



European Monitoring Centre  
for Drugs and Drug Addiction



**GERMANY**  
2017 Report of the national  
REITOX Focal Point to the EMCDDA  
(Data year 2016 / 2017)

**Drugs**

Daniela Piontek, Esther Dammer, Loretta Schulte & Tim Pfeiffer-Gerschel

IFT Institute for Therapy Research

Gabriele Bartsch, German Centre for Addiction Issues

Maria Friedrich, Federal Centre for Health Education

Gefördert durch:



Bundesministerium  
für Gesundheit

aufgrund eines Beschlusses  
des Deutschen Bundestages

## Contents

<b>0</b>	<b>SUMMARY (T0)</b> .....	<b>7</b>
0.1	Summary of the Drugs workbook (T0.1).....	7
0.1.1	Drug use and the main illicit drugs (T0.1.1).....	7
0.1.2	The use of illicit drugs with alcohol, tobacco and prescription drugs (T0.1.2) .....	13
	<b>SECTION A: CANNABIS</b> .....	<b>15</b>
<b>1</b>	<b>NATIONAL PROFILE (T1)</b> .....	<b>15</b>
1.1	Prevalence and trends (T1.1).....	15
1.1.1	The relative importance of different types of cannabis (T1.1.1) .....	15
1.1.2	Cannabis use in the general population (T1.1.2).....	15
1.1.3	Cannabis use in school and other sub-populations (T1.1.3).....	18
1.2	Patterns, treatment and problem/high risk use (T1.2).....	20
1.2.1	Patterns of cannabis use (T1.2.1) .....	20
1.2.2	Reducing the demand for cannabis (T1.2.2) .....	21
1.2.3	High risk cannabis use (T1.2.3).....	21
1.2.4	Synthetic cannabinoids (T1.2.4).....	22
<b>2</b>	<b>TRENDS. NOT APPLICABLE FOR THIS WORKBOOK. INCLUDED ABOVE.</b> <b>(T2)</b> .....	<b>22</b>
<b>3</b>	<b>NEW DEVELOPMENTS (T3)</b> .....	<b>23</b>
3.1	New developments in the use of cannabis (T3.1).....	23
<b>4</b>	<b>ADDITIONAL INFORMATION (T4)</b> .....	<b>23</b>
4.1	Additional sources of information (T4.1).....	23
4.2	Further aspects of cannabis use (T4.2) .....	23
	<b>SECTION B. STIMULANTS</b> .....	<b>25</b>
<b>1</b>	<b>NATIONAL PROFILE (T1)</b> .....	<b>25</b>
1.1	Prevalence and trends (T1.1).....	25
1.1.1	The relative importance of different stimulant drugs (T1.1.1).....	25

1.1.2	Stimulant use in the general population (T1.1.2)	25
1.1.3	Stimulant use in school and other sub-populations (T1.1.3)	29
1.2	Patterns, treatment and problem/high risk use (T1.2)	31
1.2.1	Patterns of stimulant use (T1.2.1)	31
1.2.2	Treatment for stimulants (T1.2.2)	32
1.2.3	High risk stimulant use (T1.2.3)	32
1.2.4	Synthetic cathinones (T1.2.4)	33
1.2.5	Injecting and other routes of administration (T1.2.5)	33
1.2.6	Infectious diseases (T1.2.6)	34
<b>2</b>	<b>TRENDS. NOT APPLICABLE FOR THIS WORKBOOK. INCLUDED ABOVE. (T2)</b>	<b>34</b>
<b>3</b>	<b>NEW DEVELOPMENTS (T3)</b>	<b>34</b>
3.1	New developments in the use of stimulants (T3.1)	34
<b>4</b>	<b>ADDITIONAL INFORMATION (T4)</b>	<b>34</b>
4.1	Additional sources of information (T4.1)	34
4.2	Further aspects of stimulant use (T4.2)	34
<b>SECTION C. HEROIN AND OTHER OPIOIDS</b>		<b>37</b>
<b>1</b>	<b>NATIONAL PROFILE (T1)</b>	<b>37</b>
1.1	Prevalence and trends (T1.1)	37
1.1.1	The relative importance of different opioid drugs (T1.1.1)	37
1.1.2	Estimates of opioid use in the general population (T1.1.2)	37
1.1.3	Estimates of opioid use in sub-populations (T1.1.3)	39
1.2	Patterns, treatment and problem/high risk use (T1.2)	39
1.2.1	Patterns of heroin/opioid use (T1.2.3)	39
1.2.2	Treatment for heroin and other opioids (T1.2.4)	40
1.2.3	High risk opioid use (T1.2.3)	40
1.2.4	Synthetic opioids (T1.2.4)	40
1.2.5	Injecting and other routes of administration (T1.2.5)	40
1.2.6	Infectious diseases (T1.2.6)	41

<b>2</b>	<b>TRENDS. NOT RELEVANT FOR THIS SECTION. INCLUDED ABOVE. (T2)</b> .....	<b>41</b>
<b>3</b>	<b>NEW DEVELOPMENTS (T3)</b> .....	<b>41</b>
3.1	New developments in the use of heroin and other opioids (T3.1) .....	41
<b>4</b>	<b>ADDITIONAL INFORMATION (T4)</b> .....	<b>41</b>
4.1	Additional sources of information (T4.1) .....	41
4.2	Further aspects of stimulant use (T4.2) .....	41
<b>SECTION D. NEW PSYCHOACTIVE SUBSTANCES (NPS) AND OTHER DRUGS NOT COVERED ABOVE</b> .....		<b>43</b>
<b>1</b>	<b>NATIONAL PROFILE (T1)</b> .....	<b>43</b>
1.1	New psychoactive substances (NPS), other new or novel drugs, and less common drugs (T1.1) .....	43
1.1.1	Use of NPS: Prevalence and Trends in NPS use (T1.1.1).....	43
1.1.2	Harms related to NPS use (T1.1.2) .....	45
1.1.3	Use of other drugs: Prevalence, trends and harms related to other drug use (T1.1.3) .....	46
<b>2</b>	<b>TRENDS. NOT RELEVANT FOR THIS SECTION. INCLUDED ABOVE. (T2)</b> .....	<b>46</b>
<b>3</b>	<b>NEW DEVELOPMENTS (T3)</b> .....	<b>46</b>
3.1	New developments in the use of NPS and other drugs (T3.1) .....	46
<b>4</b>	<b>ADDITIONAL INFORMATION (T4)</b> .....	<b>46</b>
4.1	Additional sources of information (T4.1) .....	46
4.2	Further aspects of NPS and other drug use (T4.2) .....	46

**SECTION E. SOURCES AND METHODOLOGY.....49**

**1 SOURCES (T6.1).....49**

**2 METHODOLOGY (T6.2).....52**

**SECTION F: BIBLIOGRAPHY.....55**

**1 BIBLIOGRAPHY .....55**

**2 TABLES .....55**

**3 FIGURES.....57**



## 0 Summary (T0)

### 0.1 Summary of the Drugs workbook (T0.1)

#### 0.1.1 Drug use and the main illicit drugs (T0.1.1)

##### Drug use in the general population

In Germany, epidemiological data on drug use and drug users is available mainly on the basis of repeated national, representative surveys. Above all, two studies are established, which make data available at regular intervals (currently, for example, every three to four years) on the use of various illicit drugs in the general population. The Drug Affinity Study (Drogenaffinitätsstudie, DAS) (DAS; Orth 2016) is an analysis of substance use among adolescents and young adults (age group 12-25 years) on a long-term basis. The Epidemiological Survey of Substance Abuse (Epidemiologischer Suchtsurvey, ESA) examines the adult residential population in the age group 18-64 years (Piontek & Kraus 2016). The most recent survey in both studies took place in 2015.

Based on the most recent population survey of 2015, in Germany approx. 14.4 million adults between 18-64 (Piontek et al. 2016a) and 479,000 adolescents between 12-17 (Orth 2016) have used an illicit drug at least once in their life (Table 1). This corresponds to a lifetime prevalence of 28.2% and 10.2% respectively. The indicator of lifetime prevalence, however, also includes adult drug use from a long time ago. Based on the last 12 months, a prevalence of 7.1% and 7.5% of 3.6 million and 352,000 adolescents respectively can be assumed. In the last 30 days, 3.4% and 2.5% or around 1.7 million adults and 117,000 adolescents have taken illicit drugs.

Table 1 Prevalence of the use of any illicit drug in Germany

	Source <sup>1)</sup>	Age	Prevalence	Extrapolation <sup>2)</sup>
Lifetime	ESA 2015	18-64	28,2 %	14.381.000
	DAS 2015	12-17	10.2%	479.000
12-month	ESA 2015	18-64	7.1%	3.621.000
	DAS 2015	12-17	7.5%	352.000
30-day	ESA 2015	18-64	3,4 %	1.734.000
	DAS 2015	12-17	2.5%	117.000

<sup>1)</sup> ESA Epidemiological Survey of Substance Abuse: The prevalence values for 2015 cannot be compared with those of earlier ESA surveys to ascertain trends over time due to changed weightings. The values include the substances cannabis, amphetamine/methamphetamine, ecstasy, LSD, heroin/other opiates, cocaine/crack, mushrooms, NPS.

DAS Drug Affinity Study: The values include the substances cannabis, ecstasy, LSD, amphetamine, methamphetamine (crystal meth), cocaine, crack, heroin, NPS, inhalants and psychoactive plants.

<sup>2)</sup> Figures are rounded. Extrapolations are based on population numbers of 50,996,806 people between 18-64 years old and 4,693,587 people aged between 12-17 (as of 31 Dec. 2014; Statistisches Bundesamt).

Cannabis plays the most prominent role of all illicit drugs among both adolescents and adults. In comparison to other drugs, the substance clearly predominates, with a 12-month prevalence of 7.3% among 12 to 17-year-olds and 6.1% among 18 to 64-year-olds (Table 2). The proportion of adolescents and adults who have consumed any other drug in the same time period is 1.2% and 2.3% respectively.

In contrast to cannabis, the 12-month prevalence rates of all other individual substances is under 1% both for adolescents and adults. Among 12 to 17-year-olds, ecstasy (0.5%) as well as amphetamine and cocaine/crack (0.3% each) are the most frequently consumed drugs after cannabis. The use of heroin/other opiates, inhalants, new psychoactive substances and methamphetamine does not occur in this age group. Among adults aged 18-64, amphetamine (1.0%), new psychoactive substances (0.9%) as well as ecstasy and cocaine/crack (0.6% each) are the drugs, in addition to cannabis which have notable prevalence rates.

Table 2 12-month prevalence of illicit drugs use in the general population, 2015

Source <sup>1)</sup>	Age	Any illicit drug	Cannabis	Drug other than cannabis <sup>2)</sup>
Total				
ESA 2015	18-64	7.1 %	6.1%	2.3%
DAS 2015	12-17	7.5 %	7.3%	1.3%
Male				
ESA 2015	18-64	8.4%	7.4%	2.6%
DAS 2015	12-17	8.4%	8.1%	1.3%
Female				
ESA 2015	18-64	5.8%	4.9%	2.0%
DAS 2015	12-17	6.5%	6.3%	1.1%

<sup>1)</sup> ESA Epidemiological Survey of Substance Abuse. DAS Drug Affinity Study.

<sup>2)</sup> Other drugs include the substances amphetamine/methamphetamine, ecstasy, LSD, heroin/other opiates, cocaine/crack, inhalants (only DAS), mushrooms, NPS.

In general, the use of illicit drugs among boys and men is more prevalent than among girls and women. This gender difference is particularly noticeable for cannabis and amphetamines. A stratification of the adult data by age shows the highest prevalence of use among 18 to 24-year-olds (20.5% national average for any illicit drug). Prevalence decreases with age and among 60 to 64-year-olds is 1.2%.

### Clinically relevant and problem drug use

In the scope of the ESA 2015, in addition to use, indicators of clinically relevant and problem use were also recorded for cannabis, cocaine and amphetamines. On the basis of the very low prevalence rates at a population level, other illicit drugs were not taken into account. This



information was recorded with the Severity of Dependence Scale (SDS), a short screening instrument, in which respondents are asked about the presence of specific problems in connection with substance use. As this scale also records problems which are below the threshold of clinical diagnoses, the prevalence rates are higher than the estimates of substance related disorders reported by the ESA 2012 (Pabst et al. 2013).

According to the SDS criteria, 1.7% of men and 1.1% of women aged between 18 and 64 have a clinically relevant use of at least one of the illicit drugs included in the survey, in relation to the time period of the last 12 months (Gomes de Matos et al. 2016; Figure 1). This produces an estimated total number of 714,000 affected people in Germany. The largest proportion of cases by far is problem use of cannabis, which 1.4% of men and 1.0% of women exhibited. For amphetamine/methamphetamine and cocaine, the prevalence rates were considerably lower at 0.2% (men) and 0.3% (women) and 0.2% (men) and 0.1% (women) respectively.

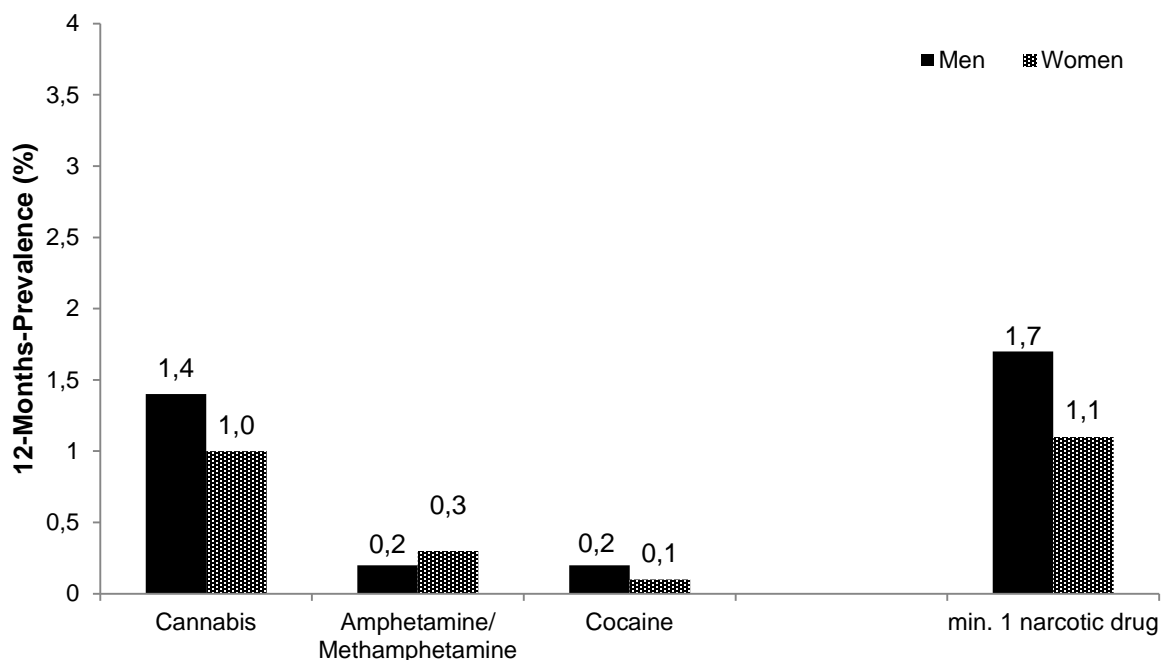


Figure 1 12-month prevalence of clinically relevant use of illicit drugs among adults in Germany

### Drug use in the *Laender*

For every ESA survey, the *Laender* have the opportunity to contribute funding and widen the sample, enabling representative conclusions to be drawn on the distribution of substance use and related problems in that *Land*. In 2015, six *Laender* took part in this additional survey - Bavaria, Hamburg, Hesse, North Rhine-Westphalia, Saxony and Thuringia (Piontek et al. 2016b).

In the territorial *Laender* (i.e. *Laender* which are not city states, such as Berlin) of Bavaria, Hesse, North Rhine-Westphalia, Saxony and Thuringia the 12-month prevalence of use of any illicit drug fluctuates between 5.3% and 7.9% therefore showing no significant divergence from the national average. Only in Hamburg is the proportion of users significantly higher, at 12.8%, than in the national sample.

Table 3 12-month prevalence of any illicit drug use by *Land*

<b>Land</b>	<b>Age</b>	<b>Total</b>	<b>Males</b>	<b>Females</b>
Bavaria	18-64	6.8%	8.6%	4.9%
Hamburg	18-64	12.8%	15.5%	10.2%
Hesse	18-64	5.9%	7.3%	4.5%
North Westphalia	Rhine- 18-64	7.9%	9.4%	6.4%
Saxony	18-64	7.4%	10.3%	4.3%
Thuringia	18-64	5.3%	6.6%	3.9%

### Drug use among pupils

In Germany a number of surveys are conducted with pupils which make information on substance use available. Of note is that these studies are all regionally limited, i.e. only conducted in individual cities or in one or just a few *Laender*. Nationally comparable data on substance use among pupils is for this reason not available. For 2015 and 2016, data is available from four studies. A repeating pupil survey in Frankfurt am Main is carried out in the scope of the Monitoring System on Drug Trends (Monitoring System Drogentrends, MoSyD) (Werse et al. 2017a). In Bavaria, the German survey of the European School Survey Project on Alcohol and Other Drugs (ESPAD; Kraus et al. 2016a) was carried out. In Lower Saxony, a regular pupil survey - the Lower Saxony Survey - was continued (Bergmann et al. 2017). The SCHULBUS survey was carried out in 2015 in Hamburg, Bavaria, Saxony and North Rhine-Westphalia (Baumgärtner & Hiller 2016).

Cannabis clearly dominates over other illicit drugs among pupils as well (Table 4). The lifetime prevalence of cannabis use in the Bavarian ESPAD study is, at 25.2%, only just below the total prevalence of any illicit drug (27.1%). Other illicit drugs were used by 11.1% of the surveyed pupils. Comparable ratios are found in the other studies. In all pupil studies, males report a more frequent use of illicit drugs than females.

Table 4 Prevalence of illicit drug use in 2015/16 among pupils

Source <sup>1)</sup>	Age	Time reference	Any illicit drug	Cannabis	Drug other than cannabis <sup>2)</sup>
ESPAD					
Bavaria	13-19	Lifetime	27,1 %	25,2 %	11.1%
SCHULBUS					
Hamburg	14-17	Lifetime	n.r.	23.3%	5.5%
Bavaria	14-17	Lifetime	n.r.	15.8%	5.7%
Saxony	14-17	Lifetime	n.r.	20.2%	4.3%
North Rhine-Westphalia	14-17	Lifetime	n.r.	17.3%	4.5%
MoSyD					
Frankfurt	15-18	Lifetime	n.r.	40 %	10 %
		12-month	n.r.	31 %	5 %
Lower Saxony Survey					
Lower Saxony	M = 14.9	12-month	n.r.	13.2%	2.0%

<sup>1)</sup> ESPAD European School Survey Project on Alcohol and Other Drugs. MoSyD Monitoring System Drug Trends

<sup>2)</sup> Other drugs includes the following substances:

ESPAD: amphetamine, methamphetamine, ecstasy, LSD, cocaine, crack, heroin, GHB, mushrooms, NPS

SCHULBUS: Ecstasy, mushrooms, LSD, amphetamine, methamphetamine, cocaine

Lower Saxony Survey: Ecstasy, speed, cocaine, LSD, angel's trumpet, magic mushrooms

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

n.r. not reported. M mean value

In the comparison of results from different pupil surveys in particular, it must be taken into account that the underlying studies have considerable methodological differences. For example, the age groups and the year groups surveyed are not uniform. Part of the differences in the prevalence estimates could also be attributable to the differing survey methods (written v. computer supported) as well as the different wording of the questions. Finally, there also exist some considerable regional differences in use behaviour and the characteristics of the markets (e.g. availability, price and/or purity for different substances).

### Drug use in specific sub-population groups

A study by Hannemann et al. (2017) investigated the use of different substances among visitors to electronic music events in Greater Munich. In this non-representative survey over 80% of respondents reported having used illicit drugs in the previous 12 months. In first place, with a prevalence of 80.7%, was cannabis, followed by ecstasy (63.5%), speed (59.5%) and cocaine (40.3%).

### Trends in drug use in Germany

The trend of use of any drug among both 12 to 17-year-olds and 18 to 59-year-olds has followed a wavelike pattern over the last 20 years (Piontek et al. 2016c; Orth 2016; Figure 2, Figure 3). Following an increase in the prevalence rate from the early 1990s to 2003 and 2004 respectively, use then decreased again in the following years. Since 2011 and 2012 respectively, however, there has been a marked increase again. The pattern of the trend in drug use over time is mainly influenced by the prevalence of cannabis, which follows a similar course. The developments over time are comparable for men and women and are more strongly pronounced in younger age groups than among older people. In relation to the clinically relevant use of cannabis in the adult general population, compared to the years 2006 and 2009 in which the SDS was also implemented, there has been no significant change among men or women.

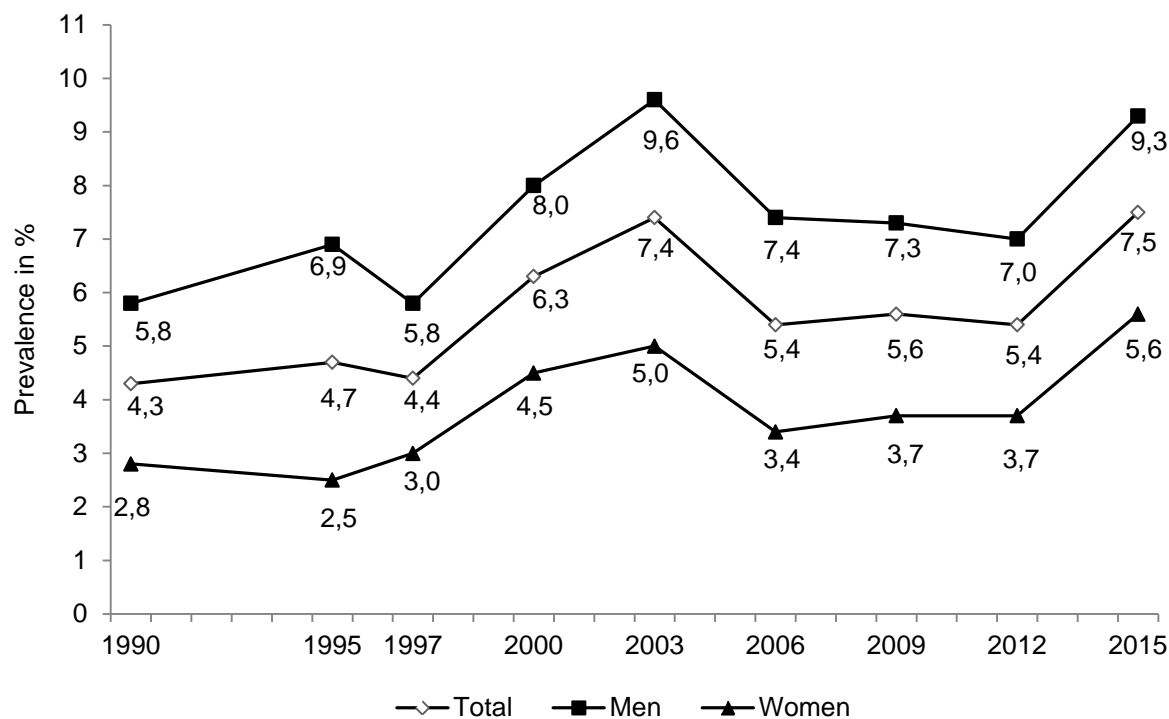


Figure 2 Trends in 12-month prevalence of use of any illicit drug among 18 to 59-year-olds in Germany, 1990-2015 (ESA)

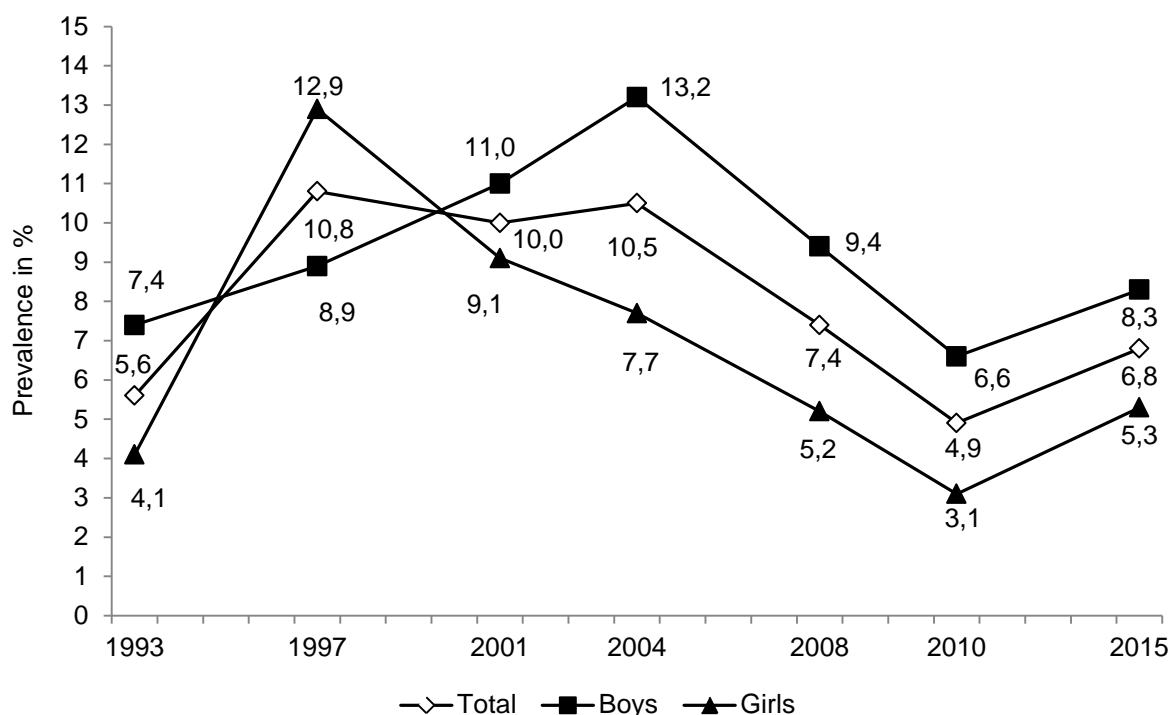


Figure 3 Trends in 12-month prevalence of use of any illicit drug among 12 to 17-year-olds in Germany, 1990-2015 (DAS)

### Other current aspects of illicit drug use in Germany

In the study by Hannemann et al. (2017) on substance use among visitors to music events, different groups (classes) of users were identified, with the help of latent class analysis, based on the 12-month prevalence of use of thirteen different substances. The conservative class hardly uses substances other than cannabis; the traditional class showed the highest prevalence for the classic party drugs cannabis, speed, ecstasy and LSD; a high proportion of the psychedelic class used, in addition to the classic party drugs, psychedelics such as LSD, ketamine and mushrooms and the unselective class used all substances covered. As far as the different patterns of use are concerned, the unselective class exhibited the most problematic use behaviour. In this respect, that group has both the highest frequency of use, and the highest probability of having taken, at some point, more than one substance at the same time.

#### 0.1.2 The use of illicit drugs with alcohol, tobacco and prescription drugs (T0.1.2)

Overall, there is little current information on the combination of illicit drugs with legal substances and prescription drugs. The data from the representative studies in the general population, in schools and in special sub-population groups allows evaluations to be made on the combined use of various substances within a defined timeframe (for example whether both alcohol and illicit drugs have been consumed within the last 12 months), whereas data on parallel, i.e. simultaneous, use, which could provide information about patterns of use, is not collected separately.

Information on the simultaneous use of different substances is available for the group defined as visitors of electronic music events (Hannemann et al. 2017). The four identified user groups also differ according to the question of whether they have already combined illicit drugs with alcohol or medicinal drugs. The conservative class, which mainly uses cannabis, had the lowest prevalence (26.7%) for the combination of illicit drugs and alcohol. Significantly higher values are found in the traditional class (44.1%), the psychedelic class (46.9%) and the unselective class (48.8%). The combination of illicit drugs with prescribed drugs is, with a lifetime prevalence of 18.5%, only strongly pronounced in the unselective class, while in the other classes it is between 6.2% and 6.9%.

## SECTION A: CANNABIS

### 1 National profile (T1)

#### 1.1 Prevalence and trends (T1.1)

##### 1.1.1 The relative importance of different types of cannabis (T1.1.1)

The data currently available in Germany in the general population and in schools does not usually allow any distinction to be drawn between different types of cannabis, since this information is not collected. Only in the MoSyD school survey in Frankfurt were those who had used cannabis in the previous 30 days subsequently asked which cannabis product they had consumed in this time period (Werse et al. 2017a). The majority of users (55%) reported only having smoked marijuana or "grass", a further 32% had consumed marijuana and hashish and 6% only hashish ("don't know": 7%).

##### 1.1.2 Cannabis use in the general population (T1.1.2)

Cannabis is by some margin the most commonly used illicit drug in Germany. The proportion of people who have already consumed cannabis at least once in their lives is 27.2% for adults aged between 18 and 64 years old (Gomes de Matos et al. 2016a) and 9.7% for adolescents aged between 12 and 17 (Orth 2016; Table 5). In relation to the last 12 months, 6.1% of adults and 7.3% of adolescents have consumed cannabis with the 30-day prevalence rates at 3.1% and 2.2% respectively. In all age groups, the substance was consumed by a significantly higher proportion of men and boys than of women and girls.

Table 5 Prevalence of cannabis use in Germany

	Source <sup>1)</sup>	Age	Total Prevalence	Male Prevalence	Female Prevalence
Lifetime	ESA 2015	18-64	27.2%	31.8%	22.6%
	DAS 2015	12-17	9.7%	11.2%	8.2%
12-month	ESA 2015	18-64	6,1 %	7.4%	4.9%
	DAS 2015	12-17	7,3 %	8.1%	6.3%
30-day	ESA 2015	18-64	3.1%	4.0%	2.3%
	DAS 2015	12-17	2.2%	2.7%	1.6%

<sup>1)</sup> ESA Epidemiological Survey of Substance Abuse. DAS Drug Affinity Study.

Over the time period of the last 25 years, the prevalence of cannabis use among 18 to 59-year-old adults, has exhibited, with a wavelike pattern, an overall upward trend. From 1990 to 2015 it increased significantly among men, from 5.6% to 8.7%, and among women, from 2.7% to 5.3% (Piontek et al. 2016c; Figure 4).

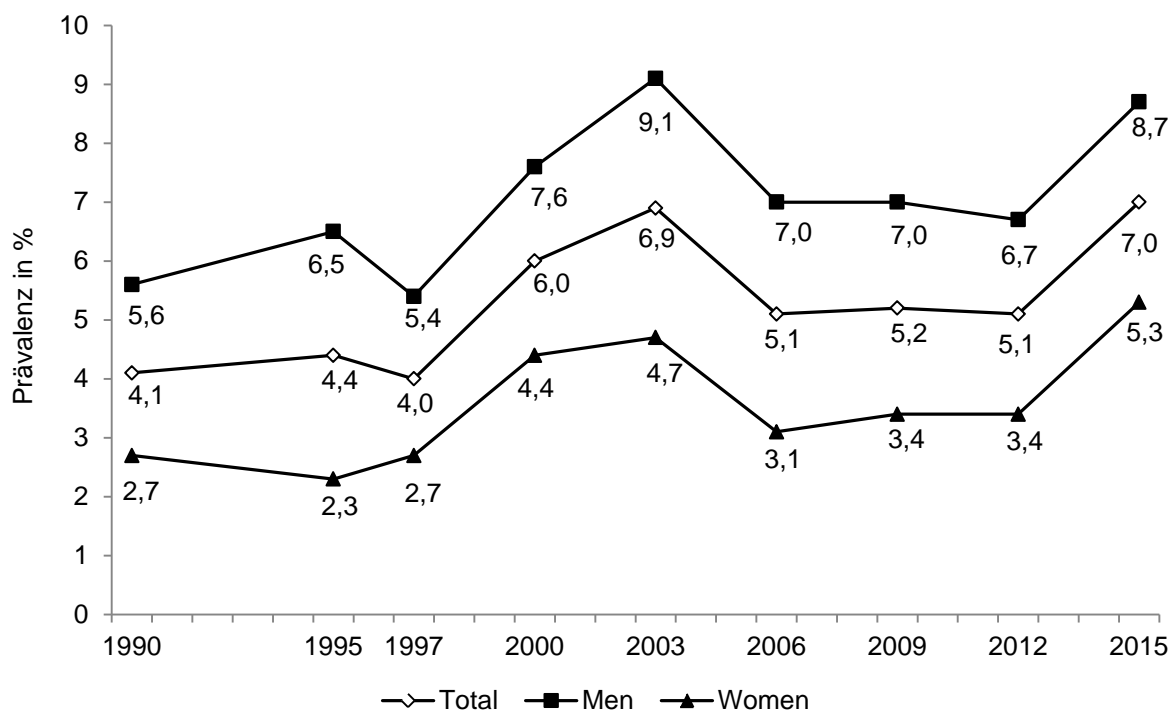


Figure 4 Trends in 12-month prevalence of cannabis use among 18 to 59-year-olds in Germany, 1990-2015 (ESA)

A similar trend in the prevalence of cannabis use can be observed among 12 to 17-year-olds (Orth 2016; Figure 5). The highest 12-month prevalence rate in this age group was recorded in 2004 (10.1%). Following a drop since then to 4.6% in 2011, it once again reached a high prevalence of 8.1% in 2014. Between 2014 and 2015, the proportion of users fell to 6.4%. Since the beginning of the 2000s, the trends for both genders have been parallel for adolescents also.



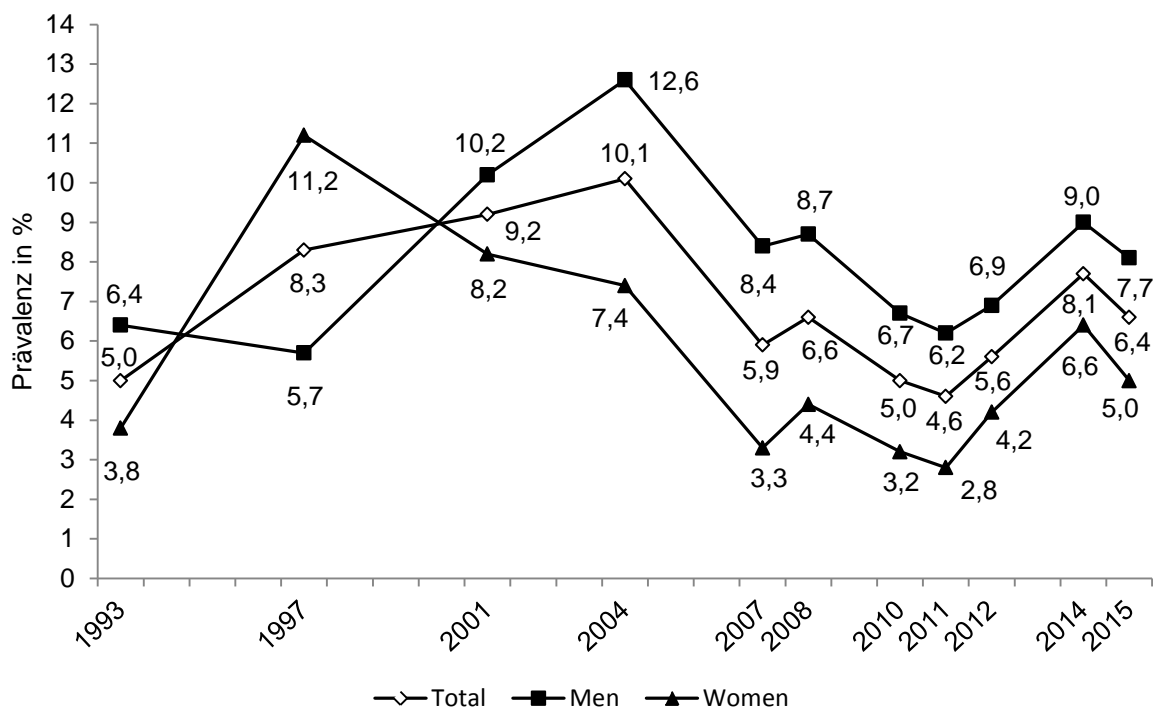


Figure 5 Trends in 12-month prevalence of cannabis use among 12 to 17-year-olds in Germany, 1993-2015 (DAS)

### Cannabis use in the *Laender*.

In all surveyed *Laender*, cannabis is the most widespread illicit drug (Piontek et al. 2016b). There are, however, some significant differences in the prevalence of use. In the time period of the last 12 months, cannabis has been the most frequently consumed in Hamburg, at 11.4%. The prevalences for the other *Laender* are between 4.1% in Thuringia and 5.9% in North Rhine-Westphalia. In Hamburg, the values differ significantly from the national data for both men (13.9%) and women (8.8%). Significantly lower values than the national average were recorded for women in Thuringia (2.7%).

In most *Laender*, the prevalence of cannabis use has followed a wavelike decreasing pattern, with an increase between the 1990s and 2015. In comparison to the first survey in 1995, there has been a significant increase in the prevalence among women in Bavaria, men and women in Saxony and men in Thuringia. Moreover, among men and women in Hamburg and men in North Rhine-Westphalia increases can be observed since 1997. The only *Land* in which no significant change has been found, is Hesse.

### 1.1.3 Cannabis use in school and other sub-populations (T1.1.3)

#### Cannabis use in schools

In the current ESPAD survey, which in Germany was carried out exclusively in Bavaria, 25.2% of pupils in the 9th and 10th grades reported having already used cannabis at least once in their lives (Kraus et al. 2016; Table 6). In relation to the last 12 months or 30 days, the rates were 21.6% and 10.4% of adolescents respectively. Cannabis use is considerably more widespread among boys than girls. 27.9% of male pupils reported use in the previous year, whilst the figure was only 15.4% for female pupils. Differences are also present between the different types of school. The prevalence rates are significantly higher at secondary general schools (Mittelschule) than at intermediate secondary (Realschule) and grammar schools (Gymnasium), which were both at a comparable level. Overall, the lifetime prevalence of use of cannabis among adolescents surveyed fell between 2003 and 2011 with the proportion of girls with experience of cannabis declining to a greater extent than the proportion of male users.

The SCHULBUS survey, conducted among 14 to 18-year-olds in the regions bordering the Czech Republic and the Netherlands, shows clear regional differences in cannabis use (Baumgärtner & Hiller 2016). At 23.3%, Hamburg has a much higher proportion of pupils with use experience than other *Laender* (15.8% to 20.2%). Looking at the data on the 30-day prevalence for cannabis products in Hamburg, which is collected and analysed on a long-term basis, it can be seen that the proportion of current users, since a peak in 2012, has been falling again and is currently at around 2009 levels.

In the Frankfurt MoSyD, 40% of 15 to 18-year-olds reported having used cannabis at least once in their life (Werse et al. 2017a). In the last 12 months this figure was 31%. Among all prevalence rates, school boys are still markedly ahead of school girls. After an increase in lifetime prevalence of cannabis use among Frankfurt school children over the last two surveys, the value for 2016 has fallen once again. The same is true for the 12-month prevalence.

Of the 9th grade pupils surveyed in Lower Saxony, 13.2% had consumed cannabis in the last 12 months (Bergmann et al. 2017). Pupils in lower types of schools and adolescents with a migration background use cannabis more often than pupils of the same age in higher types of school and those of German origin. Comparing the survey years, one can see a significant increase since 2013, in particular among male adolescents, adolescents from lower types of school and German adolescents.

Table 6 Prevalence of use of cannabis in 2015/16 among pupils

Source <sup>1)</sup>	Age	Time reference	Total Prevalence	Male Prevalence	Female Prevalence
<b>ESPAD</b>					
Bavaria	13-19	Lifetime	25.2%	31.8%	18.7%
		12-month	21.6%	27.9%	15.4%
<b>SCHULBUS</b>					
Hamburg	14-17	Lifetime	23.3%	26.0%	20.4%
		30-day	11.8%	15.2%	8.4%
Bavaria	14-17	Lifetime	15.8%	21.1%	10.2%
		30-day	8.5%	11.1%	5.7%
Saxony	14-17	Lifetime	20.2%	22.6%	17.7%
		30-day	9.1%	10.9%	7.3%
North Rhine-Westphalia	14-17	Lifetime	17.3%	18.1%	16.5 %
		30-day	7.8%	10.1%	5.3%
<b>MoSyD</b>					
Frankfurt	15-18	Lifetime	40 %	45 %	35 %
		12-month	31 %	38 %	23 %
<b>Lower Saxony Survey</b>					
Lower Saxony	M = 14.9	12-month	13.2%	n.r.	n.r.

<sup>1)</sup> ESPAD European School Survey Project on Alcohol and Other Drugs. MoSyD Monitoring System Drug Trends

n.r. not reported. M mean value

### Cannabis use in specific sub-populations

A large acceptance of cannabis can also be seen from the survey carried out in the scope of Phar-Mon NPS project on visitors to electronic music events (Hannemann et al. 2017). With a 12-month prevalence of 80.7%, cannabis is the most commonly used illicit substance by some margin. On average, the substance has been consumed by users on 12.2 of the last 30 days. The proportion of daily users is 23.7%.

In 2016, the scene study carried out in the scope of the MoSyD investigated substance use in the open drug scene in Frankfurt (Werse et al. 2017b). At 92%, nearly all respondents had experience of cannabis. The 12-month prevalence rate was 65% and has thus, following a survey peak in 2014, fallen once again. As far as the 30-day prevalence is concerned, the starting value from 1995 is higher than the values from subsequent surveys; in the meantime, the prevalence has fallen to the current lowest value of all surveys (51%). In comparison to the most recent survey, cannabis use within the previous 24 hours has also fallen, to 26%.

## **1.2 Patterns, treatment and problem/high risk use (T1.2)**

### **1.2.1 Patterns of cannabis use (T1.2.1)**

The ESA 2015 has provided information on patterns of use among 18 to 64-year-old adults. Of the people who have consumed cannabis in the previous 12 months, 21.8% have also consumed at least one other illegal substance in the same period (Piontek et al. 2016a). The proportion was highest, at 13.0%, for amphetamine, followed by ecstasy (9.3%) and cocaine/crack (8.5%). The average age of first use of cannabis was 19.2 in the ESA 2015, of which men and younger age groups reported an earlier start of use. Among the majority of 12-month users of cannabis, occasional use is from 1 to a maximum of 5 occasions (52.0%). 14.9% of users reported a frequent use of 100 or more occasions.

For adolescents aged between 12 and 17 years old, several patterns of use can be extracted from the DAS (Orth 2016). In particular, frequent use was examined, which was defined as "more than ten instances of use in the last twelve months". The proportion of affected adolescents fell significantly in comparison to 1993, from 1.7% to 0.8%. The decrease was more considerable among male adolescents than female adolescents.

In the Bavarian ESPAD survey, it was reported that cannabis use among pupils remained experimental in the vast majority of cases (Kraus et al. 2016a). 6.9% of the sample reported a frequent use of at least 20 times in their lives, whereby boys were more frequently affected than girls. The average age of first use of cannabis is 14.8 years old. Gender differences or differences between types of school have not been observed. Just over one third of adolescents surveyed (38.5%) reported that it was easy or very easy for them to obtain cannabis. Boys estimate the availability as being higher than girls do.

For pupils in Frankfurt, the proportion reporting intensive (daily) users has fallen slightly to 3% from the previous year (4%) (Werse et al. 2017a). The proportion of frequent users - those that have taken cannabis at least ten times in the last 30 days - has also slightly fallen. The proportion of all 15 to 18-year-olds surveyed who had used during school time, fell from 7% the previous year, to 5%. The average age of first cannabis use in 2015 is 15.0 and is thus higher than most of the previous years.

In Lower Saxony, the average age of first use among pupils is 14.3 (Bergmann et al. 2017). Analyses of the use frequency show that the majority of adolescents only occasionally use cannabis. In relation to the overall sample, 9.1% reported having used cannabis between 1 and a maximum of 12 times in the previous 12 months. The proportion of those who used the substance several times per month, once/several times per week or daily, is 1.7%, 1.6% and 0.8% respectively. In comparison to 2013, however, an increase in frequent use has been observed.

In the Frankfurt open drug scene, cannabis use in 2016 has once again become more moderate, following the peak in the previous reporting year (Werse et al. 2017b). Every fourth user (25%) takes cannabis every day or almost every day; in 2014 it was 40%. In contrast, 32% only rarely use the drug. In the course of the entire cycle however, the

changes in the intensity of cannabis use do not indicate a clear trend and are not statistically significant.

### **1.2.2 Reducing the demand for cannabis (T1.2.2)**

Specialist counselling and treatment of the secondary harm from cannabis use in Germany is, for the most part, provided on an outpatient basis. Inpatient admittance and treatment is only provided for severe health disorders or in cases with a high risk of relapse (Hoch et al. 2015). In Germany, according to a study of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), around 10% of cannabis users needing treatment (daily or almost daily use) receive it. In a comparison with all other European countries, Germany is, together with Norway, amongst the countries with the highest percentage of people reached (Schettino et al. 2015).

Further information on the treatment of cannabis related problems can be found in the 2017 Treatment workbook.

The data of the documentation system for addiction prevention, Dot.sys, shows that the proportion of specific services for reducing cannabis use has continued to grow (see Prevention workbook).

### **1.2.3 High risk cannabis use (T1.2.3)**

Based on data from the ESA 2015 and extrapolated to the German population, there are, in the age group 18 to 64 years old, estimated to be around 550,000 people (300,000 men and 250,000 women) with clinically relevant cannabis use according to SDS (Gomes de Matos et al. 2016a). This corresponds to a 12-month prevalence of 1.4% and 1.0% among men and women respectively. Since 2006, the prevalence of clinically relevant cannabis use has remained unchanged for both sexes (Kraus et al. 2016b).

In the scope of the ESPAD study in Bavaria, problem cannabis use was recorded by means of the Cannabis Abuse Screening Test (CAST), with a total of six unfavourable patterns of use surveyed (Kraus et al. 2016a). Overall, CAST established problem cannabis use for 1.6% of the overall sample, and 7.6% of the 12-month-users. Compared to the 2011 survey, there were no changes in the prevalence of cannabis related problems. The majority (85.8%) of adolescents who had consumed cannabis in the previous 12 months reported not having experienced any of the symptoms or problems included in the CAST. Memory problems in connection with the use of cannabis were reported by around 30% of the 12-month-users. Unfavourable patterns of use (cannabis use alone or already using in the morning) were more frequently reported by just under 10%.

In the SCHULBUS survey, cannabis dependence is defined by reaching a threshold of 2 points on the SDS (Baumgärtner & Hiller 2016). In relation to all adolescents surveyed in 2015, 6% of them could therefore be classed as cannabis dependent. This affects male adolescents and older respondents more strongly. Trend analyses for Hamburg indicate that the proportion of those affected has slightly increased among both genders since 2007, irrespective of age.

A subjective estimation of dependence is used in the Frankfurt MoSyD survey. This is based on the question of whether the pupils are of the opinion that they are currently dependent on one or more drugs (Werse et al., 2017a). Overall, 2% of respondents reported that they were dependent on cannabis. The proportion of users who were, in their own estimation, dependent on cannabis has fallen in comparison to the previous year.

in the Lower Saxony pupil survey, problem cannabis use is defined as at least repeated monthly use (Bergmann et al. 2017). The proportion of affected pupils in the current survey was 4.1% and has therefore increased in comparison to 2013. Boys, pupils from lower types of school and migrants use cannabis more frequently in problematic ways. Problem use has significantly increased in these groups in particular.

#### **1.2.4 Synthetic cannabinoids (T1.2.4)**

Specific information on the use of synthetic cannabinoids is available from two pupil surveys and from one survey in the open drug scene. The prevalence of use for individual groups of new psychoactive substances was included. The results for the categories "herb mixtures" and "herbal smoke blends", which frequently include synthetic cannabinoids, are presented. Further results for nps in general can be found in section D.

Of the 9th and 10th grade pupils surveyed in Bavaria, 5.9% had used NPS in the last 12 months in the form of herb mixtures (Kraus et al. 2016a). Almost every tenth secondary general school pupil used herb mixtures in the last year, in comparison to 3.1% of grammar school pupils and 6.7% of intermediate secondary school pupils. Boys smoke herb mixtures somewhat more often than girls (6.5% v. 5.2%).

In the Frankfurt MoSyD survey in 2015, a total of 6% of the 15 to 18-year-old respondents reported having consumed a herbal smoke blend at least once in their life (Werse et al. 2017a). For 2% this was also the case for the previous 30 days. 2% of adolescents reported a frequent use of more than five times in their lives. The lifetime prevalence of use of herbal smoke blends has remained unchanged from the previous year and thus is below the 2009-12 values. Overall, a falling trend in the course of the entire cycle continues to remain statistically significant. A slightly increasing trend was found for the 30-day prevalence rate and the more than five times use.

In the MoSyD scene study in the open drug scene, NPS play only a marginal role overall (Werse et al. 2017b). Synthetic cannabinoids or "herbal smoke blends" were the most tried, at 23%, and 7% had also consumed them in the last 12 months. The 30-day prevalence is 1%.

## **2 Trends. Not applicable for this workbook. Included above. (T2)**

### **3 New developments (T3)**

#### **3.1 New developments in the use of cannabis (T3.1)**

The current nationwide situation as well as current studies are reported above (see A1.1 and A1.2). No additional information is available on new developments in the use of cannabis.

### **4 Additional information (T4)**

#### **4.1 Additional sources of information (T4.1)**

In a study based on the repeated surveys of a Lower Saxony pupil survey, Baier et al. (2016) investigated the causal connection between cannabis and alcohol consumption and delinquent behaviour. In an initial observation of the development of substance use over time in the cross-sectional surveys since 2007/2008, it is initially apparent that problem cannabis use in particular has increased in recent years. This development varies significantly from other substance use indicators, which show a steady decline. Additionally, a longitudinal study with 1,269 ninth and eleventh grade pupils was conducted. According to that, a later use of cannabis in the eleventh grade can be predicted by the consumption of alcohol and cigarettes as well as the committing of property damage at a younger age. No significant connection was found between cannabis use and delinquent behaviour such as shoplifting, property damage and violent behaviour. However, the use also did not reduce such behaviour, as several authors assume, on the basis of the dulling effect of cannabis.

Morgenstern et al. (2017) investigated whether the use of psychotropic substances was connected to educational satisfaction. For this purpose, a written survey was conducted among 5,688 trainees in their first year, from 49 vocational schools. Bivariate analyses showed that greater satisfaction with the training was seen among trainees who stated that they did not use cannabis at all or only rarely, or who were below the cut-off for problem use. In the final multivariate model, cannabis use was, however, no longer a significant predictor. The only remaining important factors were what care at work and school was availed of, the working environment, the assessment of the skilled profession and problem alcohol use.

#### **4.2 Further aspects of cannabis use (T4.2)**

No information on further aspects of cannabis use is available.





## **SECTION B. STIMULANTS**

### **1 National profile (T1)**

#### **1.1 Prevalence and trends (T1.1)**

##### **1.1.1 The relative importance of different stimulant drugs (T1.1.1)**

Among stimulants in Germany cocaine and amphetamines are the dominant substances. Ecstasy is consumed less frequently overall. However, the importance of individual stimulants varies widely by region and scene as well as between age groups. The significance of amphetamine and methamphetamine appears to have increased in recent years. Growth rates, some of them considerable, have been observed for amphetamine, especially in the indicators from law enforcement authorities (users who come to the attention of law enforcement for the first time, relevant offences, seizures) (NB: crimes of low reportability - the more frequently the police perform checks, the higher the number of crimes become known or detected). In the area of counselling/treatment, for example, increased demand has been reported in recent years from outpatient counselling facilities and specialist walk-in clinics for support due to problems in connection with the use of amphetamine/methamphetamine. In national surveys on prevalence of use in the general public, these clear increases are not seen in the same way.

A general problem, in particular with data relating to health, is that the coding according to ICD-10 often does not allow any differentiation between amphetamine and methamphetamine. Whilst negative effects in connection with methamphetamine can be seen in some regions of Germany similarly in both the counselling/treatment realm and from law enforcement authorities, in other regions this substance has so far not played a role at all or only a minor role. Variables such as availability and regional preferences are also clearly important in relation to the use of stimulants.

##### **1.1.2 Stimulant use in the general population (T1.1.2)**

Among 18 to 64-year-old adults in Germany, cocaine is the stimulant with the highest lifetime prevalence (3.8%; Gomes de Matos et al. 2016a; Table 7). The lifetime prevalence for ecstasy use is equal to that of amphetamine at 3.3%. With a prevalence of 0.6%, methamphetamine plays a subordinate role. In relation to use in the last 12 months and 30 days, amphetamine is more prevalent than other stimulants. In the case of cocaine, amphetamine and ecstasy, the lifetime prevalence rates differ very clearly from the 12-month and 30-day prevalence rates which indicates mainly experimental use. For all substances, the prevalence values stated for men are much higher than those for women.

Among 12 to 17-year-old adolescents, ecstasy is the most prevalent with a lifetime prevalence of 0.6% and a 12-month prevalence of 0.5% (Orth 2016; Table 7). The same proportion (0.3%) of adolescents reported having consumed amphetamine and

cocaine/crack in the previous 12 months. The use of methamphetamine does not occur in this group.

Table 7 Prevalence of use of stimulants in Germany

	Source <sup>1)</sup>	Age	Total Prevalence	Male Prevalence	Female Prevalence
<b>Amphetamine</b>					
Lifetime	ESA 2015	18-64	3.3 %	4.2 %	2.5%
	DAS 2015	12-17	0.3%	0.6%	0.1%
12-month	ESA 2015	18-64	1.0 %	1.3 %	0.8%
	DAS 2015	12-17	0.3%	0.5%	0.0 %
30-day	ESA 2015	18-64	0.5%	0.6%	0.5%
	DAS 2015	12-17	n.r.	n.r.	n.r.
<b>Methamphetamine</b>					
Lifetime	ESA 2015	18-64	0.6%	0.7%	0.5%
	DAS 2015	12-17	0.0%	0.0%	0.0%
12-month	ESA 2015	18-64	0.2%	0.2%	0.2%
	DAS 2015	12-17	0.0 %	0.0 %	0.0 %
30-day	ESA 2015	18-64	0.1%	0.0%	0.1%
	DAS 2015	12-17	n.r.	n.r.	n.r.
<b>Ecstasy</b>					
Lifetime	ESA 2015	18-64	3.3%	3.7%	2.9%
	DAS 2015	12-17	0.6%	0.7%	0.5%
12-month	ESA 2015	18-64	0.6%	0.7%	0.6%
	DAS 2015	12-17	0.5%	0.6%	0.5%
30-day	ESA 2015	18-64	0.2%	0.2%	0.2%
	DAS 2015	12-17	n.r.	n.r.	n.r.
<b>Cocaine/Crack</b>					
Lifetime	ESA 2015	18-64	3.8%	5.0%	2.5%
	DAS 2015	12-17	0.5%	0.2%	0.8%
12-month	ESA 2015	18-64	0.6%	0.8%	0.5%
	DAS 2015	12-17	0.3%	0.1%	0.6%
30-day	ESA 2015	18-64	0.2%	0.2%	0.2%
	DAS 2015	12-17	n.r.	n.r.	n.r.

<sup>1)</sup> ESA Epidemiological Survey of Substance Abuse. DAS Drug Affinity Study.

n.r. not reported.

Over the time period of the last 25 years, an overall increasing trend in amphetamine use can be seen among adults aged between 18 and 59 years old, from 0.4% in 1990 to 1.0% in 2015 (Piontek et al. 2016c; Figure 6). Cocaine use has also increased in the same time period, from 0.3% to 0.6%. However a peak prevalence rate of 1.0% was reached in 2009. In relation to ecstasy, between 1995 and 2012 a decline was initially observed from 0.8% to 0.4%. In 2015, the prevalence increased again to 0.7%.

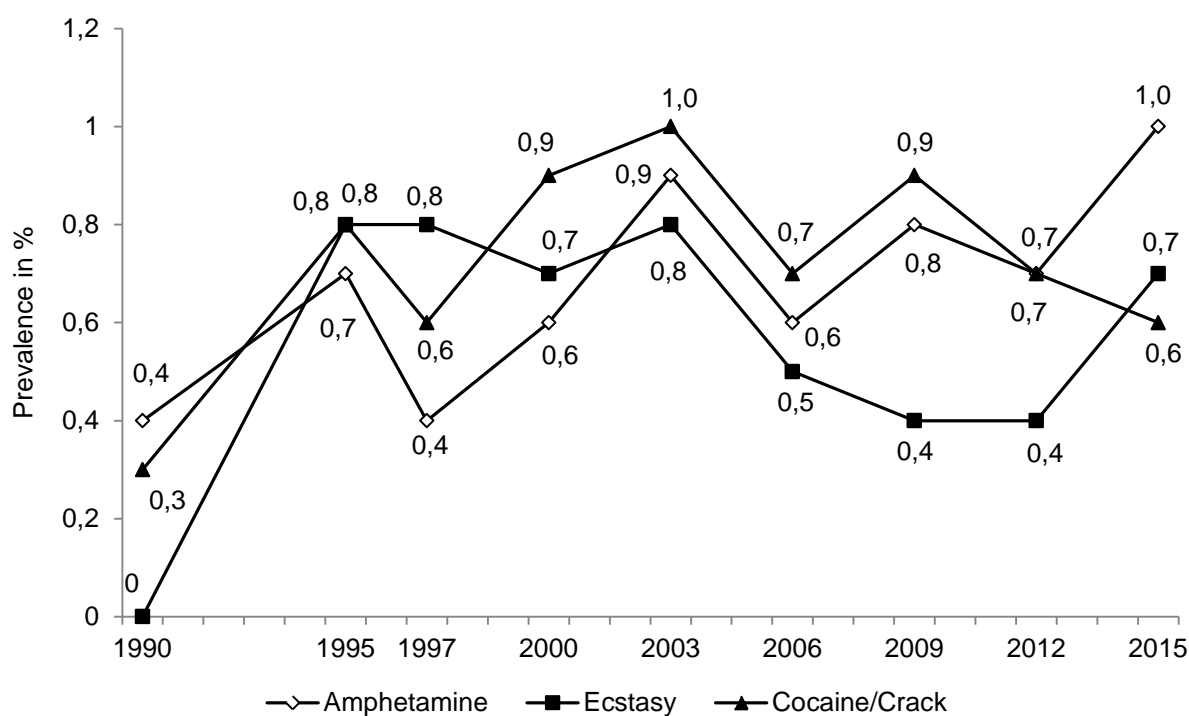


Figure 6 Trends in 12-month prevalence of stimulant use among 18 to 59-year-olds in Germany, 1990-2015 (ESA)

The use of amphetamines, cocaine and ecstasy has decreased among 12 to 17-year-old adolescents. Whilst in 1997, 2.6% had used ecstasy in the previous 12 months, 1.3% had used amphetamines and 0.9% cocaine, in 2015 it was only 0.4%, 0.2% and 0.2% respectively.

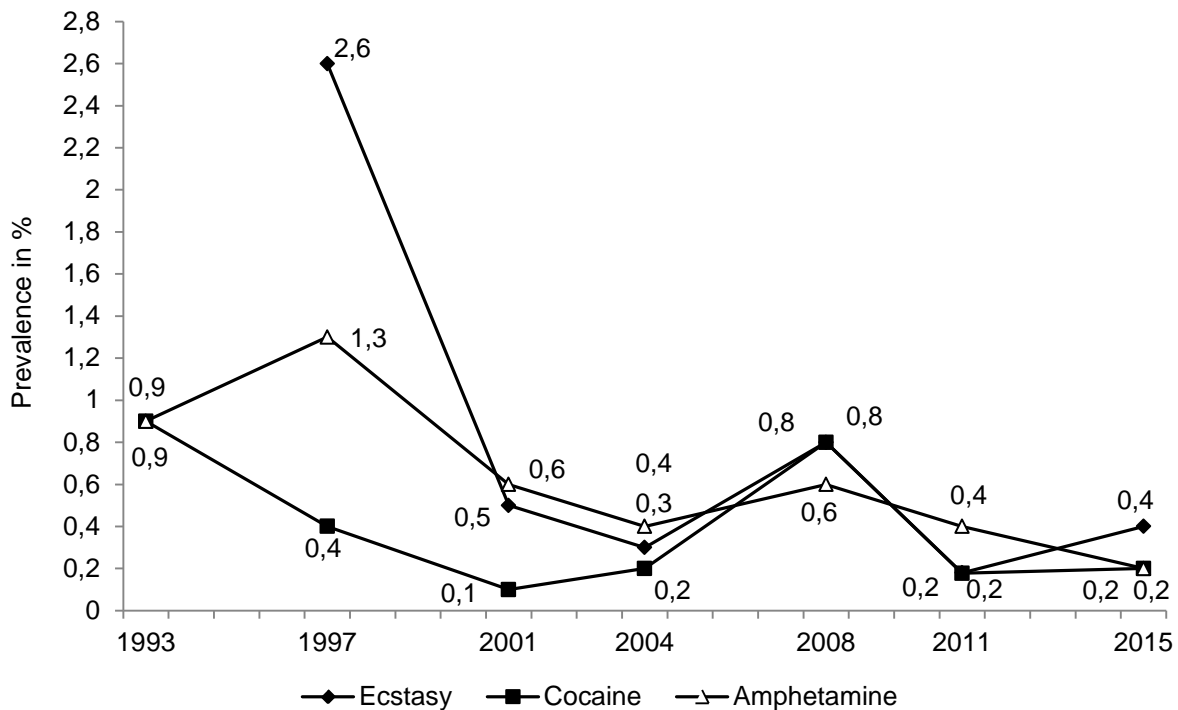


Figure 7 Trends in 12-month prevalence of stimulant use among 12 to 17-year-olds in Germany, 1990-2015 (DAS)

### Stimulant use in the *Laender*

Out of six *Laender*, for which regional results from the ESA are available for 2015, the city state of Hamburg showed the highest prevalence rates in relation to most of the recorded stimulants (Piontek et al. 2016b). For example, the 12-month prevalence of use of cocaine or crack as a national average was 0.6%, while in Hamburg 2.0% or respondents reported a use of those substances. Elsewhere, the proportion of methamphetamine users in Saxony is significantly higher, at 3.2% in the previous 12 months, than the national average.

In Hesse, Saxony and Thuringia there has been no significant change in the observations of prevalence rates of amphetamine use since 1995. In Bavaria and North Rhine-Westphalia, as well as among men in Hamburg, a significantly higher prevalence rate was observed in 2015 than in the late 1990s/early 2000s. The 12-month prevalence of ecstasy use in most *Laender* has a relatively constant trend. Increasing consumption trends have only been recorded among women in Bavaria since 1995 and among men in Hamburg since 2003. There has been no significant change in the use of cocaine or crack over the study period of the last 20 years.

### 1.1.3 Stimulant use in school and other sub-populations (T1.1.3)

#### Stimulant use in schools

Almost 3% of Bavarian pupils have had experience with amphetamine (2.8%) and ecstasy (2.7%; Kraus et al. 2016a; Table 8). Furthermore, cocaine had been consumed at least once by 2.1% of adolescents. The lowest prevalence rate was 0.5% for methamphetamine. All substances were used less often by girls than boys. The highest prevalence of use of stimulants is reported by secondary general school pupils. In particular in comparison to 2011, the use of amphetamines has significantly decreased in Bavarian schools. There were no changes in respect of ecstasy and cocaine.

In all *Laender* studied as part of the SCHULBUS survey, aside from Saxony, the highest prevalence rates were seen for ecstasy, at between 2.5% and 3.0%, (Baumgärtner & Hiller 2016). Amphetamines followed in second place. In Saxony, cocaine represents the most popular stimulant with a lifetime prevalence of 1.3%. The lowest prevalence rates were found for methamphetamine. This substance is most prevalent in Bavaria, compared to the other regions surveyed.

Ecstasy and amphetamine (speed), with a lifetime prevalence of 5% and 4% respectively, were the most prevalent stimulants in the Frankfurt MoSyD study also (Werse et al. 2017a). In keeping with the other pupil studies, methamphetamine has a low significance (1%). Over time, following an increase in use of ecstasy and speed until 2015, in the current survey a decrease of 2 percentage points has been recorded. However, the prevalence rate is the highest out of all the surveys. The lifetime prevalence of cocaine fell in 2016 to the lowest value out of all the surveys. No changes were seen in relation to methamphetamine.

Table 8 Prevalence of stimulant use among pupils in 2015/2016

Source <sup>1)</sup>	Age	Substance	Total Prevalence	Male Prevalence	Female Prevalence
<b>ESPAD</b>					
Bavaria	13-19	Amphetamine	2.8%	3.4%	2.3%
		Methamph.	0.5%	0.7%	0.3%
		Ecstasy	2.7%	3.5%	1.9%
		Cocaine	2.1%	2.5%	1.8%
<b>SCHULBUS</b>					
Hamburg	14-17	Amphetamine	2.7%	n.r.	n.r.
		Methamph.	0.5%	n.r.	n.r.
		Ecstasy	2.8%	n.r.	n.r.
		Cocaine	1.9%	n.r.	n.r.
Bavaria	14-17	Amphetamine	2.0 %	n.r.	n.r.
		Methamph.	1.4%	n.r.	n.r.
		Ecstasy	2.5%	n.r.	n.r.
		Cocaine	2.0%	n.r.	n.r.
Saxony	14-17	Amphetamine	0.6%	n.r.	n.r.
		Methamph.	0.6%	n.r.	n.r.
		Ecstasy	0.9%	n.r.	n.r.
		Cocaine	1.3%	n.r.	n.r.
North Rhine-Westphalia	14-17	Amphetamine	2.6%	n.r.	n.r.
		Methamph.	0.6%	n.r.	n.r.
		Ecstasy	3.0%	n.r.	n.r.
		Cocaine	2.0%	n.r.	n.r.
<b>MoSyD</b>					
Frankfurt	15-18	Speed	4 %	6 %	3 %
		Methamph.	1%	<1%	<1%
		Ecstasy	5 %	7 %	3 %
		Cocaine	2 %	3 %	1 %

<sup>1)</sup> ESPAD European School Survey Project on Alcohol and Other Drugs. MoSyD Monitoring System Drug Trends.

n.r. not reported.

### Stimulant use in specific sub-populations

Stimulants play a large role among visitors of electronic music events (Hannemann et al. 2017). With 12-month prevalence rates of 63.5%, 59.5% and 40.3% respectively, ecstasy,

speed and cocaine are the most frequently consumed substances after cannabis. The 30-day frequency is the highest for speed (4.5 days), followed by ecstasy (3.8 days) and cocaine (2.3 days of use).

In the Frankfurt open drug scene survey (MoSyD scene study) crack and cocaine are among the most frequently used drugs (Werse et al. 2017b). At 95% and 93% respectively, nearly all respondents have experience of use. Furthermore, 79% have used speed at some point in the past, whilst for ecstasy it is 62%. 24% have experience of methamphetamine. Crack also dominates very clearly (91%) in relation to the 12-month prevalence, ahead by some margin of cocaine (47%), speed (23%), ecstasy (11%) and methamphetamine (7%). From 2006 to 2012, the 12-month prevalence of crack was stable; following a significant increase in 2014, it has now fallen slightly again. In the case of cocaine, the development in the last three surveys since 2012 indicate a steady decline in use. Following a significant increase in the use of crack in previous years, the 30-day prevalence has fallen slightly once more in 2016 to 90%, while the use within the last 24 hours has increased once again, by one percentage point to 84%. The significance of (powder) cocaine has again fallen slightly: following the relatively sharp increase in 2012, the 30-day prevalence has currently fallen to 33%. The 24-hour prevalence has not changed from 2014.

## **1.2 Patterns, treatment and problem/high risk use (T1.2)**

### **1.2.1 Patterns of stimulant use (T1.2.1)**

The results of the ESA indicate that the overwhelming majority of persons who used stimulants in the last 12 months also used at least one other illicit drug in the same time period (Piontek et al. 2016a). For ecstasy, the proportion is 93.2%, for cocaine/crack 91.2% and for amphetamine 85.9%. The largest proportion of this use is of cannabis (75.8% to 86.7%). However the other stimulants also play a large part. The average age of first use for amphetamine (19.6) and ecstasy (19.9) is significantly lower than for cocaine/crack (22.5). Among the majority of 12-month users, use is limited to a maximum of 5 instances of use. The highest proportion for occasional use is 68.9% for cocaine, the lowest is for amphetamines at 47.1%. <1% of users reported a frequent use of at least 100 occasions, 1.8% of cocaine users, 2.5% of methamphetamine users and 17.0% of amphetamine users.

In Bavaria, only very few pupils have ever consumed a stimulant (Kraus et al. 2016a). If a substance was tried at all, it almost always remained between one and a maximum of five uses (experimental drug use). The percentage rates related to such experimental use amounted to between 0.2% for methamphetamine and 2.0% for amphetamine. The proportion of those who had consumed a stimulant on more than five occasions is under 1%. Girls and intermediate secondary school pupils reported less frequent use. Secondary general school pupils were the pupils who most often reported a frequent use. The average age of first use of amphetamine/methamphetamine und cocaine/crack is slightly below that for ecstasy. The majority of surveyed adolescents assessed the obtainability of stimulants as rather difficult or the pupils did not know where and how they could obtain these drugs.

In the scope of the MoSyD pupil study in Frankfurt, it was reported that the proportion of experienced users (at least ten uses) among those who had tried the respective substance at all, was the highest for cocaine (25%), ecstasy (17%) and speed (16%) (Werse et al. 2017a).

### **1.2.2 Treatment for stimulants (T1.2.2)**

Since December 2016, the so-called S3 methamphetamine guideline in Germany has been the first treatment guideline in the world for patients with methamphetamine related disorders, which fulfils the highest quality criteria of an S3 guideline (Drogenbeauftragte der Bundesregierung, Bundesministerium für Gesundheit, Bundesärztekammer & Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde, 2016). This was developed by the German Agency for Quality in Medicine (Ärztliches Zentrum für Qualität in der Medizin, ÄZQ) together with an interdisciplinary expert group. It is intended to provide the relevant professional groups certainty in the actions when dealing with acutely intoxicated or dependent patients. The basis for the guideline is the reviewing and assessment of internationally available literature on the topic. 135 recommendations were derived in particular for acute and post-acute treatment as well as the treatment of comorbidities and special patient groups.

In Saxony-Anhalt the *Land* Office for Addiction Questions (Landesstelle für Suchtfragen) compiled data from the recognised addiction counselling facilities and the *Land* Statistics office, in order to present the trend in the care of stimulant problems with special focus on methamphetamine (Landesstelle für Suchtfragen Sachsen-Anhalt, 2016). From the numbers, it was clear to see that over the last 10 years there has been an increase in treatments in the area of stimulant use. This increase however has not been so steep between 2014 and 2015. A comparable development in case numbers can be seen for patients discharged from in-patient care in hospital with a drug diagnosis. The number of treatments for stimulant use among 14 to 17-year-olds and among 22 to 35-year-olds more than doubled from 2012 to 2015. In 2012, people under 14 but also people over 50 were treated for the first time for crystal meth problems. The proportion of females seeking advice for stimulant problems has remained constant over the years at around a third. Based on the experiences of recent years, several principles have been developed for the work in addiction counselling facilities: (1) stop prevalence of use as far as possible, prevent unintentional "advertising effects", (2) reach those affected as early as possible and (3) protect children.

### **1.2.3 High risk stimulant use (T1.2.3)**

With the use of the refined estimation method on the basis of the 2015 treatment data (for an outline of the estimation method see section E1.2), estimates were calculated exclusively for the target group of clients with cocaine and stimulant problems (F14 and F15 codes according to ICD-10). This resulted in an estimated number of 85,000-101,000 (2014: 82,000-97,000). The estimates are at 1.6-1.9 (per 1,000 population) among 15 to 64-year-olds. Between 2005 and 2015, this value saw a significant increase overall, with exceptions in 2007 and 2009, when a slight decrease was recorded compared to the previous year.



Estimates based on numbers of deaths are not produced for this target group due to the problems mentioned in section E1.2.

The latest ESA survey (2015) revealed a clinically relevant use of amphetamine and/or methamphetamine in the last 12 months for 0.2% of 18 to 64-year-old respondents (Gomes de Matos et al. 2016a). This corresponds to a total of 102,000 people. The estimated values of clinically relevant use of cocaine are of a comparable level (0.2% or approx. 102,000 people affected).

In the MoSyD scene study, excessive patterns of use for crack were observed very often (Werse et al. 2017b). Almost a third of the current users uses more than eight times daily; only 14% of at least weekly users do not take the substance daily. In each case, around a quarter of female and male users consumed one to three, or three to eight consumption units daily respectively. The intensity of use has thus increased from the previous survey. Women have an excessive crack use more frequently than men. While 43% of women excessively consume the cocaine derivative and a further 33% have a daily crack use of three to eight consumption units, the same is true of only 28% and 27% of men respectively.

#### **1.2.4 Synthetic cathinones (T1.2.4)**

Specific information on the use of synthetic cathinones is only available from the Frankfurt MoSyD scene study (Werse et al. 2017b). In that, 5% of respondents from the open drug scene reported having already tried NPS stimulants at some point (cathinone, "bath salts" and others). Based on the last 12 months, the prevalence was 1% and only one respondent had consumed a stimulating NPS in the previous 30 days.

#### **1.2.5 Injecting and other routes of administration (T1.2.5)**

In the scope of the MoSyD scene study in Frankfurt, the users in the open drug scene were also asked about the route of administration (Werse et al. 2017b). In 2016, 57% of respondents reported exclusively smoking crack, 16% solely injected the substance and 28% consumed the cocaine derivative both by injection and inhalation. The exclusive use by way of smoking, after a comparatively significant increase in 2003, declined up to 2010 and since 2012 then considerably increased again. In contrast, injecting use alone has fallen again after the sharp increase in 2006. The general injecting use of crack has simultaneously fallen further and at 43% is at the lowest level since the surveys were started. Overall, the practised routes of administration of crack are thus shifting over to smoking use, which is now very clearly the most frequently practised type of use. No significant gender differences have been established for crack, although men more frequently exclusively inject. Overall, females smoke crack at least occasionally, somewhat more frequently than male respondents.

The routes of administration in relation to cocaine have also significantly changed over time: after 2002, injecting use significantly increased as nasal use clearly declined in parallel. In the subsequent years, this distribution has only changed a little. In 2012, however, there was a marked decline in injecting and at the same time a notable increase in nasal use recorded.

This development is currently continuing; injecting use has reached the lowest level since the beginning of the surveys with nasal use reaching its highest level. That being said, the relatively low number of cases should be taken into account.

Further information regarding routes of administration can be found in the Harms and Harm Reduction workbook.

### **1.2.6 Infectious diseases (T1.2.6)**

Information regarding infectious diseases can be found in the Harms and Harm Reduction workbook.

## **2 Trends. Not applicable for this workbook. Included above. (T2)**

## **3 New developments (T3)**

### **3.1 New developments in the use of stimulants (T3.1)**

Current data on the use of stimulants as well as the development in recent years is explained in B1.1.1.

## **4 Additional information (T4)**

### **4.1 Additional sources of information (T4.1)**

Due to the increasing take up of addiction support for methamphetamine related problems in central Germany, a project was carried out in this region which examined the requirements of the increased care needs, the associated challenges and potential for optimisation (Hoffmann et al. 2017). Therefore, qualitative, structured interviews were conducted, as well as inter-profession focus groups with patient care experts (outpatient counselling centres, acute care, rehabilitation). The results show firstly, in line with international literature, that methamphetamine users are overall a very heterogeneous target group, which places different demands on needs-based care. Parents with children, women and pregnant women were identified as particularly relevant groups. Particular challenges to the addiction support system are presented above all by numerous comorbidities, in particular psychological disorders. The key barriers and deficits named by the respondents related to long waiting times, too short treatment times, a lack of financial and personnel resources, motivational barriers and not sufficiently tailored treatment and counselling concepts. Furthermore, communications problems were emphasised, which had significance primarily in the form of a lack of exchange of information between different sectors as well as multi-dimensional problems in communicating with the pension insurance funds. Optimisation potential was seen in particular with respect to more flexible therapy models and the creation of more outpatient rehabilitation services.

### **4.2 Further aspects of stimulant use (T4.2)**

There is currently no further information available on stimulant use.





## SECTION C. HEROIN AND OTHER OPIOIDS

### 1 National profile (T1)

#### 1.1 Prevalence and trends (T1.1)

##### 1.1.1 The relative importance of different opioid drugs (T1.1.1)

In the context of illicit drugs, the use of opioids in Germany is largely identical to the use of heroin or possibly substances which are employed in the scope of substitution based treatment (Polamidon, methadone, buprenorphine). One regional peculiarity seems to be in the use of the synthetic opioid, "fentanyl", which is clearly mainly (or almost exclusively) used by drug dependent persons in Southern Germany, especially Bavaria. In this context, notable figures for drug-induced deaths have even been reported in connection with fentanyl.

The counselling and treatment system in Germany - in the context of illicit drugs - offers a comprehensive range of counselling, treatment, harm reduction (syringe exchange, consumption rooms in some German *Laender*) and social services (sanitary and accommodation services). Overall, the available indicators suggest an aging population of opioid users. The number of first-time requests for counselling/treatment, the number of users coming to the attention of law enforcement for the first time and the number of violations of the German Narcotic Drugs Act (Betäubungsmittel Gesetz, BtMG) due to the use of heroin and other opioids have been declining for years. In contrast to that, there have been repeated reports of locally reemerging scenes (it is discussed that this is related to refugees), and even in 2016 there was a renewed increase in the numbers of drug-induced deaths (see on this point the Harms and Harm Reduction workbook). A considerable problem associated with the use of opioids is in the prevalence of communicable diseases amongst affected persons (on this point, see also the Harms and Harm Reduction workbook). Only a small amount of data is available regarding the abuse of medicines containing opioids.

##### 1.1.2 Estimates of opioid use in the general population (T1.1.2)

Calculations based on two multipliers (drug-induced deaths, treatment) lead to an estimated figure of high risk heroin users ranging between 58,000 and 164,000 persons (with the estimates of the year 2015 serving as the basis for the calculation). This corresponds to a rate of 1.1 to 3.0 persons per 1,000 population in the age group of 15 to 64-year-olds (see Table 9). A detailed description of the estimation method as based on the multipliers can be found in section E**Fehler! Verweisquelle konnte nicht gefunden werden.** It should be noted, by way of qualification, that the value below is a purely calculative value, since on the reference date of 1 July 2015 77,200 persons were registered in the BfArM national substitution register alone in connection with a substitution supported treatment.

Table 9 Estimate of the prevalence of high risk opioid use from 2010 to 2016 (figures in 1000s, age group 15 to 64-year-olds)

Data Source	Reference Year							Prevalence
	2010	2011	2012	2013	2014	2015	2016	per 1,000
Treatment <sup>1)</sup>	167- 198	171- 203	153- 182	143- 169	147- 174	138- 164	<sup>2)</sup>	2,6-3,0
Police contacts	81- 117	79- 106	74- 95	68- 90	61- 84	56- 77	<sup>3)</sup>	
Drug-related deaths	82- 137	63- 91	62- 65	57- 59	56- 75	64- 108	58- 103	1,1-1,9

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

2) See section **E Fehler! Verweisquelle konnte nicht gefunden werden.** "EMCDDA estimation methods" on the missing calculation of estimate for 2015 based on treatment data.

3) Extrapolation on the basis of the police contacts are no longer possible from 2015 onwards in the format used to date, due to a change in the BKA drugs data file (Falldatei Rauschgift, FDR).

DBDD 2017, special calculation.

The estimate based on the "treatment demand" multiplier, rose between 2007 and 2011 before falling once more in 2012 and 2013. The slight increase from 2013 to 2014 is mainly due to the increase in clients with a primary opioid problem treated as inpatients in hospitals - without there being a systematic explanation of this increase. The estimated values fell slightly in 2015, without changing the overall picture.

The number of heroin users coming to the attention of law enforcement for the first time decreased up to 2014. Another increase was observed for the first time in 2015 (2000: 7,914; 2014: 1,648; 2015: 1,888). However, the estimated values for the multiplier "police contacts", calculated from the last 8-10 years' data, fell overall.

The estimates of the multiplier "drug-related deaths" are based on the mortality rate amongst clients in outpatient treatment and on the number of drug-related deaths. The upward trend in drug-related deaths since 2010 continued (2010: 1,237; 2016: 1,333). The estimated values for the multiplier "drug-related deaths" increased again in 2015, remained at the high level in 2016 and thus follow the trend of the number of drug-related deaths.

### Commentary on opioid use

Overall, the significance of the use of heroin and other opioids has, according to various data sources which provide information on drug use in Germany, decreased in recent years, presumably without the overall prevalence changing to a notable degree. In particular for younger persons, the use of opioids seems no longer to be attractive (in contrast, for example, to the use of stimulants) so that clients appearing at counselling and treatment facilities represent an aging cohort. This is also in line with indicators such as the fact that the average age of victims of drug-induced deaths has been rising for years (c.f. on this point, the Harms and Harm Reduction workbook). Furthermore, the data available from law enforcement statistics suggests a falling significance of the use of and dealing/trafficking in

heroin. In contrast, there are indications from treatment centres in big cities suggesting increasing challenges due to opioid consuming refugees. The total number of affected persons does seem not to have changed dramatically in recent years as such persons can survive for longer than was previously possible due to the good care situation in terms of treatment options available to them. One cause for concern is the stagnating or falling number of doctors who offer outpatient substitution assisted treatment. In this respect, problems of care provision already exist in some rural regions of Germany. The stagnating and increasing numbers of drug-induced deaths must also be closely monitored. This can certainly be explained in part by the increasing age of the cohorts and their specific care needs, which possibly cannot be met everywhere - even if today a first pilot facility now exists in Unna for "old" heroin addicts.

### **1.1.3 Estimates of opioid use in sub-populations (T1.1.3)**

There are currently no estimates of opioid use in sub-populations.

## **1.2 Patterns, treatment and problem/high risk use (T1.2)**

### **1.2.1 Patterns of heroin/opioid use (T1.2.3)**

In the current scene study of the Frankfurt MoSyD, it is evident that heroin (together with crack) remains by far the most commonly used drug in the street drug scene (Werse et al. 2017b). Two thirds of respondents had used heroin in the previous 24 hours, and for crack it was 84%. On average, the respondents had taken 3.7 different drugs in the previous 30 days and 2.6 different drugs in the previous 24 hours. The frequency of use has slightly increased for heroin in comparison to the previous year; for crack it has remained unchanged.

Data is available from the DSHS on further addiction related diagnoses among clients who began therapy in 2016 in relation to a primary problem on the basis of the use of opioids. According to that data, in outpatient counselling and treatment facilities as well as specialist walk-in clinics, roughly every fourth person with a primary opioid diagnosis was also diagnosed with a clinically relevant alcohol or cocaine related disorder (26.9% and 23.7% respectively), roughly a third (31.3%) with a disorder on the basis of cannabis use and roughly every tenth person (10.2%) with a disorder based on amphetamines. Although these figures relate to persons who are already in contact with specialist walk-in facilities, this data provides indications about the consumption habits of the clientele beyond the use of opioids. In an article, Soyka (2015) notes once more that approximately one third of substituting opioid dependent persons is also alcohol dependent. This has serious consequences, since the alcohol consumption worsens both the compliance and the outlook. In the view of the author, the adequate dosage of the substitution drug as well as psychosocial intervention are particularly important in treatment practice, while anti-craving medicinal drugs are contraindicated or not evidence based.

### **1.2.2 Treatment for heroin and other opioids (T1.2.4)**

Substitution based treatment is - after detoxification - the most commonly used form of intervention in the case of heroin/opioid dependence. In addition to that, there are, in particular in an inpatient context, direct, abstinence based rehabilitation services. Information on the treatment of opioid users can be found in the Treatment workbook.

### **1.2.3 High risk opioid use (T1.2.3)**

In the MoSyD scene study, around two thirds (67%) of users reported intensive use of heroin - daily or nearly daily use (Werse et al. 2017b). While this percentage has hardly changed since the previous survey, the proportion of respondents using only rarely increased slightly to 14%. For heroin, those who take up to three consumption units per day represent the largest group. In contrast, the number of those who do not use heroin daily has fallen in comparison to 2014 levels. Every tenth user can be considered an excessive heroin user, with a level of use exceeding eight consumption units per day. Accordingly, the second highest value to date to date has been reached for this pattern of use; it was only higher in 2008, at 14%. The proportion of respondents who use heroin more than three times per day is 43% overall.

### **1.2.4 Synthetic opioids (T1.2.4)**

There is currently no specific information on the use of synthetic opioids.

### **1.2.5 Injecting and other routes of administration (T1.2.5)**

For the open drug scene in Frankfurt it was reported in the scope of the MoSyD scene study that in the case of heroin, there has been, over the years of the surveys, a falling trend in injecting use (Werse et al. 2017b). Currently, with 52% of users who currently predominantly or exclusively inject, the lowest overall value has been reached by far. The sharp decline which has been observed since 2012 has thus continued. At the same time, the proportion of nasal use has increased (from 18% to 31%), as has smoking (9% to 11%). The proportion of those who inject and use nasally or inhalatively in roughly equal amounts, has fallen in comparison to 2014, from 15% to 4%. It can be assumed that in previous years many users have switched from exclusively injecting use to exclusively inhalative or nasal use. 2014 could have been a "transitional year" in which a higher proportion of respondents still practiced several types of use.

According to the data from outpatient counselling/treatment facilities, around one third (31.0%) of people who started therapy due to primary problems caused by the use of opioids in 2016 reported "never" having used intravenously. Just under a half (44.9%) reported "ever [having used] intravenously" "but not in the last 30 days" and approximately one in every four of those clients (24.1%) reported recent (within the last 30 days) injecting use. Based on the information provided by all those who started a new therapy in 2016 in outpatient addiction counselling facilities and specialist walk-in clinics, from whom corresponding information is available and who used heroin (for example also as an additional substance alongside



another primary problem), in over half of the cases the heroin is injected (58.1%), in just under one third of cases it is smoked or inhaled (30.5%) with roughly every tenth person reporting having snorted heroin (10.0%) (for the complete set of results on the counselling/treatment sector, see also TDI Table 19.1.x and 22.1.x; in addition see the Harms and Harm Reduction workbook, section 1.3.4).

### **1.2.6 Infectious diseases (T1.2.6)**

Information regarding infectious diseases amongst drug users can be found in the Harms and Harm Reduction workbook.

## **2 Trends. Not relevant for this section. Included above. (T2)**

## **3 New developments (T3)**

### **3.1 New developments in the use of heroin and other opioids (T3.1)**

Aside from the situation described above, there are no known notable current developments.

## **4 Additional information (T4)**

### **4.1 Additional sources of information (T4.1)**

Important sources are described above. Further sources on topics such as injecting behaviour, infectious diseases and harm reduction amongst opioid users can be found in the Harms and Harm Reduction workbook.

### **4.2 Further aspects of stimulant use (T4.2)**

No further information on further aspects of the use of heroin and opioids is currently available.



## SECTION D. NEW PSYCHOACTIVE SUBSTANCES (NPS) AND OTHER DRUGS NOT COVERED ABOVE

### 1 National profile (T1)

#### 1.1 New psychoactive substances (NPS), other new or novel drugs, and less common drugs (T1.1)

##### 1.1.1 Use of NPS: Prevalence and Trends in NPS use (T1.1.1)

###### Use of NPS in the general population

In the adult general population in Germany, 2.8% of those aged between 18 and 64 have already had experience with NPS at least once in their lives (Piontek et al. 2016a; Table 10). Based on the last 12 months, 0.9% have used such substances. For the time period of the previous 30 days, no corresponding use was reported. Among 12 to 17-year-old adolescents, the use of NPS is as good as non-existent (Orth 2016). A mere 0.1% have already had experience with this substance group. Among adults, men use more frequently than women, whereas for adolescents there are no differences between the genders.

Table 10 Prevalence of use of NPS in Germany

	Source <sup>1)</sup>	Age	Total Prevalence	Male Prevalence	Female Prevalence
Lifetime	ESA 2015	18-64	2.8%	3.1%	2.5%
	DAS 2015	12-17	0.1%	0.2%	0.0%
12-month	ESA 2015	18-64	0.9%	0.9%	0.9%
	DAS 2015	12-17	0.0 %	0.0 %	0.0 %
30-day	ESA 2015	18-64	0.0%	0.0%	0.0%
	DAS 2015	12-17	n.r.	n.r.	n.r.

<sup>1)</sup> ESA Epidemiological Survey of Substance Abuse. DAS Drug Affinity Study.

n.r. not reported.

###### NPS use in the *Laender*

The lifetime prevalence of NPS use in the six *Laender* which participated in the ESA 2015 varies between 2.2% in Bavaria and 3.9% in Hamburg (Piontek et al. 2016b). The maximum 12-month prevalence is 1.4%, in Hamburg and Saxony. NPS use in the 30 days before the survey was reported only by test persons in Saxony and Thuringia (0.1% each). In most *Laender*, the majority of users reported having smoked NPS in the form of herb mixtures. The percentage levels in this respect were highest in Bavaria (90.0%) and Saxony (89.6%). North Rhine-Westphalia is the only *Land* in which crystals/tablets represent the most

common type of use (84.3%). The use of liquid NPS is reported by the fewest people. Saxony is characterised by an equal prevalence of all types of use.

### **NPS use in schools**

The Bavarian ESPAD survey showed that the overwhelming proportion (93.3%) had had no experience of NPS in the previous 12 months (Kraus et al. 2016a). Nevertheless, this substance group had the highest prevalence rate in comparison to other illicit drugs aside from cannabis. At a level of 5.9%, the most prevalent form of use of NPS among adolescents is herb mixtures. A use of NPS in powder or crystal form was reported by 0.9% of pupils. Other forms in which NPS appear are used more than twice as often in secondary general schools (2.4%) than in grammar schools (0.7%) and intermediate secondary schools (0.9%).

In the current MoSyD pupil survey in Frankfurt, 6% of the 15 to 18-year-olds surveyed had consumed a herbal smoke blend at least once in their lives, 2% also in the preceding 30 days (Werse et al. 2017a). In response to the question about other legal high products ("bath salts", "fertiliser tablets" and similar products as well as "research chemicals" (RCs), namely pure active substances), 2% of respondents reported having tried a preparation of this nature on at least one occasion. Less than 1% of respondents had also taken other legal highs in the previous month. Compared to the previous year, the prevalence of the use of herbal smoke blends and other legal highs remained unchanged. Since 2009, an overall decreasing trend has been observed.

### **NPS use in specific sub-populations**

In the scope of the Phar-Mon NPS project, the use of NPS in different at-risk populations was recorded (Piontek & Hannemann, 2017). In addition to visitors of electronic music events, clients of outpatient addiction support facilities and inmates in correctional institutions were questioned on their use.

Overall, a quarter of surveyed party goers reported having taken a new psychoactive substance before. The proportion of male respondents was higher than that of women. In the 12 months before the survey, 11.1% of party goers had consumed NPS. The 30-day prevalence is 5.0%. In response to the question of which new psychoactive substances were taken in the most recent instance of use, 49 different substances were named, among them generic designations (e.g. spice, bath salts or synthetic cannabinoids) and brand names of herbal smoke blend products. The most frequently named substances were 2C-B, spice and herb mixtures as well as the substance 1p-LSD. The majority of respondents reported consuming NPS for reasons of curiosity (49.1%), followed by for reasons of the expected high (16.6%) and the presumed legality of the substances (6.3%).

In 2015 and 2016, data was collected on 249 persons from the participating outpatient addiction support facilities. Of the surveyed clients, 46 people reported the use of at least one new psychoactive substance. In total, the clients named 60 new psychoactive substances. The most frequently reported use was of spice (n = 20) and herb mixtures (n = 12). In total, 50 of the 60 substances named (83.3%) can be categorised in the group

synthetic cannabinoids. In addition, the use of cathinones was reported ( $n = 7$ ). On the question of reasons for use, curiosity was the most frequently cited at 54.3%. The proportion of respondents who reported using the substances due to lower detectability and due to good availability was 17.4% in each case.

Of the correctional institutions which took part, data was collected on 86 people in the project period. A total of 41 people reported NPS use. Spice was named by far the most frequently ( $n = 26$ ). Numerous others which were also named (e.g. Maya, herb mixtures, Bonzai, Jamaica) can be categorised as synthetic cannabinoids. In addition, the use of different cathinones (e.g. MDPV, Alpha-PHP, Alpha-PPP) was reported, though the number ( $n = 8$ ) was considerably lower. At 53.7%, curiosity was also the most frequently named reason for use in correctional institutions. A further 39.0% reported using NPS on the basis of the associated high or the intensive effect.

### **1.1.2 Harms related to NPS use (T1.1.2)**

The data collected in the Phar-Mon NPS project also contains, for clients of outpatient addiction support facilities and for inmates of correctional institutions, information on subjective experiences of unwanted side effects of NPS use (Piontek & Hannemann, 2017). Of the 46 people in outpatient addiction support facilities who reported having used NPS, 19 (41.2%) reported having experienced unwanted side effects in the last 6 months. The side effects experienced included both physical and psychological problems. Cramps were named comparatively frequently.

In total, 34 persons in correction facilities reported having experienced unwanted side effects from NPS use. In relation to all people who reported this type of use, this corresponds to 82.9%. The highest number of effects were named for synthetic cannabinoids (herb mixtures, spice). Stomach problems were frequently reported (nausea, vomiting), as well as cardiovascular complaints as well as impairments in cognition and perception.

Additional information on harms caused by NPS was collected in the Phar-Mon NPS project in cooperation with a poison information centre, (Gif tinformati onszentrale, GIZ) (Piontek & Hannemann, 2017). This provides individuals and hospitals or doctors with information on cases of poisoning and accompanying situations. In the two project years, 49 mentions of new psychoactive substances were documented. With a total of 13, synthetic cannabinoids represents the largest group. In addition, 11 mentions were made of synthetic benzodiazepine and 4 each of synthetic opioids and cathinone. In relation to the 15 documented cases in which one single NPS was named as the noxious agent additional information was analysed. In 14 of these cases (93.3%) the use that led to poisoning was attributed to abusive use behaviour. Suicidal intent was documented in one case. This was in relation to the substance flunitrazepam. The stated type of ingestion was overwhelmingly inhalative ( $n = 8$ , 53.5%) or oral ( $n = 6$ , 40.0%). In one case, relating to the substance 3-CMC, the use was nasal. The estimation of the degree of severity of the poisoning, by means of the so-called Poison Severity Score, was recorded as light in 8 cases (53.3%), of medium severity in 6 cases (40.4%) and in one case as not assessable.

### **1.1.3 Use of other drugs: Prevalence, trends and harms related to other drug use (T1.1.3)**

In most pupil surveys representative of the population, use behaviour in relation to other drugs (e.g. LSD, psychoactive mushrooms, inhalants) is also recorded. These substances do not reach notable prevalence values among adults or adolescents.

In addition, information on the use of medicinal drugs is available. In the scope of the ESA 2015, the most commonly consumed medicinal drugs in the 30 days prior to the survey were painkillers (47.1%), followed by sleep-inducing drugs and tranquilisers (5.2%) and anti-depressants (4.9%; Gomes de Matos et al. 2016). Indications of a clinically relevant medical drug use, according to the criteria of the Short Survey on Medical Drug Use (Kurzfragebogens zum Medikamentengebrauch, KFM), were exhibited by 6.0% of female and 4.5% of male respondents.

## **2 Trends. Not relevant for this section. Included above. (T2)**

## **3 New developments (T3)**

### **3.1 New developments in the use of NPS and other drugs (T3.1)**

No information beyond that reported above is available.

## **4 Additional information (T4)**

### **4.1 Additional sources of information (T4.1)**

The project "HaLT - Hart am Limit" (approx. "HALT - Close to the limit") is a nationwide prevention project for children and adolescents with high risk alcohol consumption. It children and adolescents, who have to be treated on an inpatient basis as a result of an acute alcohol intoxication, and their parents counselling right there in the clinic. On the basis of the observation that in recent years increasing numbers of adolescents have been admitted to hospital with an intoxication caused by NPS or mixed use, this problem is particularly addressed in Bavaria, through the special training of project staff. In this way, the intention is that the conversation strategy in an acute situation with adolescents who have consumed NPS (and alcohol) can be improved.

### **4.2 Further aspects of NPS and other drug use (T4.2)**

In relation to the results on NPS use in the general population and in schools, indications are present that would suggest that the prevalence is possibly overestimated. It was noted, particularly in the scope of the MoSyD pupil survey, that the answers to the question of use

of other legal highs or research chemicals must still be viewed with extreme reservation (Werse et al. 2017a). The respondents in this study were supposed to report exactly which substances they had taken. In this context, only 7 of the 18 people who reported use experience with other legal highs, named a product or substance from the narrower group of legal highs/RCS ("bath salts" or specific RCS). The other people gave the names of illicit drugs, herbal smoke blends, alcohol or medicinal drugs, gave completely nonsensical answers or no answer at all. As such therefore, it can be assumed that far fewer respondents had tried synthetic new psychoactive substances aside from cannabinoids; the current use or experience of use is practically zero.





## SECTION E. SOURCES AND METHODOLOGY

### 1 Sources (T6.1)

In Germany, epidemiological data on drug use and drug users is available mainly on the basis of regular national, representative surveys and prevalence studies. These are complemented by mostly regional, quantitative and qualitative studies, which often focus on individual substances and/or specific user groups. Furthermore, pupil studies and surveys of specific sub-population in which individual *Laender* or regions participate will also be described in the following.

#### National studies in the general population

**Epidemiological Survey of Substance Abuse, ESA:** The ESA is a combined written, telephone and online survey on the use of psychoactive substances, and their consequences, their assessment as well as on other underlying data (Piontek & Kraus 2016). The study has been conducted every three to four years since 1980 on the basis of a representative sample of the resident population. Funded by the German Federal Ministry of Health (BMG), the survey has been conducted by the Institute for Therapy Research (Institut für Therapieforschung, IFT) since 1990. 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 to 59-year-olds (1995, 1997, 2000, 2003) and finally of 18 to 64-year-olds (2006, 2009, 2012, 2015). Some of the *Laender* have provided funding for a regional expansion of the sample to ensure an adequate statistical basis for *Land* specific analysis. The ESA sampling in 2015 was based on a two-stage, random selection process. Overall, the adjusted sample comprised 9,204 people, which corresponds to a net response rate of 52.2% (Gomes de Matos et al. 2016; Piontek et al. 2016c).

**Drug Affinity Study, DAS:** The DAS carried out by the BZgA investigates the use, motives for use and situational conditions of use with regard to tobacco, alcohol and illegal intoxicants among adolescents and young adults (age group 12-25 years) on a long-term basis. The study has been conducted every three to four years since 1973. In the 2015 study, a representative sample of 7,004 test persons was questioned by way of computer-assisted telephone interviewing (CATI). Compared to the last DAS, the current study has introduced two methodological innovations: firstly, the weighting of the data also took into account the education level of the respondents whilst secondly the survey was, for the first time, conducted not only via landline but also via mobile telephone (dual frame approach). The response rate of the landline sample amounted to 48.7%, whilst the mobile telephone sample was 32.0%. Crystal meth and NPS were added to the 2015 DAS as new substances (Orth 2016).

In addition to the DAS, the BZgA conducted representative surveys on cannabis use among 12 to 19-year-old adolescents and 12 to 25-year-olds in 2007, 2010, 2012 (BZgA 2007; 2011; 2014) and in 2014. The surveys from 2010 onwards were conducted in the scope of the Alcohol Survey. In the 2014 study, a representative sample of 7,000 adolescents and

young adults was questioned (for the first time also via mobile telephone). The response rate of the landline sample was 40.3% and of the mobile telephone sample was 30.2% (Orth & Töppich 2015).

### **Pupil studies**

**European School Survey Project on Alcohol and Other Drugs, ESPAD:** The ESPAD has been conducted every four years since 1995 in numerous European countries. The coordinated survey, initiated by the Pompidou Group at the Council of Europe and CAN (Swedish Council for Information on Alcohol and Other Drugs, Stockholm), uses Europe-wide common standards for data collection. Germany has participated in the ESPAD Study since 2003 from a federal level. Bavaria took part in the follow-up surveys along with a number of other *Laender* in 2007 and 2011, however it was the only *Land* in which data was also collected in 2015. In the course of the data collection, pupils from the cohort who reach their 16th birthday in the respective survey year (in Germany pupils of the 9th and 10th school year group in regular schools) were interviewed. For Germany, this enables data analysis by birth cohort as well as by school year. The data collection in Bavaria was undertaken in April 2015 as a written survey to classes of school pupils. In the 2015 survey the adjusted sample size in Bavaria was 2,034 pupils from 95 classes, which corresponds to a response rate of 54.6% following data cleansing (Kraus et al. 2016a).

**SCHULBUS:** A survey on the prevalence of contact with addictive substances was carried out for the sixth time in 2015, under the name "Hamburg SCHOOL BUS" (Hamburger SCHULBUS), within the framework of the "Local Monitoring System" (LMS) among pupils aged 14 to 18 at schools providing general or vocational education. Among illicit drugs, a key focus was on the different aspects of methamphetamine use. The survey was also carried out in parallel in the regions of Bavaria and Saxony that border the Czech Republic as well as the regions of North Rhine-Westphalia that border the Netherlands, due to growing indications that the spread of methamphetamine in these regions has sharply increased. For the 2015 survey, in total 4,226 14 to 17-year-olds were able to be included (weighted sample figures; unweighted sample  $n = 7,297$ ). The SCHULBUS survey is not designed as a representative survey, rather it takes into account, both in the collection of data and in its analysis, regionally specific factors in order to be able to provide a foundation of data for strategies for action to local political decision makers, locally active addiction prevention experts and above all teachers (Baumgärtner & Hiller 2016).

**Monitoring System Drug Trends, MoSyD:** A source that has been continuously providing information on drug trends at a local level for many years is the MoSyD from Frankfurt/Main. The MoSyD is made up of several components: a representative pupil survey, a trend scout panel, a scene-based survey and an expert survey. A key methodological change in comparison to previous years is the fact that since 2013 the pupil survey has been conducted with the help of tablet PCs. In the recent 2016 MoSyD pupil survey, a total of 1,526 questionnaires were included in the analysis (based on all respondents from the 10th-

12th grades or in the 1st-3rd years of a traineeship); 1,074 respondents were between 15 and 18 years old (Werse et al. 2017a).

**Lower Saxony Survey** The aim of the Lower Saxony Survey is to reach around 10,000 9th grade adolescents in each survey year, in order to carry out an analysis of the dark area of juvenile delinquency (Bergmann et al. 2017). The focus of the survey is therefore accounts from victims of violence, perpetrators of violence and perpetrators of property offences. Among other things, conditional factors of youth crime are also recorded, in addition to other types of deviant behaviour, such as for example truancy or drug use. The study is conducted in Lower Saxony every two to three years, on an ongoing basis. The first survey was in 2013, the second in 2015. In the 2015 survey wave, 10,638 9th grade pupils were surveyed by means of a written questionnaire. The response rate was 68.5%. The 9th grade was chosen for two reasons. The first is that delinquent or deviant behaviour occurs frequently in this age group. The other is that a representative study can be carried out quite economically for this age group, because almost all adolescents that belong to this cohort still attend general education.

### **Studies in specific sub-populations**

**Phar-Mon NPS:** In 2015, the Phar-Mon NPS project was initiated, in which a monitoring system was implemented that enables a rapid and reliable identification of new developments as well monitoring and reporting in relation to NPS use and use of medicinal drugs not according to their intended purpose (Piontek & Hannemann 2017). For the area of NPS, information was available from surveys in cooperation with party projects, outpatient counselling centres and external addiction counselling in correctional institutions. Furthermore, data on poisonings was collected through the GIZs and the supply of and prices of NPS in online shops was analysed. Data collection in the scope of cooperation with party projects took place via the respective prevention projects. A user questionnaire was laid out at the project stands and filled out by visitors. In 2016, a total of 804 questionnaires were included in the analysis. The cooperating addiction counselling facilities provided outpatient support services for clients with substance-related problems. In this respect, 249 clients who came to the counselling centres due to NPS use, were surveyed in 2015 and 2016 as to their use behaviour in a face to face conversation. Information on NPS use in correctional institutions was collected in cooperation with the institutions which carried out external addiction counselling in the respective facilities. In the scope of this counselling service, 86 inmates were questioned on their use behaviour using structured guidelines. The GIZs are the central contact partners for different types of poisonings. Both affected individuals and hospitals or doctors who have attended to patients with corresponding symptoms, deliver information to the facilities on the affected persons and the substances which caused the poisoning. This data is documented by the staff. All GIZ-Nord (North GIZ) cases, where the poisoning was due to NPS, were included in the project (n = 49 mentions).

**Monitoring System Drug Trends, MoSyD, scene study:** The scene study carried out in the scope of the Frankfurt MoSyD provides an insight into the current situation of the Frankfurt

street-drug scene, as existed at the time the interviews were conducted, from the beginning of June to the end of July 2016 (Werse et al. 2017b). The surveys have been carried out every two years since 2002; in addition, an - externally funded - survey was carried out in 2003. In order also to be able to present long term changes in the scene, an older 1995 study is also referred to, which used in part identical sets of questions. Topic areas of the survey are (1) practised patterns of drug use, (2) coping with everyday life, (3) state of health and (4) availment of drug support. In 2016, the MoSyD scene study was carried out for the second time using an electronic questionnaire loaded onto tablet computers. As with the previous surveys, a total of 150 interviews were conducted. 104 respondents were recruited outside the low-threshold drug support facilities, i.e. directly on the street/drug scene, 46 respondents were approached in the contact areas of consumption rooms.

## 2 Methodology (T6.2)

### Basic terms

Experience with drugs means, in many cases, a one-off or infrequent use of drugs. After the drug has been tried, its use will often be ceased over time. Drug use at some point during a person's life (lifetime prevalence), which can date back 20 or even 30 years, is therefore only a rough indicator of the extent of drug use in the population at a given point in time. Accordingly, the lifetime prevalence is not suitable as an indicator for current changes, since it does not give any insight into the current use behaviour of the respondents.

Drug use in the 12 months prior to the survey (12-month prevalence) is a more suitable indicator of current user numbers and is often cited in the relevant literature as a reference value. The 12-month prevalence is limited to a sufficiently manageable time frame of past consumption whilst also providing other, more interpretable, prevalence values. The 30-day prevalence of the use of illicit drugs, with the exception of cannabis, often only produces extremely low figures which are of little to no interpretable value. The clear difference in the overall population in Germany between prevalence over a lifetime, prevalence in the last 12 months and prevalence in the last 30 days shows that experimental or short-term use is the most common pattern of consumption.

"High risk drug use" (HRDU) defined by the EMCDDA as the use of opioids, cocaine and/or amphetamines, by way of injecting or taken over a long time or regularly. The following characteristics are associated with these patterns of use:

- The use is recurrent;
- There are actual harms (negative consequences) for the person (e.g. dependence but also other health, psychological or social problems) or
- The use increases the probability/risk of the person suffering such harms.

In the reported data, the consumption of psychoactive substances (not including alcohol, tobacco and caffeine) according to high risk patterns of use (e.g. intensively, as far as

frequency is concerned) and/or high risk routes of administration (e.g. injecting use) within the last twelve months is considered to be "high risk drug use".

Irrespective of the above definitions, use can also be classed as high risk even if only the user themselves experiences it as such and, for example, considers themselves as being dependent without an objective classification confirming this (Kleiber & Soellner 1998). The working definitions used in various places respectively cover different subsets of the described overall group. Only the terms based on clinical classification systems are clearly defined.

The concept of "problem" or "high risk" use (including of cannabis) has been investigated in various surveys. However, the terminology and operationalisation of the respective concept differ from study to study so that comparability of information is only possible to a limited extent. It appears necessary, especially in the context of cannabis use, in light of the data available on the possible long-term consequences of intensive cannabis use, also to include this use behaviour when looking at problem or high risk patterns of use. In several German studies, the SDS (Gossop et al. 1995) based on the last 12 months' use (e.g. ESA, SCHULBUS) is employed in order to obtain indications of clinically relevant patterns of use.

A detailed representation of the methodology for measuring and estimating high risk consumption can be found in Chapter 4.1 of the REITOX Report 2014 (Pfeiffer-Gerschel et al. 2014).

### **Estimates of prevalence and incidence of high risk drug use**

The EMCDDA has compiled and further developed a series of methods for estimating the prevalence of high risk drug use at a national level. The selection of the target groups for these methods is based on the definition of high risk drug use as being "injecting or long-term/regular use of opioids, cocaine or amphetamines" (Kraus et al. 2003).

However, as it is not possible to avoid double counting in respect of the police figures for Germany, when looking at a number of substances, and as valid mortality estimates are only available for opioid users, the prevalence estimates for Germany, based on the three multipliers described below, were restricted to the target group of opioid users.

In view of the particular risks inherent to injecting drug use, this form of use is of considerable interest when trying to minimize secondary harm. In Germany, injecting use is still primarily associated with heroin, despite a slightly falling proportion of injecting use having been observed for some years amongst clients in addiction support facilities. The different user groups are differentiated according to primary drug in the estimates of prevalence just as in the description of clients treated and not according to route of administration.

### **EMCDDA estimation methods (indirect estimates)**

For the reporting year 2016, two multiplier methods were recalculated for which results were also available from the previous year:

- Estimate on the basis of drug-related deaths

The total number of users of opioids in the population is extrapolated from the figure for drug-related deaths for the year in the general population, through the use of a mortality estimate (calculated from the number of deaths in outpatient counselling).

Moreover, the estimate was recalculated on the basis of treatment data for the year 2015. Since some of the data (diagnostic data of patients in hospitals) that is needed for the estimation process is generally made available only after a considerable delay, it is not possible for the current REITOX Report to calculate an estimate for this multiplier based on data for the year 2016.

- Estimate based on admissions to treatment

For this, the overall number of treated cases is first calculated on the basis of reported client numbers in outpatient and inpatient care as well as the total number of outpatient and inpatient addiction support facilities. On this basis, the total number of all opioid users requiring treatment is estimated with the help of a multiplier to reach the target group. The multiplier comes from publications with estimates of problem use of illegal substances and the help-seeking behaviour in the overall population and from comparisons of availability of treatment possibilities in a region.

The estimate reported in previous years on the basis of police contacts cannot be continued from 2016 onwards due to a change to the FDR, produced by the BKA. This estimate was based on assumptions of an "average duration of use" (8 to 10 years), the number of heroin users who have come to the attention of law enforcement for the first time (incidence), which are added up over the respective years. The proportion of drug-related deaths accounted for by persons already known to police is used respectively to calculate the estimated number of unknown cases.

All results should only be taken as rough approximations as different requirements must be taken into account. In particular, the multipliers employed which are based on small numbers of cases and selective samples have only limited relevance. All multiplier methods are subject in themselves to considerable limitations. Changes in prevalence rates, for example, are not necessarily reflected in the demand for treatment. The recording of users who come to the attention of law enforcement for the first time is significantly influenced by the prosecution pressure of the police. The absolute figures for drug-related deaths also only allow cautious interpretation. Other estimation methods (e. g. nationwide capture-recapture studies or other multiplier methods) have not been used since necessary parameters were not available in a timely, empirically supported form.

## SECTION F: BIBLIOGRAPHY

### 1 Bibliography

- Baier, D., Schepker, K. & Bergmann, M. C. (2016). Macht Kiffen friedlich und Saufen aggressiv? Zum kausalen Zusammenhang von Cannabis- und Alkoholkonsum und delinquentem Verhalten. Zeitschrift für Jugendkriminalrecht und Jugendhilfe **4**, 324-332.
- Baumgärtner, T. & Hiller, P. (2016). Suchtmittelgebrauch, Computerspiel- und Internetnutzung, Glücksspielerfahrungen und Essverhalten von 14- bis 17-jährigen Jugendlichen 2015 - Deskriptive Ergebnisse der SCHULBUS-Untersuchung in Hamburg sowie in drei Grenzregionen Bayerns, Sachsens und Nordrhein-Westfalens. Büro für Suchtprävention der Hamburgischen Landesstelle für Suchtfragen e.V., Hamburg.
- Bermann, M. C., Baier, D., Rehbein, F. & Mößle, T. (2017). Jugendliche in Niedersachsen. Ergebnisse des Niedersachsensurveys 2013 und 2015, Forschungsbericht Nr. 131. Kriminologisches Forschungsinstitut Niedersachsen e.V. (KFN), Hannover.
- Die Drogenbeauftragte der Bundesregierung, Bundesministerium für Gesundheit, Bundesärztekammer & Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (Hrsg.) (2016). S3-Leitlinie Methamphetamin-bezogene Störungen. Springer, Berlin Heidelberg.
- Gomes de Matos, E., Atzendorf, J., Kraus, L. & Piontek, D. (2016). Substanzkonsum in der Allgemeinbevölkerung: Ergebnisse des Suchtsurveys 2015. Sucht **62** (5) 271-281.
- Hannemann, T.-V., Kraus, L. & Piontek, D. (2017). Consumption Patterns of Nightlife Attendees in Munich: A Latent-Class Analysis. Substance Use & Misuse **52** (8), 1532-2491.
- Hoch, E., Bonnet, U., Thomasius, R., Ganzer, F., Havemann-Reinecke, U. & Preuss, U. W. (2015). Risiken bei nichtmedizinischem Gebrauch von Cannabis. Deutsches Ärzteblatt **112** (16) 271-278.
- Hoffmann, L., Schumann, L., Thiel, C., Fankhänel, T., Klement, A. & Richter, M. (2017). Methamphetaminkonsum in Mitteldeutschland. Eine qualitative Studie zu Bedarf und Herausforderungen für die rehabilitative Versorgung (METH MD). Martin Luther Universität Halle-Wittenberg, Halle.
- Kleiber, D. & Soellner, R. (1998). Cannabiskonsum. Entwicklungstendenzen, Konsummuster und Risiken. Juventa, Weinheim.
- Kraus, L., Piontek, D., Atzendorf, J. & Gomes de Matos, E. (2016b). Zeitliche Entwicklungen im Substanzkonsum in der deutschen Allgemeinbevölkerung. Ein Rückblick auf zwei Dekaden. Sucht **62** (5), 283-294.
- Kraus, L., Piontek, D., Seitz, N.-N. & Schoeppe, M. (2016a). Die Europäische Schülerstudie zu Alkohol und anderen Drogen 2015 (ESPAD): Befragung von Schülerinnen und Schülern der 9. und 10. Klasse in Bayern, IFT-Berichte Bd. 188. IFT Institut für Therapieforschung, München.
- Landesstelle für Suchtfragen im Land Sachsen-Anhalt (2016). Die Droge Crystal im Spiegel der Betreuungen an anerkannten Suchtberatungsstellen in Sachsen-Anhalt.

- Fachausschuss der LIGA der Freien Wohlfahrtspflege im Land Sachsen-Anhalt e.V., Magdeburg.
- Morgenstern, M, Montag, J. & Hanewinkel, R. (2017). Konsum psychotroper Substanzen und Ausbildungszufriedenheit. Gesundheitswesen **79**, 10-18.
- Orth, B. & Töppich, J. (2015). Der Cannabiskonsum Jugendlicher und junger Erwachsener in Deutschland 2014. Ergebnisse einer aktuellen Repräsentativbefragung und Trends. Bundeszentrale für gesundheitliche Aufklärung (BZgA), Köln.
- Orth, B. (2016). Die Drogenaffinität Jugendlicher in der Bundesrepublik Deutschland 2015. Rauchen, Alkoholkonsum und Konsum illegaler Drogen: aktuelle Verbreitung und Trends. BZgA-Forschungsbericht. Bundeszentrale für gesundheitliche Aufklärung (BZgA), Köln.
- 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.
- Piontek, D. & Hannemann, T.-V. (2017). Medikamentenmissbrauch und der Konsum von neuen psychoaktiven Substanzen (NPS) in unterschiedlichen Risikopopulationen. Ergebnisse des Projekts Phar-Mon NPS aus den Jahren 2015 und 2016 [online]. Available at: [http://www.ift.de/fileadmin/user\\_upload/Literatur/Berichte/Piontek\\_Hannemann\\_2017\\_Phar-Mon\\_2015-2016.pdf](http://www.ift.de/fileadmin/user_upload/Literatur/Berichte/Piontek_Hannemann_2017_Phar-Mon_2015-2016.pdf)
- Piontek, D., & Kraus, L. (2016). Themenschwerpunkt Epidemiologischer Suchtsurvey 2015. Sucht **62** (5), 257-294.
- Piontek, D., Gomes de Matos, E., Atzendorf, J. & Kraus, L. (2016a). Kurzbericht Epidemiologischer Suchtsurvey 2015. Tabellenband: Konsum illegaler Drogen, multiple Drogenerfahrung und Hinweise auf klinisch relevanten Drogenkonsum nach Geschlecht und Alter im Jahr 2015 [online]. Available at: [http://www.esa-survey.de/fileadmin/user\\_upload/Literatur/Berichte/ESA\\_2015\\_Illegale\\_Drogen-Kurzbericht.pdf](http://www.esa-survey.de/fileadmin/user_upload/Literatur/Berichte/ESA_2015_Illegale_Drogen-Kurzbericht.pdf)
- Piontek, D., Gomes de Matos, E., Atzendorf, J. & Kraus, L. (2016b). Substanzkonsum und Hinweise auf klinisch relevanten Konsum in Bayern, Hamburg, Hessen, Nordrhein-Westfalen, Sachsen und Thüringen. Ergebnisse des Epidemiologischen Suchtsurvey 2015, IFT-Bericht Bd. 189. IFT Institut für Therapieforschung, München.
- Piontek, D., Gomes de Matos, E., Atzendorf, J. & Kraus, L. (2016c). Kurzbericht Epidemiologischer Suchtsurvey. Tabellenband: Trends der Prävalenz des Konsums illegaler Drogen und des klinisch relevanten Cannabisgebrauchs nach Geschlecht und Alter 1990-2015 [online]. Available at: [http://www.esa-survey.de/fileadmin/user\\_upload/Literatur/Berichte/ESA\\_2015\\_Illegale\\_Drogen-Trends.pdf](http://www.esa-survey.de/fileadmin/user_upload/Literatur/Berichte/ESA_2015_Illegale_Drogen-Trends.pdf)
- Schettino, J., Leuschner, F., Kasten, L., Tossman, P. & Hoch, E. (2015). Treatment of cannabis-related disorders in Europe. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Luxembourg.
- Soyka, M. (2015). Alkohol als komorbide Störung bei Drogenabhängigkeit. HIV&more **4** 18-19.



Werse, B., Kamphausen, G., Egger, D., Sarvari, L. & Müller, D. (2017a). MoSyD Jahresbericht 2015. Drogentrends in Frankfurt am Main. Centre for Drug Research, Goethe-Universität, Frankfurt am Main.

Werse, B., Sarvari, L., Egger, D. & Feilberg, S. (2017b). MoSyD SZENESTUDIE 2016. Die offene Drogenszene in Frankfurt am Main. Centre for Drug Research, Goethe-Universität, Frankfurt am Main.

## 2 Tables

Table 1	Prevalence of the use of any illicit drug in Germany.....	7
Table 2	12-month prevalence of illicit drugs use in the general population, 2015.....	8
Table 3	12-month prevalence of any illicit drug use by <i>Land</i> .....	10
Table 4	Prevalence of illicit drug use in 2015/16 among pupils.....	11
Table 5	Prevalence of cannabis use in Germany.....	15
Table 6	Prevalence of use of cannabis in 2015/16 among pupils.....	19
Table 7	Prevalence of use of stimulants in Germany.....	26
Table 8	Prevalence of stimulant use among pupils in 2015/2016.....	30
Table 9	Estimate of the prevalence of high risk opioid use from 2010 to 2016 (figures in 1000s, age group 15 to 64-year-olds).....	38
Table 10	Prevalence of use of NPS in Germany.....	43

## 3 Figures

Figure 1	12-month prevalence of clinically relevant use of illicit drugs among adults in Germany.....	9
Figure 2	Trends in 12-month prevalence of use of any illicit drug among 18 to 59-year-olds in Germany, 1990-2015 (ESA).....	12
Figure 3	Trends in 12-month prevalence of use of any illicit drug among 12 to 17-year-olds in Germany, 1990-2015 (DAS).....	13
Figure 4	Trends in 12-month prevalence of cannabis use among 18 to 59-year-olds in Germany, 1990-2015 (ESA).....	16
Figure 5	Trends in 12-month prevalence of cannabis use among 12 to 17-year-olds in Germany, 1993-2015 (DAS).....	17
Figure 6	Trends in 12-month prevalence of stimulant use among 18 to 59-year-olds in Germany, 1990-2015 (ESA).....	27
Figure 7	Trends in 12-month prevalence of stimulant use among 12 to 17-year-olds in Germany, 1990-2015 (DAS).....	28

