a part of the prevention strategy, which the Federal Government is currently preparing to tackle drug and addiction-related problems in society. Both strategies emphasise the high significance of health promotion and prevention for a successful health care policy. The implementation of the action plan was overseen by the German National Board on Drugs and Addiction (DSR).

The DSR is appointed by the federal government’s Commissioner on Narcotic Drugs and supports her in her work. It 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 Federal Centre for Health Education (BZgA) (for the findings of this evaluation, see the REITOX reports 2009 and 2010).

The DSR of the 17th legislative period began work in its constitutive session on 10 November 2012. The DSR remains an advisory committee of the Federal Government Commissioner on Narcotic Drugs and comprises experts and specialists from science, politics, administration, associations and health system facilities. The chairperson of the DSR is the Federal Government Commissioner on Narcotic Drugs.

<sup>14</sup> <http://www.pharmazeutische-zeitung.de/index.php?id=53213> (last accessed: 14 August 2014).

The strategies include quality and efficiency assured measures to secure and improve sustained health and quality of life as well as to meet the present challenges caused by demographic changes in a society which is constantly growing older. This means that prevention takes on a central significance in addition to the existing offerings for counselling and treatment, support in leaving the drug scene, harm reduction measures and repression.

The Federal Government continues to follow an integrative approach to 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 assistance systems. The National Strategy directs its attention in particular to new challenges in drug and addiction policy which arise from, amongst other things, demographic change, societal changes, old and new addiction forms and addictive substances (e.g. the emergence of new psychoactive substances (NPS), dealing with increasing consumption of methamphetamine (crystal meth), pathological gambling and so-called online/media addiction) as well as the resulting consumption trends. Now, more than in the past, the focus is not only on addiction but also on risky use behaviour, which is harmful to health and limits personal development even if it does not necessarily lead to an addiction.

### **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 of Education and Research (BMBF), scientists from different fields cooperated with facilities of primary care and addiction support in their region, within the framework of application-oriented research projects.

Even though government funding for the research networks stopped in 2007, the networks created continue to carry out common research activities and identify new funding possibilities. A list of all the research projects and pilot programmes which received funding from the Federal Government is shown below.

#### **Pilot programmes and research projects funded by the Federal Ministry of Health (BMG)**

A simple overview of the model programmes 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 structure of the REITOX report. Each proposal is examined in greater detail, where necessary, in the respective individual chapters (provided they have not already been covered in previous REITOX reports).

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

<b>Funded Projects</b>	<b>Project Period</b>	<b>Notes</b>
<b>Prevention</b>		
Focus: Innovative prevention concepts in pregnancy, plus evaluation	03/11 – 02/13 10/12 – 09/14 07/12 – 12/14	7 model projects in first phase; 3 model projects in second phase; Evaluation project
ELSA	05/12 – 02/14	Internet based counselling programme for parents of children and adolescents at risk of addiction.
Prevention and reduction of substance use amongst students	04/13 – 10/15	3 projects
Prevention of amphetamine abuse	06/13 – 01/14 09/13 – 12/13	
<b>Drug use in the population and specific targeted groups</b>		
DRUCK-Study	04/12 – 03/15	Serosurvey and behavioural survey on HIV, hepatitis B and C amongst injecting drug users.
SCHULBUS	02/12 – 02/14	Development, testing and preparation of tablet PC based school and teacher surveys on approaches to addictive substances
Spice II Plus	03/13 – 02/15	Co-financed EU project
Alcohol and drugs as risk factors for successful completion of education.	04/12 – 03/15	Representative survey
<b>Drug-related treatment</b>		
Focus: Addiction among older people, 2nd phase	01/13 – 02/14	7 model projects for better cooperation between addiction and old-age care facilities (extension)
Focus: Addiction in old age, evaluation	03/13 – 05/14	Cross-project analysis of the funding priority
Promotion of culturally sensitive work within addiction support - diversity training	07/13 – 12/13	
FreD law enforcement	05/13 – 02/14	Early intervention in first-offence drug users
CAN Stop Intramural	10/14 – 03/15	Implementation of group training CAN Stop in juvenile detention institutions
<b>Other projects funded by the BMG which are related to drugs</b>		
safe - clean party	08/14 – 01/15	Development and trialling of further training concept for employees in dance locales and nightclubs on how to handle risky addictive substance use of their guests.

Table 1.1 (continued)

<b>Funded Projects</b>	<b>Project Period</b>	<b>Notes</b>
CNN – Chancen nahtlos nutzen (use chances seamlessly) – specific follow-up project	10/13 – 06/15	Improvement of the image of addiction self-help and intensification of cooperation/communication with vocational addiction support.
Self-control training (Selbstkontrolltraining, SKOLL), quality assurance	05/13 – 01/14	Early intervention for risky users of psychotropic substances.
Further training of house doctors in individual practices, follow-on project	05/13 – 05/14	Early identification of elderly addicts
National transfer of MDFT as a family-based early intervention in youth addiction support	09/12 – 12/13	Implementation of multi-dimensional family therapy (MDFT)

BMG 2014, personal correspondence.

### **Projects and research projects receiving funding from the European Commission**

German experts are participating in a series of international projects and research projects in the area of drugs and addiction 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 acted as coordinators in 2010/2011. 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>15</sup> for which an updated version was not available. The brochure, which also contains short descriptions of the projects (as well as descriptions of older and completed projects), can, for example, be downloaded from the EMCDDA website. To date, new involvements of German partners can be found, for example, in the ALICE-RAP<sup>16</sup> project (7th Research Framework Programme, DG Research and Innovation) or Spice II Plus<sup>17,18</sup>.

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

The BZgA would like to motivate people to think critically about the use of substances with addiction potential and to support them in choosing low-risk use or abstaining from use altogether. For children, a life skills programme<sup>19</sup> is offered in cooperation with sports clubs. Other age groups are reached through national media campaigns which are interlinked with

<sup>15</sup> Drug Prevention and Information Programme (DPIP) (DG JUST); Public Health Programme (PHP) (DG SANCO); Seventh Framework Programme (FP7) (DG Research).

<sup>16</sup> [www.alicerap.eu](http://www.alicerap.eu) (last accessed: 31 October 2014).

<sup>17</sup> <http://www.uniklinik-freiburg.de/giftberatung/spice-ii-plus-wissenschaftliche-studie-zu-aktuellen-party-drogen.html> (last accessed: 14 August 2014).

<sup>18</sup> [www.emcdda.europa.eu/themes/research](http://www.emcdda.europa.eu/themes/research) (last accessed: 31 October 2014).

<sup>19</sup> [www.kinderstarkmachen.de](http://www.kinderstarkmachen.de) (last accessed: 31 October 2014).

local activities. These campaigns address issues involving the most widely consumed addictive substances, alcohol<sup>20,21</sup> and tobacco<sup>22</sup> but also the misuse of medicinal products and illegal drugs as well as pathological gambling<sup>23</sup> and excessive internet or computer game use<sup>24</sup>.

Prevention experts can network amongst themselves, regionally and nationally, through the internet portal PrevNet, a joint project between the German Laender.

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

As a result of the federal structure of the Federal Republic of Germany and the principle of subsidiarity, but also as a consequence of the differences in the degree of problems and initial conditions, considerable regional differences exist in how substance-related disorders are dealt with. Consequently, different guidelines and rules as well as different drug and addiction programmes exist in the 16 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 aimed at the reduction of drug demand. Approaches along these lines – the development of guidelines and programmes for quality assurance – are, however, adopted at a professional level by professional and scientific associations, as well as by the funding agencies, without any application or consideration of the approaches being mandatory. Compliance with and application of these guidelines are, however, not mandatory. 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 nationwide services available range from prevention, outpatient counselling, qualified detoxification treatments, recovery treatment, 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) and other specific services (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 projects available nationwide like early intervention with drug users who have come to the attention of

<sup>20</sup> [www.kenn-dein-limit.info](http://www.kenn-dein-limit.info) (last accessed: 31 October 2014).

<sup>21</sup> [www.kenn-dein-limit.de](http://www.kenn-dein-limit.de) (last accessed: 31 October 2014).

<sup>22</sup> [www.rauchfrei-info.de](http://www.rauchfrei-info.de) (last accessed: 31 October 2014).

<sup>23</sup> [www.check-dein-spiel.de](http://www.check-dein-spiel.de) (last accessed: 31 October 2014).

<sup>24</sup> [www.ins-netz-gehen.de](http://www.ins-netz-gehen.de) (last accessed: 31 October 2014).

the police for the first time (FreD) or the implementation of the intervention programme "Realise it" in the Laender have proven successful.

The Laender too, are increasingly setting their focus on children and adolescents as well as on legal addictive substances. Central to their work is a stronger goal orientation of support systems, the comparison of supply 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.

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, for example to migrants or socially disadvantaged families over school projects or initiatives undertaken in 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 2013/2014, the drug and addiction commissioners of the federal states reported numerous activities and projects. As the activities reported in this section in the past included only a selection of the activities undertaken with the support of the Laender, which were based on active reporting from the respective Laender to the DBDD, the format of the REITOX report was modified in 2013 to a) align the structure of the information recorded more closely with the chapters of the REITOX report and b) to include the recorded information in the chapter which discusses the corresponding subject matter. In that way, it has been possible to improve both the thematic integration of the reported activities and the readability of the report.

### **Conferences and working groups**

As in previous years, numerous conferences and working sessions were held in the reporting year. Due to 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.

- 6th German Addiction Congress in Bonn (6. Deutscher Suchtkongress).  
The German Addiction Conference 2012 took place from 18 - 21 September 2013 in Bonn. The leading organiser was the German Society for Addiction Psychology (DG-SPS) in cooperation with the German Society for Addiction Research and Addiction Treatment (DG-Sucht) and with the support of numerous other specialist organisations. Over 200 speakers gave talks, again demonstrating the wide range of specialist topics from the perspective of medical, psychological and biological and social sciences. Once more, it was possible to win the support of both national and international experts who have further enhanced the established reputation of the Congress.
- 22nd Congress of the German Society for Addiction Medicine (22. Kongress der Deutschen Gesellschaft für Suchtmedizin).  
The 22nd Congress of the German Society for Addiction Medicine (DGS) took place from 1 - 3 November 2013 in Berlin under the slogan, "The people's disease, addiction - treat

correctly and fund sufficiently". The focus, in addition to numerous wide ranging events, was on a critical examination of new psychoactive substances (NPS).

- Expert Conference of the German Centre for Addiction Issues (DHS) .  
From 4-6 November 2013, the DHS Expert Conference took place with, as its main topic, "Addiction and Work". Numerous national and international speakers and partners were involved<sup>25</sup>.
- 37th Federal Drug Congress of the Professional Association for Drugs and other Intoxicants (36. BundesDrogenKongress des Fachverbands für Drogen und Rauschmittel).  
The 36th Federal Drug Congress took place under the slogan "Our work - Your work! Successful ways to find work for people suffering from addiction" on 27 and 28 May 2014 in Cologne. The Professional Association of Drug Help Organisations (fdr) has held the German Federal Drugs Congress since 1980 as an expert conference on addiction support with a focus on illegal drugs. The documentation of the congress can be found at [www.fdr-online.info](http://www.fdr-online.info)<sup>26</sup>.
- Addiction-Self-Help-Conference (Sucht-Selbsthilfe-Konferenz) of the German Centre for Addiction Issues (DHS).  
From 25 - 27 April 2014, the Addiction-Self-Help-Conference 2014 of the DHS took place under the heading "Addiction-Self-Help and Prevention"<sup>27</sup>.
- Interdisciplinary Congress for Addiction Medicine (Interdisziplinären Kongress für Suchtmedizin).  
The 15th Interdisciplinary Congress for Addiction Medicine was held in Munich from 3 - 5 July 2014, which presented 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<sup>28</sup>.

### 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) of the EU Council 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

<sup>25</sup> Conference Documentation: <http://www.dhs.de/dhs-veranstaltungen/rueckschau/fachkonferenzen.html> (last accessed: 14 August 2014).

<sup>26</sup> Conference Documentation: [http://fdr-online.info/pages/infos-fuer-die-suchthilfe/tagungen-seminare-fortbildungen/bundesdrogenkongress/37.fdrkongress\\_v1.php](http://fdr-online.info/pages/infos-fuer-die-suchthilfe/tagungen-seminare-fortbildungen/bundesdrogenkongress/37.fdrkongress_v1.php) (last accessed: 14 August 2014).

<sup>27</sup> Conference Documentation: <http://www.dhs.de/dhs-veranstaltungen/rueckschau/selbsthilfekonferenzen.html> (last accessed: 14 August 2014).

<sup>28</sup> Conference Program: [http://www.sv-veranstaltungen.de/site/wp-content/uploads/2014/07/Suchtmedizin\\_2014.pdf](http://www.sv-veranstaltungen.de/site/wp-content/uploads/2014/07/Suchtmedizin_2014.pdf) (last accessed: 14 August 2014).



countries, the work of the United Nations Office on Drugs and Crime (UNODC). Furthermore, Mr. Werner Sipp, former head of the department for “Narcotics law, narcotics trade, international addiction issues” in the Federal Ministry of Health, is an internationally recognised, independent German expert in the International Narcotics Control Board (INCB) at the United Nations.

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 for Health, Ministry of the Interior, Ministry of Foreign Affairs) or experts from other areas when representing Germany on the European and international committees. 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, for example with the Former Yugoslav Republic of Macedonia (IPA IV Project of EMCDDA), Central Asia (Central Asian Drug Action Programme), Serbia (Twinning) and participated in various international projects in which German experts worked together with colleagues from countries within and outside of the EU.

The fifth phase of the “Central Asia Drug Action Programme” (CADAP) of the EU Commission, for which GIZ has the project lead, was successfully completed in June 2013 in the scope of a European consortium with partners from the Czech Republic, Poland and Germany. A sixth phase, under the leadership of the German Federal Ministry of Health (BMG) and with financial support from the German Federal Ministry for Economic Cooperation and Development (BMZ), will be carried out by GIZ with partners from the Netherlands, the Czech Republic, Poland and Germany in mid 2014.

The aim of the project is to convince the central Asian governments in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan to adopt a comprehensive and sustainable effort in the area of improvement and monitoring of the drug situation, of the prevention and treatment of drug addicts. The focus thereby is on the capacities in the area of health policy and the adequate connection of existing measures from other policy areas and international programmes.

As far back as November 2008, the German Federal Ministry of Health (BMG) and the Ukrainian Ministry of Health signed an “Action Programme to Intensify Cooperation in Health Care Matters”. The aim of this action programme is to support the reform of the psychiatric system and to promote the psychiatric treatment pilot projects in four regions which include the treatment and care of drug users. The State Drug Control Authority has existed for 4 years, with the remit to coordinate all activities in the area of drug prevention, control and treatment as well as in the area of drug policy. There is also a close cooperation with the United Nations Office on Drugs and Crime (UNODC). A comprehensive drug strategy has been developed which includes various, in parts contradictory, political approaches together,

such as the Ministries of the Interior and of Health (for example in the expansion of substitution based programmes with methadone which are in part counteracted by criminal prosecution of doctors who carry out the treatment). At the core of the strategy is a change of policy, away from an arbitrary prosecution of addicts and towards an approach focusing on medical and psychological treatment. The protection of human rights is also placed at the heart of the matter. In terms of law enforcement, the focus is on dealer structures. The intention is to abandon the stereotype of Soviet politics which was built on repression. Today, prevention is given priority as well as support for addicts. The role of civil society must also be taken into account to a greater extent. Up until 2020, an action plan is to be created each year for the implementation of the strategy and the implementation will be evaluated. Mainly, there is a lack of specialists who can implement this new strategy (Michels 2014).

### 1.3.3 Other drug policy developments

Aside from the changes and improvements reported in other parts of this report, there are no other developments to report.

### 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 it facilitates both vertical and horizontal exchanges between the different institutions and the federal and *Land* ministries. Other examples of cooperation between the Federal Government and the Laender include the Working Group on Addiction Support (AG Suchthilfe) of the Permanent Working Group of the Highest State Health Authorities (Arbeitsgemeinschaft der Obersten Landesgesundheitsbehörden, AOLG) and the Coordination Group for Addiction Prevention (Koordinierungskreis Suchtprävention) of the Federal Centre for Health Education (BZgA).

On a national level, the Federal Centre for Health Education (BZgA) is in charge of the planning and execution of prevention campaigns and the monitoring of addiction prevention activities and their quality assurance. It chairs the working group “Addiction prevention” which also reports to the Board on Drugs and Addiction (DSR). 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. Its core responsibilities are the identification, prevention and combating of diseases, in particular infectious diseases.

## 1.4 Economic analysis

### 1.4.1 Introduction

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 this data, were the subject of a Selected Issue of the REITOX Report 2007 which is available in German and English on the DBDD website<sup>29</sup>. 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.

The background to the funding of drug-related measures lies in Germany's federal structure and the principle of subsidiarity, which has led to a complex system of responsibilities at the federal, *Land* and local levels, along with social insurance providers with respect to the funding and performance of various functions. 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 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

<sup>29</sup> [http://www.dbdd.de/images/publikationen/dbdd/Sonderkapitel/2007\\_oeffentliche\\_ausgaben.pdf](http://www.dbdd.de/images/publikationen/dbdd/Sonderkapitel/2007_oeffentliche_ausgaben.pdf) (last accessed: 31 October 2014).

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 was collected by means of paper-based interviews. In addition to the German Pension Fund (Rentenversicherung Bund), 40 of 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 euros 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. Therefore, there is no available data.

### **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.

## 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 infrequent use of drugs. After the drug is 'tried', its use is, in most cases, completely discontinued after a time. Drug use over the period of a lifetime is therefore only a rough indicator of the extent of drug use at a given point in time. The figures also include people reporting experience with drugs 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. Even more up to date is the information provided by surveys on drug use in the 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 until now studies such as the "European School Survey Project on Alcohol and other Drugs" (ESPAD) (see below) or the study, "Health Behaviour in School-aged Children" (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, motives for use and 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 were presented in the REITOX Report 2012 under sections 2.2 and 2.3<sup>30</sup>.

<sup>30</sup> 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.

- In addition to the DAS, the BZgA published the findings of representative surveys conducted on cannabis use among 12-19 year-old adolescents and 12-25 year olds respectively (BZgA 2007, 2011), the results of which were presented in the REITOX Reports of 2007 and 2011. In June 2014, these surveys were expanded to include the results from the survey year 2012 (see below).
- The nationwide Epidemiological Survey of Substance Abuse (ESA) is a combined written, telephone and online survey on the use of psychotropic substances, their effects and on their 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<sup>31</sup>. 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. In this REITOX Report, the latest results of the ESA 2012 are presented. Extensive information on the design of the study and methods used by the ESA 2012 has been provided by Kraus and colleagues (Kraus et al. 2013a). The adjusted sample includes n=9,084 people between 18 and 64 years of age. The net response rate was 53.6%.
- The “European School Survey Project on Alcohol and other Drugs” (ESPAD<sup>32</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>33</sup> (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). Individual data is available from all participating Laender for the ESPAD.
- The study on “Health Behaviour in School-aged Children” (HBSC), funded by the WHO, 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 reported 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 2002 is based on data from four Laender (Berlin, Hesse, North-Rhine Westphalia, Saxony); in 2006 the German data set comprised Berlin, Hamburg, Hesse,

<sup>31</sup> The target group changed over time from adolescents and young adults in the age range of 12-24 (1980), 12-29 (1986) and 12-39 (1990) to the adult population of 18-59 year olds (1995, 1997, 2000, 2003) and finally the 18 to 64 year olds (2006, 2009, 2012).

<sup>32</sup> [www.espad.org](http://www.espad.org) (last accessed: 31 October 2014).

<sup>33</sup> Swedish Council for Information on Alcohol and Other Drugs.

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). In 2013, based on data from the HBSC studies of 2002, 2006 and 2010, ter Bogt and Colleagues (2014) examined the extent to which international changes to the frequent consumption of cannabis relate to the societal and/or familial well-being, as well as how they relate to gender. The results of the study are reported in section 2.5.

- 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 were based on nationwide representative data on the health of children and adolescents aged from 0 to 17 years. A total of 17,641 children and adolescents participated in the study. For the analyses of tobacco, alcohol and drug use, the data from interviews conducted among the 11 to 17 year old boys and girls and their parents was 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 of children and adolescents in Schleswig-Holstein (RKI 2007; 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. They focus, alongside other factors, on the extent and effects of the use of a specific substance and the 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>34</sup>, a scene-based survey and an expert survey. A key change in comparison to all previous years is the fact that the pupil survey in 2013 was conducted for the first time with the help of tablet PCs (c.f. also: Baumgärtner & Kestler (2014)). In the study period 2013 a total of N=1,511 valid questionnaires provided the data for the MoSyD pupil survey (based on those surveyed from the 10th-12th grades or the 1st-3rd years of a traineeship), of which N=1,004 (weighted sample: N=1,004) respondents were between 15 and 18 years old (Werse et al. 2014).

<sup>34</sup> 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 end, 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 guideline-based interview.

Furthermore, in 2014, findings of the Trend Scout Panel and the expert survey of the MoSyD are now 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. The results were presented in the REITOX Report 2009.

After the last data collection in 2009, a survey called “Hamburg SCHULBUS” was carried out for the fifth time in 2012 within the framework of the Local Monitoring System (LMS) among students aged 14 to 18 years at schools providing general or vocational education. The number of pupils aged between 14 and 17 years of age included in the sample in the 2012 survey is n=1,013 (weighted sample; n=1,148 unweighted sample). The surveys, which were conducted in schools whose selection was based on theoretical sampling, were administered to classes of school pupils from the 8th grade upwards (cluster sampling) (Baumgärtner & Kestler 2014).

High interest was exhibited by various cities and municipalities in adopting the data collection methods used by the “Hamburg SCHULBUS” project in their own areas in future. This led the Office for Addiction Prevention to investigate one of the model projects supported by the Federal Ministry of Health in order to ascertain how it would be possible to adapt this approach for use in other regions, while saving resources, and what knowledge could be gained from it. For this purpose, the previously paper-based survey was transferred to a tablet/PC-based process and was extended beyond the Greater Hamburg Area to include four further model locations (two municipalities in Lower Saxony, a small town in Mecklenburg-West Pomerania and a rural district in Schleswig-Holstein) with the intention of collecting regional data. The publication of these results occurred at the start of 2014 (Baumgärtner & Kestler 2014).

### **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 was published in the period under review, this report confines itself to presenting only some basic data.

When interpreting the results of population surveys, it needs however to be taken into account that the figures may be considerably 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 findings of the last two epidemiological surveys conducted on substance abuse (ESA 2009, 2012) and the most recent DAS (2011).

Table 2.1 Prevalence of illegal drugs in Germany

	Source	Age	Prevalence	Absolute <sup>1)</sup>
Lifetime	ESA 2012 <sup>2)</sup>	18-64	23.9%	12,351,000
	DAS 2011	12-17	7.2%	344,000
12 Months	ESA 2012 <sup>2)</sup>	18-64	4.9%	2,532,000
	DAS 2011	12-17	4.9%	234,000
30 Days	ESA 2012 <sup>2)</sup>	18-64	2.6%	1,344,000
	DAS 2011	12-17	2.0%	95,000

1) Figures are rounded. Population figures in the age categories of 18-<65 year-olds: 51,680,000 (year 2012); 12-17 year-olds: 4,778,270 (year 2011) (Source: Statistisches Bundesamt, GENESIS Online-Datenbank).

2) The prevalence of use of illegal drugs shown in the Epidemiological Survey of Substance Abuse (ESA) are based on a cross-sectional analysis from 2012. The numbers cannot be directly compared to data from previous ESA surveys to ascertain trends over time as the data from the ESA 2012, unlike the ESA 2009, was also weighted in respect of the educational structure of the population. Upon application of an identical weighting variable and taking into account confidence intervals (CI 95%), it becomes clear that the number of persons with lifetime, 12-month and 30-day use in the period 2009 to 2012 has remained stable from a statistical point of view.

BZgA 2012; Kraus et al. 2014.

Lifetime prevalence is not suitable as an indicator for current changes since it does not give any valuable clues as 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 refers 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).

Prevalence estimates of substance-related disorders as defined by DSM-IV can be extrapolated for the general German population aged between 18 and 64 based on the results of the ESA 2012. According to these estimates,

- approximately 283,000 adults (95% confidence interval (CI) = 201,000–397,000) exhibit misuse and
  - approximately 319,000 adults (95% CI = 224,000–453,000) exhibit dependence
- in connection with the consumption of the illegal drugs cannabis, cocaine or amphetamine.

In addition, an estimated

- 4.61 million people (CI = 4.20 million–5.05 million) have a diagnosis for misuse of painkillers, sleeping tablets or tranquillisers. Approximately 2.31 million people (CI = 2.03 million–2.62 million) are dependent on (at least) one medication.

In relation to illegal drugs, more men than women in the population exhibit substance-related disorders. Only prescription medications have a higher proportion of female addicts (Kraus et al. 2014).

## 2.2.2 Comparison of the use of individual drugs

### National data

The data from the DAS 2011 was comprehensively reported in the REITOX Report 2012; the most important key figures are reported again in Table 2.2 in comparison with the ESA data. On the use of illegal substances amongst adults, new findings were most recently presented in 2013 from the ESA 2012. In Table 2.2, the results of the ESA 2009 and 2012 are shown as well as the DAS 2011.

Table 2.2 Prevalence of consumption of illegal drugs by substance

Source	DAS 2011		ESA 2009 <sup>1)</sup>			ESA 2012 <sup>1)</sup>		
	%;12-17 Y	%;18-25 Y	%; 18-64 Years			%; 18-64 Years		
Substance	12 M <sup>2)</sup>	12 M <sup>2)</sup>	LT <sup>1)</sup>	12 M <sup>2)</sup>	30 D <sup>2)</sup>	LT <sup>2)</sup>	12 M <sup>2)</sup>	30 D <sup>2)</sup>
Cannabis	4.6	13.5	25.6	4.8	2.4	23.2	4.5	2.3
Amphetamine	0.4	1.6	3.7	0.7	0.3	3.1	0.7	0.4
Ecstasy	0.2	1.0	2.4	0.4	0.2	2.7	0.4	0.2
LSD	0.1	0.3	2.4	0.1	0.1	2.2	0.3	0.1
Heroin	0.0	0.0	0.5	0.1	0.0	0.6	0.2	0.1
Cocaine	0.2	0.9	3.3	0.8	0.3	3.4	0.8	0.3
Crack	0.0	0.0	0.2	0.1	0.0	0.3	0.1	0.1
Mushrooms	0.4 <sup>3)</sup>	0.7 <sup>3)</sup>	2.8	0.1	0.1	2.6	0.3	0.1
Inhalants	0.1	0.2	--	--	--	--	--	--
Any illicit drug	4.9	14.3	26.7	5.1	2.6	23.9	4.9	2.6
Illicit drugs besides cannabis	1.0	2.8	7.4	1.3	0.6	6.3	1.4	0.8

1) Due to the modified weighting the data from the ESA surveys cannot be directly compared to ascertain trends over time (see also the relevant explanatory footnote in Table 2.1).

2) LT: Lifetime, 12 M: 12 Months, 30 D: 30 Days.

3) Psychoactive Plants.

BZgA 2012; Kraus et al. 2014; Pabst et al. 2010.

The REITOX Report 2013 contains a differentiated overview and commentary of the consumption prevalences according to individual substance, age group and gender from the ESA (Kraus et al. 2014; Pabst et al. 2013).

Cannabis remains the dominant illegal drug in Germany. Cocaine and amphetamine are the most commonly used illegal substances after cannabis. The prevalence of all other illegal drugs studied here is low, with 12-month prevalence rates below 0.5%.

### ***ESA 1980–2012: Trends in cannabis consumption***

Within the last six years, no changes have been evident in the prevalence of cannabis among most population groups. Only a fall among young men aged between 18 and 24 can be observed. However, in the long term there is an almost universal increase in the proportions of current consumers.

The 12-month prevalence for cannabis consumption again fell markedly among young men and women aged between 18 and 24, following an increase up to the start of the 2000s (Kraus et al. 2014). The maximum in both genders was almost four times as high as in 1980. A similar development can be observed among 25 to 39 year-old adults, although the prevalence was considerably lower than that for young adults and the fall from the maximum was smaller. A markedly lower prevalence level and a flatter curve can be observed for 40 to 59 year-olds and among 60 to 64 year-olds. Differences between men and women first and foremost relate to the lower proportion of cannabis consumption among women in all age groups. In comparison with the respective starting levels, the 12-month prevalence values for the year 2012 are significantly higher for both genders in all age groups, with the exception of the 60 to 64 age group. The decline from the middle of the 2000s onwards is only statistically significant in the youngest age group.

### **The Cannabis Consumption of Adolescents and Young Adults in Germany in 2012**

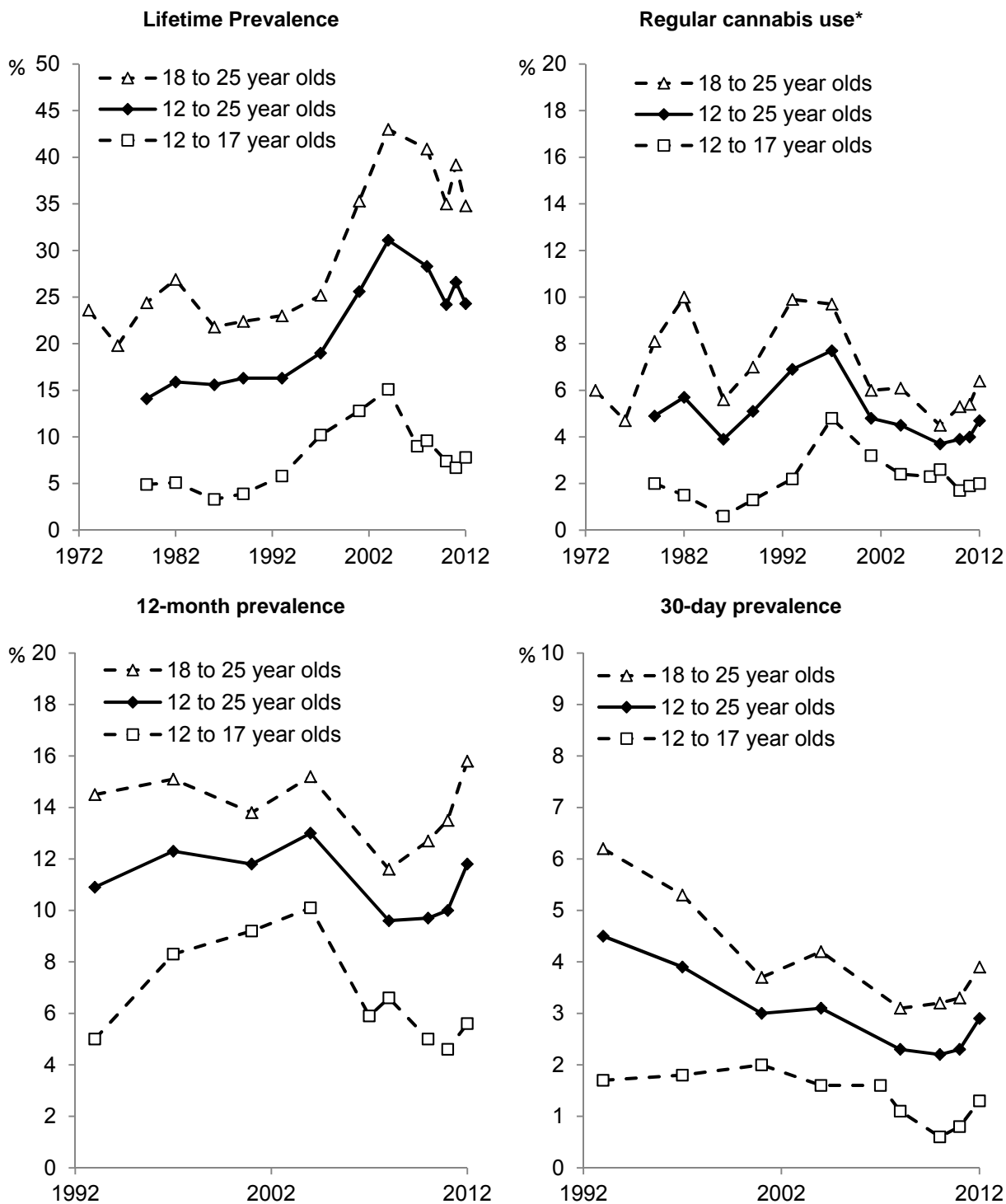
Trend data provided by the DAS for the lifetime prevalence rates for the use of cannabis by adolescents and young adults between 12 and 25 years of age was presented in chapter 2.3 of the REITOX Report 2012.

In the early summer of 2014, a representative survey on the cannabis use of adolescents and young adults (12-25 years old), which came from the “Alcohol Survey 2012”, was presented by the BZgA in addition to the DAS findings<sup>35</sup> (BZgA 2014).

According to findings of the study, in 2012 every thirteenth adolescent in Germany between the ages of 12 and 17 years old (7.8%) had used cannabis at least once in their life (lifetime prevalence). 5.6% of 12 to 17 year olds had consumed cannabis in the 12 months prior to

<sup>35</sup> That was a repeated nationwide representative poll of 12 to 25 year olds in the population on alcohol as well as tobacco and cannabis. Methodological key indicators: Computer assisted telephone interviews (CATI), multi-layer randomisation from Infratest telephone master sample (ITMS, computer generated random telephone numbers, random selection of 12 to 25 year olds in the household), sample size: 5,000 interviewees, response rate: 53.5%, interview period: 29 May to 29 July 2012.

the interview (12-month prevalence) (269,000) and 1.3% (63,000) had regularly used cannabis in the previous 12 months, i.e. more than ten times.



\*1993 to 1997: ten times or more in the past 12 months. From 2001: more than ten times in the past 12 months.

BZgA 2014.

Figure 2.1 Cannabis use by age group. Trends 1973-2012 / 1993-2012

Amongst young adults in the ages 18 to 25 years, cannabis use is much more widespread. Around one third of this age category (34.8%) had tried cannabis at least once, almost one

sixth (15.8%) had used cannabis in the twelve months prior to the survey and 3.9% regularly consume cannabis.

It remains the case that differences between the sexes can be observed in terms of cannabis use. More male than female adolescents and young adults tend towards cannabis use. The comparison of the surveys since 1993 shows that the popularity of cannabis use has changed over the years. The number of 12 to 17 year old adolescents who have tried cannabis once began to rise at the beginning of the 1990s. The peak was, depending on gender, in 1997 (female) and 2004 (male). Since then, a decline in use is apparent. The proportion of adolescents who have consumed cannabis in the twelve months prior to the survey develops according to the same pattern. An increase until 1997 (female) and 2004 (male) was followed by a decline.

The regular consumption of cannabis in young adults hardly changed between 1993 and 2012. The number of 18 to 25 year old young adults who have tried cannabis at least once increased from 1993, reaching its peak in 2004. Thereafter, the number is smaller. In deviation from this pattern, the proportion of young men who have consumed cannabis within the twelve months prior to the survey has increased since 2008 and is back at 1990s levels. Amongst women in this age group, this statistically significant increase has not been witnessed. The prevalence of regular cannabis use amongst young men and women has remained practically unchanged for a good ten years now.

In order to examine cannabis use according to social factors, the interviewees were divided according to the type of school they attended or their job. As cannabis consumption is related to age, the comparatively young pupils of the first stage of secondary education and the older interviewees who had already left that stage were examined separately.

Amongst pupils of the first stage of secondary education, there is no statistically significant difference in the consumption of cannabis to the recorded use factors (lifetime, 12-month, 30-day prevalence, regular use) as far as type of school is concerned. The groups with differing migration background also did not differ from one another in a statistically significant way.

In the case of the older interviewees, who were differentiated by school attended, education, degree, joblessness or unemployment, there were also no differences in respect of the lifetime prevalence of cannabis use. However, the following significant social differences were observed.

- The 12-month prevalence amongst students and the unemployed was above average. It is the lowest for employed people.
- The 30-day prevalence is as low for grammar school (Gymnasium) pupils as it is for employed persons whilst it is highest amongst the unemployed. Amongst unemployed persons, regular cannabis use is considerably more widespread (at 9.3%) than in other groups.

- In the case of interviewees outside of the first stage of secondary education, migration background also plays a role. For people with a migration background of Turkey/Asia, the lifetime and 12-month prevalence of cannabis use is much lower than in the other groups.

### 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, however, there is a non-negligible group which displays risky use patterns at an early age and, in many cases, also develops psychological comorbidities (at a later stage) (social behaviour disorders, affective disorders and anxiety disorders (e.g. Thomasius & Stolle 2008b). For this group of persons it is particularly important to provide specific treatments 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 displays a high degree of association with other disorders as a result of the use of illegal substances (Perkonigg et al. 2008a). In view of the particular importance assumed by the use of 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 2012) 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) (2 million), 14.2% of this age group drink alcohol regularly (i.e. at least once a week) (670,000), 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) (720,000) and 3.7% at least four times (frequent binge drinking). In the case of young adults aged 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%. Alcohol consumption amongst male adolescents and young adults is more widespread than amongst 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 in 2004. Since 2004, trends amongst 18-25 year old adolescents have fluctuated. 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) has already been 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 analysis from the HBSC was reported by Richter and colleagues (2012). According to this, following a sharp rise in consumption rates of alcohol in the years 1994 to 2002, a similarly 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 available from the DAS (BZgA 2012). In 2011, 70.8% of 12-17 year old adolescents in Germany had never smoked, 11.7% currently smoked (560,000). As a proportion of the overall group, 4.8% smoke daily (230,000), 2.0% smoke 10 cigarettes or more per day and 0.3% smoke at least 20 cigarettes a day. 17.5% had tried smoking at least once but were currently non-smokers. Amongst young adults between 18 and 25 years old, 27.6% had never smoked whilst smokers made up 36.8% of the group. 23.1% smoked every day, 16.5% consumed at least 10 cigarettes per day and 4.8% smoked 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.

There is also regional data from other sources (e.g. Hamburg SCHULBUS survey 2012 (Baumgärtner & Kestler 2014); the study by KFN Lower Saxony (Baier & Rabold 2012) and the Frankfurt MoSyD study (Werse et al. 2014)) on alcohol and tobacco consumption among school pupils, adolescents and young adults. We do not explore these here due to the objectives of the REITOX Report.

### 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, having taken 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). The findings were presented in detail in the REITOX Report 2012. According to those findings, the percentage of cannabis users has declined considerably compared to the first study in 2003 (see Table 2.4 of the REITOX Report 2012). 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 development of risky cannabis use over time (recorded via the Cannabis Abuse Screening Test, CAST) can only be viewed for the period of the last four years as the respective indicators were not collected in 2003. 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 risky cannabis use increased from 0.7% to 2.9% (overall sample) and from 5.0% to 17.0% (users).

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)***

The results of the most recent DAS were comprehensively reported in the REITOX Report 2012. Based on the results of the current DAS (BZgA 2012), 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 role played by ecstasy, LSD, amphetamine, cocaine, crack, heroin, inhalants or psychoactive plants is 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.

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

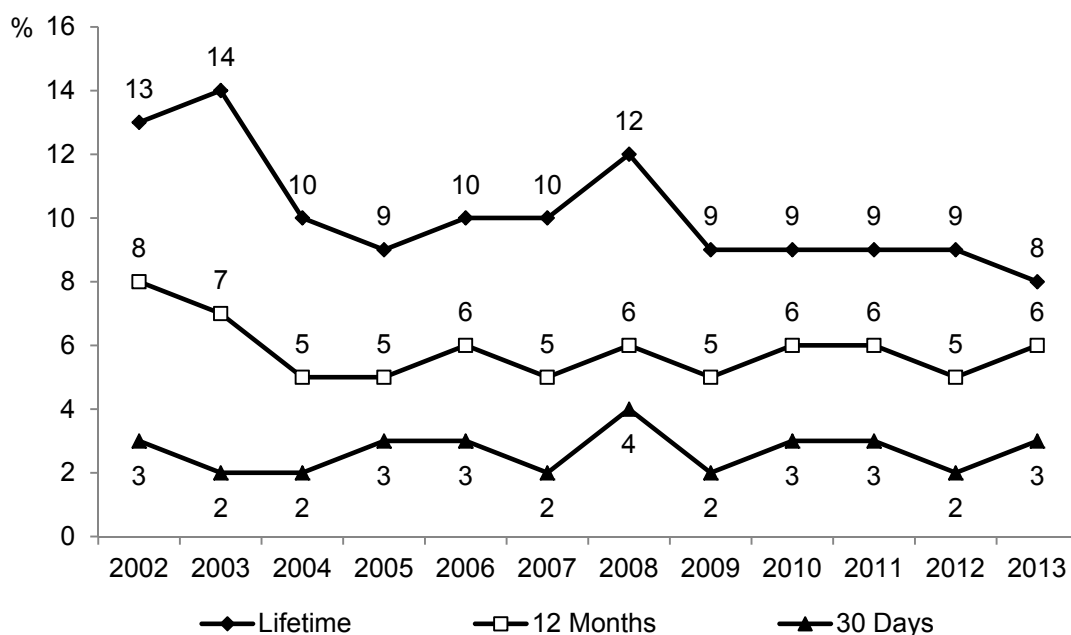
Young men and women aged 18 to 25 show a similar trend pattern to the overall group, however, on a different level. In the 1990s, an increase in the lifetime prevalence of cannabis use begins for young adults of both sexes. The highest levels of cannabis use experience for male and female 18-25 year 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 relevant to cannabis consumption had shown a decline up until around 2011 amongst adolescents in Germany. Under 2.2.2, trends were reported based on current data from representative studies of the BZgA, as these put the developments of the last few years into perspective.

## Data from the Laender and the regional monitoring systems

### Frankfurt (MoSyD)

In 2013, 8% of 15-18 year old Frankfurt school pupils reported experiences with at least one illegal drug apart from cannabis<sup>36</sup> (Figure 2.2). The 12-month prevalence and the 30-day prevalence were in each case one per cent higher than the comparable value from the previous year (6% and 3%). Detailed overviews of the lifetime prevalence and 12-month prevalence of the use of individual substances can be seen in Table 2.3.



Werse et al. 2014.

Figure 2.2 12-month and 30-day prevalence of illicit drug use (except cannabis) among Frankfurt students aged between 15 and 18; 2002-2013 (MoSyD)

Amongst Frankfurt pupils, inhalants are still relatively common (Table 2.3): 15% of 15-18 year-olds have tried inhalants at least once. 8% have experience with laughing gas, 5% with speed, 4% with cocaine and 3% with each of mushrooms and ecstasy. 2% have used hormonal drugs at least once in their lives. In the case of GHB/GBL, crystal (methamphetamine), crack and heroin, the lifetime prevalence was 1% for each.

<sup>36</sup> Summary of the substances: psychoactive mushrooms, ecstasy, speed, cocaine, LSD, crack, heroin, crystal and GHB.

Table 2.3 Lifetime prevalence of a range of substances (%) in the 15 to 18 year old age group in the year after the survey; 2002-2013 (MoSyD)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Sig.
<b>Lifetime Prevalence</b>													
Inhalants	17	17	21	14	15	17	15	16	13	14	10	15	***
Speed	5	5	4	3	5	4	5	3	6	6	5	5	**
Laughing gas	5	5	3	6	5	5	5	6	6	5	5	8	**
Cocaine	4	5	4	4	5	4	6	3	4	3	4	4	n.s.
Psych. Mushrooms	8	9	5	4	6	5	5	4	4	4	4	3	***
Ecstasy	5	5	3	3	4	3	3	3	3	3	4	3	*
Hormonal Drugs	a	a	3	4	2	3	4	3	3	3	1	2	*
LSD	3	3	2	2	3	2	2	2	3	3	3	1	n.s.
Crack	1	2	1	2	1	2	1	2	2	1	1	1	n.s.
Crystal	a	a	a	a	a	1	1	1	1	1	1	1	n.s.
GHB/GBL	<1	1	1	1	<1	1	1	<1	1	<1	2	1	*
Heroin	1	1	1	1	1	1	<1	<1	1	<1	<1	1	*
<b>12-month prevalence</b>													
Inhalants	7	7	8	7	7	9	8	8	6	8	5	8	n.s.
Speed	3	2	2	2	3	2	4	2	3	4	3	3	*
Laughing gas	2	2	1	1	1	2	2	3	2	2	2	2	n.s.
Cocaine	3	3	2	3	2	2	3	2	3	2	2	3	n.s.
Psych. Mushrooms	4	4	2	2	3	2	2	1	1	3	2	2	***
Ecstasy	3	2	1	1	2	2	2	2	2	2	2	2	n.s.
Hormonal Drugs	a	a	2	2	1	2	2	2	2	1	1	2	n.s.
LSD	1	1	1	1	2	1	1	1	1	1	1	1	n.s.
Crack	1	1	<1	1	1	1	1	1	1	<1	<1	<1	n.s.
Crystal	a	a	a	a	a	1	1	1	<1	1	<1	1	n.s.
GHB/GBL	<1	<1	<1	<1	<1	1	1	<1	1	<1	<1	1	n.s.
Heroin	<1	<1	<1	<1	<1	1	<1	<1	<1	0	<1	<1	n.s.

<sup>a</sup> Not collected.

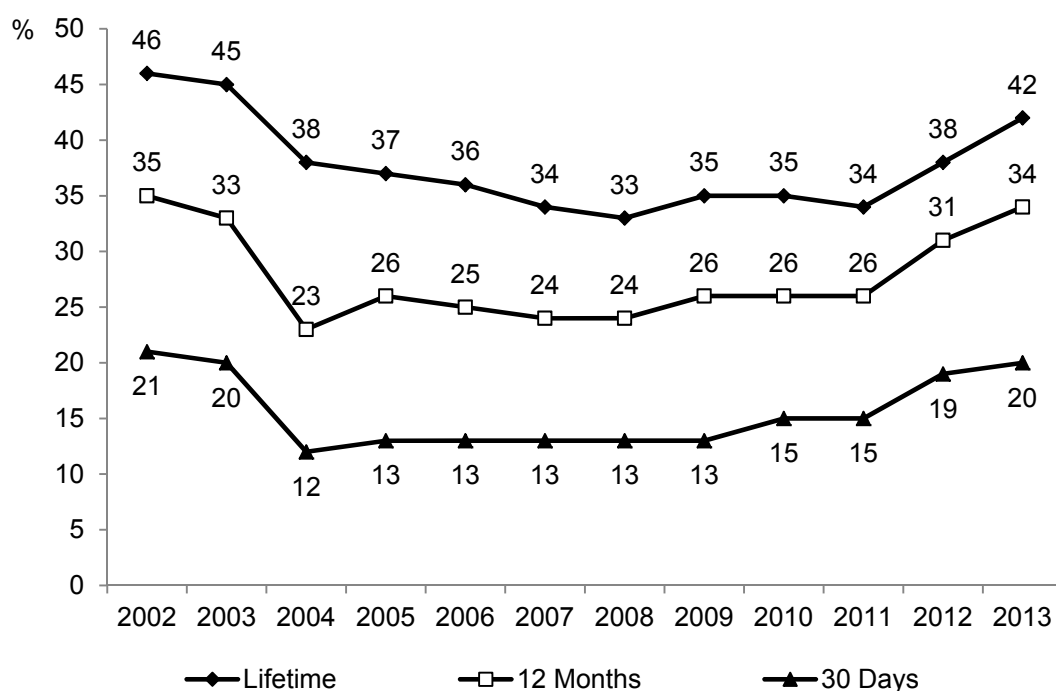
Werse et al. 2014.

In relation to the last 12 months, 8% of 15-18 year olds report that they have used inhalants, 3% have used speed or cocaine in that period whilst the figure of 2% applied to each of laughing gas, psychoactive mushrooms, hormonal drugs or ecstasy. All other substances

had 12-month prevalence figures of 1% maximum. In total, 6% of people had consumed at least one “hard drug” in the preceding year.

In relation to cannabis consumption among Frankfurt school pupils, it is evident that the lifetime prevalence, following an initially sharp decline up to 2008 and then slight fluctuations, has recently risen by four percentage points, as in the previous year, thereby almost returning to 2003 levels (Figure 2.3). A similar situation exists in respect of the 12-month and 30-day prevalences which, after falling until 2004 and maintaining very constant values in the following years to 2012, have risen, practically reaching 2002 levels once more.

After data from recent years that may have indicated a stagnation in cannabis consumption, the latest trends from Frankfurt’s school pupils indicate an increase once again. This can also be seen amongst heavy users (at least 10 times in the previous month): As was already the case in 2012, the respective proportion was at 7% and as such almost as high as in the first survey years. The proportion of those who have used drugs no more than 9 times in the previous month has increased once more, as in 2011-2012 by one percent.



Werse et al. 2014.

Figure 2.3 Lifetime, 12-month and 30-day prevalence of cannabis use among Frankfurt students aged between 15 and 18 years old; 2002-2013 (MoSyD)

Since 2008, school pupils have also been asked about their consumption of so-called herbal smoke blends; since 2010 use of other so-called legal highs has been surveyed. In the current study, 5% of the 15 to 18 year olds surveyed had consumed a herbal smoke blend at least once in their lives, 1% in the preceding 30 days. Likewise, 0.5% had consumed a product of this kind more than 5 times in their lifetime. There are no significant differences between the different age cohorts.

In response to the questions about legal high products (in addition to “bath salts” and “plant foods” etc. the question also mentioned “research chemicals” (RCs), as such also the active substances themselves, as examples), 2% of respondents admitted having tried a preparation of this nature on at least one occasion. 1% of those questioned had also taken other legal highs in the last month, and five respondents had taken these products more than five times in their lifetime. In this context also, no significant age-related differences are apparent.

The answers to these questions as to the use of legal highs or RCs should be viewed with even greater suspicion in 2013 than before: only 2 of the 24 persons who stated that they had experience of use, named, in response to the open question as to names of the substances used, “bath salts” at all as a product or substance from the narrower category of legal highs/RCs. Four of those who reported experience with use, named illegal drugs or laughing gas, two named herbal smoke blends or herbal ecstasy, three stated that they did not know what they had consumed, four provided nonsensical answers and the remaining seven did not give any information. As such, in the estimation of the authors of the MoSyD, it can be assumed that far fewer respondents had tried synthetic new psychoactive substances aside from cannabinoids; the key indicator for current use or experience of use would therefore likely tend towards zero.

The lifetime prevalence of the use of herbal smoke blends fell in the reporting year by a further two percent so that overall a decreasing trend can be seen in the MoSyD since 2010 which is also statistically significant. The change in the 30-day prevalence shows no clear trend. The same applies in respect of “more than five times” use; however in 2013 this indicator reached its lowest value since 2009. Overall, the downward trend in the consumption of herb mixtures containing cannabinoids was clearly confirmed. In the case of other legal highs or research chemicals, no significant changes are apparent. Even the small proportion of those who name a specific product in this area (2011:8 mentions, 2012: 5, 2013: 2), however, indicates a declining trend in this area also.

### ***Hamburg SCHULBUS – (Hamburg SCHULBUS Project)***

The data collected for the fifth time in 2012 on the consumption prevalence for narcotics among adolescents between 14 and 17 years of age and the conclusions that can be drawn from this were already presented in the REITOX Report 2013 (Baumgärtner & Kestler 2014).

Based on data from the SCHULBUS 2012, Baumgärtner (2013) conducted a detailed analysis of at-risk groups within the examined population. The basis of the analysis was the question as to whether differently distinct sub-groups could be identified within this at-risk group of adolescents, in relation to various factors. The analysis incorporated a series of variables such as gender, migration background, type of school, family situation and age of first use or prevalence of use of addictive substances in the group of friends.

Generally, the sub-groups within the at-risk group amongst male adolescents were, as expected, much higher for alcohol, tobacco and cannabis consumption than amongst female adolescents (OR for cannabis 5.18; CI: 2.14-11.14). No interpretable peculiarities were

observed in relation to a specific, Eastern European migration background. An interesting finding was that adolescents with a more Muslim based migration background had a much lower level of risky cannabis consumption than their peers without a migration background (OR: 0.21; CI: 0.05-0.89). As far as the type of school is concerned, the probability of risky tobacco or cannabis consumption was much lower amongst grammar school (Gymnasium) pupils than similarly aged adolescents at district schools (OR: 0.36; CI: 0.13-0.99). A family or school situation which the interviewees described as “bad”, increased the probability of risky consumption.

Based on data of first use of addictive substances, Baumgärtner was able to confirm earlier findings that an early starting age of use enormously increases the risk of later substance abuse. Furthermore, if addictive substances are consumed in the group of friends, the risk of own drug abuse increases by a factor of four (OR for cannabis: 26.57; CI: 10.45-67.56).

Baumgärtner places a value on the proportion of 14-17 year olds in Hamburg with risky patterns of use of at least one addictive substance (alcohol, tobacco, cannabis) of 18.5%, whereby this number is based to a large extent on the substance alcohol (cannabis: 5.2%).

### **Lower Saxony**

The German Centre for Addiction Research in Childhood and Adolescence (DZSKJ) conducted a prevalence study in 2013 on the use of psychotropic substances amongst pupils in Lower Saxony, taking into account a sub-group of adolescents who exhibit risky use patterns. In a cooperation project between the research institute WINEG of the health insurance provider Techniker Krankenkasse (TK) and Suchtmobil e.V., N=1,085 adolescents were asked about their use of psychotropic substances and the risk assessment of such use. The final report was produced by the DZSKJ and made available by the TK. The central findings were presented in April 2013 at a press conference in the Lower Saxony office of the TK. A German language publication with selected findings was produced and is due to be submitted, after an internal review, by a specialist journal.

### **Summary and trends**

Alcohol and nicotine, the most widespread drugs, are unchanged; amongst illegal drugs, cannabis continues to occupy the top spot.

In line with the findings of the Frankfurt MoSyD, in specific subcultures other substances play an important role, for example heroin/crack (“open drug scene”) or speed (“electronic dance music”) - from Frankfurt, there are also indications that use is also spreading to working days. For the consumption of MDMA/ecstasy, an increase in consumption was identified in the scope of the MoSyD in the current reporting year, which corresponds to trends reported in other regions.

After the data from the regional monitoring systems (Frankfurt and Hamburg) had already pointed to a stagnation in the previous year, or had even suggested a turnaround in the continuously decreasing trends in the consumption of illegal substances that had been observed for many years (primarily: cannabis) among adolescents, the BZgA data (survey

year: 2012) provides further information supporting the initial perception. The study published by the BZgA in 2014 arrives at the conclusion that “(...) *it could be wrong to assume a further decline in cannabis consumption amongst young adults in Germany*” (BZgA 2014, p. 18).

The contact persons interviewed in the scope of the Trend Scout Panel of the Frankfurt MoSyD 2013 reported perceiving an improvement in the image of cannabis in the course of the worldwide legalisation debate (Werse et al. 2014). According to that panel, in 2013 a wide openness to and acceptance of consumption was reported in almost all scenes.

Clearly, it is still the case that the target group of “regular” users (as differently as they are defined in the individual studies) have not been reached to a satisfactory extent, whilst there are indications that the established prevention programmes and services can successfully increase the age of first use. The average age of first use of cannabis in Frankfurt has constantly risen in Frankfurt over the years (2002: 14.5 years old; 2012: 15.1 years old) even if this value in the survey year 2013 was below the comparable value in the previous year. In Frankfurt, the proportion of those pupils who have used cannabis before their 13th birthday is also as low as never before in the scope of the MoSyD (2002: 21%; 2013: 10%).

Particular attention should be paid to the connections between cannabis consumption and smoking behaviour. The relationship has been well known for many years and has repeatedly been described elsewhere.

The prevalence of so-called “legal highs” and related products seems to be unchanged and relatively low. Nonetheless, they seem to have established themselves as a permanent fixture in the drug scene. Gathering epidemiological data on this segment is associated with significant difficulties and will certainly be a subject of study in future, against the backdrop of changing consumption patterns.

From the available data it is clear that considering individual substances in isolation without considering consumption patterns and other relevant (e.g. social) data is not sufficient if we are adequately to describe the emergence and maintenance of illegal substance consumption.

Tables 2.4 and 2.5 summarise the most important findings of recent studies on drug use amongst adolescents and young adults.

A comparison of the data reveals the following:

- The age groups surveyed by the individual studies are not identical.
- ESPAD and HBSC were only conducted in some of the 16 Laender (HBSC 2010: all Laender except Baden-Wuerttemberg).
- Some of the divergences in the prevalence estimates may also be attributable to different methods used (telephone vs. class supported questionnaires) or different wording in the questionnaires.

- Regionally, there also exist some considerable differences in the use behaviour and in the characteristics of the markets (e.g. availability, prices and/or purity for different substances).

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

Moreover, individual substances or groups of substances (e.g. GHB/GBL, methamphetamines, biogenic drugs and 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 for all of these substances (exception: Frankfurt). Moreover, some of the appearances of these substances are transitional phenomena that cannot necessarily be taken as indicators of prolonged changes in patterns of use.

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 and 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.



Table 2.4 Prevalence rates for the use of illicit drugs *except* cannabis among school populations and adolescents in various German studies

Source <sup>1)</sup>	Year	Age group	Region	Prevalence (%)		
				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	2013	15-18	Frankfurt	3	6	8
MoSyD	2012	15-18	Frankfurt	2	5	9
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	2012	14-17	Hamburg	2.2		7.3
SCHULBUS	2009	14-17	Hamburg	0.9		3.9
SCHULBUS	2007	14-17	Hamburg	2.2		5.8
SCHULBUS	2005	14-17	Hamburg	4.8		10.3
SCHULBUS	2004	14-17	Hamburg	3.4		10.2

1) The presented data from the year 2004 is 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 a few students aged 14 and 17 years were also included.

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

SCHULBUS: ecstasy, mushrooms, LSD, speed/amphetamine, cocaine, crack and heroin. The results depicted differ from those of the previous year and are based on a re-analysis of the data (Baumgärtner & Kestler 2013).

2) Corresponds to "present use" (BZgA until 2008) or respectively "current use" (SCHULBUS).

Table 2.5 Prevalence rates for the use of cannabis among school populations, adolescents and young adults in various studies\*

Source	Year	Age group	Region	Use in Period (%)		
				30 Days <sup>1)</sup>	12 Months	Lifetime
HBSC	2010	15	National <sup>2)</sup>		7.4	
HBSC <sup>3)</sup>	2006	15	5 Laender	7.1/4.3	10.6	18.1/13.8
HBSC	2002	M=15.7	4 Laender		15.5	24.0
KiGGS <sup>3)</sup>	2003/06	11-17	National		9.2/6.2	
BZgA	2012	18-25	National	6.4 (3.9) <sup>4)</sup>	15.8	34.8
BZgA	2012	12-17	National	2.0 (1.3) <sup>4)</sup>	5.6	7.8
BZgA	2011	18-25	National	5.4 (3.3) <sup>4)</sup>	13.5	39.2
BZgA	2011	12-17	National	1.9 (0.8) <sup>4)</sup>	4.6	6.7
BZgA	2010	18-25	National	5.3 (3.2) <sup>4)</sup>	12.7	35.0
BZgA	2010	12-17	National	1.7 (0.2) <sup>4)</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
ESPAD <sup>5)</sup>	2011	15-16	5 Laender	8.1	17.4	22.2
ESPAD <sup>5)</sup>	2007	15-16	7 Laender	8.1	17.2	25.2
ESPAD <sup>5)</sup>	2003	15-16	6 Laender		24.0	31.0
MoSyD	2013	15-18	Frankfurt	20	34	42
MoSyD	2012	15-18	Frankfurt	19	31	38
MoSyD	2011	15-18	Frankfurt	15	26	34
MoSyD	2010	15-18	Frankfurt	15	26	35
MoSyD	2009	15-18	Frankfurt	13	26	35
SCHULBUS	2012	14-17	Hamburg	16.9		29.3
SCHULBUS <sup>6)</sup>	2009	14-17	Hamburg	11.3		23.6
SCHULBUS <sup>6)</sup>	2007	14-17	Hamburg	9.0		22.7
SCHULBUS <sup>6)</sup>	2005	14-17	Hamburg	15.5		35.0
SCHULBUS <sup>6)</sup>	2004	14-17	Hamburg	16.7		38.0

\* In the case of repeated surveys (e.g. BZgA, MoSyD), only the data of the last five published studies are shown.

1) BZgA (DAS 2004: 30 days = "present"), SCHULBUS (30 days = "current use").

2) Except for Baden-Wuerttemberg.

3) HBSC (2006) and KiGGS: first figure: boys; second figure: girls.

4) In brackets: regular use (> 10 times in the last year).

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

6) The results depicted differ from those of the previous year and are based on a re-analysis of the data (Baumgärtner & Kestler 2013).

## 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 services upon referral continues to constitute a special problem. Mediators 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 services 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.

Data from the various recent studies (MoSyD, SCHULBUS, JDH-Study Berlin) confirms that in a comparison of adolescents from Muslim parent households with other adolescents of the same age, those with a Muslim background use cannabis and illegal drugs much more rarely.

### (Techno) party scenes

According to the expert panel questioned in the scope of the Frankfurt MoSyD (Werse et al. 2014) in 2013 there were, once more, no noteworthy changes in use behaviour in respect of alcohol, as the most important drug, followed by cannabis, amphetamine and ecstasy/MDMA. A current topic in the scene in 2013 was the perceived higher intensity of checks on the part of law enforcement.

### Open drug scene – Frankfurt am Main

In 2013, the “Scene Study 2012”, was presented, the last comprehensive report from MoSyD on the open drug scene in Frankfurt am Main (Bernard & Werse 2013); its findings were laid out in the REITOX Report 2013.

According to the estimation of the expert panel of the MoSyD 2013 (Werse et al. 2014), heroin and crack remain unchanged as the most used substances in this scene. Benzodiazepines are, however, after flunitrazepam was brought within the BtMG (Rohypnol®) in 2011, much more rarely consumed than, for example, two years previously. Rumours about crystal meth having appeared on the scene have not been confirmed.

The shift in heroin trafficking from dealers primarily of Macedonian background to mainly North Africans has evidently ended. The active substance content has visibly risen again. The trend away from i.v. use to more nasal use and smoking has continued.

It is possible that the illegal sale of substitution drugs has increased parallel to a falling proportion of “official” substituting individuals. Psychiatric-addiction-related double diagnoses were somewhat more regularly observed. An increased pressure on the scene from law enforcement was also perceived.

### **Substance use and addiction-related problem situations of children and adolescents in inpatient youth care.**

In Germany, children and youths are regularly surveyed about their substance use and sometimes also on their addiction-related behaviour (e.g. BZgA, ESPAD, KiGGS, SCHULBUS). The representative studies relate to the general population in the relevant age cohorts. In the expert community, however, specifically in the area of selective and indicated prevention, there has long been the suspicion that children and adolescents receiving special public education assistance represent a particularly affected sub-group, although no data has so far been available for this group.

In the autumn of 2013, FOGS conducted a census in the provider's own inpatient youth support facilities on behalf of the LWL, which allowed findings to be obtained on the use of addictive substances, addiction-related behaviour, other health-related aspects, violence amongst, i.a., 12-17 year olds. A second survey was aimed at experts in youth support facilities and investigated how they perceive the addiction-related problems in the adolescents in their care, how teams and facilities deal with that and how well the experts feel equipped to deal with these youths. Furthermore, they were asked about their willingness to provide support and cooperation<sup>37</sup>.

The findings on the use of addictive substances amongst children and adolescents in inpatient youth support facilities of the LWL are, in the opinion of the authors and those who commissioned the survey, alarming in many ways, in particular in respect of smoking, cannabis consumption, experience of violence and psychological abnormalities. The findings of the survey show, in a way which is unique in Germany, clear indications of the considerable and complex risk of addiction amongst children and adolescents and in particular of girls in inpatient youth support facilities. The homes for troubled youths of the LWL, in which the surveys were carried out, can certainly be seen as representative of the

---

<sup>37</sup> Final report available at: [http://www.lwl.org/LWL/Jugend/lwl\\_ks/Publikationen/FORUM\\_SUCHT](http://www.lwl.org/LWL/Jugend/lwl_ks/Publikationen/FORUM_SUCHT) (last accessed: 15 August 2014).

system of inpatient support with different living forms and a clientele with varying levels of problems. The consumption of addictive substances and the risk of addiction are therefore no exceptions in this context.

### **Substance abuse amongst adolescents with ADHD**

In the scope of an international study, N=1,017 directly affected persons, their siblings and healthy control persons were examined, having been recruited in the scope of the International Multicentre ADHD Genetics (IMAGE) Study in Belgium, the Netherlands and Germany (Groenman et al. 2013). The aim of the study was to examine the relationship between a diagnosis of attention deficit hyperactivity disorder (ADHD) in childhood and the development of a later disorder due to the use of psychotropic substances (alcohol, drugs, tobacco). The participants in the study were between 5 and 17 years old, were recruited from the outpatient units of the participating clinics and were examined again, on average after 4.4 years, at an average age of 16.4 years old. The study found that the sample of adolescents diagnosed with ADHD exhibited an increased risk for the development of substance use disorders (HR = 1.77, 95% CI: 1.05-3.00). The authors conclude from this finding that where there is already a diagnosis of ADHD in childhood, this is a risk factor for the development of substance abuse disorders in adolescence, thus also confirming other studies performed on this topic.

## **2.5 Further research results and findings**

### **Study, “Adolescence, drugs, backgrounds” (Berlin)**

The exploratory “JDH Study” (“Adolescence, Drugs, Backgrounds”) (Cornel et al. 2014) was conducted as a cooperation project of the Special Unit for Addiction Prevention Berlin GmbH together with the Alice Salomon University of Applied Sciences, Berlin, with the involvement of students at the university. The aim of the study was to generate background knowledge on substance consumption amongst adolescents and young adults between the ages of 16 and 27 years old. In addition to the motives for consumption, in particular the attitudes and opinions were at the focus of the study. From November 2012 to March 2013, a total of N=441 adolescents and young adults took part in the study, which was conceived as a mixed-methods design.

Initial findings from the study report a lifetime prevalence of cannabis use of 69% (“current consumption” defined as “at least once a month or less often”): 35%; “regular consumption” was defined as “several times a week or daily”: 14%). The corresponding value for amphetamine was 26% (lifetime; current: 12%; regular: 1%); cocaine: 19% (6%; 8%); ecstasy: 17% (8%; --); herbal smoke blends: 8% (2%; --) and “bath salts”: 5% (2%; --). Initial analyses revealed that almost one in eight of those questioned (12.5%) exhibited characteristics of problem use of addictive substances. Amongst problem users, cannabis use dominates, compared to alcohol consumption and other illegal substances. For 18 year olds, the “desire to belong” or the “peer pressure” played a much greater role than for the older respondents. These motivations were mentioned almost twice as often by the former

group than the latter. 18 to 20 year olds also specified, more often than all other age groups, the consumption motive of “escaping problems”. The intensity of cannabis consumption correlates with a higher consumption of other substances. This relationship is evident in particular for the consumption of cigarettes and illegal substances. Similar to the case with Muslim adolescents in the scope of the Hamburg SCHULBUS study, respondents in this study, who specified that they belonged to a religion, exhibited a lower lifetime prevalence of cannabis use (51%) and a lower intensity of consumption than respondents who did not belong to a religion. The frequency and intensity of consumption of alcohol is significantly lower amongst respondents who belong to the Muslim religion than amongst those with a Christian or no affiliation. Every second respondent felt pressured by the focus on performance in society, over half (56%) sometimes to often felt overwhelmed by everyday life, such as through school obligations or demands of parents. Regular cannabis use is associated with a perception of the substance cannabis as legal whilst non-users view it as clearly illegal.

### **Addiction Report Saxony**

In January 2014, a Drug and Addiction Report for the Free State of Saxony was presented by the Saxon State Government for the second time, after 2009 (Sächsisches Staatsministerium für Soziales und Verbraucherschutz 2014). In order to present the substance-related drug and addiction problem in Saxony, in particular the ESA 2009 (Saxony), the short report of the ESA 2009 (Germany) as well as the Addiction Yearbooks of the DHS were used and supported by further literature. For the target group of adolescents, the main sources used were the study “Youth 2009 in Saxony”, the Drug Affinity Study of the Federal Centre for Health Education (BZgA) (2012) and the HBSC fact sheets (2012). For some age groups and substances, there was no Saxony-specific data available. Therefore, in those cases the numbers were extrapolated on the basis of nationwide data and the population figures (2011) for Saxony according to age and gender.

Based on the ESA 2009, in the second Drug and Addiction Report for Saxony, the following estimated values were specified: in the Free State of Saxony, there are approximately 114,000 persons in the age group of 18 to 64 year olds who consume illegal drugs (of which the majority, 105,000 persons, consumes cannabis compared to 32,000 users of other illegal drugs), 37,000 cannabis dependent persons and 85,000 people who exhibit problem consumption of prescription medication. It is estimated that somewhere around 490,000 persons in Saxony have a lifetime prevalence in the respect of the consumption of illegal drugs, 114,000 persons have used illegal drugs within the last 12 months and 53,000 persons have used them in the last 30 days.

There is particular attention in Saxony to the use of stimulants. In the Free State of Saxony, the 12-month prevalence in the ESA 2009 was only slightly higher (0.8%) than the comparable values from the nation as a whole (0.7%). Independent of these prevalence rates, the Drug and Addiction Report expressly refers to the fact that the need for treatment in outpatient, inpatient and complementary care facilities in the Free State of Saxony has

risen considerably in recent times, in particular for people who use methamphetamine. The authors conclude from that, that these increases indicate an increase in consumption. However, reliable current numbers on prevalence rates were not available by the editorial deadline (30 January 2013).

### **Methamphetamine and other synthetic drugs**

Once more, the growing use of methamphetamine was reported in the past year at various places both in the press and in the scope of specialist events. On the part of law enforcement authorities and care facilities, some regions still reported clear increases in seizures, first-offence users as well as treatments/support, which are not only limited to the *Land* which borders the Czech Republic. However, there is still no reliable epidemiological information to date that could provide some insights into the use of methamphetamine in the general population.

Overall, illegal synthetic drugs only played a side role in the expert panel of the Frankfurt MoSyD. The substance most often mentioned in this context - apparently due to high media presence - was methamphetamine; albeit with the reference to the fact that the substance still only plays an extremely marginal role. In the area of peer prevention, isolated enquiries on the substances were reported, but apparently these came mostly from those who did not consume it themselves. Frankfurt law enforcement reported that there had not been even a single case, at least in the first half of 2013, in connection with methamphetamine. According to the experts questioned, other synthetic substances also only play a minor role in Frankfurt or have lost even further significance. The number of cases due to amphetamine and ecstasy/MDMA trafficking had fallen and the seizure volumes of these substances were small. Amongst adolescents who are reached by peer prevention through school projects, only a very small group was interested in synthetic drugs.

In 2013, the Federal Ministry of Health commissioned a study to address the motives of consumers of (meth)amphetamine. The aim of the study was to identify relevant groups of people with abusive consumption of amphetamine and methamphetamine and to obtain information from them on their usage biographies, motives and patterns as the basis for possible target group specific preventative measures (Milin et al. 2014).

The project comprises three modules: 1.) an empirical survey of persons who currently consume amphetamine and methamphetamine, 2.) an analysis of posts in relevant internet forums and 3.) the study of persons who have ceased using. The focus of the project was the empirical survey under point 1.). With the help of an innovative, PC assisted instrument - or one which can be accessed online - the participation of 392 users was secured from a broad spectrum of contact points (i.a. communications platforms on the internet, recreational events, counselling and treatment services). The survey was based on a mixed methods approach with carefully balanced quantitative and qualitative elements.

Some of the user groups described in the international context could also be empirically confirmed for Germany. These include, in addition to users with recreational use, users with job-related use, users with additional psychological disorders, users with children and users

with especially risky use habits. In addition to the sometimes differing motives for use, the circumstances of starting using and further aspects from which ideas for preventative measures can be derived, indications for the estimation of support services and prevention by the affected persons themselves could be obtained. Furthermore, a particularly high degree of acceptance was observed amongst those who pursued an accepting and risk minimisation approach. The strengths of the aforementioned study are in the qualitative description of the aforementioned aspects. It is not a representative survey. All statements, including the differences between amphetamine users and persons who (also) consume methamphetamine, must therefore be interpreted with some caution.

### **Ketamine**

The assumption posited in the scope of the Frankfurt MoSyD 2012 of a further spread of ketamine use to scenes outside the area of “electronic dance music” was not confirmed in 2013. In the relevant scenes, around every tenth person who belongs to that scene had consumed ketamine at least several times in 2013. Four trend scouts of the MoSyD talked of a continuing trend or even an increasing popularity - only in the tech-house scene did use fall. The perceived availability in Frankfurt had improved again compared to the previous year (Werse et al. 2014).

### **“Legal highs” and new psychoactive substances (NPS)**

As before, the results of the current trend scout study from the Frankfurt MoSyD indicate that “legal highs” play at best a marginal role in all the scenes investigated (Werse et al. 2014). The same applies to “research chemicals”, which are only prevalent to a certain extent in specialised, more adventurous circles. The majority of partygoers were by contrast considered somewhat conservative in their consumer behaviour.

From the Trend Scout Panel of the Frankfurt MoSyD, some information is available on NPS which became noticeable in Frankfurt. According to that information, the potent stimulant MDPV (methylenedioxypropylvalerone - subject to the BtMG since 2012) became popular in a small number of persons in the gay party and club scene. The substance gained access to the scene as something which people brought with them from Berlin, where they are considered trendy drugs in particular groups. The users were described by the trend scout as experienced drug users who only used after-hours in small groups. Apparently, no dealing in MDPV had so far taken place. In addition to the euphoria inducing effects, the drug has a negative effect on physical sensation, namely on own body awareness, which can in some cases be felt as psychologically stressful. Further risks were identified as the difficulty in dosing the drug, which is effective in the milligram range, as well as the unknown side effects and the risk of confusion with MDMA due to the similarity in the names.

Mephedrone found its way into the Goa scene, three years after being subject to the BtMG. It is snorted nasally or mixed with cannabis and smoked in joints. The effectiveness of the latter use form is questionable, however, as mephedrone, a salt, is not smokable. Nevertheless, the combination is described as an MDMA-like rush, although it can also



cause a dissociative and “contemplative” trip. Until now, mephedrone was only offered for free amongst acquaintances and primarily tried out of curiosity. The substance was presumably purchased in larger volumes on the internet at a price unknown to the trend scout. A small group uses the substance regularly in private settings with the aim of using the trips for “finding oneself” or “crisis management”.

Since the beginning of 2013, the IFT Institute for Therapy Research in Munich has carried out research as part of the Federal Ministry of Health-supported project “Phar-Mon” in cooperation with the MINDZONE addiction prevention project investigating new trends in substance misuse in the party scene. In the scope of this research, information on new substances and patterns of use amongst party goers in Munich is being collected as this population can be considered very knowledgeable and experienced in the use of such substances. Initial analysis of the data has shown that, in the relevant population, the consumption of cannabis (12-month prevalence: 75%), ecstasy (52%) and speed (51%) are dominant. Furthermore, one in six respondents stated that they had consumed crystal in the past year. This finding underlines the fact that the requirements of differentiated, target group specific prevention measures (in this case for crystal methamphetamine) can vary greatly from region to region (Stumpf et al. 2014).

In the spring of 2013, further cooperations with the prevention projects “Eve&Rave” in Münster and “Musikszeneprojekt: Drogerie” in Erfurt were started. In March 2014, further prevention projects in Frankfurt (Alice), Berlin (Fixpunkt), Cologne (Drogenhilfe), Leipzig (DrugScouts) and Potsdam (Chillout) were contacted.

Currently, a total of N=1,200 completed questionnaires from 26 events have been returned (status: 12 June 2014), whereby the majority of the questionnaires are from Munich. It has so far been possible to include N=753 questionnaires in the analysis. In the course of the analysis, in total 72 “new” substances were mentioned and verified. Established substances (cannabis, MDMA, speed, LSD etc.), medicinal products, crystal meth and ketamine were excluded. Collective names were included (e.g. bath salts, research chemicals, spice etc.) as were natural drugs (ayahuasca, mescaline). The data confirms that the use of psychoactive substances amongst young partygoers is still more widespread than in the general population. In the sample, the most commonly consumed substance within the last 12 months was cannabis (75.1%). Ecstasy (MDMA) and speed (amphetamine) are at second and third in the most commonly taken substances (52.0% and 51.1% respectively in the previous 12 months; 30.2% and 28.3% in the previous 30 days). Crystal meth is in tenth place after cocaine, LSD, hallucinogenic mushrooms, ketamine, new psychoactive substances and GHB. Around 16.4% of respondents had consumed crystal meth within the previous 12 months, 4.1% in the previous 30 days. Only heroin, natural drugs and substances which respondents could not identify, were taken less frequently (Hannemann & Piontek, personal report, July 2014).

### **Risk assessment as predictor for individual use**

In 2014, Eul and Stöver (2014) presented an extensive paper which brought together the findings of several consecutive studies on the topic of “Experience of use and willingness to use, risk assessment, desired legal situation and the interaction between cannabis and other drugs in the German population”. Based on three representative surveys from 2000 to 2010 and an internet survey from 2010<sup>38</sup>, the use, personal risk assessment and the desired legal status of cannabis and other drugs in the German population was studied. It is of little surprise that, according to the findings of the study, cannabis is the most used substance compared to amphetamine, cocaine, ecstasy and other drugs; at the same time, it is rated as the least risky and the illegal drug most favoured for liberalisation in terms of a possible relaxation of drug laws. Based on their findings, the authors conclude that the personal risk assessment comes before numerous other influences as the most important predictor of individual use or non-use of the respective drug. Furthermore, the risk assessment also strongly affects the desired legal status in connection with the respective substance. Eul and Stöver refer to the fact that around 70% of the German population are against the sanction-free possession of cannabis for personal consumption. However, almost 60% of respondents in the studies voted for a decriminalisation of the possession of cannabis for personal use. 75% of the respondents were in favour of a possible use of cannabis as medicine.

### **Social and familial well-being - international comparison from the HBSC**

In 2013, based on data from the HBSC studies of 2002, 2006 and 2010, ter Bogt and Colleagues (2014) examined the extent to which international changes to the frequent consumption of cannabis (operationalised as minimum number of uses=40 in the period to 15 years old) relate to the societal and/or familial well-being as well as how they relate to gender. This included data from N=160,606 15 year olds from representative studies in 30 countries from Europe and North America. The authors reported that they found a decline in the frequency of lifetime use amongst adolescents in Europe and North America, in particular in Western Europe and the USA. A comparable trend was not observed in the fast developing countries of Eastern, Central and Southern Europe. Throughout the observation period (2002-2010), cannabis use proved to be less characteristic for countries with a high gross domestic product (GDP) in contrast to those with a lower GDP, as well as for families with higher standards of living in contrast to less economically secure families; a growing difference between the sexes was recorded (more male adolescents). The perceived availability of cannabis and respective contacts within the peer group proved to be enduringly important predictors for frequent cannabis use. The authors arrive at the conclusion that cannabis consumption overall rather levels out and that patterns of use between countries as well as between different income groups are converging.

---

<sup>38</sup> The studies were three representative and computer assisted telephone interviews (CATI) with N=2,002 (2000), N=1,007 (2002) and N=1,001 (2010) respondents between 14 and 94 years old (2000), 14 and 90 years old (2002) and 14 and 91 years old (2010). Furthermore, findings from a non-representative internet survey with N=4,104 participants from 2010 was taken into account. Further methodological aspects can be deduced from the original work.

## Wastewater analysis

In the scope of an international study, Ort and Colleagues (2014) examined the variability of daily concentrations of drugs in wastewater, in order to investigate the extent to which wastewater analysis, which is generally an alternative option for estimating drug use in the population, could also provide results for smaller populations and in order to optimise the design of the monitoring process for future studies. The basis for this was formed by daily wastewater samples from 1,369 consecutive days from a German small town with 7,160 inhabitants. The researchers tested the wastewater using suitable processes for the presence of cocaine and benzoylecgonine and looked at the data using time series analysis techniques. They observed an increase in the provable contamination with cocaine over the course of time, with increased values in winter and spring. Despite considerable daily fluctuations, the contamination at weekends and on days with frost and snow was significantly higher. Based on their findings, the authors conclude that at least 56 consecutive samples are necessary to obtain reliable annual estimated values for contamination with drugs. In order to identify changes in consumption habits or relationships with other factors, samples are required on a much larger scale (both in relation to very prevalent drugs in small communities and low prevalent substances in large cities). Extensive additional information is available on this topic on the EMCDDA<sup>39</sup> website.

## Data from poison control centres

In light of the increasing significance of intoxication through substance abuse for toxicology, Liebetrau and Colleagues (2013) retrospectively analysed data<sup>40</sup> from the Erfurt poison control centre (Thuringia) from the years 2002-2011 according to substance class, reasons for exposure, severity of symptoms, age groups and gender. According to their analysis, the number of substance abuse cases increased continuously in the observation period (N= 3,760; 3% of all exposures) from n=252 (2002) to n=507 (2011), whereby only the increase in concomitant use was significant, when compared to all exposures. The abuse of ethanol, amphetamine-type stimulants, benzodiazepine/analogues and GHB increased, whilst that of cannabis reduced. Cases of abuse in connection with so-called “legal highs” were first observed in 2010 and led to medium serious symptoms more often than cannabis abuse did. The authors conclude from their data that the clinical significance of substance abuse can be seen in the fact that in comparison to suicide attempts, it more often leads to medium serious and serious symptoms; the authors recommend that data on substance abuse from poison control centres should be taken into account in addition to other data sources when reporting on the drug situation.

---

<sup>39</sup> <http://www.emcdda.europa.eu/topics/pods/waste-water-analysis> (last accessed: 25 August 2014).

<sup>40</sup> Exposures to a substance under adventitious, abusive or unknown circumstances or in the scope of a suicide attempt.

### **Joint action for the reduction of alcohol-related harm**

Even though the focus of this project is on the collection of data in connection with the consumption of alcohol, the project funded by the European Commission, “Reducing Alcohol Related Harm - RARHA”<sup>41</sup>, should be mentioned here due to its objective of international coordination on data collection, monitoring and development of guidelines, similar to the structure of the REITOX report. In the scope of RARHA, 23 EU member states are working together with the aim of developing joint approaches to the priorities of the EU alcohol strategy, to introduce these across the EU and thus to reduce alcohol-related harm in Europe and promote low-risk consumption of alcohol. Germany is represented in this joint action by the German Federal Ministry of Health, which also funds the project. Some of the outstanding tasks have been delegated, for example to the BZgA, the IFT Munich and the LWL Coordination Office for Drug Related Issues, which are partners in RARHA. In the scope of the project, the level of knowledge and the access to EU-wide comparable data on alcohol consumption, patterns of consumption and alcohol-related harm is to be improved. Guidelines are to be developed on low-risk alcohol consumption as well as a population-based campaign to highlight the content of the guidelines.

---

<sup>41</sup> <http://ec.europa.eu/eahc/news/news310.html> (last accessed: 15 August 2014).

## 3 Prevention

### 3.1 Overview

#### 3.1.1 Institutions involved and organisational framework

The primary goal of addiction prevention is to promote the health of the individual, maintain abstinence and to prevent abuse and addiction, or at least reduce it. 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 is one of the four main areas on which the German addiction and drug policy is based (cf. chapter 1.1.2).

The importance of prevention of addiction is also shown by the fact that the *National Strategy on Drug and Addiction Policy* (Die Drogenbeauftragte der Bundesregierung 2012b), with its specific measures and aims, is to be embedded in a wide-ranging prevention strategy.

The bodies responsible for the implementation of the *National Strategy on Drug and Addiction Policy* and for the associated prevention activities are, in addition to 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

The National Strategy on Drug and Addiction Policy stipulates that special risk groups will be ascertained for each drug and prevention be focussed more strongly on those in the future (Die Drogenbeauftragte der Bundesregierung 2012b).

Current substance-related developments and trends are described in detail in chapter 2. Findings from the epidemiology deliver valuable indications for determining the need for addiction prevention measures in different social groups and make it easier to focus them on the specific needs of the target group. At this point, we should therefore first address the findings of representative surveys which provide indications of connections between socio-demographic factors and the consumption of illegal drugs in the general population.

The illegal drug that is still most commonly consumed in Germany is cannabis. The Epidemiological Survey of Substance Abuse 2012, conducted by the Institute for Therapy Research (IFT), found a 12-month prevalence of 4.5% amongst the general population (Pabst et al. 2013).

The proportion of those surveyed who stated that they had used cannabis in the previous 12 months has remained relatively stable over the last ten years in most population groups.

The Federal Centre for Health Education (BZgA) regularly conducts a "Study on Juvenile Drug Affinity in Germany". The 12-month prevalence found in this representative survey of 11.8% in the age group of 12-25 year olds is far higher than the value in the general population (BZgA 2014).

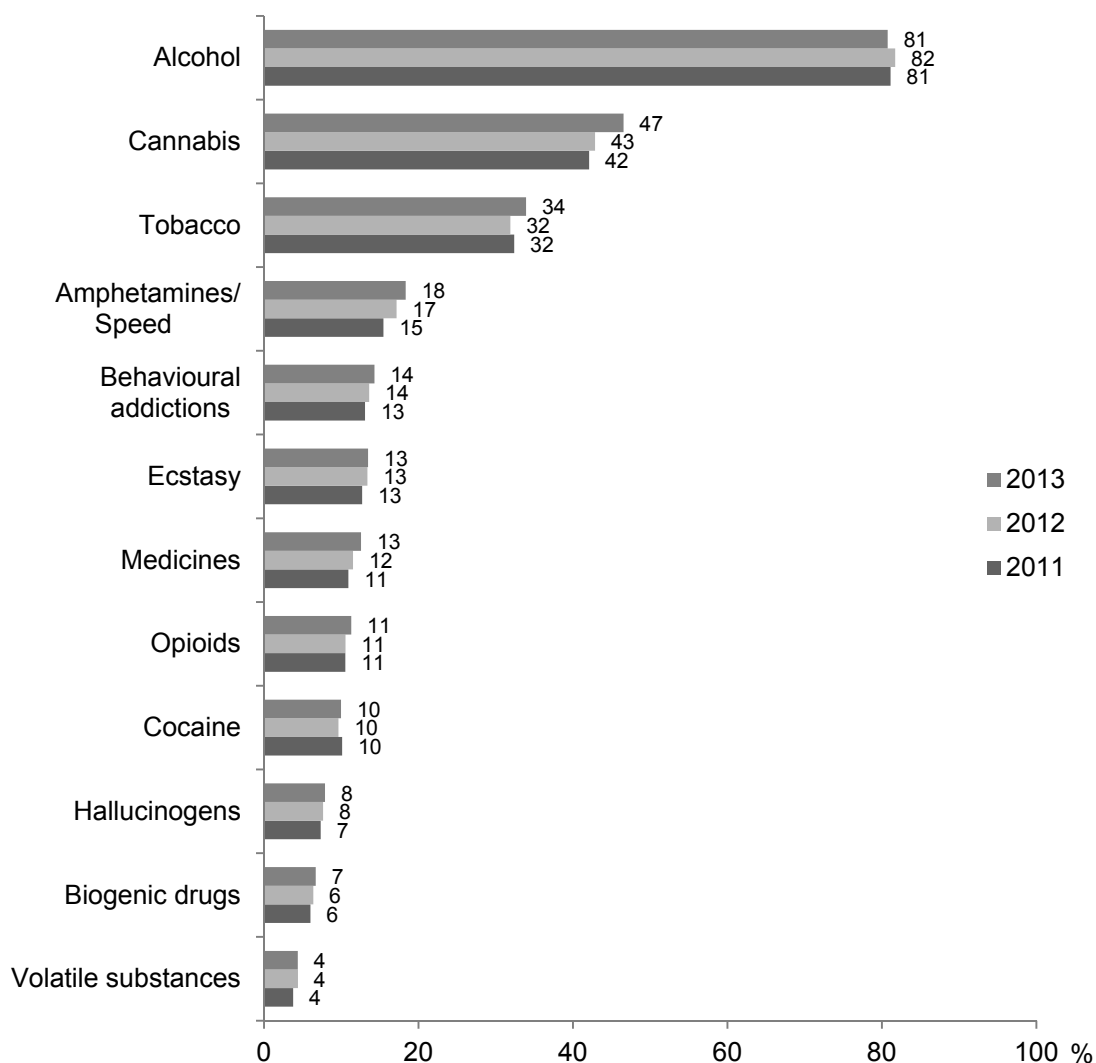
The last use was one year or more prior to the survey for more than half of 18-25 year olds. For most adolescents and young adults, the use experience is therefore in the past. Amongst 12 to 25 year olds with experience of use, less than 20% currently use cannabis (BZgA 2014).

For the majority, their experience of use was limited to the one-time, occasional or episodic use. For a minority of those who were already regularly and often consuming cannabis in their youth, the use usually continues into young adulthood and beyond. Addiction prevention measures have traditionally focussed on the adolescent age group in order to counteract persistent abuse of cannabis in later life.

The data of the documentation system for addiction prevention, Dot.sys<sup>42</sup> shows that the proportion of specific services for reducing cannabis consumption has been growing for some years (Figure 3.1). 81% of the activities recorded by Dot.sys deal with alcohol and 47% with cannabis.

---

<sup>42</sup> The monitoring system Dot.sys is the documentation system used in Germany's addiction prevention initiatives (cf. 3.1.3).



Number of prevention activities recorded in Dot.sys with respect to substances:

N (2013) = 19,902; N (2012) = 19,942; N (2011) = 18,904.

Dot.sys 2013, own presentation.

Figure 3.1 Development of the substances addressed between 2011 and 2013

Aside from cannabis, representative surveys are not suitable for reliably identifying at-risk groups for illegal drugs as the 12-month prevalence rate ascertained in the general population is under one percent (Pabst et al. 2013).

Any findings on changes in the social structure and in use behaviour create the requirements for adjusting the addiction prevention services to the new needs and wants of the target group. As such, the effectiveness and the cost-benefit relationship of measures can be optimised. This applies to a particularly great extent for people with an increased risk of problem use. It remains to be examined whether addiction prevention services sufficiently reach this group.

Health system facilities, law enforcement agencies and independent entities for the administration of justice document contact with users of illegal drugs. The Drugs Data File

(Falldatei Rauschgift, FDR) delivers information on drug-related deaths (for methodological discussions see Chapter 6).

From these sources, it is evident that for individuals with problem use, there has been a fundamental change in the age structure since 2000 and in the preferred substances consumed. As these developments are significant for the planning of addiction prevention measures, at this point the factors of age, substance and their interaction should briefly be explained.

Most prevention programmes are aimed at adolescents and young adults. Therefore, the following will look at, in particular, the age group of under 25s.

### **Developments in problem use<sup>43</sup> amongst under 25 year olds.**

The number of users of hard drugs who have come to the attention of the police for the first time (EKHD) has fallen since 2000 by 15% overall, rose amongst over 24 year olds (hereinafter: "older people") by 33% and fell amongst under 25s (hereinafter: "younger people") by 50% (BKA 2014b). The group comprising youths, adolescents and young adults (under 25 years old) represented, with 58%, the majority of users of hard drugs who have come to the attention of the police for the first time. In 2013, the proportion made up by that group was only 38% (BKA 2014b). Entries in the police register must, as explained in Chapter 9, be erased after a statutory time limit which leads to a systematic overestimation of first-offence users in the statistics. The increase in numbers amongst over 25 year-olds could therefore be a statistical artefact. Inversely, this measurement error also leads to any decreases being systematically underestimated. Whilst an actual increase cannot be higher than that measured, a downward trend is at least as large as the real-life situation. This affects the group of under 25 year-olds twice as much as it also includes youths for which the time limit for erasing criminal records is half as long. The decline amongst youths is very marked for most substances. Today, users who come to the attention of the police for the first time (not including LSD and meth(amphetamine)) are largely over 24 years old (BKA 2014b). The average age has risen overall from 25 to 29 in the period 2000-2014 (BKA 2014b) This increase is most pronounced for heroin: from 27 to 35 years old and today there is no drug with an average age under 25 (BKA 2014b).

The proportion of under 25s in drug-related deaths fell in the period 2000-2014 from 14% to 5% whilst the average age at the time of death rose from 33 to 38 (BKA 2014b).

The number of hospital treatments in connection with illegal substances (ICD-10 F11-16, F18-19) has risen since 2000 by 15% overall; this number increased for over-24 year olds by 38% and fell for under 25 year olds by 28%. The proportion of younger people in those requiring treatment fell from 35% to 22% (Statistisches Bundesamt 2013a).

---

<sup>43</sup> The term "problem use" in this context, brings together the following statistics: "Users of hard drugs who have come to the attention of the police for the first time (first offenders)" (EKHD), drug-related deaths, hospital treatments, access to outpatient and inpatient addiction support, criminal suspects (German Narcotic Drugs Act) and convictions (BtMG).



Looking at the absolute figures and differentiating according to substance class, one can see that the declining proportion of younger people for opioids, cannabinoids and stimulants has a variety of reasons. Whilst the number of hospital treatments in connection with opioids rose overall by 20%, there was an increase amongst older people of 82% and a decline amongst younger people of 74%, meaning that the proportion of younger people fell from 40% to 9% (Statistisches Bundesamt 2013a).

The number of hospital treatments due to cannabis grew overall by 199% (Statistisches Bundesamt 2013a). In this category, an increase was recorded for both age groups, however the increase amongst older people was considerably higher - at 279% - than amongst younger people - at 163%. That being said, younger cannabis consumers still comprise the majority, albeit with a share which fell from 69% to 60%.

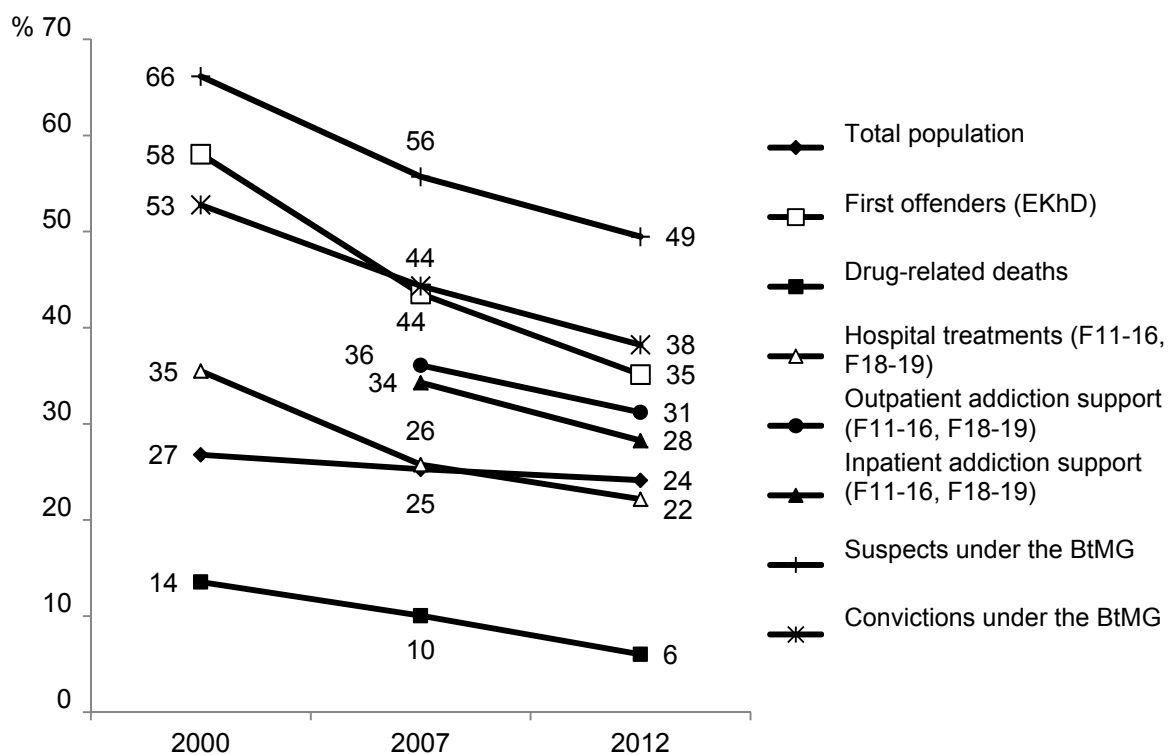
For stimulants, a very sharp overall rise of 345% was seen in hospital treatments; amongst older people the increase was 554% whilst amongst younger people it was 218% (Statistisches Bundesamt 2013a). As such, the proportion of younger people, who still made up the majority in 2000, has fallen from 62% to 44%.

Hospital treatments due to multiple substance use or the misuse of other psychotropic substances fell by 7% overall (Statistisches Bundesamt 2013a). Amongst older people, there was a rise of 9%, amongst younger people a fall of 39%, the proportion of younger people in the total thereby fell from 34% to 22%.

In the area of outpatient addiction support, the number of treatment cases amongst 25 year-olds increased in the period 2007-2012 (Sonntag et al. 2008a; Pfeiffer-Gerschel et al. 2013a). However, this rise can presumably be traced to a 20% larger number of participating treatment facilities, as the proportion of younger people has declined compared to 2007 for all substances. Aside from cannabinoids, this decline was very pronounced. In terms of inpatient addiction support (Sonntag et al. 2008b, Pfeiffer-Gerschel et al. 2013b) the proportion of younger people has also fallen markedly compared to 2007 for all substances, so that the majority of those needing treatment, even for cannabis induced disorders, was no longer in that age group. In the area of inpatient addiction support, the average age at the start of treatment for all illegal drugs was higher in 2012 than in 2007.

The police crime statistics (BMI 2014) also reflect this trend. Comparing the numbers for the year 2013 with the year 2000, the proportion of younger people in general violations of the German Narcotic Drugs Act (BtMG) has seen a considerable drop for all substances. Whilst the vast majority of suspects, up to offences with heroin and cocaine, were younger than 25 in 2000, today this only applies to cannabis, ecstasy and LSD. For heroin, the proportion fell most strongly in this area also: from 39% to 9%.

In terms of convictions for drug-related crime, a similar shift in age structure has occurred (Statistisches Bundesamt 2014c). In 2000, 53% of those convicted for offences against the BtMG were under 25 years old. Following a temporary, slight increase to 55% in 2001, the proportion of this age group in convictions fell to 28% in 2013.



Statistisches Bundesamt, BKA, DSHS (own calculations).

Figure 3.2 Proportion of under 25 year olds

### Substance-specific trends amongst users under 25 years old

Amongst under 25 year-old users of hard drugs who have come to the attention of the police for the first time, (meth)amphetamine accounted for 80% of the numbers in 2013 (BKA 2014b). In 2000, this proportion was 34%. The proportion of cases concerning heroin amongst members of this age group fell from 28% in 2000 to 3% and the proportion concerning ecstasy from 34% to 13%.

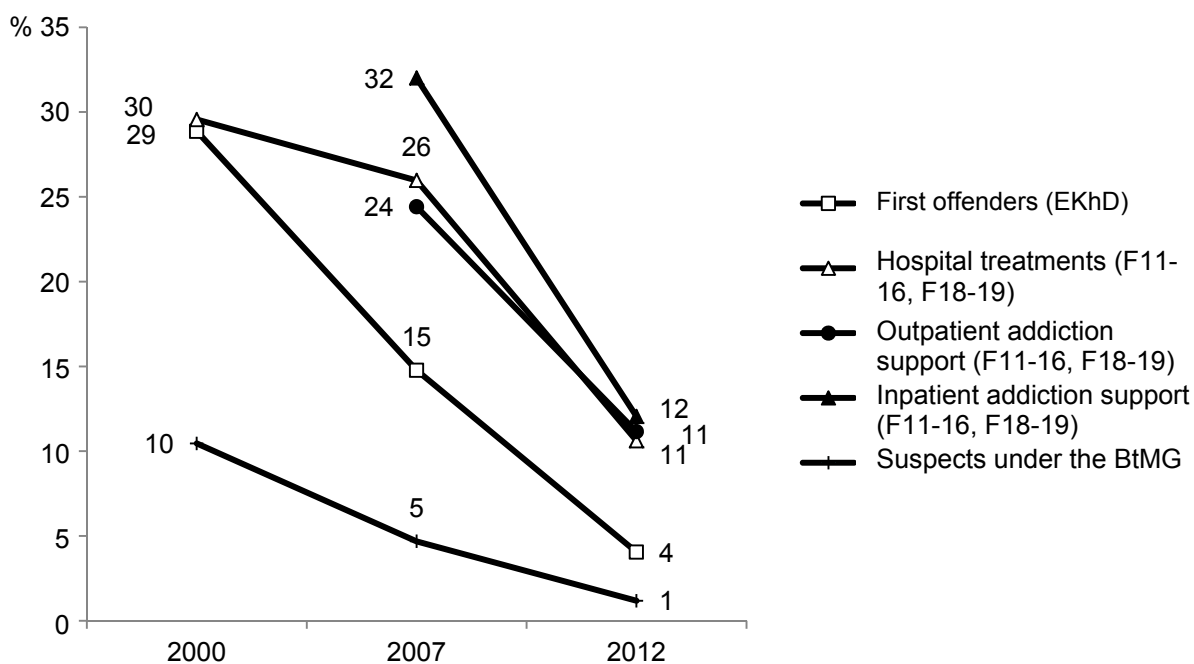
In terms of hospital treatments for people aged under 25, the proportion of cases concerning opioids of all ICD-10 F11-16, F18-19 diagnoses fell from 30% in 2000 to 11% in 2012 (Statistisches Bundesamt 2013a), whilst cannabinoids, as a proportion, led to hospital treatment over three times more frequently (2000: 8%, 2012: 29%). The proportion of diagnoses in connection with stimulants in this age group rose by over four times in this period, from 2% to 9%.

In the area of outpatient addiction support, similar tendencies were observed amongst under 25 year olds in respect of the substance specificity (Sonntag et al. 2008a; Pfeiffer-Gerschel et al. 2013a). Compared to 2007, the proportion of main diagnoses in connection with the consumption of opioids fell by more than half, from 24% to 11% amongst under 25 year olds, whilst cannabinoids and stimulants also experienced large, proportional increases. Cannabis diagnoses rose from 59% to 68% within this age group, diagnoses caused by stimulants from 10% to 16%.

The same general trends could be observed in this age group in the area of inpatient addiction support (Sonntag et al. 2008b; Pfeiffer-Gerschel et al. 2013b).

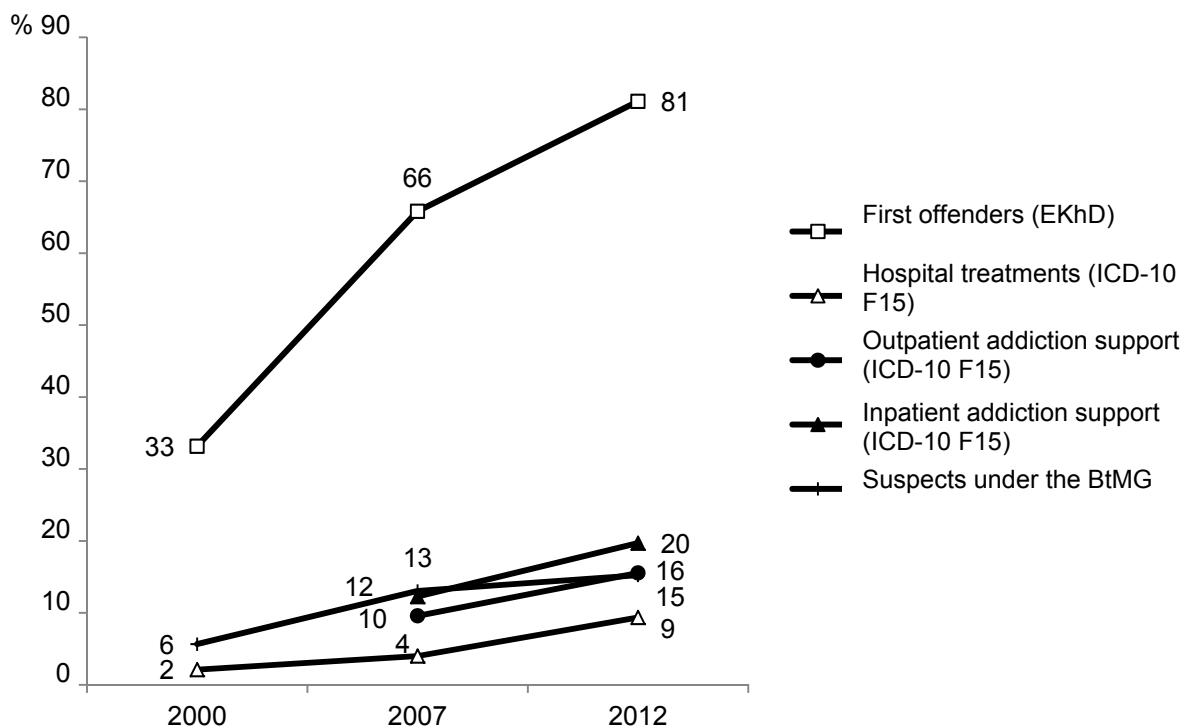
Amongst those suspected of general offences against the German Narcotic Drugs Act under 25 years old, the proportion of cannabis offences rose from 67% in 2000 to 74% in 2013, whilst the proportion of investigations related to (meth)amphetamine more than doubled, from 6% to 14% (BKA 2014b).

As far as convictions due to general offences against the BtMG were concerned, younger people still comprised a slight majority in 2000, with 51%. In 2012, only 38% of those convicted were under 25 years old (BMI 2014).



Statistisches Bundesamt, BKA, DSHS.

Figure 3.3 Proportion of cases concerning heroin/opioids, age group of under 25 year olds



Statistisches Bundesamt, BKA, DSHS (own calculations).

Figure 3.4 Proportion of cases concerning (meth)amphetamine, age group of under 25 year olds

In summary, a fundamental change in age structure has been observed since 2000 amongst users for whom problems arise in connection with the use of illegal drugs, defined here as contact with police, hospital treatment and the use of addiction support facilities. The proportion comprising the age groups of youths, adolescents and young adults has fallen sharply overall. Nevertheless, general trends in the age group of younger people can be seen. These include the decline in significance of opioids in problems caused by illegal drugs, a substantially higher proportion of cannabis today and an increase in the significance of (meth)amphetamine. In contrast, the substance class associated with the most serious social problems, namely opioids, now only plays a minor role amongst younger users.

In all evaluated statistics, the proportion of under 25s in problems associated with the consumption of illegal drugs has fallen markedly since 2000. Problems which arise from drug use are today mostly seen in later stages of life.

On the other side, however, this trend naturally also means that there has been a significant increase in the proportion of over-25 year olds. As can be seen from the absolute numbers, this development can be traced back primarily to an increase amongst older people and a decline amongst younger people. The high consistency in the findings of the data triangulation across several sources (EKhd, drug-related deaths, hospital treatments, inpatient and outpatient addiction support, criminal suspects, convictions) suggests that these are statistical artefacts.

As yet, it is unclear as to what has caused these trends. More could be explained through studies according to age, cohort and time period effect.

The question is how addiction prevention should react to these trends. On the one hand, the first use of illegal substances still occurs overwhelmingly in youth or young adulthood; on the other hand, the effectiveness of resource oriented universal prevention without a specific substance-related approach is well proven in these periods of life (Bühler & Thrul 2013). These age groups should therefore continue to be given priority in terms of the aims of addiction prevention interventions in the future.

Today, it is mainly people over the age of 24 years old who come to the attention of the authorities through delinquent behaviour in connection with the use of illegal drugs. In 2000, it was still mainly youths and young adults (under 25 years old) against whom investigations were conducted due to offences against the German Narcotic Drugs Act (BtMG), who were registered by the police for the first time due to the use of hard drugs and who were convicted for general offences against the BtMG.

In summary, an increasingly low congruence can be stated between the main target group of the addiction prevention measures (under 25 years olds) and the group of users who have come to the attention as a result of problem use (over 25 year olds). In light of this historic development, it seems appropriate and in line with a stronger orientation of addiction prevention according to at-risk groups, to increase the numbers of addiction prevention programmes for people over 25 years old. As this target group has generally already been using for many years, the expansion of the services primarily in the area of selective and indicated prevention is advisable. Furthermore, there should be more information on already existing support for quitting the drug scene (e.g. [www.quit-the-shit.net](http://www.quit-the-shit.net)) or services of local counselling centres (BZgA 2012).

### **3.1.3 Effectiveness and efficiency in addiction prevention**

Good examples of the central factors in the increase of effectiveness and efficiency of addiction prevention are evaluation, networking and transfer. In order to guarantee a structured and systematic exchange, in recent years structures have been successfully developed and cooperations agreed at various levels with almost all relevant addiction prevention contributors. Among these are, for example, the development of quality standards, the further development of existing quality assurance measures and the employment of recognised quality assurance instruments in addiction prevention. In this context, the BZgA-Laender cooperation association, "addiction prevention" (a cooperation between Laender authorities responsible for drug prevention and the BZgA), is equally as 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 of course the monitoring system Dot.sys (documentation system used for addiction prevention), a joint project of the BZgA and the Laender. Working on behalf of the Federal Centre for Health

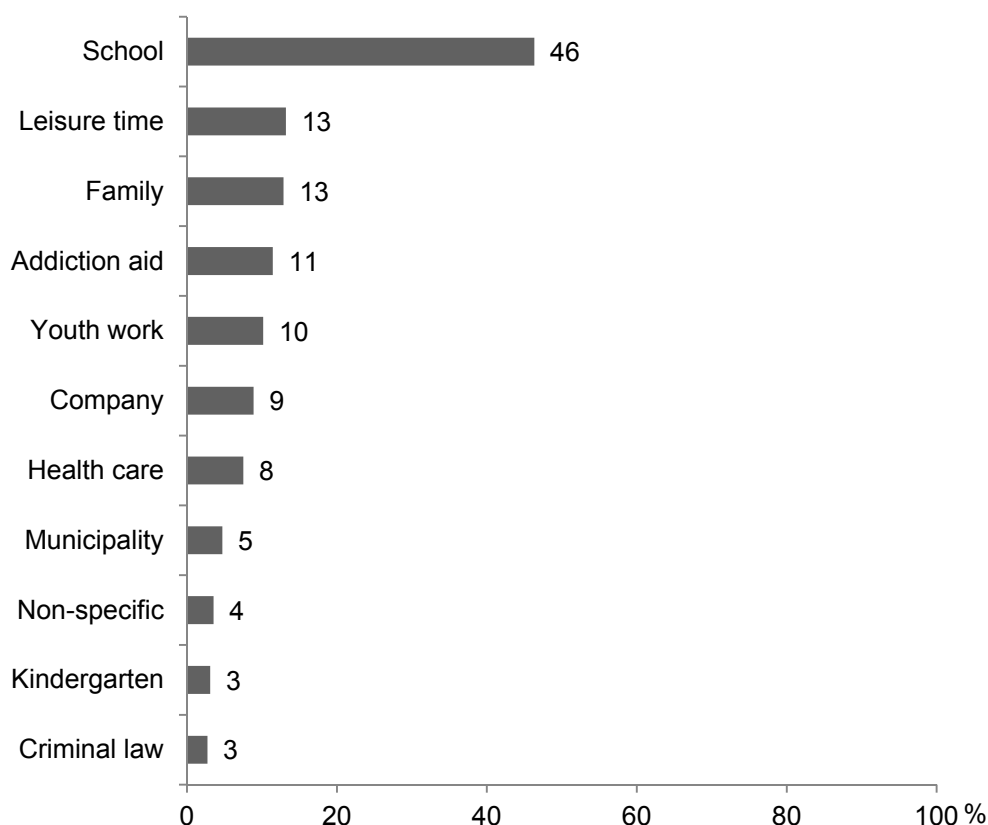
Education (BZgA), the IFT compiled an expert report on the effectiveness of addiction prevention measures (Bühler & Thrul 2013). The *National Strategy on Drug and Addiction Policy* stipulates that preventative measures be tested for their effectiveness and relevance. "It is of particular importance in times of tight finances to apply the resources available in a targeted manner" (Die Drogenbeauftragte der Bundesregierung 2012b). To increase the effectiveness of addiction prevention measures, a stronger focus on risk groups is intended (Die Drogenbeauftragte der Bundesregierung 2012b).

The demand for an evidence based approach in addiction prevention was the subject of much debate amongst experts in 2013 (e.g. Hanewinkel & Morgenstern 2013; Uhl 2013). In June 2013, under the heading, "Finding evidence for the effectiveness of addiction prevention measures" the BZgA and the Bavarian Health and Food Safety Authority (Bayerische Landesamt für Gesundheit und Lebensmittelsicherheit) organised the third expert conference "Quality in Addiction Prevention", which was attended by experts from all German Laender. In August 2013, the specialist journal, "Suchttherapie" ("Addiction Therapy"), made "Evidence basis in addiction prevention" the main focus. In 2013, the Federal Ministry of Health funded a week-long scientific conference which took place under the leadership of the Catholic High School NRW in early 2014, the findings of which were compiled into a memorandum (Experten- u. Expertinnengruppe „Kölner Klausurwoche“ 2014).

### **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 also improving the quality and transparency in prevention practice. The participating counselling centres, authorities, associations, specialised clinics and coordination agencies at Laender 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 computer-based documentation system of addiction prevention measures, "*Dot.sys*", is used for creating and presenting addiction prevention measures on a federal, *Land*, and local level. The system has been available since 2011 free of charge as an online database at [www.dotsys-online.de](http://www.dotsys-online.de).

Of the 32,335 addiction prevention measures, projects and programmes documented in *Dot.sys* 3.0 in the reporting year 2013, a share of 58% took a universal prevention approach, 17% were carried out as indexed prevention measures and 14% as selective prevention measures. 11% of the measures must be allocated to structural or situational prevention. The setting "school" is the primary field of action of addiction prevention activities in Germany in 2013 with 46% of the measures performed and documented.



Dot.sys 2013, N = 32,335, own presentation.

Figure 3.5 Settings for prevention measures in 2013

Other selected results show the following:

- In 2013, 54% of the measures carried out were directed at end users and was thus at a similar level to the previous year<sup>44</sup>. The proportion of measures directed at the target group of multipliers remained almost unchanged at 39%. This means that the trend of declining measures emerging since 2008, directed at multipliers in Germany for the benefit of an increase in the measures with a target level of end users, did not continue in 2013.

A good 7% of entries can be attributed to the area of public relations work.

- At 30%, the proportion of measures which took a gender-specific approach remained unchanged.
- In 2013, 19,205 measures specifically related to a substance were carried out (59% of the documented measures). This means that the proportion remained the same as that of the previous year.
- The focal point of prevention on a federal and *Land* level continues to be the prevention of the abuse of alcohol (81%), cannabis (46%) and tobacco (32%). 40% of the measures were conducted “unrelated to any specific substance” and are thus aimed, across substances, primarily at promoting life skills. Life skills encompass self-awareness,

<sup>44</sup> In the 2013 report, too low a value was erroneously reported.

empathy, creative and critical thinking, decision making and problem solving ability, coping with emotion and stress as well as communication and relationship skills.

- In addition to training sessions and courses (39%), counselling (24%) and cooperation/coordination (14%) are in the foreground of addiction prevention activities.
- The most commonly named objective of the measure is still knowledge transfer (77%). Changing attitudes (55%) was mentioned more frequently than in the previous year (50%), followed by the exchange of skills and resources (45%) as well as behaviour change (17%).
- The “school” setting continues to be the primary field of action of addiction prevention activities in Germany in 2013 with 46% of the measures documented. It is followed at 13% by measures taking place in the “family” setting as well as measures in the recreational setting, which also comprise 13%. The setting “addiction support” is the background to the work in addiction prevention in 11% of cases and youth work has a share of 10%, followed by interventions in healthcare settings (8%) and measures in the workplace (9%).
- 26% of the measures are being or have already been evaluated. That reflects a slight decline of 4% over the previous year<sup>45</sup>. These are typically internal evaluations.

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

In addition to the behavioural and environmental prevention measures (BZgA 2007) of universal prevention, the interventions primarily differ in respect of their scope, either as substance-specific, non-substance-related/behavioural addictions and cross-substance projects. Cross-substance interventions primarily serve to teach life skills or to promote the forming of critical opinions.

#### 3.2.1 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.

<sup>45</sup> A re-analysis of the Dot.sys data for 2012 on the basis of the complete data set revealed that the proportion of evaluated projects was 30% and not 32% as reported last year.



The programmes run in the setting “school” have been successfully implemented all over Germany for many years. “*Be Smart – Don’t Start*” – the school class competition to promote non-smoking – and “*Smoke free School*” are just two examples. The aforementioned programmes are generally made up of different modules ranging from promoting social skills and conveying information to motivate participants to lead a healthy lifestyle.

An early entry into the consumption of legal addictive substances has a negative effect on psychosocial development, which is why the application of addiction prevention measures in primary school seems particularly useful. In addition, the 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).

In 2012, the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz, KMK) issued a “Recommendation on Health Promotion and Prevention in Schools”. That recommendation stated: “Addiction prevention is a particularly significant topic in health promotion and prevention. The aim is to prevent the start of the use of addictive substances and other risky behaviours as well as identify and reduce risky use and behaviour at an early stage, in particular through early intervention and measures to improve life skills.”

Through guidelines and teaching plans, the Ministers for Education and Cultural Affairs of the Laender have made addiction prevention a binding topic of classroom teaching.

The life skills programme for primary school children, “Klasse2000”, which has been running since 1991, reached over a million children in 2013.

The effectiveness of addiction prevention measures at primary school has been intensively examined. Measures that build on a psychosocial approach and on behaviour-modifying interventions are particularly likely to succeed, usually on the condition that they are supplemented by components in non-classroom settings (Bühler & Thrul 2013).

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. In the context of life skills programmes in cannabis prevention, the involvement of peers is more likely to lead to success than delivery by teaching staff.

### 3.2.2 Family

As the most important and constant base for socialising of children and adolescents, the family assumes an important role in the area of prevention. Until the start of puberty, the family exerts the largest influence, positive or negative, on the standards and values adopted by children and thus also on forming different modes of behaviour. Parents and siblings, as well as close relatives and acquaintances, often serve as role models whose lifestyles are - consciously or unconsciously - imitated and adapted to. Given this, the family has the greatest influence on the health education and thus on the health in general of the child.

13% of the measures documented in Dot.sys in 2013 were implemented in family settings. Parents and guardians have a major influence on the psychological development of their children. Part of the federal government's strategy from 2008 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>46</sup>.

The universal prevention programme from the USA, known as the "Strengthening Families Program" (in German: *Familien stärken*) for family based prevention of addiction and behavioural disorders was adapted in 2013 by the University Clinic of Hamburg Eppendorf for use in Germany (Bröning et al. 2014; Stappenbeck et al. 2013a). The manual and film materials were evaluated in terms of their efficacy (Stappenbeck et al. 2013b). In total, 292 families were included in the evaluation and were allocated randomly to the intervention or control groups. After the pre- and post intervention time points, data was collected at six and eighteen months following the end of the intervention. It was possible to collect data successfully with a retention rate of 88%. The findings of the research project funded by the German Federal Ministry of Education and Research (BMBF) are currently being prepared. Two randomised controlled studies from the USA have delivered evidence of the efficacy of this substance unspecific brief intervention for the prevention of methamphetamine abuse (Spath et al. 2006). The proportion of methamphetamine users in the experimental group was significantly below that of the control group 4.5 and 6.5 years after the programme was conducted. In a study from the US State of Iowa, the measure also proved to be cost effective (Guyll et al. 2011). As the cost effectiveness of a prevention measure increases with the prevalence of the harmful behaviour, this finding can only be applied to the German situation to a limited extent as the prevalence of methamphetamine use is comparably low. However, it is a programme not based on any specific problem. Positive effects for the prevention of other addiction and behavioural disorders also contribute to a reduction of healthcare costs and should be taken into account in any respective cost analysis.

Parents who have questions on how to deal with the substance or media consumption of their children have had the option, since 2012, of contacting Parent Counselling in cases of Children and Youths at Risk of Addiction and Dependence (Elternberatung bei Suchtgefährdung und Abhängigkeit von Kindern und Jugendlichen, ELSA). The free of

---

<sup>46</sup> [http://www.bmg.bund.de/fileadmin/redaktion/pdf\\_misc/psychische-Gesundheit\\_01.pdf](http://www.bmg.bund.de/fileadmin/redaktion/pdf_misc/psychische-Gesundheit_01.pdf) (last accessed: 31 October 2014).

charge online counselling service of ELSA was developed and tested in the scope of a pilot project funded by the German Federal Ministry of Health (BMG). The aim of the counselling service is to promote child-raising skills, to reduce family conflicts and thereby to stabilise the collective within the family.

A nationwide network of eleven addiction and drug counselling centres was established for the conceptualisation of the counselling platform and for the decentralised implementation of the online counselling service. In addition to the well-known online based counselling forms via email or chat, ELSA offers parents, in particular, a several week support service in the form of a structured counselling programme. In the first 18 months of operation, around 300 parents from across Germany registered for the ELSA counselling service. These comprised mostly mothers who were primarily concerned about the cannabis use or problem computer use of their sons.

The users of the several week long ELSA counselling programme who took part in the evaluation by online questionnaire which accompanied the project, rated the counselling via chat and the responses received as helpful (personal report, delphi-Gesellschaft, 2014). 90% of the participants were satisfied or very satisfied with the ELSA counselling programme overall. Almost all of the users of the counselling programmes reported that they had become more competent or more confident in dealing with their child/children as a result. In addition to the counselling services, the ELSA website contains information on substances and addiction behaviour as well as local counselling options.

### 3.2.3 Community Prevention

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. In addition to kindergartens and schools, organised and non-organised recreation, as well as the public health sector, serve as spheres of action for community-based prevention.

In order to support the local areas, the Federal Centre for Health Education brought out a “Workbook on the Chain of Prevention” (“Werkbuch Präventionskette”). The creation of so-called chains of prevention aims to help integrate health care in all areas of life within a community (BZgA 2013).

In Germany there are a large number of small and very small entities in which around 8.7 million people are working subject to social insurance contributions. Whilst there are numerous materials and guidelines for action for dealing with substance-related disorders in larger businesses and relevant business structures have been developed in the area of health promotion and addiction prevention, there are a lack of corresponding approaches in the area of small and very small businesses. Addiction problems cause immense macroeconomic and microeconomic costs. Therefore, the question is how addiction prevention can be promoted, specifically in these small and very small businesses. In collaboration with the Association of German Company Doctors (Verband Deutscher Betriebs- und Werksärzte e.V.) and other organisations, the Professional Association on Addiction developed a brochure containing practice-oriented information with corresponding case studies on this specific topic (Fachverband Sucht 2014).

### 3.2.4 Recreational settings and sports clubs

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.

### 3.3 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 should be taken into account. The *National Strategy on Drug and Addiction Policy* envisages a stronger focus on at-risk groups (Die Drogenbeauftragte der Bundesregierung 2012, p. 12)

and sees the need "... to develop specific services for at-risk adolescents in the field of selective prevention" (ibid).

From July to December 2013, the Centre for Interdisciplinary Addiction Research (ZIS) of the University of Hamburg surveyed, in the scope of the study, "Amphetamine and methamphetamine - group of persons with abuse consumption and starting points for preventative measures", 392 current and 71 former users of amphetamine type stimulants across Germany. There was a particular focus on crystal meth. On the basis of the data, a differentiated analysis can be made of different groups of users concerning their circumstances of use as well as the respective needs and possible access in respect of preventative measures. As such, the study has provided, for the first time, scientifically based indications of different types of amphetamine and methamphetamine user in Germany. On the basis of these findings, the ZIS issued recommendations for different measures of selective prevention. When conceiving the study design, care was taken to ensure sustainability. As such, the developed modules of the electronically implemented survey instruments, as well as the networks created, can also be used for future studies in order effectively to record new trends and to evaluate the success of target group specific measures. In addition, an adjustment in respect of other substance groups is possible and planned.

The research project, "SMOKE IT!" (Stöver & Schäffer 2014), examined the extent to which the provision of new consumption apparatus (foil, pipes) and accompanying media content (flyers, postcards, posters) can lead to a change in the route of drug administration (from intravenous to inhalation) and thus a reduction of the morbidity and mortality risk. The project revealed that through targeted media and personal interventions in connection with the provision of attractive consumption apparatus, opiate users can be motivated to a change in method of use. Despite the considerable harm to the respiratory tracts caused by inhalative use, it can be assumed that this form of use, in comparison to i.v. use - in terms of the indicators, "overdoses" and "viral infections" - is much less risky. The authors of the study propose that there be a greater focus on this method of use in future as inhalative use was the sole method of use only for a quarter (26.9%) of the experimental group. In light of the high level of acceptance (80%) amongst the study participants, the authors recommend all drug support facilities expand their needle exchange services to include the provision of smoking foils.

### **3.3.1 At-risk groups**

#### **Socially Disadvantaged Groups**

Poverty, unemployment and a low social status increase the risk of the onset or aggravation of addiction-related problems (Deutscher Bundestag 2008). It is therefore particularly important to promote and strengthen this group of people in the development as early as possible. However, the "usual" prevention measures are often almost impossible to apply in

the work with socially disadvantaged children and adolescents, as they do not always meet the needs of this target group.

As a survey conducted by the LWL Coordination Office for Drug Related Issues found in 2009 (LWL 2014), the group comprising mentally disabled youths between 13 and 18 years is a particularly at-risk group for problem substance use, irrespective of living situation. For the providers of prevention services, there is the (new) challenge in the scope of inclusion, of aiming their services also at these young people. In this context, it is not enough simply to apply the already established prevention methods from other youths to the target group comprising people with mental disabilities. Rather it is important to develop specific measures which meet the needs and requirements of the target group. These methods are lacking, however, as is experience in cooperation between addiction and disability support.

With the programme “Sag Nein! – Suchtpräventionswoche an Förderschulen” (“Say No! - Addiction Prevention Week at Schools for Special Needs Children”), the LWL Coordination Office for Drug Related Issues is contributing to qualifying this interface (LWL 2014).

People with learning difficulties have less resistance to offers of using intoxicants or abusing substances in social situations. Similarly, they are more likely to state that their reason for drinking alcohol is because the others are doing it. This motivation for consumption, namely “wanting to belong” is a central aspect addressed in the independent prevention concept “Sag Nein!”. A further essential aspect is the development of alternative ways of acting to create feelings of relaxation and well-being, sociability and freedom. For young people with mental disabilities, it can be more difficult to develop such alternative actions. Therefore, it is even more important to communicate to them a set of such options so that intoxicants are not perceived as the only route to well-being.

“Sag Nein - die Suchtpräventionswoche in Förderschulen für geistige Entwicklung” (“Say No – Addiction Prevention Week at Special Schools for Mental Development) is a brief and early intervention measure. The programme can be classified as selective prevention, as the participating pupils display an increased risk of intoxicant use or abuse. Teachers choose participants according to relevant criteria. These include not only experimental or risky use which has already occurred but also the fact that it is known that the use or abuse of intoxicants occurs in the family home.

In the scope of the project, a manual was developed, whose content has already been tested. In conclusion, the concept developed was rated as very suitable. The pupils from middle and upper year groups who took part engaged well and gained good knowledge. The teachers also seemed satisfied with the results. The knowledge imparted during the first phase is designed to be further expanded upon during two separate project days, at intervals of four weeks and three months later. Initial findings of an effectiveness study have shown that the participants could still recall content from more detailed conversations, even after several weeks.

## 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, 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. These are funded, for example, 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).

The data available on the prevalence of addiction behaviour amongst people with a migration background is generally insufficient. In addition, this population group is too heterogeneous to enable generally applicable statements to be made as to the addictive behaviour of its members. Rather, the group must be further differentiated into specific sub-categories. Individual study results are available for the addictive behaviour of migrant adolescents.

In a cross-sectional study, Bermejo and Frank (2014) collected data on alcohol consumption amongst older persons with Turkish, Spanish and Italian migration backgrounds, as well as amongst repatriates. Overall risky consumption was reported by 9% of respondents. Repatriates had the highest level (11.4%) and the Turkish group - in which most people, namely 70.2% are abstinent - had the lowest level (5.3%). Looking at persons who consume alcohol, the highest value for risky consumption was recorded in the Turkish group (17.6%). Alcohol consumption of older persons with a migration background is below the average values for Germans. The findings indicate that persons who consume alcohol from abstinence based cultures are more likely to develop problem consumption patterns.

### 3.3.2 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 (Klein 2001). An estimated 6 million adults grew up as children in families with addiction problems<sup>47</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 - these occur more frequently in addiction-stricken families than on average (Thomasius et al. 2008).

<sup>47</sup> [www.fruehehilfen.de](http://www.fruehehilfen.de) (last accessed: 31 October 2014).

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) and in the Act on Cooperation and Information in Child Protection (Gesetz zur Kooperation und Information im Kinderschutz, KKG)<sup>48</sup>. Prevention and intervention programmes in Germany for children and their drug-addicted parents are offered by outpatient and inpatient addiction support services and self-help groups. “Kidkit – Help for Children and Adolescents” is a cooperation project between the KOALA association, the Cologne “Drogenhilfe” (Drug Help) organisation and the German Institute for Addiction and Prevention Research based in the Catholic University of Applied Science campus in Cologne. On the website, children and adolescents who are growing up in dysfunctional families and/or who experience violence in the family receive age-appropriate information on topics such as “addiction and family”, “violence in the family” and “mentally ill parents” as well as free and anonymous advice sessions<sup>49</sup>.

The modular prevention strategy “Trampolin”<sup>50</sup>, already described in the previous REITOX Report, which is aimed at children from families affected by addiction, changed from being a federally supported model project to being included in the standard catalogue of services. The issues of specific measures and challenges for research and practice resulting from an 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 as well as the establishment of “Trampolin” as a standard programme for children of families with addiction issues were discussed as important steps to be put into practice (DZSKJ & DISuP 2012).

Work on the manual was completed at the beginning of 2013 and it has been available from the Hogrefe Verlag (Hogrefe Publishing) since June 2013. In 2013, the focus was placed on application in practice; amongst other things, the homepage was revised and the training concept was finalised. Basic certificate instruction is offered by the DZSKJ, further training by the German Institute on Addiction and Prevention Research (DISuP). Both forms of training have since been successfully implemented. The DZSKJ conducted a training course for Lower Saxonian addiction prevention and counselling specialists, financed through an implementation project of the *Land*, Lower Saxony. These specialists then received ongoing support for any questions which arose on the implementation of the programme in their facilities. A further training course financed by the city of Munich took place in November in Munich. The materials developed for the “drive-to-web” campaign (flyers, posters, advertisements, banners, postcards) are available to facilities which already offer “Trampolin” or which intend to offer it in the future and they are continually demanded. The 27

---

<sup>48</sup> Art. 1 Gesetz zur Kooperation und Information im Kinderschutz (KKG)  
<http://www.bmfsfj.de/BMFSFJ/kinder-und-jugend,did=119832.html> (last accessed: 31 October 2014).

<sup>49</sup> [www.kidkit.de](http://www.kidkit.de) (last accessed: 31 October 2014).

<sup>50</sup> [www.projekt-trampolin.de](http://www.projekt-trampolin.de) (last accessed: 31 October 2014).

Trampolin aims to prevent negative development processes of children from families afflicted by addiction, using methods of promoting resilience and supporting children in building their own resilience and protection factors.



cooperating facilities in the project received regular information on the status of the project and delivered up to date reports in the scope of their online surveys on the status of the work with Trampolin in their facilities. In 2014, the implementation of “Trampolin” in practice will be continued.

### 3.3.3 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 substance 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 (e.g. youth support facilities, church-run organisations, community-based or municipal youth centres) are often derived from the Law on Child and Youth Welfare (German Code of Social Law, Volume 8). 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 area of non-organised recreation, prevention of addiction is more open. This means that activities and services 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 mostly based 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 framework of such party projects are mostly carried out by drug agencies or addiction prevention facilities respectively, in cooperation with local clubs, discotheques and organisers of music and party events.

The Regensburg University Clinic has been offering the accident avoidance prevention programme for youths “P.A.R.T.Y.”, originating from the USA. The name stands for “Prevent Alcohol and Risk Related Trauma in Youth”. In the course of that programme, youths experience the drawn-out healing process which one has to endure in hospital following a serious accident (Universitätsklinikum Regensburg 2014).

### 3.4 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 2009).

### 3.4.1 Children and teenagers with behavioural disorders

Behavioural disorders in children are a central risk factor for the development of addiction-disorders at teen and adult age. There are indications of psychological problems for about a fifth of all children and teenagers. Around 10% of the children and adolescents display psychological problems, i.e. specific disorders ranging from anxiety and depression to social behaviour disorders (Hölling et al, 2007). 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 3.4.1).

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.

### 3.4.2 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 have shown that children with ADHD run a significantly higher risk of developing an addictive disorder (Thomasius et al. 2008).

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

### 3.4.3 Early recognition and early intervention

At the interface between indicated prevention and therapy, measures have meanwhile been established to which the term “early intervention” can be assigned. 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. These people have a very high risk of developing addiction. However, at the time of intervention, this group does not (yet) meet the criteria of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) or the criteria of the International Classification of Diseases (ICD-10) (EMCDDA 2009). In general, treatment can only be initiated if dependence has been established by a diagnosis according to DSM-IV or ICD-10.

Leicht et al. (2013) examined various newly developed brief interventions on the prevention of hepatitis C when intravenously injecting drugs. They arrived at the conclusion that the measures are suited to low-threshold facilities provided they are evaluated, continuously further developed and adapted for local conditions.

In 2013, the LWL Coordination Office for Drug Related Issues (LWL Koordinationsstelle Sucht, KS) launched an information initiative in order to promote the observance and application of the FreD project ("Early intervention in first-offence drug users") by criminal law enforcement (justice, police, youth support in criminal proceedings). At the locations where the FreD concept already exists, it is to be extended further. In order to achieve this, firstly a "top down" information campaign has been implemented. In a first step, the Ministries of Justice and Interior Ministries of the Laender were included; in a second step, the (state) prosecutors' offices, police headquarters, police departments and the youth support in criminal proceedings services (youth welfare offices) were given information on FreD and also offers of support in implementing FreD. These activities are accompanied by publications in the relevant media of the law enforcement authorities as well as by educating new FreD trainers. The information initiative, FreD, carried out across the country with law enforcement authorities has been running since May 2013 and has now been extended to August 2014. The project is financially supported by the Federal government (Federal Ministry of Health, Berlin).

The project, "WISEteens" had the objective of developing a web-based, fully automated brief intervention against problem alcohol and substance use amongst adolescent risky drug users between the ages of 16 and 18 years and evaluating it in the scope of a randomised controlled research design. The project is being conducted in a joint consortium of research facilities from Sweden, Belgium and the Czech Republic under the lead of the German Centre for Addiction Research in Childhood and Adolescence (DZSKJ). In 2013, the phase of the project with active funding by DG Justice of the European Commission was completed. In total, the project was able to collect n=213 full data sets of adolescent participants. That enabled a statistical analysis which was able to prove a significantly positive effect of brief interventions compared to a control group.

The cannabis prevention programme, "Stark statt breit" ("Strong not stoned") was developed by the *Ginko Foundation for Prevention* on behalf of the Ministry for Health, Equalities, Care and Ageing of the *Land North Rhine-Westphalia* and aims to contribute to preventing the use of cannabis amongst juveniles and young adults and to motivate users to cease their cannabis consumption.

The programme primarily contains the implementation of target group specific measures and aims to take into account gender-specific differences whilst

- supporting the development of health promoting attitudes,
- increasing the level of knowledge in relation to the risks of cannabis use,
- promoting the encouragement of low-risk behaviour as well as
- intensifying the expansion of support and care services tailored to specific needs.

To this end, amongst other things the following offers are provided on various levels:

Informational brochures for adolescents aim to contribute to the development of a critical attitude to cannabis use. "Info cards" on cannabis are employed in mobile prevention work in youth centres in order to reach out to juvenile users or potential users and to discuss cannabis use and its problems.

A brochure for parents contains basic information on the topic of cannabis as well as an instruction on how to approach conversations with (cannabis using) children.

In addition, tools are offered to specialists working in youth welfare and youth work, which contain instructions on how to implement interactive programmes. "Hanf Dampf" (approx. "Hemp Steam") is a tool for public youth work which contains ideas, methods and specific materials for a creative, youth and gender appropriate discussion of cannabis problems tailored to use in youth holiday camps. Furthermore, specific links to networked prevention in public youth work is provided. A further tool provides suggestions and instructions for simulation exercises and role playing scenarios in the scope of prevention of cannabis use.

Through participation in a three-day training course on motivational brief interventions in cannabis using adolescents (MOVE), specialists in the field are given instruments from the youth work and youth welfare areas for counselling which is gender aware and tailored to the environment and expectations of adolescents, which can take place where such adolescents would usually spend time (e.g. youth meeting points, youth centres).

#### **3.4.4 National and regional media campaigns**

National and regional media campaigns are instruments of universal prevention. 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 easier the more 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 service.

In 2013, the Berlin Special Unit for Addiction Prevention (Fachstelle für Suchtprävention) published a new information leaflet on crystal/methamphetamine (Fachstelle für Suchtprävention in *Land* Berlin 2014).

The crime prevention authorities at both *Land* and federal level took it upon themselves to inform people of the various forms of criminality and to demonstrate how these can be prevented. It is an institution of the Conference of Ministers of the Interior and publishes media nationwide such as brochures, films and PC games. In addition to the relevant public relations work, the crime prevention authorities also develop topics and target group specific campaigns. In projects which are conceived and funded across *Land* boundaries, the aim, amongst other things, is the police prevention of addiction. It targets a broad range of groups - from children/adolescents and their parents and teachers through business operators to journalists.

Anyone who is interested can obtain information primarily from the website [www.polizei-beratung.de](http://www.polizei-beratung.de). At <http://www.polizei-beratung.de/themen-und-tipps/drogen.html> there is a section devoted to the issue of drugs which covers topics including drugs in general, the protection of children from drugs as well as, for example, how drug couriers (mules) can be abused. An important aspect is also the information on so-called “legal highs”. Furthermore, police crime prevention produces the following print media which anyone can order from its website and which are available across Germany from all police stations free of charge:

- The leaflet “Sehn-Sucht” (approx. “spotlight on addiction”) with information on legal highs.
- The brochure, “Sehn-Sucht”, which contains information on crystal meth and valuable tips on how to protect children from drugs. The brochure also contains a list of drugs, be it legal, illegal or synthetic.

Both media were revised in spring 2014 and their content updated.

Most Laender also have their own media or programmes, for example for pupils in the 7th grade in which they are warned about drugs or which serve as information as protection against drugs, such as in Baden-Wuerttemberg, the brochure “Risiko Drogen” (“Risk: drugs”), published by the Ministry of the Interior. In Brandenburg, there is a multimedia drug prevention series produced by the *Land* Office of Criminal Investigation, under the title “Hast Du noch was vor?” (“Are you doing anything later?”).



## 4 High Risk Drug Use

### 4.1 Overview

#### Definitions

The EMCDDA defines “high risk drug use” (HRDU) as drug use which fulfils the following criteria:

- The use is recurrent.
- There are actual harms (negative consequences) for the person (including dependence but also other health, psychological or social problems) or
- the use places the person at a high probability/risk of suffering such harms.

High-risk drug use is measured as the use of psychoactive substances (excluding alcohol, tobacco and caffeine) by high-risk pattern (e.g. intensively) and/or by high-risk routes of administration in the last 12 months.

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” (DHS 2010). 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 to be 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.

#### Measuring and estimation methods

Sometimes there are considerable methodological difficulties in evaluating data from specific collection systems or studies with regard to problem use in terms of addiction. Whereas with police records only the higher probability of intense drug users to be picked up by police can be interpreted as an indication of problem drug use, surveys make use of additional information (frequency of use, accompanying circumstances, diagnostic criteria) or adapted clinical tests to differentiate. A relatively safe classification is possible in therapy facilities where staff members have been trained or are 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 from the categories F11 (opioids) to 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, such as cannabis, while denying using for example heroin or playing 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 fifth edition of the classification system, DSM, by the American Psychiatric Association (APA), published in May 2013, abandoned the differentiation between substance abuse and substance dependence and instead defined a substance use disorder, that is classified according to its degree of severity: mild, moderate and severe (APA 2013). The amalgamation of substance abuse and substance dependence into one clinical definition is supported by a series of findings which casts doubt on the ability to differentiate between abuse and dependence and rather suggests 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, or respectively a medical classification, of a main drug is - according to the authors - not sufficient. These difficulties are of particular relevance 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 problem drug use

### 4.2.1 EMCDDA estimate methods (indirect estimates)

For the year 2013 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 2011 was recalculated. Since some of the data (diagnostic data of the patients in hospitals) that is needed for the estimation calculation is 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 2013.

- 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. The multipliers used have a particularly limited validity as they are based on small case figures and selective samples. The methods have been described elsewhere (Kraus et al. 2003). 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 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 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 53,000 and 182,000 persons (with the estimates of the year 2012 serving as a calculation basis). This corresponds to a quota of 1.05 to 3.4 persons per 1,000 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 2013 (figures in 1,000s, age group 15-64 years old)

Data Source	Reference Year									Prevalence per 1,000
	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Treatment <sup>1)</sup>	137- 163	130- 154	110- 130	164- 195	163- 194	167- 198	171- 203	153- 182	<sup>2)</sup>	2.8-3.4
Police contacts	128- 166	117- 159	108- 149	99- 137	89- 127	81- 117	79- 106	74-95	68-90	1.3-1.7
Drug-related deaths	79-96	103- 130	99- 113	117- 178	91- 119	82- 137	63-91	62-65	57-59	1.05- 1.10

1) Number of outpatient facilities according to the DSHS + estimates of 20% hidden participants.

2) Cf. chapter 4.2.1 on the missing calculation of the estimate based on therapy data for 2013.

DBDD 2014, special calculation.

In 2013, the estimation procedure was refined based on treatment data for clients with opiate, cocaine and amphetamine problems, meaning that patients in inpatient addiction treatment facilities are now considered. In addition, the number of clients with corresponding primary diagnoses and the number of patients for the facilities documented in the Statistical Report on Substance Abuse Treatment in Germany were both taken from the same table (Deutsche Suchthilfestatistik, DSHS). Furthermore, since 2009 the estimates 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 estimates for the previous year were adjusted accordingly and for this reason they differ from the reported estimates to date of problem drug users.

The estimate on the basis of the “treatment request” multiplier fell once more in 2012, after reaching its highest value since 2007 the previous year. This could be traced back to the decline in numbers of clients treated in both outpatient and inpatient facilities.

The number of heroin users who have come to the attention of the police for the first time has been rapidly declining for some years (2000: 7,914; 2013: 2,090). At the same time, the portion of drug-related deaths that had been previously recorded as users who had come to the attention of the police for the first time, had been on a continual decline between 2003

(n=52) and 2013 (n=33) and slightly rose again from 2011 to 2012 (n=37). The estimates based on this indicator have been on a continual decline since 2000.

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 rose slightly in comparison to the previous year (2012: 1.4-1.5%; 2013: 1.7-1.8%); the latter, after falling between 2010 and 2012, has risen once again in 2013 (2010: 1,237; 2011: 986; 2012: 944; 2013: 1,002). The estimates based on the multiplier “drug-related deaths” fell once more (due to the overall growth in the proportion of patients who died during addiction treatment) in 2013 in comparison to 2012.

The estimates for the multiplier “police contacts” have been falling since 2005. The same applies to the multiplier “drug-related deaths” for the years since 2008. The estimated values on the basis of the multiplier “demand for treatment” fell between 2005 and 2007, rose again between 2008 and 2011 before falling significantly once more in 2012. One can, therefore, not observe any clear trend.

The range of values (1.05 – 1.10/1,000) 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 et al. 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 way 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 prevalence.

Updated calculations undertaken with the refined estimation method on the basis of treatment data from 2012, which includes clients with cocaine and amphetamine problems, produce a prevalence of 217,000 - 258,000 (2011: 229,000-272,000). This corresponds to a prevalence of 4.0 - 4.8 (per 1,000 population) amongst 15-64 year olds (2010: 4.0 - 4.7%; 2011: 4.3 - 5.0). This extrapolation increased between 2007 and 2011 continuously and has now fallen again sharply up to 2012. 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 problem drug use

The incidence of problem 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 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 problem drug use from non-treatment sources**

#### **Estimates in the general populations**

The last Epidemiological Survey on Addiction (ESA) was conducted in the year 2012 (Pabst et al. 2013). The methodology has already been described in Chapter 2 of the REITOX report 2013. The data on disorders was collected with the help of the written version of the Munich Composite International Diagnostic Interview (M-CIDI; Wittchen et al. 1995) for alcohol, tobacco, cannabis, cocaine, amphetamine, painkillers, sleep inducing drugs and tranquilisers. For all substances, the criteria for the diagnosis of abuse (not including tobacco) and dependence were raised according to DSM-IV for the period of the previous 12 months.

Based on the overall sample, 0.5% of respondents fulfilled the DSM-IV criteria for cannabis abuse and dependence (approx. 250,000) (Pabst et al. 2013). In total 0.2% exhibited cocaine dependence (approx. 100,000). An abuse of amphetamines was exhibited by 0.2% of interviewees (approx. 100,000); a further 0.1% fulfilled the criteria of dependence (approx. 50,000). Further results have already been presented in the REITOX Report 2013. Multiple diagnoses (abuse and/or dependence) applied in 6.6% of the sample (Piontek et al. 2013). Extrapolated to the overall German population in the ages between 18 and 64 years old, this would lead to a total number of approx. 3,407,000 persons (95% CI: 3,048,000 - 3,845,000). When comparing individual substances, it was revealed that the proportion of comorbid disorders is lowest for painkillers (38.1%), tobacco (39.8%) and alcohol (46.8%). In contrast, more than 80% of persons suffering from disorders caused by the consumption of cannabis, sleep inducing substances and cocaine, exhibited at least one further diagnosis, primarily in the case of cocaine-related disorders for alcohol (73.6%) and painkillers (69.1%) as well as amphetamine-related disorders for cannabis (73.4%) and alcohol (67.9%).

As far as the development over time of the proportion of people in the general population who exhibit substance-related disorders, the following could be observed (Kraus et al. 2013b): Between 2000 and 2012, the proportion of cannabis dependent men increased from 0.5% to 0.8%. Similarly, the prevalence values for dependence on tranquilisers for both genders (m: 2000: 0.5%, 2012: 1.0%; w: 2000: 0.6%, 2012: 1.1%) and the dependence on painkillers (2000: 2.7%; 2012: 3.4%) and sleep inducing substances (2000: 0.3%; 2012: 0.7%) increased amongst women. There are no indications of significant changes over time in respect of the abuse and dependence on cannabis amongst women.

#### **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 HRDU<sup>51</sup>-definition of the EMCDDA**

Various studies have been conducted to collect data on the construct “problem” or “risky” use of cannabis. However, terminology and implementation differ from study to study so 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.

The findings on risky or problem use of cannabis can be found in chapter 4.3.

Mephedrone, according to the Trend Scout Panel of the MoSyD Study (Werse et al. (2014) is regularly used in small groups in private settings and the trips are used for finding oneself as well as crisis management. In this context, problem consumption patterns come to light. The trend scout rated the lack of experience, the as yet unknown possible harmful effects and the risk of mental self-dispossession as particularly risky.

In Munich, parallel to the decline of opioid users, a stark increase in the use of new psychoactive substances (NPS) was reported, which had corresponding consequences for the frequency and progress of emergencies (KBS, 2014, personal report). In this context, increasing numbers of needles have been exchanged for the last 2 years in the urban areas of Munich. The assumption is that NPS has a higher frequency of i.v. consumption. From the area of inpatient treatment, it was reported that there was also a clearly increased use of NPS amongst almost all clients. Furthermore, the number of clients with a dependence on methamphetamine also increases, according to these statements.

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

###### **Other data on adolescents and young adults**

In the following, selected findings from the most recent studies analysing the connections between problematic, risky or regular use and the later onset of substance-related disorders will be reported to complement previously presented data from 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. 2008a). Behrendt and colleagues (2009) could not only show for cannabis but also for alcohol and nicotine that an

---

<sup>51</sup> High Risk Drug Use.

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

Results of the European School Survey Project on Alcohol and Other Drugs (ESPAD) on problem cannabis consumption (the last survey took place in 2011) can be found in the REITOX Report 2012.

According to the BZgA Study on cannabis use amongst adolescents and young adults in Germany (BZgA 2014) 1.3% of 12-17 year olds had regularly consumed cannabis in the 12 months prior to the survey, i.e. more than ten times. The regular consumption of cannabis of adolescents hardly changes between 1993 and 2012. Amongst young adults in the ages 18 to 25 years, cannabis use is much more widespread. 3.9% had consumed cannabis regularly in the previous twelve months. The prevalence of regular cannabis use amongst young men and women has remained practically unchanged since 2001.

#### **4.4.3 Medical drug abuse**

##### **Introduction**

In the current publication of the findings of the Epidemiological Survey of Substance Abuse (ESA), it is reported that 3.4% of the 18-64 year olds polled exhibited the criteria for dependence on painkillers (Pabst et al. 2013). In addition, 1.4% of respondents displayed an addiction to tranquilisers and 0.8% an addiction to sleep inducing substances. Overall, it was extrapolated that 2.31 million persons in Germany are dependent on painkillers, tranquilisers of sleep inducing substances. In comparison to that, extrapolations from the ESA have shown that 1.77 million people are alcohol dependent.

In comparison, the German Epidemiological Health Survey (DEGS) contained more conservative estimates. This population study was conducted with adults between the ages of 18 and 79. The 12-month prevalence of medication dependence (stimulants, depressants, painkillers and sleep inducing substances) was 0.5% (Jacobi et al. 2014). Extrapolated, that corresponds to 0.3 million people. Due to clear differences in the methodological approach, the inclusion criteria and the medications covered, the findings of the two studies cannot be compared with one another.

The prescription numbers of the public health insurance providers can provide indications of how widespread a medicinal product is, as well as provide information on trends of medicinal product misuse. In the last few years, there have been noticeable changes in the structure of prescribing psychotropic drugs in Germany. Prescriptions of sedatives/hypnotics fell by 76% between 1992 and 2012 (Schwabe & Paffrath 2013). At the same time, the number of private prescriptions for this group of pharmaceutical products increased (Glaeske & Schick Tanz

2012) and there are even indications that doctors prescribed these substances on private prescriptions beyond the health provider data deemed as transparent, at least for zolpidem and zopiclone (Hoffmann et al. 2009). In 2012, a total of 105 million defined daily doses (DDD) of benzodiazepines and z-drugs were prescribed (Schwabe & Paffrath 2013). As far as painkillers are concerned, opioid analgesics were prescribed three times as often in 2012 as in 1997, so that a peak of 403 DDD was reached (Schwabe & Paffrath).

In the scope of treatment of medication dependence, a current pilot project was produced covering outpatient withdrawal treatment of benzodiazepine dependent patients. The objective of the project was to enable local and low threshold offers of outpatient withdrawal treatment for older patients in cooperation with doctor and pharmacist. 102 patients were included in the project, of which 72% were women; the average age was 71 years old. 45% of the patients were abstinent after the project finished and a further 28% were able to reduce their doses. 80% of the patients who became abstinent or were able to reduce their doses, reported that they had not had a relapse three months after the end of the intervention (ABDA 2013).

In a systematic literature review by Erbe and Bschor (2013), the risks of diphenhydramine (DPH) dependence were raised. A PubMed research project between 1972 and 2012 revealed reliable indications of the addiction potential of DPH, in particular amongst patients with a history of dependence.

#### **Data from the monitoring system Phar-Mon**

Funded by the BMG, the Phar-Mon project has been investigating medical drug abuse among clients of a random sample drawn from 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 in medical drug abuse.

In the period from January to December 2013, data was collected from N=32 reference facilities participating in the project. 31 of the 32 facilities which were invited to participate reported a total of N=698 recordings of the abuse of medical drugs by N=483 clients. These recordings come mostly from men (71.5%) and persons with the main diagnosis of addiction or harmful use of opioids (62.3%). As the patterns of use varied widely according to the main diagnosis of the clients, cases of misuse in Phar-Mon are presented separately according to the main diagnosis groups, alcohol, opioids and sedatives/hypnotics.

A typical characteristic of clients who are in treatment for alcohol problems is that they abuse several substance groups to varying degrees, whilst the abuse amongst persons with an opioid or sedatives/hypnotics-related problem was more strongly limited to precisely that substance group for which help was sought. In the main diagnosis group alcohol, analgetics (n=30, 26.5%) and sedatives/hypnotics (n=26, 23.0%) were abused at comparable rates. Within analgetics, ibuprofen (n=5, 4.4%) and the opioid painkiller tramadol (n=5, 4.4%) were named most commonly. Within sedatives/hypnotics, benzodiazepines clearly dominate in

comparison to z-drugs. Diazepam (n=14, 12.4%) and lorazepam (n=6, 5.3%) were misused most commonly. In addition, other substance groups such as anti-depressants (n=18, 15.9%), neuroleptics (n=10, 8.8%) and antihypertensives (n=7, 6.2%) were misused by a small proportion.

Amongst clients with the main diagnosis dependence or harmful use of opioids, substitution drugs are the most commonly misused substance (n=227, 52.9%). The proportion of cases involving misuse of methadone (n=118, 27.5%) is double that of buprenorphine (n=60, 14.0%) and appears in similar proportions to the previous year. Levomethadone is, at 11.4% (n=49) less often misused. The mentions of an abuse of sedatives/hypnotics (n=100, 23.3%) comprised, similar to the previous years, almost a quarter of the sample. In this context, benzodiazepine diazepam is by some margin the most commonly misused substance (n=69, 16.1%) in the sample.

The benzodiazepine antiepileptic clonazepam (brand name: Rivotril<sup>®</sup>), which is used to treat epilepsy and anxiety states, is one of the five most commonly misused substances in the main diagnosis group opioids (n=42, 9.8%). Following a sharp increase in the mentions of clonazepam misuse from 2011 (n=25; 4.7%) to 2012 (n=52; 10.3%) the numbers appear to stabilise in 2013. Clonazepam was mainly misused by male (83.3%) opioid dependent persons and primarily acquired on the black market (83.3%). The medicinal product was primarily used for sedation (69.0%), modulation of the effect of other substances (42.9%), avoidance of withdrawal symptoms (35.7%) and anxiety reduction (28.6%). In 95.2% of cases, it was stated that clonazepam was used in combination with another substance (e.g. heroin, alcohol, cocaine, THC).

The misuse of the antiepileptic drug pregabalin (brand name: Lyrica<sup>®</sup>) has been increasingly observed for some years. Pregabalin is misused in order to achieve various effects, e.g. sedation, euphoria or even ecstasy-like effects such as dissociation. In 2013, more than three times as many cases of pregabalin misuse were documented by the Phar-Mon than in the previous year (2012=5, 2013=17). It remains the case that the medicinal product is mainly misused by opioid addicts (9 of 11 cases) and men (12 of 17 cases). Craving (10 of 17 cases), loss of control (5 of 17 cases), tolerance development (7 of 17 cases), use contrary to intended purpose (8 of 17 cases), exceeding the maximum dose (5 of 17 cases) and exceeding the duration of administration (6 of 17 cases) were seen to be important characteristics of the misuse. The medicinal product was most commonly acquired via a doctor's prescription (12 of 17 cases). Aside from this, 5 of 17 clients reported that they had acquired it via the black market. Although there are reports of different types of administration, the most common was oral (15 of 17 cases), often in combination with other substances (10 of 17 cases). Clients report that they take pregabalin for anxiety reduction (8 of 17 cases). In addition, they mentioned sedation (6 of 17 cases), inducing euphoria (5 of 17 cases) and the avoidance of withdrawal symptoms (5 of 17 cases) as other reasons for taking the substance. In light of the misuse and addiction potential of pregabalin and clonazepam, it is still important that caution is taken when prescribing such medications to patients with a history of substance-related disorders.



Use contrary to the intended purpose in the case of substitution drugs amongst opioid dependent clients is widespread and well-known. Nevertheless, the causes of a misuse of substitution drugs are less well-known. This was explored in greater detail on the basis of the Phar-Mon data from the years 2007-2011 and recently published in the journal, *Substance Abuse Treatment, Prevention and Policy*. The publication examined the misuse of substitution drugs amongst opioid dependent persons in outpatient addiction counselling. Initially, intergroup differences between buprenorphine, levomethadone and methadone were studied in respect of the pattern of use. Then, an explorative analysis of the predictive factors of use was performed. The misuse (non-compliant use) of levomethadone and methadone was characterised by a more common concomitant use of other psychoactive substances as well as injecting use, whilst buprenorphine was more often obtained without prescription. In respect of the predictive factors, methadone was taken more often than buprenorphine to relieve withdrawal symptoms and levomethadone was taken more often to modulate the effect of other substances and more rarely to enhance mood. The implications for prevention, treatment and addiction policy were discussed on the basis of the findings (Casati et al. 2014).

Naturally, in the main diagnosis group of sedatives/hypnotics, it was sleep inducing substances and tranquilisers which were most often misused (n=30, 53.6%). Amongst the active substances, lorazepam was dominant in 2013 with 19.6% (n=11) of the mentions, followed by diazepam and bromazepam with 8.9% each (n=5) and the Z-drug zolpidem with 7.1% (n=4). In this main diagnosis group, Z-drugs appear more often, which is only rarely the case in the groups with the main diagnosis alcohol and opioids. The sharp increase in the area of analgetic misuse from 2011 to 2012 continued unabated in 2013, reaching 32.1%. Amongst opioid analgetics, tilidine (n=6, 10.7%) and tramadol (n=4, 7.1%) were most commonly misused. However, in part there have been large fluctuations in this pharmaceutical product group in recent years influenced by the small sample size.



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

### 5.1 Overview

#### **Treatment phases**

People willing to overcome their substance dependence with professional support are offered a wide range of cessation counselling and therapeutic services. These are firstly abstinence-based options and secondly substitution-based options, the main difference being the latter are initially focused purely on stabilising the overall condition. The two concepts complement each other since, in the long term, substitution also aims at abstinence from drugs if at all possible.

Based on the present state of knowledge, abstinence-oriented therapy can be subdivided into four basic phases (“phase model”):

#### **Contact and motivation phase**

- Develop, maintain and strengthen the motivation to have treatment
- Counselling, incl. medical, psychological and social diagnosis and case history
- The basis should be a treatment or support plan (taking into account all regionally available treatment/healthcare options)

#### **Detoxification/withdrawal phase**

- Multi-professional teams will assist in treating different aspects of the addiction within a “qualified withdrawal” programme
- Duration of two to six weeks, depending on the individual case

#### **Rehabilitation phase**

- Abstinence should be stabilised and dependence permanently ended
- Out-patient, in-patient or day care
- Standard therapy duration for drug addicts: up to 26 weeks

#### **Integration and aftercare phase**

- Comprises aftercare as well as assisted living and other out-patient aftercare measures
- During the aftercare phase, therapeutic measures are reduced with the focus instead placed on re-integration into work and society (support from specialist departments within job agencies as well as the client’s pension insurance provider)

## Data sources

Information on the characteristics and consumption patterns of clients in treatment is available from various sources. However, comparability of the data is limited – in particular in respect of in-patient treatment – due to the different ways it is collected.

### *Outpatient Treatment*

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) provides extensive data on outpatients from the large majority (2013: 822; 2012: N=794) of the outpatient facilities funded by the Laender and municipalities (Braun et al. 2014d). Since January 2007, most of the addiction aid facilities in Germany have used the new Core Data Set (DHS 2010).

Since 2010, no facility has been excluded from the Statistical Report on Substance Abuse Treatment in Germany (DSHS), reported here, on the grounds of their missing quota being too high<sup>52</sup> (>33%), in order to avoid an overestimation of the missing figures and to achieve a maximum facility sample for each table. This contrasts with previous years up to and including 2009. Therefore, caution needs to be exercised when comparing data of 2010 with that of 2007 to 2009.

The “Treatment Demand Indicator (TDI)” of the EMCDDA<sup>53</sup> 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), which renders substance-based analysis difficult or impossible.

### *Inpatient Treatment*

In 2013, 200 facilities participated in the DSHS (2012: 198) (Braun et al. 2014c).

A lot of the larger facilities, especially psychiatric clinics which also offer addiction-specific treatment are not represented in the DSHS. In order to fill this gap as far as possible in the REITOX Report, data from other sources was taken.

- The 2012 Statistical Report on Hospital Diagnosis, produced by the German Federal Statistical Office (Statistisches Bundesamt 2013b), documents the diagnosis on discharge of all patients leaving inpatient facilities as well as the main diagnoses, age and sex. Though complete, the KDS is not addiction-specific and offers little detailed

---

<sup>52</sup> 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 ensure that overall data quality is not over-proportionally 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. 2010).

<sup>53</sup> The TDI is one of five epidemiological key indicators, which are documented nationally and aggregated on an EU level. Standardised core data is collected in respect of problem drug use, dependence and resulting consequences (EMCDDA 2012).

information in this area. It does however allow a differentiation of the number of cases according 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 this 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 2013). However, the proportion of inpatient therapies which were acute treatments, or 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.

- Data from regional monitoring systems can be compared to the nationwide figures, insofar as the regional systems used the KDS, and thus serve as a valuable extension of national statistics.

### ***Substitution treatment***

Since 1 July 2002, data on substitution therapy has been recorded by the substitution register with the purpose of avoiding double prescriptions of substitution drugs as well as monitoring the implementation of specific quality standards in therapy. The short-term use of substitution substances for the purpose of detoxification is not documented in this register where the detoxification treatment lasts a maximum of four weeks and the patients do not require substitution chemicals directly upon completion of the treatment. Since 2010, this data source has provided information on the number of clients treated and on the substitution drugs used, complete with a list of names of the doctors in charge of therapy. Since an amendment to the psychotherapy guidelines was made in 2011, patients receiving substitution therapy have had a right to psychotherapy even if they have not achieved abstinence after more than 10 therapy sessions (Gemeinsamer Bundesausschuss 2013).

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

## **5.2 Strategy, Policy**

In Germany there is a sophisticated, nationwide support system available to addicts. They can use this support free of charge, however in some cases approval for costs is required from the social funding agencies defined in the statutory social codes (Leune 2014, p. 182f). House doctors play a particular role as they are often the first point of contact for addicts and

at-risk persons. The core of the support system is provided, in addition to the house doctors (for whom no detailed treatment data is available) by the approximately 1,300 addiction advice and treatment centres, around 300 psychiatric outpatient institutes, around 800 facilities for integration support and about 500 (all-day) outpatient and 320 inpatient therapy facilities (ibid.). The majority of the care facilities are run by charitable bodies. State and commercial organisations are also found, in particular, in the area of inpatient treatment.

Table 5.1 Overview of addiction support services offered

Type of facility	Number [rounded]	Places [rounded]
Counselling centres and services (per year) approx.	< 1,300 <sup>54</sup>	> 500,000
Substitution treatment (registered) <sup>1)</sup>	8,416	77,300
Low threshold facilities	> 300	
Specialist hospital departments	> 300	> 7,500
Psychiatric clinics	300	> 220,000
Psychiatric outpatient institutes	300	91,800
Withdrawal with motivational elements	190	> 2,000
(Whole day) outpatient rehabilitation	100	> 1,000
Inpatient rehabilitation	320	13,200
Adaption facilities	115	> 1,200
Social therapy inpatient facilities	268	> 10,700
Social therapy daycare facilities	112	> 1,200
Outpatient assisted living	460	> 12,000
Employment projects/qualification measures	250	> 4,800
Self help groups	8,700	No reliable figures

1) In 2013, 2,691 doctors were in the substitution register (BOPST 2014). The number of doctors qualified to administer addiction treatment reported by the medical associations, was higher than the number of doctors actually performing substitution treatment. In 2012, 8,416 doctors qualified to treat addiction were registered (BOPST 2014).

BOPST 2014; Flöter & Pfeiffer-Gerschel 2011; Leune 2013.

Low-threshold and counselling services 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. With the exception of therapeutic treatment, outpatient addiction support is, for the most part, voluntarily funded by the Laender and municipalities on the basis of community services of general interest. This is anchored under constitutional law in the Social State Principle (Sozialstaatsprinzip) as per Art. 20 (1) German Basic Law (Bürkle & Harter 2011).

<sup>54</sup> This represents an estimate of the total number of outpatient psycho-social counselling centres amongst which facilities which exclusively or primarily treat users of illegal drugs are in the minority.

Acute treatments for 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 providers. The main diagnosis for all patients treated in German hospitals is reported to the Federal Statistical Office which regularly publishes the respective data (Statistical Report on Hospital Diagnoses).

Rehabilitation is designed 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 who also decide on the type, scope and duration of the therapy. Statistical data on the services rendered are available from the social administration authorities.

### **Treatments: Psychiatry**

In addition to the data from the DSHS and the German Statutory Pension Insurance Scheme (DRV), the report on the basic data set on addiction psychiatry can also be used. The figures on addiction treatment cannot, however, be added to the data of the DSHS or the DRV due to possible overlapping. The addiction psychiatry facilities within the specialist psychiatric clinics and the addiction psychiatry departments of the general hospitals and university clinics represent, alongside facilities counselling and rehabilitation, the second major pillar of addiction disorder treatment in Germany. These facilities offer low-threshold, qualified withdrawal treatment, however emergency cases are also treated and crisis interventions and complex treatments in cases of comorbidity are also performed. A detailed diagnosis and reintegration planning process is also conducted. A multi-professional team treats all types of addiction disorder on an inpatient, day care or outpatient basis. This provides a comprehensive medical, psychosocial and psychotherapeutic treatment.

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. 31% of inpatient psychiatric 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% of cases (DGPPN/Bundessuchtausschuss der psychiatrischen Krankenhäuser 2011 cited according to Die Drogenbeauftragte der Bundesregierung 2012a).

A shift in demand towards increasingly intensive treatment forms has been observed for a long time. Outpatient care for addicted people in psychiatric facilities has been greatly expanded, particularly through the set-up of outpatient psychiatric clinics in institutions 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, 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 system

The German treatment system for people with drug-related problems or their relatives is – as described above – very elaborate. Planning of the treatment demand in the various segments of the medical and/or social help system at a national level, however, does not match with the federal structure of the Federal Republic of Germany. Planning is done instead at *Land* 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 psychosocial 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 psychosocial 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 and 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 aimed at alcohol addicts and older target groups. It is the aim of the German Self Help Associations to open themselves up increasingly to addicts of all substances and to convince more young addicts of the idea of self-help.

#### 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, see also chapter 5.2, section Treatments: psychiatry). Outpatient counselling facilities are often the first port of call for drug users insofar as their drug problems are not treated by primary care – i.e. generally speaking by practice-based doctors. The counselling is free of charge; the facilities are mainly funded by the municipalities and Laender as well as by their not 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, although patients without employment are subject to other regulations) (c.f. Chapter 11.2.1 REITOX Report 2012). In some cases, inpatient measures are not appropriate for the client's situation (for example if it could jeopardise an existing job) or even impossible (for instance if there is no childcare available to enable a mother to attend/receive treatment). In recent years we have seen increased flexibility in the structure of treatments offered and this has enabled clients to make use of other, demand specific treatment services (for example day care and outpatient treatment options).

Withdrawal treatments are carried out by specialised clinics or therapeutic communities. In the integration and after-care phase, a varied range of services is offered, specifically geared to the needs of the clients, with regard to employment, housing and re-integration into society. All fields of work are staffed with specialists, the majority of whom have received supplementary training specific to the field. All services offered aim at stabilising abstinence from drugs.

Since 2001, substitution based therapy has been regulated in detail by the Narcotics Law and in the meantime has become a fully medically recognised treatment form. This treatment option 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 (2008b) underline the effectiveness of various types of substitution treatments with methadone and buprenorphine. Concomitant use (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) had 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 an SHI-accredited care service to be borne by the SHI. Substances eligible for substitution therapy in Germany are levomethadone, methadone and buprenorphine. Codeine and dihydrocodeine (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 (c.f. chapter 1.2.2 in the REITOX Report 2009).

The majority of substituted patients are treated by practice-based doctors or in specialised outpatient clinics. 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, which 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. In this context, what constitutes success can vary depending on the observer's perspective: the reduction of concomitant use of other psychotropic substances can be considered as much a success as the cessation 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, insofar as it is regarded as "necessary". As a result of different interpretations of psychosocial care in the Laender and communities, psychosocial care is, on a national level, subject to great variations in terms of organisation, funding and treatments offered.

The 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 for eliminating 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 has not yet been satisfactorily achieved. At a regional level however, cooperation and coordination of the treatments offered 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 differing 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 summary of the current state of knowledge and provide practical guidance – with information on the quality of the empirical basis for the individual statements - for carrying out treatments. In 2006, the Working Group of the Scientific Medical Professional Societies (Arbeitsgemeinschaft der medizinisch-wissenschaftlichen 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). Currently, the published guidelines on “Cannabis-related disorders”, “Opioid-related disorders (acute treatment and post-acute treatment)”, “Mental and behavioural disorders from cocaine, amphetamine, ecstasy and hallucinogens” and “Medication dependence (sedatives, hypnotics, analgesics, psychostimulants)”, as well as on the substances, alcohol and tobacco, are being revised.

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). At the beginning of 2014, the final version of the guidelines, “Therapy for opiate dependence - Part 1: substitution treatment” of the German Society for Addiction Medicine (DGS) were passed (Backmund et al. 2014).

Moreover, the revised version of the S3-Guideline of 2004 on “Prophylaxis, diagnostics and therapy of the hepatitis-C-virus (HCV)-Infection, AWMF-Register No. 021/012” from 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 supplementary training in the specific relevant field. 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 on the basis of European standards (introduction of Master and Bachelor programmes at universities and technical colleges) the requirements on therapeutic staff in addiction support are being newly developed and defined. In the restructuring of the courses for social workers, psychologists and medical staff in the area of addiction support, post-graduate education plays a particularly 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 options (in particular counselling centres), quality assurance and technical monitoring are mainly in the hands of the institutions that support these facilities, namely the Laender and municipalities. The responsibility for detoxification and rehabilitation, however, lies with the respective insurance carriers (statutory health and pension insurance organisations) (c.f. also chapter 11.3 of the REITOX Report 2012). With outpatient treatments now being increasingly funded by the 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.

### 5.3.2 Availability and diversification of treatment

A detailed presentation of the forms of treatment that are generally available has already been given above (see chapters 5.1, 5.2 and 5.3.1). With regard to the availability of treatment and help services, there are differences to be found between the Laender. For example, not all Laender offer consumption rooms as a component 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 (particularly in the eastern Laender).

All in all, the situation with regard to support services available has not changed much recently. The only partially secured 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 services are cut at various locations (despite community services of general interest, which is enshrined in the constitutional law Social State Principle as per Art. 20 (1) German Basic Law, c.f. Bürkle & Harter 2011). 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 (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 services offered 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). However people are also treated with problems related to the use of illicit drugs and other disorders (e. g. eating disorders, pathological gambling, and tobacco dependence). Correspondingly, most of the facilities hold treatments 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 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. Given the significant increase in the prevalence of cannabis use, especially at the end of the 1990s (until about 2003), a series of studies and projects were launched, dedicated to the development of specific intervention concepts for cannabis users under various framework conditions (c.f. REITOX reports of recent years). Diamorphine-assisted therapy, addressed

to the group of heavily dependent opioid users, is also a further development of an intervention that primarily defines itself by the main substance of the disorder, 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 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 is 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 2013 (Braun et al. 2014a,b,c,d). The data used in the presentation is 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 can be found in chapters 8 and 9.

In the year 2013 data from a total of 334,804 therapies (without one-off contacts) carried out in N=822 outpatient facilities was 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 52% of all recorded cases in 2013).

#### **Diagnostics data**

For the year 2013 the German Statistical Report on Treatment Centres for Substance Use Disorders contains data on the main diagnoses of a total of 67,108 treatments from N=820 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 in 37.6% of cases (2012: 41.1%; 2011: 44.9%) clients sought treatment or counselling primarily for dependence on or harmful use of opioids. 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 (2013: 38.7%; 2012: 36.5%) clients were treated for primary

cannabis problems. After a slight decrease in 2011, this proportion has risen continuously. As in the previous years, the proportion of clients who received counselling and treatment because of problems connected to the use of stimulants continued to increase in 2013 (14.2%; 2012: 12.3%). The comparative values for cocaine (5.7%; 2012: 6.0%) and other substances remained practically unchanged in comparison with the previous year.

Amongst persons who received addiction specific treatment for the first time, cannabis was by some distance the most used substance, with its share once more increasing slightly (59.5%; 2012: 58.4% of all clients). By a considerable margin, the second largest group is first-time clients with the main diagnosis stimulants (18.7%; 2012: 16.6%), followed by first-time clients with opioid-related disorders (12.7%; 2012: 15.0%). The proportion of first-time clients with cocaine-related disorders (5.5%; 2012: 6.0%), as well as all other substance groups, have remained practically unchanged in size since last year (Table 5.2).

Table 5.2 Main diagnosis in outpatient therapy (DSHS outpatient data, 2013)

Main diagnosis harmful use/addiction of (ICD10:F1x.1/F1x. 2x)	All persons treated <sup>1)</sup>			Persons treated for the first time <sup>2)</sup>		
	Males <sup>2)</sup>	Females <sup>2)</sup>	Total <sup>2)</sup>	Males <sup>2)</sup>	Females <sup>2)</sup>	Total <sup>2)</sup>
Opioids	36.4%	41.6%	37.5%	12.3%	14.3%	12.7%
Cannabinoids	41.7%	27.8%	38.7%	63.3%	45.6%	59.5%
Sedatives/Hypnotics	1.2%	5.5%	2.1%	1.0%	5.3%	1.9%
Cocaine	6.2%	3.8%	5.7%	5.9%	4.1%	5.5%
Stimulants	12.7%	19.5%	14.2%	16.0%	28.8%	18.7%
Hallucinogens	0.2%	0.1%	0.1%	0.2%	0.1%	0.2%
Volatile substances	0.1%	0.2%	0.1%	0.1%	0.3%	0.1%
Multiple/other substances	1.6%	1.6%	1.6%	1.3%	1.6%	1.4%
<b>Total (N)</b>	<b>52,443</b>	<b>14,587</b>	<b>67,030</b>	<b>16,294</b>	<b>4,445</b>	<b>20,739</b>

1) All persons treated are in this case newly admitted patients and patients who completed therapy in the reporting year. Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 10.1.1.

2) Information on persons treated for the first time in outpatient, inpatient and low threshold treatment centres, as well as first time outpatient treatment of drug problems in prisons can be found in TDI-table 10.1.2.

Braun et al. 2014b,d.

Secondary addiction diagnoses made in addition to the main diagnosis are relatively common. Out of the clients with primary opioid-related problems<sup>55</sup> in 2013, about one in four clients (25.2%) also displayed an alcohol-related disorder (dependence or harmful use) or a disorder in connection with the use of cocaine (19.7%) (Table 5.3). Dependence on or

<sup>55</sup> All subsequent data on clients with primary opioid-related problems are referred to a total number of N=22,100.

harmful use of cannabis continued to represent the most common non-opioid secondary diagnosis in this patient group (30.4%).

Among clients with primary cocaine-related problems<sup>56</sup>, cannabis, alcohol, amphetamines and ecstasy played a dominant role as substance-related secondary diagnoses. The proportion of clients with a primary cocaine problem who also fulfilled the diagnostic criteria of a heroin-related disorder rose following a low in 2012 to 9.7% (2012: 7.3%; 2011: 8.9%).

Almost one in five of the clients with a primary cannabis-related problem<sup>57</sup> also displayed harmful use of or dependence on amphetamines (17.9%). Almost one client in ten with a cannabis-related main diagnosis also showed harmful use of or dependence on cocaine (8.7%). Almost 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 (23.3%). Seen across the board of all substances, a quarter of the clients had a disorder caused by the use of alcohol in addition to the primary reason for treatment admission.

Almost every second client (45.9%) with the main diagnosis stimulants<sup>58</sup> was also diagnosed with a harmful use or dependence on cannabinoids; one in six had the additional diagnosis of a disorder due to the consumption of ecstasy and 10.4% due to cocaine (Braun et al. 2014d).

---

<sup>56</sup> Referred to a total number of N=2,754 (main diagnosis: cocaine).

<sup>57</sup> Referred to a total number of N=23,253 (main diagnosis: cannabinoids).

<sup>58</sup> Referred to a total number of N=9,021 (main diagnosis: stimulants).

Table 5.3 Main diagnosis and additional substance-related diagnosis (DSHS outpatient data, 2013)

Single diagnosis <sup>1)</sup>	Main diagnosis				
	Opioids	Cannabinoids	Sed./Hypn.	Cocaine	Stimulants
Alcohol	25.2%	23.3%	31.7%	33.0%	26.3%
Heroin	82.6%	2.0%	5.2%	9.7%	4.3%
Methadone	39.5%	0.4%	1.4%	2.1%	0.4%
Buprenorphine	10.6%	0.2%	1.0%	0.8%	0.2%
Other opiates	13.6%	0.6%	4.9%	1.8%	0.8%
Cannabinoids	30.4%	99.8%	13.0%	39.2%	45.9%
Buprenorphine	13.0%	0.9%	71.9%	3.2%	1.7%
Other sedativ./hypnot.	0.5%	0.2%	20.9%	0.3%	0.4%
Cocaine	19.7%	8.7%	4.2%	92.9%	10.4%
Crack	1.0%	0.2%	0.3%	3.7%	0.4%
Amphetamine	9.1%	17.9%	6.1%	16.4%	67.8%
MDMA	4.3%	6.3%	2.2%	7.0%	16.0%
Other stimulants	1.1%	2.0%	1.1%	1.3%	33.4%
LSD	2.6%	2.2%	0.7%	3.0%	3.6%
<b>Total (N)</b>	<b>22,100</b>	<b>23,253</b>	<b>1,313</b>	<b>2,754</b>	<b>9,021</b>

1) Multiple entries possible.

Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 25.1.1.

Braun et al. 2014d.

### Socio-demographic information, consumption patterns and treatment duration

In 2013, 78.2% (2012: 78.7%) of all outpatient clients N=67,030<sup>59</sup> with drug problems recorded within the framework of the German Statistical Report on Treatment Centres for Substance Use Disorders were male. 50.2% (2012: 50.3%) of all treated patients were between 15 and 29 years of age. 83.3% (2012: 83.2%) of them were of German nationality, 3.2% (2012: 3.0%) were from other countries of the European Union (EU), 8.4% (2012: 8.6%) from non-EU countries such as Turkey or the former Soviet Union (unknown nationality: 5.1%). Since living conditions of the clients vary considerably depending on the main diagnosis or the drugs used, the characteristics presented in Table 5.4 are broken down by main drugs.

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

<sup>59</sup> For whom data on the gender and main diagnosis were available.



Table 5.4 Socio-demographic data by main drug (DSSH outpatient data, 2013)

Characteristics	Main diagnosis				
	Opioids	Cannabis	Cocaine	Stimulants	
Age when starting treatment (m) <sup>1)</sup>	36.7	24.5	33.7	27.4	
Age of first drug use (m) <sup>1)</sup>	21.4	15.3	21.8	18.3	
Gender (ratio males) <sup>2)</sup>	75.9%	84.4%	85.4%	70.1%	
Living alone <sup>3)</sup>	52.4%	61.1%	43.8%	53.3%	
Working status <sup>4)</sup>					
	Unemployed	62.4%	34.3%	41.2%	49.0%
	In school/education	2.1%	32.0%	4.2%	11.2%
Homeless <sup>5)</sup>	2.8%	0.8%	1.4%	1.4%	

1) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 11.1.1.

2) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 11.1.1.

3) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 14.1.1.

4) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 18.1.1.

5) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 16.1.1.

Braun et al. 2014d.

Table 5.5 shows the most common use pattern for various substances. Heroin continues to be mainly injected by more than half of the clients (2013: 60.0%; 2012: 57.8%). The trend of recent years which has seen 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 remained stable to a degree since 2010. The proportion of those who smoke heroin (2013: 27.9%; 2012: 28.0%), remained almost unchanged in comparison to the previous year, whilst nasal use rose (2013: 9.4%; 2012: 7.8%). Injecting use was also found in every sixth cocaine user (17.0%). All other substances are mainly orally consumed, sniffed (especially cocaine and amphetamines) or smoked (especially crack). The most diversified use pattern was found for amphetamines.

Table 5.5 Routes of drug administration (DSHS outpatient data, 2013)

Substance	Route of administration <sup>1)</sup>					Total
	Injection	Smoking	Oral	Inhalation	Other	
Heroin	60.0%	27.9%	2.2%	9.4%	0.5%	13,578
Methadone	2.4%	1.2%	96.0%	0.1%	0.3%	7,544
Buprenorphine	3.4%	1.3%	89.1%	4.8%	1.3%	2,440
Other opioids	10.8%	7.8%	76.7%	1.7%	3.0%	2,432
Cocaine	17.0%	19.2%	1.1%	62.3%	0.3%	9,684
Crack	5.3%	89.5%	2.0%	2.9%	0.2%	832
Amphetamine	1.3%	12.3%	29.1%	56.0%	1.2%	11,647

Multiple entries possible.

1) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 19.1.1.

Braun et al. 2014d.

The DSHS also contains some basic data on intensity of care<sup>60</sup>. The average number of contacts during therapy was the highest for opiate clients, amounting to 21.1 (2012: 20.7), and the lowest for cannabis clients, amounting to 9.9 (2012: 10.2). There was generally more contact with women than men with comparable main diagnoses (Table 5.6). The average treatment duration corresponds in its distribution to the figures for contacts. On average, opioid clients have the longest treatment duration and cannabis clients the shortest.

Table 5.6 Number of contacts and treatment duration (DSHS outpatient data, 2013)

Main diagnosis	Number of times contacted (M)			Duration of treatment (M) <sup>1)</sup>		
	Males	Females	Total	Males	Females	Total
Opioids	19.9	24.6	21.1	56.2	61.0	57.3
Cannabinoids	9.6	11.1	9.9	24.4	23.7	24.3
Sedatives/Hypnotics	12.7	15.4	14.3	29.4	34.5	32.3
Cocaine	14.1	17.3	14.6	29.2	27.6	29.0
Stimulants	10.7	12.0	11.1	29.3	28.8	29.2
Hallucinogens	11.3	9.1	10.8	30.5	30.4	30.2
Volatile substances	16.7	12.8	15.1	20.3	28.9	23.9
Multiple/other substances	14.3	23.3	16.3	32.7	34.4	33.1

1) In weeks.

Braun et al. 2014d.

<sup>60</sup> Due to the small number of cases of clients with primary problems associated with hallucinogens (n = 100) and volatile substances (n = 59), these two groups were not taken into account in the comparisons.

### 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, differentiating 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.

#### Diagnosics data

Out of the total of 47,354 inpatient treatments of substance-related disorders in N=200 facilities, documented by the DSHS in 2013, 10,352 were related to illicit substances (including sedatives/hypnotics and volatile solvents) (Braun et al. 2014c). Among those were 8,040 males: this corresponds to a male portion of 77.7% (2012: 77.9%). In nearly three quarters of the cases (71.8%) alcohol-related disorders were the primary reason for inpatient therapy (29,724 therapies; 2012: 29,504). 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.

Of the treatments with primary drug problems in the scope of the DSHS, those with a main diagnosis based on dependence or harmful use of cannabis (28.3%; 2012: 26.8%) for the first time exceeded the proportion of treatments on the basis of opioids (27.1%; 2012: 30.0%) and thus represented for the first time the largest single group in the inpatient setting (without main diagnosis alcohol). The proportion of treatments on the basis of the consumption of opioids has been declining since 2007 (48.6%), the proportion due to cannabis has been constantly rising since 2007. This group is followed by treatments on the basis of poly-drug use (15.3%; 2012: 16.8%). This proportion fell year on year for the first time since 2007. Problems in connection with cocaine or stimulants were in 7.2% (2012: 6.7%) or respectively 18.3% (2012: 15.5%) of the cases the primary reason for treatment (Table 5.7).

For five years, cannabis-related disorders on the basis of the DSHS report were the second most common reasons for treatment, even ahead of poly-drug use and in 2013 they became the most common reason for treatment. This is probably an expression of the increased importance of cannabis in the inpatient setting of specialised clinics. Amongst inpatients recorded within the framework of the DSHS, cannabis still plays a significantly smaller role amongst women than men - albeit a role which has risen sharply compared to the previous year: only 20.8% (2012: 18.5%) of the women vs. 30.4% (2012: 29.2%) 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 1:5 and for cocaine, which is to a larger extent the main reason for therapy in men (8.1% vs. 4.1%).

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 area of acute treatment

(hospitals) about half of the drug cases in 2012 (44.7%; 2011: 43.5%) were related to poly-drug use; in the statistics of the German Statutory Pension Insurance Scheme (DRV) the figure even amounts to 42.2% (2011: 46.7%) of all cases in the same year. In the DRV statistics, this proportion has been falling for years; in the area of acute treatment, this value increased slightly once more, for the first time between 2011 and 2012. In the DSHS, the use of cannabis is more often coded as the main reason for therapy<sup>61</sup>. According to the data on acute treatments (statistical report on hospital diagnoses) and the statistical data from the DRV, the share of clients treated for cannabis use are on the rise (but still account for a significantly smaller portion).

Hospital stays caused by sedative and hypnotics use continue to be relatively common in acute treatment (Statistical Report on Hospital Diagnoses). About one in ten addiction diagnoses in hospital treatments is related to these substances. In contrast, they play a relatively minor role in rehabilitation treatments (DRV) and in the DSHS (Table 5.7).

Table 5.7 Inpatients broken down by addiction diagnosis

	Hospital	DRV	DSHS			
	2012	2012	2012	2013		
Main diagnosis	Total	Total	Total <sup>1)</sup>	Total <sup>2)</sup>	Males <sup>2)</sup>	Females <sup>2)</sup>
Opioids	27.5%	24.0%	30.0%	27.1%	26.7%	28.5%
Cannabinoids	10.5%	18.1%	26.8%	28.3%	30.4%	20.8%
Sedatives/Hypnotics	10.4%	2.5%	4.0%	3.6%	1.8%	9.9%
Cocaine	1.5%	4.4%	6.7%	7.2%	8.1%	4.1%
Stimulants	4.7%	8.7%	15.5%	18.3%	17.5%	21.3%
Hallucinogens	0.5%	0.1%	0.1%	0.1%	0.1%	0.1%
Volatile substances	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%
Mult./other substan.	44.7%	42.2%	16.8%	15.3%	15.4%	15.2%
<b>Total (Number)</b>	<b>96,279</b>	<b>13,949</b>	<b>9,481</b>	<b>10,352</b>	<b>8,040</b>	<b>2,312</b>

1) The data corresponds with TDI-table: 14.1.1 of the year 2012.

2) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 10.1.1.

Braun et al. 2014c; DRV 2013; Statistisches Bundesamt 2013b.

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

<sup>61</sup> 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.

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 – different coding practices can be held responsible for the differences found between the statistics.

### **Socio-demographic information and treatment duration**

In analogy to the presentation of the data for the clients in outpatient treatment, Table 5.8 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 5.4), 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 proportion of homeless persons among inpatients with the main diagnosis opioids and cocaine had doubled in comparison to the previous year and amongst inpatients with the main diagnosis stimulants had more than quadrupled, it continued to increase slightly in 2011. In 2012, the proportion of homeless persons amongst clients with the main diagnosis opioids increased again whilst the proportion for the main diagnoses cannabis, cocaine and stimulants fell slightly. The proportion of inpatient clients who were homeless continued to fall from 2011 to 2012 for clients with the main diagnosis of cocaine, cannabis and stimulants whilst it remained constant for the main diagnosis opioids. 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 5.8 Socio-demographic data by main drug (DSHS inpatient data, 2013)

Characteristics	Main diagnosis				
	Opioids	Cannabis	Cocaine	Stimulants	
Age when starting treatment (m) <sup>1)</sup>	34.6	27.5	33.5	28.1	
Age of first drug use (m) <sup>1)</sup>	20.8	15.2	21.0	18.3	
Gender (ratio males) <sup>2)</sup>	76.5%	83.5%	87.4%	74.0%	
Living alone <sup>3)</sup>	55.8%	64.6%	50.9%	63.0%	
Working status <sup>4)</sup>					
	Unemployed	67.9%	65.3%	62.8%	65.3%
	In school/education	0.7%	5.5%	0.7%	3.1%
Homeless <sup>5)</sup>	2.1%	1.5%	2.0%	1.4%	

1) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 11.1.1.

2) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 10.1.1.

3) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 14.1.1.

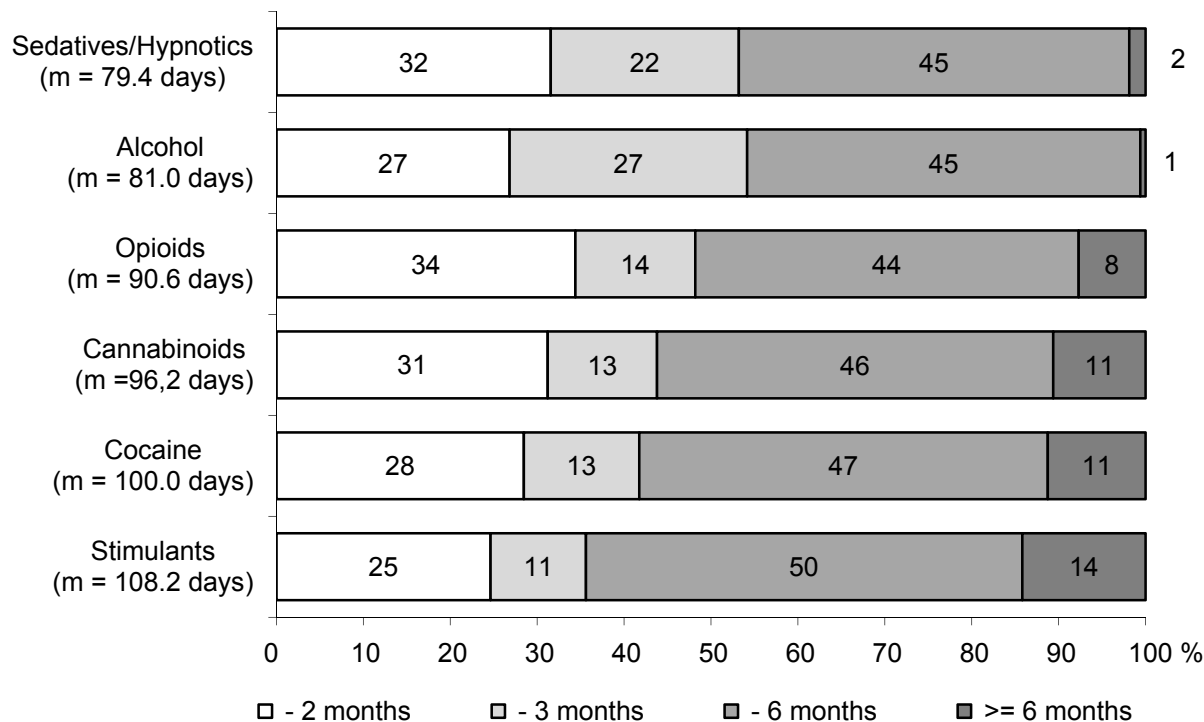
4) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 18.1.1.

5) Information on all persons treated in outpatient, inpatient and low threshold treatment centres, as well as outpatient treatment of drug problems in prisons can be found in TDI-table 16.1.1.

Braun et al. 2014c.

The data from the DSHS shows significant differences in the average treatment duration broken down by main diagnoses (Figure 5.1). In 2013 the average treatment duration for patients with primary disorders caused by the use of cannabinoids was 13.7 weeks (2012: 12.7), 15.5 weeks for stimulants (2012: 15.2), 14.3 weeks for cocaine (2012: 13.6), 12.9 weeks for opioids (2012: 13.6) and 11.3 weeks for sedatives/hypnotics (2012: 11.6). The treatment duration for alcohol, given as a comparative value, is on average 11.6 weeks (2012: 11.7).

Some of the treatment durations differ considerably. A striking statistic is that at 13-15 weeks, the average treatment duration for disorders caused by illicit substances is on average at least 1.5 weeks longer than for alcohol and sedatives/hypnotics. This is primarily attributable to the clearly smaller proportion of patients with treatment duration  $\geq 9$  months for alcohol and sedatives/hypnotics. The average treatment duration for alcohol-related disorders has declined slightly over the last five years. For the other substance groups (except opioids) these increased in part significantly from 2012 to 2013. No clear trend can be identified for the past few years.



Braun et al. 2014c.

Figure 5.1 Duration of inpatient treatment broken down by substance use disorders (DSHS inpatient data, 2013)

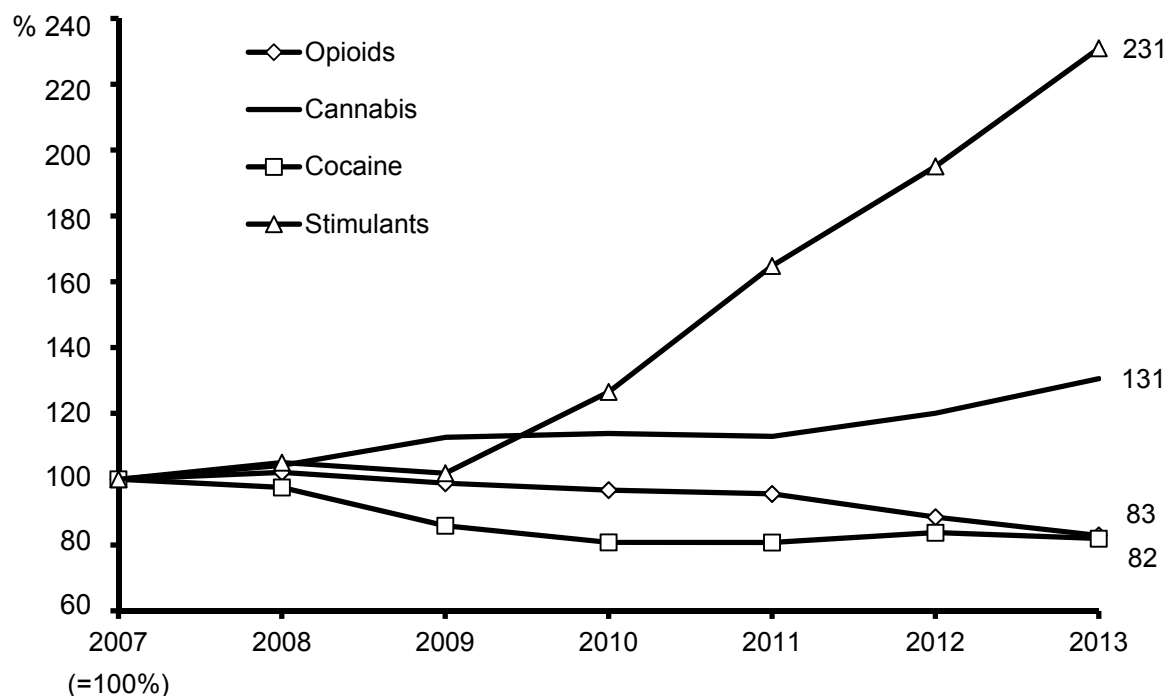
## 5.5 Trends of clients in treatment

### 5.5.1 Developments in the outpatient and inpatient setting

All in all, disorders caused by the use of heroin and cannabinoids continue to play a predominant role among the illicit drugs in outpatient and inpatient facilities. However, cannabis is in first place when it comes to treatment requests made by persons seeking outpatient therapy for the first time, whereas opioids are the reason for making contact with a treatment facility in only less than eight users. Eight years ago, this portion was still at about a third of the first-time patients. Among all 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, whereas the proportion of clients with the main diagnosis cannabis has increased continuously. In 2013, the proportion of clients with the main diagnosis cannabis exceeded for the first time the proportion with the main diagnosis opioids and thereby comprised the largest single population amongst users of illegal drugs.

If one calculates the changes in admissions of clients to the outpatient setting, broken down by main diagnosis since the introduction of the new Core Data Set in 2007 (Index=100%), one finds a slight increase in the share of patients with main diagnosis cannabis since 2007, a slight decline in patients with opioid problems, in the last two reporting years, a slight

increase in clients with cocaine problems as well as a more than doubling of the proportion of clients with the main diagnosis stimulants (Figure 5.2).



Braun et al. 2014c.

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

In the inpatient setting (DSHS), opioid users represented only the second largest patient group after cannabis users; in the pension insurance rehabilitation statistics, opioid users still represented the largest patient group amongst users of illegal drugs. According to those findings, inpatient treatment of cannabis disorders therefore plays an increasingly important role. This development becomes most apparent in the data collected by DHDS, while acute treatments for cannabis use (Statistical Report on Hospital Diagnoses), by comparison, are still relatively rare.

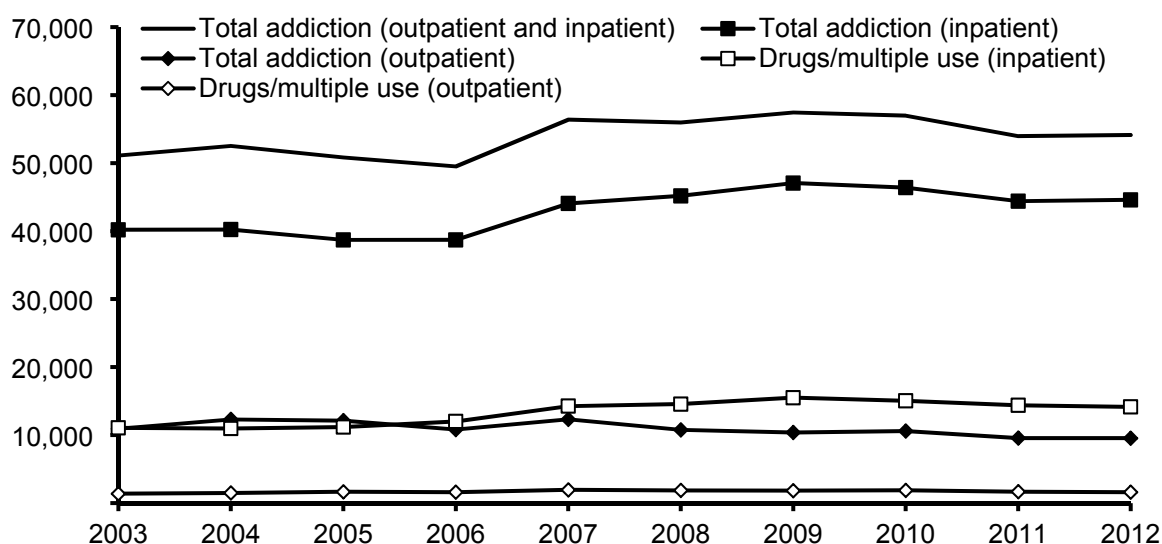
The total number of pension insurance funded rehabilitation services in the area of addiction rose by over 10% between 2003 (51,123) and 2009 (57,456), then fell in 2011 (2010: 56,997; 2011: 53,965) before rising again in 2012 (54,142) (Figure 5.3). The largest part of these services (69.9%) is provided for alcohol-related disorders. Disorders due to the use of illegal drugs and multiple use together comprise around 29.1% of the treatments provided (medicinal drugs: 1.0%). This share increased from 24.3% in 2003 by about 5%, which means that since 2004 the share of rehabilitation services funded by pension insurance for the therapy of primary alcohol problems has been shrinking.

The ratio of inpatient to outpatient treatments is (across all services) almost 5:1. This ratio shifted slightly between 2003 and 2008 (especially since 2005) in favour of the inpatient



treatments (from 3.7:1 to 4.7:1). Looking only at the rehabilitation services funded for drugs and multiple use, one finds that the ratio between inpatient and outpatient treatment has, with nearly 9:1 markedly shifted towards the inpatient treatments. Between 2003 and 2007 (according to the data of the DRV), the number of rehabilitation cases for drug patients (drugs/multiple use) in inpatient treatment continuously increased before falling slightly since then. In the area of outpatient treatment, the respective numbers of cases continuously increased until 2007, then remained stable until 2010 before falling again 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. An attempt to take a differentiated view of the statistical data could contribute to an in-depth analysis of changes in the reporting years to come.



DRV 2013.

Figure 5.3 Changes in outpatient and inpatient rehabilitation therapies

The total number of acute addiction or drug treatments in hospitals has increased slightly after slight fluctuations between 2010 and 2012 (Statistisches Bundesamt 2013a). A slight growth was observed in the number of treatments due to stimulants (+16.5%), cocaine (+16.0%) and cannabinoids (+11.5%). A decline in the number of treatments due to opioids (-8.4%) and - with a low total number of cases - hallucinogens (-17.8%) and volatile substances (-21.7%) (Table 5.9).

Table 5.9 Inpatient treatment of drug problems in hospitals 2009-2012

Main diagnosis	Year				Changes
	2009	2010	2011	2012	2012 vs. 2011
Alcohol	339,092	333,357	338,355	345,034	2.0%
Opioids	31,496	32,538	28,956	26,512	-8.4%
Cannabinoids	7,251	8,145	9,094	10,142	11.5%
Sedatives/Hypnotics	9,094	9,270	10,241	9,999	-2.4%
Cocaine	1,050	1,076	1,222	1,417	16.0%
Stimulants	1,848	2,805	3,878	4,519	16.5%
Hallucinogens	431	430	574	472	-17.8%
Tobacco	258	310	269	225	-16.4%
Volatile substances	194	171	198	155	-21.7%
Multiple/other substances	42,468	41,449	41,777	43,063	3.1%
<b>Total addiction</b>	<b>433,182</b>	<b>429,551</b>	<b>434,564</b>	<b>441,538</b>	<b>1.6%</b>
<b>Total drugs</b>	<b>93,832</b>	<b>95,884</b>	<b>95,940</b>	<b>96,279</b>	<b>0.4%</b>

Statistisches Bundesamt 2011a,b, 2013a,b.

### 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 a year.

From 2002, when reporting became obligatory, the number of substitution patients reported continuously increased until 2010 – as of 1 July 2010 the number was 77,400. However, since 2011 the number has remained largely stable; on 1 July 2013 it was 77,300 patients (BOPST 2014).

In 2013, around 92,000 registrations, deregistrations or changed registrations of patient codes were recorded in the substitution register. This high number is due, amongst other things, to the fact that the same patients were registered and deregistered multiple times – either by the same doctor or by different doctors. The reasons for this could lie with the patients themselves (e.g. change of attending doctor, longer stay in a clinic or correctional facilities) or with the doctors (e.g. change in personnel in outpatient substitution clinics). In 2013, around 170 double treatments were confirmed by the substitution register which were then ended by the doctors concerned upon notification by the register (BOPST 2014).

The number of doctors qualified to administer addiction therapy reported by the medical associations and registered in the substitution register is considerably higher than the number of doctors actually performing substitution treatments. A total of 2,691 doctors

reported patients to the substitution register in 2013. The number of doctors who actually perform substitution treatments has been stagnating at a practically unchanged level since 2004. In 2012, 496 of these doctors - that is approximately 18% - used the supervision of a colleague (doctors without an addiction therapy qualification can treat up to three substitution patients simultaneously if they involve a suitably qualified physician). By the cut-off date of 1 July 2013, around 15% of the doctors performing substitution treatments had reported half of their substitution patients (BOPST 2014).

The average number of registered substitution patients per doctor varies considerably between the individual states and its nationwide average is 29. 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, Hamburg and Berlin), possibly because of the surrounding environment, than in the large area states. Secondly, it is significantly higher in the western Laender than in the eastern Laender. Only 2.7% (N=2,078; 2012: 2.9%; N=2,181) of the patients reported to the register (cut-off date: 01 October 2013) and 4.8% (N=130; 2012: 5.3%, N=146) of the doctors performing substitution treatments are from the eastern Laender (excluding Berlin). The number of registered patients per doctor is accordingly also subject to considerable variations between the Laender. Whereas a doctor in Hamburg treated on average 41.6 substitution patients in 2013 (followed by the Saarland with an average of 39.2 and Berlin: 35.5), the average in Brandenburg was only 5.3 (Mecklenburg-West Pomerania: 10.4; Thuringia: 15.0).

The share of substances used in substitution treatment has shifted in the past few years away from methadone (2013: 49.3%) and towards levomethadone (2013: 28.6%) as well as buprenorphine, which, in 2013, was used in about every fifth substitution (21.3%) (Table 5.10). The proportion of patients receiving substitution therapy with methadone or levomethadone has fallen since 2005 from 82.0% to the current level of 77.9%.

Table 5.10 Type and proportion of substitution drugs reported to the substitution register (2005-2013)

<b>Substitution drug</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Methadone	66.2%	64.1%	61.4%	59.7%	58.9%	57.7%	54.8%	51.6%	49.3%
Levomethadone	15.8%	17.2%	19.0%	20.6%	21.8%	23.0%	25.4%	27.0%	28.6%
Buprenorphine	17.2%	18.0%	18.6%	18.9%	18.6%	18.6%	19.2%	20.4%	21.3%
Dihydrocodein	0.7%	0.6%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%
Codein	0.1%	0.1%	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%	0.7%	0.5%

BOPST 2014.

Following up the repeated discussion on the future provision of substitution, in particular in rural areas, experts (Falch-Knappe & Schoen-Blum 2014) from Ortenaukreis (largest district by area in Baden-Wuerttemberg), by way of example for other regions, have confirmed, in the scope of the annual REITOX reports, the difficulties in maintaining a qualified local

substitution service for drug addicts. This was primarily due to the fact that older substitution doctors were no longer involved in the provision due to age and no medics could be found who could provide a longer-term substitution service. This situation has apparently led, in the specific case, to an overburdening of the only specialist practice in the district and thus associated problem zones in public areas. This under-provision led to the idea of developing a cross-border substitution project with the major French city of Strasbourg and the city of Kehl. With the involvement of many partners such as the Strasbourg addiction support facility, "Ithaque", the doctor's association, the association of SHI-accredited doctors, clinics, Eurodistrict, the *Land* Baden-Wuerttemberg, the Ortenaukreis and the city of Kehl, the cross-border project, "Practice for Addiction Medicine" was realised in the youth and drug counselling centre (DROBS) in the centre of Kehl. Through close cooperation between several different specialist areas under one roof, the aim is that patients will be helped to take advantage of psychosocial support and at the same time to increase the quality of treatment through a close interworking between the professions. In this process, the German-French exchange of experiences and the cooperation proved to be very positive, in the opinion of the experts. With the support of the *Land*, the project will be evaluated by a research group of the Tübingen University Clinic. The aim is to examine the transferability of this project structure to other regions.

Beck and Colleagues (2014) presented the results of a study in 2014, in which the effectiveness of slow-release oral morphine (SROM) with methadone in maintenance therapy was studied for patients who had previously been treated with methadone. This was a prospective randomised study with cross-over design over a period of two 11-week intervention episodes at the 14 outpatient facilities in Switzerland and Germany. By way of comparable measurement of effectiveness, urine samples were taken, which were then tested for heroin use (number of positive tests per person and treatment arm). N=157 patients were involved. In a global assessment, the number of positive tests under SROM were no higher than under administration of methadone. For SROM, there was a dosage effect in that the increase of the individual dose reduced the proportion of positive heroin tests. There were no differences in terms of the retention rate. The authors conclude from their findings that SROM proves to be just as effective in relation to the outcome indicators tested as methadone.

Schoofs and Colleagues (2014) conducted a survey in Berlin with N=986 substitution patients (around a fifth of the total population of substituted opioid addicts in Berlin) and published extensive data on dosing and side effects. The authors point out that the dosing of the substitute often deviated from the recommended 80-120 mg/d methadone equivalent. In this context, levomethadone is given in higher doses on average than methadone. The doses prescribed to the patients in the sample studied, differed, in part considerably, from the currently officially recommended average doses for methadone or methadone equivalents. As such, around 40% of the respondents received less than 80mg of methadone equivalent per day whilst around 15% of respondents received a much higher dose (up to 250mg methadone equivalent). Almost half of all patients polled reported side effects under substitution; the most common mentioned were perspiration and sedation. Side effects were

more commonly reported on levomethadone than on methadone. Overall, in the opinion of the authors, the findings support the existing recommendations, which consider methadone to be the first choice substitute in substitution treatment.

Jagsch and Colleagues studied the effectiveness, acceptance, tolerability and retention rate in buprenorphine/naloxone treatment amongst opioid dependent patients in an outpatient setting under practice conditions (Jagsch et al. 2013). The study was conducted in an open-label, prospective, multi-centre design in 25 centres with N=307 patients over a study period of 12 months. The retention rate after 12 months was 45.6%, whereby patients with buprenorphine treatment exhibited the highest retention rate. The dropout analysis revealed 3 significant predictors of a premature departure from the study: a shorter duration of heroin dependence, a lower age of first contact with heroin and a higher dosage. Around two thirds of respondents reported that they were satisfied or very satisfied with the treatment, whereby the self-assessment was not the same as the third party assessment of the medical professionals. The study underlines, in the estimation of the authors, the fact that a considerable need for training still exists in the area of buprenorphine/naloxone medication. The authors considered the findings in respect of the retention rate and the observed satisfaction in agreement with the findings from studies of other chronic diseases.

Schulte and Colleagues (2013) recently presented a German language version of the “Opiate Dosage Adequacy Scale” (ODAS) for buprenorphine, which had previously only been available for methadone. This instrument is based on the repeatedly reported finding that higher dosages in the case of substitution with buprenorphine will, in the main, also lead to a higher retention rate and reduced rate of concomitant use of other psychotropic substances, whilst a section of patients already profit from low to medium doses. With that, the dosage is not in itself necessarily clearly decisive for the success of the therapy, rather its appropriateness, dependent on the individual needs of the patient. An adaptation of the language of the ODAS on the basis of the German scale for methadone and of an assessment and adaptation algorithm, is now available for the first time also for buprenorphine and could prove to be, in the opinion of the authors, after a validation in an application study, an instrument for quality assurance in opiate substitution with buprenorphine.

In May 2014, the Bavarian Academy for Addiction Issues (BAS e.V.) presented the fifth, completely revised edition of the “Recommendations for psychosocial support for substituted opiate dependent men and women”<sup>62</sup>, replacing the fourth version of the recommendations, which is now over ten years old. The updating was successful in particular because, in that period of substitution assisted treatment, some partly serious changes and results were witnessed which included a considerably broadened focus, in the opinion of the authors, on substitution assisted treatment or the introduction of diamorphine assisted treatment in Germany. For the latter, the legislature has, amongst other things, stipulated an obligatory participation in psychosocial care in the first six months of treatment. The revision was undertaken with the close involvement of professionals and now represents, in the opinion of

---

<sup>62</sup> <http://www.bas-muenchen.de/publikationen/papiere-empfehlungen.html> (last accessed: 31 October 2014).

the participants, an “open document”. Updates and revisions to the current developments will in future also be necessary. By way of example, the authors mention, in this context, the optimisation of substitution options for imprisoned opiate addicts.

### 5.5.3 Other current developments

#### Addiction among the elderly

Addiction among the elderly is no rare occurrence, due to the demographic changes and improved medical treatments for addiction. Not only with alcohol, tobacco and medication but also with illegal drugs, there is a growing group of older users whose need for help and support goes beyond the treatment of drug addiction. In the REITOX Report 2013 (Pfeiffer-Gerschel et al. 2013c), various projects in this area have already been mentioned (e.g. focus of funding of BMG with 8 pilot projects, Project 40+ of Mudra in Nuremberg). The project, “Addiction in old age - web and network based optimisation of outpatient and inpatient care (SANOPSA)” should also be mentioned, which is funded by the German Federal Ministry of Education and Research and due to run for a period of 3 years (2012-2015). The aim is to improve the care and quality of life of older people with substance use disorders within and through the outpatient and inpatient/day care treatment of the elderly. For this purpose, care concepts and approaches on how to deal with substance use amongst older care patients should be optimised. This should be made possible through the development and employment of expert led care activity recommendations (legal substances) and a manualised care concept (illegal substances). The care and activity concepts are made available via the portal [www.sanopsa.de](http://www.sanopsa.de), which includes facility-specific solution approaches which can be discussed in a moderated forum (Kuhn 2013)<sup>63</sup>.

#### Comorbidity

Comorbid disorders present the greatest challenge in the scope of drug treatment. In the scope of the Epidemiological Survey of Substance Abuse 2012, information was presented on the prevalence of comorbid substance disorders on a population level in Germany for the first time (Piontek et al. 2013). Overall, 6.6% of the people between the ages of 18 and 64 years old have more than one substance-related disorder. This corresponds to a total of 3.4 million people. As far as substance dependence is concerned, this amounts to a proportion of 3.2% (1.7 million people). Over 80% of people suffering from disorders as a result of the use of cannabis, sleep inducing substances or cocaine have at least one further diagnosis. The highest homotypical comorbidity, i.e. the simultaneous occurrence of disorders from the same diagnostic group, in respect of cocaine-related disorders could be seen for alcohol (73.6%) and painkillers (69.1%) and in respect of amphetamine-related disorders, for cannabis (73.4%) and alcohol (67.9%). An increased probability of having at least one or more than one substance-related diagnosis exists for persons with a nationality other than

---

<sup>63</sup> Further information on addiction in old age can be found at [www.unabhaengig-im-alter.de](http://www.unabhaengig-im-alter.de) (last accessed: 31 October 2014).

German as well as for single and divorced persons. It is primarily men in young adulthood or middle age who are affected. A further risk factor is a low level of education.

Scherbaum & Specka (2014) state that over a lifetime and also at the present time, up to over 50% of opiate addicts are affected by comorbid psychological disorders. Affective and anxiety disorders are particularly widespread, as are personality disorders and posttraumatic stress disorder.

General conclusions on the treatment of persons with addiction diseases and comorbid disorders, as well as the effectiveness of the treatment, are almost impossible on the basis of the current state of knowledge. On the one side, this can be traced back to the heterogeneity of the disease and on the other to the patient, treatment, setting and outcome characteristics. Moggi (2014) states in his review article, that several treatment components of integrative treatment programmes have repeatedly shown themselves to be effective: integrative treatment programmes, rated according to intensity, which combine disorder specific interventions and contain motivating conversations, cognitive behavioural therapy interventions, addictive substance reducing interventions such as relapse prevention or contingency management and/or family interventions, are superior to less involved treatments (Moggi 2014).

In the research project, "PESu", conducted by the Institute for Quality Management and Social Medicine at the University Clinic of the University of Freiburg and financed by the German Pension Fund (DRV Bund), best practice recommendations on dealing with comorbid addiction problems in somatic and psychosomatic rehabilitation were developed. The findings will be published in September 2015 (Institut für Qualitätsmanagement 2014).

### **People with intellectual disability and addictive substance use**

Addiction problems amongst people with an intellectual disability was for a long time not a subject discussed within disabled and addiction care. Through the increasing outpatient support and the associated intention to encourage participation, the possibilities for the target group to acquire and consume addictive substances increases. Findings from the research project "Full Survey on Addiction and Intellectual Disability in NRW", concluded in 2013, show that amongst adults with an intellectual disability, in addition to unproblematic patterns of use, abuse of and dependence on legal and illegal drugs also manifest themselves (Kretschmann-Weelink 2013; Kretschmann-Weelink & Hörning 2014). Through means of an online assisted survey, facilities within disabled care and addiction support in North Rhine-Westphalia were surveyed and 100 structured interviews were conducted with persons with intellectual disability. In addition, ten interviews were conducted with experts from addiction support. 66.7% of the employees interviewed from disabled care facilities in NRW answered yes to the question of whether substance abuse or dependence of people with intellectual disabilities had already led to problems within their facility. The estimated frequency of problem substance use in the facilities of the interviewees resulted in a median value (n=780) of 32.5% for nicotine, 15.7% for alcohol and 11.6% for medicinal products; in the case of illegal drug use, the resulting median value was 5.3% and for drugs administrable

intravenously, 2.1%; for ecstasy and other designer drugs and for inhalants, the figure given was 1.4%; for cocaine it was 1%. Problem use behaviour is seen in particular within (outpatient) assisted living. Almost 50% of the interviewed employees from addiction support facilities knew an intellectually disabled client with problem use patterns. The interviewees with intellectual disabilities reported use experience both with legal and illegal substances. Barriers to utilising addiction support services for intellectually disabled persons are, in addition to shame or lack of knowledge of those affected, insufficiently available or inadequate therapy services. Help for people with intellectual disability and addiction problems are listed on the website [www.geistige-behinderung-und-sucht.de](http://www.geistige-behinderung-und-sucht.de).

### **New initiatives are advertising for substitution treatment**

The German Society for Addiction Medicine, the German Aids Service Organisation and Akzept e.V. have started an initiative to ensure care for opiate dependent persons. Its declared objective is to obtain more doctors for the substitution based treatment of chronically ill opiate dependent people in need of treatment. Whilst the number of treated substitution patients increased between 2003 and 2013 from 52,700 to 77,300, the number of doctors providing substitution treatment has stagnated at the current level of 2,691 (2003: 2,607) (BOPST 2014). Increasingly, older doctors are retiring with hardly any younger doctors taking their place. Furthermore, many opiate dependent patients in the smallest towns or in rural regions are not even treated at all. As such, there is an ever growing gap in the provision of care (Initiativkreis Substitutionstherapie (Initiative Committee on Substitution Therapy) 2014). For this reason, the aforementioned organisations came together to form an initiative committee, which aims to counteract the shortage in the provision of care in the treatment of opiate dependent patients. More information on the initiative is made available at [www.bitte-substituieren-sie.de](http://www.bitte-substituieren-sie.de).



## 6 Health correlates and consequences

### 6.1 Overview

Drug use has an influence on morbidity and mortality of the users. Data on drug-related fatalities is collected by two nationwide 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 is hardly any data available on the morbidity of untreated drug addicts which could be used for epidemiological purposes. Hence, as an alternative, the descriptions of the health condition of the clients in addiction support facilities (at the start of their treatment) are used as an approximation. However, as these often represent a positive selection of the total of drug users, health aspects are probably underestimated.

#### 6.1.1 Drug-related 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). This data is published at regular intervals<sup>64</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 findings are complemented by supplementary anonymous reports of the doctors in charge. In this way, HIV reports ideally contain information on age and gender, town/city of residence, mode of transmission of the infection as well as information on stage of disease and HIV-related basic 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 unrecognised) multiple data entries.

With the introduction of the Infectious Diseases Control Law in 2001, data on possible modes of transmission of hepatitis B and C (HBV and HCV) is 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 is published annually by the Robert Koch Institute in Berlin in the "Yearbook – Infection epidemiology of notifiable infectious diseases" (Infektions-epidemiologisches Jahrbuch meldepflichtiger Krankheiten) (RKI 2014a) or respectively in the Epidemiological Bulletin of the RKI.

Since 2007, the German statistical report on treatment centres for substance use disorders has recorded data on the HBV and HCV status of patients in addition to the HIV status. Since

<sup>64</sup> [www.rki.de](http://www.rki.de) (last accessed: 31 October 2014).

the number of facilities which report this data is very small and only patients with test results are recorded, this data requires cautious interpretation.

### 6.1.2 Drug-related deaths

#### Case File: Narcotics

In general, drug-induced fatalities are recorded by the Criminal Police Offices in the individual Laender (LKA). The BKA has access to the database and is responsible for data quality management and data collection. Data collection modalities and the basis 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 toxicological reports in particular are often only released after a considerable delay, they are only taken into account in the classification of drug-related fatalities 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 Register<sup>65</sup>

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 authority and then to the *Land* Statistics Office. Aggregation and evaluation at national level is done by the Federal Statistics Office. Often, this data source does not take into account the results of delayed toxicological reports in the classification of the drug-related deaths.

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 cases of death, within the framework of sensitive data collection, as soon as possible after the use of opioids, cocaine, amphetamine (derivates), hallucinogens and cannabinoids, i.e. in

<sup>65</sup> 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).

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 drug-induced 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 incorporated in 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) came into force. According to the new rules, the acute causes of death are to be generally coded, if possible, in the 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 specificity.

The data collected by the Federal Criminal Police Office (BKA), explicitly sets out, in addition, long-term secondary diseases, suicides and accidents that have come to the attention of the police. It has, however, as yet not been possible to isolate completely the registered cases of intoxication to achieve data comparability with the General Mortality Register on the basis of the aggregated data recorded by the BKA, due to the usage of not completely distinct categories, hence only estimations were possible. Since the data year 2012, the BKA has used a new table in which the individual causes of death can be better separated and overlaps can be better identified in many cases.

Comparisons with other European countries should only be made on the basis of the General Mortality Register, as this registry largely follows common standards. Due to the broader definition of the term 'drug-induced death', the police register data leads 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 total number of drug-related fatalities. A certain number of relevant cases are not recognised, unreported or wrongly assigned – in both registers. However, a long-term comparison of the two registers shows very similar developments and trends that can be seen as a sort 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 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 below 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 2013. Data from other sources gives additional insight into the problems of specific, often regional, populations of drug users (e.g. consumption room users and clients of outpatient addiction support facilities) affected by HIV and hepatitis.

Comprehensive epidemiological studies on the prevalence of hepatitis B, hepatitis C and HIV among injecting drug users are not yet available for Germany. The “DRUCK” study currently being conducted by the Robert Koch Institute (RKI, see below), will try, at least partly, to fill the information gaps in future (study duration: 1 April 2012 to 31 March 2015).

In addition, a current study on the epidemiology of the hepatitis C virus infection amongst opioid substitution patients (ECHO Study) of the Centre for Interdisciplinary Addiction Research (ZIS) in Hamburg will be able to contribute information on the prevalence and incidence of HCV amongst opioid substituting individuals (c.f. Chapter 7) (ZIS Hamburg 2014).

Data on the prevalence of hepatitis B and C and of HIV in injecting drug users is also contained in standard table 9.

### **Development of HIV reported data**

A total of 3,263 HIV infections were reported to the RKI for the year 2013. This translates to a nationwide incidence of 4.0 cases per 100,000 population. The total number of newly diagnosed HIV infections thus rose in comparison with 2012 (2,976) by 9.6%. The distribution of reports by *Land* and by infection risk has changed slightly since 2012.

The highest incidence of new HIV-diagnoses was in the city states of Berlin (14.8 cases per 100,000 population), Hamburg (9.2) and Bremen (7.4). Large cities such as Cologne, Dusseldorf, Frankfurt am Main, Munich, Stuttgart and Mannheim have similarly high incidences as the city states. In comparison to the previous year, the incidence in the majority of *Laender* increased, in particular in the east and in the south. In Hamburg and Schleswig-Holstein, the incidence fell, in North Rhine-Westphalia there was no change. If one compares the findings not with the previous year but with the median of the years 2008-2012, the incidence also increased in North Rhine-Westphalia and Schleswig Holstein. In absolute numbers, the increase in Berlin was particularly pronounced (from 384 to 518 cases).

The incidence of newly diagnosed HIV infections amongst men was 6.6 cases per 100,000 population, slightly higher than in the previous year (6.2) and much higher than amongst women, although the incidence for women, of 1.4 per 100,000 population did also increase slightly from the previous year (1.1). The proportion of women amongst new HIV diagnoses was 18%. After a 10 year period of a declining proportion of women (after a peak of 25% in 2002 and a low of 15% in 2010), it has now returned almost to 2006 levels (19%). Amongst men and women, the peak incidence of new diagnoses of HIV infections is in the age group of young adults between 25 and 29 years old (16.9 for men, 4.5 for women) (RKI 2014a).

### **HIV: infection risks**

Information about the mode of transmission was available for 75% of newly diagnosed HIV infections. For 814 reports (25%) there is either no information or only insufficient information on the infection risk available, meaning no clear assignment is possible.

Of the reports with sufficient information (n=2,450), men who have sex with men (MSM) (n=1,735) still represented, at 71%, the largest group although their proportion fell by 3% whilst the proportion taken by the second largest group - persons who contracted their HIV infection through heterosexual contact - grew both in absolute numbers and relatively (from n=484 to n=593 representing an increase from 21% to 24%). The proportion of persons who probably contracted their HIV infection through injecting drug use (n=100) increased by a half percentage point from 3.6% to 4.1%.

Amongst persons for whom it was stated that they became infected with HIV outside Germany, the proportion of persons with non-German background was 13% for MSM, amongst injecting drug users it was 16% and for persons with heterosexual risk it was 32% (RKI 2014a).

### **HIV Data from other Sources**

From Hamburg, data is available on the HIV prevalence among clients of the outpatient addiction help facilities. The HIV infection rate in 2012 of 4.9% was almost as high as in the previous year (2011: 5.2%). Differentiated by gender, a slightly higher infection rate can be observed amongst women (5.8%) than amongst men (5.1%). 3.8% of opioid dependent clients stated that they had not as yet had an HIV test (Rosenkranz et al. 2013).

Data is now also available from the Frankfurt Consumption Room Documentation (Förster & Stöver 2013) on the HIV status of clients treated in 2012. Of 4,984 consumption room users (2011: 4,714) for whom basic data was available, 2,944 (2011: 3,646) people answered the question on HIV testing. Thus, there is valid information on HIV testing available for 92.8% (2011: 77%) of those consumption room users in 2012 who answered that question with yes. Women had themselves tested for an HIV infection a little more often (96.4%) than men (92.1%). This was also observed in the previous year.

In turn, 71% (2011: 75%) of consumption room users who had had an HIV test, also had information as to the year of the test. For 83% of consumption room users, for whom information on the year of the test was available, an HIV test was performed in 2011 or 2012. For the remaining persons, the last HIV test was in 2010 or earlier. These findings show, as in the previous years, that the test results are comparatively recent.

Although 2,732 people stated that they had taken an HIV test, only 2,640 of these clients stated what the result was. That corresponds to 53% of all consumption room users in 2012, on the basis of the basic data. Of those, 3.2% stated that they were HIV positive (men: 2.7%, women: 5.7%). Overall, the proportion of HIV infected persons amongst consumption room users has fallen since 2009 whilst in 2012 it stayed at the same level as the previous year (2011: 3.2%; 2010: 3.7%; 2009: 4.4%). Furthermore, it was evident that HIV infections amongst new users of the rooms was, at 2.2%, much below the proportion of continuing users who had HIV (3.9%).

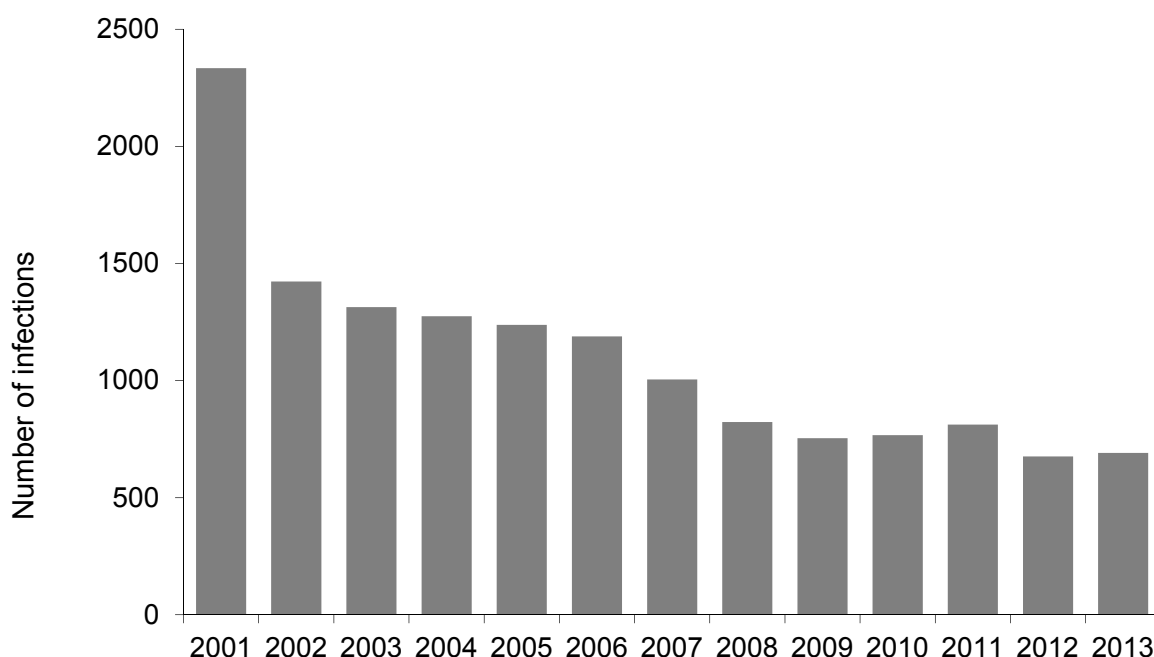
The Statistical Report on Substance Abuse Treatment in Germany (DSHS) also records data on the HIV-infection status of the treated patients (Braun et al. 2014d). The HIV prevalence

among the tested opioid clients in outpatient facilities was 3% (n = 452), although status is unknown in 44% of cases. If one only looks at those who have been tested, the HIV prevalence is 5%. Among tested patients with any illegal substance problem, 4% (n = 590) showed an HIV infection.

If one combines the findings from Hamburg, Frankfurt am Main and from the DSHS, the resulting average HIV prevalence rate is 3.5%. This value represents a conservative estimate of the actual prevalence and must be viewed with caution, in light of the large number of unknown cases.

### Development of hepatitis-B report data

In 2013, a total of 1,947 hepatitis B cases were reported to the RKI. Out of these, 691 cases (35%) corresponded to the reference definition<sup>66</sup>. As such, the proportion of cases which corresponded to the reference definition, in comparison to the previous year, fell by 5%, with a minimal increase in the absolute number of cases. The incidence of hepatitis B cases in Germany was 0.8 cases per 100,000 population and has therefore remained constant in comparison to the previous year (Figure 6.1). The trend over time did not show any seasonality.



RKI 2014a.

Figure 6.1 Reported hepatitis B infections (according to the reference definition) according to report year, 2001-2013

<sup>66</sup> Case definition: clinically/laboratory confirmed HBV infections.

After a decline in the number of reported acute hepatitis B infections or the yearly incidence has been observed since 2001, this trend has stagnated with slight fluctuations since 2009. The decline can likely be traced back primarily to an improved immunisation in the population through the introduction of general vaccination recommendations for nursing infants in 1995 as well as an improvement in data quality - in particular the exclusion of chronic infections. The RKI recommends consistent implementation of the vaccination recommendation for hepatitis B for all nurslings, children and adolescents as well as for further, defined, at-risk groups, in particular in the case of sexual behaviour with a high risk of infection or in the case of injecting drug use (RKI 2014a).

### **Hepatitis-B: infection risks**

Due to the change in the data collection software and the new method of recording modes of transmission, data on modes of transmission of hepatitis B can only be compared with the previous 2 years. Solid information was available on the mode of transmission in the case of 82 (12%) of the diseases reported as per the reference definition. Multiple mentions were reduced to the most probable mode of transmission. Injecting drug use was stated as the reason in 19 cases (23%) and thus represented the second most common mode of transmission (RKI 2014a).

### **Development of hepatitis-C reported data**

#### **Cases reported 2013**

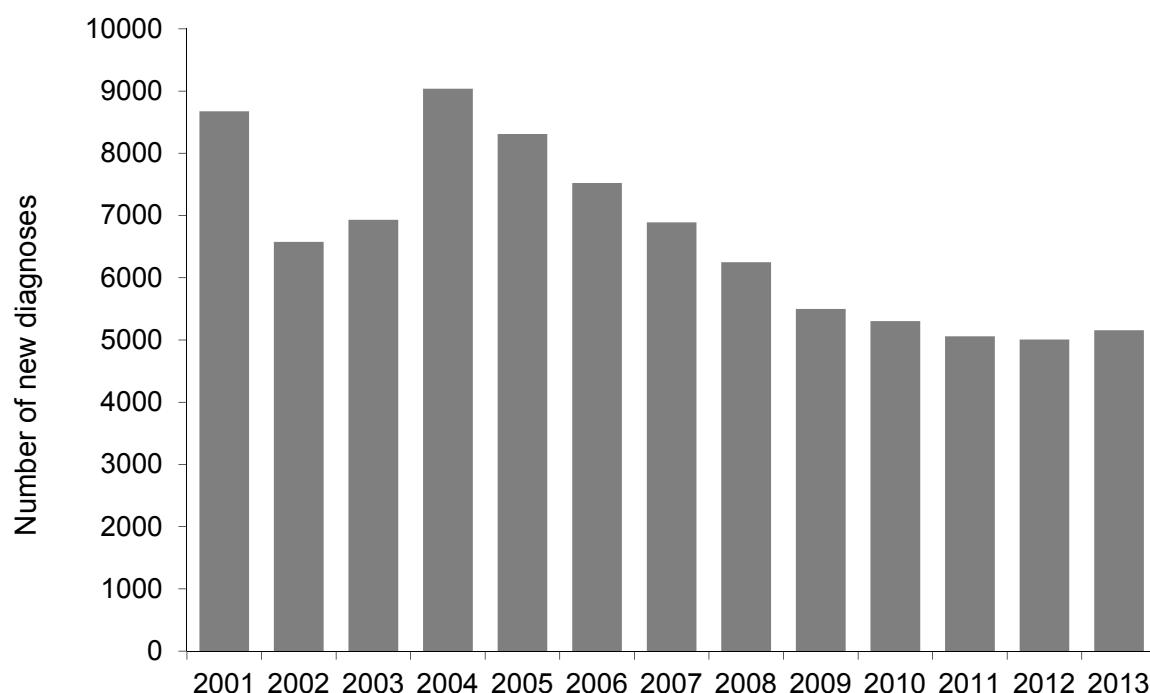
For 2013, 5,156 cases of newly diagnosed hepatitis C were reported to the RKI<sup>67</sup>. This corresponds to a national incidence of 6.3 new diagnoses per 100,000 population. Thus the calculated incidence of new diagnoses was higher than in 2012 (6.1), but lower than the median of the years 2008 to 2012 (6.5). The trend over time did not demonstrate any seasonality.

Since 2005, there has been a downward trend in the incidence and absolute numbers of newly diagnosed hepatitis C, a trend which has slowed since 2009. Since 2011, the incidence has remained stable with slight fluctuations. For the current report year, a slight increase in new diagnoses has been seen (Figure 6.2). The increase in 2013 can possibly be traced back to an increase in the diagnostic testing since the approval of the new antiviral medications against hepatitis C and must be monitored. The incidence of newly diagnosed

---

<sup>67</sup> Case definition: as it is barely possible from a laboratory diagnostic or a clinical perspective to distinguish between acute and chronic HCV infections, currently 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 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 taken into account for which the clinical picture is not fulfilled or for which no information is available.

cases amongst boys or men was, at 8.1 new diagnoses per 100,000 population, considerably higher than amongst women or girls (4.5).



RKI 2014a.

Figure 6.2 Reported hepatitis C new diagnoses, Germany, 2001 to 2013

A comparison of the incidence in individual Laender revealed a wide range of values: the respective incidence rates ranged from 2.7 new diagnoses per 100,000 population in Brandenburg to 14.8 in Berlin. Since 2003, Berlin has been the *Land* with the highest incidence of newly diagnosed cases. Possible causes are, in addition to more complete reporting and communication of first diagnoses, in some cases for persons who have been infected for some time (chronic cases), especially the above average proportion of people in metropolitan urban centres who belong to at-risk groups such as injecting drug users and MSM. Analyses for the Berlin districts revealed amongst other things a clustering of cases in the districts where correctional facilities are located and where there are greater numbers of tests performed on at-risk groups than in other districts (RKI 2014a).

### Hepatitis-C: infection risks

Due to the change in the data collection software and the new method of recording modes of transmission, the data on modes of transmission of hepatitis C are only comparable with the two previous years but not with those prior to 2011. Reliable information was available on the mode of transmission in the case of 1,324 (26%) of the new diagnoses reported as per the reference definition. 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 1,157 cases (87% of cases with reliable information



on mode of transmission), of which 887 first diagnoses were for men (77%). Among the cases with reliable information on mode of transmission, 88% of cases for men and 84% of cases for women (n=264) were most probably transmitted through i.v. drug use. The fact that men are overrepresented amongst intravenous drug users explains the considerably higher 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, 9 persons (1%) were 15 to 19 years old, 66 persons (7%) were 20 to 24 years old, 156 persons (18%) were 25 to 29 years old, 397 persons (45%) were 30 to 39 years old, 237 persons (27%) were 40 to 59 years old and 22 persons (2%) were older than 60. The number of cases with probable mode of transmission stated as “injecting drug use” fell slightly in comparison with the previous year. Of the reported cases stating “injecting drug use”, there was the additional information “i.v. use in prison” for 3 (1.0%) women and 13 (1.3%) men. Injecting drug users represent a large proportion of newly diagnosed cases of hepatitis C. For this reason, the highest priority in Germany should be given to the prevention of hepatitis C, specifically amongst injecting drug users. Furthermore, more attention should be drawn to the risk of sexual transmission through practices prone to cause injury or among persons who are especially vulnerable due to a previously existing co-infection (e.g. HIV) (RKI 2014a).

### **Hepatitis B and C – Data from other sources**

In the framework of the DSHS, data was also collected in 2013 on the hepatitis B and hepatitis C infection status of addiction patients in outpatient treatment (Braun et al. 2014d). The prevalence of hepatitis B among the tested opiate clients is at 7% (n=523), and among the tested clients with illicit drug problems at 5% (n=622). The prevalence of hepatitis C among the tested opiate clients is at 50% (n=4,932, out of these 548 are acute and 4,384 chronic), and among the tested clients with any illicit drug problem at 35% (n=5,489).

According to the Hamburg base documentation system of the outpatient addiction help system (BADO), 50.1% of opioid users were infected with hepatitis C in 2012 (2011: 48.8%; 2009: 48%, 2010: 44.5%). 3.5% of clients have as yet never had a test (Rosenkranz et al. 2013).

In the Frankfurt Consumption Room Documentation 2012 (Förster & Stöver 2013), 2,945 (59%) consumption room users answered the question on hepatitis testing. Of these, 2,760 (93.7%) answered this question in the affirmative, whilst 55.4% of consumption room users were asked for information about their hepatitis status. Of these people, 80.9% of the men and 87.6% of the women had taken a hepatitis test in 2011 or 2012. Amongst the remaining 18.0% of the tested consumption room users, the hepatitis tests were a while back. As such, the test results are relatively up to date.

In respect of the result of the hepatitis tests, information was available on 54.7% (n=2,678) consumption room users. Of these, 54.1% stated that they did not have a hepatitis infection. This means, therefore, that 45.9% did have a hepatitis infection. Hepatitis C was most commonly reported. 42.8% of consumption room users were infected with hepatitis C, a

further 1.9% with hepatitis B and C. Only 1% stated that they had a hepatitis B infection. The gender specific differences were minimal. As information on a possible hepatitis infection was available for a good half of the consumption room users and of these almost half had a positive result, this could also apply for a similar proportion of the half of users without any information.

If one differentiates the information according to average age, it can be seen, as in previous years, that (amongst clients who provided information on their hepatitis status) those infected with hepatitis were considerably older than those without infection. The average age of consumption room users who were not infected with a hepatitis virus was 35.4; in contrast, the average age of those who did have a hepatitis infection was 36.7.

### **Update on the DRUCK Study of the RKI**

The Robert Koch-Institute has been running the DRUCK study on drugs and chronic infectious diseases (DRUCK Study) since April 2012, a serosurvey and behavioural survey on HIV and hepatitis B and C amongst injecting drug users (RKI 2012; Ross et al. 2013; Zimmermann et al. 2014). The study was funded by the German Federal Ministry of Health for a period of 3 years and is being conducted in a total of 8 cities in Germany. The pilot test in 2011 in Berlin and Essen has already delivered initial results and showed the feasibility of the study design. Participants are recruited using the snowball method and studies in drug support facilities by trained study personnel.

The objective of the DRUCK Study is to obtain information on risk of infection and patterns of behaviour of people who inject drugs. In addition, an examination of blood tests should determine how often the infectious diseases hepatitis B, hepatitis C and HIV occur which could be transmitted through drug use or sexual contact. The analysis of the risk and prevention behaviour should help to update and focus the current prevention recommendations.

The data collection was completed in May 2014; in the course of the data collection, biological and behavioural information was obtained from over 2,000 intravenous drug users. The data is currently being cleaned up; the analysis will follow.

The first preliminary findings have revealed distinct differences between the drug scenes, between the substances mainly consumed and also the prevalence of tested infection in the individual study towns and cities. In addition to a prevalence of hepatitis C antibodies of between 31% and 73%, a prevalence of viraemic hepatitis C infections of between 23% and 50%, i.e. up to 50% of injecting users in a town are infected with hepatitis C, could infect others and are potentially in need of treatment. That corresponds approximately to the situation as it was assumed to be on the basis of the data of the DSHS, BADO and Frankfurt Consumption Room Documentation (see above).

The HIV prevalence fluctuated between 0 and 9.1% of the study population of a town/city. According to the new findings, this proportion has rather been underestimated by the data used from the DSHS, BADO and Frankfurt Consumption Room Documentation (see above).

Throughout all of the previous study towns/cities, a low prevalence of injecting drug users who are vaccinated against hepatitis B: preliminary analyses show that only 15% to 25% of injecting drug users were vaccinated and 15% to 30% had suffered a hepatitis B infection in the past. In all towns/cities, a high proportion (76% to 86% of injecting drug users) had been imprisoned at least once in their lives and up to 37% of those who had been imprisoned at some point, stated that they had also injected drugs in prison with the associated risks of the use of unsterile, contaminated injecting material. 37% to 65% of the study participants in a town/city were in substitution at the time of the survey and 57% to 76% stated that they had already been homeless. Beyond the findings in the collected data, the DRUCK Study also shows the high level of acceptance amongst injecting drug users of services of testing for infection markers in respect of HIV, HBV and HBC and testing counselling in drug support facilities. The HIV quick tests were utilised in the various towns/cities by up to 20% of the participants.

Detailed reports on the findings for the individual study cities as well as a consolidated report with recommendations for the prevention of infections are expected at the end of 2014/2015.

### **6.2.2 Sexually transmissible diseases, tuberculosis and other infectious diseases**

Currently, there is no up-to-date epidemiological data available in this area.

### **6.2.3 Data on risky behaviour**

In the Hamburg base documentation system of outpatient addiction support in 2012, the treated opioid users were interviewed, amongst other things, on their shared use of needles: 5.7% stated that they had shared needles with other users within the last 30 days, the lifetime prevalence was 31.4% (Rosenkranz et al. 2013).

Detailed analysis on risky behaviour of injecting drug users from the DRUCK Study of the RKI are expected for the end of 2014/2015.

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

### **6.3.1 Non-fatal overdoses and drug-related emergencies**

The Coordination Office of the Bavarian Addiction Support reported that the increase in injecting use of bath salts leads to increased organ failure in patients, according to statements of the detoxification units, so that a transfer to internal medicine units is required (KBS, through Cornelia Poth, personal report). From other Laender, no specific reports are available for the current reporting period on this topic.

As an approximation of the number of drug-related non-fatal emergencies, there is nationwide data available on acute intoxication and poisoning treated on an inpatient basis in hospitals (ICD-10-diagnoses) from the Statistical Report on Hospital Diagnoses, 2012 of the German Statistical Office (Statistisches Bundesamt, special calculations) (Table 6.2). One should note that the cases of poisoning (ICD-10 T40.X) include both overdoses and mistaken administration or ingestion of the wrong substances. Also, a case of opioid poisoning could

be caused by, for example, (accidental or intentional) overdoses of prescribed medications and not by the use of illegal drugs.

Table 6.1 Number of acute intoxication and poisoning cases, Statistical Report on Hospital Diagnoses, 2012

ICD-10-Diagnosis	Number (without fatalities)	Age (in years)				
		<15	15 - 25	25 - 45	45 - 65	>65
<b>Acute intoxication [acute inebriation] (F11.0 to F16.0, F18.0, F19.0)</b>	14,774	264	4,190	6,963	2,549	808
From opioids (F11.0)	1,576	17	190	846	289	234
From cannabinoids (F12.0)	1,288	112	847	283	44	2
From sedatives/hypnotics (F13.0)	2,887	42	471	1,143	831	400
From cocaine (F14.0)	365	2	97	237	29	0
From other stimulants (F15.0)	1,055	20	502	460	57	16
From hallucinogens (F16.0)	307	1	171	115	19	1
From volatile substances (F18.0)	75	4	25	33	10	3
From multiple substance use or consumption of other psychotropic substances (F19.0)	7,221	66	1,887	3,846	1,270	152
<b>Intoxication from narcotics (BtM) and psychodysleptics (hallucinogens) (T40.X)</b>	2,236	93	417	569	433	724
From opium (T40.0)	128	3	7	13	29	76
From heroin (T40.1)	154	0	21	99	34	0
From other opioids (T40.2)	1,242	49	86	203	288	616
From methadone (T40.3)	119	4	7	66	39	3
From other synthetic narcotics (T40.4)	54	2	21	20	8	3
From cocaine (T40.5)	83	0	25	53	5	0
From other non-specified substances (T40.6)	96	4	28	31	15	18
From cannabis(-derivates) (T40.7)	293	30	190	59	13	1
From lysergide (LSD) (T40.8)	18	0	13	4	0	1
From other non-specified psychodysleptics (T40.9)	49	1	19	21	2	6

Statistisches Bundesamt 2014b, special calculations.

A further approximation of the number of drug-related emergencies can be taken from the data of the Poison Information and Emergency Poison Control Centres. Data is available from five of the nine German Poison Information Centres<sup>68</sup> on the documented enquiries on the basis of acute poisoning cases in connection with drugs (not including medication, which

<sup>68</sup> <https://www.klinitox.de/77.0.html> (last accessed: 25 August 2013).

is recorded separately) (GIZ Nord 2013; Informations- und Behandlungszentrum für Vergiftungen Homburg/Saar 2013; Informationszentrale gegen Vergiftungen 2013; Toxikologische Abteilung der II. Medizinischen Klinik 2013; Vergiftungs-Informations-Zentrale Freiburg 2014). In total, 3,178 cases were recorded in these institutions in 2012 (Enquiries 2012, total: 125,438). The proportion of these cases in the overall number of enquiries is thus 2.5 %. From this information, however, one cannot tell whether these are accidental poisonings or overdoses during wilful drug use. In principle, the poison information centres classify cases according to substance (and other variables) in their documentation systems, however this information is usually not reported in detail in the publicly available annual reports.

The Munich Poison Information Centre recorded 36,117 cases in 2012, 1,856 of which were related to illegal drugs. Also, there was an upward trend in respect of enquiries related to the consumption of legal highs, which were spread evenly through the year and were not subject to seasonal fluctuations. It seems to be a problem that many of these drugs can be acquired on the internet under names which change quickly (Toxikologische Abteilung der II. Medizinischen Klinik 2013). The GIZ Nord<sup>69</sup> documented a total of 32,422 cases of suspected poisonings in 2012, of which 1.7 % (n=548) concerned enquiries related to the main group illegal drugs. Information on substance groups is available: 54.9 % (n=301) of the enquiries concerning illegal drugs were the result of a person having taken stimulants. Amongst the illegal drugs, cocaine was the reason behind 18.6 % (n=102) of the enquiries whilst amphetamine accounted for 33.8 % (n=185). Of the enquiries related to amphetamines, 49.2 % were concerning methamphetamine (n=91), which corresponds to 16.6 % of all enquiries related to illegal drugs. On the basis of the data of the GIZ Nord alone, however, no clear conclusion can be drawn on the popularity of crystalline methamphetamines in the northern Laender. Over half of the cases of poisoning classified by the facilities as serious, could be traced back to stimulant use. Emergency calls due to cannabinoids accounted for 12.8 % (n=70) of the enquiries related to illegal drugs, emergency calls due to opioids accounted for 4.7 % (n=26) (GIZ-Nord 2013).

### **6.3.2 Other topics of interest**

#### **Comorbid somatic and mental disorders amongst drug users**

In addition to the suffering induced by the infectious diseases described above, drug users are to a great extent affected by a series of other somatic and mental comorbidities. Comprehensive national or representative analyses on this topic are not available.

In the Hamburg base documentation system 2012, however, there is information on both the physical and mental health of treated clients (Rosenkranz et al. 2013):

The 4,668 clients in the opioid group are mostly poly-drug users, however they all have an opioid dependence. On average, this group displays 4.1 problem areas including gambling and eating disorders, which in some cases exist in addition to a tobacco dependence. In

---

<sup>69</sup> Responsible for enquiries from Bremen, Hamburg, Lower Saxony and Schleswig-Holstein.

addition to opiates, in particular cocaine (65%), cannabis (62%) and alcohol (58%), although also crack (45%) and sedatives (43%), were consumed. 15% of the clients also had an eating disorder (males: 3%). 23% of people in this group were seen by employees of the outpatient addiction assistance to be suffering substantially or extremely from a health perspective, in the case of a further 32%, a medium health impairment. Almost 52% of the opioid clients stated that they suffered from sleeping disorders. 33% of clients are extremely to substantially mentally stressed, 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. 30% of opiate addicts report at least one suicide attempt in their lives.

In contrast, only around 12% of the 2,305 cannabis clients have, in the opinion of the workers at addiction support facilities, considerable or extreme health-physical impairments and 40% have no such impairments at all. 42.4% stated that they suffered from sleeping disorders. Psychological distress affects cannabis clients more commonly than physical distress; around 31% of such clients suffer from a considerable or even extreme affliction. 14% of cannabis clients have already attempted suicide at least once.

More recent findings on the treatment of mental disorders with simultaneous addiction problems are addressed in chapter 5.

## **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 (c.f. chapter 6.1). The autopsy rate of all drug-induced deaths according to the Case File Narcotics (FDR) of the German Federal Criminal Police Office (BKA) in the reporting year 2013 was 59% (BKA 2014a, b).

In 2013, the number of drug-related deaths rose for the first time for six years. In 2013, a total of 1,002 people died because of the use of illicit drugs (2012: 944). 80% of the drug deaths were male; the average age was 38 years old. The most populous Laender, Bavaria and North Rhine-Westphalia, comprised the largest share of drug deaths, accounting for 23% and 20% respectively. In relation to the number of inhabitants, the city states of Berlin and Hamburg had the biggest problem in 2012. Nuremberg, with 6.1 drug deaths per 100,000 population was the least affected large city in Germany, followed by Cologne with 4.1 drug deaths per 100,000 population. However, when interpreting these numbers, it must be taken into account that the autopsy rate of the individual Laender can vary widely making it more difficult to compare the numbers of drug deaths from *Land* to *Land*. Overdosing on heroin/morphine (including poisoning by heroin/morphine in conjunction with other substances) was recorded for 474 cases (2012: 427), thus remaining the most common

cause of death (47%). The proportion of drug-related deaths in which substitution substances were detected, alone or in combination with other drugs, was at 25% (255 cases), which represented a decline in comparison to 2012 (29%) of 4 percent<sup>70</sup>. Poisoning through substances other than opiates, especially through cocaine/crack and amphetamine/methamphetamine was the cause of death in 14% of cases (Table 6.3) (BKA 2014a, b).

---

<sup>70</sup> These cases did not concern regulated substitution treatments.

Table 6.2 Drug-related deaths 2013 by cause of death

Cause of death	% of Total (N)		Number 2013
	2012	2013	
<b>Monovalent intoxications from opioids</b>	<b>25.5</b>	<b>24.2</b>	<b>242</b>
Heroin/Morphine	18.8	19.4	194
Opioid-substitution substances	6.8	4.8	48
- thereof: Methadone/Polamidone	3.9	2.0	20
- thereof: Buprenorphine (i.a. Subutex)	0.1	0.2	2
- thereof: Others	2.8	2.6	26
<b>Poly-drug intoxications from opioids<sup>1)</sup></b>	<b>39.7</b>	<b>42.0</b>	<b>421</b>
Heroin/Morphine in connection with other substances (i.c.w.o.s.)	26.5	27.9	280
Opioid-substitution substances i.c.w.o.s.	21.8	20.7	207
- thereof: Methadone/Polamidone i.c.w.o.s.	15.5	15.7	157
- thereof: Buprenorphine (i.a. Subutex) i.c.w.o.s.	1.2	0.8	8
- thereof: Others i.c.w.o.s.	5.2	5.1	51
<b>Monovalent intoxications from substances other than Opioids</b>	<b>5.4</b>	<b>4.9</b>	<b>49</b>
Cocaine/Crack	2.2	1.6	16
Amphetamine/Methamphetamine	1.8	2.6	26
- thereof: Amphetamine	1.1	1.6	16
- thereof: Methamphetamine	0.7	1.0	10
Amphetamine derivatives	0.5	0.3	3
Others (except psychoactive medical substances)	0.8	0.5	5
- thereof: New psychoactive substances/Designer drugs	0.1	0.3	3
<b>Poly-drug intoxications from substances other than Opioids<sup>1)</sup></b>	<b>8.4</b>	<b>8.7</b>	<b>87</b>
Cocaine/Crack i.c.w.o.s.	3.4	3.0	30
Amphetamine/Methamphetamine i.c.w.o.s.	3.7	3.9	39
- thereof: Amphetamine i.c.w.o.s.	2.8	3.2	32
- thereof: Methamphetamine i.c.w.o.s.	1.0	0.8	8
Amphetamine derivatives i.c.w.o.s.	0.8	0.5	5
Others (exc. psychoactive med. subst.) i.c.w.o.s.	2.3	1.4	14
- thereof: Psychoactive substances/Designer drugs i.c.w.o.s.	1.2	0.2	2
Psychoactive medical substances i.c.w.o.s.	0.6	2.5	25
<b>Intoxications from psychoactive medical substances only (where applicable, in connection with alcohol)</b>	<b>2.5</b>	<b>1.6</b>	<b>16</b>
<b>Suicides</b>	<b>5.1</b>	<b>5.9</b>	<b>59</b>
Suicide by way of intoxication (already included in the causes mentioned above)	3.4	3.1	31
Suicide through means other than intoxication	1.7	2.8	28
<b>Long-term impairments</b>	<b>11.7</b>	<b>9.4</b>	<b>94</b>
- thereof: Long-term impairments in combination with intoxication consequences	3.7	2.6	26
<b>Accidents</b>	<b>1.9</b>	<b>2.8</b>	<b>28</b>
<b>Other cases</b>	<b>3.2</b>	<b>0.5</b>	<b>5</b>
<b>Total (N)<sup>2)</sup></b>	<b>944</b>		<b>1002</b>

1) On the first level of the subcategories multiple counting may occur.

2) The total number includes all mono-drug and poly-drug intoxications plus all suicides not caused by intoxications as well as all long-term impairments, accidents and other cases.

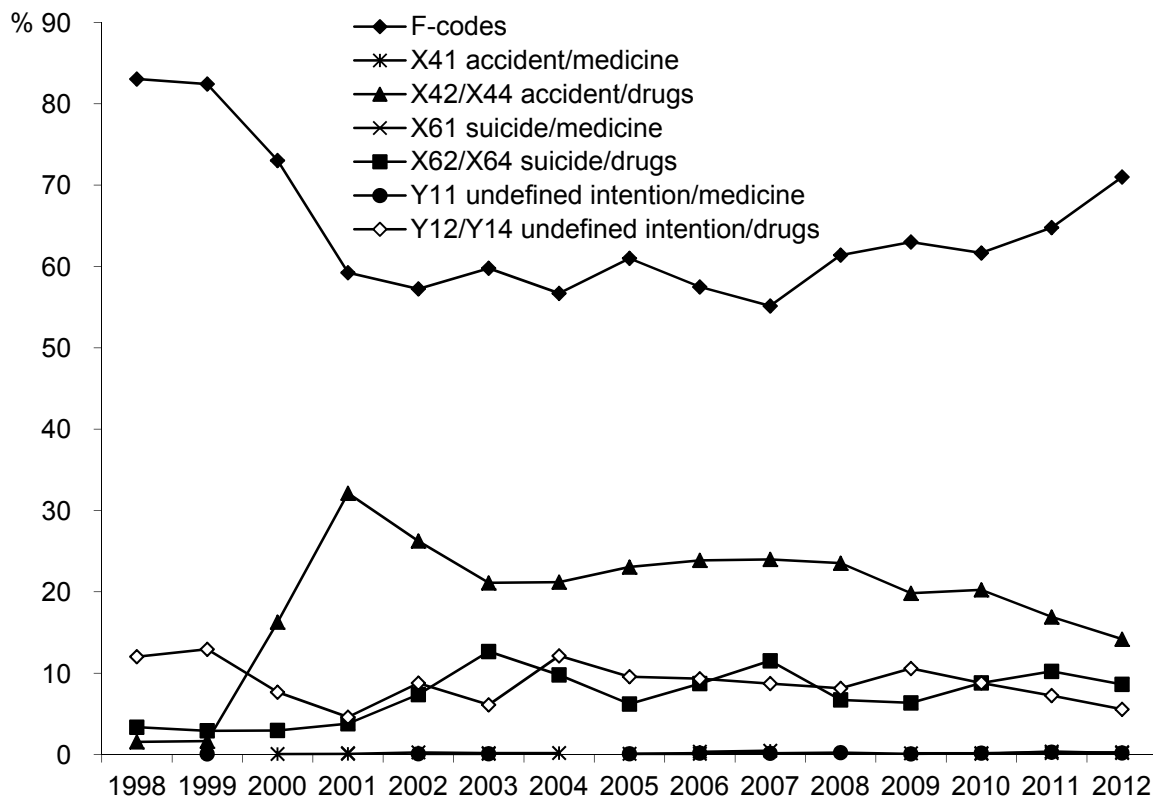


It is possible that the figures for mixed intoxications (“poly-drug poisonings”) or specifically for substitution substances could be underestimated in the representation of substance involvement as precise toxicological information on a case of death is often lacking.

### **Data from the general mortality register**

The most recent data on drug-related deaths, recorded by the general mortality register of the German Federal Statistical Office, is from the year 2012. In that year, data on 1,079 persons was collected, which represented an almost unchanged number compared to the previous year (N=1,076). In that way, the trend in the general mortality register since 2008 was consolidated after the lowest number of cases since records began in 1988 had been reported in the previous year. Amongst those who died in 2012 in connection with illegal drug use, 250 were females and 829 male (the proportion of women increased by 2% year on year to 23.2%). The number of death cases recorded by the general mortality register according to the definition of the EMCDDA, in contrast to the statistics of the narcotics situation report of the BKA (based on the police definition, in 2012 -4.2% compared to 2011) did not fall. In contrast to the previous years, the BKA register traditionally gives a much lower number of cases, although the total figure also includes those “indirect” death cases which cannot be precisely separated from the “direct” cases as it is not clear whether the categories, “suicide” and possibly also “accidents/other” are classified as “direct” or “indirect” cases.

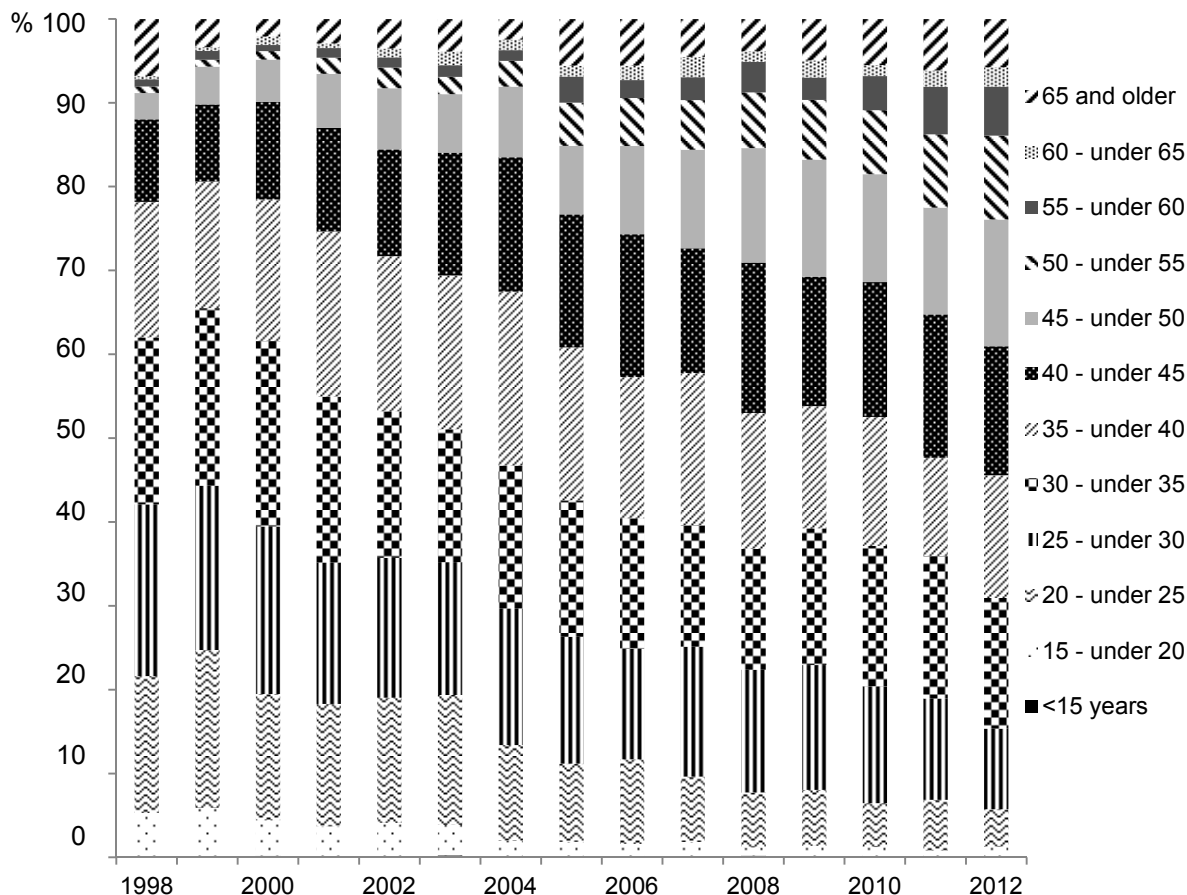
In 2012, the *underlying* disease (dependence, harmful use of drugs, other from the ICD group F 1x.x) was coded for 71.0% of death cases (2011: 64.8%); however, for these cases the information on the *acute* cause of death is lacking. One fears, in light of the increasing number of F category coded cases, that the significance of the national mortality register, despite the changes of the WHO coding rules which took effect in 2006, will decrease in light of the analysis on the substance classes which acutely led to deaths in the case of intoxication (Figure 6.3).



Statistisches Bundesamt, special calculations.

Figure 6.3 Coding of causes of death in drug-related cases of death in the general mortality register (1998-2012)

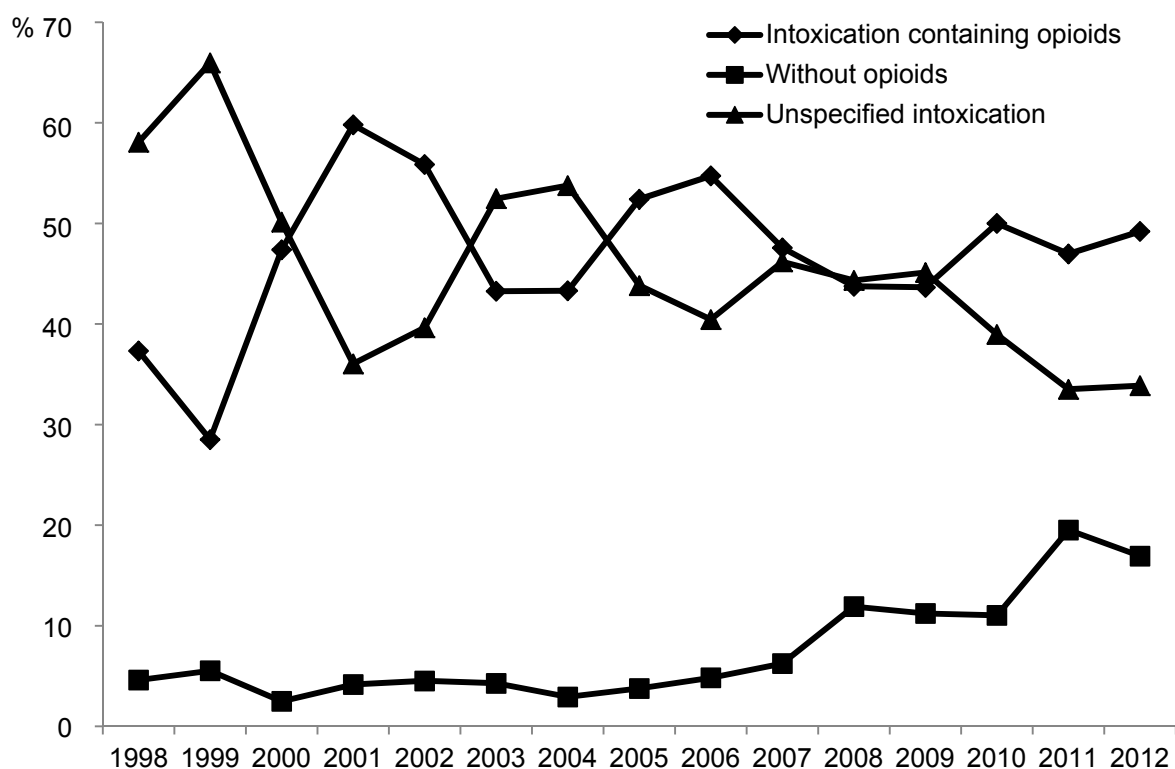
The distribution of ages in drug-related deaths in the course of the last ten years shows that a trend towards an ever increasing proportion of older age groups has continued. The proportions of age groups over 45 years old are the only ones which are constantly growing. Specifically in the age group of over 65s, however, an increasing artefact is becoming apparent as cases of deaths of patients with chronic pain are possibly being included in the figures by the coding standard for drug-related deaths due to errors in coding. Neither does a look at drug-related deaths reveal any new trend of fatal drug-related intoxication amongst the youngest users of hard drugs - the age segment of under 25s returned the lowest recorded level in 2012, with 5.7% (Figure 6.4).



Statistisches Bundesamt, special calculations.

Figure 6.4 Drug-induced deaths according to age groups 1998-2012

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 2012, this applied to only 29.0% of registered cases. Purely opiate-related deaths accounted for, in this subgroup, almost 49.2% of cases. In 16.9% of cases, other substance groups were mentioned, 33.9% of cases involved unspecified intoxications and in particular those with mixed consumption of different substance groups (Figure 6.5). It may be assumed that opiates once more played a predominant role. The limited significance should again be stressed, however, as 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 calculations.

Figure 6.5 Opiate induced intoxications in fatal drug overdoses 1998-2012 with ICD X/Y- coding

#### 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 exists on drug addicts in therapy.

According to the German Statistical Report on Treatment Centres for Substance Use Disorders (Braun et al. 2014d) for 2013, for 1.7% (2012: 1.4%; 2011: 1.6%) of opioid clients, the treatment ended with the death of the client (opioid clients accounted for 85% 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 has 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 of 1.5% per year in 2013 was slightly higher than in the preceding years (Table 6.4).

However, when looking at this 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 facilities' knowledge of clients' deaths has not changed systematically over the years, it is nevertheless possible to interpret trends in the manner presented below.

Table 6.3 Mortality of opioid users in outpatient treatment – Trend

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Proportion of death cases amongst treatment outtake (%)	1.2	1.2	1.4	1.3	1.4	1.2	1.5	1.5	1.6	1.4	1.7
Treatment duration (days)	282.1	297.5	305.2	301.7	314.3	321.2	336.4	343.3	354.3	381.6	400.9
Mortality p.a. (%)	1.5	1.5	1.7	1.6	1.6	1.4	1.6	1.6	1.6	1.3	1.5

Braun et al. 2014d and own calculations.

Data on the mortality among drug users is 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 Overview

Health aspects of drug use are addressed by specific services and treatments offered to 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 limited proportion of the specific measures, as these are provided by specialised facilities or as part of a specific programme.

Data on general health care does not provide any information that is specifically relevant to drug addicts as a group. Other than a few individual cases, there is no data available on the overall number of emergency cases of overdoses or other life-threatening conditions caused by drug use. Nor is there any data on the treatment of secondary diseases carried out in general doctor's practices or clinics.

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

Various targeted approaches are used to prevent drug-related deaths:

- Raising awareness and educating on the risks of overdosing
- Provision of effective treatment measures for drug users (in particular, substitution, see chapter 5) and improvement of retention rates
- Improved transition management after release from prison (see chapter 9)
- Provision of drug consumption rooms
- Improvement of the reaction of bystanders in the case of drug emergencies (first aid training, naloxone programs)

#### Provision of drug consumption rooms

In view of the high-risk use pattern still linked with heroin, drug consumption rooms and low-threshold facilities play an important role in offering help to addicted people at an early stage. Drugs are brought along to drug consumption rooms by the drug users themselves. Infection prophylaxis is an intrinsic part of the service provided and so 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 would not otherwise be reached by the system ("harm reduction") in order to provide them with motivational treatments to quit drug use. Based on Sec. 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.

Currently, there are a total of 23 fixed location drug consumption rooms in six German Laender (Berlin, Hamburg, Hesse, Lower Saxony, North-Rhine Westphalia and Saarland) across 15 cities and one mobile drug consumption station in Berlin<sup>71</sup>.

More precise data on the utilisation and clientele of consumption rooms is at present only available for individual facilities which publish their annual reports on the internet. The data from Frankfurt and Berlin is presented below by way of example:

In the four Frankfurt consumption rooms in 2012, a total of 212,687 incidences of consumption by 4,984 consumption room users (of which 1,464 were new users) were documented, which amounts to an average of 43 incidences of use per user per year. As in the previous years, heroin and crack are the predominant drugs which are intravenously injected in consumption rooms. Heroin was consumed in 82% of all incidences of use, while crack was consumed – alone or in combination with other drugs – in 50% (2011: 43%) (multiple answers possible). Only a little under 2% of consumption room users still consume benzodiazepine intravenously (2011: 14%). Since November 2011, benzodiazepine, flunitrazepam (Rohypnol) has been subject without exception to the German Narcotic Drugs Act, which is a likely explanation for the sharp decline in the number of consumption instances involving benzodiazepines. The injection of cocaine was only reported by 1% of users. All other psychotropic substances are mentioned only rarely (0.4%). The proportion of non-injecting instances of use (primarily smoking/inhaling the substance) increased in 2012 to 5.1% (2011 and 2019, approx. 3%). Whilst this is also determined by logistical conditions such as the installation of a ventilation system, it can be traced back primarily to the nationwide project, “SMOKE IT!”, which aggressively promoted inhalative consumption of heroin as an alternative route of administration. If one differentiates i.v. drug use according to pattern of use, heroin is used on its own (without other drugs) most often, accounting for 48% of cases. In second place is heroin in combination with crack, at 32% (2011: 24%), and in third place, at 17%, is crack on its own. Cocaine without other drugs was consumed by 0.6% intravenously (Förster & Stöver 2013).

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

The EMCDDA and ECDC list seven key interventions in a joint publication on the prevention of drug-related infectious diseases (ECDC & EMCDDA 2011):

- Health promotion/provision of information and education on infectious diseases with a focus on safer use and safer sex practices
- Provision of sterile injection equipment and paraphernalia (safer-use services)
- Provision of vaccinations (hepatitis A and B, tetanus, influenza etc.)
- Provision of opportunities for testing
- Provision of effective treatment offers (in particular substitution, see chapter 5)

<sup>71</sup> See also <http://www.drogenkonsumraum.net/> (last accessed:06 August 2014).



- Access to treatment for infectious diseases
- Creation of conditions based on the needs of the target group in the provision of the above services (e.g. outreach offers, street work, low-threshold facilities, cooperation between drug counselling centres and practice based doctors etc.)

Some at-risk groups for drug-related infectious diseases are not reached to an acceptable level by educational and informational programmes. With the project, “Baobab”, the Lower Saxony State Aids Service Organisation provides this culturally sensitive HIV education and prevention as a way of reacting to the growing number of new infections amongst migrants. Baobab offers a target group-specific education service and is aimed primarily at immigrants from Sub-Saharan states (10% - 15% of all newly diagnosed HIV infections in Germany concern people from this region; 30% of these new infections occurred in Germany (Kasadi 2014). Language barriers and cultural chasms must be overcome in order to ensure African communities also receive educational and prevention based support in the area of the taboo topics of sexuality and HIV / AIDS (Kasadi 2014).

### **National strategy against viral hepatitis in Germany**

In the REITOX report 2013, the DBDD already reported on the Action Plan for a National Strategy Against Viral Hepatitis in Germany, which the German Liver Foundation (Deutsche Leberstiftung) had prepared and presented together with the “Action Group for Hepatitis and Drug Use” (Aktionsbündnis Hepatitis und Drogengebrauch) as well as the German Liver Patient Association (Deutsche Leberhilfe e.V.) (Aktionsbündnis "Hepatitis und Drogengebrauch" et al. 2013; Pfeiffer-Gerschel et al. 2013c). On 28 July 2014, at the World Hepatitis Day in Cologne, the focus of the discussion was placed on the fact that the peak of the wave of long-term effects from viral hepatitis had not yet been reached. The number of deaths from viral hepatitis apparently exceeded that of HIV whilst also occupying a considerably smaller media presence in public (Deutsche Leberhilfe e.V. 2014).

### **Safer use initiatives**

Prevention of drug-related infectious diseases by low-threshold drug support facilities consists mainly of providing information on infectious diseases and risks as well as distributing safer use equipment. Distribution of needles and needle exchange is explicitly permitted by the Narcotics Act and is also practised by many facilities.

Data on needle exchanges in Germany is mostly only documented by individual facilities in the respective annual reports. A nationwide compilation of the data available is not undertaken. An overview of the locations of the 153 needle vending machines in 10 Länder can be found on a website provided by the German AIDS Service Organisation (DAH)<sup>72</sup>. Of the 153 needle vending machines funded by the AIDS support organisation, 100 are in North Rhine-Westphalia and 20 in Berlin, which shows clearly that the distribution of locations for the whole of Germany cannot yet be described as comprehensive. That being said, the

<sup>72</sup> <http://www.spritzenautomaten.de/> (last accessed: 7 August 2014).

documentation of needle vending machines in the other Laender is very incomplete, which could contribute to a distortion of the data in favour of NRW and Berlin and does not necessarily represent an exhaustive count of all needle vending machines in Germany.

The only *Land* in which a regular survey is conducted on a local level on the distribution of single use syringes by the DAH, is North-Rhine Westphalia. For 2013, the DAH in NRW reported 1,850,169 needles issued in facilities (2012: 2,040,100; 2011: 1,927,626) as well as 117,915 (2012: 215,059; 2011: 228,262) needles issued by vending machines<sup>73</sup>.

Safer use services currently offered in prisons are far behind what could be possible. A needle vending machine is only available in one of the 185 German prisons. In light of this fact, the DAH started a campaign to improve the situation of drug users in prison (DAH 2013). As part of this, the DAH invited people to take part in an online campaign<sup>74</sup>, which would be used to push for the right of prisoners to good health. The initiative is supported by the *Paritätische* (Equal Opportunities Association), the German Association of Parents and Relatives for Acceptance-Oriented Drug Work and by akzept e.V.

Further information on needle exchange services can be found in standard table 10.

### **Provision of opportunities for testing**

The actual number of people suffering from hepatitis in Germany is still unknown, due to a deficit in the area of diagnosis, although estimates from various data sources are available (c.f. Chapter 6) (Wedemeyer 2013). The German Liver Foundation and its partners therefore demand a systematic screening of all patients for hepatitis. Above all, the recommendations for testing should be made simpler and the recording of at-risk groups such as migrants, people in prison and drug users should be improved. The project, "TEST IT" (January to September 2010) of the DAH, which was conducted in cooperation with the Dortmund Drug Support Facility, KICK, and scientifically supported by the Dortmund University of Applied Sciences and Arts, proved to be a success in relation to an increase in the rate of testing for HIV and is being continued in an expanded form, for example in Berlin<sup>75</sup> (Deutsche AIDS-Hilfe e.V. 2010). Around 10% of the HIV infections detected in Berlin were diagnosed in the scope of the quick test project (aerzteblatt.de 2013b).

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

The Professional Association of Gastroenterologists in Private Practice (bng) reported, on the basis of data from the hepatitis C register, that only around half of patients diagnosed with hepatitis C in the past received adequate medical treatment (aerzteblatt.de 2014). This deficit is even more serious in respect of the treatment of hepatitis C amongst drug users. Although drug users represent the largest group of persons infected with hepatitis C, they are

---

<sup>73</sup> [http://www.saferuse-nrw.de/Saferuse-NRW/upload/pdf/abfrage\\_spritzen\\_2011-2013.pdf](http://www.saferuse-nrw.de/Saferuse-NRW/upload/pdf/abfrage_spritzen_2011-2013.pdf) (last accessed: 7 August 2014).

<sup>74</sup> [www.drogenundmensenrechte.de](http://www.drogenundmensenrechte.de) (last accessed: 31 October 2014).

<sup>75</sup> <http://www.testit.fixpunkt-berlin.de/> (last accessed: 31 October 2014).

treated much less widely than infected persons with a different infection risk, which is due to a widespread negative attitude amongst doctors to drug users (Gölz 2014).

The Correlation Hepatitis C Initiative wants to remedy the situation by trying to integrate drug users both in political decision making processes as well as in the development of treatment concepts (Schatz 2014): in an amalgamation of over 30 European organisations, the objective is to improve knowledge and capacities on a practical and political level and to bring greater attention to the HCV problem in relation to drug users. Specifically, the barriers in low-threshold facilities to inform clients about HCV tests and to test them or have them tested are being studied. Furthermore, a database will be created in which scientific material, aimed at the specific field of hepatitis C and drug use, will be made available. A training programme for sufferers and peers on hepatitis will also be developed and conducted. In this way, drug users themselves have proven to be valuable experts in the field of HCV research and prevention.

Chronic hepatitis C primarily requires treatment even in persons suffering from addiction, due to the high rate of mortality. Nevertheless, medical professionals can ask the question “start or wait”, dependent on the chances of success of the treatment (Schäfer 2013). Doctors and patients should, in light of the current developments (especially the introduction of new medications) *“together assess how urgent an antiviral treatment is, taking into account any potential side effects and chances of success”* (quoted from: Zeuzem, S. in Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften 2014). With the new active ingredient sofosbuvir (“Sovaldi®” from the company Gilead) a new hepatitis C drug was given marketing authorisation in Germany in 2014, which increases the chances of recovery (“sustained virologic response” SVR) for HCV of genotype 1 in combination with ribavirin and pegylated interferon to 90% and also improves the chances of recovery for HCV of genotype 2 to 6 but is criticised as too expensive (aerzteblatt.de 2013a; Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften 2013). The price of production of the new active ingredient is estimated as 68 to 136 dollars (for the entire 12 week therapy), whilst the sale price in the USA is 1,000 dollars per tablet meaning that the price for the 12 week course is 84,000 dollars (aerzteblatt.de 2013a; Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften 2013). In Germany, the tablets cost 725 euros each, which leads to a price of 60,900 euros for a 12 week course (van den Heuvel 2014). To what extent drug users or substituting patients will also be able to benefit from these new, expensive treatment options remains to be seen.

Specifically in the treatment of hepatitis in clients suffering from addiction, there are particular challenges such as the coordination of doctors (addiction professionals and gastroenterologists), the treatment of comorbid diseases (often psychiatric comorbidity = interaction between drugs), substitution drugs and medication, somatic concomitant diseases etc. Depending on the genotype of the hepatitis, food treatment results can be achieved with the triple therapy. In particular, patients suffering from addiction who are in substitution treatment are at an advantage in terms of the treatment of chronic hepatitis C: their chances of recovery are comparable to patients who do not exhibit injecting drug use (Schäfer 2013).

Nevertheless, the hepatitis C treatment of patients in substitution treatment is often seen as difficult although many of these difficulties can be minimised through intensive education of the patients (Reimer et al. 2013). In addition, institutions like the DAH are making efforts to educate, e.g. by giving infected users the possibility of learning about the interaction between their hepatitis / HIV medication and drugs in an online quick test<sup>76</sup>.

In order to further advance the development of hepatitis treatment for drug addicts, the ECHO Study (Epidemiology of the Hepatitis C Virus Infection amongst Opioid Substitution Patients) of the Centre for Interdisciplinary Addiction Research (ZIS) in the period of November 2013 - December 2015 aims to examine the situation regarding hepatitis C amongst opioid dependent clients in substitution therapy:

The standard therapy for the treatment of opiate dependence, namely opioid substitution, offers, due to the close contact between doctor and patient, excellent possibilities for prophylaxis, diagnostic and therapy of the hepatitis C virus (HCV) infection, which often affects this patient group. The objective of the study is to record the current HCV prevalence and incidence in opioid substitution treatments, on the basis of a representative sample of around 200 outpatient substitution facilities with around 2,500 patients. In addition, influencing factors for therapy initiation and seroconversion will be described. To this end, both patient-related data from regular health care and patient questionnaires will be included, in order to answer the following questions (ZIS Hamburg 2014):

- What is the current HCV status (prevalence) of opiate dependent clients in substitution treatment?
- Which influencing factors are associated with the initiation of therapy? Which factors stand in the way of the initiation of therapy?
- How high is the HCV incidence amongst opiate dependent clients in substitution treatment?
- What influencing factors are associated with a seroconversion during opioid substitution?

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

There is currently no information available on other health correlates amongst drug users.

---

<sup>76</sup> <http://www.hiv-drogen.de/> (last accessed: 31 October 2014).

## 8 Social correlates and social reintegration

### 8.1 Overview

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.

The social exclusion of drug users is related, according to Kronauer, to the following five dimensions of social involvement (Kronauer 2010; Wiese 2008):

- Exclusion from division of labour in society due to lack of gainful employment
- Exclusion from social networks which can lead to social isolation and manifest itself in two ways:  
Loss/lack of partner relationships, friendships or familial relationships  
Concentration of social relationships on persons in the same, disadvantaged position
- No material participation, i.e. the standard of living stays far behind that achieved and accepted in society
- No political/institutional participation, i.e. powerlessness and lack of opportunities through a lack of political and social rights (e.g. right to vote, right to social security, free choice of academic education etc.)
- No cultural participation, i.e. socially excluded persons share the basic aims of the rest of society but are excluded from their realisation

For drug users, there is an increased risk of exclusion in respect of each of these five dimensions. It is in the nature of the issue surrounding the (risk of) marginalisation of addicts, that (social) epidemiological data on excluded persons is difficult to collect. Nevertheless, attempts are made at least to outline the situation regarding social side effects and the social reintegration of drug users in Germany.

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 national Statistical Report on Substance Abuse Treatment as well as from data provided by local monitoring systems such as the scene surveys in the scope of the Frankfurt MoSyD.

## 8.2 Social exclusion and drug use

### 8.2.1 Social exclusion of drug users

According to the data of the Statistical Report on Substance Abuse Treatment in Germany (DSHS) on clients of outpatient facilities in 2013, 17.6% of clients with a primary opioid problem, 16.8% of clients with a primary cocaine problem and 12.2% of cannabis clients left school without a school leaver's certificate (high school examinations). Almost two thirds of clients with primary opioid-related problems (62.4%) are jobless<sup>77</sup> at the start of the therapy and so are a little more than a third (34.3% and respectively 41.2%) of the clients with primary cannabis and cocaine-related problems (Table 8.1). In general, this situation has not changed by the end of the therapy (Braun et al. 2014d).

Since 2007, data has also been available within the framework of the DSHS based on evaluations carried out by low-threshold facilities themselves. According to these evaluations, the socio-economic conditions of the clients who sought help from low-threshold facilities in 2013 were 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 ability to interpret these figures is limited as the total number, N=31, of the low-threshold facilities participating in the DSHS only represents a small section of the overall number of similar services<sup>78</sup> available in Germany (c. f. chapter 5) and no data is available on the representativeness of the sample (Braun et al. 2014f).

---

<sup>77</sup> i.e. people who are unemployed under the German Code of Social Law (SGB), Volume II or III.

<sup>78</sup> On 29 July 2013, the total number of low threshold facilities ("facility type 2") in the facilities register of the German addiction support was 283.

Table 8.1 Social situation of persons in outpatient therapy and low-threshold facilities by main drug (2013)

Main diagnosis	Outpatient Treatment			Low-threshold facilities		
	No school leaving qualification	Un-employed <sup>1)</sup>	Home-less <sup>2)</sup>	No school leaving qualification	Un-employed <sup>1)</sup>	Home-less <sup>2)</sup>
	%			%		
Alcohol	4.7	36.9	0.5	7.9	49.6	3.7
Opioids	17.6	62.4	2.8	20.0	76.6	11.2
Cannabinoids	12.2	34.3	0.8	21.3	51.8	7.4
Sedatives/Hypnotics	5.7	33.9	0.4	0.0	50.0	0.0
Cocaine	16.8	41.2	1.4	26.4	61.5	7.0
Stimulants	12.5	49.0	1.4	20.9	62.0	7.4
Hallucinogens	11.4	48.8	3.5	0.0	100.0 <sup>3)</sup>	0.0
Tobacco	4.1	15.0	0.3	0.0	0.0	0.0
Volatile substances	5.8	18.5	0.0	--	--	--
Mult./other substances	14.7	48.6	1.4	100.0 <sup>3)</sup>	--	100.0 <sup>3)</sup>

1) On the day before the start of treatment; according to SGB III (ALG I) or SGB II (ALG II).

2) On the day before the start of treatment.

3) These results concern just one person in each case who could be asked the question.

Braun et al. 2014 d,f.

In the Status Report of the Hamburg Basic Documentation 2012 (Buth et al. 2012; Rosenkranz et al. 2013), 4,772 registered opioid clients (2011: 4,668; 2010: 5,143) took advantage of outpatient support and data was also collected on their social situation. 89% of these clients had at least one primary school leaver certificate (2010: 88%; 2009: 89%) and 60% (2010 and 2009: 66%) could show a completed professional training qualification. However, although 9 out of 10 opioid clients had a school leaver certificate and over half a professional qualification, only 16% had a regular full-time or part-time job on the open labour market. With an unemployment rate of 72% (not including those in prison), the work-related situation can be described, as in previous years, as catastrophic. Also due to the high rate of abstinence of 62%, urgent measures are still needed to reintegrate the affected persons into working life. Only 15% of clients earned their living from regular employment, 64% drew the second stage of unemployment benefit (ALG II). Only 26% of opioid clients were not in debt. A quarter of clients had debts of up to 5,000 euros, for 20% the level of debt went up to 50,000 euros. For only 7% had the debts already been managed, although this was deemed necessary by the respective addiction facility for 62% of the clients. The necessity of combining the work of the addiction support facilities with a systematic debt counselling service remains great and is frequently seen as indispensable for a long-term recovery (Zimmermann & Lunkenheimer 2013).

Indicators for the extent of social reintegration of addicts are, for example, the number of so-called “clean contacts”<sup>79</sup> outside of professional help, free time activities and visits to cultural, political or sporting events. On this topic also, there is data available from the Status Report of the Hamburg Basic Documentation 2012 (Rosenkranz et al. 2013). Amongst Opioid clients, 18.0% had not had any days with clean contacts within the last 30 days but 56.9% had spent 15-30 days with clean contacts in that time period. The situation looks a little better for cannabis users: 10.5% had not had any clean contacts but 73.0% had spent at least half of the last 30 days with clean contacts. 38.9% of opioid clients (32.1% of cannabis clients) had not spent any day with recreational activities during the previous month, 68.4% (61.8% of cannabis users) had not visited any cultural, political or sporting event, however this could also be determined by economic factors.

The data from the scene survey in the scope of the Frankfurt MoSyD 2012 (Bernard & Wersé 2013) paints a picture of the social situation of drug users in the open drug scene who were questioned on the street (proportion of respondents: n=146). 86% of them had a school leaver certificate, 58% had a professional qualification but only 23% were in regular full-time or part-time employment, which corresponds to a 77% unemployment rate. The proportion of those who mentioned unemployment benefit or social welfare as sources of income was 56%. The abstinence rate is very low compared to the area of outpatient addiction treatment: the 30-day prevalence for heroin use is 80%, the 24-hour prevalence is 68%. There is a significant difference in the 30-day prevalence of heroin use between substituted and non-substituted patients, whereby the latter used heroin more than twice as frequently (37% vs. 91%). The home situation is also significantly worse in the open drug scene than in the area of outpatient addiction support. 12% of respondents were homeless and 29% used emergency overnight accommodation. However, 95% of members of the scene had an officially registered home address, something which underlines the meaninglessness of this official status information in terms of the actual living situation of the affected persons.

In the Hesse *Land* analysis of the computer assisted basic documentation of the outpatient addiction support (COMBASS) 2012, the social situation of opioid clients was shown to be similar to that in the Hamburg Basic Documentation: 80% lived in an own apartment or with relatives/parents; on the other hand, 15% were in a precarious living situation, 85% possessed a high school leaver certificate or were still in academic education but only 21% had a job or place on a training course; 58% were drawing the second stage of unemployment benefit (Neumann-Runde et al. 2013). The comparison of these findings with the Hamburg Basic Documentation (see above) makes it clear that the highly problematic social situation of opioid clients is not only found in high population density areas but also in rural regions.

---

<sup>79</sup> Clean contacts are not substance or gambling addicted persons to whom clients in addiction support have contact outside of the realms of the support.



## 8.2.2 Drug use among socially excluded groups

### Drug use and homelessness

In the following, the definitions of the European typology for homelessness and housing exclusion (ETHOS) will be used (FEANTSA 2005). According to those definitions, “roofless” refers to homeless people and those in emergency accommodation, whereby “houseless” refers to people in homeless centres, those who have been released from institutions (e.g. prison, correctional facilities), those in women's refuges or people in long-term facilities for homeless living.

There is a range of services available for drug addicts to help them through periods of homelessness. This includes firstly socio-pedagogic/therapeutic services for outpatients, managed living for addicts, adaptation facilities and inpatient social therapy facilities (care homes or temporary accommodation). Secondly, the general services of homeless assistance are also used by drug users. Current data is not available, however, neither for drug addicts who are affected by rooflessness or houselessness, nor for houseless or homeless who are affected by drug addiction.

In Germany, there is no nationwide emergency accommodation report on a statutory basis, hence attempts are made to summarise the situation with the help of estimates (BAG W 2013a,b): The number of houseless in Germany was, according to the Federal Working Group for Homeless Support (BAG W) 284,000 in 2012 (2010: approx. 248,000). By 2016, a further increase in numbers of houseless persons to 380,000 is forecast. The number of roofless persons also increased in 2012, to approx. 24,000 (2010: approx. 22,000). The use of addictive substances amongst homeless persons is estimated in older, varying local and regional studies to be up to 80%, whereby the proportion of untreated houseless persons with an addiction can be assumed to be over 70% (Kostrzewa 2014; Lutz & Simon 2007; Salize et al. 2006). These numbers contain primarily alcohol dependent individuals but also consumers of illegal drugs. Current, Germany-wide data is not available in this area, which is determined by, amongst other things, the specific characteristics of the clientele such as being difficult to contact as well as reservations in respect of people in institutions (Salize et al. 2006). An epidemiological analysis of the situation of drug dependent homeless persons seems to be appropriate, due to the interaction between addiction, poverty and homelessness becoming increasingly serious today (Lutz 2013; Salize et al. 2006).

In order to be able to better assess the situation of health care in houseless and roofless persons, the BAG W demands, in its “Call for a National Strategy to Overcome Housing Shortages and Poverty in Germany” (BAG W 2014a), an improvement of outpatient support services for this at-risk group through statutory amendments. Furthermore, the standard recording tool, “BAGW\_MEDTOOL14”, which is also supposed to be used for the documentation of addiction diseases according to ICD-10, is to be used in 2015 across Germany in facilities which are sought out by houseless and roofless persons (suffering from addiction), by doctors in those facilities; the data collected will then be analysed by the BAG W in 2016 (BAG W 2014b; BAG W via Peters-Steinwachs, B., 2014, personal report).

### Drug consumption and prostitution

In contrast to professional prostitution, prostitution for the purpose of procuring drugs has the following eight characteristics (Zurhold 2005, Rummel 2012):

- The main motive for the prostitution is the use of drugs.
- Key features are quick entry, flexible working times, geographically close to the drug scene and a high degree of mobility.
- 100% of the income from sex work is retained by the women as they are of less interest to pimps due to their considerable financial needs.
- It is mostly street prostitution. The place where contact is established is the street and the sexual performance is then in secluded places, in the open air, in a car or in transient hotels.
- The drug curb crawling strip is usually in a prohibited zone.
- As there is no training or highly inadequate training prior to entry into prostitution, there is a low degree of professionalism.
- The ability to fulfil certain requirements of sex work is limited under the influence of drugs (e.g. insisting on prices, protection strategies).
- Living and working areas overlap.

Prostitution for the purpose of procurement of drugs by drug users is often seen as a risk factor specific to women, which both worsens the living situation of the affected person as well as increases the risk of transmission of sexually transmitted diseases such as HIV in the general public (Bernard 2013). It has repeatedly been shown in studies that drugs and/or alcohol consumption is a predictor of sexual exploitation and vice versa (Czarnecki et al. 2014; Klatt et al. 2014; Strobl 2006). Although the at-risk group of so-called drug or street prostitution in Germany has been given more attention in Germany by researchers and politicians since the 1980s, no nationwide epidemiological data is available on prostitution and drug use.

Projects do exist in Germany which offer support for prostitutes suffering from a drug dependence. Four such projects are mentioned here:

- Project “Hotline” of the integrative Drogenhilfe e.V.<sup>80</sup>, Frankfurt am Main: streetwork and counselling for drug using women who work on the strip in the station district and are thereby confronted on a daily basis with rape, physical injury, coercion, imprisonment and burglary.  
Service: focus on street social work, counselling - in particular on safer use, safer sex and safer work - on location and in the office, warning system for the protection against violent johns in cooperation with the criminal investigation department, i.a.

<sup>80</sup> [www.idh-frankfurt.de/hotline](http://www.idh-frankfurt.de/hotline) (last accessed: 31 October 2014).

- Project “Le Trottoir - Help for Prostitutes” of the Drug Help Centre DHZ gGmbH<sup>81</sup>, Saarbrücken: project for moving the prostitution mile and low threshold support of prostitutes who work for the purpose of procuring drugs.  
Service: sanitary facilities, counselling, prevention of violence, health prophylaxis i.a.
- Project “Night Shift” (Nachtschicht) of the Diakonischen Werk<sup>82</sup>, Osnabrück: streetwork project for drug using street prostitutes.  
Service: at least twice a week; counselling, needle exchange, issuing safer use and safer sex materials i.a.
- Ragazza e.V.<sup>83</sup>, Hamburg: contact and counselling centre, meeting point and protected room for drug using women who engage in prostitution.  
Service: consumption room, needle exchange programme, gynaecological support, overnight accommodation i.a.

### **Drug consumption and migration background**

Dealing with migrants suffering from addiction represents a special challenge, due to, amongst other things, difficulties connected to the immigrant status of the person affected which could impede their access to the addiction support (Deimel 2013; Schu & Czycholl 2014). The number of addicted persons with migration backgrounds in Germany remains unclear as no current epidemiological publication on this topic exists. On the basis of the Census 2011, the proportion of migrants in the German general population is 8.2%, which amounts to around 6,640,290 people (Statistische Ämter des Bundes und der Länder 2014). The three largest groups within this population comprise people with Turkish, Polish and Russian backgrounds (Statistisches Bundesamt 2014d). In the Epidemiological Survey of Substance Abuse (ESA) 2012, the proportion of persons with migration background of all persons with a disorder in relation to illegal drugs was 32.6%. It is assumed, however, that in the ESA, this proportion of addicts is still underestimated as people with migration background could possibly be underrepresented in the sample due to language barriers (Piontek, D. 2014; personal report). The proportion of persons with migration background among all addicts is also estimated by other experts to be 33-35% (Deimel 2013). Based on the (incomplete) available estimates, the proportion of persons with migration background who have used drugs or have developed respective disorders is much higher than in the rest of the population.

It is apparent, however, that only a small proportion of these affected persons utilise addiction support services (Deimel 2013). With the help of data from the care sector, the Statistical Report on Substance Abuse Treatment in Germany (DSHS) attempts to present the situation in greater detail: in the short report of the DSHS, on clients with migration

---

<sup>81</sup> [www.drogenhilfezentrum.de/index.php/9-uncategorised/50-trottoir](http://www.drogenhilfezentrum.de/index.php/9-uncategorised/50-trottoir) (last accessed: 31 October 2014).

<sup>82</sup> [www.suchtberatungsstelle.de/standorte/osnabrueck/frauenprojekt-nachtschicht.html](http://www.suchtberatungsstelle.de/standorte/osnabrueck/frauenprojekt-nachtschicht.html) (last accessed: 31 October 2014).

<sup>83</sup> [www.ragazza-hamburg.de](http://www.ragazza-hamburg.de) (last accessed: 31 October 2014).

background<sup>84</sup>, in outpatient and inpatient addiction treatment (Künzel et al. 2013), the proportion of these people in outpatient treatment was most recently estimated at 16.8% and the proportion of those in inpatient treatment was estimated at 13.0%. These figures, however, are not only related to persons addicted to illegal drugs but also, for example, to alcohol and tobacco dependent persons.

In 2012, the German Caritasverband e.V. conducted a survey in outpatient (n=273) and inpatient (n=35) counselling and treatment facilities of the Caritas Addiction Support (return rate: 53.6%) on the situation regarding treatment of people with migration background<sup>85</sup> (Ruf & Walter-Hamann 2014). According to the survey, 40% of the facilities had special services for people with migration background, which comprise, on average, 16.5% (standard deviation, SD = 10.6) of clients. The high standard deviation in this context is indicative of a highly fluctuating proportion of clients with migration background across facilities. The most common countries of origin included - partly corresponding to the people with migration background in the German general population - Russia (34.4%), Turkey (26.9%), Kazakhstan (15.0%) and Poland (10.6%). 94% of the facilities stated that an integration of the respective clients is possible within regular services if sufficient language knowledge is available. 72.0% of the facilities also offer counselling in the native language (in the area of inpatient treatment it is even as high as 90.9%). In 91.4% of facilities, problems with the treatment of people with migration background had been experienced. The most prevalent were language problems, followed by cultural differences and a different understanding of addiction/disease (free text information) (Ruf & Walter-Hamann 2014; Zakhalev 2014).

### 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 of people with substance-related disorders. More details on this can be found in the REITOX Reports of 2005, 2007 and 2008.

The law on the further development of the basic social assistance for people in search of work, "Gesetz zur Fortentwicklung der Grundsicherung für Arbeitsuchende", which came into effect as of August 2006, has laid down comprehensive regulations for the status of people 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 were parent-child programmes and geriatric rehabilitation included in the catalogue of standard insurance benefits, but also the medical rehabilitation for addicted individuals.

There are currently several measures in Germany which aim to socially reintegrate (former) drug addicts. One of these projects is BuddyCare from the Integrative Drug Support

<sup>84</sup> Definition of people with migration background: A migration background exists if the client has either come to the country themselves (immigrant) or is a child of immigrants.

<sup>85</sup> Definition of people with migration background: The term, "People with migration background" includes people who came to Germany after 1950 and foreign nationals born in Germany (including refugees), late repatriates and naturalised persons as well as their children (Ruf & Walter-Hamann 2014).

(Integrative Drogenhilfe e.V.) in Frankfurt am Main, which has for several years been bringing together volunteers (so-called “buddys”) with a (former) drug addict. This buddy pair then does something together once a week for a year (e.g. going to the cinema or to a cafe). In 2012 20 buddy pairs were successfully arranged (2011: 14, 2012: 16), 10 were continued from the previous year (2011: 12; 2012: 11) and 7 could be regularly ended (2011: 11, 2012: 5). The drug dependent participants in this project had the important experience of being able to have social contacts outside the scene and to have a good time without drugs (akzept e.V. et al. 2014; Integrative Drogenhilfe e.V (idh). 2014; Pfeiffer-Gerschel et al. 2012).

### 8.3.1 Education, vocational training

Many facilities complement therapy by offering promotional programs for drug addicts to support educational achievement 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.

### 8.3.2 Employment

The already tense situation on the labour market makes it difficult for substance dependent people to reintegrate, post therapy, into professional and social life. The unemployment rate among drug addicts is extremely high – depending on the severity of the problem, it can even exceed 80%. Studies show that social and professional integration is a crucial factor for sustained abstinence.

In the last few years, a series of measures have been tested to facilitate the integration into working life of unemployed people for whom it is difficult to find jobs. 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 in the revision of the Social Security Code II, III and XII.

The statistics of the employment authorities usually do not identify the sub-section of people with substance-related problems separately, hence measures and results for the target group of this report cannot be represented separately.

The integrative approach adopted by the Social Security Code II (SGB II) enables socio-integrative services to be provided in addition to the instruments of employment promotion. An integral part of these supporting integration services is addiction counselling (Sec. 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.

### **Promotion by the German Statutory Pension Insurance**

In the course of the further development of the content and structure of existing rehabilitation offers, the targeted promotion of employment opportunities for jobless rehabilitants by the Pension Insurance has become an integral part of the therapy for people suffering from addiction. It includes, for example, indicative groups with regard to unemployment and training for applying for jobs. From the viewpoint of the social security administration, the central goal of addiction therapy is to restore the working capacity. Apart from purely somatic aspects, psychological factors – i.e. the personal and social skills of the clients – are also taken into account to prepare clients for working life.

The objective of the medical rehabilitation in the name of the German Pension Insurance (DRV) is the restoration and securing of the capacity to work (Boder et al. 2013). Furthermore, it is considered to have been proven that successful employment rehabilitation is one of the most important predictors of long-term abstinence (Indlekofer 2013). There is apparently a positive interaction between successful recovery from an addiction disease and material participation of drug users. Henkel and Zemlin conclude in their own study using the data from the Statistical Report on Substance Abuse Treatment in Germany (DSHS), that the actual use of this positive connection in reality is not yet adequately possible (Henkel & Zemlin 2013). In relation to the high prevalence of addiction problems in the group of people who claim the second stage of unemployment benefit (ALG II), the number of people who are placed in work is very small and has even been falling since 2010. Furthermore, the placing of people in work was undertaken selectively according to addiction diagnosis with a preference on persons with alcohol problems and a discrimination against opiate addicts.

Both on the primary and secondary employment market, isolated possibilities are created in order to reintegrate (former) drug addicts into employment, such as in Baden-Wuerttemberg e.g. through the pilot project “BISS” (Berufliche Integration nach Stationärer Suchtrehabilitation = Employment Integration after Inpatient Addiction Rehabilitation) (2010 to 2012) (Indlekofer). In the assessment of this project, a positive conclusion is reached: the outcomes, in the opinion of the authors, are excellent. Today, the BISS model has therefore become a standard service.

In other German Laender also, various projects are still carried out to improve the (re)integration of (former) drug users into the employment market. In this context, for example, in Bavaria the addiction support providers continue to work towards implementing work and employment projects for the reintegration of drug addicts, especially in large cities, and in particular for older drug addicts. On the basis of the interface problem (SGB II and SGB XII), financing of the projects continues to be difficult. In order to promote cooperation

between the Bavarian job centres and addiction support, the Coordination Office of the Bavarian Addiction Support (KBS) organises an expert conference on the topic of “addiction and work” every two years (Koordinierungsstelle der bayerischen Suchthilfe (KBS) through Cornelia Poth 2014, personal report).





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

### 9.1 Overview

Since, in addition to the purchase of or trafficking in illegal drugs, the possession of drugs is also illegal, criminal sanctions are some of the more common corollaries of drug use and this is true not only in the Member States of the European Union (EU). The Federal Criminal Police Office (Bundeskriminalamt, BKA), in its statistics on drug-related crimes, distinguishes 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 Sec. 29 BtMG (especially possession, purchase and distribution, so-called consumption-related offences)
- dealing/trafficking in and smuggling of narcotics as per Sec. 29 BtMG
- illegal import of narcotics in non-negligible quantities as per Sec. 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 2013 a total of 253, 525 narcotics offences were recorded in Germany (2012: 237,237; 2011: 236,478; 2010: 231,007), of which 189,783 were general offences against the German Narcotics Act (BtMG) (2012: 173,337; 2011: 170,297) and 44,555 were dealing/trafficking offences (2012: 45,040; 2011: 48,291). Drug-related crime has thus risen slightly, with an increase of 6.9% compared to the previous year (BMI 2014).

#### Direct economic compulsive crimes

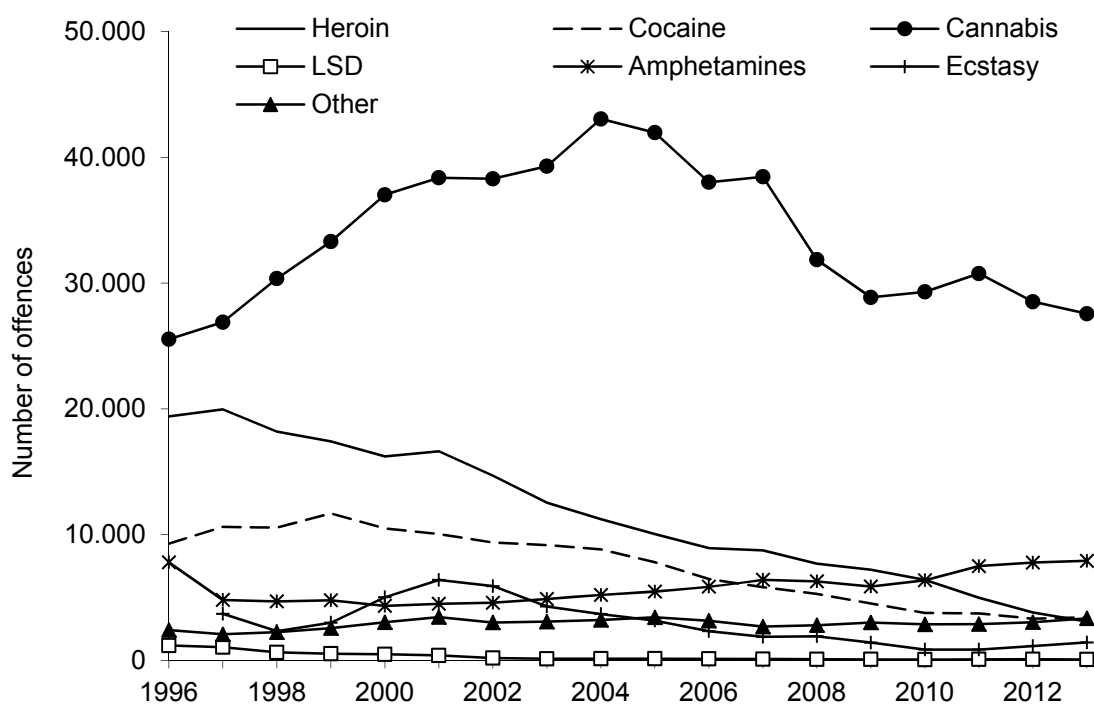
Direct economic compulsive crimes are understood to refer to all criminal offences committed in order to obtain narcotic drugs, substitutes or alternative drugs. In 2013, 2,091 cases (2012: 2,152; 2011: 3,013) of direct economic compulsive crimes were recorded by the Police Criminal Statistics (Polizeiliche Kriminalstatistik, PKS). This corresponds to a decrease of 2.8% in comparison to the previous year, meaning it has remained almost stable. The number of this type of offence has thus fallen continually after a sharp increase in 2011 and is lower than the previous lowest level of 2005 (2,210) (BMI 2014).

#### 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 with 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 (27,570 crimes, 58.9% of all crimes; 2012: 28,524 crimes, 59.8%; 2011: 30,765 crimes, 60.6%), well ahead of **amphetamine** (7,915 crimes, 16.9%; 2012: 7,778, 16.3%; 2011: 7,497, 14.8%), which overtook heroin both in its share of the total and in absolute number of cases (Figure 9.1). Since then, **heroin** has continuously decreased in both indicators, reaching a level in 2013 of 6.6% (3,086 crimes; 2012: 3,806, 8.0%; 2011: 4,980, 9.8%) and thus lies clearly behind **cocaine** (3,431 crimes, 7.3%; 2012: 3,304, 6.9%; 2011: 3,731, 7.3%). Both the proportion and the absolute number of trafficking and smuggling crimes involving ecstasy increased once more after a continuous downward trend since 2001 and record lows in 2010 and 2011 (2013: 1,424 crimes, 3.0%; 2012: 1,138 crimes, 2.4%) (BMI 2014).



BMI 2014.

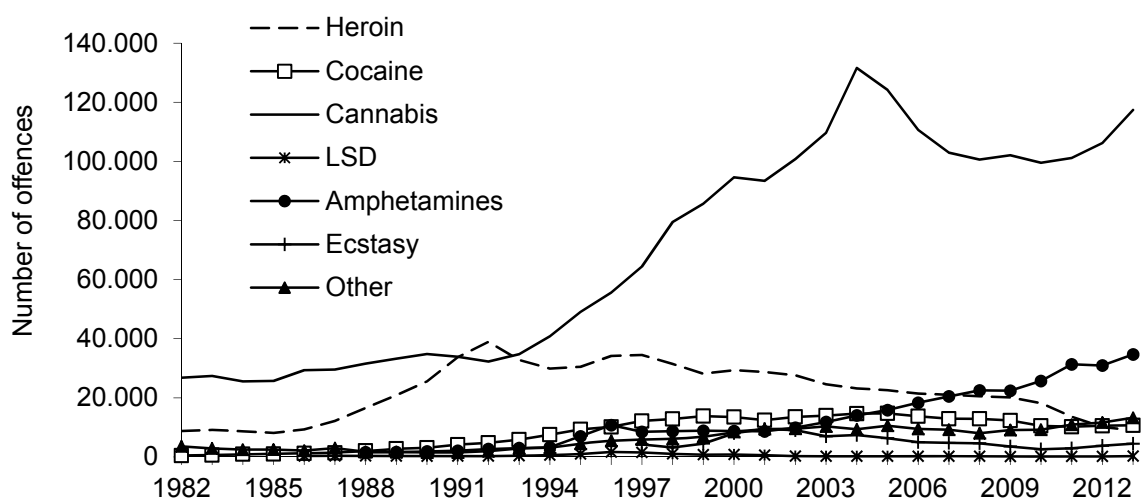
Figure 9.1 Development of dealing/trafficking offences (1996-2013)

### Consumption-related offences<sup>86</sup>

This section is about narcotics offences that are classified by police as “general offences” – due to the surrounding circumstances (quantity, persons involved) - and are therefore considered as consumption-related offences (Figure 9.2).

<sup>86</sup> 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.

The police crime statistics (BMI 2014) show that cannabis plays a predominant role also in the case of consumption-related offences: 61.9% of all such cases are related to cannabis. Heroin (4.7%), amphetamines (18.3%) and cocaine (5.6%) together account for 28.6% of the recorded cases. The remaining proportion is split between ecstasy and LSD. In 2013, the total number (189,783) increased considerably by 9.5% in comparison with the previous year (2012: 173,337). The number of consumption-related offences in connection with LSD increased sharply from 2012 to 2013 (+67.5%). Similarly, there was a clear increase in relation to ecstasy (+18.8%), amphetamines (+12.1%) and cannabis (+10.6%) as well as other substances (+13.7%). A clear decline was seen in the number of consumption-related offences in connection with heroin (-11.1%). The number of consumption-related offences in connection with cocaine has stayed relatively stable (+1.6%).



BMI 2014.

Figure 9.2 Development of consumption-related offences (1982-2013)

### 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 thus represent a sort of incidence measurement. 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 (the period of storage may not exceed 10 years for adults, five years for adolescents and 2 years for children, whereby a distinction should be drawn between the purpose of storage and the type and seriousness of the offence). In this way, an unknown number of repeat offenders

are wrongly classified as “having come to the attention of police for the first time” and therefore the incidence rate is an overestimate of 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 so-called 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 recorded trends in other areas, e.g. the number of treated cases, can help to evaluate trends more reliably.

After an increase in the overall figure for first-offence hard drug users in 2011 (21,315), that figure has fallen continuously (2011-2012: -8.2%; 2012-2013: -1.8%) to 19,210 in 2013.

The only types of drugs where the respective numbers of first offence users increased from 2012 to 2013 are - with a very low total number - LSD (2012: 144; 2013: 156; +8.3%) and ecstasy (2012: 1,257; 2013: 1,480; +17.7%), for which the number of first offence drug users has been continuously rising since a low in 2010. There was almost no change in the number of users who came to the attention of the police for the first time in connection with (meth)amphetamine (2012: 13,728, 2013: 13,721), which has been on a downward trend since a high in 2011. There has been a clear fall in the number of first offence drug users in connection with crack (2012: 369; 2013: 242; -52.5%) and of heroin (2012: 2,090; 2013: 1,789; -14.4%), which confirms the trend since 2004. The number of first offence drug users in connection with cocaine has fallen slightly (2012: 3,263; 2013: 3,173; -2.8%), continuing the trend since 2004, as has the number of first offence users in connection with other “hard” drugs (2013: 312; 2012: 330; -5.5%).

First-time offenders in connection with amphetamines and methamphetamines accounted for a little less than 2/3 (65.7%) of the total of first-time offenders (cocaine: 15.2%, heroin: 8.6%, ecstasy: 7.1%, others: 1.5%, crack: 1.2% and LSD: 0.7%)<sup>87</sup> in 2013. In this statistical documentation cannabis users are not taken into account since only so-called hard drugs are recorded (BKA 2014b).

In Bavaria, the number of first offence drug users of crystal fell from 528 in 2012 to 385 in 2013 (BLKA, personal report 2014).

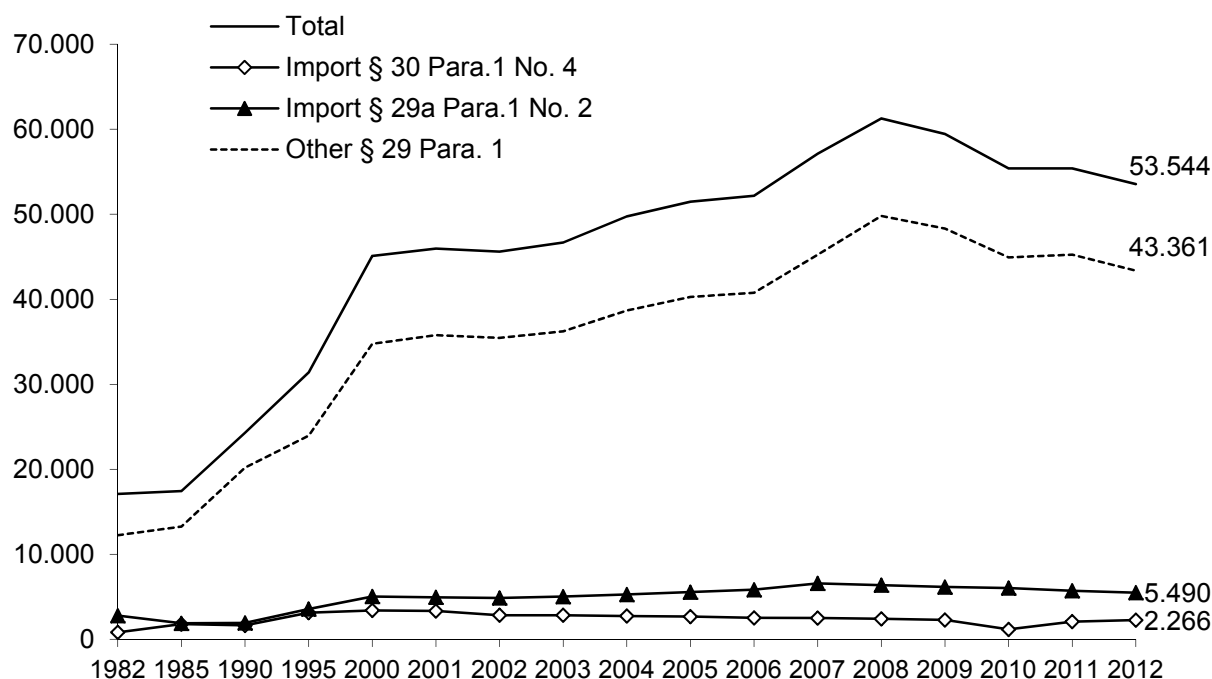
### **Sentencing under the Narcotics Act (BtMG) and the penal system**

According to the sentencing statistics of the Federal Statistical Office (Statistisches Bundesamt 2014c) 53,544 persons (2011: 55,391) were convicted in 2012 for offences committed against the Narcotics Act (data for 2013 not yet available). 47,194 convictions were issued under the general criminal law (relating to adults) (2011: 48,573), and 6,350 (2011: 6,818) relating to juvenile offenders. As for the convictions issued in respect of the

<sup>87</sup> Each person is only counted once in the overall figure under the acronym “EKhD” (Erstauffälliger Konsument harter Drogen - user of hard drugs who has come to the attention of the police for the first time/first offence user of hard drugs). However, to shed some light on the polytoxicomaniac 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%.

general criminal law, 15,163 (2011: 16,041) prison sentences were passed – out of these 9,953 (2011: 10,258) were suspended sentences - and 32,030 (2011: 31,532) fines were imposed. The overall figure decreased slightly in comparison to the previous year. This decline is reflected in all age groups, i.e. in adult, young adult<sup>88</sup> and juvenile<sup>89</sup> offenders. An increase in convictions was only seen in the case of female juvenile offenders. The decline of the overall number can be traced back to a slight decrease in the number of cases involving unspecific consumption offences (Sec. 29 (1) BtMG) to 43,361 cases (2011: 45,251; 2011-2012: -4.2%) (Figure 9.3).

As in the previous years, convictions rendered for violations of the Narcotics Act accounted for around 7% of all convictions imposed in 2012, whereby the proportion of convicted males (12.1%) was significantly higher than that of convicted females (4.9%). Amongst juveniles, the share of convictions imposed for violations of the Narcotics Act was 4.6%. Young adults aged between 18 and 21 years old had a considerably higher share at 8.8%. As a result, narcotics offences committed by this age group have an above-average share in the overall crime rate.



Statistisches Bundesamt 2014c.

Figure 9.3 Convictions under the Narcotics Act (BtMG)

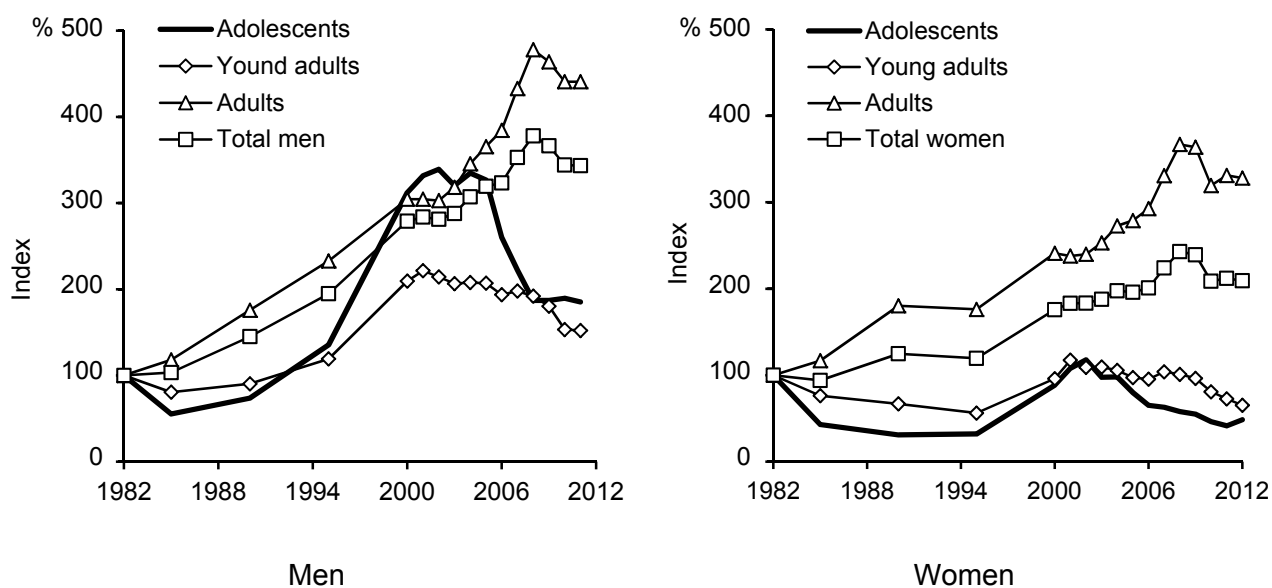
As in the previous years, about nine times more men than women were convicted for violations of the Narcotics Act in 2012 (males: 48,183; females: 5,361). The development

<sup>88</sup> Young adults means persons who are aged 18-20 years old at the time of the offence (Sec. 1 JGG). They can either be adjudicated according to the general criminal law or the criminal law relating to young offenders.

<sup>89</sup> Juveniles means individuals who are 14-17 years old at the time of the offence (Sec. 1 JGG). They are adjudicated under the criminal law relating to juvenile offenders.

trends of the previous 29 years also show marked differences. Using the figures of 1982 as an index (=100%), the number of convictions of men more than tripled (331%) while that of women more than doubled (209%) in the period to 2012.

Significant differences were found between juveniles and young adults. For juvenile (49%) and young adult (65%) females, the number of convictions issued in 2012 remained under that of 1982, whilst the number of convictions of male juveniles (179%) and young adult males (142%) 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 2012 no significant changes were found. The number of female juvenile convicts fell continuously between 2002 (Index: 118) and 2011 (Index: 41) and has since begun to rise slightly again. Among the young adult offenders, the number of convictions has been on the decline since 2001 (Index: 222) (Index 2012: 142). While the number of female young adults only experienced slight fluctuations between 2000 (index: 96) and 2009 (index: 96), the number has fallen sharply since then and in 2012 was only 65% (Figure 9.4). Information on violations of the Narcotics Act can be found in standard table 11.



Statistisches Bundesamt 2014c.

Figure 9.4 Trends in convictions under the BtMG

According to the Hamburg basic documentation system, BADO 2012 (BADO e.V. 2013), more than a third of the clients of the Hamburg outpatient addiction help system had problems with criminal justice authorities (35.1%) in 2012. This proportion has fallen continuously since 2009 (38.0%). In particular, the proportion of clients currently in custody (adults on remand or in prison) was much lower in 2012 than in 2005 (2005: 17%; 2012: 13.8%). At the same time, the proportion of individuals who have been awarded probation conditions has continuously increased since 2009 (2009: 9.0%; 2012: 8.0%). Opiate clients

have the most problems with judicial authorities. Roughly half of opiate clients (47.1%) report that they are currently in conflict with the law. They account for the largest proportion of clients serving a prison sentence (19.1%) and are involved particularly often in judicial proceedings (11.8%) or are awarded probation conditions (10.9%). Within the cannabis group (32.6% with current legal problems), a distinction must be drawn between male and female clients. Currently, 37.5% of men but only 10.3% of women are having problems with judicial authorities and the proportion of persons on remand or in prison is also many times higher for male clients (14.3%) than female (1.4%).

Almost half of the clients documented by the BADO Hamburg in 2012 had been convicted at least once in their lives (49.2%). This proportion has fallen by almost 7 percent since 2005 (2005: 56.0%; 2012: 49.2%). 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 37.0% to 28.6%), economic compulsive crimes (from 29.0% to 23.8%) and other or unknown offences (from 28% to 23.9%). The highest share of convicts is to be found again in the group of opiate clients (80.9%). About two thirds had already been convicted because of violations of the Narcotics Act (65.0%), over half of these because of economic compulsive crimes (53.9%), more than a third because of unknown or other offences (41.2%) and a quarter because of bodily injury offences (25.4%). One third of cannabis clients had been convicted at least once in their lives (35.25%). The most common offences in this context were assault and other/unknown offences with 13.4% and 14.3% respectively, followed by narcotics offences (11.3%), economic-compulsive offences (6.9%) and driving under the influence of alcohol or drugs (4.8%).

Just as for the current problems with the judicial authorities, there are also significant gender differences to be found in relation to convictions for clients as a whole: women are less frequently convicted overall (females: 31.7%; males: 55.4%) 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 five (21.8%), but only one woman in eighteen (5.4%) was convicted.

A total of 37.4% of all clients treated in 2012 and documented by the BADO Hamburg, reported that they had already been in prison at least once in their lives. That is nine percentage points lower than in 2005. By far the largest proportion of clients with prison experience was in the group of opiate clients (67.6%). In contrast, only 19.1% of cannabis clients had experience of prison. A comparison of the sexes reveals that the proportion of those with prison experience was around twice as large for men (43.1%) than for women (21.4%).

## 9.2.2 Other drug-related crime

### Drug use and road accidents

In a meta-analysis on the basis of 66 studies, the risk of a traffic accident under the influence of drugs was calculated (Elvik 2013). The odds ratio of accident involvement was calculated (amongst others, for amphetamine, painkillers, anti-depressants, benzodiazepine, cannabis, cocaine, opiates and zopiclone). A slight to medium increase in the risk of accident was observed for the use of most substances. Most of the studies which have evaluated the dose response relationship were able to confirm its existence. Effects of drug use on the risk of accidents from well-monitored studies tended to be smaller than in the less well-monitored studies.

Since 2003, the Statistical Report on Road Accidents published by the Federal Statistical Office has been providing information on whether operators of motor vehicles involved in accidents have been 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<sup>90</sup>. This also applies to cases where lack of fitness to drive could not be proven. The recommendations of the so-called "Critical Value Commission" (Grenzwertkommission) can serve as a basis for the limits of each substance. This would be 1 ng/ml for THC, 10 ng/ml for morphine, 75 ng/ml for BZE, 25 ng/ml for ecstasy, 25 ng/ml for MDE and 25 ng/ml for amphetamine (Burhoff 2006).

In 2013, there were a total of 291,105 police-registered accidents on German roads with injury to persons, with 444,637 vehicle operators involved (Table 9.1). Of these, 13,327 people involved in accidents (3.0%) were under the influence of alcohol and 1,350 (0.7%) were under the influence of "other intoxicating substances" (Statistisches Bundesamt 2014a). Thus, the downward trend, which had been apparent since 2003, continued once more (following a temporary increase from 2010 to 2011) in respect of the number of accidents with injuries to persons and the number of accidents under the influence of alcohol. The absolute number of accidents under the influence of other intoxicating substances fell slightly in 2013 compared to previous years. The proportion of persons involved in accidents who were under the influence of alcohol or other intoxicating substance fell from 2012 to 2013 (alcohol 2012: 3.0%; "other intoxicating substance" 2012: 0.3%). However, since drugs are more difficult to detect than alcohol, it should still be assumed that drug-related cases are under-represented in German road accident statistics involving intoxication.

<sup>90</sup> A list of these substances can be found here: [http://www.gesetze-im-internet.de/stvg/anlage\\_108.html](http://www.gesetze-im-internet.de/stvg/anlage_108.html) (last accessed: 04 August 2014).



Table 9.1 Drug use and road traffic accidents – human causes

Year	Accidents with damage to persons	Incorrect driving behaviour	Drivers under the influence of...	
			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
2012	299,637	362,993	14,380	1,393
2013	291,105	350,381	13,327	1,350

Statistisches Bundesamt 2014a.

There is a need for quick and reliable methods for rapid screening of drug-influenced drivers on the roadside by police (Musshoff et al. 2014). Although oral fluid may be a useful matrix for on-site testing of drivers under the influence of drugs, it is evident that oral fluid devices still show a lack of sensitivity (methamphetamine, benzodiazepines) and specificity (THC). Poor results for benzodiazepines may be explained by the small positive test number. Although the sensitivity for THC came out higher than compared to the literature, specificity is not yet satisfactory (only <90%). Furthermore, specificity was poor due to lowered cut-offs resulting in multiple false positive tests.

### Crime experienced by drug users themselves

Since 2005, the Hamburg Basic Documentation System BADO has been showing a stable share of approximately 60% of all clients who have had experience with physical violence (BADO e. V. 2013). As for sexual violence, this has been at or just over 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 (69.6%) stated that in the relevant period (2012) they had already been victims of physical violence and more than one in four had been victims of sexual violence (25.6%). Experience with sexual violence is least common in cannabis clients (15.0%). Experience with physical violence is also comparatively less prevalent among cannabis clients (56.8%) than in the overall sample.

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: 68.4%; males: 58.1%), and, to a much larger extent, to sexual violence. In 2012, over half (52.2%) of all female clients reported that they had fallen victim to sexual violence;

amongst male clients the percentage is 8.2%. Among women, opiate clients are the ones who are the most affected by crime; more than three quarters of them report experience with physical violence (78.1%) and a little less than two thirds experience with sexual violence (65.6%) at some point in their lives.

### 9.3 Prevention of drug-related crime

Apart from consistent law enforcement, a variety of measures for crime 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 for police crime prevention at the *Land* and federal government level. The goal of this programme is to inform the population, opinion leaders, media and other groups who are active in prevention about different forms of crime and possible ways of preventing them. This is done using, amongst other things, crime prevention PR-work and the development and publication of media, measures and concepts that support the local police offices in their prevention activities.

The PREMOS (Predictors, Moderators and Outcomes of Substitution Treatment) Study is a prospective, long-term study involving a sample, representative for Germany, of 2,694 opioid dependent patients (Soyka et al. 2012). Convictions and criminal behaviour were examined at the beginning (baseline) of the study and after 6 years of continuous opioid substitution treatment (OST). Indictments and convictions due to drug-related offences, crime related to procurement of drugs and violence offences fell in the 12 months prior to the follow-up. This suggests a significant and clinically relevant reduction in criminal behaviour of opioid dependent patients found in sustained OST.

### 9.4 Interventions in the criminal justice system

#### 9.4.1 Alternatives to prison

According to Sec. 63 and Sec. 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 (such as 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 (Sec. 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 towards standardising the definitions of limit values for “small quantities” in the *Laender*, in line with the requirements issued by the Federal Constitutional Court. Further details can be found in 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“, Sec. 35 BtMG).

The BMG funded study, “Medical rehabilitation of drug addicts under Sec. 35 BtMG (“Therapy not punishment”): Efficacy and Trends”, which was conducted in the Laender Hamburg, Schleswig-Holstein and North-Rhine Westphalia, was completed in April 2013. The results of the study show that housing drug addicted criminals in a withdrawal facility under Sec. 64 StGB increased enormously from 2001 to 2011. It became clear that after the end of a rehabilitation measure, drug addicts were increasingly subject to probation as per Sec. 35, 36 BtMG. A regular completion of the therapy was achieved by 50% of the Sec. 35 group, thus this group was more successful than the group without this judicial order, from which 43.0% completed the therapy normally. A detailed presentation of the study can be found in the REITOX Report 2013.

#### 9.4.2 Other interventions in the criminal justice system

Possibilities exist, under certain circumstances, to cease criminal proceedings at all levels. Often, a few hours of community service is the first response of authorities in dealing with problematic behaviour in connection with drugs.

There is a series of other options available to curb drug crime as well as 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>91</sup>.

At public prosecution level, it is possible to stop the prosecution of crimes committed by adolescents<sup>92</sup> and young adults<sup>93</sup>, who fall under the juvenile law or to discontinue proceedings in respect of the Juvenile Offenders Act (JGG, Sec. 45 and 47). This is mostly applied only in cases involving small quantities of cannabis.

In nearly all Laender, local prevention measures, such as the widely spread programme “Early intervention in first-offence drug users – FreD” are used as a way of intervening without starting immediate criminal proceedings. 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 of 2007 and 2008).

#### 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. Firstly, 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

<sup>91</sup> 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.

<sup>92</sup> See footnote 89.

<sup>93</sup> See footnote 88.

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 2013, there were a total of 7,555 persons (13.4% of all inmates) serving time in prison institutions as a result of violations of the Federal Narcotics Act (BtMG). 14.9% (473) of imprisoned women and 3.5% (194) of imprisoned youths were serving sentences due to offences against the BtMG. From 2006 to 2013 (total: 64,512; BtMG: 9,579), the total number of inmates increased by 12.3% whilst the number of inmates serving sentences due to BtMG offences decreased by 21.1% (Table 9.2). The number of inmates convicted for BtMG offences as a percentage of all inmates has been falling slightly since 2008, both for adults as well as for juveniles and adolescents (in particular male inmates) (Statistisches Bundesamt 2014e).

Table 9.2 Imprisoned persons and narcotics offences

		Prisoners and persons in protective custody			Custodial sentences for adults		Juvenile punishments		Custodial sentences
		Total	Males	Females	Males	Females	Males	Females	
2013	Inmate N	56,562	53,378	3,184	47,609	2,997	5,281	184	491
	BtMG N	7,555	7,082	473	6,902	459	180	14	0
	BtMG%	13.4	13.3	14.9	14.5	15.3	3.4	7.6	0.0
2012	BtMG%	14.0	13.9	15.9	15.2	16.5	3.6	7.5	0.2
2011	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 2014e.

### 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" (Sec. 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 (Sec. 125a of the German Constitution (GG)), which in part cite the German

Prison Law. The German Prison Law still applies in 6 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), Hesse (HStVollzG, since 28 June 2010), Brandenburg (BbgJVollzG, since 1 June 2013), Mecklenburg-Western Pomerania (StVollzG M-V, since 1 June 2013), Rhineland-Palatinate (LJVollzG, since 1 June 2013), Saxony (SächsStVollzG, since 1 June 2013) and in the Saarland (SLStVollzG, since 1 June 2013). 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 provision of services in the area of health care is based on the Federal Social Code (SGB V) in all five of the German Laender with their own prison laws, for example<sup>94</sup>.

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 (Sec. 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 (Sec. 58 StVollzG). The provisions of Social Code V apply to the type and scope of health services (Sec. 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 (Sec. 26, section 2 HStVollzG). In addition, in Lower Saxony, Hesse and Baden-Wuerttemberg preventative measures are also explicitly mentioned. In Lower Saxony, the right of prisoners to vaccinations (Sec. 57 (1) Lower Saxony Prison Act) is codified in law. In Hesse and Baden-Wuerttemberg the need to inform inmates about healthy living habits is codified (Sec. 23, section 1 HStVollzG and Sec. 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 (Sec. 4 HStVollzG and Sec. 64 JVollzGB).

In a comprehensive analysis by the Associations of Addiction Professionals for 2009, it was shown that a large number of rehabilitation patients in addiction treatment who have been released from prison (39% alcohol and 77% drugs) have no health insurance at the beginning of the treatment and that this can only be obtained in some cases after several weeks (Drogen- und Suchtrat 2013). To solve this problem, the temporal, local and specialist competence of the respective institutions (job centres, health insurance providers) must be

---

<sup>94</sup> 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.

clarified at the earliest possible opportunity and without excessive bureaucracy. That can usually only be achieved if respective enquiries or applications are made prior to the end of the prison sentence. Through the social service of the prison, a clarification of the likely place of residence of the affected person should take place in good time (around 3 months) prior to the release date, by interviewing the person. The local job centre closest to the prospective place of residence can then undertake a determination of capacity for employment as per Sec. 8 SGB II, prior to release from prison in order to avoid delays in the clarification of social rights issues in connection with the start of rehabilitation measures.

### **Implementation of the principle of equivalence**

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 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 heading, "Equivalence of care", that health policy in prisons complies with national health policy and is integrated into 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**

In a systematic review by Hedrich et al. (2012) an overview was provided on the effectiveness of sustained treatments (opioid maintenance treatment, OMT) in the prison setting. Results show that the benefits of OMT in the prison setting are comparable to those in the general public. OMT represents a possibility to motivate problem opioid users to submit themselves for treatment in order to reduce illegal opioid use and risky behaviour in prison and possibly also to minimise overdoses after release from prison. If there is a connection with a treatment programme which is close to the community, OMT in prison also facilitates the continuity of treatment and helps with the achievement of long-term, positive effects.

The DSHS has kept a series of tables on ambulatory counselling during prison sentences since 2008 (Braun et al. 2014e). As this series of tables only comprises thirteen facilities for the reporting year 2013 (2012: 12 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. Furthermore, no information whatsoever is available on the mechanisms for selecting participation, nor can any conclusions be drawn regarding the

representativeness of the participating prisons. The average age of men with illegal drug problems who made use of outpatient aid in prison in 2013 was 30.2 (N= 1,171) (2012: 29.3), while the average for women was 37.5 (N=2) (2012: 29.8). It is particularly noteworthy that 50.0% (2012: 56.3%) 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 25.3% (2012: 24.9%). In prison the percentage of men whose main diagnosis (MD) is stimulants (45.6%) and who are undergoing treatment is significantly higher than among persons who undergo outpatient treatment outside of prisons (c. f. Table 5.2). In contrast to that, treatment in prison for men due to hypnotics/sedatives (1.2%) is of a similar level to that outside prison. Amongst imprisoned women, the number of documented cases is too low to draw comparisons with outpatient treatment outside prison (Table 9.3).

Table 9.3 Outpatient treatment of drug problems in prisons

Main diagnosis	Males		Females		Total	
	N	%	N	%	N	%
Opioids	296	25.3	1	50.0	297	25.4
Cocaine	109	9.3	0	0.0	109	9.3
Stimulants	533	45.6	0	0.0	533	45.5
Sedatives/Hypnotics	14	1.2	0	0.0	14	1.2
Hallucinogens	6	0.5	0	0.0	6	0.5
Cannabinoids	207	17.7	1	50.0	208	17.8
Multiple/other substances	4	0.3	0	0.0	4	0.3
Total	1,169	100.0	2	100.0	1,171	100.0

Braun et al. 2014e.

### 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 2011.

### 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 funding 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 (Sec. 74 Prison Law in connection with Sec. 15 Prison Law) with a view to promoting reintegration into society after prison. In order to reach this goal prison services are to cooperate at an inter-departmental level (Sec. 154 Prison Law).

Moreover, providers of social security services should work together with groups which have shared goals and the other organisations involved, with the aim of mutually complementing each others' work (Sec. 68 (3) Social Code XII and Sec. 16 (2) Social Code II). Corresponding strategies and measures are developed and implemented under the term "transition management". On the one hand, an attempt is made 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 opportunities for professional qualifications and training as well as job placement. Although from a historic viewpoint there have been corresponding efforts dating back up to 150 years with the introduction of "assistance for offenders" and the introduction of the probation service in the 1950s, there is still a great need for further development in the discussion and implementation of transition management.

It is currently a challenge for addiction support services to offer people at risk of addiction or people suffering from addiction an adequate service upon release from prison (fdr 2013). For this reason, the Professional Association of Drug Help Organisations (fdr) issued a recommendation on transition management which contained, amongst other things, the following elements:

- Improvement of addiction medicine care situation, including substitution treatment in prison, drug emergency training sessions
- Participation also for inmates suffering from addiction in internal prison services
- Close support in transition and networking with services of addiction support system and ex-offender support, e.g. arrangement of assisted living, outpatient doctor services etc.
- Creation of outpatient rehabilitation concurrently with imprisonment, beginning around 6 months prior to release in a treatment centre outside prison and continued after release.



## 10 Drug Markets

### 10.1 Overview

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. Obtaining a real understanding 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 from 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, this data is regularly collected by 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. Frankfurt MoSyD). 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 and sea ports, at times large quantities of narcotic drugs are seized. In this context, one should highlight that in a Europe more or less free of internal border controls, "internal European" border seizures are rather low. 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 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. Based on an agreement made at European level on the initiative of the EMCDDA, data collection for the latter has been differentiated since 2010 into

trade volumes from 0.5 to < 1.5 kg (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). To ensure the price survey is as representative as possible, data is 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 compile the data from the testing points and any further current information in a standardised table and transfer the current market prices of narcotics in their *Land* to the BKA once a year. Based on this data, the BKA calculates the average narcotics prices for Germany.

The drug prices established in this way can only be interpreted as rough approximate values, particularly since differences in purity and quality categories are not taken into account. A further difficulty is the fact that prices are only known in connection with a few incidents, so that random effects may influence these figures.

In 2010, the EMCDDA published a manual with guidelines on data collection for 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 and the Netherlands for example, expert groups from the health sector and criminal prosecution, or from various social “scenes”, give estimates of current narcotics prices (EMCDDA 2010).

The trend scouts and scene surveys conducted in the context 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 ( $\geq$  1,000g). 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 maximisation. Apart from the data on active ingredients, the most frequently found additives are reported. Insofar as these are pharmacologically effective, they are categorised 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

In the REITOX Report 2012, data from the DAS 2011 was presented on the subjective availability and places of availability of cannabis as well as trends in the ease of cannabis availability amongst 12 to 25 year olds and young adults.

#### **Trend Scout Panel of the Monitoring System of Drug Trends (MoSyD) in Frankfurt am Main**

Information on the (subjective) availability of illegal drugs in various party scenes can be taken from the Trend Scout Panel of the Monitoring System of Drug Trends (MoSyD) in Frankfurt am Main (Werse et al. 2014).

Cannabis remains the most widely used illegal drug, which continues to be rated as very readily available. The majority of users still prefer marijuana over hashish. Hash is viewed in some scenes as lower quality or impure. In the youth scene, the glorification of the especially potent grass variety “Haze” by rap musicians plays a big role in the choice of that drug. At the same time, a low availability of hash is assumed. In the scenes which traditionally had a particular affinity with cannabis, namely reggae and hip hop, a real rejection has developed in some against “over bred” grass, whose psychedelic effect is perceived as too extreme. A clear image enhancement has taken place in the past year and cannabis use is seen as less problematic than before. This view is taking hold slowly but surely across the whole population. Many consider the drug to be less dangerous than alcohol or tobacco. Due to the increasing social acceptance, users are confident to smoke cannabis more openly than before.

Speed remains the most important synthetic drug across all of the scenes studied. On average, less than one in five has consumed speed at least occasionally in the past year. In the scenes related to “electronic dance music” it was over 50%. In the party scenes, speed is taken in particular for performance enhancement and increased willingness to communicate but also to mitigate the undesired effects of all other drugs (in particular alcohol and ecstasy/MDMA). Speed is also partly taken on working days, primarily in order to get “fit for work” or other responsibilities between the weekends of constant partying. Speed continues to be mainly consumed nasally. A high risk awareness is present insofar as possible dangers of infection are concerned. Many users will only use their own snorting tube. In the techno scene, oral use is popular with some, in order to avoid harm to the nasal mucous membrane or because irreversible harm has already been caused. As far as crystal meth or methamphetamine is concerned, aside from rumours or stories of accidental use (for example if inferior quality speed was cut with small amounts of methamphetamine), there were no indications from the different scenes in the reporting year of dealing or use of this substance.

The popularity of ecstasy or MDMA is still limited to the scenes related to “electronic dance music”. In those scenes, there was an increase in the number of users in 2013. The trend

scouts assume that around half of all members of the scene last year took ecstasy or MDMA at least a few times; the availability is seen as “excellent”. Outside these environments, there was also a slight increase observed in the punk rock scene in the scope of the establishment of parties with electronic music. The supply and popularity of ecstasy tablets are still higher than those for crystalline MDMA. Ecstasy tablets with particularly high active substance content (up to 200 mg) have increasingly led to involuntary ingestion of large amounts of MDMA which has led to a noticeable increase in the emergence of undesired side effects.

As far as the presumed number of cocaine users is concerned, there was no difference in this reporting year to the values in 2012. In 2013, it was estimated that on average one in ten had used cocaine at least occasionally. In the “electronic dance music” scenes, this rose to one in four. The availability overall is overwhelmingly stated as “readily available” or “available with little effort”. In almost all scenes, cocaine is seen as a prestige and status drug. In parts of the techno scene it is therefore rather frowned upon. In some situations, however, cocaine is consumed participatively, for example because no more speed is available. A fixed group of users exists in the underground party scene, where cocaine has become the favourite drug of left-wing football fans, who consider it to be “more healthy” than speed. In the tech-house scene, cocaine has the highest estimated yearly prevalence (over 75%). For some of the members of the scene, obtaining and taking cocaine was one of the priorities at parties.

Hallucinogens were consumed overall by no more than 10% in 2013. LSD and/or psilocybin have a small group of fans in various scenes. In most scenes, the consumption took place in private settings. Use as a party drug is only known in the techno and goa scenes. In the goa scene, the use is popular for the purpose of having mystical or spiritual experiences. A new use of LSD has become known from the hip hop scene: some graffiti artists use LSD as a creative stimulus when designing their works. As the market is relatively small, very different statements were made by the different trend scouts on availability.

The assumption made in 2012 of a further spread of ketamine use to scenes outside the area of “electronic dance music” was not confirmed in the reporting year. In the relevant scenes, around one in ten people who belongs to that scene had consumed ketamine at least several times in 2013. Four trend scouts spoke of a continuing trend or even an increasing popularity - only in the tech-house scene did use fall. Availability improved in comparison to the previous year.

The use of GHB/GBL (“liquid ecstasy”, “knockout drops”) only retains any popularity within the gay party and club scene with low prevalence; elsewhere, the substance has become almost meaningless, although rumours continue to circulate in several scenes about its misuse as knockout drops. In the gay scene, the liquid narcotic is mainly used as a sex drug due to the aphrodisiac and numbing effect which it has in small doses - primarily this would be in the fetish scene for the purpose of pain avoidance during extreme sex practices. GBL is purchased by individuals through internet shops and then passed on to friends and acquaintances. Profit oriented dealing apparently does not happen.

A current phenomenon is represented by so-called research chemicals (RCs), which are also known as “legal highs”. According to the ECJ judgement of 10 July 2014, the German Medicinal Products Act (AMG) cannot be used without further reasons to prohibit the trade with so-called “legal highs”. “RC” is the abbreviation used in circles of experimental drug users for synthetic psychoactive substances of different substance categories (e.g. piperazine, cathinone or cannabinomimetic substances) that have not (yet) been brought within the scope of the BtMG and that have some similar effects to better known drugs which are outlawed under the BtMG (e.g. amphetamines, ecstasy or cannabis). These substances are, on the one hand, (at least allegedly) sold as a pure substance under their actual chemical name via online shops. On the other hand, they are packaged and disguised as “bath salts”, “fertiliser tablets”, “air fresheners” or the like (without the specific substance being indicated) and sold by online traders or even by some bricks and mortar head shops.

According to the trend scout panel (Werse et al. 2014), no further popularity of so-called “legal high” products would be expected. Almost all trend scouts estimated the prevalence rate for herbal smoke blends and so-called “bath salts” close to 0%. However, research chemicals continue to find a small group of users in scenes related to “electronic dance music”. The use of 3-FA, a derivative of amphetamine and 3-MMC, a mephedrone-like stimulant was observed by one trend scout from the techno scene. In both cases, however, the use was limited to a period of a few months and to a relatively closed group of friends of particularly drug-experienced members of the scene. Another techno scene expert sees the reason for the emergence of these substances in the prohibition of the substances methylone and 6-APB (“Benzo Fury”) which had previously been popular in these circles. These substances have an uplifting and/or empathogen effect and are therefore suitable as party drugs. Research chemicals, which have psychedelic effects, however, are only used by a small group of so-called psychonauts who often associate an experimental interest with that, in the sense of experimenting on their own bodies. In particular, these persons experimented in the past year with not yet banned phenethylamines of the 2C series and various tryptamines.

### 10.2.2 Drugs origin: national production versus imported

The cultivation of cannabis in open-air areas and indoor plantations continues unabated. Whilst the number of seized cannabis plantations<sup>95</sup> fell slightly to 782 (-3%), the total number of plants seized within the plantations significantly increased by 10% to 2013, to a total of 107,766 plants.

The number of indoor cannabis plantations seized rose in 2013 to 691 (+4%), which was due to the considerable increase in large plantations to 184 (+22%) and professional plantations

---

<sup>95</sup> The definition of “cannabis plantation” was any site with a cultivation capacity of 20 plants or more.

to 28 (+22%). In contrast, the number of small plantations seized, at 479, fell (-2%)<sup>96</sup>.

Whilst the number of plants seized in small indoor plantations, at 15,565 plants, was 9% higher than the previous year, the number seized in large plantations rose to 47,007 (+40%) and in professional plantations to 31,199 (+84%).

In addition to indoor cannabis plantations, 91 outdoor cannabis plantations were seized (-37%). That was due to a considerable fall in the number of seizures of plantations of all sizes: small plantations: 85 (-31%), large plantations: 6 (-67%) and no professional plantations.

The quantity of plants seized in small outdoor plantations fell to 1,932 (-45%) and in large plantations also fell to 1,932 (-45%).

### 10.3 Seizures

Officers from the narcotics division of the Bavarian State Office of Criminal Investigation (BLKA) cracked an international drug ring in July 2013, which had operated in the encrypted “dark net” (heise online 2013). In total, three men and one woman between 24 and 28 years old were arrested in the Bavarian town of Deggendorf, in Berlin and in Brandenburg an der Havel. During their searches, the investigators seized more than 17 kg of amphetamine as well as around 700,000 euros in cash as well as several vehicles, accounts and property.

#### 10.3.1 Quantities and numbers of seizures of all illicit drugs

Comparing the years 2012 and 2013, the seized quantities of ecstasy (+53.5%), psychoactive mushrooms (+16.5%), amphetamine (+12.6%), heroin (+11.8%), cocaine (+4.5%) and crystalline methamphetamine (crystal; +2.8%) increased whilst the seized quantities of khat (-49.6%), hashish (-25.8%), crack (-20.0%), LSD (-3.1%) and marijuana (-2.3%) fell. Table 10.1 provides an overview of the quantities of illegal drugs seized in Germany between 2011 and 2013.

---

<sup>96</sup> The definition of “professional plantation” was any site with a cultivation capacity of 1,000 cannabis plants or more, “large plantation” was a site with a capacity of 100 to 999 plants and “small plantation” referred to a site with a capacity of 20 to 99 plants. Cultivation capacity should not be confused with the number of plants found (e.g. if harvesting has already occurred).

Table 10.1 Quantity of illegal drugs seized in Germany, 2011 to 2013

Substance	2011	2012	2013	Change 2013 vs. 2012
Heroin	497.8 kg	241.7 kg	270.2 kg	+11.8%
Cocaine	1,940.6 kg	1,258.4 kg	1,314.5 kg	+4.5%
Crack	2.8 kg	0.5 kg	0.4 kg	-20.0%
Amphetamine	1,368.4 kg	1,120.6 kg	1,261.8 kg	+12.6%
Crystal	40.0 kg	75.2 kg	77.3 kg	+2.8%
Ecstasy	484,992 CU	313,179 CU	480,839 CU	+53.5%
Hashish	1,747.5 kg	2,385.7 kg	1,769.7 kg	-25.8%
Marijuana	3,957.4 kg	4,942.0 kg	4,827.1 kg	-2.3%
LSD	25,978 tr.	36,988 tr.	35,823 tr.	-3.1%
Khat	45,913.8 kg	45,270.1 kg	22,794.7 kg	-49.6%
Mushrooms	13.2 kg	17.3 kg	20.1 kg	+16.5%

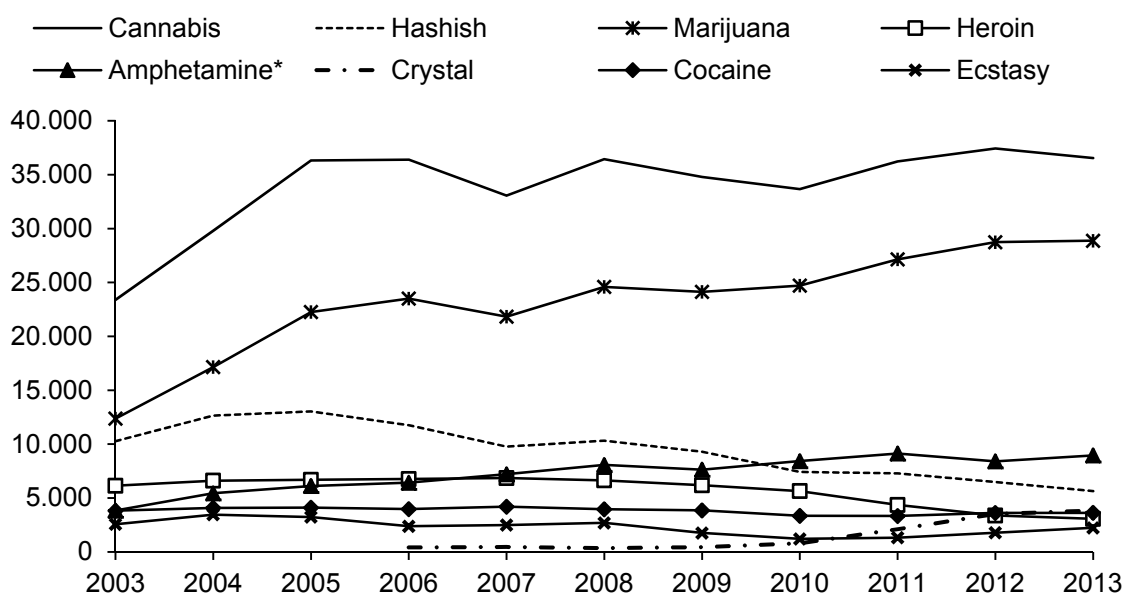
BKA 2014b.

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 2013 (56,885 cases) was 1.2% lower than the equivalent figure for 2012 (57,519 cases<sup>97</sup>) and thus remained stable in comparison to the previous year. The most important factors for the stable overall number of seizures are firstly the increased numbers of seizures of crystal (+9.5%), ecstasy (+25.0%), LSD (+10.4%) and amphetamine (+6.5%) and secondly to the reduction in the number of seizures of crack (-78.4%)<sup>98</sup>, heroin (-9.3%) and cannabis (-2.4%)<sup>99</sup> (BKA 2014b).

<sup>97</sup> The number of cases included multiple mentions; the total number of seizures is thus lower, due to numerous cases in which several types of drugs were seized.

<sup>98</sup> The considerable decrease in the number of cases of crack is due to an altered method of recording in the FDR.

<sup>99</sup> Case numbers for cannabis relate to seizures of hash, marijuana and cannabis plants.



\* Seizures of methamphetamine are also included in the category "Amphetamines". From 2006, however, data on seizures of crystal has been collected separately.

BKA 2014b.

Figure 10.1 Number of seizures of Narcotic drugs in the Federal Republic of Germany from 2003 to 2013

When looking at the seized quantities and the number of seizures, one can see that figures have increased considerably since 2000 for amphetamines (quantity: +365%; number of cases: +140%) and declined for heroin (-66% and -62% respectively) and ecstasy (-71% and -52%) (Table 10.2). The number of cases for cocaine in 2013 fell, in comparison to 2000 levels, by 25%, whilst the volume of seizures increased by 44%. For cannabis, these numbers were in reverse: For an increased number of cases (+16%), the volume of seizures fell by 54%<sup>100</sup> (BKA 2014b).

Across Germany, the crystal problem is still focused primarily on Saxony and Bavaria. Despite the decline in the number of cases by 15.4%, there was a considerable increase in seizures (+151.8%). That is, amongst other things, due to one individual seizure of around 20kg at Munich airport. This shipment was not destined for the German market. If one subtracts this from the total volume of seizures, the volume of seizures is roughly the same as that in 2012.

<sup>100</sup> Seizure volumes in the case of cannabis are related to seizures of hash and marijuana.



Table 10.2 Changes in the number of seizures and quantity seized

	2013 vs.	Heroin	Cocaine	Amphetamines	Crystal	Ecstasy	Cannabis*	Mushrooms	Khat
Cases	2012	-9%	+0%	+7%	+10%	+25%	-2%	+12%	-17%
Quantity	2012	+12%	+4%	+13%	+3%	+54%	+9%	+16%	-50%
Cases	2000	-62%	-25%	+224%**		-52%	+16%		
Quantity	2000	-66%	+44%	+394%**		-71%	+188%		

Note: Increases >10% are marked by framed fields and decreases >10% by shaded fields.

\* The category "Cannabis" includes cannabis resin, herbal cannabis and cannabis plants.

\*\* Amphetamine and crystal have only been separately recorded since 2006, the reverse comparison is based on the sum of the two categories.

BKA 2014b.

In 2013, in 2,026 cases (2012: 2,204) 107,766 cannabis plants (2012: 97,829) were seized (Table 10.3), which constitutes a substantial rise in the number of seized plants (+10.2%), for a simultaneous decline in the number of cases (-8.1%). The quantity seized thus increase once more, after a low in 2012, the number of cases has fallen once more since a peak in 2012. The stable number of individual seizures of marijuana (see 10.3.1) indicates, for a simultaneous fall in the number of cases of hash, an increasing preference for this type of drug compared to a reduction for hashish (BKA 2014b).

Table 10.3 Seizures of cannabis plants

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Quantity <sup>1)</sup>	93,936	190,241	135,252	121,663	127,718	101,549	133,650	97,829	107,766
Cases	1,035	1,121	1,463	1,526	1,359	1,517	1,804	2,204	2,026

1) In units.

BKA 2014b.

### 10.3.2 Quantities and numbers of seizures of precursor chemicals used in the manufacture of illicit drugs

In addition to the base materials and chemicals seized in illegal drug laboratories (see 10.3.3), in 2013 4,500 kg of  $\alpha$ -phenylacetonitrile (APAAN), 4 kg of chloroephedrine, 0.84 kg ephedrine, 4,034 units of ephedrine in tablet form, 137 kg PMK glycidate and 1 l hydrochloric acid which were obviously intended for the illegal production of narcotics, were seized (BKA 2014a).

### 10.3.3 Number of illegal laboratories and other production sites

In 2013, 20 illegal drug laboratories were discovered, which corresponds to a slight decrease in comparison with the previous year (24 laboratories). These comprised 11 laboratories for the production of amphetamine and nine for the synthesis of methamphetamine.

Overall, the narcotic substances amphetamine (157 kg) and methamphetamine (0.26 kg) were seized in the detected laboratories as well as the base materials hydrochloric acid and sulphuric acid (14 l and 48 l), acetone (12 l), ethyl ether (0.1 l), benzyl methyl ketone (BMK; 0.35 l), methyl ethyl ketone (0.7 l), toluol (20 l), potassium permanganate (1.4 kg) and pseudoephedrine in tablet form (78 tablets). In addition, the chemicals benzaldehyde (25 l), nitroethane (13 l) and (red) phosphorus (1.2 kg), which are significant for the production of narcotic drugs, were found (BKA 2014a).

An overview of the most recent seizures is contained in standard table 13.

## 10.4 Price / purity

### 10.4.1 Prices of illicit drugs at retail level

As far as average drug prices in minor trafficking are concerned (Table 10.4) there were noteworthy changes were observed from 2012 to 2013 only for amphetamine (-18%), heroin (+14%) and ecstasy (+12%). The prices for cocaine (+6%), crystal (+6%), marijuana (+3%), hashish (+7%) and LSD (-4%) remained almost unchanged. The average price for crack increased significantly between 2012 and 2013 (+32.5%).

After an international expert group led by the EMCDDA initiated a harmonisation of the data collection procedures for wholesale drug prices in Europe, wholesale quantities<sup>101</sup> were divided into the categories 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 and implemented by the BKA. As a result, it is at least possible to compare data since 2011.

In comparison to 2012, the prices for wholesale heroin increased in 2013 both in quantities of 0.5 to < 1.5 kg and in quantities from 1.5 to < 10 kg. Increases were also seen in the prices for marijuana in quantities of 0.5 to < 1.5 kg, cocaine in quantities of 1.5 to < 10 kg and amphetamine in quantities of 10 to < 100 kg (price information based on very small amounts of data are marked with an asterisk in Table 10.4). All other wholesale prices either remained constant in comparison to the previous year or decreased.

An overview of the current drug prices can be found in standard table 16.

---

<sup>101</sup> 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 21).

Table 10.4 Prices of various drugs 2012 - 2013 (all prices in €)

		Heroin	Cocaine	Crack	Ecstasy	Amphetamines	Crystal	Marijuana	Hashish	LSD
Small quantities <sup>1)</sup>										
	2013	49.1	68.7	77.5*	7.9	11.6	79.6	9.4	8.0	10.5
	2012	42.9	64.9	58.5 <sup>3)</sup>	7.0	14.2	75.3	9.1	7.5	10.9
<b>Change</b>		+14%	+6%	+32.5%	+13%	-18%	+6%	+3%	+7%	-4%
Larger quantities <sup>2)</sup>										
0.5 to <1.5kg	2013	30,917	36,500	--	2,664	3,944	31,733*	4,700	3,088	--
(500 to <1,500 CU)	2012	27,444	38,786	--	2,642	4,052	33,750*	4,488	2,942	--
1.5 to <10kg	2013	21,250*	35,250*	--	1,567*	2,500*	--	3,700	2,650	--
(1,500- <10,000 CU)	2012	21,000*	30,900	--	2,150	3,146	--	4,120	2,625	--
10 to <100 kg	2013	--	35,000**	--	--	2,700*	--	3,500*	2,100*	--
(10,000-100,000 CU)	2012	12,000*	--	--	--	1,500*	--	3,500*	2,700*	--

1) Price per gram.

\* Median value is based on a very small data basis (less than five Laender).

2) Price per kilogram.

\*\* Value based on supply from only one Land.

3) Value is from 2011.

Bundeskriminalamt SO 21, 2014, personal reports.

According to the Trend Scout Panel of the MoSyD annual report, Frankfurt (Werse et al. 2014) the average prices for cannabis products had risen again compared to the previous year to 9.50 € for marijuana (2012: 8.60 €) and 8.50 € for hashish (2012: 7.00 €). From the scenes for which a particularly high hash price (10 € per gram) was stated, there were several reports of quality improvements. In 2013, hash was primarily smoked if there is not enough money available for "haze", which can cost up to 14 € per gram. Despite a constant per gram price of speed (around 10 €), speed is subject to considerable fluctuations in quality. The majority of users are well aware that they are sometimes consuming goods which have been cut. Once more, the quality of MDMA "pills" improved over the last year, connected with a further average price increase (8.50 € per tablet / 2012: 8.00 €). Overall, the price and quality of cocaine was subject to stark fluctuations. The median price per gram was 68 € (2012: 65 €). The price of ketamine was, both for a gram of crystalline powder and for an ampule containing the liquid solution, around 40 €. The dried ampule contents do only garner around half a gram, however most of the ampules trafficked contain the preparation "ketanest", which contains, as its active substance S-ketamine: a ketamine variety developed for human medicine, whose anaesthetic effect is around twice as high as the standard ketamine racemate, which is produced for the black market or for veterinary medicine. In all known cases, new psychoactive substances (NPS) were ordered by individual persons on the internet and synthesised themselves before being distributed in their circle of friends and acquaintances free of charge or at cost price. Dealing, in the sense of trafficking for profit, did not occur in respect of this drug.

### 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 of consumable marijuana from the proper cultivation of a full-grown cannabis plant. In North Rhine-Westphalia, the average value, from about 50 cannabis plantations with plants ready for harvesting or harvested plants, has been a little over 40 g of consumable, dried marijuana. 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 (2013: 9.40 €/g) or by the wholesale price respectively (2013: 3,500 €/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, 1,000 cannabis plants yield profits ranging between €225,500 and €366,000 at retail level and between €77,500 and €130,000 at wholesale level.

For the year 2013 this means a non-realised profit from 107,766 plants of between €8.4 million and €14.0 million at the wholesale level and between €24.2 million and €39.4 million at the retail level (Bundeskriminalamt, SO 21 and own calculations).

#### 10.4.2 Purity / Potency of illicit drugs<sup>102</sup>

##### Composition of illicit drugs

##### *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 2003.

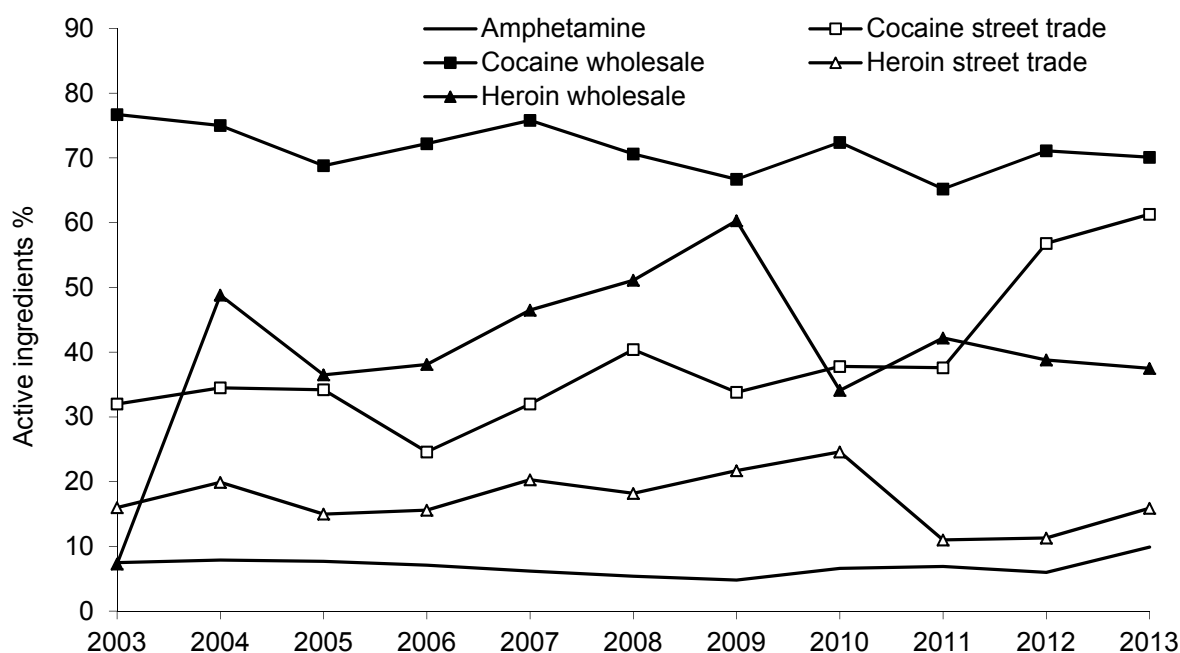
In 2013, a total of 2,863 (2012: 2,368) amphetamine samples were tested for their potency. As the potency of amphetamine does not depend on the size of the seized amount, no differentiation is drawn between street level dealing and the wholesale level. The most common ingredient in the samples tested was caffeine; the most common cutting agent was lactose. The active ingredient content of amphetamine has, after falling between 2011 (6.9%) and 2012 (6.0%), once more considerably increased (9.9%).

<sup>102</sup> The data on the contents of active ingredient comes from the forensic laboratories of the BKA (KT 34). The interpretation of the data was performed by the DBDD.

Cocaine comes onto the market primarily as hydrochloride. Cocaine hydrochloride and cocaine base are, however, shown together here. Overall in 2013, 2,801 cocaine samples were tested (2012: 2,683). In 2013, the active ingredient content of wholesale cocaine, at 70.1%, was within the range of the past ten years (around 70%, +/- 5%). The active ingredient content on the street, after an increase of almost 20 percent between 2011 (37.6%) and 2012 (56.8%), reached 61.3% in 2013 - the highest value by some margin in the past ten years. As in previous years, additives detected were primarily tetramisole/levamisole, phenacetin and lidocaine and cutting agent, lactose.

For 2013, 2,015 (2012: 2,102) 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. The active ingredient content of heroin on the street has, after it had halved from 2010 to 2011, risen once again from 2012 (11.3%) to 2013 (15.9%). In the wholesale trade, the active ingredient content of heroin fluctuated greatly: between 2005 (36.5%) and 2009 (60.3%), the purity of heroin almost doubled. After falling sharply in 2010 (34.1%) the active ingredient content increased slightly in 2011 to 42.2% before falling continuously since then (2013: 37.5%).

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



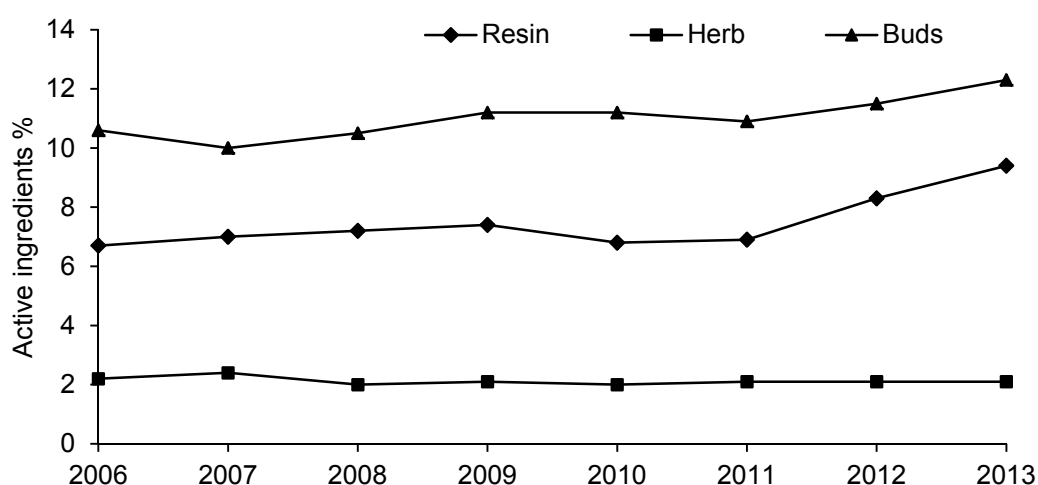
Bundeskriminalamt KT 34, 2014.

Figure 10.2 Amount of active ingredients in heroin, cocaine and amphetamines 2003-2013

### **Cannabis**

Since 2006, all participating laboratories have differentiated in the examination of marijuana between 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>103</sup> was achieved in 2013 on the basis of the reported data sets on 2,821 samples of cannabis plant, 6,629 samples with buds and 2,349 samples of hashish resin by the laboratories of BKA, LKÄ and the border authorities. The flower buds had a potency of 12.3% in 2013 (2012: 11.5%), the cannabis plant had a potency of 2.1% (2012: 2.1%). Since 2006, flower buds and cannabis plant have been recorded separately. The active substance content of flower buds has continuously increased since a low point in 2007 (10.0%) (2013: 12.3%), the respective content of cannabis plant has not changed significantly since 2008 (2.0%) (2013: 2.1%). Cannabis resin demonstrated an active substance content of 9.4% and has therefore risen beyond the previous peak value of 2003 (8.4%) (Figure 10.3).



Bundeskriminalamt KT 34, 2014.

Figure 10.3 Amount of active ingredient in cannabis 2006-2013

### Ecstasy

In 2013, the potency was reported for a total of 157,375 tablets and capsules (2012: 413,010) – referred to in the following as a consumption unit (CU). 99.2% (i.e. 156,065) of all consumption units (2012: 94.9%) 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 92.6%, followed by amphetamine (6.6%), 1-(3-chlorophenyl)-piperazine (mCPP) (0.7%) as well as MDA and MDE (each <0.1%).

Table 10.5 shows the potency calculated as a base for the individual psychoactive substances in single substance preparations. The median active ingredient content of MDMA since 2008/2009 (51 and 50 mg/CU respectively) increased continuously every year thereafter, reaching 91 mg/CU in 2013. The cutting agents most commonly reported in mono and combination preparations were, as in previous years, lactose, cellulose and caffeine.

<sup>103</sup> In the case of the reported active ingredient content, the tetrahydrocannabinol (THC) additionally created through heat is also taken into account.

Table 10.5 Amount of active ingredients in ecstasy in mg/CU

Active ingredient	Quantity				Median			
	2010	2011	2012	2013	2010	2011	2012	2013
MDMA	0.1-140	6-242	1-216	0.3-243	58	73	83	91
Amphetamine	0.3-21	0.4-54	2-11	0.5-92	3	5	5	9.6
Methamphetamine	1.7-33	7-14	11-21	-	5	12	12	-
m-CPP 1(-3-Chlor-phenyl)-piperazine	0.1-100	0.2-39	5-46	0.7-33	30	29	21	8.5

Note: Amounts of active ingredients were calculated as base.

Bundeskriminalamt KT 34, 2014, personal reports.





## PART B: BIBLIOGRAPHY AND ANNEXES

### 11 Bibliography

#### 11.1 Literature

- ABDA (Bundesvereinigung Deutscher Apothekerverbände) (2013). Modellprojekt Ambulanter Entzug Benzodiazepin-abhängiger Patienten in Zusammenarbeit von Apotheker und Hausarzt, Berlin.
- Aden, A., Stolle, M., & Thomasius, R. (2011). Cannabisbezogene Störungen bei Jugendlichen und jungen Erwachsenen - Diagnostik, Komorbidität und Behandlung. Sucht **57** (3) 215-230.
- aerzteblatt.de (2013a). Hepatitis C: Teure Heilung in Sicht [online]. Available: <http://www.aerzteblatt.de/nachrichten/56929> [accessed: 29-08-2014].
- aerzteblatt.de (2013b). Aids-Hilfe fordert Erhalt des Berliner Schnelltestangebots [online]. Available: <http://www.aerzteblatt.de/nachrichten/55313/Aids-Hilfe-fordert-Erhalt-des-Berliner-Schnelltestangebots> [accessed: 11-08-2014].
- aerzteblatt.de (2014). Hepatitis-C-Patienten oft unterversorgt [online]. Available: <http://www.aerzteblatt.de/nachrichten/57498>
- Aktionsbündnis "Hepatitis und Drogengebrauch", Deutsche Leberhilfe e.V., & Deutsche Leberstiftung (2013). Aktionsplan für eine nationale Strategie gegen Virushepatitis in Deutschland. Aktionsbündnis "Hepatitis und Drogengebrauch", Deutsche Leberhilfe e.V., Deutsche Leberstiftung, Berlin, Hannover.
- akzept e.V. Bundesverband, Deutsche AIDS-Hilfe e.V., & JES-Bundesverband (2014). Alternativer Sucht- und Drogenbericht 2014. Frankfurt, Berlin.
- APA (American Psychiatric Association) (2013). Diagnostic and statistical manual of mental disorders. Fifth edition. DSM-5. American Psychiatric Publishing, Arlington, VA.
- Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (2013). "Compassionate Use": DGVS begrüßt Vergabe von Hepatitis C-Wirkstoff an Schwerstkranke [online]. Available: <http://idw-online.de/de/news561911> [accessed: 29-08-2014].
- Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (2014). DGVS empfiehlt neue Behandlungsstrategien für Patienten mit Hepatitis C [online]. Available: <http://idw-online.de/de/news579669> [accessed: 29-08-2014].
- Backes, H. & Schönbach, K. (2002). Peer Education – ein Handbuch für die Praxis: Basisinformationen, Trainingskonzepte. Bundeszentrale für gesundheitliche Aufklärung, Köln.
- Backmund, M. & Meyer-Thompson, H.-G. (2013). Das Substitutionsrecht auf die Füße stellen! Die BtMVV-Änderungsinitiative der DGS nimmt Fahrt auf. Suchttherapie **14** (2) 93-94.
- Backmund, M., Hinrichsen, H., Rossol, S., Schütz, C., Soyka, M., Wedemeyer, H., & Reimer, J. (2006). Leitlinien der Deutschen Gesellschaft für Suchtmedizin (DGS e.V.): Therapie

- der chronischen Hepatitis C bei intravenös Drogengebrauchern. Suchtmedizin in Forschung und Praxis **8** (3) 129-133.
- Backmund, M., Lüdecke, C., Isernhagen, K., Walcher, S., Rütger, T., & Leitliniengruppe der DGS (Teilnehmerinnen und Teilnehmer der Konsensuskonferenzen) (2014). Leitlinien der Deutschen Gesellschaft für Suchtmedizin (DGS e.V.). Therapie der Opiatabhängigkeit - Teil 1: Substitutionsbehandlung. Suchtmedizin in Forschung und Praxis **16** (1) 7-20.
- BADO e.V. (2013). Suchthilfe in Hamburg. Statusbericht der Hamburger Basisdatendokumentation 2012. ergänzender Tabellenanhang. BADO e.V., Hamburg.
- BÄK (Bundesärztekammer) (2010). Richtlinien der Bundesärztekammer zur Durchführung der substituionsgestützten Behandlung Opiatabhängiger - vom Vorstand der Bundesärztekammer in seiner Sitzung am 19. Februar 2010 verabschiedet. Bundesärztekammer, Berlin.
- BAG W (Bundesarbeitsgemeinschaft Wohnungslosenhilfe e.V.) (2013a). Schätzung der Wohnungslosigkeit in Deutschland 2003-2012. BAG W, Bielefeld.
- BAG W (Bundesarbeitsgemeinschaft Wohnungslosenhilfe e.V.) (2013b). Pressemitteilung. Zahl der Wohnungslosen in Deutschland weiter gestiegen. BAG W, Bielefeld.
- BAG W (Bundesarbeitsgemeinschaft Wohnungslosenhilfe e.V.) (2014a). Aufruf zu einer Nationalen Strategie zur Überwindung von Wohnungsnot und Armut in Deutschland. BAG W, Berlin.
- BAG W (Bundesarbeitsgemeinschaft Wohnungslosenhilfe e.V.) (2014b). Manual. Erhebungs-Tool für medizinische Projekte. BAG W, Bielefeld.
- Baier, D. & Rabold, S. (2012). Kinder- und Jugenddelinquenz im Bundesland Saarland. Forschungsbericht Nr. 120. Kriminologisches Forschungsinstitut Niedersachsen e.V. (KFN), Hannover.
- Baumgärtner, T. (2013). "Risikogruppen in der aktuellen Hamburger SCHULBUS-Studie. **Schüler- und Lehrerbefragungen zum Umgang mit Suchtmitteln**", in *DZSKJ-Fachtagung 2013 "Risikogruppen in der Suchtprävention"*, Büro für Suchtprävention der Hamburgischen Landesstelle für Suchtfragen e.V., Hamburg.
- Baumgärtner, T. & Kestler, J. (2013). Die Verbreitung des Suchtmittelgebrauchs unter Jugendlichen in Hamburg 2004 bis 2012. Basisauswertung der SCHULBUS-Daten im jahresübergreifenden Vergleich. Kurzbericht. Büro für Suchtprävention der Hamburgischen Landesstelle für Suchtfragen e.V., Hamburg.
- Baumgärtner, T. & Kestler, J. (2014). Suchtmittelgebrauch, Computerspielverhalten, Internetnutzung und Glücksspielerfahrungen von Jugendlichen in Hamburg und drei kommunalen Modellregionen in Deutschland - Deskriptive Ergebnisse der SCHULBUS-regional-Studie 2012. Büro für Suchtprävention der Hamburgischen Landesstelle für Suchtfragen e.V., Hamburg.
- Beck, T., Haasen, C., Verthein, U., Walcher, S., Schuler, C., Backmund, M., Ruckes, C., & Reimer, J. (2014). Maintenance treatment for opioid dependence with slow-release oral morphine: a randomized cross-over, non-inferiority study versus methadone. Addiction **109** (4) 617-626.

- Behrendt, S., Wittchen, H.-U., Höfler, M., Lieb, R., & Beesdo, K. (2009). Transitions from first substance use to substance use disorder in adolescence: Is early onset associated with a rapid escalation? Drug and Alcohol Dependence **99** (1-3) 68-78.
- Bermejo, I. & Frank, F. (2013). Zugänge zur transkulturellen Prävention alkoholbezogener Störungen bei älteren Personen mit Migrationshintergrund. Das Gesundheitswesen
- Bernard, C. (2013). Frauen in Drogenszenen - Drogenkonsum, Alltagswelt und Kontrollpolitik in Deutschland und den USA am Beispiel Frankfurt am Main und New York City. Springer, Wiesbaden.
- Bernard, C. & Werse, B. (2013). MoSyD Szenestudie 2012. Die offene Drogenszene in Frankfurt am Main. Centre for Drug Research - Goethe-Universität, Frankfurt a.M.
- BKA (Bundeskriminalamt) (1999). Rauschgiftjahresbericht 1998. Bundesrepublik Deutschland. Bundeskriminalamt, Wiesbaden.
- BKA (Bundeskriminalamt) (2014a). Rauschgiftkriminalität. Bundeslagebild 2013. BKA, Wiesbaden.
- BKA (Bundeskriminalamt) (2014b). Rauschgiftkriminalität. Bundeslagebild 2013 - Tabellenanhang. BKA, Wiesbaden.
- BMI (Bundesministerium des Innern) (2014). Polizeiliche Kriminalstatistik 2013. Die Kriminalität in der Bundesrepublik Deutschland. BMI, Berlin.
- BMJ (Bundesministerium der Justiz) (Eds.) (2009). Gesundheit im Justizvollzug. Indikatorenendatenbank der Weltgesundheitsorganisation (WHO) - Regionalbüro für Europa - und des European Network on Drugs and Infections Prevention in Prison (ENDIPP). Erfassungsjahr 2008. Berlin.
- Boder, H., Heinsohn, J., Koch, A., Müller, J., Schönfelder, C., Voigt, W., & Wessel, B. (2013). MBOR Sucht - Konzept zur Übertragung der Anforderungen für die Medizinisch-beruflich orientierte Rehabilitation der Deutschen Rentenversicherung auf den Indikationsbereich Abhängigkeitserkrankungen. Konturen **5** 42-45.
- BOPST (Bundesopiumstelle) (2014). Bericht zum Substitutionsregister. Januar 2014. Bundesinstitut für Arzneimittel und Medizinprodukte (BfArM), Bonn.
- Braun, B., Brand, H., Künzel, J. & Pfeiffer-Gerschel, T. (2014a). Deutsche Suchthilfestatistik 2013. Alle Bundesländer. Tabellenband für (teil-)stationäre Rehabilitationseinrichtungen und Adaptionseinrichtungen. Bezugsgruppe: Beender Erstbehandelte ohne Einmalkontakte. IFT Institut für Therapieforschung, München.
- Braun, B., Brand, H., Künzel, J. & Pfeiffer-Gerschel, T. (2014b). Deutsche Suchthilfestatistik 2013. Alle Bundesländer. Tabellenband für ambulante Beratungs- und/oder Behandlungsstellen, Fachambulanzen und Institutsambulanzen (Typ 3 und 4). Bezugsgruppe: Zugänge Beender Erstbehandelte ohne EK. IFT Institut für Therapieforschung, München.
- Braun, B., Brand, H., Künzel, J. & Pfeiffer-Gerschel, T. (2014c). Deutsche Suchthilfestatistik 2013. Alle Bundesländer. Tabellenband für (teil-)stationäre Rehabilitationseinrichtungen und Adaptionseinrichtungen. Bezugsgruppe: Beender mit Einmalkontakte. IFT Institut für Therapieforschung, München.

- Braun, B., Brand, H., Künzel, J. & Pfeiffer-Gerschel, T. (2014d). Deutsche Suchthilfestatistik 2013. Alle Bundesländer. Tabellenband für ambulante Beratungs- und/oder Behandlungsstellen, Fachambulanzen und Institutsambulanzen (Typ 3 und 4). Bezugsgruppe: Zugänge Beender ohne Einmalkontakte. IFT Institut für Therapieforschung, München.
- Braun, B., Brand, H., Künzel, J. & Pfeiffer-Gerschel, T. (2014e). Deutsche Suchthilfestatistik 2013. Alle Bundesländer. Tabellenband für externe Beratung im Strafvollzug. Bezugsgruppe: Zugänge Beender ohne Einmalkontakte. IFT Institut für Therapieforschung, München.
- Braun, B., Brand, H., Künzel, J. & Pfeiffer-Gerschel, T. (2014f). Deutsche Suchthilfestatistik 2013. Alle Bundesländer. Tabellenband für niedrigschwellige Einrichtungen. Bezugsgruppe: Zugänge Beender ohne Einmalkontakte. IFT Institut für Therapieforschung, München.
- Bröning, S., Sack, P. M., Thomsen, M., Stolle, M., Wendell, A., Stappenbeck, J., & Thomasius, R. (2014). Implementing and evaluating the german adaptation of the "Strengthening Families Program 10 - 14" - a randomized-controlled multicentre study. BMC Public Health **14** (83).
- Brook, D. W., Brook, J. S., Zhang, C., Cohen, P., & Whiteman, M. (2002). Drug use and the risk of major depressive disorder, alcohol dependence, and substance use disorders. Archives of General Psychiatry **59** (11) 1039-1044.
- Bühler, A. & Thrul, J. (2013). Expertise zur Suchtprävention. Aktualisierte und erweiterte Neuauflage der "Expertise zur Prävention des Substanzmissbrauchs", Forschung und Praxis der Gesundheitsförderung, Bd. 46. Bundeszentrale für gesundheitliche Aufklärung (BZgA), Köln.
- Burhoff, D. (2006). Praktische Fragen der Drogenfahrt nach § 24a Abs. 2 StVG [online]. Available: [http://www.burhoff.de/insert/?/veroeff/aufsatz/zap\\_f9\\_s781.htm](http://www.burhoff.de/insert/?/veroeff/aufsatz/zap_f9_s781.htm) [accessed: 06-08-2013].
- Bürkle, S. and Harter, K. (2011). Perspektiven einer zukunftsorientierten ambulanten regionalen Suchthilfe. Diskussionspapier der Caritas Suchthilfe. [online]. Available: [http://www.caritas-suchthilfe.de/aspe\\_shared/form/download.asp?nr=395135&form\\_type=115&acid=01C4E62E959C48609379B3F6EC6A48D3C3B1C&ag\\_id=5505](http://www.caritas-suchthilfe.de/aspe_shared/form/download.asp?nr=395135&form_type=115&acid=01C4E62E959C48609379B3F6EC6A48D3C3B1C&ag_id=5505) [accessed: 14-07-2014].
- Buth, S., Verthein, U., Schütze, C., Neumann-Runde, E. & Martens, M.-S. (2012). Suchthilfe in Hamburg. Statusbericht der Hamburger Basisdatendokumentation. 2011. BADO e.V., Hamburg.
- BZgA (Bundeszentrale für gesundheitliche Aufklärung) (2007). Cannabiskonsum der Jugendlichen und jungen Erwachsenen in Deutschland. Ergebnisse der Repräsentativbefragungen der Bundeszentrale für gesundheitliche Aufklärung. Kurzbericht Juni 2007. BZgA, Köln.
- BZgA (Bundeszentrale für gesundheitliche Aufklärung) (2011). Der Cannabiskonsum Jugendlicher und junger Erwachsener in Deutschland 2010. Ergebnisse einer aktuellen Repräsentativbefragung und Trends. BZgA, Köln.

- BZgA (Bundeszentrale für gesundheitliche Aufklärung) (2012). Die Drogenaffinität Jugendlicher in der Bundesrepublik Deutschland 2011. Der Konsum von Alkohol, Tabak und illegalen Drogen: aktuelle Verbreitung und Trends. BZgA, Köln.
- BZgA (Bundeszentrale für gesundheitliche Aufklärung) (2013). Werkbuch Präventionskette. BZgA, Köln.
- BZgA (Bundeszentrale für gesundheitliche Aufklärung) (2014). Der Cannabiskonsum Jugendlicher und junger Erwachsener in Deutschland 2012. Ergebnisse einer aktuellen Repräsentativbefragung und Trends. BZgA, Köln.
- Casati, A., Piontek, D., & Pfeiffer-Gerschel, T. (2014). Patterns of non-compliant buprenorphine, levomethadone, and methadone use among opioid dependent persons in treatment. Substance Abuse Treatment, Prevention, and Policy **9** (19).
- Collatz, J. (2001). Bedarf und Inanspruchnahme psychiatrischer Versorgung durch Migrantinnen und Migranten. In: Transkulturelle Psychiatrie, Th. Hegemann & R. Salmann (Eds.). Psychiatrie Verlag, Bonn.
- Cornel, H., Daubitz, S., Jüngling, K., Schmidt, A., Seidel, A. & Straub, J. (2014). JDH-Studie - Jugend, Drogen, Hintergründe. Erste Ergebnisse einer Befragung Berliner Jugendlicher und junger Erwachsener. Fachstelle für Suchtprävention Berlin gGmbH, Berlin.
- CPT (European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment) (2010). CPT standards, Strasbourg.
- Czarnecki, D., Engels, H., Kavemann, B., Steffan, E., Schenk, W. & Törnau, D. (2014). Prostitution in Deutschland - Fachliche Betrachtung komplexer Herausforderungen, Berlin.
- DAH (Deutsche AIDS-Hilfe e.V.) (2013). Saubere Spritzen für Gefangene: Deutsche AIDS-Hilfe startet Unterschriftenaktion [online]. Available: <http://www.aidshilfe.de/aktuelles/meldungen/saubere-spritzen-fuer-gefangene-deutsche-aids-hilfe-startet-unterschriftenaktion> [accessed: 31-10-2014].
- Deimel, D. (2013). Ausländerrechtliche Rehabilitationshindernisse in der Behandlung suchtkranker Migranten. Suchttherapie **14** (4) 155-159.
- Deutsche AIDS-Hilfe e.V. (2010). Projekt TEST IT. Evaluationsbericht. Deutsche AIDS-Hilfe e.V., Dortmund/Berlin 2010.
- Deutsche Leberhilfe e.V. (2014). Virushepatitis: Höhepunkt der Spätfolgenwelle ist noch nicht erreicht. Welt-Hepatitis-Tag am 28. Juli: Vermeidbare Todesopfer durch späte Diagnose und geringe Zahl der Therapien. Deutsche Leberhilfe e.V., Köln.
- Deutscher Bundestag (2008). Lebenslagen in Deutschland - Dritter Armuts- und Reichtumsbericht [online]. Available: <http://dip21.bundestag.de/dip21/btd/16/099/1609915.pdf> [accessed: 14-10-2013].
- Deutscher Bundestag (2014). Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Dr. Harald Terpe, Maria Klein-Schmeink, Elisabeth Scharfenberg, weiterer Abgeordneter und der Fraktion BÜNDNIS90/DIE GRÜNEN - Drucksache 18/555. Drogenpolitik der Bundesregierung und Aufgaben der Drogenbeauftragten. Drucksache 18/725. Bundesanzeiger Verlagsgesellschaft, Köln.

- DHS (Deutsche Hauptstelle für Suchtfragen) (2010). Deutscher Kerndatensatz zur Dokumentation im Bereich der Suchtkrankenhilfe. Definitionen und Erläuterungen zum Gebrauch. Stand: 05.10.2010. DHS, Hamm.
- Die Drogenbeauftragte der Bundesregierung (2012a). Drogen- und Suchtbericht. Mai 2012. Die Drogenbeauftragte der Bundesregierung, Berlin.
- Die Drogenbeauftragte der Bundesregierung (2012b). Nationale Strategie zur Drogen- und Suchtpolitik, Berlin.
- Dilling, H., Mombour, W., & Schmidt, M. H. (2005). Internationale Klassifikation psychischer Störungen. ICD-10 Kapitel V(F). Klinisch-diagnostische Leitlinien. 5. durchges. und ergänzte Aufl. Huber, Bern.
- Drogen- und Suchtrat (2013). Beschluss des Drogen- und Suchtrats. Sozialrechtliche Statusklärung als Grundlage für die Gewährleistung des KV-Schutzes Haftentlassener [online]. Available: [http://www.drogenbeauftragte.de/fileadmin/dateien-dba/Drogenbeauftragte/Downloads/Beschlusspapier\\_UEbergangsmanagement\\_Haft.pdf](http://www.drogenbeauftragte.de/fileadmin/dateien-dba/Drogenbeauftragte/Downloads/Beschlusspapier_UEbergangsmanagement_Haft.pdf) [accessed: 29-08-2014].
- DRV (Deutsche Rentenversicherung Bund) (2013). Rehabilitation 2012. Statistik der Deutschen Rentenversicherung. Band 194. DRV, Berlin.
- Duffert, A. (2014). Current challenges and problems in the field of new psychoactive substances in Germany from a law enforcement perspective. Drug Testing and Analysis **6** (7-8) 876-878.
- DZSKJ (Deutsches Zentrum für Suchtfragen des Kindes- und Jugendalters) & DISuP (Deutsches Institut für Sucht- und Präventionsforschung) (2012). "Trampolin" - Konzeption und Evaluation eines modularen Präventionskonzepts für Kinder aus suchtbelasteten Familien. Abschlussbericht [online]. Available: [http://www.drogenbeauftragte.de/fileadmin/dateien-dba/DrogenundSucht/Suchtstoffuebergreifende Themen/Downloads/BMG\\_Endbericht\\_Trampolin\\_submit\\_01.pdf](http://www.drogenbeauftragte.de/fileadmin/dateien-dba/DrogenundSucht/Suchtstoffuebergreifende%20Themen/Downloads/BMG_Endbericht_Trampolin_submit_01.pdf) [accessed: 08-09-2014].
- ECDC (European Centre for Disease Prevention and Control) & EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2011). Prevention and control of infectious diseases among people who inject drugs. ECDC, Stockholm.
- Elvik, R. (2013). Risk of road accident associated with the use of drugs: A systematic review and meta-analysis of evidence from epidemiological studies. Accident Analysis & Prevention **60** 254-267.
- EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2009). Preventing later substance use disorders in at risk children and adolescents: a review of the theory and evidence base of indicated prevention. Thematic Papers. Office for Official Publications of the European Communities, Luxembourg.
- EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2010). EMCDDA Manuals. Guidelines for collecting data on retail drug prices in Europe: issues and challenges. EMCDDA, Lissabon.
- EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2012). Treatment demand indicator (TDI) [online]. Available: <http://www.emcdda.europa.eu/themes/key-indicators/tdi> [accessed: 02-10-2013].

- Erbe, S. & Bschor, T. (2013). Diphenhydramin-Abhängigkeit und -Entzug. Psychiatrische Praxis **40** (5) 248-251.
- Eul, J. & Stöver, H. (2014). Konsumerfahrung, Konsumbereitschaft, Risikoeinschätzung und gewünschte Rechtslage und deren Wechselbeziehungen untereinander zu Cannabis und anderen Drogen in der Bevölkerung Deutschlands. Akzeptanzorientierte Drogenarbeit / Acceptance-Oriented Drug-Work **11** 1-64.
- Experten- u. Expertinnengruppe „Kölner Klausurwoche“ (2014): Memorandum Evidenzbasierung in der Suchtprävention – Möglichkeiten und Grenzen. Köln. Available: [http://www.katho-nrw.de/fileadmin/primaryMnt/KatHO/Bilder/Bilder\\_zu\\_Pressemitteilungen/ab\\_2014/KoelnerMemorandum\\_EBSP2014.pdf](http://www.katho-nrw.de/fileadmin/primaryMnt/KatHO/Bilder/Bilder_zu_Pressemitteilungen/ab_2014/KoelnerMemorandum_EBSP2014.pdf)
- Fachstelle für Suchtprävention im Land Berlin (2014). Neues Informationsblatt Crystal/Methamphetamin. Newsletter Nr. 33 - Ausgabe 03/2014.
- Fachverband Sucht e.V. (2014). "Suchtprobleme in Klein- und Kleinstbetrieben" - Ein praxisorientierter Leitfaden für Führungskräfte. Available: <http://www.sucht.de/broschuere-suchtprobleme-in-klein-und-kleinstbetrieben.html> [accessed: 08-10-2014].
- Falch-Knappe, M. and Schoen-Blum, T. (2014). "Praxis für Suchtmedizin" der Stadt Kehl (Baden-Württemberg, Deutschland) - ein grenzüberschreitendes Projekt. Offenburg.
- fdr (Fachverband Drogen und Suchthilfe e.V.) (2013). Empfehlung des Fachverbandes Drogen- und Suchthilfe e.V. für ein Übergangsmanagement bei Suchtkranken im Justizvollzug. fdr, Berlin.
- FEANTSA (European Federation of National Associations Working with the Homeless AISBL) (2005). ETHOS - Europäische Typologie für Obdachlosigkeit, Wohnungslosigkeit und prekäre Wohnversorgung. FEANTSA, Brussels.
- Flöter, S. & Pfeiffer-Gerschel, T. (2011). Analyse der Länderkurzberichte 2010/2011. DBDD, München.
- Förster, S. & Stöver, H. (2013). Auswertung der Frankfurter Konsumraumdokumentation 2012. Dokumentationszeitraum 01.01.-31.12.2012. Institut für Suchtforschung (ISFF), Frankfurt.
- Gemeinsamer Bundesausschuss (2013). Richtlinien des Gemeinsamen Bundesausschusses über die Durchführung der Psychotherapie in der vertragsärztlichen Versorgung in der Fassung vom 19. Februar 2009, veröffentlicht im Bundesanzeiger Nr. 58 (S. 1399) vom 17. April 2009, in Kraft getreten am 18. April 2009, zuletzt geändert am 18. April 2013, veröffentlicht im Bundesanzeiger (BAnz AT 18.06.2013 B6), in Kraft getreten am 19. Juni 2013. Gemeinsamer Bundesausschuss, Berlin.
- GIZ-Nord (Giftnormationszentrum Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein) (2013). Jahresbericht 2012. Universitätsmedizin Göttingen - Georg-August-Universität, Göttingen.
- Glaeske, G. & Schick Tanz, C. (2012). GEK-Arzneimittel-Report 2012. Asgard-Verlagsservice GmbH, Siegburg.
- Gölz, J. (2014). Chronische Virusinfektionen bei Drogenabhängigen: Diagnostik und Therapie. Suchttherapie **15** (1) 16-21.

- Groenman, A. P., Oosterlaan, J., Rommelse, N., Franke, B., Roeyers, H., Oades, R. D., Sergeant, J. A., Buitelaar, J. K., & Faraone, S. V. (2013). Substance use disorders in adolescents with attention deficit hyperactivity disorder: a 4-year follow-up study. Addiction **108** (8) 1503-1511.
- Guyll, M., Spoth, R., & Crowley, D. M. (2011). Economic analysis of methamphetamine prevention effects and employer costs. Journal of Studies on Alcohol and Drugs **72** (4) 577-585.
- Hanewinkel, R. & Morgenstern, M. (2013). Evidenzbasierung der Suchtprävention - Pro. Suchttherapie **14** (3) 110-111.
- Hanna, E. Z., Yi, H. Y., Dufour, M. C., & Whitmore, C. C. (2001). The relationship of early onset regular smoking to alcohol use, depression, illicit drug use, and other risky behaviors during early adolescence: results from the youth supplement to the third national health and nutrition examination survey. Journal of Substance Abuse **13** (3) 265-282.
- Hedrich, D., Alves, P., Farrell, M., Stöver, H., Møller, L., & Mayet, S. (2012). The effectiveness of opioid maintenance treatment in prison settings: a systematic review. Addiction **107** (3) 501-517.
- Heimann, H. M., Penka, S., & Heinz, A. (2007). Erklärungsmodelle von Migranten für Abhängigkeitserkrankungen - eine Untersuchung an Aussiedlern aus der ehemaligen Sowjetunion, Migranten aus der Türkei sowie einheimischen Deutschen. Suchttherapie **8** (2) 57-62.
- heise online (2013). Bayerische Polizei sprengt Darknet-Drogenring [online]. Available: <http://www.heise.de/newsticker/meldung/Bayerische-Polizei-sprengt-Darknet-Drogenring-1914770.html> [accessed: 29-08-2014].
- Henkel, D. & Zemlin, U. (2013). Suchtkranke im SGB II: Vermittlungen an die Suchthilfe durch Jobcenter und Integration in Arbeit - eine kritische Bilanz. Sucht **59** (5) 279-286.
- Hildebrand, A., Sonntag, D., Bauer, C., & Bühringer, G. (2009). Versorgung Suchtkranker in Deutschland: Ergebnisse der Suchthilfestatistik 2007. Sucht **55** (Sonderheft 1) S15-S34.
- Hoffmann, F., Scharffetter, W., & Glaeske, G. (2009). Verbrauch von Zolpidem und Zopiclon auf Privatrezepten zwischen 1993 und 2007. Der Nervenarzt **80** (5) 578-583.
- Hölling, H., Erhart, M., Ravens-Sieberer, U., & Schlack, R. (2007). Verhaltensauffälligkeiten bei Kindern und Jugendlichen. Erste Ergebnisse aus dem Kinder- und Jugendgesundheitsurvey (KiGGS). Bundesgesundheitsblatt - Gesundheitsforschung - Gesundheitsschutz **50** (5-6) 784-793.
- Ilse, J., Hartwig, Ch., & Haasen, C. (2007). Die Epidemiologie des Mehrfachkonsums illegaler Drogen in Hamburg - eine Literaturübersicht. Suchtmedizin in Forschung und Praxis **9** (2) 122-128.
- Indlekofer, F. (2013). BISS - ein Erfolgsprogramm zur beruflichen Reintegration nach stationärer Suchtrehabilitation. Konturen **6** 3.
- Informations- und Behandlungszentrum für Vergiftungen Homburg/Saar (2013). Jahresbericht 2012. Universitätsklinikum des Saarlandes, Homburg/Saar.



- Informationszentrale gegen Vergiftungen (2013). Jahresbericht 2012. 45. Bericht über die Arbeit der Informationszentrale gegen Vergiftungen des Landes Nordrhein-Westfalen am Zentrum für Kinderheilkunde des Universitätsklinikums Bonn. Universitätsklinikum Bonn, Bonn.
- Initiativkreis Substitutionstherapie (2014). Bitte substituieren Sie! Die Kampagne [online]. Available: [http://www.bitte-substituieren-sie.de/\\_bitte-substituieren-sie.de/die-kampagne.html](http://www.bitte-substituieren-sie.de/_bitte-substituieren-sie.de/die-kampagne.html) [accessed: 07-07-2014].
- Institut für Qualitätsmanagement (2014). Praxisempfehlungen zum Umgang mit komorbiden Suchtproblemen in der somatischen und psychosomatischen Rehabilitation (PESu-Projekt) [online]. Available: <http://www.uniklinik-freiburg.de/aqms/projekte/leitlinien/pesu.html> [accessed: 07-07-2014].
- Integrative Drogenhilfe e.V. (idh). (2014). Jahresbericht 2013. idh, Frankfurt am Main.
- Jacobi, F., Höfler, M., Strehle, J., Mack, S., Gerschler, A., Scholl, L., Busch, M. A., Maske, U., Hapke, U., Gaebel, W., Maier, W., Wagner, M., Zielasek, J., & Wittchen, H.-U. (2014). Psychische Störungen in der Allgemeinbevölkerung. Studie zur Gesundheit Erwachsener in Deutschland und ihr Zusatzmodul Psychische Gesundheit (DEGS1-MH). Der Nervenarzt **85** (1) 77-87.
- Jagsch, R., Fischer, G., Köchl, B., & Unger, A. (2013). Buprenorphin/Naloxon - Ergebnisse aus dem niedergelassenen Bereich. Suchttherapie **14** (2) 84-91.
- Kasadi, K. (2014). Baobab - Zusammensein. Aufbau eines landesweiten, transkulturellen HIV-Präventionsnetzwerks für Migrantinnen und Migranten in Niedersachsen. impulse für Gesundheitsförderung **82** 23-24.
- Klatt, T., Cavner, D., & Egan, V. (2014). Rationalising predictors of child sexual exploitation and sex-trading. Child Abuse & Neglect **38** (2) 252-260.
- Kleiber, D. & Soellner, R. (1998). Cannabiskonsum. Entwicklungstendenzen, Konsummuster und Risiken. Juventa, Weinheim.
- Klein, M. (2001). Kinder aus alkoholbelasteten Familien - Ein Überblick zu Forschungsergebnissen und Handlungsperspektiven. Suchttherapie 2001 (2) 118-124.
- KMK (Kultusministerkonferenz) (2012). Beschluss der Kultusministerkonferenz vom 15.11.2012.
- Körner, H., Patzak, J., & Volkmer, M. (2012). Betäubungsmittelgesetz: BtMG. Arzneimittelgesetz. Grundstoffüberwachungsgesetz. C.H.Beck, München.
- Kostrzewa, R. (2014). Wohnungslos und Suchtkrank - ein Randthema? Editorial. Infodienst Sucht **2014** (1) 1.
- Kraus, L., Bauernfeind, R., & Bühringer, G. (1998). Epidemiologie des Drogenkonsums: Ergebnisse aus Bevölkerungssurveys 1990 bis 1996. Bd. 107 Schriftenreihe des Bundesministeriums für Gesundheit. Nomos Verlag, Baden-Baden.
- Kraus, L., Augustin, R., Frischer, M., Kümmler, P., Uhl, A., & Wiessing, L. (2003). Estimating prevalence of problem drug use at national level in countries of the European Union and Norway. Addiction **98** (4) 471-485.
- Kraus, L., Pabst, A. & Piontek, D. (2012). Europäische Schülerstudie zu Alkohol und anderen Drogen 2011 (ESPAD). Befragung von Schülerinnen und Schülern der 9. und 10. Klasse

- in Bayern, Berlin, Brandenburg, Mecklenburg-Vorpommern und Thüringen. IFT-Berichte Bd. 181. IFT Institut für Therapieforschung, München.
- Kraus, L., Piontek, D., Pabst, A., & Gomes de Matos, E. (2013a). Studiendesign und Methodik des Epidemiologischen Suchtsurveys 2012. Sucht **59** (6) 309-320.
- Kraus, L., Pabst, A., Piontek, D., & Gomes de Matos, E. (2013b). Substanzkonsum und substanzbezogene Störungen: Trends in Deutschland 1980-2012. Sucht **59** (6) 333-345.
- Kraus, L., Pabst, A., Gomes de Matos, E., & Piontek, D. (2014). Kurzbericht Epidemiologischer Suchtsurvey 2012. Tabellenband: Prävalenz des Konsums illegaler Drogen, multipler Drogenerfahrung und drogenbezogener Störungen nach Geschlecht und Alter im Jahr 2012 [online]. IFT Institut für Therapieforschung, München. Available: <http://www.ift.de/index.php?id=429> [accessed: 11-03-2014].
- Kretschmann-Weelink, M. (2013). Prävalenz von Suchtmittelkonsum bei Menschen mit geistiger Behinderung in Nordrhein-Westfalen. Abschlussbericht [online]. Available: <http://www.lwl.org/ks-download/downloads/GBS-Datenbank/Abschlussbericht-AWO.pdf> [accessed: 03-07-2014].
- Kretschmann-Weelink, M. & Hörning, M. (2014). Menschen mit geistiger Behinderung und Suchtmittelkonsum. In: Jahrbuch Sucht 2014, Deutsche Hauptstelle für Suchtfragen (DHS) (Eds.), pp. 248-257. Pabst, Lengerich.
- Kronauer, M. (2010). Exklusion. Die Gefährdung des Sozialen im hoch entwickelten Kapitalismus. Campus, Frankfurt / New York.
- Kuhn, S. (2013). Für Sie unterwegs - Neue Pflegekonzepte für die Suchthilfe im Alter. Suchttherapie **14** (3) 97.
- Künzel, J., Steppan, M. & Pfeiffer-Gerschel, T. (2013). Klienten mit Migrationshintergrund in ambulanter und stationärer Suchtbehandlung. Kurzbericht Nr. 1/2013 - Deutsche Suchthilfestatistik 2011. IFT Institut für Therapieforschung, München.
- Küstner, U., Thomasius, R., Sack, P. M., & Zeichner, D. (2008). Drogenambulanz. In: Kinder und Suchtgefahren. Risiken - Prävention - Hilfen, M. Klein (Eds.), pp. 441-449. Schattauer, Stuttgart.
- Lampert, T. & Thamm, M. (2007). Tabak-, Alkohol- und Drogenkonsum von Jugendlichen in Deutschland - Ergebnisse des Kinder- und Jugendgesundheitsurveys (KiGGS). Bundesgesundheitsblatt - Gesundheitsforschung - Gesundheitsschutz **50** (5/6) 600-608.
- Leicht, A., Dettmer, K., & Blättner, N. (2013). Brief interventions - innovative approaches for preventing infections with hepatitis C among drug users. Suchtmedizin in Forschung und Praxis **15** (4) 249.
- Leune, J. (2013). Versorgung abhängigkeitskranker Menschen in Deutschland. In: Jahrbuch Sucht 2013, Deutsche Hauptstelle für Suchtfragen (DHS) (Eds.), pp. 181-196. Pabst, Lengerich.
- Leune, J. (2014). Versorgung abhängigkeitskranker Menschen in Deutschland. In: Jahrbuch Sucht 2014, Deutsche Hauptstelle für Suchtfragen (DHS) (Eds.), pp. 181-202. Pabst, Lengerich.

- Liebetrau, G., Prasa, D., Hentschel, H., & Deters, M. (2013). Substanzmissbrauch - Entwicklung des Vergiftungsgeschehens im Einzugsbereich des Giftnotrufes Erfurt 2002-2011. Gesundheitswesen [Epub ahead of print] (DOI: 10.1055/s-0033-1355368).
- Lutz, R. (2013). Soziale Erschöpfung, Armut und Sucht. Konturen **6** 10-13.
- Lutz, R. & Simon, T. (2007). Lehrbuch Wohnungslosenhilfe. Juventa, Weinheim.
- LWL (Landschaftsverband Westfalen-Lippe) (2014). Erprobungsphase in Förderschulen läuft erfolgreich. LWL-KS-Newsletter 12. Jahrgang / Nr. 3 Mai 2014.
- Maruska, K., Isensee, B., & Hanewinkel, R. (2011). Universelle Prävention des Substanzkonsums: Effekte des Grundschulprogramms Klasse2000. Sucht **57** (4) 301-312.
- McGue, M., Iacono, W. M., Legrand, L. N., Malone, S., & Elkins, I. (2001). Origins and consequences of age at first drink. I. Associations with substance-use disorders, disinhibitory behavior and psychopathology, and P3 amplitude. Alcoholism: Clinical and Experimental Research **25** (8) 1156-1165.
- Meier, B.-D. (2009). Äquivalenzprinzip. In: Gefängnismedizin. Medizinische Versorgung unter Haftbedingungen, K. Keppler & H. Stöver (Eds.), pp. 73-84. Thieme, Stuttgart.
- Michels, I. (2014). Die Drogen- und AIDS-Situation in der Ukraine. Suchttherapie **15** (2) 49-50.
- Michels, I., Stöver, H., & Gerlach, R. (2007). Substitution treatment for opioid addicts in Germany [online]. Harm Reduction Journal **4** (5). Available: <http://www.harmreductionjournal.com/content/4/1/5> [accessed: 29-08-2014].
- Milin, S., Lotzin, A., Degkwitz, P., Verthein, U. & Schäfer, I. (2014). Amphetamin und Methamphetamin - Personengruppen mit missbräuchlichem Konsum und Ansatzpunkte für präventive Maßnahmen. Sachbericht. Zentrum für Interdisziplinäre Suchtforschung (ZIS) der Universität Hamburg, Hamburg.
- Moggi, F. (2014). Ist eine wirksame psychosoziale Behandlung von Patienten mit Suchterkrankungen und komorbiden psychischen Störungen eine unmögliche Aufgabe? Suchttherapie **15** (1) 9-15.
- Mostardt, S., Flöter, S., Neumann, A., Wasem, J., & Pfeiffer-Gerschel, T. (2010). Schätzung der Ausgaben der öffentlichen Hand durch den Konsum illegaler Drogen in Deutschland. Das Gesundheitswesen **72** (12) 886-894.
- Musshoff, F., Große Hokamp, E., Bott, U., & Madea, B. (2014). Performance evaluation of on-site oral fluid drug screening devices in normal police procedure in Germany. Forensic Science International **238** 120-124.
- Neumann-Runde, E., Kalke, J., & Werse, B. (2013). Landesauswertung der Computergestützten Basisdokumentation der ambulanten Suchthilfe in Hessen (COMBASS) - Grunddaten 2012. Hessische Landesstelle für Suchtfragen, Frankfurt am Main.
- Nickel, J., Ravens-Sieberer, U., Richter, M., & Settertobulte, W. (2008). Gesundheitsrelevantes Verhalten und soziale Ungleichheit bei Kindern und Jugendlichen. In: Gesundheit, Ungleichheit und jugendliche Lebenswelten: Ergebnisse der zweiten internationalen Vergleichsstudie im Auftrag der Weltgesundheitsorganisation WHO, M.

- Richter, K. Hurrelmann, A. Klocke, W. Melzer, & U. Ravens-Sieberer (Eds.), pp. 63-92. Juventa, Weinheim.
- Office of the United Nations High Commissioner for Human Rights (1982). Principles of Medical Ethics relevant to the Role of Health Personnel, particularly Physicians, in the Protection of Prisoners and Detainees against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment [online]. Available: <http://www2.ohchr.org/english/law/medicaethics.htm> [accessed: 28-07-2011].
- Ort, C., Eppler, J. M., Scheidegger, A., Rieckermann, J., Kinzig, M., & Sörgel, F. (2014). Challenges of surveying wastewater drug loads of small populations and generalizable aspects on optimizing monitoring design. *Addiction* **109** (3) 472-481.
- Ottova, V., Hillebrandt, D., Kolip, P., Hoffarth, K., Bucksch, J., Melzer, W., Klocke, A., Richter, M., Ravens-Sieberer, U., & das HBSC-Team Deutschland (2012). Die HBSC-Studie in Deutschland - Studiendesign und Methodik. *Das Gesundheitswesen* **74** (Suppl 1) S8-S14.
- Pabst, A., Piontek, D., Kraus, L., & Müller, S. (2010). Substanzkonsum und substanzbezogene Störungen. Ergebnisse des Epidemiologischen Suchtsurvey 2009. *Sucht* **56** (5) 327-336.
- Pabst, A., Kraus, L., Gomes de Matos, E., & Piontek, D. (2013). Substanzkonsum und substanzbezogene Störungen in Deutschland im Jahr 2012. *Sucht* **59** (6) 321-331.
- Patzak, J. (2009). Bundesgerichtshof setzt die »nicht geringe Menge« von Metamfetamin von 30 Gramm Metamfetamin-Base auf 5 Gramm Metamfetamin-Base herab. *Sucht* **55** (1) 30-34.
- Patzak, J. & Bohnen, W. (2011). *Betäubungsmittelrecht*. C.H. Beck, München.
- Penka, S., Heimann, H., Heinz, A., & Schouler-Ocak, M. (2008). Explanatory models of addictive behaviour among native German, Russian-German, and Turkish youth. *European Psychiatry* **23** (Supplement 1) 36-42.
- Perkonigg, A., Goodwin, R. D., Fiedler, A., Behrendt, S., Beesdo, K., Lieb, R., & Wittchen, H. U. (2008a). The natural course of cannabis use, abuse and dependence during the first decades of life. *Addiction* **103** (3) 439-449.
- Perkonigg, A., Bühringer, G., Arnold, M., Böhm, M., Antoni, J., Gorgas, B., Hirtsiefer, F., Kronthaler, F., Küfner, H., Lubinski, A., Rieger, W., Sonntag, D., Tretter, F., Wiggerhauser, K., & Wittchen, H.-U. (2008b). Verbesserung in der Suchthilfe durch evidenzbasierten Wissenstransfer. *Suchtmedizin in Forschung und Praxis* **10** (3) 151-163.
- Pfeiffer-Gerschel, T., Kipke, I. & Steppan, M. (2010). *Deutsche Suchthilfestatistik 2009. Alle Bundesländer. Tabellenband für ambulante Beratungsstellen. Bezugsgruppe: Zugänge/Beender ohne Einmalkontakte*. IFT Institut für Therapieforschung, München.
- Pfeiffer-Gerschel, T., Kipke, I., Flöter, S., Jakob, L., Hammes, D. & Rummel, C. (2012). *Bericht 2012 des nationalen REITOX-Knotenpunkts an die EBDD. Deutschland. Neue Entwicklungen, Trends und Hintergrundinformationen zu Schwerpunktthemen. Drogensituation 2011/2012*. Deutsche Beobachtungsstelle für Drogen und Drogensucht (DBDD), München.

- Pfeiffer-Gerschel, T., Steppan, M. & Brand, H. (2013a). Deutsche Suchthilfestatistik 2012. Alle Bundesländer. Tabellenband für ambulante Beratungs- und/oder Behandlungsstellen, Fachambulanzen und Institutsambulanzen. Bezugsgruppe: Zugänge Beender Erstbehandelte ohne EK. IFT Institut für Therapieforschung, München.
- Pfeiffer-Gerschel, T., Steppan, M. & Brand, H. (2013b). Deutsche Suchthilfestatistik 2012. Alle Bundesländer. Tabellenband für (teil-)stationäre Rehabilitationseinrichtungen und Adaptionseinrichtungen. Bezugsgruppe: Beender mit Einmalkontakte. IFT Institut für Therapieforschung, München.
- Pfeiffer-Gerschel, T., Kipke, I., Flöter, S., Jakob, L., Budde, A. & Rummel, C. (2013c). Bericht 2013 des nationalen REITOX-Knotenpunkts an die EBDD. Deutschland. Neue Entwicklungen und Trends. Drogensituation 2012/2013. Deutsche Beobachtungsstelle für Drogen und Drogensucht (DBDD), München.
- Piontek, D., Kraus, L., Gomes de Matos, E., & Pabst, A. (2013). Komorbide Substanzstörungen in der erwachsenen Allgemeinbevölkerung. Sucht **59** (6) 347-354.
- Rehm, J., Room, R., van den Brink, W., & Kraus, L. (2005). Problematic drug use and drug use disorders in EU countries and Norway: an overview of the epidemiology. European Neuropsychopharmacology **15** (4) 389-397.
- Reimer, J., Schmidt, C. S., Schulte, B., Gansefort, D., Götz, J., Gerken, G., Scherbaum, N., Verthein, U., & Backmund, M. (2013). Psychoeducation Improves Hepatitis C Virus Treatment During Opioid Substitution Therapy: A Controlled, Prospective Multicenter Trial. Clinical Infectious Diseases **57** (S2) 97-104.
- Richter, M., Pförtner, T.-K., Lampert, T., & das HBSC-Team Deutschland (2012). Veränderungen im Tabak-, Alkohol- und Cannabiskonsum von Jugendlichen im Zeitraum von 2002 bis 2010 in Deutschland. Das Gesundheitswesen **74** (Suppl 1) S42-S48.
- RKI (Robert Koch-Institut) (2007). Beiträge zur Gesundheitsberichterstattung des Bundes - Gesundheit von Kindern und Jugendlichen in Schleswig-Holstein. RKI, Berlin.
- RKI (Robert Koch-Institut) (2012). DRUCK-Studie - Drogen und chronische Infektionskrankheiten in Deutschland. Ergebnisse der Pilotierung eines Sero- und Verhaltenssurveys bei i. v. Drogengebern. Epidemiologisches Bulletin, 33. RKI, Berlin.
- RKI (Robert Koch-Institut) (2013). DRUCK-Studie. 3. Newsletter, August 2013. Update zur DRUCK-Studie des RKI. RKI, Berlin.
- RKI (Robert Koch-Institut) (2014a). Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten für 2013. Datenstand: 1. März 2014. RKI, Berlin.
- RKI (Robert Koch-Institut) (2014b). DRUCK-Studie. 5. Newsletter, Juni 2014. DRUCK-Studie schließt Datenerhebung in der letzten Studienstadt erfolgreich ab. RKI, Berlin.
- Rosenkranz, M., Neumann-Runde, E., Buth, S. & Verthein, U. (2013). Suchthilfe in Hamburg. Statusbericht der Hamburger Basisdatendokumentation 2012. BADO e.V., Hamburg.
- Ross, R. S., Stambouli, O., Grüner, N., Marcus, U., Cai, W., Zhang, W., Zimmermann, R., & Roggendorf, M. (2013). Detection of infections with hepatitis B virus, hepatitis C virus, and human immunodeficiency virus by analyses of dried blood spots - performance

- characteristics of the ARCHITECT system and two commercial assays for nucleic acid amplification. Virology Journal **10** (72).
- Ruf, D. & Walter-Hamann, R. (2014). Suchtberatung, Suchtbehandlung und Suchtselbsthilfe von Menschen mit Migrationshintergrund. Suchttherapie **15** (2) 75-81.
- Sächsisches Staatsministerium für Soziales und Verbraucherschutz (2014). 2. Sächsischer Drogen- und Suchtbericht. Sächsisches Staatsministerium für Soziales und Verbraucherschutz, Dresden.
- Sack, P. M. & Thomasius, R. (2009). Besondere pathogenetische Aspekte. Familiäre Einflüsse. In: Handbuch der Suchtstörungen im Kindes- und Jugendalter, R. Thomasius, M. Schulte-Markwort, U. Küstner, & P. Riedesser (Eds.), pp. 147-151. Schattauer, Stuttgart.
- Sack, P. M., Stolle, M., & Thomasius, R. (2008). Drogenabhängigkeit. In: Therapie psychischer Störungen bei Kindern und Jugendlichen. Ein integratives Lehrbuch für die Praxis, H. Remschmidt, F. Mattejat, & A. Warnke (Eds.), pp. 376-386. Thieme, Stuttgart.
- Salize, H., Dillman-Lange, C., Kentner-Figura, B., & Reinhard, I. (2006). Drohende Wohnungslosigkeit und psychische Gefährdung - Prävalenz und Einflussfaktoren bei Risikopopulationen. Der Nervenarzt **77** 1345-1354.
- Sarrazin, C., Berg, T., Ross, S., Schirmacher, P., Wedemeyer, H., Neumann, U., Schmidt, H., Spengler, U., Wirth, S., Kessler, H., Peck-Radosavljevic, M., Ferenci, P., Vogel, W., Moradpour, D., Heim, M., Cornberg, M., Protzer, U., Manns, M., Fleig, E., Dollinger, M., & Zeuzem, S. (2010). Update der S3-Leitlinie Prophylaxe, Diagnostik und Therapie der Hepatitis-C-Virus(HCV)-Infektion. Zeitschrift für Gastroenterologie **48** 289-351.
- Sarrazin, D. (2014). Substanzkonsum und suchtbezogene Problemlagen von Kindern und Jugendlichen in stationärer Jugendhilfe.
- Scalia Tomba, G. P., Rossi, C., Taylor, C., Klempova, D. & Wiessing, L. (2008). "Guidelines for estimating the incidence of problem drug use", Final Report CT.06.EPI.150.1.0. EMCDDA, Lissabon.
- Schäfer, B. (2013). Hepatitis-C Therapie: Starten oder Warten? Welche Patienten jetzt therapiert werden sollen! Suchtmedizin in Forschung und Praxis **15** (4) 266-268.
- Schäfer, C. & Paoli, L. (2006). Drogenkonsum und Strafverfolgungspraxis. Eine Untersuchung zur Rechtswirklichkeit der Anwendung des § 31a BtMG und anderer Opportunitätsvorschriften auf Drogenkonsumentendelikte. Duncker & Humblot, Berlin.
- Schatz, E. (2014). Europäisches Netzwerk für soziale Eingliederung und Gesundheit: Die Correlation Hepatitis C Initiative. Suchttherapie **15** (1) 43-44.
- Scherbaum, N. & Specka, M. (2014). Komorbide psychische Störungen bei Opiatabhängigen. Suchttherapie **15** (1) 22-28.
- Schmidt, L., Gastpar, M., Falkai, P., & Gaebel, W. (Eds.) (2006). Evidenzbasierte Suchtmedizin. Behandlungsleitlinie Substanzbezogene Störungen. Deutscher Ärzte-Verlag, Köln.
- Schoofs, N., Riemer, T., Bald, L. K., Heinz, A., Gallinat, J., BERPohl, F., & Gutwinski, S. (2014). Methadon und Levomethadon - Dosierung und Nebenwirkungen. Psychiatrische Praxis **41** (2) 82-87.

- Schu, M. & Czycholl, D. (2014). Transkulturelle Suchthilfe - Erfahrungen im Bundesmodellprojekt transVer. Suchttherapie **15** (2) 61-66.
- Schulte, B., Gonzales-Saiz, F., Jeschke, P., Reimer, J., Schäfer, I., Walcher, S., Weber, B., & Verthein, U. (2013). Die "Opiate Dosage Adequacy Scale" (ODAS) für die Beurteilung der Angemessenheit der Buprenorphindosierung während der Opiatsubstitution. Suchttherapie **14** (4) e1-e6.
- Schütze, C., Buth, S., Kalke, J., & Rascke, P. (2007). Dokumentation der Suchtprävention - Exemplarische Auswertungen. Jahresbericht 2006. Moderne Dokumentation in der ambulanten Suchtkrankenhilfe, Bd. 8. Ministerium für Soziales, Gesundheit, Familie, Jugend und Senioren des Landes Schleswig-Holstein, Kiel.
- Schwabe, U. & Paffrath, D. (Eds.) (2013). Arzneiverordnungs-Report 2013. Springer-Verlag, Berlin, Heidelberg.
- Settertobulte, W. & Richter, M. (2007). Aktuelle Entwicklungen im Substanzkonsum Jugendlicher: Ergebnisse der „Health Behaviour in School-aged Children (HBSC)“ Studie 2005/2006. In: Jugendliche und Suchtmittelkonsum. Trends - Grundlagen - Maßnahmen. K. Mann, U. Havemann-Reinecke, & R. Gassmann (Eds.). Lambertus Verlag, Freiburg.
- Sonnenmoser, M. (2008). Für Jugendliche besonders riskant. Deutsches Ärzteblatt **2008** (1) 34-35.
- Sonntag, D., Bauer, C. & Eichmann, A. (2008a). Deutsche Suchthilfestatistik 2007. Alle Bundesländer. Tabellenband für ambulante Beratungsstellen. Bezugsgruppe: Zugänge/Beender ohne Einmalkontakte. Institut für Therapieforchung, München.
- Sonntag, D., Bauer, C. & Eichmann, A. (2008b). Deutsche Suchthilfestatistik 2007. Alle Bundesländer. Tabellenband für stationäre Rehabilitationseinrichtungen. Bezugsgruppe: Beender. Institut für Therapieforchung, München.
- Soyka, M., Träder, A., Klotsche, J., Haberthür, A., Bühringer, G., Rehm, J., & Wittchen, H.-U. (2012). Criminal behavior in opioid-dependent patients before and during maintenance therapy: 6-year follow-up of a nationally representative cohort sample. Journal of Forensic Sciences **57** (6) 1524-1530.
- Spoth, R. L., Clair, S., Shin, C., & Redmond, C. (2006). Long-term effects of universal preventive interventions on methamphetamine use among adolescents. Archives of Pediatrics & Adolescent Medicine **160** (9) 876-882.
- Springer, J.F. and Phillips, J.L. (2007). The institute of Medicine framework and its implication for the advancement of prevention policy, programs and practice. Prevention Policy Paper Series [online]. EMT Associates, Folsom, CA. Available: [http://ca-sdfsc.org/docs/resources/SDFSC\\_IOM\\_Policy.pdf](http://ca-sdfsc.org/docs/resources/SDFSC_IOM_Policy.pdf) [accessed: 31-10-2014].
- Stappenbeck, J., Wendell, A., & Thomasius, R. (2013a). Familien stärken: Adaptation und Evaluation eines amerikanischen Suchtpräventionsprogramms für Familien in Deutschland - Projektbeschreibung. Abhängigkeiten, **19** (1), 24-31.
- Stappenbeck, J., Wendell, A. & Thomasius, R. (2013b). Evaluation des familienbasierten Programms "Strengthening Families" zur Prävention von Sucht- und Verhaltensproblemen bei Kindern im Alter von 10-14 Jahren in einer randomisiert-kontrollierten Multicenterstudie. Gesundheitswesen, **75**, 1-2.

- Statistische Ämter des Bundes und der Länder (2014). Gebiet und Bevölkerung - Ausländische Bevölkerung [online]. Available: [http://www.statistik-portal.de/statistik-portal/de/jb01\\_jahrtab2.asp](http://www.statistik-portal.de/statistik-portal/de/jb01_jahrtab2.asp) [accessed: 31-10-2014].
- Statistisches Bundesamt (2011a). Diagnosedaten der Patienten und Patientinnen in Krankenhäusern (einschl. Sterbe- und Stundenfälle) 2009. Fachserie 12, Reihe 6.2.1. Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2011b). Diagnosedaten der Patienten und Patientinnen in Krankenhäusern (einschl. Sterbe- und Stundenfälle) 2010. Fachserie 12, Reihe 6.2.1. Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2013a). Diagnosedaten der Patienten und Patientinnen in Krankenhäusern (einschl. Sterbe- und Stundenfälle) 2011. Fachserie 12, Reihe 6.2.1. Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2013b). Diagnosedaten der Patienten und Patientinnen in Krankenhäusern (einschl. Sterbe- und Stundenfälle) 2012. Fachserie 12, Reihe 6.2.1. Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2014a). Verkehr. Verkehrsunfälle 2013. Fachserie 8 Reihe 7. Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2014b). Krankenhausdiagnosestatistik. Aus dem Krankenhaus entlassene vollstationäre Patienten (einschl. Stundenfälle, ohne Sterbefälle). Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2014c). Rechtspflege. Strafverfolgung 2012. Fachserie 10, Reihe 3. Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2014d). Bevölkerung und Erwerbstätigkeit. Bevölkerung mit Migrationshintergrund - Ergebnisse des Mikrozensus 2012. Fachserie 1 Reihe 2.2. Statistisches Bundesamt, Wiesbaden.
- Statistisches Bundesamt (2014e). Rechtspflege. Strafvollzug - Demographische und kriminologische Merkmale der Strafgefangenen zum Stichtag 31.3. - 2013. Fachserie 10 Reihe 4.1. Statistisches Bundesamt, Wiesbaden.
- Stolle, M., Sack, P. M., & Thomasius, R. (2007). Drogenkonsum im Kindes- und Jugendalter. Früherkennung und Intervention. Deutsches Ärzteblatt **104** (28-29) A2061-A2069.
- Stöver, H. & Schäffer, D. (2014). SMOKE IT! Promoting a change of opiate consumption pattern - from injecting to inhaling. Harm Reduction Journal **11** (18) 1-8.
- Strobl, I. (2006). Es macht die Seele kaputt: Junkiefrauen auf dem Strich. Orlanda, Berlin.
- Stumpf, D., Hannemann, T.-V., Piontek, D., & Pfeiffer-Gerschel, T. (2014). Crystal Methamphetamin in Deutschland - Epidemiologie und Präventionslage. Pro Jugend.
- Süss, B. & Pfeiffer-Gerschel, T. (2011). Bestimmung der Erreichungsquote der Deutschen Suchthilfestatistik auf Basis des DBDD-Einrichtungsregisters. Sucht **57** (6) 469-477.
- ter Bogt, T. F., de Looze, M., Molcho, M., Godeau, E., Hublet, A., Kokkevi, A., Kuntsche, E., Gabhainn, S. N., Pejnovic Fanelic, I., Simons-Morton, B., Sznitman, S., Vieno, A., Vollebergh, W., & Pickett, W. (2014). Do societal wealth, family affluence and gender account for trends in adolescent cannabis use? A 30 country cross-national study. Addiction **109** (2) 273-283.



- Thomasius, R. (2009). Drogenabhängigkeit bei Jugendlichen. In: Drogenabhängigkeit bei Jugendlichen, C. Möller (Eds.), pp. 13-38. Vandenhoeck & Ruprecht, Göttingen.
- Thomasius, R. & Petersen, K. U. (2008). Aktuelle Ergebnisse der Cannabisforschung. Konturen **32** (3) 32-35.
- Thomasius, R. & Stolle, M. (2008a). Der Konsum von psychoaktiven Substanzen bei Kindern und Jugendlichen - Die spezifischen Behandlungsanforderungen. Konturen **34** (3) 18-22.
- Thomasius, R. & Stolle, M. (2008b). Diagnostik und Behandlung psychischer Störungen durch Cannabiskonsum. Psychiatrie und Psychotherapie up2date **2008** (2) 225-240.
- Thomasius, R., Schulte-Markwort, M., Küstner, U., & Riedesser, P. (2008). Suchtstörungen im Kindes- und Jugendalter. Das Handbuch: Grundlagen und Praxis. Schattauer, Stuttgart.
- Toxikologische Abteilung der II. Medizinischen Klinik (2013). Jahresbericht 2012. Klinikum rechts der Isar, Technische Universität München, München.
- Uhl, A. (2013). Evidenzbasierung der Suchtprävention - Kontra. Suchttherapie **14** (3) 112-113.
- Universitätsklinikum Regensburg (2014). P.A.R.T.Y. im Universitätsklinikum Regensburg Pressemitteilung vom 19.02.2014.
- van den Heuvel, M. (2014). Hepatitis-C Therapie: Wirkung um jeden Preis? [online]. Available: <http://news.doccheck.com/de/41490/hepatitis-c-therapie-wirkung-um-jeden-preis/> [accessed: 31-10-2014].
- Vergiftungs-Informations-Zentrale Freiburg (2014). Jahresbericht 2012. Universitätsklinikum Freiburg, Zentrum für Kinder- und Jugendmedizin, Freiburg.
- Walter, U., Krauth, C., Kurtz, V., Salmann, R., & Machleidt, W. (2007). Gesundheit und gesundheitliche Versorgung von Migranten unter besonderer Berücksichtigung von Sucht. Der Nervenarzt **78** (9) 1058-1061.
- Wedemeyer, H. (2013). "Es steht ein dramatischer Therapiewandel bevor!" [online]. Available: <http://www.aerztezeitung.de/medizin/krankheiten/infektionskrankheiten/hepatitis/article/843213/welt-hepatitis-tag-steht-dramatischer-therapiewandel-bevor.html> [accessed: 31-10-2014].
- Werse, B., Morgenstern, C., & Sarvari, L. (2014). MoSyD Jahresbericht 2013. Drogentrends in Frankfurt am Main. CDR Centre for Drug Research, Frankfurt am Main.
- Wiese, B. (2008). Konsumentensouveränität im Bereich sozialer Dienstleistungen: Ein Mittel zur sozialen Integration? Eine qualitative Studie am Beispiel der Obdach- und Wohnungslosenhilfe. Peter Lang, Frankfurt am Main.
- Winkler, KR. (2007). Bundesgerichtshof legt Grenzwert für die "nicht geringe Menge" bei Buprenorphin fest. Sucht **53** (4) 238-241.
- Wittchen, H.-U., Behrendt, S., Höfler, M., Perkonigg, A., Lieb, R., Bühringer, G., & Beesdo, K. (2008a). What are the high risk periods for incident substance use and transitions to abuse and dependence? Implications for early intervention and prevention. International Journal of Methods in Psychiatric Research **17** (S1) S16-S29.

- Wittchen, H.-U. et al. (1995). Münchener Composite International Diagnostic Interview (M-CIDI), Paper-pencil 2.2, 2/95. Max-Planck-Institut für Psychiatrie, Klinisches Institut, München.
- Wittchen, H.-U., Apelt, S. M., Soyka, M., Gastpar, M., Backmund, M., Götz, J., Kraus, M. R., Tretter, F., Schäfer, M., Siegert, J., Scherbaum, N., Rehm, J., & Bühringer, G. (2008b). Feasibility and outcome of substitution treatment of heroin-dependent patients in specialized substitution centers and primary care facilities in Germany: A naturalistic study in 2694 patients. Drug and Alcohol Dependence **95** (3) 245-257.
- Wittchen, H.-U., Jacobi, F., Rehm, J., Gustavsson, A., Svensson, M., Jönsson, B., Olesen, J., Allgulander, C., Alonso, J., Faravelli, C., Fratiglioni, L., Jennum, P., Lieb, R., Maercker, A., van Os, J., Preisig, M., Salvador-Carulla, L., Simon, R., & Steinhausen, H.-C. (2011). The size and burden of mental disorders and other disorders of the brain in Europe 2010. ECNP/EBC Report 2011. European Neuropsychopharmacology **21** (9) 655-679.
- Zakhalev, R. (2014). Migranten aus den GUS-Staaten haben ein anderes Suchtverständnis. Suchttherapie **15** (2) 82-83.
- Zimmermann, D. & Lunkenheimer, C. (2013). Schuldnerberatung - Ein unverzichtbarer Teil der Drogenhilfe. Konturen **6** (14) 20.
- Zimmermann, R., Marcus, U., Schäffer, D., Leicht, A., Wenz, B., Nielsen, S., Santos-Hövener, C., Ross, R. S., Stambouli, O., Ratsch, B.-A., Bannert, N., Bock, C.-T., Kücherer, C., & Hamouda, O. (2014). A multicentre sero-behavioural survey for hepatitis B and C, HIV and HTLV among people who inject drugs in Germany using respondent driven sampling. BMC Public Health **14** (1) 845.
- ZIS Hamburg (2014). ECHO-Studie Epidemiologie der Hepatitis-C-Virus Infektion bei Opioidsubstituierten [online]. Available: <http://www.echo-studie.de/index.php?mindex=1> [accessed: 31-10-2014].
- Zurhold, H. (2005). Entwicklungsverläufe von Mädchen und jungen Frauen in der Drogenprostitution. Eine explorative Studie. VWB, Berlin.

## 11.2 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
<a href="http://www.bmg.bund.de">www.bmg.bund.de</a>	Bundesministerium für Gesundheit (BMG) Federal Ministry for Health
<a href="http://www.bzga.de">www.bzga.de</a>	Bundeszentrale für gesundheitliche Aufklärung (BZgA) Federal Centre for Health Education (FCHE)
<a href="http://www.dbdd.de">www.dbdd.de</a>	Deutsche Beobachtungsstelle für Drogen und Drogensucht (DBDD) German Monitoring Centre for Drugs and Drug Addiction
<a href="http://www.dhs.de">www.dhs.de</a>	Deutsche Hauptstelle für Suchtfragen (DHS) German Centre for Addiction Issues
<a href="http://www.drogenbeauftragte.de">www.drogenbeauftragte.de</a>	Drogenbeauftragte der Bundesregierung Commissioner of the Federal Government on Narcotic Drugs
<a href="http://www.drugcom.de">www.drugcom.de</a>	BZgA Informationen für junge Leute und Partygänger Federal Centre for Health Education information for young people and party goers
<a href="http://www.emcdda.europa.eu">www.emcdda.europa.eu</a>	Europäische Beobachtungsstelle für Drogen und Drogensucht (EBDD) European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)
<a href="http://www.prevnet.de">www.prevnet.de</a>	“PrevNet“ serves as a network between persons involved in drug prevention and facilitates access to information and material
<a href="http://www.rki.de">www.rki.de</a>	Robert Koch Institute (RKI), Berlin
<a href="http://www.fdr-online.info">www.fdr-online.info</a>	Fachverband Drogen und Rauschmittel e.V. (fdr) Professional Association of Drug Help Organisations
<a href="http://www.sucht.de">www.sucht.de</a>	Fachverband Sucht e.V. (FVS) German Association of Addiction

## 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
<a href="http://www.fh-frankfurt.de/fachbereiche/fb4/forschung/forschungsinstitute/isff.html">www.fh-frankfurt.de/fachbereiche/fb4/forschung/forschungsinstitute/isff.html</a>	Institut für Suchtforschung der Fachhochschule Frankfurt/Main Institute for Addiction Research of the Technical College Frankfurt/Main
<a href="http://www.katho-nrw.de/katho-nrw/forschung-entwicklung/institute-der-katho-nrw/disup/">www.katho-nrw.de/katho-nrw/forschung-entwicklung/institute-der-katho-nrw/disup/</a>	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)
<a href="http://www.dg-sucht.de">www.dg-sucht.de</a>	Deutsche Gesellschaft für Sucht German Association for Addiction
<a href="http://www.heroinstudie.de">www.heroinstudie.de</a>	Deutsche Heroinstudie German Heroin Study
<a href="http://www.ift.de">www.ift.de</a>	Institut für Therapieforschung München Institute for Therapy Research Munich
<a href="http://www.medizin.uni-greifswald.de/prevention/forschung/intervention/earlint_start.html">www.medizin.uni-greifswald.de/prevention/forschung/intervention/earlint_start.html</a>	Addiction Research Association, Nord-Ost ("Early intervention with substance-related disorders" (EARLINT))
<a href="http://www.psychologie.tu-dresden.de/i2/klinische/index.html">www.psychologie.tu-dresden.de/i2/klinische/index.html</a>	Dresden University of Technology Institute for Clinical Psychology and Psychotherapy
<a href="http://www.nsfv.de">www.nsfv.de</a>	North German Addiction Research Association e. V.
<a href="http://www.uke.de/zentren/suchtfragen-kinder-jugend/index.php">www.uke.de/zentren/suchtfragen-kinder-jugend/index.php</a>	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
<a href="http://www1.uni-frankfurt.de/fb/fb04/forschung/cdr/index.html">www1.uni-frankfurt.de/fb/fb04/forschung/cdr/index.html</a>	Goethe Universität Frankfurt am Main Goethe University Frankfurt/Main Centre For Drug Research (CDR)
<a href="http://www.zi-mannheim.de">www.zi-mannheim.de</a>	Zentralinstitut für seelische Gesundheit Mannheim Central Institute for Mental Health Mannheim
<a href="http://www.zis-hamburg.de">www.zis-hamburg.de</a>	Zentrum für Interdisziplinäre Suchtforschung (ZIS) der Universität Hamburg Centre for Interdisciplinary Addiction Research, Hamburg University

### Websites of other relevant institutions / working groups

Website	Content
www.gangway.de	Gangway e. V. – Social streetwork in Berlin
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 <i>Land</i> Centre for Addiction Problems Department for Addiction Prevention

### Cannabis-specific projects

Website	Content
www.averca.de	Project “AVerCa”, Working platform for “Best-Practice”-materials, projects and programmes, in order to optimise the work with and access to young cannabis users
www.be-u-online.de	Cannabis information campaign in 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 treatment programme for young people with cannabis disorders
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 Projekt – 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.chillout-pdm.de	Chill Out, Specialist Unit for Consumption Competence – Potsdam

<b>Website</b>	<b>Content</b>
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.drogerie-projekt.de	Musikszeneprojekt Drogerie, Prevention centre – Erfurt
www.drugscouts.de	SZL Suchtzentrum gGmbH – Leipzig Addiction Centre Leipzig
www.eve-rave.de	Eve & Rave – Münster
www.fixpunkt-berlin.de	Partyteam von Fixpunkt – Berlin
www.mindzone.de	Mindzone Projekt – München
www.odyssee-kiel.de	Partyprojekt of the Odyssee club – Kiel
www.partypack.de	Projekt der Drogenhilfe Köln e.V. Drug Aid Cologne
www.sapere-aude-ac.de	Safer Party Project – Aachen

### **Safer Use / Harm Reduction**

<b>Website</b>	<b>Content</b>
www.drogenkonsumraum.net	Deutsche AIDS-Hilfe e.V. – Project consumption rooms
www.drogenundmenschenrechte.de	Deutsche AIDS-Hilfe e.V. – Project clean injecting for inmates
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 – Project Syringe dispensing machines NOW

### **In-patient treatment of drug addicts in Germany**

<b>Website</b>	<b>Content</b>
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

## 12 Tables

Table 1.1	Model programmes and research projects funded by the federal government .....	12
Table 2.1	Prevalence of illegal drugs in Germany.....	25
Table 2.2	Prevalence of consumption of illegal drugs by substance.....	26
Table 2.3	Lifetime prevalence of a range of substances (%) in the 15 to 18 year old age group in the year after the survey; 2002-2013 (MoSyD).....	35
Table 2.4	Prevalence rates for the use of illicit drugs <i>except</i> cannabis among school populations and adolescents in various German studies.....	41
Table 2.5	Prevalence rates for the use of cannabis among school populations, adolescents and young adults in various studies* .....	42
Table 4.1	Estimate of the prevalence of problem opioid use from 2005 to 2013 (figures in 1,000s, age group 15-64 years old).....	82
Table 5.1	Overview of addiction support services offered.....	94
Table 5.2	Main diagnosis in outpatient therapy (DSHS outpatient data, 2013).....	102
Table 5.3	Main diagnosis and additional substance-related diagnosis (DSHS outpatient data, 2013) .....	104
Table 5.4	Socio-demographic data by main drug (DSHS outpatient data, 2013).....	105
Table 5.5	Routes of drug administration (DSHS outpatient data, 2013) .....	106
Table 5.6	Number of contacts and treatment duration (DSHS outpatient data, 2013) .....	106
Table 5.7	Inpatients broken down by addiction diagnosis.....	108
Table 5.8	Socio-demographic data by main drug (DSHS inpatient data, 2013).....	110
Table 5.9	Inpatient treatment of drug problems in hospitals 2009-2012 .....	114
Table 5.10	Type and proportion of substitution drugs reported to the substitution register (2005-2013).....	115
Table 6.1	Number of acute intoxication and poisoning cases, Statistical Report on Hospital Diagnoses, 2012.....	132
Table 6.2	Drug-related deaths 2013 by cause of death .....	136
Table 6.3	Mortality of opioid users in outpatient treatment – Trend .....	141
Table 8.1	Social situation of persons in outpatient therapy and low-threshold facilities by main drug (2013).....	151
Table 9.1	Drug use and road traffic accidents – human causes .....	169
Table 9.2	Imprisoned persons and narcotics offences.....	172

---

Table 9.3	Outpatient treatment of drug problems in prisons .....	175
Table 10.1	Quantity of illegal drugs seized in Germany, 2011 to 2013 .....	183
Table 10.2	Changes in the number of seizures and quantity seized .....	185
Table 10.3	Seizures of cannabis plants.....	185
Table 10.4	Prices of various drugs 2012 - 2013 (all prices in €) .....	187
Table 10.5	Amount of active ingredients in ecstasy in mg/CU .....	191



## 13 Figures

Figure 2.1	Cannabis use by age group. Trends 1973-2012 / 1993-2012 .....	28
Figure 2.2	12-month and 30-day prevalence of illicit drug use (except cannabis) among Frankfurt students aged between 15 and 18; 2002-2013 (MoSyD) .....	34
Figure 2.3	Lifetime, 12-month and 30-day prevalence of cannabis use among Frankfurt students aged between 15 and 18 years old; 2002-2013 (MoSyD) .....	36
Figure 3.1	Development of the substances addressed between 2011 and 2013.....	55
Figure 3.2	Proportion of under 25 year olds .....	58
Figure 3.3	Proportion of cases concerning heroin/opioids, age group of under 25 year olds.....	59
Figure 3.4	Proportion of cases concerning (meth)amphetamine, age group of under 25 year olds.....	60
Figure 3.5	Settings for prevention measures in 2013.....	63
Figure 5.1	Duration of inpatient treatment broken down by substance use disorders (DSHS inpatient data, 2013).....	111
Figure 5.2	Changes in admissions to outpatient therapy, by main diagnoses (DSHS outpatient data) .....	112
Figure 5.3	Changes in outpatient and inpatient rehabilitation therapies.....	113
Figure 6.1	Reported hepatitis B infections (according to the reference definition) according to report year, 2001-2013 .....	126
Figure 6.2	Reported hepatitis C new diagnoses, Germany, 2001 to 2013.....	128
Figure 6.3	Coding of causes of death in drug-related cases of death in the general mortality register (1998-2012) .....	138
Figure 6.4	Drug-induced deaths according to age groups 1998-2012 .....	139
Figure 6.5	Opiate induced intoxications in fatal drug overdoses 1998-2012 with ICD X/Y- coding.....	140
Figure 9.1	Development of dealing/trafficking offences (1996-2013).....	162
Figure 9.2	Development of consumption-related offences (1982-2013).....	163
Figure 9.3	Convictions under the Narcotics Act (BtMG).....	165
Figure 9.4	Trends in convictions under the BtMG .....	166
Figure 10.1	Number of seizures of Narcotic drugs in the Federal Republic of Germany from 2003 to 2013.....	184

---

Figure 10.2	Amount of active ingredients in heroin, cocaine and amphetamines 2003-2013 .....	189
Figure 10.3	Amount of active ingredient in cannabis 2006-2013.....	190