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0 Summary (T0)

0.1 Drug use and the main illicit drugs (T0.1)

0.1.1 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. Several established studies make data available at regular intervals on the use of various illicit drugs in the general population. The Drug Affinity Study (Drogenaffinitätsstudie, DAS) (most recently: (Orth and Merkel, 2020)) is a long-term analysis of substance use among adolescents and young adults (age groups: 12-17 and 18-25). The Epidemiological Survey of Substance Abuse (Epidemiologische Suchtsurvey, ESA) examines the adult residential population in the age group 18-64 (Atzendorf et al., 2019).

According to the population surveys, in 2018 approximately 15.2 million adults between 18 and 64 years old (Seitz et al., 2019b) and in 2019 around 481,000 adolescents aged between 12 and 17¹ (Orth and Merkel, 2020) in Germany had used an illicit drug at least once in their life. This corresponds to lifetime prevalence rates of 29.5% and 10.6% respectively. Based on the last 12 months, taking the prevalence rate of 8.3% across both groups, one can extrapolate that there are 4.2 million adult and 374,000 adolescent users (Table 1). Cannabis is the most prominent of all illicit drugs, among both adolescents and adults. In comparison to other drugs, that substance clearly predominates, with a 12-month prevalence of 8.1% among 12 to 17-year-olds and 7.1% among 18 to 64-year-olds. The proportion of adolescents and adults who have consumed any other illicit drug in the same time period is 1.1% and 2.4% respectively (Table 2).

In contrast to cannabis, the 12-month prevalence rates for all other individual substances are at or under 1% for adolescents (DAS) and adults (ESA) respectively. Among 12 to 17-year-olds, the most frequently consumed drugs after cannabis are ecstasy (0.5%), amphetamine and psychoactive plants (0.3% each) and cocaine and LSD (0.2% each). Among adults aged 18-64, other drugs in addition to cannabis that have notable prevalence rates are amphetamines (1.2%), new psychoactive substances (0.9%) as well as ecstasy and cocaine/crack (1.1% each). The same pattern, only at an overall higher level, is seen in the group of young adults (18-25 years old/DAS). The individual 12-month prevalence rates for illicit drugs other than cannabis² range from 0.1% (heroin and inhalants) to 3.6% (ecstasy) (Orth and Merkel, 2020).

¹ Results from the DAS on young adults aged 18 to 25 years old are presented in Tables 1 and 2 in the 2020 workbook.

² Ecstasy, LSD, amphetamine, crystal meth, cocaine, crack, heroin, new psychoactive substances, inhalants and psychoactive plants.

Data from the ESA on drug use in the *Laender* (Seitz et al., 2020a) were presented in the 2020 workbook.

Table 1 Prevalence of use of any illicit drug in Germany

	Source ¹⁾	Age	Prevalence	Extrapolation ²⁾
Lifetime	ESA 2018	18-64	29.5%	15,200,000
	DAS 2019	12-17	10.6%	481,000
12 months	ESA 2018	18-64	8.3%	4,300,000
	DAS 2019	12-17	8.3%	374,000
30 days	ESA 2018	18-64	3.3%	1,700,000
	DAS 2019	12-17	4.0%	181,000

1) The values include the substances: ESA: cannabis, amphetamine/methamphetamine, ecstasy, LSD, heroin/other opiates, cocaine/crack, mushrooms, NPS.

DAS: cannabis, ecstasy, LSD, amphetamine, methamphetamine (crystal meth), cocaine, crack, heroin, NPS, inhalants or psychoactive plants or a combination of these substances. The results presented are based on the dual-frame sample with weighting by education.

2) Figures are rounded. Extrapolations are based on population numbers of 51,544,494 people aged 18-64 (as of 31 December 2017; Statistisches Bundesamt) and 4,520,918 people aged 12-17 (as of 31 December 2018; Statistisches Bundesamt).

Table 2 12-month prevalence of illicit drug use in the general population

Source	Age	Any illicit drug	Cannabis	Drugs other than cannabis ¹⁾
Total				
ESA 2018	18-64	8.3%	7.1%	2.4%
DAS 2019	12-17	8.3%	8.1%	1.1%
Male				
ESA 2018	18-64	10.2%	8.9%	2.9%
DAS 2019	12-17	11.0%	10.8%	1.1%
Female				
ESA 2018	18-64	6.4%	5.3%	1.8%
DAS 2019	12-17	5.4%	5.3%	1.0%

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

0.1.2 Clinically relevant and problem drug use

In the ESA 2018, in addition to drug use, indicators on clinically relevant or problem drug use were also collected. Cannabis abuse and dependency according to DSM-IV were present in 0.6% of the total population. There was evidence of amphetamine/methamphetamine abuse

according to DSM-IV for 0.1% of 18 to 64-year-old respondents. In contrast, dependency was present in 0.2% of respondents. The prevalence rates both for abuse of and dependency on cocaine according to DSM-IV were 0.1% (Atzendorf et al., 2019). The prevalence values for substance-related disorders are currently at a similarly high level to those in 1997 and 2000 (Seitz et al., 2019d).³

0.1.3 Drug use among school pupils, university students and vocational school students

In Germany, a number of different pupil studies are conducted on substance use. The results of the surveys were reported in the 2020 Drugs workbook. New results are available only for the Frankfurt pupil survey in the scope of the Monitoring System on Drug Trends (Monitoring System Drogentrends, MoSyD) and the Lower Saxony Survey (Niedersachsensurvey) (Krieg et al., 2020).

Summaries of usage prevalence rates are presented in Table 3. Cannabis clearly dominates over other illicit drugs among pupils as well. For example, the lifetime prevalence of cannabis use in the Frankfurt MoSyD study is 29% and in the Lower Saxony Survey is 15.2%, while the lifetime prevalence excluding cannabis was 9% in Frankfurt and 3% in Lower Saxony. Similar rates can be found in the other studies. In all pupil studies, males have a more frequent use of illicit drugs than females.

When comparing 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. Some of the differences could also be attributable to the differing survey methods or the different wording of the questions. Finally, some considerable regional differences also exist in use behaviour and the characteristics of the markets.

³ The results of this survey were reported in detail in the 2019 Drugs workbook.

Table 3 Prevalence of illicit drug use among pupils

Source ¹⁾ /Region	Age	Time reference	Any illicit drug	Cannabis	Drugs other than cannabis ²⁾
ESPAD 2019					
Bavaria	13-19	Lifetime	27.1%	24.2%	17.3%
MoSyD 2020					
Frankfurt	15-18	Lifetime	n.r.	29%	9%
Frankfurt	15-18	12 months	n.r.	24%	6%
HBSC 2017/2018³⁾					
National	15	Lifetime	n.r.	22.6%/15.5%	n.r.
SCHULBUS 2018					
Hamburg	14-17	Lifetime	n.r.	25.4%	7.8%
Bavaria	14-17	Lifetime	n.r.	26.5%/23.9%	n.r.
Lower Saxony Survey 2019					
Lower Saxony	M = 15	12 months	n.r.	15.2%	3.0%
SCHULBUS 2016/17					
City state Bremen	14-17	Lifetime	n.r.	23.0%	5.4%
SCHULBUS 2015					
Saxony	14-17	Lifetime	n.r.	20.2%	4.3%
North Rhine-Westphalia	14-17	Lifetime	n.r.	17.3%	4.5%

1) In the case of repeated surveys only the most recent results are presented.

2) Other drugs include the following substances: ESPAD: amphetamine, methamphetamine, ecstasy, LSD, cocaine, crack, heroin, GHB, magic 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.

3) HBSC: First value: boys, second value: girls.

4) SCHULBUS Bavaria: First value: cities, second value: rural districts.

n.r. not reported. M = mean value

0.1.4 Trends in drug use in Germany

The trend in the use of any illicit drug among both 12 to 17-year-olds and 18 to 64-year-olds has followed a similar pattern over the last 20 years (Orth and Merkel, 2020, Seitz et al., 2019a). 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, however, there has been a marked increase again. Among adults, the most marked changes have been seen among 18 to 24-year-olds (see Figure 1). As shown in Figure 2, the trends

for male and female adolescents are similar, although the increase among female adolescents is somewhat flatter. The pattern of the trend in drug use over time is mainly influenced by the prevalence of cannabis, which follows a similar course (see section A 1.1.2). In contrast to cannabis, stimulant use among adolescents has fallen (see Section B 1.1.2) (Orth et al., 2021).

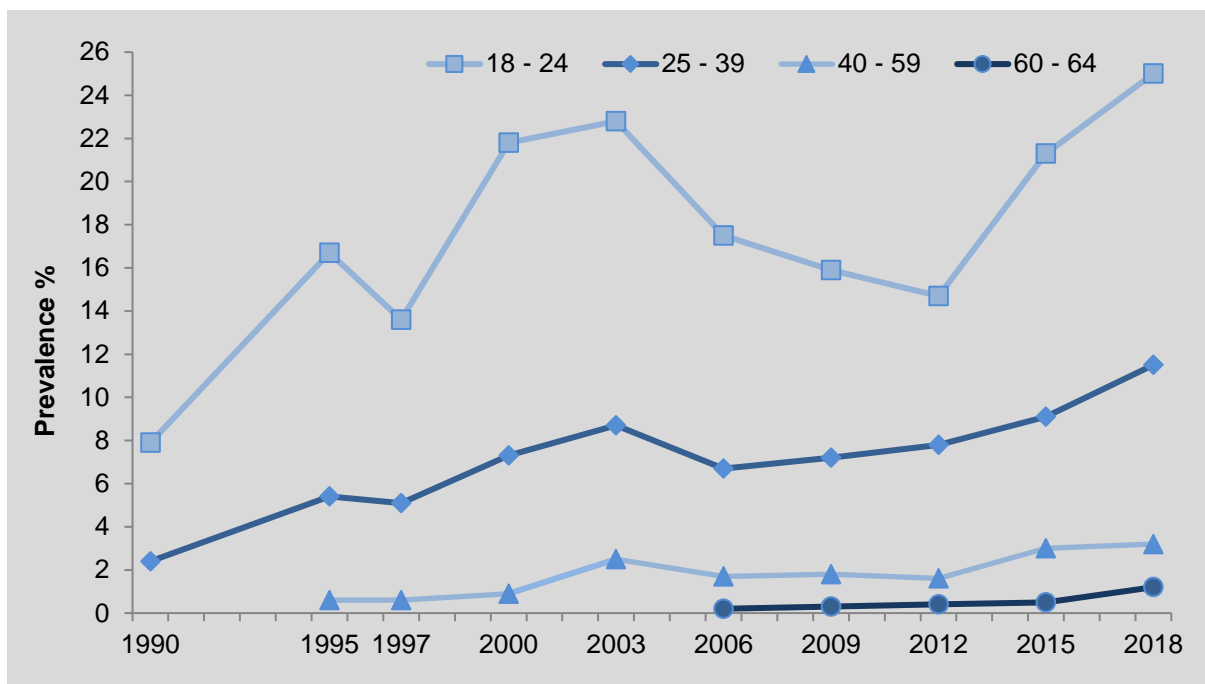


Figure 1 Trends in 12-month prevalence of use of any illicit drug among 18 to 64-year-olds in Germany, 1990-2018 (ESA) by age group

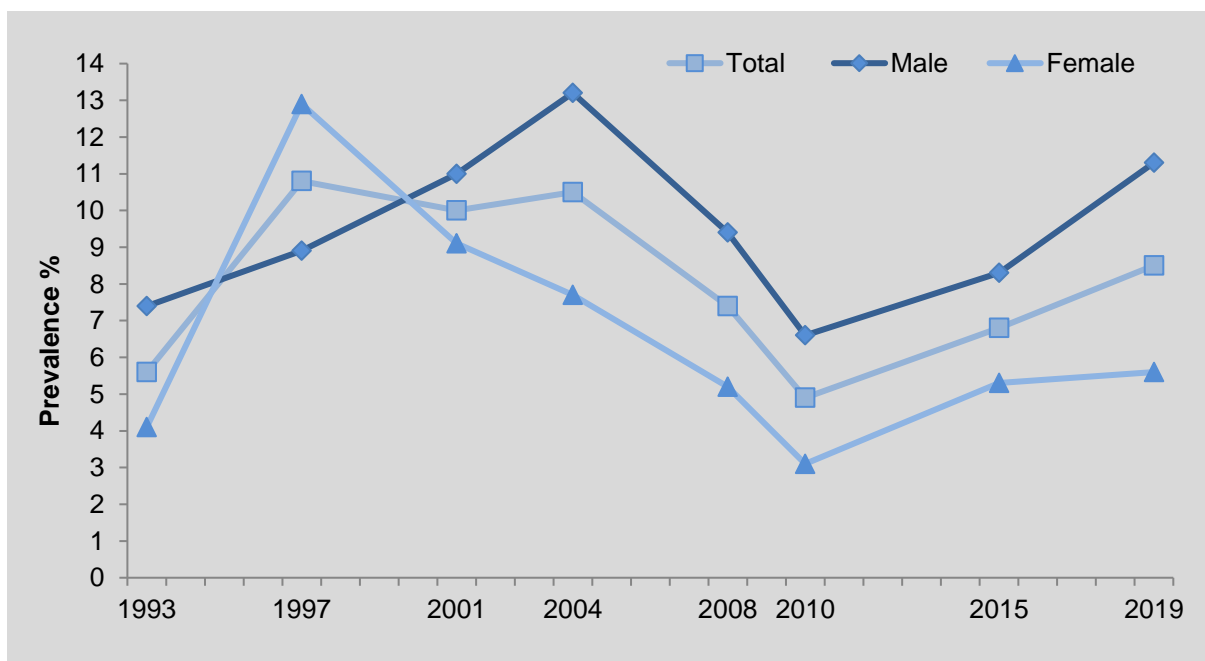


Figure 2 Trends in 12-month prevalence of use of any illicit drug among 12 to 17-year-olds in Germany, 1993-2019 (DAS) by gender

0.2 The use of illicit drugs with alcohol, tobacco and prescription drugs (T0.2)

There is no current information on the combination of illicit drugs with legal substances and prescription medicines. The data from the representative studies in the general population, in schools and in special sub-populations 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.

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)

It is not possible to differentiate between the prevalence rates of different types of cannabis in the general population and in schools, as information is not recorded with that detail. This information was only collected in the MoSyD pupil survey in Frankfurt for the 30-day prevalence of cannabis products. 36% of respondents reported only having smoked marijuana or "grass", while a further 39% had consumed marijuana and hashish and 20% only hashish. It is striking that marijuana is no longer the dominant cannabis product among Frankfurt pupils but that it has been replaced by the mixed category (marijuana and hashish). In addition, consumption of hashish alone has seen a statistically significant increase over the overall course of the study. Since 2018, marijuana consumption has increased again, however, a trend which continued in 2020 with a further rise. Nevertheless, marijuana and hashish remains the most frequently mentioned category (MoSyD Jahresbericht 2020, as yet unpublished results).

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

Cannabis is the most commonly used illicit drug in Germany by some margin. The frequencies of use are listed in

Table 4. 7.1% of adults (Atzendorf et al., 2019) and 8.1% of adolescents have consumed cannabis within the last 12 months, with the 30-day prevalence rates at 3.0% and 3.8% respectively. Cannabis use increases steadily from late childhood to young adulthood (Orth and Merkel, 2020). In all age groups, the substance was consumed by a significantly higher proportion of men and boys than of women and girls. In the adult population, the highest usage prevalences are observed in the 18 to 20-year-old and 21 to 24-year-old age groups. When looking at use alongside the level of school education, it is noticeable that the 12-month prevalence among people with an *Abitur* qualification (school leaving certificate qualifying the pupil for university admission), it is, at 10.3%, nearly double that of people who have a basic school leaving certificate, at 5.0%, or that of people with an intermediate secondary school leaving certificate (5.2%) (Orth et al., 2021).

Table 4 Prevalence of cannabis use in Germany

	Source	Age	Total	Male	Female
Lifetime	ESA 2018	18-64	28.3%	32.9%	23.4%
	DAS 2019	12-17	10.4%	13.1%	7.5%
12 months	ESA 2018	18-64	7.1%	8.9%	5.3%
	DAS 2019	12-17	8.1%	10.8%	5.3%
30 days	ESA 2018	18-64	3.0%	3.8%	2.1%
	DAS 2019	12-17	3.8%	5.0%	2.6%

Over the time period of the last 28 years, the 12-month prevalence rate for cannabis use among 18 to 64-year-old adults has exhibited, with a wavelike pattern, an overall upward trend (Seitz et al., 2019d). The trend for each age group is shown in Figure 3.

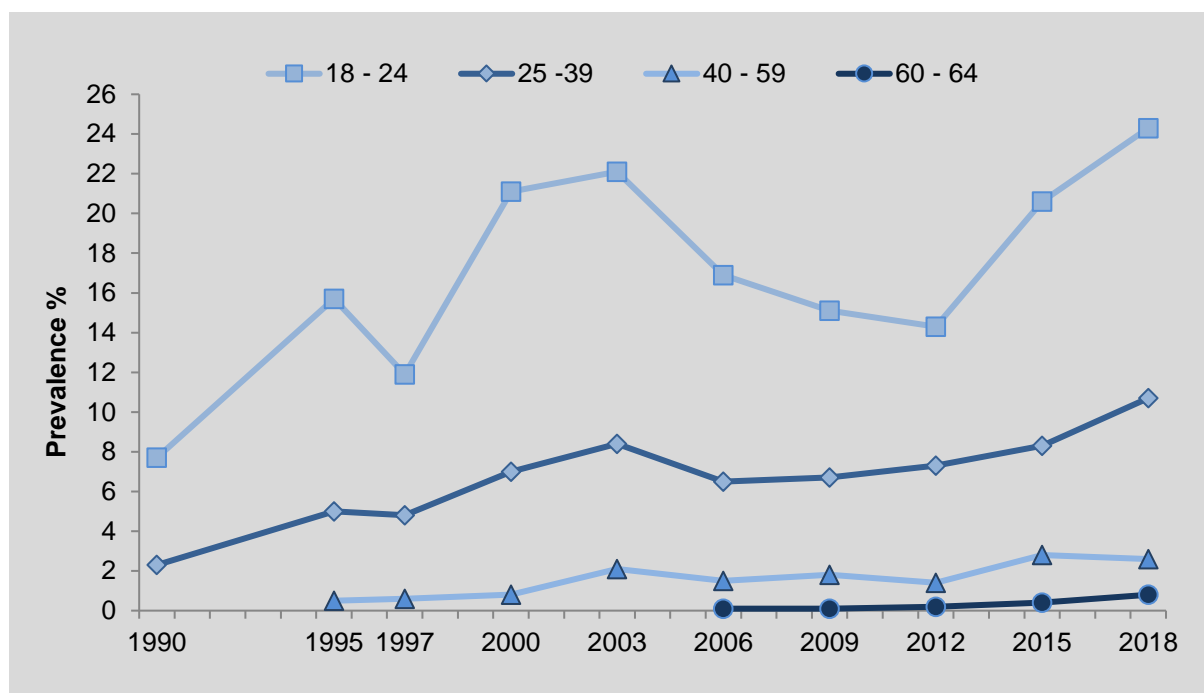


Figure 3 Trends in the 12-month prevalence of cannabis use among 18 to 64-year-olds in Germany, 1990-2018 (ESA) by age group

The DAS 2019 shows that the rate of cannabis use has gone up among 12 to 17-year-old adolescents compared to 2011. Increases can be seen in the lifetime and 12-month prevalence rates for both genders. The current lifetime prevalence rates have not yet reached the high level of 2004. In contrast, the 12-month prevalence rates, which represent more recent use, are, for 2019, at a similarly high level to 2004 for both genders (differences not statistically significant) Fehler! Verweisquelle konnte nicht gefunden werden.. Between 2010 and 2019, the 30-day prevalence increased among male adolescents, as did regular use, which significantly increased. Among 18 to 25-year-old women and men, the 12-

month prevalence of cannabis use has been increasing since 2008. In 2019, young women reached the highest and young men the second highest 12-month prevalence rates since 1993 (Figure 4) (Orth and Merkel, 2020).

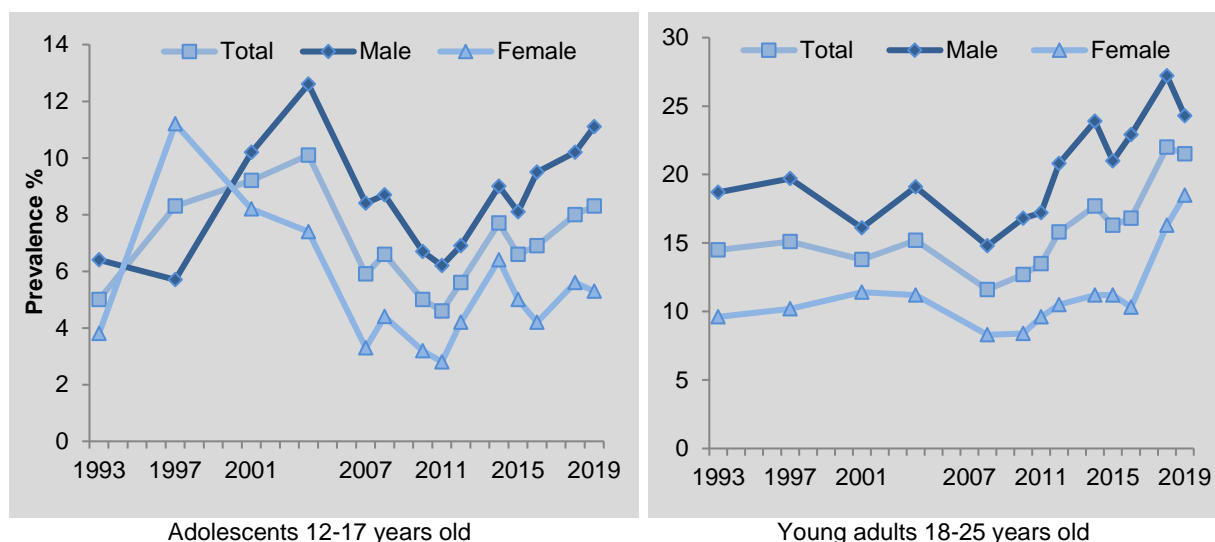


Figure 4 Trends in the 12-month prevalence of cannabis use among 12 to 25-year-olds in Germany 1993-2019 (DAS and AS), by gender

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

Cannabis use in schools

Cannabis use in schools in Germany is regularly recorded through various studies on substance consumption. For 2020, new results are available from the Frankfurt pupil survey in the scope of the MoSyD and the Lower Saxony Survey. The prevalence rates for cannabis are summarised in Table 5 with the values from all school studies.

In the latest Frankfurt MoSyD survey in 2020, 29% of 15 to 18-year-olds reported having used cannabis at least once in their lives. This figure was 24% for the previous 12 months and 15% for the previous 30 days. The decline in all prevalence rates observed since 2015 (with the exception of 2018) continued. In all prevalence rates, school boys are still markedly ahead of school girls. The average age of first use has increased over time to 15.2 years old in 2019 (2002: 14.5), which is slightly below the 2017 peak (15.3). In 2020, the age of first use fell to 15.0 years old. In 2019 question regarding the consumption of CBD flowers and CBD resin were asked for the first time. The lifetime prevalence of CBD flowers has remained unchanged at 14%, with the 30-day prevalence falling slightly from 4% to 3% (MoSyD Jahresbericht 2020, as yet unpublished results).

Table 5 Prevalence of cannabis use among pupils 2015 to 2020

Source ¹⁾ /Region	Age	Time reference	Total	Male	Female
ESPAD 2019					
Bavaria	13-19	Lifetime	24.2%	26.7%	21.7%
		12 months	21.4%	24.0%	18.7%
MoSyD 2020²⁾					
Frankfurt	15-18	Lifetime	29%	31%	27%
		12 months	24%	27%	22%
HBSC 2017/2018					
National	15	Lifetime	n.r.	22.6%	15.5%
		30 days	n.r.	10.1%	8.3%
SCHULBUS 2018					
Hamburg	14-17	Lifetime	25.4%	27.1%	23.4%
		30 days	13.7%	16.0%	10.9%
Bavaria ³⁾	14-17	Lifetime	26.5%/23.9%	31.3%/27.9%	21.0%/19.5%
		30 days	14.9%/12.2%	18.6%/15.3%	10.8%/8.8%
Lower Saxony Survey 2019					
Lower Saxony	M = 15	12 months	15.2%	n.r.	n.r.
SCHULBUS 2016/17					
City state Bremen	14-17	Lifetime	23.0%	27.1%	18.6%
		30 days	11.4%	12.2%	10.2%
SCHULBUS 2015					
Saxony	14-17	Lifetime	20.2%	22.6%	17.7%
		30 days	9.1%	10.9%	7.3%
North Rhine-Westphalia	14-17	Lifetime	17.3%	18.1%	16.5%
		30 days	7.8%	10.1%	5.3%

1) In the case of repeated surveys only the most recent results are presented.

2) In 2020, for the first time 12 people stated their gender as "diverse". Lifetime and 12-month prevalence: 25% each.

3) SCHULBUS Bavaria: First value: cities, second value: rural districts.

n.r. = not reported. M = mean value

In the SCHULBUS survey, the cannabis products hashish and marijuana represent the most widely consumed intoxicant among illicit drugs. Almost a quarter of young people in Bremen, Bremerhaven, Bavaria and Hamburg reported having used cannabis at least once before. In Hamburg, the lifetime prevalence of cannabis use increased slightly in 2018 compared to

2015 (Baumgärtner und Hiller, 2020). The slightly fluctuating trend in prevalence figures in recent years does not show a clear trend, but confirms a widespread establishment of cannabis use (smoking pot) among adolescents (Baumgärtner, 2020). 15% of adolescents surveyed in metropolitan milieus reported a current use of hashish and/or marijuana, while this figure was 12% for adolescents of the same age in rural districts (Baumgärtner und Hiller, 2019b). The data on the average age of first use of cannabis products over time shows, similar to the MoSyD Study, that since 2012 adolescents have been having their first experience of use with hashish and/or marijuana at a later age on average than even as recently as the mid-2000s (2005: male: 13.6, female: 13.8; 2012: male: 14.7, female: 15; 2018: male: 14.6, female: 15) (Baumgärtner und Hiller, 2019a).

Cannabis use in specific sub-populations

A survey of partygoers carried out in the scope of the Phar-Mon plus project also shows the high degree of acceptance of cannabis. With a 12-month prevalence of 75.2%, cannabis is the most frequently consumed illegal substance by some margin. Male partygoers have a higher prevalence rates than female partygoers (Lochbühler et al., 2021a).

The results of the 2018 scene study in the scope of the MoSyD (Werse et al., 2019) are presented in the 2019 Drugs workbook.

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

1.2.1 Patterns of cannabis use (T1.2.1)

Several patterns of use of 12 to 17-year-old adolescents can be seen in the current alcohol survey or in the DAS (Orth and Merkel, 2019, Orth and Merkel, 2020). The focus here is, in particular, on frequent use, defined as "more than ten instances of use in the last twelve months". The proportion of adolescents affected overall in 2019 was 2.0% (2018: 1.6%, 2016: 1.5%). The prevalence of regular cannabis use (male: 2.8%; female: 1.2%) is statistically significantly higher for male adolescents than female adolescents. Furthermore, regular cannabis use among boys has increased since 2010, whereas among girls it has fallen.

In the group of Frankfurt pupils who had used cannabis in the previous 30 days, 17% reported intensive (daily) use. This corresponds to 2% of all 15 to 18-year-old respondents surveyed in 2019 (Werse et al., 2020).

1.2.2 Reducing the demand for cannabis (T1.2.2)

Specialist counselling and treatment of cannabis-related disorders in Germany is, for the most part, provided on an outpatient basis. Admittance and treatment on an inpatient basis is only provided for severe health disorders or in cases with a high risk of relapse (Hoch et al., 2015).

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

1.2.3 High-risk cannabis use (T1.2.3)

In the ESA 2018, substance-related disorders for cannabis were recorded with the help of the written version of the Munich Composite International Diagnostic Interview (M-CIDI) (Wittchen et al., 1995). Compared to the survey years 1997 to 2018, cannabis abuse and dependence according to DSM-IV has remained broadly constant for both genders (Seitz et al., 2019d). Further results can be found in the 2019 Drugs workbook.

In the ESPAD study in Bavaria, problem cannabis use in the last 12 months was recorded with the help of the Cannabis Abuse Screening Test (CAST) (Legleye et al., 2007), for pupils in the 9th and 10th grades (Seitz et al., 2020b). In relation to the total sample, 2.0% of the pupils, and 9.3% of users who had used cannabis in the past 12 months, were categorised as having problem cannabis use. Intensive cannabis use of 20 times or more within the last 30 days was reported by 14.4% of all users. In the SCHULBUS survey, cannabis dependence is defined as reaching a threshold of 2 points on the “Severity of Dependence Scale” (SDS) (Gossop et al., 1995) (Baumgärtner & Hiller, 2017, Baumgärtner & Hiller, 2019a). On that basis, 5.3% of youths surveyed in Hamburg in 2018 were classed as cannabis dependent. This is true above all for male adolescents and older respondents. Problem use has, however, generally experienced a downward trend among male and female respondents as well as among younger respondents (14 to 15-year-olds) (Baumgärtner and Hiller, 2019a). A similar picture can be seen in the city state of Bremen (2016/2017) (4.8% problem use). If one instead considers the data separately, however, there are differences for Bremerhaven, where almost twice as many pupils are classed as cannabis dependent, at 7.9% (Bremen: 4%) (Baumgärtner and Hiller, 2017). In Bavaria, the proportions of problem cannabis users were notably high, at 7% of all respondents in the large cities and 4% in the rural districts, since that means that half or at least a third of current users there are classed as cannabis dependent (Baumgärtner und Hiller, 2019b). In contrast to the rest of their peers, above all young people with problem use have had their first experiences with cannabis at a very young age, use cannabis while at home alone, far removed from the “classic settings”, and leave the parental home at an earlier age. The motives for cannabis use among recreational users are context-related (e.g. curiosity, to experience something exciting), whereas the motives among adolescents who are currently using or who exhibit problem use are often effect-related, i.e. accessory to everyday life (for example to forget day-to-day life, feelings of happiness) and to transcend everyday life (physical feeling, different perception) (Baumgärtner, 2020).

In the Frankfurt MoSyD survey, the value for the question as to subjective estimation with regard to cannabis dependency was 4% in 2019, the same as in 2018. In the preceding two years, 2016 and 2017, the value was still at 2% (Werse et al., 2020)⁴. Following the decline

⁴ No new data was available in this regard at the time this report was produced.

from 2018 (4%) to 2019 (2%), the proportion of intensive users with daily consumption remained unchanged for 2020 (MoSyD Jahresbericht 2020, as yet unpublished results).⁵

In the Lower Saxony pupil survey, problem cannabis use is defined as being at least several times a month. The proportion of affected pupils in the 2019 survey was 4.9% and has thus slightly, but significantly, increased since 2013 (3.4%) (Krieg et al., 2020). Girls and respondents at higher types of school use cannabis somewhat less often than boys and adolescents at middle and lower types of school. An increase in problem cannabis use since 2017 has been observed for female adolescents and respondents in higher types of school as well as from urban areas.

Data from the current 2020/21 Brandenburg pupil survey on regular cannabis use was not available at the time this report was produced. The results from the 2017 survey are detailed in the 2020 Drugs workbook.

The 2018 retrospective online cohort study from Seidel et al. (2020) aims to identify risk factors and predictors for the trend in high-risk cannabis use. 7,671 cannabis users (use in the last 12 months) were able to be recruited for this purpose. At the time of the survey, 29.7% (male: 32.3%; female: 26.0%) of respondents met the criteria for high-risk cannabis use, which was assumed to be a diagnostic cut-off score >3 on the Severity of Dependence Scale (SDS). An increased probability of developing high-risk cannabis use was associated with the following characteristics: male, older in age, with a migration background, increased "sensation seeking", early age of first use of cannabis, more frequent cannabis use among friends during schooltime and the associated positive social reaction to use before the age of 16, unstable relationship with parents and poorer mental health of parents. It is noteworthy that the transition from first use to high-risk use of cannabis happens more quickly than with alcohol or nicotine. Prevention measures are derived from the results of the study that primarily focus in on the early initiation into cannabis use and on family-oriented mental and social health measures.

1.2.4 Synthetic cannabinoids (T1.2.4)

Specific information on the use of synthetic cannabinoids is available from the two pupil surveys, ESPAD Bavaria and the MoSyD pupil survey, as well as from one survey in the open drug scene. The data collected concerned the prevalence of use of individual groups of new psychoactive substances. The results for the categories "herb mixtures" and "herbal smoke blends", which frequently include, above all, synthetic cannabinoids, are presented. These and further results for NPS in general can be found in section D.

2 Trends (T2)

Not applicable for this workbook.

⁵ Due to pandemic-related restrictions, the sample size was markedly smaller than it was in previous years.

3 New developments (T3)

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

Within the scope of a quantitative survey by the Phar-Mon plus project, the frequency of cannabis use among users (N=378), among other things, was recorded before and since the start of the coronavirus pandemic. Among users who consumed cannabis both before and since the start of the pandemic (N=378), a significant increase from 33.9% to 39.7% was observed in (almost) daily use. In the sample of partygoers, the increase was twice as much (26.7% to 38.4%). The majority of respondents in both the overall sample and in both subsamples reported having noticed no change with regard to their use frequency since the start of the pandemic (overall sample: 68.2%; people connected to the addiction support system: 79.3%; partygoers: 54.7%). 22.5% of respondents in the overall sample and 30.2% in the subsample of partygoers reported have used cannabis less compared to the time before the coronavirus pandemic. Cannabis was mainly used, both before and since the start of the pandemic, for pleasure, to relax and to de-stress. Since the start of the coronavirus pandemic, cannabis use in order to deal with negative feelings has increased the most (Lochbühler et al., 2021b).

In the “EMCDDA Web Survey on Drugs: COVID-19”, which was aimed at users over 18 years old, changes in the use of illicit drugs and the reasons for use were recorded using an online questionnaire. In addition, questions were asked regarding changes in how drugs were acquired, changes in the need for and services provided by addiction support facilities, and on the drug market. The survey was conducted from 8 to 27 April 2020. A total of 197 people between 18 and 65 years old completed the online questionnaire. For Germany, the 30-day prevalence for cannabis in the survey was 99.0%. In addition, almost a third of respondents (30.0%) had used amphetamine in the previous 30 days. Around one quarter (21.4%) reported having consumed ecstasy/MDMA in the previous 30 days. Cocaine/crack and LSD were each consumed by around 15% of respondents. The lowest rates were found for heroin (3%), synthetic cannabinoids (1.5%), synthetic stimulants (6.6%) and other opioids without a prescription (7.0%). A similar order of prevalence was also observed for the question of which illegal drugs had been acquired since the outbreak of the pandemic (cannabis: 40.2%, n=51; amphetamine: 16.5%, n=21; cocaine/crack: 13.4%, n=17) (Lochbühler et al., 2021a).

A Germany-wide online survey, which was conducted in spring 2020 at the start of the measures imposed to stem the COVID-19 pandemic, was aimed at cannabis users. A total of 1,146 people filled out the questionnaire completely. Around one third (39%) had increased their use during the corresponding phase of the pandemic, while only around one sixth (16%) had reduced their use. As the duration of the restrictions increased, so too did the proportion of those who reported having increased their use. Assessments of the market conditions were balanced: 48% noted no change, 47% reported lower availability (Werse und Kamphausen, 2021a). As a consequence of this online survey on regular cannabis use, another online survey was conducted between January and March 2021. This survey also

addressed at least occasional users of illegally obtained cannabis products containing THC and aimed to explore the impact of the pandemic-related restrictions on supply and use. A total of 3,460 people, and thus more than three times as many as in the first survey in 2020, completed the questionnaire (adjusted sample: 3,455 questionnaires). As with the first survey, the focus was on reaching people with regular to intensive patterns of use; occasional users were only represented to a low extent. In the second survey, people also tended to show increased cannabis use during periods where restrictions were imposed. The reasons for this are ambivalent: on the one hand, some of the respondents welcomed the opportunity to be able to get high more often in the increased free time (66%), on the other, compensatory motives were not infrequently mentioned, especially coping with stress (61%). This is often assessed as neutral or positive, while at the same time more than a quarter of respondents viewed the increase in use critically. A small majority of respondents' were hardly affected or not affected at all by limits in the supply of cannabis, while the situation has become worse for a significant proportion of users. For the most part, this has been compensated by new sources or hoarding. Regional differences have been seen to a small extent. The coronavirus crisis has had very different effects on cannabis users, depending on their individual situation. More free time, boredom and stress led, among other things, to a tendency towards increased use (Werse und Kamphausen, 2021b).

4 Additional information (T4)

4.1 Additional sources of information (T4.1)

Important sources are described above. Further studies are described in the 2020 Drugs workbooks.

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)

Cocaine, ecstasy and amphetamines are the dominant substances among stimulants in Germany. However, the significance of individual stimulants varies considerably by region and scene as well as between age groups. The prevalence rates show that methamphetamine use plays a rather subordinate role in the general population. Thus, the data does not confirm (media) fears of a “methamphetamine wave” that have been expressed in previous years (Seitz et al., 2019d). No sharp increase in individuals with corresponding clinically relevant disorders was observed (Pfeiffer-Gerschel et al., 2020). However, there have been indications in recent years of an increasing significance of amphetamine and methamphetamine. Growth rates, some of them significant, 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 are detected; see on this point the Drug Market and Crime workbook). In the area of counselling/treatment, for example, increased demand for support has been reported in recent years from outpatient counselling facilities and specialist walk-in clinics due to problems in connection with the use of amphetamine/methamphetamine (see on this point the Treatment workbook). In national surveys on prevalence of use in the general public, these clear increases are not seen in the same way, however.

A fundamental 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 impacts in connection with methamphetamine can be seen in some regions of Germany, similarly in the counselling/treatment realm and for 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)

Table 6 gives an overview of the use of stimulants in the general population (adolescents and adults). Among 18 to 64-year-old adults in Germany, cocaine/crack is the stimulant with the highest lifetime prevalence (Seitz et al., 2019b). As far as use in the last 12 months and in the last 30 days are concerned, amphetamine is more prevalent than other stimulants. Ecstasy is the most widely used substance among 12 to 17-year-olds and 18 to 25-year-olds

in terms of both lifetime prevalence (0.6% and 7.8% respectively) and 12-month prevalence (0.5% and 3.6% respectively) (Orth and Merkel, 2020).

Table 6 Prevalence of stimulant use in Germany

	Source	Age	Total	Male	Female
Amphetamine					
Lifetime	ESA 2018	18-64	3.8%	4.6%	2.9%
	DAS 2019	12-17	0.5%	0.5%	0.6%
12 months	ESA 2018	18-64	1.2%	1.5%	0.9%
	DAS 2019	12-17	0.3%	0.4%	0.2%
Methamphetamine					
Lifetime	ESA 2018	18-64	0.8%	1.0%	0.6%
	DAS 2019	12-17	0.2%	0.3%	0.1%
12 months	ESA 2018	18-64	0.2%	0.3%	0.1%
	DAS 2019	12-17	0.0%	0.0%	0.1%
Ecstasy					
Lifetime	ESA 2018	18-64	3.9%	4.5%	3.2%
	DAS 2019	12-17	0.6%	0.5%	0.7%
12 months	ESA 2018	18-64	1.1%	1.2%	1.0%
	DAS 2019	12-17	0.5%	0.4%	0.5%
Cocaine/Crack					
Lifetime	ESA 2018	18-64	4.1%	5.0%	3.2%
	DAS 2019	12-17	0.3%/0.0%	0.3%/0.1%	0.4%/0.0%
12 months	ESA 2018	18-64	1.1%	1.4%	0.8%
	DAS 2019	12-17	0.2%/0.0%	0.1%/0.1%	0.4%/0.0%

Figure 5 shows the trends in stimulant use among adults since 1990 (Seitz et al., 2019a). Results on stimulant use in the *Laender* (Seitz et al., 2020a) were reported in the 2020 Drugs workbook.

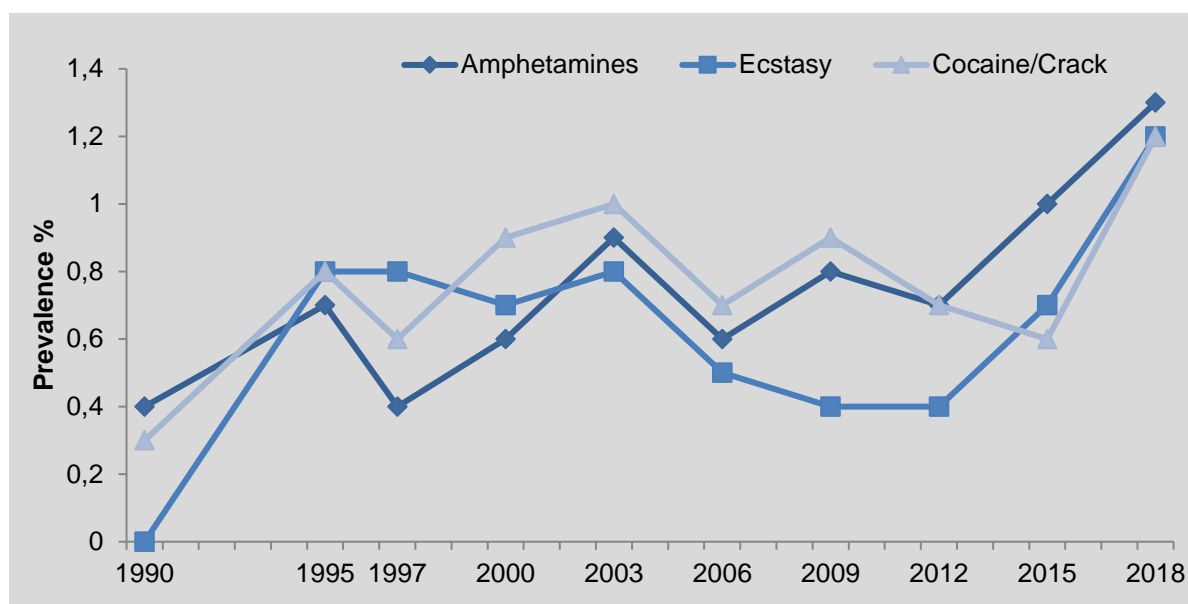


Figure 5 Trends in the 12-month prevalence of stimulant use among 18 to 59-year-olds in Germany, 1990-2018 (ESA)

The use of amphetamine, cocaine and ecstasy has decreased among 12 to 17-year-old adolescents. In contrast, while a decline was also seen in the group of 18 to 25-year-olds between 2001 and 2015, since then ecstasy and cocaine use has once again significantly increased (Figure 6).

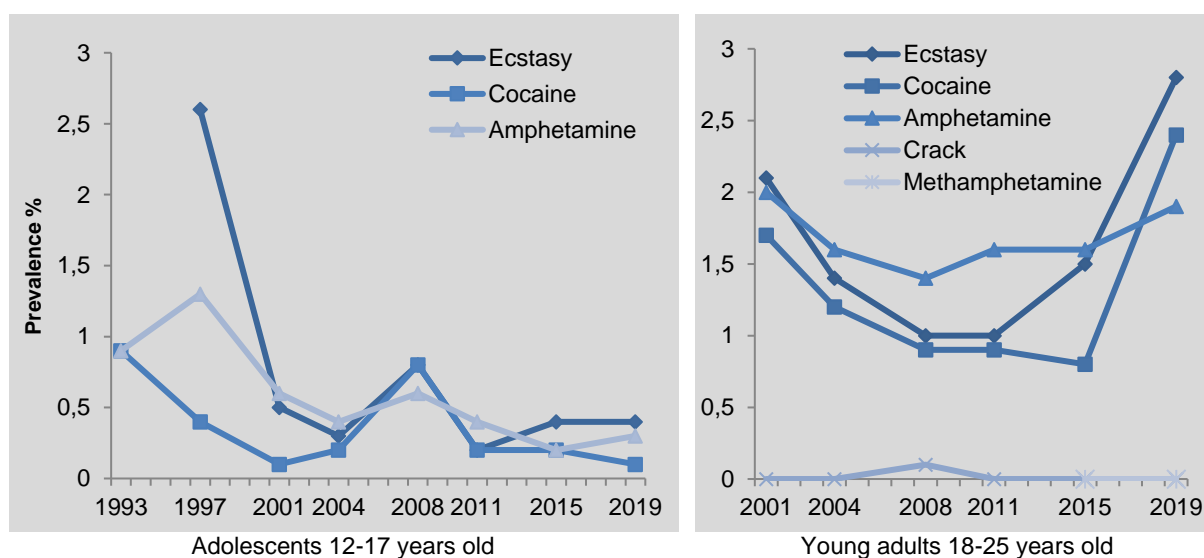


Figure 6 Trends in the 12-month prevalence of stimulant use among 12 to 25-year-olds in Germany, 1993 to 2019 and 2001 to 2019 (DAS)

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

Stimulant use in schools

An overview of stimulant use among school pupils can be found in

Table 7. Among Bavarian pupils in the 9th and 10th grades, 3.6% have had experiences with amphetamine, 3.3% with methamphetamine and 3.0% with ecstasy (Seitz et al., 2020b). Moreover, cocaine has been consumed at least once by 2.2% of adolescents. All substances are used less often by girls than boys. Amphetamine use in Bavarian schools is still significantly lower than it was in 2011. There were no changes in respect of ecstasy and cocaine.

In the last SCHULBUS survey in Hamburg (2018), ecstasy had the highest prevalence rate at 3.4% (Baumgärtner and Hiller, 2019a). The figures for stimulants have risen slightly in comparison to 2015 levels in all categories (with the exception of amphetamine). A (feared) increase in crystal meth use in Bavaria has not been confirmed. The 30-day prevalence values are consistently in fractions of a per cent (cities: 0.7%, rural districts: 0.4%) (Baumgärtner und Hiller, 2019b).⁶

In the Frankfurt MoSyD study, ecstasy was recorded at a lifetime prevalence of 6% (12-month prevalence: 2%), which represented an increase of 2%. Ecstasy thus remained the most-used stimulant. The increase is notable because a decline was observed in other studies due to pandemic-related restrictions. For cocaine, the values for both prevalence rates have remained at the level of the previous year (3% and 2% respectively) (MoSyD Jahresbericht 2020, as yet unpublished results).

In the 2017 Brandenburg pupil survey⁷, the lifetime prevalence for amphetamine use was 4.7% (school boys) and 4.1% (school girls). Regular (at least once a week) use of amphetamine (speed and/or crystal meth) was reported by 0.5% of girls and 0.8% of boys (Böhm et al., 2020).

⁶ Results from the 2016/2017 JEBUS study on use among 18 to 25-year-olds in vocational and higher education in Hamburg and in major cities in Bavaria and Saxony (Baumgärtner und Hiller, 2018) were presented in the 2018 Drugs workbook.

⁷ Data from the current 2020/21 Brandenburg pupil survey was not available at the time the report was produced.

Table 7 Lifetime prevalence of stimulant use among pupils in 2015/2020

Source ¹ /Region	Age	Substance	Total	Male	Female
ESPAD 2019					
Bavaria	13-19	Amphetamine	3.6%	4.1%	3.1%
		Methamphetamine	3.3%	3.8%	2.9%
		Ecstasy	3.0%	3.3%	2.6%
		Cocaine	2.2%	2.3%	2.1%
MoSyD 2020					
Frankfurt	15-18	Speed	4%	4%	4%
		Methamphetamine	1%	<1%	2%
		Ecstasy	6%	8%	4%
		Cocaine	3%	3%	3%
SCHULBUS 2018					
Hamburg	14-17	Amphetamine	2.1%	n.r.	n.r.
		Methamphetamine	1.1%	n.r.	n.r.
		Ecstasy	3.4%	n.r.	n.r.
		Cocaine	3.0%	n.r.	n.r.
Brandenburg pupil survey BJS 2017					
Brandenburg	16	Amphetamine	n.r.	4.7%	4.1%
SCHULBUS 2015					
Bavaria ³	14-17	Amphetamine	2.0%	n.r.	n.r.
		Methamphetamine	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.
		Methamphetamine	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.
		Methamphetamine	0.6%	n.r.	n.r.
		Ecstasy	3.0%	n.r.	n.r.
		Cocaine	2.0%	n.r.	n.r.

1) In the case of repeated surveys only the most recent results are presented. 2) In 2020, for the first time 12 people stated their gender as "diverse". Speed, methamphetamine and cocaine, each 0%, Ecstasy: 17%. 3) SCHULBUS Bavaria 2018: the lifetime prevalence of stimulant use is not reported. "n.r." not reported.

Stimulant use in specific sub-populations

Stimulant use is particularly pronounced in the partygoers group. Behind cannabis, the second, third and fourth most frequently consumed substances are ecstasy (MDMA), amphetamine (speed) and cocaine, with 12-month prevalence rates of 60.0%, 56.2% and 36.2% respectively. Use of crystal meth/methamphetamine (3.8%) was reported significantly less frequently (Lochbühler et al., 2021a).

The study by Betzler et al. (2021) examined the possible influence of a “drug checking” service on drug users in Berlin’s nightlife and aimed to identify encouraging or discouraging factors affecting the perception of such a programme. 719 people from the Berlin party scene were reached using an online survey in 2019. Respondents showed a comparatively high rate of substance use. This was roughly at the level of previous studies in Berlin, however. The most-used illegal substances over the previous 30 days were cannabis (60.9%), amphetamine (53.3%), MDMA (47.1%), cocaine (41.5%) and ketamine (36.7%). The prevalence values for NPS (synthetic cathinone: 3.8%; synthetic cannabinoids: 0.4%) are possibly too low, as participants often unknowingly consume NPS.

Qualitative interviews with people (trend scouts) from the Frankfurt scene, revealed that in 2019 the most significant illegal substance in the “electronic dance music” scene was, for the first time, cocaine, followed by speed, cannabis, ecstasy and ketamine. Despite a slight decline in prevalence, ecstasy tablets or crystalline MDMA remain a common party drug. In the reporting year, cocaine became the most significant synthetic party drug for the first time, with the prevalence rate remaining at the same level as the previous year. Use during the working day, independent of the party setting, was also reported more often (Werse et al., 2020).

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

1.2.1 Patterns of stimulant use (T1.2.1)

In Bavaria, only very few pupils have ever consumed a stimulant. If a substance was tried at all, it almost always remained between one and a maximum of three uses (experimental drug use). The percentage rates for such experimental use were between 0.6% for methamphetamine and 1.7% for amphetamine and ecstasy. The proportion of those who had used a stimulant more than three times was 1.1% for amphetamine and 1.0% for ecstasy. For cocaine and methamphetamine the percentage is under 0.4%. (Seitz et al., 2020b).

The results from the Bremen Drug Scene Study (Bremer Drogenszenen Studie)⁸ (see also section C, 1.2.1) show that the substances alcohol, heroin/opiates, cocaine/crack, tablets (benzodiazepine, Lyrika®) and cannabis were most frequently consumed. Polydrug use patterns can also be seen. Among 60-65% of those in the scene, daily cocaine use or use

⁸ Within this qualitative study, 50 participant observations were conducted in the drug scenes in four Bremen districts, 36 structured, problem-centred interviews with those in the scene and 8 expert interviews with professionals from addiction and homeless support.

several times a week is common (mostly nasal or injecting use), partly in combination with heroin (“cocktail”). Crack smokers are mostly substituting, long-term opiate consumers (Prepeliczay and Schmidt-Semisch, 2020).

Results from the ESA 2018 (Seitz et al., 2019b) were presented in the 2019 Drugs workbook.

1.2.2 Treatment: stimulants (T1.2.2)

According to the Statistical Report on Substance Abuse Treatment in Germany (deutsche Suchthilfestatistik, DSHS), there has been a significant increase in demand for treatment in connection with the use of stimulants in outpatient addiction support facilities (6.3% in the reporting year 2019, up from 2.5% in the reporting year 2007) (Dauber et al., 2020). Further differentiation by substance is not possible with the existing data. The greatest increase in the demand for treatment/care was seen among people with a cocaine and stimulant diagnosis. Data from individual *Laender* tends to indicate a more regional phenomenon, especially in the Czech border area (Pfeiffer-Gerschel et al., 2019).

More information on the treatment of patients with methamphetamine-related disorders can be found in the Treatment workbook.

1.2.3 High-risk stimulant use (T1.2.3)

Calculations on the basis of a treatment multiplier for 2019 (for an explanation of the estimation method, see section E1.2) for the target group of clients with cocaine and stimulant problems (F14 and F15 codes according to ICD-10) produce an estimate of 87,000-103,000 (2018: 88,000-105,000). The estimates lie between 1.6 and 1.9 (per 1,000 population) among 15 to 64-year-olds. This value has significantly increased almost continuously over the last ten years. It fell back for the first time in 2017, although only slightly and remained almost unchanged in 2018 and 2019. In this context, it must also be taken into account that from 2017 the DSHS data was partly recorded in a different format and this may lead to deviations.

Results on substance-related disorders for cocaine and amphetamine/methamphetamine from the ESA 2018 (Atzendorf et al., 2019a, Atzendorf et al., 2019) are described in the 2019 workbook.

1.2.4 Synthetic cathinones (T1.2.4)

Specific information on the use of synthetic cathinones is only available from the 2018 Frankfurt MoSyD scene study, which was already reported on in the 2019 workbook (Werse et al., 2019).

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

In the scope of the 2018 MoSyD scene study in Frankfurt, users in the open drug scene were asked about their routes of administration (Werse et al., 2019). The results were reported in the 2019 Drugs workbook.

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 (T2)

Not applicable for this workbook.

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 trend in recent years is explained in B1.1.1. Additional information on new developments is not available.

4 Additional information (T4)

4.1 Additional sources of information (T4.1)

Wastewater analyses have been conducted in various European countries since 2011, in order to collect additional data on residues of various chemical substances and thus their prevalence in the overall population. In 2020, ten cities in Germany took part in the study⁹. The highest average MDMA residues per day were found in Saarbrücken (20.64)¹⁰, Dortmund (20.61), Hamburg (19.34) and Magdeburg (19.06). Compared to the rest of Europe, these values are in the middle to lower range. Higher values were seen for methamphetamine in the Czech Republic and Slovakia, as well as Cyprus, eastern Germany, Spain and northern Europe. Compared to the 2019 analyses, an increase in MDMA and amphetamine has been seen in nearly all German cities. In contrast, the values for methamphetamine declined (European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), 2021).

The ATTUNE study is a multi-country survey in Europe¹¹ with a mixed methods design, which examined users of amphetamine-type stimulants (ATS) - grouped by their frequency of use - in comparison to non-users, in order to gain insights into the different ATS drug use careers and draw conclusions on possible interventions. Users showed dynamic patterns of use and different patterns with regard to their motives of use and reasons for ceasing use. While the initial motivation is usually curiosity and pleasure-seeking, the substances are later used to enhance performance in a professional context and to cope with psychological

⁹ Chemnitz, Dortmund, Dresden, Dülmen, Erfurt, Hamburg, Magdeburg, Munich, Nuremberg and Saarbrücken.

¹⁰ In mg/1,000 Einwohner per day.

¹¹ Germany, the Netherlands, England, Poland and the Czech Republic.

problems and stresses of various types. Becoming part of a drug-savvy social circle also contributes to increased use. People who engage in moderate use differ from addicts in a number of ways, including in the prioritisation of everyday obligations, the reason for use, type of social network, embedding in use and leisure culture and use behaviour as they get older. The group of people with problem ATS use, in contrast, often undergo counselling and treatment. The functional use of the substance as a coping strategy for personal problems increases the risk of dependence. The large majority (88%) of ATS users in the survey reported having already tried more than one type of ATS at least once. 23% of all respondents used MDMA in addition to amphetamine, and these were often supplemented with NPS, amphetamine-type medicine or methamphetamine. In Germany, 62% of respondents had used cocaine at least once and half of those had also used hallucinogens (lifetime prevalence) (Rosenkranz et al., 2020).

4.2 Further aspects of stimulant use (T4.2)

Due to the frequent comorbidity between amphetamine-type stimulant abuse and hyperactivity disorders (ADHD), the hypothesis has emerged that this patient group could be self-medicating. As a result, Thurn et al. (2020) concluded that users with or without ADHD use amphetamine-type stimulants for different reasons. The mixed methods study used ADHD-compatible methods (questionnaire and mind mapping technique) to question users with and without ADHD in the first and last month of their use. The results showed that at the start of use, reinforcement motives were the focus, while it was mainly coping motives in later use. No ADHD-related differences were identified, whereas the qualitative data showed that people with ADHD use less often for social motives. The lack of difference between people with and without ADHD in relation to coping motives also shows that self-medication among ADHD patients does not constitute an important factor. Thus, treatment programmes for users with and without ADHD do not necessarily have to differ from one another.

The study by Bohn et al. (2020) illustrates the aspects of mental health of men who practise chemsex in Germany¹². The research group compared mental health data with regard to symptoms of depression, anxiety disorder, somatisation and trauma between men who do and men who do not engage in chemsex. 1,050 out of a total of 1,583 participants reported using substances. The 12-month prevalence of the use of methamphetamine, mephedrone, GHB/GBL and/or ketamine in a sexual context was 27% (n = 280). The results are only representative to a minor degree due to the study design. However, it is worth mentioning that the group that does practise chemsex has significantly higher average scores for depression, anxiety and somatisation. Both groups assessed their own personal mental state as worse than men in the general population.

¹² The term chemsex describes the use of drugs, mostly methamphetamine, mephedrone, ketamine or GHB/GBL, during sexual activity between men with the aim of facilitating, extending and/or intensifying the sexual experience.

SECTION C: HEROIN AND OTHER OPIOIDS (SECTION C)

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 Germany, the use of opioids is usually understood to mean the use of heroin or other substances that are used in substitution-based treatment (polamidone, methadone, buprenorphine). Overall, there are indications that there is an aging population of opioid users. The estimated numbers of people who use opioids are relatively constant, depending on the indicator used.

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

In Germany there is no direct way to calculate the number of opioid users. Therefore, this number is estimated with the help of various context indicators and a number of different approaches. When interpreting the estimate, several limitations must be taken into account. Due to indicator-specific sources of errors, which can exist from the point of collection of the relevant data as well as the different areas of focus of the data collected and used for the estimate, in some cases widely differing estimates for the total number of opioid users in Germany can be produced.

Table 8 Estimate of the prevalence of high-risk opioid use 2014-2019 (figures in 1000s, age group 15-64)

Data source	Reference year						Prevalence
	2014	2015	2016	2017	2018	2019	per 1,000
Treatment ¹⁾	147-174	139-165	135-160	130-155	117-138	104-123	1.9-2.3

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

(DBDD, 2021; special calculation)

Calculations on the basis of a treatment multiplier for 2019 produce an estimate of the number of high-risk users of heroin of between 104,000 and 123,000 people. This corresponds to a rate of 1.9 to 2.3 people per 1,000 population between the ages of 15 and 64 (see Table 8). The estimate rose between 2007 and 2011 but has been continuously falling since 2012 - apart from a slight increase from 2013 to 2014. Overall, the picture remains unchanged despite slightly fluctuating values in recent years. Detailed remarks on the estimation method, based on the multiplier, can be found in section E2, Methodology.

In an estimate produced in 2016, the figure arrived at for Germany was 166,294 people (lower and upper limits: 164,794; 167,794) with an opioid dependency, of whom 123,988 were men (122,968; 125,007) and 42,307 are women (41,826; 42,787). Based on the

registered resident population in Germany in 2016 aged between 15 and 64, this produces a rate of 3.05 - 3.11 per 1,000 population (Kraus et al., 2019).¹³

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

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

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

1.2.1 Patterns of heroin/opioid use (T1.2.1)

The 2018 Frankfurt MoSyD scene study showed that heroin (together with crack) remains by far the most commonly used drug in the street drug scene (Werse et al., 2019, Werse et al., 2017).

The results from the Bremen drug scene study (see also on this point section B, 1.2.1) show that the substances alcohol, heroin/opiates, cocaine/crack, tablets (benzodiazepine, Lyrika®) and cannabis were the most frequently consumed. Polydrug use patterns can also be seen. Nearly 95% of those in the scene drink alcohol (almost) daily (e.g. beer, spirits), sometimes in large quantities and often throughout the day. Even though many respondents do regard their long-term alcoholism as a problem, it is specifically the combined effects of alcohol with heroin or other opiates/substitution substances, as well as with cocaine and benzodiazepine or Lyrika® that are relevant for them. 70-80% of people in the scene use heroin daily (often even in public). Their opiate addiction is a topic raised by many of the respondents. Depending on the duration of dependence and substance quality, their daily need is 3-5 consumption units (so-called "sachets"). At least 75% of long-term opiate addicts undergo regular substitution treatment. The concomitant use observed and reported by those in the scene who are substituting almost always consists of alcohol. The consumption of alcohol often serves to "improve" the effect of the substitution (Prepeliczay and Schmidt-Semisch, 2020).

Information on comorbidities can be found in the 2018 Drugs workbook.

1.2.2 Treatment: heroin and other opioids (T1.2.2)

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.

The pandemic-related restrictions and limitations hit high-risk opioid users particularly hard. Possibly due to reduced availability of illegal heroin, or tighter financial means, an increase in demand for low-threshold substitution treatment was observed in Germany (Adorjan et al., 2021, Pogarell et al., 2020).

¹³ Further (methodological) details and results were presented in the 2019 workbook.

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 2018 MoSyD scene study, 70% of users reported intensive use of heroin, i.e. daily or nearly daily use, somewhat more than in 2016 (67%) (Werse et al., 2019). Further results of the study were described in the 2019 Drugs workbook.

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 heroin, the MoSyD scene study reports a decreasing trend in injecting use over the course of the survey in relation to the open drug scene in Frankfurt. This was not confirmed in 2018, however (Werse et al., 2019). 59% prefer to take heroin by injection. Further information was presented in the 2019 workbook.

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 among drug users can be found in the Harms and Harm Reduction workbook.

2 Trends (T2)

Not applicable for this workbook.

3 New developments (T3)

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

At the end of March 2020, the CDR at the Goethe University Frankfurt began a qualitative online study with the objective of collecting information on the effects of the coronavirus pandemic on people who compulsively use “hard” drugs, as well as on the drug support services that work with them. From 50 qualitative replies returned from 26 German cities (from mainly central and southern Germany), there was a predominantly worsened mood. The general living conditions for users are primarily complicated by a more severe shortage of money. The drug market was only in part influenced by the coronavirus restrictions, in that illegally traded medicinal drugs increased in price more sharply than illegal substances. Drug use changed as a result of the crisis, in that it is presumed that fewer psychoactive substances are being used overall but also in that more people are turning to legally or illegally available substitution drugs, with some also using sedating medicinal drugs and alcohol as generally cheaper substances. Take home rules for substitution drugs were often,

but not always, expanded. Overall, drug addicts' interest in substitution treatment has increased since the start of the coronavirus crisis (Werse und Klaus, 2020).

As a result of the study, from November 2020 to January 2021 (N=254) outpatient drug support and substitution practices were surveyed online with regard to the effects of the pandemic and the pandemic-related restrictions. Across all substances, even though in most cases the highest values were seen for "remained the same", an increase is assumed much more frequently than is a decrease (Figure 7). The assumed increase for alcohol is the greatest by some margin. A large majority of those working in drug support thus assume a shift in use towards legal drugs (Werse und Kamphausen, 2021c).

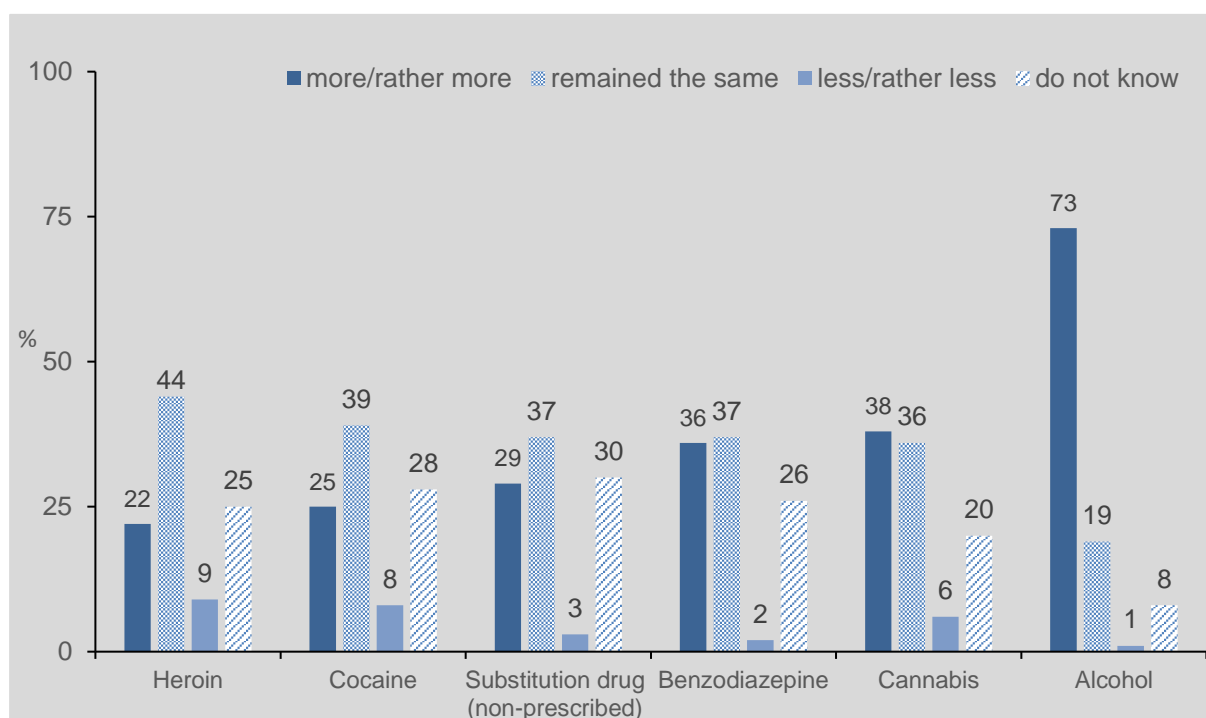


Figure 7 Assessment of any changes in the use of selected substances in the partial sample from the area of drug support (%) (coronavirus and drug support)

In the scope of the Phar-Mon project, possible changes in the use of specific substances due to pandemic-related restrictions were investigated. Across substances, the majority of respondents reported no change in their use behaviour or route of administration since the start of the coronavirus pandemic. Among the respondents with connections to addiction support, the proportion of those who had started using LSD, other opioids, crystal meth/methamphetamine and ketamine since the start of the pandemic was higher than the proportion of those that had stopped using those substances. The results of the partygoer survey were similar in relation to speed/amphetamine, LSD and other opioids (Lochbühler et al., 2021a).

The European Web Survey conducted in Germany shows that the proportion of people with increased use since the start of the pandemic has grown. At the same time, the data shows

an increase per dose per usage instance in the same time period, above all for heroin, alcohol and speed (ibid).

4 Additional information (T4)

4.1 Additional sources of information (T4.1)

No additional sources of information are available on this.

4.2 Further aspects of heroin and opioid use (T4.2)

A secondary data analysis conducted on the basis of the ESA 2015 aimed to examine a representative population sample with regard to the 12-month prevalence of opioid use disorders among patients undergoing prescription opioid pain relief and identify associated risk factors. From the overall sample (n=9,204), 3.5% (n=275) of respondents reported a legal use of prescription opioids within the previous 12 months. 21.2% (n=54) of those met the diagnostic criteria for a prescription opioid use disorder (medium to severe use disorder: 6.4%). Of these, 15.3% (n=7 out of 54) reported having also used illegal opioids (for example heroin) within the previous 12 months, while in the group of people without a use disorder this was only reported by 3.8% (n=3 out of 221). Risk factors identified were signs of depression, unexplained physical complaints or a psychiatric diagnosis (Just et al., 2020).

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

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

1.1 Use of NPS: Prevalence and trends in NPS use (T1.1)

Use of NPS in the general population

As shown in Table 9, within the adult general population in Germany, 2.6% of those aged between 18 and 64 have already had experience with NPS at least once in their lives. 0.9% have used such substances within the last 12 months (Atzendorf et al., 2019).

Among 12 to 17-year-old adolescents, the use of NPS is as good as non-existent. A mere 0.1% have already had experience with this substance group. Data on the use of NPS has been collected since 2015 and the figures have only changed marginally in 2019 (Orth und Merkel, 2020). Among adults, men use NPS more frequently than women, whereas for adolescents there are no differences between the genders.

Table 9 Prevalence of NPS use in Germany

	Source	Age	Total	Male	Female
Lifetime	ESA 2018	18-64	2.6%	3.1%	2.0%
	DAS 2019	12-17	0.1%	0.2%	0.1%
12 months	ESA 2018	18-64	0.9%	1.1%	0.8%
	DAS 2019	12-17	0.1%	0.1%	0.1%
30 days ¹⁾	ESA 2018	18-64	0.1%	0.1%	0.0%

1) Not reported in the DAS study.

NPS use in schools

The Bavarian ESPAD survey revealed that NPS had the highest prevalence rate of all illegal drugs - except cannabis - at a level of 8.4% (Seitz et al., 2020b) The most common form of NPS used by adolescents is herb mixtures (3.6%). 1.5% of respondents reported having used NPS more than 3 times in their lives¹⁴.

In the 2020 Frankfurt MoSyD survey, a total of 6% of the 15 to 18-year-old respondents reported having consumed a herbal smoke blend at least once in their lives. For 2%, this was also the case for the previous 30 days, while 1% of adolescents reported a use of more than

¹⁴ Further results of the study were described in the 2020 Drugs workbook.

five times in their lives. Compared to the previous year, only the lifetime prevalence changed, from 4% to 6%. 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), 3% of respondents reported having tried a preparation of this nature on at least one occasion which is the same figure as the previous year. 2% (2019: 1%) of respondents also reported having taken other legal highs within the previous month. At the same time, the authors of the study interpret these values as "maximum values", as it has been observed that a large proportion of the pupils who answer yes to these questions, specify established illegal drugs and medicinal drugs that can be abused in the open question and thus did not actually mean NPS in the actual sense of the term (Mosyd Jahresbericht 2020, as yet unpublished results)¹⁵.

In Hamburg and Bremen, NPS use in schools was recorded in the SCHULBUS study. In Hamburg, the highest lifetime prevalence rate in the category of illicit drugs not including cannabis is for NPS, at 4.4%. The value has increased from 2015 (2.7%) (Baumgärtner und Hiller, 2019a). In Bremen and Bremerhaven, 2.3% of respondents had already tried these substances at some point in their lives and for 0.5% the last use was not more than 30 days previously (Baumgärtner und Hiller, 2017). In Bavaria, the 30-day prevalence rates remain significantly under two percent (2018: 1.5%) (Baumgärtner und Hiller, 2019b).

The JEBUS Study (Baumgärtner und Hiller, 2018) collected data on the use of NPS among 18 to 25-year-olds in vocational and higher education institutions in Hamburg, Saxony and Bavaria. This revealed a lifetime prevalence of 10.8% in vocational education and a significantly lower lifetime prevalence of 6.4% in higher education. Vocational students also reported significantly higher values for the 12-month prevalence, at 1%, than did students in higher education, at 0.3%.¹⁶

NPS use in specific sub-populations

In the scope of the Phar-Mon plus project, information on the use of NPS in different at-risk populations was collected. In addition to partygoers, clients of various addiction support facilities were surveyed and urine analyses were taken in one correctional institution, from people suspected of having taken NPS. In an online survey on the effects of the coronavirus pandemic on the use of psychoactive substances, a total of 80 people reported having consumed NPS in the last 12 months. Of those, 56 people had used research chemicals/pure substances, 14 had used herb mixtures, 12 has used C-liquids, 2 has used bath salts and 12 people had taken an NPS unknown to them. Overall, 10 of the 80 NPS users had a connection to the addiction support system, 25 reported regularly having been to parties or undertaken similar activities before the pandemic, i.e. at least one to two times per

¹⁵ According to the authors, the increase may be due to to a local trend towards an e-cigarette liquid containing cannabinoids ("Django").

¹⁶ Further results from the 2016/2017 JEBUS study on NPS use among 18 to 25-year-olds in vocational and higher education in Hamburg and major cities in Bavaria and Saxony (Baumgärtner und Hiller, 2018) were presented in the 2018 Drugs workbook.

week. There were no great differences, if any at all, in use behaviour between the time before and the time since the start of the pandemic.

The majority of a total of 25 people surveyed who reported having used NPS in a party setting within the previous 12 months, stated, as their motive for use, “curiosity”. This was followed by “greater availability”, “using NPS as a substitute for other substances” as well as “the (presumed) legality of the substances” (Lochbühler et al., 2021a, Lochbühler et al., 2021b).

The risk of an increase in NPS being ordered online was discussed in the interviews carried out in 2020 with staff and others working in addiction support, as well as with substitution patients.

In Wittlich prison, which took part in the project, 122 cases of NPS use were proven in 2020. In the scope of the study, NPS use was detected and documented by way of urine tests. All NPS used can be attributed to the group of synthetic cannabinoids. The most frequently used substance by some margin was MDMB-4en-PINACA (n=83), followed by FF-MDMB-PICA (n=47) (Lochbühler et al., 2021a).

Data from a multi-country¹⁷ quantitative survey on the use of NPS in different groups of people (marginalised, partygoers and internet-savvy) shows extensive experience with illegal drugs in all groups (Werse und Kamphausen, 2020). Overall, stimulants or empathogens, followed by cannabinoids, are the most widespread, with notable proportions of daily users only among marginalised persons. In the German sample, the lifetime prevalence and the 30-day prevalence of stimulants/empathogens was at a comparably low level (lifetime 50%, 12-month 39%, 30-day 20%). Almost two thirds (63%) of German respondents had had use experience at least once with synthetic cannabinoids and so-called herbal smoke blends, with 15% having used them in the previous 30 days. There are particularly high values for psychedelics among German respondents. They were each significantly above the average for all respondents (lifetime: 76% for Germany and 50% on average, 12-month: 65% and 41%; 30-day: 31% and 17% respectively). The use of internet resources was the easiest way to recruit NPS users, indicating that there is still a significant population of such current users who primarily educate themselves online. It is notable that in two earlier online surveys on NPS use in Germany from 2011 and 2013/14, cannabinoids and cathinone still played a much larger role than in the present sample which was recruited in a very similar manner. Overall, the results suggest that the use of NPS in Germany is not very widespread in marginalised “hard scenes”. Instead, the patterns of use among those recruited online point to a certain focus on well-informed circles of “psychonauts” - people who experiment primarily with psychedelic substances, alongside various other types of drugs.

¹⁷ Germany, Hungary, Ireland, Netherlands, Poland and Portugal.

1.2 Health harms related to NPS use (T1.2)

The data collected by the Phar-Mon plus project on partygoers and inmates of Wittlich correctional institution also contained information on subjective experiences of unwanted side effects of NPS. In the scope of the survey on partygoers, side effects were reported when using herbal smoke blends/herb mixtures, research chemicals and unknown NPS, in the form of, among other things, vomiting and nausea. Signs of use among the 122 NPS cases at Wittlich prison were often issues with balance and an unsteady gait, as well as cardiovascular complaints and impairments in perception and consciousness (Lochbühler et al., 2021a).

The NPS side effects varied considerably and were additionally intensified by increased potency levels, e.g. with synthetic cannabinoids and fentanyl. On top of that, the risk of acute overdose is very high (e.g. due to high potency levels) and the long-term risks are largely unknown. As the underlying substance is often unknown and there is a lack of knowledge on mostly evidence-based, effective measures, the treatment of intoxications is difficult. There is a lack of systematic examination of the frequency of unidentified NPS intoxications (Wodarz et al., 2019).

1.3 Use of other drugs: Prevalence, trends and harms related to other drug use (T1.3)

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

Further data on the use of medicinal drugs from ESA 2018 (Seitz et al., 2019c) is described in the 2019 Drugs workbook.

A study consisting of cross-sectional and longitudinal analyses of medical associations' prescription data in northern Germany determined the prevalence rates of various medicinal drugs with addictive potential in the population over a five-year period (2011-2015). Both prevalence rates and average duration and quantity of active ingredient have slightly decreased for benzodiazepine (BZD) or Z-drugs (ZD) from 2011 to 2015. The proportion of use of this type of medicinal drug is significantly higher among women. For older patients, the values for duration of use and quantity of active ingredient is the highest, although an above average reduction in these parameters has also been found in this patient group. In 2015, nearly one fifth of those treated with BZD or ZD in 2015 received these medicinal drugs (at least) all year round. At the same time, however, the proportion of prescriptions in accordance with the guidelines (less than two months) increased. According to those figures, problem prescribing patterns indicating abuse or dependence are declining (2011: 30%; 2015: 27.1%). The number of people who were prescribed an opioid analgesic slightly increased (2011: 4.5%; 2016: 4.9%). As with BZD and ZD, prevalence increases steadily as patients' ages increase. Only minor changes have been seen in this regard over the five-year

period. The study results do not indicate any epidemic of use of opioid analgesics in Germany. The prevalence of patients who have received anti-depressants (AD) on prescription increased between 2011 and 2012 (from 7.5% to 8.0%) before remaining static at 8.0% in subsequent years. Just over twice as many women as men received AD in the survey time period. A significant connection between prevalence and age can be seen with regard to this medicinal drug too. The average duration of use and quantity of active ingredient taken have been steadily increasing since 2012 (Verthein et al., 2019).

2 Trends (T2)

Not applicable for this workbook.

3 New developments (T3)

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

Data on possible changes in the use of specific substances due to pandemic-related restrictions, investigated in the scope of the Phar-Mon plus project, are described in section C, 3.1.

4 Additional information (T4)

4.1 Additional sources of information (T4.1)

No additional sources of information are available on this.

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

From the results on NPS use in the general population and in schools, there are indications that would suggest that the prevalence is possibly overestimated. It has been noted, particularly in the scope of the MoSyD pupil survey, that the answers to the question as to use of other legal highs or research chemicals must still be viewed with extreme reservation, as to a large extent erroneous, nonsensical or no information at all was given (Werse et al., 2020).

SECTION E: SOURCES AND METHODOLOGY (SECTION E)

1 Sources and methodology (T6)

1.1 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. Pupil studies and surveys of specific sub-populations in which individual *Laender* or regions participate are described in the following.

National studies in the general population

Epidemiological Survey of Substance Abuse, ESA: The ESA is a combined survey (written, telephone and online) on the use of psychoactive substances and associated consequences (Atzendorf et al., 2019). The study has been conducted every three to four years since 1980 on the basis of a representative sample of the resident population. The survey has been conducted by the Institute for Therapy Research (Institut für Therapieforschung, IFT) in Munich since 1990 with funding from the BMG. Since 1995, the ESA has covered the adult population of 18 to 59-year-olds, and since 2006 18 to 64-year-olds. The sampling in the 2018 ESA was based on a two-stage, random selection process. Overall, the adjusted sample included 9,267 people, which corresponds to a net response rate of 41.6% (Atzendorf et al., 2019). Berlin, Hesse, North Rhine-Westphalia, Saxony and Thuringia provided funding in 2018 for a regional expansion of the sample to ensure an adequate statistical basis for *Land*-specific analyses¹⁸.

Drug Affinity Study, DAS: The DAS from the BZgA investigates, on a long term basis, the use, motives for use and situational conditions with regard to the consumption of tobacco, alcohol and illegal intoxicants among adolescents and young adults (age group 12-25 years old). The study has been carried out every three to four years since 1973. In the 2019 study, a representative sample of 7,000 test persons was surveyed via computer-assisted telephone interviewing (CATI). The current study was carried out on a dual frame basis. The response rate of the landline sample was 43.2% and of the mobile telephone sample was 30.4% (Orth und Merkel, 2020).

In addition to the DAS, the BZgA has conducted representative surveys on cannabis use among 12 to 19-year-old adolescents and 12 to 25-year-olds every two to three years since 2007. From 2010 onwards, the surveys were conducted in the scope of the Alcohol Survey. In 2018, a representative sample of 7,002 adolescents and young adults was surveyed. The

¹⁸ Detailed results from the 2018 survey were reported in the 2019 and 2020 Drugs workbooks; the results of the most recent survey will be presented in the 2022 report.

response rate of the landline sample was 47.1% and of the mobile telephone sample was 30.9% (Orth und Merkel, 2019)¹⁹.

Pupil studies

European School Survey Project on Alcohol and Other Drugs, ESPAD: The ESPAD study has been conducted in numerous European countries every four years since 1995. The survey, coordinated by the EMCDDA since 2013, uses common standards across Europe for data collection. Germany participated in the ESPAD in 2003 at a federal level. Bavaria was the only *Land* in which data was collected in the 2015 and 2019 surveys. In the course of the data collection, pupils were interviewed who were due to reach their 16th birthday in the respective survey year (in Germany pupils of the 9th and 10th school grade in regular schools). The data collection was carried out in April 2019 as a written questionnaire to classes of school pupils. The adjusted sample size was 3,185 pupils from 168 year groups, which corresponds to an adjusted response rate of 74.2% (Seitz et al., 2020b)²⁰.

SCHULBUS: In 2018 the pupil and teacher surveys on contact with addictive substances (SCHULBUS) were carried out among 14 to 17-year-old students in Hamburg (for the seventh time since 2004) and in Bavaria within the scope of the “Local Monitoring System” (LMS) at schools providing general or vocational education (unweighted sample 2018: Hamburg: n = 1,033; Bavaria²¹ cities: n = 3,850 and rural districts: n = 1,851). The survey was expanded on a one-time basis to the Hanseatic city of Bremen in 2005 and when it was repeated in 2016/17 it was expanded to the entire city state (unweighted sample 2016/17: n = 1,570) (Baumgärtner and Hiller, 2017). The regions of Bavaria and Saxony that border the Czech Republic and a rural district of North Rhine-Westphalia on the Dutch border were included in the survey in 2015 due to increasing use of methamphetamine. The SCHULBUS survey is not designed as a representative survey, rather it takes into account regionally specific factors in order to be able to provide decision makers responsible for local policies, addiction prevention professionals working locally and above all teachers with data on which to base strategies for action (Baumgärtner und Hiller, 2016). On the basis of the 2004 to 2018 data, a deeper look was taken at the prevalence of and trend in adolescent cannabis use and its background (Baumgärtner, 2020). The tried and tested concept and the methodology used in the SCHULBUS study was applied to the JEBUS survey in 2016/17 for the target group of 18 to 25-year-olds in Saxony, Bavaria and Hamburg (Baumgärtner und Hiller, 2018).²²

¹⁹ Detailed results from the DAS were presented in the 2020 report, those from the Alcohol Survey in the 2019 report.

²⁰ The results of the most recent survey were reported in detail in the 2020 Drugs workbook.

²¹ The study took place in the large cities of Munich and Nuremberg, and in the rural districts of Miltenberg, Dillingen and Weilheim-Schongau.

²² In total, more than 11,000 young adults were able to be surveyed in various German cities, with regard to, among other things, their existing drug use experiences. For detailed results from the JEBUS survey, see the 2018 report.

Monitoring System Drug Trends, MoSyD, pupil survey: One source that has been continuously providing information on drug trends at a local level for many years is the MoSyD from Frankfurt am Main. The MoSyD is made up of several components: a representative pupil survey, a trend scout panel, a scene survey and an expert survey. As part of the MoSyD broad pupil survey, a representative sample of respondents in late adolescence (15 to 18 years old) are surveyed. In 2020, the pupil survey was conducted for the seventh time, using tablet PCs and special software. In the current pupil survey (survey period end of 2020, as well as March and April 2021), a total of 872 questionnaires were included in the analysis (based on all respondents from the 10th-12th grades or in the 1st-3rd years of a traineeship); 681 respondents were between 15 and 18 years old²³ (Mosyd Jahresbericht 2020, as yet unpublished results).

Health Behaviour in School-aged Children, HBSC: The HBSC study, supported by the World Health Organisation (WHO), aims to collect data on the health and health-related behaviour of young people for international comparison. It is carried out every four years and has today grown to include 49 countries in Europe and North America. Germany participated for the first time in 1993/94 with its most populous *Land*, North Rhine-Westphalia. In the most recent wave of surveys in 2017/2018, data was collected from all 16 *Laender* for the second time. The HBSC study is designed as a cross-sectional study. The target population of the survey is pupils from the 5th, 7th and 9th grades across all types of school. Questions on (cannabis) drug use were only put to 15 year-olds (HBSC-Studienverbund Deutschland 2020)²⁴.

Lower Saxony survey: Since 2013, the *Land* of Lower Saxony has been carrying out a 2-yearly, representative survey throughout Lower Saxony of around 10,000 9th grade adolescents, in cooperation with the Criminological Research Institute of Lower Saxony (Kriminologisches Forschungsinstitut Niedersachsen, KFN), in order to examine the hidden side of youth crime. In addition to many other factors, drug consumption is also recorded. In the 2019 survey, 12,444 9th grade pupils were reached, corresponding to an overall response rate of 41.4%, which is lower than previous years (2017: 59.2%; 2015: 68.5%; 2013: 64.4%), continuing the falling trend in survey uptake (Krieg et al., 2020).

Studies in specific sub-populations

Phar-Mon plus: Phar-Mon plus, designed as target-group-specific continuous monitoring, brings together the data on the use of new and established psychoactive substances from various cooperation partners. The diversity of the cooperation partners enables a nearly complete picture of the current situation to be obtained. Data from users at parties and music festivals also goes into the project, as well as data from the “Hart am Limit” project (approx.

²³ The number of cases was lower than in previous years due to the pandemic. Representativeness was, however, ensured through sufficient feedback from all school types.

²⁴ The results of the study were reported in the 2020 Drugs workbook.

"HALT - Close to the limit") by the Bavarian Academy for Addiction and Health Issues (Bayerische Akademie für Sucht- und Gesundheitsfragen, BAS), the Poisons Information Centre North (GIZ-Nord) and Wittlich prison. Data from the forum work in the project "Legal High Ingredients" (Legal High Inhaltsstoffe) and the EU Early Warning System (EWS) is also taken into account. The focus of the project in 2020 was the effects of the COVID-19 pandemic on the use of psychoactive substances and on care in the addiction support system. The effects among users were directly recorded using an online survey. Data collection was carried out from July to December 2020; 1,017 questionnaires were able to be included in the analysis; of those, 106 people were (at least at times during the previous 12 months) connected to the addiction support system and 156 people could be categorised in the partygoers group. Parallel to that, a total of 50 qualitative interviews were conducted with addiction support workers, people involved in self-help support, peers from party projects and substitution patients in nine *Laender*. Between January and June 2020, data from six party projects was collected and analysed (n = 105). From the cooperation with Wittlich prison, 122 data records from 2020 are available on the use of new psychoactive substances (Lochbühler et al., 2021a).

Monitoring System Drug Trends, MoSyD, scene study: The scene study carried out in the scope of the Frankfurt MoSyD enables insight to be gained into the situation of the Frankfurt street drug scene. The biennial surveys have been conducted since 2002. 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 2020, the MoSyD scene study was carried out for the fourth time using an electronic questionnaire. The results from this survey were not yet available at the time of this report. The results from the 2018 scene study (Werse et al., 2019) are presented in the 2020 Drugs workbook.

European Websurvey on Drugs (EWSD): The European online survey on the topic of drugs, initiated by the EMCDDA, was coordinated in Germany in the framework of the DBDD, in cooperation with the IFT and the Charité Berlin. The study was conducted on a smaller scale twice between 2016 and 2018. In 2021, the survey took place in 30 European countries and neighbouring countries from 18 March to 15 May. The main objective of this study was to better understanding the types of drug use by drug users in Europe. The online survey collected information on the different types of drug use in Europe, especially with regard to how often people consume different drugs, how they use them and how much they take. The information gathered in this study will be used to make a contribution to evidence-based drug policy. For that study, adults were surveyed who had used at least one of the following drugs in the previous twelve months: cannabis (hashish or grass/weed/marijuana), cocaine, ecstasy/MDMA, speed/amphetamine, methamphetamine, heroin or any new psychoactive substance (also known as NPS, legal highs or research chemicals). Over 50,000 people from the participating countries took part in the online survey. The results will be presented in the 2022 Drugs workbook.

1.2 Methodology (T6.2)

Basic terms

Drug use at some point during a person's life (lifetime prevalence), is largely based on experimental use. In contrast, drug use in the 12 months prior to the survey (12-month prevalence) is a suitable indicator from which one can deduce information on current user numbers and is often cited in the relevant literature as a reference value. The 30-day prevalence of the use of illicit drugs often only produces, with the exception of cannabis, extremely low figures which are of little to no interpretable value and are an indicator for short-term use.

"High-risk drug use" (HRDU) is defined by the EMCDDA as the use of psychoactive substances (cannabis, opioids, amphetamines) with high-risk routes of administration (e.g. injecting use), intensively in relation to frequency or of a long duration or regularly, usually within the last 12 months.

The concept of "problem" or "high-risk" use (for example of cannabis) has been investigated in various studies. However, the terminology and operationalisation of the respective concept differ from study to study, hence comparability of information is only possible to a limited extent.

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).

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

EMCDDA estimation methods (indirect estimates)

For the 2019 reporting year, the estimate was made on the basis of admissions to treatment. For this, the overall number of treated cases is first calculated using reported numbers of clients in outpatient and inpatient care together with the total number of outpatient and inpatient addiction support facilities. On this basis and with the help of a multiplier for how well the target group is reached, the total number of all opioid users requiring treatment is estimated.

Details and data on other multipliers used in previous years (estimate on the basis of drug-related deaths and contacts with police) can be found in workbooks from previous years.

All results should only be taken as rough approximations as different requirements must be taken into account. In particular, the multipliers used which are based on small numbers of cases and selective samples only have limited relevance. All multiplier methods are subject in themselves to considerable limitations. For example, 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 investigative pressure of the police and 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: ANNEXES

1 Bibliography (T6.3)

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