

European Monitoring Centre for Drugs and Drug Addiction

EN

# European Drug Report

Trends and Developments





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# Preface

It is our great pleasure to present the European Drug Report (EDR) 2019: Trends and Developments, the EMCDDA's flagship publication. This report provides an analysis of the latest data on the drug situation and responses to it across the European Union, Norway and Turkey. It is supported by other, online information resources, including our Statistical Bulletin, containing source data. The EDR package also includes 30 Country Drug Reports, which provide an overview of the current situation for all countries participating in the EU drug information network.

# EUROPEAN DRUG REPORT PACKAGE 2019



Interlinked elements allowing access to available data and analysis on the drugs problem in Europe and at national level

The EMCDDA's aim is to contribute to a healthier and more secure Europe. We seek to do this by providing the best available evidence to support the development of informed and targeted drug policies and actions. Our flagship report gives stakeholders a timely overview of the drug situation, which is necessary for developing effective responses to today's problems. Moreover, it affords an analysis of new threats, allowing us to prepare for future challenges arising in this fast-changing and complex area.

This year's report arrives at a critical time for reflection on drug policy developments, especially given the international debate on the appropriate follow-up to the United Nations special session on the world drug problem in 2016. Next year will see the final evaluation of the current EU drugs strategy (2013-20). During this period, Europe has witnessed some dramatic changes in the challenges the drugs area presents, including the appearance of more non-controlled substances. We have also seen significant changes in the drug market and drug use; and our understanding of what constitutes effective interventions has increased. A market dominated by plant-based substances imported into Europe has evolved into one where synthetic drugs and production within Europe have grown in importance. Globalisation and technological advances have reshaped the strategic issues that European policymakers need to consider. We are proud of the EMCDDA's international reputation for keeping pace with these changes and providing the information necessary to help support the cooperation and coordination that the EU drug strategy envisages.

The European Union and its Member States are committed to achieving the goals adopted in the United Nations 2030 Agenda for Sustainable Development. Many aspects of these goals relate directly and indirectly to drug problems. For example, the production and trafficking of drugs can cause great harm to the physical environment, institutional structures and the quality of life attainable for citizens in the countries affected. Goals 3.3 and 3.5 focus on ending the epidemics of infectious diseases and enhancing the prevention and treatment of drug use problems. Within this context, Europe is committed to pursuing the goal of eliminating viral hepatitis among people who inject drugs over the next decade. The hepatitis C virus is highly prevalent among this population, but recent advances in the medications available for treating the infection have made the possibility of eliminating the virus an attainable goal. This is why, in this year's European Drug Report, we give special emphasis to the need to scale up the provision of prevention, testing and treatment as a critical objective to achieving this important public health goal.

Finally, we must express our gratitude to our national counterparts in the Reitox network of national focal points, our other national and international partners and the Scientific Committee of the EMCDDA, without whose support this report would not be possible. We are also grateful to our partners at European level, in particular the European Commission, Europol, the European Centre for Disease Prevention and Control and the European Medicines Agency. Additionally, we are thankful to the specialised networks that have collaborated with us, enriching our report with leading-edge and innovative data.

### Laura d'Arrigo

Chair, EMCDDA Management Board

# Alexis Goosdeel

Director, EMCDDA



# Introductory note and acknowledgements

This report is based on information provided to the EMCDDA by the EU Member States, the candidate country Turkey and Norway in an annual reporting process.

The purpose of the current report is to provide an overview and summary of the European drug situation and responses to it. The statistical data reported here relate to 2017 (or the last year available). Analysis of trends is based only on those countries providing sufficient data to describe changes over the period specified. The reader should also be aware that monitoring patterns and trends in a hidden and stigmatised behaviour like drug use is both practically and methodologically challenging. For this reason, multiple sources of data are used for the purposes of analysis in this report. Although considerable improvements can be noted, both nationally and in respect to what is possible to achieve in a European level analysis, the methodological difficulties in this area must be acknowledged. Caution is therefore required in interpretation, in particular when countries are compared on any single measure. Caveats and qualifications relating to the data are to be found in the online version of this report and in the Statistical Bulletin, where detailed information on methodology, qualifications on analysis and comments on the limitations in the information set available can be found. Information is also available there on the methods and data used for European level estimates, where interpolation may be used.

The reference period for all graphics, analysis and data included in this report is the drug situation up to the end of 2018. All grouping, aggregates and labels therefore reflect the situation as it was in 2018 in respect to the composition of the European Union and the countries participating in EMCDDA reporting exercises. Due to the time needed to compile and submit data many of the annual data sets included here are from the reference year January to December 2017.

The EMCDDA would like to thank the following for their help in producing this report:

- the heads of the Reitox national focal points and their staff;
- | the services and experts within each Member State that collected the raw data for this report;
- the members of the Management Board and the Scientific Committee of the EMCDDA;
- the European Parliament, the Council of the European Union in particular its Horizontal Working Party on Drugs — and the European Commission;
- the European Centre for Disease Prevention and Control (ECDC), the European Medicines Agency (EMA) and Europol;
- I the Pompidou Group of the Council of Europe, the United Nations Office on Drugs and Crime, the WHO Regional Office for Europe, Interpol, the World Customs Organisation, the European School Survey Project on Alcohol and Other Drugs (ESPAD), the Sewage Analysis Core Group Europe (SCORE), the European Drug Emergencies Network (Euro-DEN Plus), the European Syringe Collection and Analysis Project Enterprise (ESCAPE) network, the Trans-European Drug Information network (TEDI) and the European Web Survey on Drugs group;
- | the Translation Centre for the Bodies of the European Union and the Publications Office of the European Union.

# Reitox national focal points

Reitox is the European information network on drugs and drug addiction. The network is comprised of national focal points in the EU Member States, the candidate country Turkey, Norway and at the European Commission. Under the responsibility of their governments, the focal points are the national authorities providing drug information to the EMCDDA. The contact details of the national focal points may be found on the EMCDDA website.

# Commentary

The 2019 European Drug Report provides a snapshot of the drug situation in Europe

# **Understanding Europe's drug situation in 2019**

The EMCDDA's latest analysis of the European drug phenomenon reveals a market that is both resilient and reflective of developments taking place at the global level. The continuing health and security problems presented by established and newer illicit drugs create a challenging policy context for the shaping and implementation of effective responses. The 2019 European Drug Report provides a snapshot of the drug situation in Europe based on the latest data available. This introductory section provides a brief analytical commentary on some of the important issues that are currently featuring on Europe's drug policy agenda.

# Opioids: efforts still needed to address an evolving problem

The European drug problem was once defined by injecting heroin use. Today, new heroin treatment demands are low by historical standards, rates of injecting use have fallen, and the number of new cases of HIV attributed to drug injecting each year has decreased by around 40 % over the last decade. This is good news. European countries can be applauded for introducing the pragmatic harm reduction and treatment measures that contributed to these successes. In contrast, elsewhere, opioid problems have continued to grow, resulting in escalating public health costs in both North America and some of the countries bordering the European Union. However, despite the improvements seen in Europe, the use of opioids continues to make a major contribution to the health and social costs attributable to drug use in Europe, and the threats posed by this class of drug may even be growing.

An analysis of the responses available for opioid-related problems shows that, in a number of countries, especially in the eastern parts of Europe, the provision of effective harm reduction and treatment remains inadequate. There are also signs that in some countries with historically good service coverage, the situation has deteriorated. At the same time, the needs of an ageing and often increasingly vulnerable cohort of long-term opioid users continue to grow. Overdose deaths reflect this, with victims now on average aged 39 years, as does the high prevalence of both physical and psychological health problems among this group. Moreover, an overall increase in drug-related deaths has been observed over the last 5 years, with increases reported in all age groups above the age of 30 years. Supply side indicators show signs that the threat may be growing. The quantity of heroin seized has increased, and the purity of the drug remains relatively high and the price relatively low, suggesting high

availability in many parts of Europe. Heroin-processing laboratories have also recently been detected in some EU countries, which represents a worrying development.

# Combatting viral hepatitis

Europe is committed to the international 2030 Agenda for Sustainable Development. This global policy framework includes combatting viral hepatitis. Within the European Union, this is of particular relevance for people who inject drugs, as these are not only the people with the highest burden of the disease, but also the ones at highest risk of transmission. Addressing the health impact of viral hepatitis by 2030 will therefore depend on scaling up prevention measures and access to testing and treatment for hepatitis B and C for this group.

Hepatitis strategies are now in place in 17 EU countries and Norway, and an increasing number of countries are providing unrestricted access to better tolerated and more effective, direct-acting antiviral medications. Nonetheless, more needs to be done. HCV screening is a critical entry point to effective hepatitis care and helps prevent further transmission. Community-based drugs services can play an important role here. In many countries, however, effective testing policies and appropriate referral pathways are not in place. Professional resistance can also exist to treating drug users, and the benefits that this investment in care delivers, both to individuals and to the wider community, is not always recognised. The EMCDDA is developing tools to support the implementation of viral hepatitis treatment in drug treatment settings. These include a checklist to identify barriers to the uptake of HCV testing and treatment, a knowledge questionnaire for service staff, and illustrative case studies demonstrating how innovative community-based testing approaches can make a valuable contribution to the response to this disease.

# Synthetic opioids now play a bigger role

In the United States and Canada, the current opioid epidemic is being driven by the use of synthetic opioids, particularly fentanyl derivatives. This is not the case in Europe, but concerns do exist in this area. Around 50 new synthetic opioids have been reported to the EU Early Warning System on new psychoactive substances. Many of these substances have been linked to severe poisonings and deaths. Some, like carfentanil, are extremely potent, meaning that they can be trafficked in very small quantities, which are difficult to detect but can equate to many thousands of user doses. In addition, synthetic opioids that are usually used as medicines appear to be playing an increasing role in the drug problem in many parts of Europe — these include drugs used for substitution treatment and pain relief. One in every five of those entering drug treatment for an opioid-related problem now reports a synthetic opioid, rather than heroin, as their main problem drug; and these drugs are becoming more commonly detected in drug overdose cases. Despite this threat, the current capacity to detect and report on the availability, use and consequences of synthetic opioids remains limited. Improving the sensitivity of information resources in this area must therefore be regarded as a priority.

# The value of toxicological and forensic data sources

Drug overdose deaths are rarely associated with the consumption of one substance alone. Modern drug consumption patterns are highly dynamic, with an increased number of drugs appearing on the market, and consumers typically — knowingly or unknowingly — using a number of different substances. This means that without good forensic and toxicological data, new health threats may be overlooked. There is a risk therefore that the role of potent new psychoactive substances, like fentanyl derivatives, in overdose deaths may be missed, especially when they are consumed alongside more established drugs like heroin. Some EU Member States, particularly in northern Europe, have invested in improving the availability and sensitivity of toxicological data and this now allows a better understanding of drug trends and health threats. Introducing comprehensive screening and increasing the sensitivity of testing in Sweden, for example, resulted in a doubling of the number of fentanyl cases detected among the samples of drug-related deaths examined. A recent EMCDDA study shows, however, that not all laboratories have the capacity to detect the more uncommon substances. For forensic and toxicological investigation, the availability of reference standards is essential; for new psychoactive substances, however, these are often not available in many laboratories. In addition, the absence of European forensic toxicology guidelines for drug-related death investigations is a barrier to improving monitoring and practice in this area. More

Europe is committed to the international 2030 Agenda for Sustainable Development

# FIGURE 1

generally, as synthetic drugs of all types are likely to continue to grow in importance, greater investment in



toxicological and forensic data sources will be needed.

# Innovative monitoring tools provide insight on emerging trends

This year's European Drug Report draws on a selection of newer targeted data sources. These 'leading edge' indicators are not representative of the general population and have other limitations; however, they do provide useful, timely and complementary data that offer valuable insights into drug use in Europe (see Figure 1). For example, wastewater analysis now provides a snapshot of drug volumes consumed at community level in cities across Europe. One of the benefits of this data source is that the information can be reported rapidly, and can thereby provide a potential early warning of changes in drug consumption. This is illustrated by new data for 2018, recently released by the SCORE group and the EMCDDA, which point to greater geographical diffusion and an overall increase in the consumption of all the commonly used classes of stimulant drugs.

Other new data sources included in this year's report include the European Web Survey on Drugs. Based on a sample of drug users recruited online, the results of this survey provide information about patterns of use and purchases of commonly used illicit drugs. Information from drug checking services, which enable people to have their drugs analysed and to receive information on their content, is also reviewed here to provide insights into drug use in specific recreational settings.

Hospital emergency data on acute drug-related harms can increase our understanding of the public health impact of the use of the drugs in Europe. Drug-related acute toxicity presentations in selected hospitals in 18 European countries are monitored by the European Drug Emergencies Network (Euro-DEN Plus). The findings from this year's analysis illustrate how the drugs responsible for emergency presentations can vary across Europe. Stimulants were associated, for example, with a large number of emergencies, but presentations involving amphetamines were most common in the north and east of Europe, whereas cocaine was the predominant stimulant in southern and western countries.

The role that stimulants can play in injecting drug use is also demonstrated by a new pilot study that analysed the drug residues extracted from used syringes collected at needle exchange sites in five European cities. In all but one site, stimulants were the most common substance



detected. Half of the syringes analysed contained traces of two or more drugs, the most frequent combination being a mix of stimulant and opioid. These new sources of information offer the chance to corroborate and complement existing data sources, improving our awareness of the less well-observed forms of drug use.



# Europe's cocaine market continues to grow

Current data on cocaine show that both the number of seizures and the volumes seized are at an all-time high. Cocaine enters Europe through numerous routes and means, but the growth in large-volume trafficking, through major ports, using containers, stands out. Increased availability of the drug is also suggested by the highest estimates of cocaine purity at retail level in a decade. A reorganisation of the cocaine supply chain and the players involved is visible at the middle and retail level, with the emergence of fragmented, looser and more horizontal organisational structures. Smaller groups have been able to enter the market by using a range of information technology like encryption, darknet market places, social media for dealing and cryptocurrencies. Entrepreneurship in the competitive cocaine market is evident from innovative distribution strategies, such as cocaine-exclusive call-centres. These new methods appear to reflect to some extent the type of disruption seen in other areas facilitated by the common use of smartphones - a potential 'Uberisation' of the cocaine trade a competitive market in which sellers compete by offering additional services such as fast and flexible delivery options.

# Cocaine: health harms more evident

Estimating the prevalence of problematic cocaine use is particularly difficult, as this drug is less visible in established indicators, which tend to be more focused on opioid-related problems. Nonetheless, there are signs that increased cocaine availability is resulting in growing health costs. Since 2014, the number of new clients entering treatment for cocaine problems, although still relatively low, has increased by over 35 %, with around two-thirds of countries noting an increase. In some countries, cocaine has been associated with recent increases in drug-related deaths. The drug is often detected alongside opioids in overdose deaths in those parts of Europe where it is the predominant stimulant. In addition, the role played by cocaine in deaths linked to cardiovascular disease may go unreported. Where data are available, they show an overall increase in cocaine-related emergency presentations, with cocaine being the most commonly reported illicit substance in the 18-country Euro-DEN study. Cocaine was also found in a quarter or more of the syringes tested in three of the five cities participating in a pilot exercise of the utility of syringe residue analysis for mapping patterns of injecting drug use. The new data available also suggest that the use of crack cocaine, a smokable form of the drug, which is particularly associated with problematic use, may be spreading. Increases in the number of crack cocaine

clients entering treatment since 2014 have been reported in Belgium, Ireland, France, Italy, Portugal, as well as in the United Kingdom, the European country that has been most associated with crack use.

The evidence available to support what constitutes effective services for cocaine users remains relatively weak, and targeted programmes for cocaine users are currently limited in Europe. This is beginning to change, with some countries now introducing more specialised harm reduction interventions. Overall, however, as needs in this area appear to be growing, investment is urgently needed in the development and evaluation of interventions of all types, but especially effective treatment models, if services are to be better placed to successfully engage with this client group.

# Europe's international role in synthetic drug production

Synthetic drug production in Europe, although difficult to monitor, appears to be growing, diversifying and becoming more innovative. This expansion can be seen from recent data documenting increased seizures of precursor chemicals. The EMCDDA-Europol European Drug Markets Report, to be published in late 2019, will provide an in-depth analysis of these developments. The detection of production laboratories, waste-dumping sites, and the potency and variety of synthetic drugs available on the European market are key concerns in this area.

There are now also growing indications of Europe's importance in the global market for synthetic drugs. These signals include significant seizures of various substances at EU borders; the fact that more MDMA is now seized in Turkey than in the European Union as whole; and the detection of facilities in Europe producing methamphetamine and other synthetic drugs intended for export. The infrastructure that permits goods to rapidly move between countries has increasingly been used to facilitate trafficking of controlled drugs, new psychoactive substances, precursors and other chemicals essential for drug production into the European Union. The same

Estimating the prevalence of problematic cocaine use is particularly difficult



NB: For the complete set of data and information on the methodology, see the accompanying online Statistical Bulletin.

infrastructure is also sometimes used to traffic synthetic drugs — particularly MDMA, but also other substances — to non-EU countries.

Synthetic drug production also appears to be driving the spread of methamphetamine use to new countries within the European Union. Globally, methamphetamine represents the greatest challenge in the synthetic drug area. In Europe, methamphetamine use has been concentrated in a few countries with long-standing problems. This is still largely the case today, but despite the widespread availability of other stimulants, analysis of wastewater residues suggest the drug is beginning to diffuse to new countries. Laboratory detections also point to some scaling-up of production and production for non-EU markets.

# Cannabis: new developments for Europe's most established drug

Cannabis is one of the longest-established drugs in Europe. It is the most commonly used illicit drug, with nearly 20 % of those in the 15-24 age group reporting having used cannabis in the last year. Internationally and within Europe, cannabis use continues to be a topic that is generating significant policy and public interest, as new developments are triggering debate on how society should respond to this substance.

A discussion is taking place about the therapeutic value of cannabis, cannabis preparations and medicines derived from the cannabis plant. Some countries have legalised cannabis, provoking a consideration of the costs and benefits of different regulatory and control options. This is a complex area. In Europe, considerable policing resources go into cannabis control, with over half of the 1.2 million use or possession for personal use offences reported in 2017 related to cannabis. Involvement in the cannabis market can also be a driver for youth criminality and a major source of income for organised crime. In addition, our understanding of the potential health risks from cannabis use, especially among the young, has grown. Cannabis is now the substance most often named by new entrants to specialist drug treatment services as their main reason for seeking help. This is worrying, as over the last few years the EMCDDA's overall assessment has been that cannabis trends have remained largely stable. Now, however, this is being challenged by new data, where a number of countries are reporting increased use among younger age cohorts.

Adding to this complexity, new forms of cannabis have been developed in recent years as a result of advances in cultivation, extraction and production techniques. Hybrid multi-strain plants yielding higher-potency cannabis have begun to replace established forms of the plant both within Europe and in Morocco, where much of the cannabis resin used in Europe originates. A recent EMCDDA-supported study shows that for both cannabis resin and herb the potency has increased over the last decade. The creation of legal recreational cannabis markets where the drug has been legalised is also driving innovation, with the development of new cannabis products such as edibles, e-liquids and concentrates. Some of these are now appearing on the European market, where they represent a new challenge for detection and drug control.

Recognising the now dynamic and complex nature of the cannabis policy sphere, the EMCDDA has launched a new series of publications that provide evidence reviews and analysis on this area. These include an overview of the development of medicinal cannabis provision in the European Union. Informed debate in this area is inhibited by the absence of a common conceptual understanding of medicinal cannabis. This is complicated by the diversity of products available, which can range from medicinal products containing compounds from the cannabis plant, to raw cannabis preparations.

# Low-THC cannabis products raise regulatory issues

Another example of the rapid developments taking place concerning cannabis has been the appearance in the last 2 years of low-strength herbal cannabis and cannabis oils for sale in health food shops or specialist shops in some EU countries. Sales take place based on the claim that these products have little or no intoxicating effect and therefore are not controlled under drug laws. Cannabis contains many different chemicals, but two cannabinoids, tetrahydrocannabinol (THC) and cannabidiol (CBD), attract the most attention. THC is the main substance found in cannabis responsible for its psychoactive effects. Products containing CBD are increasingly marketed with claims about their beneficial effects. The complex and evolving literature on the evidence for medicinal use of both THC and CBD has been addressed in a recent EMCDDA publication. The new products claim to have less than 0.2 % or 0.3 % THC and broadly fit within two categories of products: one aimed at cannabis users for smoking and one — formulations like oils and creams — aimed people interested in possible healthcare uses. Some EU Member States regard low-THC products as cannabis extracts subject to criminal penalties; others consider them medicines that cannot be sold without authorisation; a few

classify them as products that do not pose a threat to public health and so do not require any licence for trade. This development is raising issues for regulation at both EU and national level.

### Harnessing digitalisation for health benefit

Young people are an important target group for many drug interventions. They are likely to be the section of the population who are most familiar with and open to the use of information and communications technology in many areas of their life. They are also likely to be the group most willing to accept and benefit from the use of this technology for the delivery of drug prevention, treatment and harm reduction interventions. This year's European Drug Report reviews some of the new developments in the mobile or m-health areas, which aim to address a wide range of issues, from access to services to providing skills training to those working in the drugs area. Developments in this field make use of online resources and mobile applications, with some recent innovative approaches exploring how virtual reality may, for example, be utilised in drug treatment, helping patients to develop resilience to drug cues or reduce craving. An important note of caution is merited here, as the new applications in this area are not always accompanied by robust quality standards, data protection rules and evaluation evidence. As in all other areas of healthcare, these will be essential elements, if the potential benefits promised by new technology for drug interventions are to be realised.

# Strengthening the EU Early Warning System and risk assessment on new psychoactive substances

In 2018, new psychoactive substances were reported to the EU Early Warning System on new psychoactive substances at a rate of about one per week. At 55, the number of new drugs detected in 2018 is similar to the number found in 2017, but much reduced compared with 2013 and 2014. While this may suggest a fall-off in innovation in this area, it should be noted that a significant number of substances that have already been notified continue to appear on the European drug market each year, suggesting that substances may persist in the market over time. There are also changes in the type of substances being observed, potentially signalling that new psychoactive substances are increasingly more targeted at the long-term and more problematic drug users. Whereas, for example, the EU Early Warning System on new psychoactive substances continues to receive reports of a diverse range of substances, more synthetic opioids and benzodiazepines are now appearing.

Early warning and risk assessment are central to Europe's response to developments in the new psychoactive substances area. In 2018, the European system was revised to provide a strengthened and accelerated EU capacity to detect, assess and respond to health and social threats posed by new drugs. This not only provides for early warning across Europe, but also a possibility of faster risk assessment and control of substances at the European level. The changes also strengthen the network that supports the EMCDDA and Europol in this work, with formal working agreements now in place between the EMCDDA and the European Medicines Agency (EMA), the European Food Safety Authority (EFSA), the European Centre for Disease Prevention and Control (ECDC) and the European Chemicals Agency (ECHA).

Young people are an important target group for many drug interventions

# 1

In the global context, Europe is an important market for drugs

# **Drug supply and the market**

In the global context, Europe is an important market for drugs, supplied from both domestic production and trafficking from other world regions. South America, West Asia and North Africa are important source areas for illicit drugs entering Europe, while China is an important source country for new psychoactive substances. In addition, some drugs and precursors are transited through Europe en route to other continents. Europe is also a producing region for cannabis and synthetic drugs; cannabis production is mostly for local consumption, while some synthetic drugs are manufactured for export to other parts of the world.

# Monitoring drug markets, supply and laws

The analysis presented in this chapter draws on reported data on drug seizures, drug precursor seizures and stopped shipments, dismantled drug production facilities, drug laws, drug law offences, retail drug prices, purity and potency. In some cases, the absence of seizure data from key countries makes the analysis of trends difficult. A range of factors can influence trends, including user preferences, changes in production and trafficking, law enforcement activity levels and priorities and the effectiveness of interdiction measures. Full data sets and methodological notes can be found in the online Statistical Bulletin.

Also presented here are data on notifications and seizures of new psychoactive substances reported to the EU Early Warning System by the national partners of the EMCDDA and Europol. As this information is drawn from case reports rather than routine monitoring systems, seizure estimates represent a minimum. A full description of the Early Warning System on new psychoactive substances can be found on the EMCDDA website. Sizeable markets for cannabis, heroin and amphetamines have existed in many European countries since the 1970s and 1980s. Over time, other substances also established themselves — including MDMA and cocaine in the 1990s. The European drug market continues to evolve, with a wide range of new psychoactive substances emerging over the last decade. Recent changes in the illicit drug market, largely linked to globalisation and new technology, include innovation in drug production and trafficking methods, the establishment of new trafficking routes and the growth of online markets.

# Illicit drug markets in Europe: complex and multi-level

Illicit drug markets encompass a complex set of interlinked activities, including production, trafficking, distribution and sale to the end consumer. They span large geographical distances. Different actors may be involved at the various stages, but organised criminal groups play a dominant role in the illicit drugs business, worth billions of euros each year.

At the retail level, the sale of drugs is still conducted primarily through direct contact between suppliers and consumers. Mobile technology and encryption, however, are increasingly being exploited by drug dealing networks. Online platforms for the sale of illicit drugs, while still a relatively minor component of the overall market, have been growing in importance in recent years. Online markets may be found on the surface web — the indexed or searchable part of the web — including web shops and social media platforms, or on the 'darknet' — an encrypted network, requiring special tools to access — where sellers and buyers can conceal their identities.

Over 100 global darknet markets have been in existence at various times since anonymous online markets emerged in 2010. In July 2017, AlphaBay, the largest marketplace to have existed so far, was taken down in an international police operation, which also saw the end of another large site, Hansa market. This law enforcement operation may have eroded consumer confidence in the security of these marketplaces. Nevertheless, an EMCDDA and Europol analysis shows that revenues and trade volumes associated with drug sales across the darknet had returned to pre-enforcement levels one year later.

# FIGURE 1.1

Number of reported drug seizures, breakdown by drug, 2017

	Heroin
	4 % Amphetamines 5 %
	MDMA <b>3 %</b> Other substances
a	nnabis plants 2%

# Over a million seizures of illicit drugs

Seizures of illicit drugs by law enforcement agencies are an important indicator of drug markets, with over 1.1 million seizures of illicit drugs reported in 2017 in Europe. The majority of these reported seizures involve small quantities of drugs confiscated from users. However, a small number of multi-kilogram consignments of drugs account for most of the total quantity of drugs seized. The three countries that report the highest numbers of seizures, together accounting for over two-thirds of all drug seizures in the European Union are Spain, the United Kingdom and France. However, data on the number of seizures are not available for the Netherlands, while 2015 data are the most recent available for Germany and Slovenia, adding a degree of uncertainty to the analysis. Cannabis is the most commonly seized drug, accounting for almost three-quarters of the total number of seizures in Europe (Figure 1.1).

# Cannabis: seizures and potency increase, price remains stable

Herbal cannabis ('marijuana') and cannabis resin ('hashish') are the two main cannabis products found on the European drugs market. Cannabis oil is comparatively rare, although some large bulk seizures have been reported in the last few years. Herbal cannabis consumed in Europe is mainly cultivated within Europe, though some is trafficked from external countries. The herbal cannabis produced in Europe is mostly cultivated indoors. Cannabis resin is mostly imported from Morocco, with Libya emerging as a major hub for resin trafficking. Reports are emerging of some resin production in the European Union, while the production of 'nederhash' has been documented for a number of years in the Netherlands. In addition, the Western Balkans is a source of both herbal cannabis and, more recently, cannabis oil. In 2017, EU Member States reported 782 000 seizures of cannabis products, including 440 000 seizures of herbal cannabis, 311 000 of cannabis resin and 22 700 of cannabis plants. The number of seizures of herbal cannabis has exceeded that of cannabis resin since 2009. However, the quantity of cannabis resin seized is more than double that of herbal cannabis (466 versus 209 tonnes). In part, this is a consequence of cannabis resin being trafficked in larger volumes across national borders, making interdiction more likely. Because of its proximity to Morocco, Spain is particularly important when it comes to quantities of cannabis resin seized, accounting for almost three-quarters (72 %) of the total quantity seized in the European Union in 2017 (Figure 1.2).



NB: EU + 2 refers to EU Member States, Turkey and Norway. Price and potency of cannabis products: national mean values — minimum, maximum and interquartile range. Countries covered vary by indicator.

### Seizures of cannabis resin and herbal cannabis, 2017 or most recent year



NB: Number of seizures (thousands) for the 10 countries with highest values.

Quantity of cannabis resin seized (tonnes)





The numbers of cannabis seizures reported in the European Union, both for resin and herbal products, have been relatively stable since 2012 (Figure 1.3). However, following a decline in 2015, the quantity of herbal cannabis seized has increased in many countries. The overall increase between 2016 and 2017 is mainly due to substantial increases reported in Greece, Spain and in particular Italy. Every year since 2009, Turkey has seized more herbal cannabis than any EU country, but in 2017, the amount of herbal cannabis seized in Italy almost equalled that seized in Turkey. In addition, a number of countries that generally seize small quantities of herbal cannabis also showed considerable increases in 2017. One example is Hungary, where the quantity seized was 7 times the amount seized in the previous year (over 3.5 tonnes in 2017, 0.5 tonnes in 2016).

Seizures of cannabis plants may be regarded as an indicator of the production of the drug within a country. However, differences between countries, both in law enforcement priorities and reporting practices, mean the data must be interpreted with caution. The number of plants seized in Europe peaked at 7 million in 2012, due to intensive interdiction in Italy that year, before dropping to 2.5 million plants in 2015, and increasing to 3.4 million plants in 2017. In 2017, European countries reported 490 seizures of cannabis oil, with Turkey (50 litres in 3 seizures) and Greece (12 kg in 37 seizures) accounting for the largest quantities.

Analysis of indexed trends among those countries consistently reporting price and potency data shows an increase in the potency of both herbal cannabis and cannabis resin since 2007. Resin potency has shown a continuous increase since 2009. Drivers of this increasing average potency in resin likely include the introduction of high-potency plants and new production techniques in Morocco, and, to a lesser extent, the greater use within Europe of resin extraction techniques that provide higher potency products. The average potency of herbal cannabis increased in 2017, after a period of stability between 2013 and 2016. However, it remains to be seen if this recent increase is the start of a new trend. Data suggest that the retail price per gram is similar for resin and herbal cannabis and that the prices have remained stable since about 2009.



### Trends in the number of cannabis seizures and quantity of cannabis seized: resin and herb

### Availability of low-THC cannabis products

Since 2017, herbal cannabis and cannabis oils have been offered for open sale in health food shops or specialist shops in several EU countries. Sales have taken place based on the claim that these products have little or no intoxicating effect and therefore are not controlled under drug laws.

Herbal cannabis and its extracts are known for the two cannabinoids tetrahydrocannabinol (THC) and cannabidiol (CBD). THC can cause intoxicating effects, while CBD has been associated with health benefits, though at present there is little evidence for most conditions that have been studied. The percentage of each can vary greatly in cannabis plants. The EU common agricultural policy subsidises growing certain varieties of the cannabis plant for industrial uses, provided their THC content does not exceed 0.2 % (a limit originally intended to distinguish between plant types, not a safety profile for human consumption). National limits may be between 0 and 0.3 %.

The new products are claimed to have less than 0.2 % or 0.3 % THC and seem to fit broadly into two categories, which may overlap. The first is marketed to existing illicit cannabis users as 'legal' cannabis, in formats usually associated with smoking. The second is marketed with 'health' and 'well-being' associations, emphasising the

content of CBD, often in the form of oils or creams. The categories are also reflected in the type and decor of their sales outlets. As there is no agreed testing standard established for these products, the THC and CBD content may vary from that stated on the labels or on the 'test results' that may be displayed with the product.

# Heroin: quantity seized increases

Heroin is the most common opioid on the EU drug market. Historically, imported heroin has been available in Europe in two forms, the more common of which is brown heroin (its chemical base form), produced mainly from morphine extracted from poppies grown in Afghanistan. Far less common is white heroin (a salt form), which in the past came from South-East Asia, but now may also be produced in Afghanistan or neighbouring countries. Other opioids available in illicit markets in Europe include opium and the medicines morphine, methadone, buprenorphine, tramadol and various fentanyl derivatives. Some of these opioids may be diverted from legitimate pharmaceutical supplies, while others are illegally manufactured.

Afghanistan remains the world's largest illicit producer of opium, and most heroin found in Europe is thought to be manufactured there or in neighbouring Iran or Pakistan. Illicit opioid production in Europe has until recently been limited to homemade poppy products produced in some eastern countries. The discovery of laboratories producing heroin from morphine using acetic anhydride in Bulgaria, Czechia, Spain and the Netherlands in recent years, together with an increase in morphine and opium seizures, suggests that some heroin is now manufactured closer to consumer markets in Europe. This change may reflect suppliers seeking to reduce costs by carrying out the last stages of heroin production in Europe, where precursors such as acetic anhydride are cheaper than in opiumproducing countries. Manufacturing the drug close to the consumer market may also be aimed at reducing interdiction risks.

Heroin enters Europe along four main trafficking routes. The two most important ones are the 'Balkan route' and the 'southern route'. The first and most significant of these runs through Turkey, into Balkan countries (Bulgaria, Romania or Greece) and on to central, southern and western Europe. An offshoot of the Balkan route involving Syria and Iraq has also emerged. The southern route, where shipments from Iran and Pakistan enter Europe by air or sea, either directly or transiting through African countries, has gained importance in recent years. Other routes include the 'northern route' from Afghanistan through Central Asia to Russia and a route through the southern Caucasus and across the Black Sea.

A period of reduced heroin availability was observed in a number of European countries around 2010/11, accompanied by an overall drop in both numbers of seizures and quantities of heroin seized. Since then, seizures in the European Union have largely stabilised, with 37 000 seizures amounting to 5.4 tonnes reported in 2017. Turkey continues to seize more heroin than all other European countries combined (Figure 1.4). Following a steep drop in seizures in the period 2014-16, from 12.8 to 5.6 tonnes, in 2017 Turkey seized 17.4 tonnes of heroin, the largest quantity for a decade.

Among those countries consistently reporting price and purity data, indexed trends suggest that, following a sharp decrease between 2009 and 2011, heroin purity increased rapidly before stabilising in recent years, but below 2007 levels. In contrast, overall the retail price of heroin declined slightly over the last decade, with a decline also seen in 2017.



NB: EU + 2 refers to EU Member States, Turkey and Norway. Price and purity of 'brown heroin ': national mean values — minimum, maximum and interquartile range. Countries covered vary by indicator.



### Number of heroin seizures and quantity seized: trends and 2017 or most recent year

In addition to heroin, other opioid products are seized in European countries. Although these represent a small fraction of total opioid seizures, they increased markedly in 2017. The other opioids most commonly seized include the medicinal opioids tramadol, buprenorphine and methadone (see Table 1.1). In 2017, for the second year running, increases were reported in the quantities seized of tramadol and fentanyl derivatives. Furthermore, the quantities of opium and morphine seized were also much higher in 2017 than in the previous year.

# TABLE 1.1

Seizures of opioids other than heroin in 2017

Opioid	Number		Number			
		Kilograms	Litres	Tablets	Patches	of countries
Methadone	1 428	17.2	26.4	30 381		18
Buprenorphine	2 649	0.5	0.01	58 682		17
Tramadol	4 290	13.8	0.1	118 935 898		11
Fentanyl derivatives	940	14.3	1.9	10 551	2 291	13
Morphine	358	246.0	1.3	9 337		13
Opium	1837	2 177.9				17
Codeine	522	0.1		18 475		8
Dihydrocodeine	21			1 436		4
Oxycodone	560	0.0001		18 035		8

# Europe's stimulant market: regional differences

The main illicit stimulant drugs available in Europe are cocaine, amphetamine, methamphetamine and MDMA. There are marked regional differences regarding what stimulant is most commonly seized (Figure 1.5), which are influenced by the location of entry ports and trafficking routes, major production centres and large consumer markets. Cocaine is the most frequently seized stimulant in many western and southern countries, while amphetamines and MDMA seizures are predominant in northern and eastern Europe.

# Cocaine market: seizures at historical high

In Europe, cocaine is available in two forms, the most common is cocaine powder (the salt form) and less commonly available is crack cocaine (free base), a smokable form of the drug. Cocaine is produced from the leaves of the coca bush, which is cultivated mainly in Colombia, Bolivia and Peru. Cocaine is transported from diverse departure points in South and Central America to Europe by various means, including passenger flights, air freight, private aircraft, yachts and other small vessels. However, the largest quantity appears to be smuggled in maritime freight, especially containers. The Caribbean, West and North Africa are important transit zones for cocaine coming to Europe.

In 2017, the number of cocaine seizures and the quantity seized in the European Union reached the highest levels ever recorded, with more than 104 000 seizures of cocaine

# FIGURE 1.5

Most frequently seized stimulant drug in Europe, 2017 or most recent data



reported, amounting to 140.4 tonnes. The quantity of cocaine seized surpassed the previous high, recorded in 2006, by more than 20 tonnes and represented a doubling of the quantity seized in 2016 (see Figure 1.6). With combined seizures of around 86 tonnes, Belgium (45 tonnes) and Spain (41 tonnes) accounted for 61 % of the estimated EU total in 2017, but large quantities were also reported by France (17.5 tonnes) and the Netherlands (14.6 tonnes). In addition, the purity of cocaine at retail level has been increasing since 2010, particularly in 2016 and 2017, when it reached the highest level in the last



NB: EU + 2 refers to EU Member States, Turkey and Norway. Price and purity of cocaine: national mean values — minimum, maximum and interquartile range. Countries covered vary by indicator.



### Number of powder cocaine seizures and quantity seized: trends and 2017 or most recent year



NB: Number of seizures (thousands) for the 10 countries with highest values.





decade. The retail price of cocaine has remained stable. Taken together, these indicators suggest that cocaine availability is at an all-time high.

Seizures of crack cocaine are low and stable in the countries that report them. This may be explained in part because crack is manufactured within Europe, close to the consumer markets, and is not transported across borders, where many drug seizures usually take place.

The number and quantity of seizures of coca leaves has been increasing, totalling 204 kilograms of coca leaves in 2017 alongside a small amount of coca paste. This may indicate a diversification in production tactics by some criminal organisations, as the cocaine laboratories found in Europe in the past have mainly been 'secondary extraction facilities', where cocaine is recovered from materials in which it has been incorporated (such as wines, clothes, plastics), rather than laboratories processing coca leaves.

> Indicators suggest that cocaine availability is at an all-time high

# Drug production: precursor chemical developments

Drug precursors are chemicals needed to manufacture illicit drugs. Historically, in Europe the main area of concern has been in relation to precursors for the production of synthetic drugs such as amphetamine, methamphetamine and MDMA. However, the emergence of heroin laboratories in the EU has placed a greater emphasis on the diversion of acetic anhydride, the precursor involved in the conversion of morphine to heroin. As many of these precursor chemicals have legitimate uses they are not prohibited, but their trade is monitored and controlled through EU regulations, which schedule certain chemicals. The availability of precursors and other chemicals necessary for drug production has a large impact on the drug market and on the production methods used in illicit laboratories. Production techniques are also evolving over time in order to avoid detection, controls and penalties, and changes typically include the use of alternative substances to produce synthetic drugs or their precursors, which then becomes the favoured production method. The additional processing associated with the use of these alternative substances, and more complex routes of synthesis, can require more chemicals, creating more waste, potentially leading to greater environmental damage if this is disposed of inappropriately.

Data on seizures and stopped shipments of drug precursors confirm the use of both scheduled and nonscheduled chemicals in the production of illicit drugs in the European Union, in particular for amphetamines and MDMA (Table 1.2). The scheduling of the BMK (benzyl methyl ketone) precursor APAAN (alphaphenylacetoacetonitrile) in late 2013 continues to have an impact, with seizures falling from 48 tonnes in 2013 to around 5 tonnes in 2017. Seizures of the alternative chemical APAA (alpha-phenylacetoacetamide) increased sharply in 2016 and again in 2017. Seizures of glycidic derivatives of BMK, which can also be easily converted to BMK, first reported in 2015, also increased sharply to about 3 tonnes in 2016, and further to almost 6 tonnes in 2017.

The quantities of PMK (piperonyl methyl ketone) and non-scheduled chemicals for MDMA manufacture seized increased dramatically in 2017. All seizures of PMK and most seizures of the glycidic derivatives of PMK in 2017 occurred in the Netherlands. In addition, large amounts of 2-bromo-4-methylpropiophenone, a precursor for synthetic cathinones, as well as large amounts of BMK (and glycidic derivatives of BMK) were seized in the Netherlands, confirming the country's central role in synthetic drug production in the European Union.

# TABLE 1.2

Summary of seizures and stopped shipments of EU scheduled precursors and non-scheduled chemicals used for selected drugs produced in the European Union, 2017

	Seizures		Stopped shipments		TOTALS	
Scheduled/non-scheduled	Number	Quantity	Number	Quantity	Number	Quantity
MDMA or related substances						
PMK (litres)	10	5 397	0	0	10	5 397
Safrole (litres)	5	2 969	0	0	5	2 969
Piperonal (kg)	3	37	4	6 384	7	6 421
Glycidic derivatives of PMK (kg)	20	17 774	0	0	20	17 774
N-t-BOC-MDMA (kg)	1	25	0	0	1	25
Amphetamine and methamphetamine						
BMK (litres)	29	3 506	0	0	29	3 506
Ephedrine bulk (kg)	14	25	0	0	14	25
Pseudoephedrine bulk (kg)	23	13	0	0	23	13
APAAN (kg)	9	5 065	0	0	9	5 065
PAA, phenylacetic acid (kg)	0	0	4	300	4	300
APAA (kg)	90	10 830	0	0	90	10 830
Glycidic derivatives of BMK (kg)	5	5 725	0	0	5	5 725
Others						
Acetic anhydride (litres)	24	81 289	55	243 011	79	324 300
2-bromo-4-methylpropiophenone (kg)	4	1 2 1 1	0	0	4	1 2 1 1
N-phenethyl-4-piperidone (kg)	2	4.5	0	0	2	4.5

In 2017, more than 81 tonnes of acetic anhydride was seized and a further 243 tonnes was stopped before their supply, which represents a large increase compared to the previous years. Furthermore, it is worth noting that a significant amount of *N*-phenethyl-4-piperidone, a precursor for the manufacture of fentanyl derivatives, has been reported seized by Estonia.

# Amphetamine and methamphetamine seizures: signs of gradual increase

Amphetamine and methamphetamine are synthetic stimulant drugs, which may be grouped together as 'amphetamines' in some datasets. Over the last decade, seizure data indicate that the availability of methamphetamine has been slowly increasing and spreading geographically, but it is still much lower than that of amphetamine. Both drugs are produced in Europe for the European market. The available data indicate that amphetamine production takes place mainly in Belgium, the Netherlands and Poland, and to a lesser extent in the Baltic States and Germany. Typically, all stages of amphetamine production are carried out in the same location. Seizures of amphetamine oil in some Member States, however, indicate that this product may be trafficked between countries, with the final stage of production occurring at, or near, its intended destination point.

Some amphetamine is also manufactured in the European Union for export, principally to the Middle East. Large seizures of amphetamine tablets with a 'captagon' logo that have been seized in Turkey are linked with Syria.



NB: EU + 2 refers to EU Member States, Turkey and Norway. Price and purity of amphetamines: national mean values — minimum, maximum and interquartile range. Countries covered vary by indicator. Indexed trends are not available for methamphetamine.

29







NB: Number of seizures (thousands) for the 10 countries with highest values. Quantity of amphetamine seized (tonnes)



Methamphetamine seized in Europe is mainly produced in Czechia and the border areas of neighbouring countries. A small number of illicit methamphetamine laboratories are found each year in the Netherlands, and sometimes these are quite large facilities, mainly producing for markets in the Far East and Oceania. In Czechia, methamphetamine is produced mainly from pseudoephedrine, which is extracted from medicinal products. In 2017, of the 298 illegal methamphetamine laboratories reported in the European Union, 264 were located in Czechia. Small-scale laboratories operated by local user-dealers supplying the domestic market dominate. However, larger-scale facilities involving non-Czech organised crime groups producing methamphetamine for other European countries have emerged in recent years.

In 2017, EU Member States reported 35 000 seizures of amphetamine, amounting to 6.4 tonnes. The estimated quantity of amphetamine seized in the European Union has generally fluctuated around 5 to 6 tonnes each year since 2010, although there have been increases in each of the past 2 years (Figure 1.7). Germany and the United Kingdom generally seize the largest amounts, often more than a tonne each. Methamphetamine seizures are far lower, with 9 000 seizures reported in the European Union in 2017, amounting to 0.7 tonnes, with France (122 kg), Germany (114 kg) and Czechia (93 kg) seizing the largest amounts (Figure 1.8). The number of seizures of methamphetamine has shown an overall upward trend since 2002 but with signs of stabilisation in recent years; the quantity seized has been increasing, albeit with some fluctuation, since 2009.

In 2017, Turkey seized more amphetamine (6.6 tonnes) than the EU Member States combined (6.4 tonnes). Almost all of the amphetamine seized in Turkey was in the form of tablets (26.3 million tablets — over 99.5 % of the total estimated amount seized), including large quantities of 'captagon' tablets containing amphetamine. Turkey also seized an exceptionally large quantity of methamphetamine in 2017 (658 kg), a similar amount to that reported for the European Union (662 kg).

Compared with a decade ago, both the price and purity of amphetamine in Europe were higher in 2017, despite a slight fall compared to the previous year. Typically, both the average reported purity and price are higher for methamphetamine than for amphetamine samples.



### Number of methamphetamine seizures and quantity seized: trends and 2017 or most recent year



NB: Number of seizures (thousands) for the 10 countries with highest values.

Quantity of methamphetamine seized (tonnes)



# MDMA: increased production and seizures

MDMA (3,4-methylenedioxymethamphetamine) is a synthetic drug chemically related to amphetamine, but with different effects. MDMA is consumed as tablets, often called ecstasy, or in powder and crystal form. International efforts to control drug precursors — chemicals necessary for the production of illicit drugs — disrupted the MDMA market in the late 2000s. More recently, the MDMA market has seen a revival, as producers have found substitute,



NB: EU + 2 refers to EU Member States, Turkey and Norway. Price and purity of MDMA: national mean values — minimum, maximum and interquartile range. Countries covered vary by indicator.



### Number of MDMA seizures (all forms) and quantity of tablets seized: trends and 2017 or most recent year





non-controlled chemicals for use in the manufacture of the drug. This is reflected in the average MDMA content of tablets, among those countries routinely reporting data, which has been increasing since 2010 and reached a 10-year high in 2017. Marketing appears to play a role in sales, and new tablet designs in various colours, shapes and brand logos are constantly being introduced.

The production of MDMA in Europe is mainly concentrated in the Netherlands and Belgium. A total of 21 active MDMA laboratories, almost double the number in 2016, were reported to have been dismantled in the European Union in 2017, all in the Netherlands. In Belgium, although no MDMA production facilities were detected in 2017, reports of the dumping of chemical waste from MDMA production suggest that the drug continues to be produced there.

Seizure reports from outside Europe, identified through the monitoring of open source information, and analysis of darknet market data illustrate the important role played by European producers in the global supply of MDMA. For example, darknet market monitoring data show that as well as facilitating direct sales to consumers, these markets are used by dealers across the globe to purchase MDMA produced in Europe. Analysis shows that transactions involving quantities of MDMA tablets indicative of the middle level of the market account for more than double the revenue of sales of retail-level quantities. In contrast, darknet cannabis and cocaine transactions are overwhelmingly at the retail level.

The number of reported MDMA seizures in the European Union has been on an upward trend since 2010. The quantity of MDMA seized is more often reported in number of tablets than by weight. The estimated 6.6 million MDMA tablets reported seized in 2017 is the highest number in the European Union since 2007. Fluctuations can be seen in the long term in the number of MDMA tablets seized annually in the European Union, reflecting in part the impact of large individual seizures. Some countries have also reported seizures of MDMA powder. Reported seizures of MDMA powder in the European Union increased from 0.3 tonnes in 2016 to 1.7 tonnes in 2017. This increase is mainly due to seizures reported by the Netherlands a country now able to provide data on the quantity of MDMA seized, for the first time in 5 years, and thus contributing to a more comprehensive analysis in this area.

Large quantities of MDMA tablets were seized in Turkey in 2017, more than double the amount in the previous year, amounting to 8.6 million tablets and exceeding the total amount seized in the European Union (Figure 1.9).

### Seizures of LSD, GHB and ketamine

Seizures of other illicit drugs are reported in the European Union, including over 2 000 seizures of LSD (lysergic acid diethylamide) in 2017, amounting to 74 000 units. The overall number of LSD seizures has more than doubled since 2010, although the quantity seized has fluctuated. Sixteen EU countries reported around 2 000 seizures of ketamine, amounting to an estimated 194 kilograms and 5 litres of the drug, most of which was accounted for by Belgium, France and the United Kingdom. Norway also reported a small number of ketamine seizures - 42 seizures amounting to 0.1 kilogram. In 2017, seizures of GHB (gamma-hydroxybutyrate) or GBL (gammabutyrolactone) were reported by 14 EU countries, Norway and Turkey, with Norway accounting for over a quarter of the total number of seizures. Taken together, the estimated 1 600 seizures amounted to almost 127 kilograms and 1 300 litres of the drug. Belgium seized almost half of the total quantity, mainly as GBL.

### New psychoactive substances: a complex market

By the end of 2018, the EMCDDA was monitoring more than 730 new psychoactive substances, 55 of which were detected for the first time in Europe in 2018. These substances make up a broad range of drugs, such as synthetic cannabinoids, stimulants, opioids and benzodiazepines.

In most cases, new psychoactive substances are produced in bulk quantities by chemical and pharmaceutical companies in China. From there they are shipped to Europe, where they are processed into products, packaged and sold. They are sometimes sold openly in physical shops. Although restrictions have limited the open sale of these products in some countries, they may still be available more covertly. They can also be obtained through online shops or the darknet or may be sold on the illicit drug market. In such cases, they may be sold under their own name or sold as or mixed with other drugs, such as heroin, cocaine, MDMA or psychoactive medicines.

The number of new substances identified for the first time each year peaked in 2014-15, but has since stabilised at levels comparable to 2011-12 (Figure 1.10). The causes of this are unclear, but they may reflect the results of sustained efforts to control new substances in Europe, as well as legislative initiatives in China. Number and categories of new psychoactive substances notified to the EU Early Warning System for the first time, 2005-18







Seizures reported to the EU Early Warning System: trends in total number of seizures and number of seizures by category in 2017

NB: Data for EU Member States, Turkey and Norway.

The number of new substances detected for the first time each year is just one of a range of metrics that the EMCDDA uses in order to understand the overall market. For example, 390 substances, approximately half of the new substances being monitored by the EU Early Warning System, were detected in Europe in 2017, some of which first appeared more than 10 years ago. This illustrates the dynamic nature of this part of the drug market: substances may appear and then disappear rapidly, but the number of substances in circulation remains high.

# Seizures of new psychoactive substances

During 2017, law enforcement agencies from across Europe reported close to 64 160 seizures of new psychoactive substances to the EU Early Warning System. Of these, 39 115 seizures were reported by the 28 EU Member States (Figure 1.11).

In 2017, new psychoactive substances were most commonly reported as powders, which amounted to 2.8 tonnes, across all categories. This is broadly comparable to the figures from previous years. In addition, just under 240 kilograms of herbal material were reported, two-thirds of which was in the form of smoking mixtures containing synthetic cannabinoids. New substances were also found in tablets (6 769 cases, 2.8 million units), blotters (980 cases, 23 000 units) and liquids (1 430 cases, 490 litres). Some of these liquids were sold as ready-to-use nasal sprays as well as e-liquids for vaping in e-cigarettes. In Europe, seizures of new psychoactive substances are typically dominated by synthetic cannabinoids and cathinones. However, more diversity can be seen in recent years, with other groups of substances becoming more prominent. For example, the quantity of opioids and benzodiazepines seized in Europe appears to have increased.
# Seizures of synthetic opioids reported to the EU Early Warning System: trends in number of seizures and quantity seized



Powders (kilograms)



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Liquids (litres)



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Tablets (units)



NB: Data for the European Union, Turkey and Norway. Seizures of tramadol are not included.

# 1 300 seizures of new opioids were reported to the EU Early Warning System

### New synthetic opioids

Since 2009, 49 new synthetic opioids have been detected on Europe's drug market — including 11 reported for the first time in 2018. The overall figure includes 34 fentanyl derivatives, 6 of which were reported for the first time in 2018. Although currently playing a small role in Europe's drug market, many new opioids (particularly those of the fentanyl family) are highly potent substances that pose a serious threat to individual and public health.

In 2017, approximately 1 300 seizures of new opioids were reported to the EU Early Warning System by law enforcement agencies. The majority of these cases (70 %) were seizures of fentanyl derivatives (Figure 1.12), but a number of other types of opioids (such as U-47,700 and U-51,754) were also reported. The total quantity of opioid powders and tablets reported has seen a continued increase since 2012 (Figure 1.12). Overall, seizures of new opioids in 2017 amounted to approximately 17 kilograms of powders, 1.8 litres of liquids and over 29 000 tablets. Less commonly, new opioids have also been found in blotters and in herbal smoking mixtures; in these cases, there may be no indication that they contain potent opioids, which could pose a risk of poisoning to people who use them, particularly if they have no existing tolerance to opioids.

Of particular concern have been the seizures of carfentanil in Europe, one of the most potent opioids known. In 2017, over 300 seizures of carfentanil were reported in Europe. These seizures amounted to approximately 4 kilograms of powders and 250 millilitres of liquids. Some of these powders were sold as or mixed with heroin.

### New benzodiazepines

Over the last few years there appears to have been an increase in the number, type and availability of new psychoactive substances belonging to the benzodiazepine class, which are not controlled under international drug control laws. Some of these are sold as fake versions of commonly prescribed anti-anxiety medicines such as alprazolam (Xanax) and diazepam, making use of existing distribution networks in the illicit drug market. Others are sold online, sometimes under their own names, marketed as 'legal' versions of authorised medicines.

The EMCDDA is currently monitoring 28 new benzodiazepines — 23 of which were first detected in Europe in the last 5 years. In 2017, close to 3 500 seizures of new benzodiazepines were reported to the EU Early Warning System. Most of these seizures were of tablets,

### FIGURE 1.13

New accelerated EU procedures to identify and respond to new psychoactive substances appearing in the European Union



amounting to more than 2.4 million units, which represents a large increase from the around half a million tablets reported in 2016. This increase can be attributed to large seizures of etizolam — a substance first reported to the Early Warning System in 2011 — in one country. In addition, around 27 kilograms of powders, 1.4 litres of liquids and 2 400 blotters containing new benzodiazepines were reported to have been seized in 2017.

### New psychoactive substances: new legal responses

European countries take measures to prevent the supply of drugs under three United Nations Conventions, which provide a framework for control of production, trade and possession of over 240 psychoactive substances. The rapid emergence of new psychoactive substances and the diversity of available products has proved challenging for the Conventions and for European policymakers and lawmakers.

At national level, various measures have been used to control new substances, and three broad types of legal response can be identified. Many countries in Europe first responded by using consumer safety legislation, and subsequently extended or adapted existing drug laws to incorporate new psychoactive substances. Increasingly, countries have designed specific new legislation to address this phenomenon.

For many years, most European countries only listed controlled substances individually. However, as the number of new substances detected in Europe increased,

### FIGURE 1.14



Drug law offences in the European Union related to drug use or possession for use or drug supply: indexed trends and reported offences in 2017

more countries have sought to control groups of substances. Most of the countries have defined the groups by chemical structure ('generic' groups), though a few have defined the groups by the effects. Most of the countries that have taken the generic approach have added the group definitions to existing drug laws, but some have only included such groups in specific new psychoactive substance legislation.

At EU level, the legal framework for responding to public health and social threats caused by new psychoactive substances, which dated from 2005, has been revised, with the aim of establishing a swifter, more effective system (Figure 1.13). The new legislation retains the three-step approach to responding to new psychoactive substances — early warning, risk assessment and control measures — while strengthening existing processes by streamlining and accelerating data-collection and assessment procedures, and introducing shorter deadlines. Following the risk assessment, the Commission can then make a proposal for subjecting the substance to control measures. The European Parliament and the Council have the right, within 2 months and under certain conditions, to object to the Commission proposal. National authorities will have 6 months (instead of 12) to place the substance under control on their territory once the decision enters into force. This new legislation is applicable across Europe from 23 November 2018.

### Drug law offences: cannabis predominates

The implementation of laws is monitored through data on reported drug law offences. The numbers reflect differences in national legislation and priorities and also the different ways in which the laws are applied and enforced.

In 2017, an estimated 1.5 million drug law offences were reported in the European Union, an increase of about a fifth (20 %) since 2007. Most of these offences (79 %) related to use or possession, totalling around 1.2 million offences, a 27 % increase compared with 10 years ago. Drug use or possession offences involving cannabis continued to increase. Three-quarters (75 %) of use or possession offences involved cannabis, although this figure fell by 2 percentage points compared with 2016. The upward trend in offences for MDMA use or possession continued in 2017, although they still only account for 2 % of use-related offences (Figure 1.14).

Overall, the number of drug supply offences in the European Union has increased by 22 % since 2007, with an estimate of more than 230 000 cases in 2017. Again, cannabis dominates, accounting for the majority of supply offences (57 %). Reports of supply offences for MDMA have been rising since 2011 (Figure 1.14), whereas offences related to the supply of heroin have decreased slightly while the situation for cocaine is relatively stable over the same period.

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EU Drug Markets Report: Strategic Overview.

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New psychoactive substances in Europe: legislation and prosecution — current challenges and solutions.

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Among people who use drugs, polydrug consumption is common

# Drug use prevalence and trends

Drug use in Europe now encompasses a wider range of substances than in the past. Among people who use drugs, polydrug consumption is common and individual patterns of use range from experimental to habitual and dependent consumption. Cannabis is the most commonly used drug — the prevalence of use is about five times that of other substances. While the use of heroin and other opioids remains relatively rare, these continue to be the drugs most commonly associated with the more harmful forms of use, including injecting drug use. The extent of stimulant use and the types that are most common vary across countries, and evidence is growing of a potential increase in stimulant injecting. Use of all drugs is generally higher among males, and this difference is often accentuated for more intensive or regular patterns of use.

### Monitoring drug use

The EMCDDA collects and maintains datasets that cover drug use and patterns of use in Europe.

Surveys undertaken among school students and the general population can provide an overview of the prevalence of experimental and recreational drug use. These survey results are complemented by community level analyses of drug residues in municipal wastewater, carried out in cities across Europe.

Studies reporting estimates of high-risk drug use are used to identify the extent of the more entrenched drug use problems, while data on those entering specialised drug treatment systems, when considered alongside other indicators, inform an understanding on the nature and trends in high-risk drug use.

Other, more targeted data sources are also used here. These 'leading edge' indicators provide insights into changing drug-use patterns and types of drug used. While not representative of the general population, these sources provide timely supplementary data. All data sources on drug use have strengths and weaknesses, and both the availability and the quality of data can vary by country. This is why the EMCDDA takes a cautious and multi-indicator approach to describing the European drug situation.

Full data sets and methodological notes can be found in the online Statistical Bulletin.

### Around 96 million adults have used illicit drugs

Around 96 million or 29 % of adults (aged 15-64) in the European Union are estimated to have tried illicit drugs during their lives. Experience of drug use is more frequently reported by males (57.8 million) than females (38.3 million). The most commonly tried drug is cannabis (55.4 million males and 36.1 million females), with much lower estimates reported for the lifetime use of cocaine (12.4 million males and 5.7 million females), MDMA (9.3 million males and 4.6 million females) and amphetamines (8.3 million males and 4.1 million females). Levels of lifetime use of cannabis differ considerably between countries, ranging from around 4 % of adults in Malta to 45 % in France.

Last year drug use provides a measure of recent drug use and is largely concentrated among young adults. An estimated 19.1 million young adults (aged 15-34) used drugs in the last year (16 %), with about twice as many males (20 %) as females (11 %) reporting doing so.

### Cannabis use among young people

Across all age groups, cannabis is the illicit drug most commonly used. The drug is generally smoked and, in Europe, it is commonly mixed with tobacco. Patterns of cannabis use can range from the occasional to the regular and dependent.

It is estimated that 91.2 million adults in the European Union (aged 15-64), or 27.4 % of this age group, have tried cannabis during their lives. Of these, an estimated 17.5 million young adults (aged 15-34), or 14.4 % of this age group, used cannabis in the last year. Last year prevalence rates among young adults range from 3.5 % in Hungary to 21.8 % in France. Among young people using cannabis in the last year, the ratio of males to females is two to one. When only 15- to 24-year-olds are considered, the prevalence of cannabis use is higher, with 18 % (10.1 million) having used the drug in the last year and 9.3 % in the last month (5.2 million).

### FIGURE 2.1



Last year prevalence of cannabis use among young adults (15-34): selected trends and most recent data

NB: Age ranges other than 15-34 are reported by Denmark, United Kingdom and Norway (16-34), Sweden (17-34), Germany, France, Greece and Hungary (18-34).

In most countries, recent survey results show either stable or increasing last year cannabis use among young adults. Of the countries that have produced surveys since 2016 and reported confidence intervals, 6 reported higher estimates, 5 were stable and 1 reported a decrease compared with the previous comparable survey. In 11 of these countries, an increase in use among 15- to 24-yearolds has been reported in the most recent survey.

Few countries have sufficient survey data to permit statistical analysis of long-term trends in last year use of cannabis among young adults (15-34). Among these, the decreasing trends previously observed in Spain and the United Kingdom (England and Wales) have stabilised in the more recent data, although the United Kingdom has seen an increase to 12.3 % in the most recent year (Figure 2.1). Since 2000, increasing trends in last year prevalence of cannabis use among young adults have been observed in a number of countries. These include Ireland and Finland, where the most recent data indicate levels approaching the EU average of 14.4 % and, albeit at lower levels, Bulgaria and Romania. In France, recent surveys show prevalence levels are stable at a high level of 22 %. In Denmark, a 2017 survey reported a decrease: to 15.4 % from the 2013 estimate of 17.6 %.

Data from web surveys can provide complementary information to general population surveys and further insight into the use of drugs in Europe. While not representative of the general population, these surveys are able to reach large samples of people who use drugs. The European Web Survey on Drugs collected information about patterns of use and purchases of the most commonly used illicit drugs from 40 000 people who use drugs, recruited primarily through social media. The findings show that herbal cannabis was more commonly used than cannabis resin. However, many respondents reported using both types, particularly in France, Italy and the Netherlands. The use of cannabis resin only was reported infrequently (Figure 2.2).

### FIGURE 2.2

Forms of cannabis used in the last year by participants in a web survey who reported use of the drug



NB: The survey was carried out in two waves, one in 2016 (Czechia, France, Croatia, Netherlands, United Kingdom) and one in 2017/18 (remaining 10 EU countries).

Source: European Web Survey on Drugs.

Cannabis is the illicit drug most commonly used

### High-risk cannabis use: signs of stabilisation

Based on surveys of the general population, it is estimated that around 1 % of adults in the European Union are daily or almost daily cannabis users — that is, they have used the drug on 20 days or more in the last month. Around 60 % of these are under 35 and around three-quarters are male.

When considered alongside other indicators, data on those entering treatment for cannabis problems can provide information on the nature and scale of high-risk cannabis use in Europe. In 2017, approximately 155 000 people entered drug treatment in Europe for problems related to cannabis use; of those, about 83 000 were entering treatment for the first time in their lives. In the 24 countries with available data, the overall number of first-time entrants for cannabis problems increased by 76 % between 2006 and 2017.

Overall, 47 % of the primary cannabis users entering treatment for the first time in 2017 reported daily use of the drug in the last month, with figures ranging from 10 % or less in Latvia, Hungary and Romania to 68 % or more in Spain, the Netherlands and Turkey.

### Cocaine use: some signs of an increase

Cocaine is the most commonly used illicit stimulant drug in Europe, and its use is more prevalent in southern and western countries. In recent years the use of this drug has been on the increase in Europe. For research and monitoring purposes, people who use cocaine may be categorised in different ways, according to the setting, the product used or the motivation for using. Among regular consumers, a broad distinction can be made between typically more socially integrated users, who sniff powder cocaine (cocaine hydrochloride), and marginalised users, who inject cocaine or smoke crack (cocaine base), sometimes alongside the use of opioids. In many datasets, it is not possible to distinguish between the two forms of cocaine (cocaine powder or crack) and the term cocaine use covers both.

It is estimated that 18.0 million adults in the European Union (aged 15-64), or 5.4 % of this age group, have tried cocaine during their lives. Among these are about 2.6 million young adults aged 15 to 34 (2.1 % of this age group) who have used the drug in the last year.

Six countries, Denmark, Ireland, Spain, France, the Netherlands and the United Kingdom, report last year prevalence of cocaine use among young adults of more than 2.5 % (Figure 2.3). Of the countries that have produced surveys since 2016 and reported confidence



NB: Apart from trends, data are for all treatment entrants with cannabis as primary drug. Trends in first-time entrants are based on 24 countries. Only countries with data for at least 11 of the 12 years are included in the trends graph. Missing values are interpolated from adjacent years. Due to changes in the flow of data at national level, data since 2014 for Italy are not comparable with earlier years. Due to changes to the reporting system, 2017 totals for Germany are estimates based on 2016 data.



Last year prevalence of cocaine use among young adults (15-34): selected trends and most recent data

NB: Age ranges other than 15-34 are reported by Denmark, United Kingdom and Norway (16-34), Sweden (17-34), Germany, France, Greece and Hungary (18-34).

intervals, 3 reported higher estimates and 9 had stable estimates compared with the previous comparable survey.

A statistical analysis of long-term trends in last year use of cocaine among young adults is only possible for a small number of countries, among which there is some evidence of increased use: the annual survey in the United Kingdom reported an increase to 4.7 % after a period of relative stability; the fourth comparable annual survey from the Netherlands confirmed an upward trend, reaching 4.5 %; and in France an upward trend continued, rising above 3 % for the first time. In contrast, Spain continued to report a decline in prevalence, which fell to 2.8 % (Figure 2.3).

A 2018 EMCDDA trendspotter study, analysing multiple data sources, reported that the increase in the availability of higher-purity cocaine on Europe's drug markets may be leading to a resurgence in the use of the drug in some countries. The study also highlighted signs that cocaine is expanding into new markets in eastern Europe, where the drug was previously little used.

Analysis of municipal wastewater for cocaine residues carried out in a multi-city study complements the results from population surveys. Wastewater analysis reports on collective consumption of pure substances within a community, and the results are not directly comparable with prevalence estimates from national population surveys. The results of wastewater analysis are presented in standardised amounts (mass loads) of drug residue per 1 000 population per day. While they may be informative on the volume of cocaine used in a particular location, they do not provide direct information on the number of users.

A 2018 analysis found the highest mass loads of benzoylecgonine — the main metabolite of cocaine — in cities in Belgium, Spain, the Netherlands and the United Kingdom. Very low levels were found in the majority of the eastern European cities studied (see Figure 2.4), but the most recent data show signs of increases. Comparison with data from the previous year shows a picture suggesting generally increasing use. Of the 38 cities that have data for 2017 and 2018, 22 reported an increase, 5 a decrease and 11 a stable situation. Increasing longerterm trends are reported for most of the 13 cities with data for 2011 and 2018.

Cocaine is the most commonly used illicit stimulant drug

### Cocaine residues in wastewater in selected European cities: trends and most recent data



NB: Mean daily amounts of benzoylecgonine in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in each year from 2011 to 2018.

Source: Sewage Analysis Core Group Europe (SCORE).

Data from the European Web Survey on Drugs provide insights into the patterns of cocaine use among different groups and how this may vary between countries. When comparing amounts used across countries, it is important to note that both the price and purity of cocaine on the market will differ between countries and this may have an impact on amounts used. Among respondents who reported using cocaine, the proportion using the drug frequently (on more than 50 days in the last year) ranged from none at all in Czechia to over 10 % in Belgium, Cyprus, France, Italy and Luxembourg (Figure 2.5). Cocaine consumption varied between countries, ranging from an average of 1.3 grams per day of use in Austria, Belgium and France to 3.5 grams in Cyprus. In general, frequent users consumed higher amounts of the drug each day of use compared with less frequent users.

# High-risk cocaine use: recent treatment demand increases in many countries

The prevalence of high-risk cocaine use among adults in Europe is difficult to gauge as only 4 countries have recent estimates. In addition, these estimates are not directly comparable, as they have been generated using different definitions and methodologies. In Spain, a new general population survey used high frequency of use to estimate high-risk cocaine use at 0.3 % among people aged 15-64 in 2017/18. In 2015, based on Severity of Dependence

### FIGURE 2.5

Frequency of cocaine use among participants in a web survey who reported use of the drug in the last year



NB: The survey was carried out in two waves, one in 2016 (Czechia, France, Croatia, Netherlands, United Kingdom) and one in 2017/18 (remaining 10 EU countries).

Source: European Web Survey on Drugs.

Scale questions, Germany estimated high-risk cocaine use among the adult population at 0.2 %. In 2017, using treatment and criminal justice data, Italy estimated that 0.69 % of the adult population could be classified as high-risk cocaine users. In France, a 2017 capturerecapture study estimated the prevalence of high-risk crack cocaine use at 0.07 %.

Spain, Italy and the United Kingdom account for almost three-quarters (73 %) of all reported specialised treatment entries related to cocaine in Europe. Overall, cocaine was cited as the primary drug by around 73 000 clients entering specialised drug treatment in 2017 and by more than 33 000 first-time clients.

After a period of decline, the overall number of cocaine first-time treatment entrants increased by 37 % between 2014 and 2017. While much of this increase is accounted for by Italy and the United Kingdom, a total of 19 countries reported increases during the same period. Overall, the latest European data reveal a lag of 11 years between first cocaine use, on average at the age of 23, and first treatment for cocaine-related problems, on average at the age of 34.

The majority of those entering specialised treatment for problems related to cocaine use are primary powder cocaine users (55 000 or 14 % of all drug clients in 2017). Most primary cocaine clients are seeking treatment for use of the drug on its own (46 % of all powder cocaine clients) or in combination with cannabis (20 %), alcohol (23 %) or other substances (10 %). This group is generally reported to be relatively socially well-integrated, with stable living conditions and regular employment compared to those entering treatment with opioid problems. This is not the case, however, for those entering treatment for primary crack cocaine use (11 000 clients or 3 % of all drug clients in 2017), who appear more marginalised. Most crackrelated treatment demands are reported by the United Kingdom (65 %). Many primary crack cocaine clients report heroin as a secondary problem drug. Since 2014 increases in the number of crack cocaine clients are reported in Belgium, Ireland, France, Italy, Portugal and the United Kingdom.

The use of cocaine in combination with heroin or other opioids is reported by 56 000 clients entering specialised drug treatment in Europe in 2017. This number represents 16 % of all treatment entrants for whom both primary and secondary drug information is available.



NB: Apart from trends, data are for all treatment entrants with cocaine as primary drug. Trends in first-time entrants are based on 24 countries. Only countries with data for at least 11 of the 12 years are included in the trends graph. Missing values are interpolated from adjacent years. Due to changes in the flow of data at national level, data since 2014 for Italy are not comparable with earlier years. Due to changes to the reporting system, 2017 totals for Germany are estimates based on 2016 data.

### COCAINE USERS ENTERING TREATMENT



Last year prevalence of MDMA use among young adults (15-34): selected trends and most recent data

NB: Age ranges other than 15-34 are reported by Denmark, United Kingdom and Norway (16-34), Sweden (17-34), Germany, France, Greece and Hungary (18-34).

### MDMA use: a mixed picture

MDMA (3,4-methylenedioxy-methamphetamine) is used in the form of tablets (often called ecstasy), and also as crystals and powders; tablets are usually swallowed, but crystal and powder forms of MDMA may be taken orally or snorted.

It is estimated that 13.7 million adults in the European Union (aged 15-64), or 4.1 % of this age group, have tried MDMA/ecstasy during their lives. Figures for more recent use among young adults suggest that 2.1 million young adults (15-34) used MDMA in the last year (1.7 % of this age group), with national estimates ranging from 0.2 % in Portugal and Romania to 7.1 % in the Netherlands (Figure 2.6). Prevalence estimates for those aged 15-24 years are higher, with 2.3 % (1.3 million) estimated to have used MDMA in the last year.

Until recently, in many countries, MDMA prevalence had been on the decline from peak levels attained in the early to mid-2000s. In recent years, however, monitoring sources suggest a mixed picture with no clear trends. Among the countries that have produced new surveys since 2016 and reported confidence intervals, 4 reported higher estimates than in the previous comparable survey, 6 reported stable estimates, and 2 reported a lower estimate.

Where data exist for a statistical analysis of trends in last year use of MDMA among young adults, the more recent data show a mixed picture (Figure 2.6). In the United Kingdom, the most recent data show prevalence of use has bounced back after falls in 2015 and 2016 that in turn reversed the increase seen between 2012 and 2014. In Spain, the long-term trend remains downward, although recent values are stable. The most recent data show a continued upward trend in Bulgaria. Data from the 2017 survey in the Netherlands confirm the high levels reported in the previous three annual surveys.



### mg/1000 population/day Amsterdam 60 Helsink 40 Brussels enhage Amsterda Dresder Paris Budweis Piestany Innsbruck Bordeau; Zagreb Milan LiubÌ Lisbon Barcelona 2011 2012 2013 2014 2015 2016 2017 2018 Valencia Berlin Lisbon Barcelona Helsinki Athens **6** 50 Limas Zagreb Paris Brussels Milan mg/1000 population/day 10 25 50

### MDMA residues in wastewater in selected European cities: trends and most recent data

NB: Mean daily amounts of MDMA in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in each year from 2011 to 2018.

Source: Sewage Analysis Core Group Europe (SCORE).

A 2018 multi-city analysis found the highest mass loads of MDMA in the wastewater in cities in Belgium, Germany and the Netherlands (Figure 2.7). Of the 37 cities that have data for 2017 and 2018, 21 reported an increase, 9 a stable situation and 7 a decrease. Looking at longer-term trends, in most cities with data for both 2011 and 2018 (10 cities), wastewater MDMA loads were higher in 2018 than in 2011. In 2017, the sharp increases observed over the 2011-16 period appeared to be stabilising. However, the most recent data in 2018 point to increases in most cities.

MDMA is often taken alongside other substances, including alcohol. Current indications suggest that, in higher-prevalence countries, MDMA is no longer a niche or subcultural drug limited to dance clubs and parties, but is used by a broad range of young people in mainstream nightlife settings, including bars and house parties. The European Web Survey on Drugs found that among people who had used MDMA in the previous year, the proportion reporting frequent use (more than 50 days in the past year) ranged from none at all in Cyprus to around 8 % in Austria and Croatia. MDMA use is rarely cited as a reason for entering specialised drug treatment. In 2017, MDMA was reported by less than 1 % (around 1 700 cases) of treatment entrants in Europe, with France, Hungary, United Kingdom and Turkey accounting for 68 % of these.

MDMA is often taken alongside other substances, including alcohol

### Drug samples tested by drug checking services between January and July 2018

Number of substances submitted for testing Detected substances and most common adulterants (% of all samples tested for adulteration)



NB: Adulterants refer only to substances that possess active pharmacological properties. Inactive compounds are not considered as adulterants. Source: Data were provided by drug checking services in Austria (Checkit), Belgium (Modus Vivendi), Italy (Neutravel), Luxembourg (PiPaPo), Portugal (Kosmicare and Checkin), Slovenia (DrogArt) and Spain (Energy Control and Ai Laket).

# Monitoring drug use in recreational settings: innovative methods

Studies consistently find that drug use is more commonly reported in surveys carried out in nightlife settings (like clubs, bars or music festivals) than among the general population. New means of monitoring drug use in recreational settings have emerged that do not rely solely on self-reported survey data, but utilise the chemical analysis of samples from a range of sources: biological samples such as breath, urine and hair samples; the content of drug amnesty bins; and the drugs submitted to drug checking facilities.

Results are available from 3 044 analyses of drug samples submitted by users to 9 drug checking services operating in 7 EU Member States, performed between January and July 2018 and compiled by the Trans-European Drug Information network (TEDI). About half of the samples were tested at music events and about half were tested in drop-in centres. There were twice as many cocaine samples submitted in drop-in centres, mostly in Spain, than at music events.

Overall, MDMA (tablet and powder forms), cocaine and amphetamine were the three drugs most frequently

submitted for testing, although there was variation between countries. Amphetamine was rarely submitted for testing in Belgium and Portugal, but represented more than 25 % of the samples submitted in Italy and Austria. New psychoactive substances, mostly synthetic cathinones, represented only 3 % of all drugs submitted for testing, although some such as 4-CMC and 4-CEC (synthetic cathinones) were occasionally found as adulterants in samples submitted as MDMA (Figure 2.8).

Data on drug purity obtained from 8 drug checking services during the first half of 2018 confirm recent reports on the increased availability of high-purity MDMA and cocaine observed in drug markets in western Europe. The highest average dosage of MDMA in tablets tested in drug checking services was reported from Belgium (182 mg). Five services reported individual tablets containing high amounts of MDMA (more than 250 mg). Overall, samples presented to the services as MDMA were unlikely to contain any unexpected active component, with adulterated MDMA powder or tablets representing less than 10 % of all MDMA samples tested. Caffeine was the most common adulterant in these samples. Despite the high average purity levels of cocaine (73%), samples presented as cocaine were frequently adulterated with potentially harmful substances such as levamisole and



### Last year prevalence of amphetamines use among young adults (15-34): selected trends and most recent data

NB: Age ranges other than 15-34 are reported by Denmark, United Kingdom and Norway (16-34), Sweden (17-34), Germany, France, Greece and Hungary (18-34).

phenacetin, as well as local anaesthetics such as lidocaine and tetracaine. Among all substances tested at drug checking services, samples presented as amphetamine were the most adulterated, with an average purity of 34 %, and often containing high levels of caffeine.

### Amphetamines: variation in use but stable trends

Amphetamine and methamphetamine, two closely related stimulants, are both consumed in Europe, although amphetamine is much more commonly used. Methamphetamine consumption has historically been restricted to Czechia and, more recently, Slovakia, although recent years have seen increases in use in other countries. In some datasets, it is not possible to distinguish between these two substances; in these cases, the generic term amphetamines is used.

Both drugs can be taken orally or nasally; in addition, use by injection constitutes a significant part of the drug problem in some countries. Methamphetamine can also be smoked, but this route of administration is not commonly reported in Europe.

It is estimated that 12.4 million adults in the European Union (aged 15-64), or 3.7 % of this age group, have tried amphetamines during their lives. Figures for recent use among young adults (aged 15-34) suggest that 1.3 million (1.0 %) used amphetamines during the last year, with the most recent national prevalence estimates ranging from nought in Portugal to 3.9 % in the Netherlands (Figure 2.9). The available data suggest that since the start of the century, most European countries have experienced a relatively stable situation in amphetamines use. Of the countries that have produced new surveys since 2016 and reported confidence intervals, none reported higher estimates, 8 reported a stable trend and 3 reported lower estimates than in the previous comparable survey.

A statistical analysis of trends in last year prevalence of use of amphetamines in young adults is only possible in a small number of countries. Long-term downward trends are observable in Denmark, Spain and the United Kingdom (Figure 2.9). The fourth comparable survey from the Netherlands suggests an upward trend.

### Amphetamine residues in wastewater in selected European cities: trends and most recent data



NB: Mean daily amounts of amphetamine in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in each year from 2011 to 2018.

Source: Sewage Analysis Core Group Europe (SCORE).

Analysis of municipal wastewater carried out in 2018 found that mass loads of amphetamine varied considerably across Europe, with the highest levels reported in cities in the north and east of Europe (Figure 2.10). Amphetamine was found at much lower levels in cities in the south of Europe.

Of the 38 cities that have data for 2017 and 2018, 21 reported an increase, 7 a stable situation and 10 a decrease. Overall, the data from cities with data from 2011 to 2018 showed a diverse picture, but with relatively stable trends in most cities for amphetamine.

Methamphetamine use, generally low and historically concentrated in Czechia and Slovakia, now appears to be present also in Cyprus, the east of Germany, Spain and northern Europe (Figure 2.11). In 2017 and 2018, of the 40 cities that have data on methamphetamine in wastewater, 5 reported an increase, 20 a stable situation and 15 a decrease.

# High-risk amphetamines use: high treatment demand

Problems related to long-term, chronic and injecting amphetamine use have, historically, been most evident in northern European countries. In contrast, methamphetamine problems have been most apparent in Czechia and Slovakia. A 2015 estimate for Germany reported 0.19 % or 102 000 adult high-risk amphetamines users. Users of amphetamines are likely to make up the majority of the estimated 2 234 (0.18 %) high-risk stimulant users reported by Latvia in 2017, down from 6 540 (0.46 %) in 2010. In Czechia, high-risk methamphetamine use among adults (15-64) was estimated at around 0.50 % in 2017 (corresponding to 34 700 users). This represents an increase from 20 900 users in 2007, though numbers have been relatively stable in recent years. The estimate for Cyprus was 0.03 % or 176 users in 2017.

Approximately 30 000 clients entering specialised drug treatment in Europe in 2017 reported amphetamines as their primary drug, of whom about 12 000 were first-time clients. Primary amphetamine users account for 15 % or more of first-time treatment entrants in Germany, Latvia, Poland and Finland, and an increasing trend has been observed in Germany since 2009. Treatment entrants reporting primary methamphetamine use are concentrated in Czechia, Slovakia, Poland and Turkey, which together



### Methamphetamine residues in wastewater in selected European cities: trends and most recent data

NB: Mean daily amounts of methamphetamine in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in each year from 2011 to 2018.

Source: Sewage Analysis Core Group Europe (SCORE).

account for 88 % of the 5 000 methamphetamine clients entering specialised treatment in Europe. Amphetamines are the drugs with the smallest gender gap, though women still represent only about one-quarter (26 %) of

amphetamine clients. Considering route of administration,

14 % of all entrants reported oral consumption of amphetamines, 65 % reported sniffing and 9 % reported injecting.

### AMPHETAMINES USERS ENTERING TREATMENT



NB: Apart from the map, data are for all treatment entrants with amphetamines as primary drug. Data for Germany, Sweden and Norway relate to clients citing a stimulant other than cocaine as primary drug.

# Ketamine, GHB and hallucinogens: use remains low

A number of other substances with hallucinogenic, anaesthetic, dissociative or depressant properties are used in Europe: these include LSD (lysergic acid diethylamide), hallucinogenic mushrooms, ketamine and GHB (gammahydroxybutyrate).

The recreational use of ketamine and GHB (including its precursor GBL, gamma-butyrolactone) has been reported among subgroups of drug users in Europe for the last two decades. National estimates, where they exist, of the prevalence of GHB and ketamine use in adult and school populations remain low. In their 2017 survey, Norway reported last year prevalence of GHB use at 0.1 % for adults (16-64). In 2017, last year prevalence of ketamine use among young adults (16-34) was estimated at 0.6 % in Denmark and 1.7 % in the United Kingdom.

The overall prevalence levels of LSD and hallucinogenic mushroom use in Europe have been generally low and stable for a number of years. Among young adults (15-34), national surveys report last year prevalence estimates of less than 1 % for both substances in 2017 or most recent survey year, with the exception of Finland (1.9 %) and the Netherlands (1.6 %) for hallucinogenic mushrooms, and Norway (1.1 %) and Finland (1.3 %) for LSD.

# New psychoactive substances: low use and decreasing treatment demands

Since 2011, more than half of the European countries have reported national estimates of the use of new psychoactive substances (not including ketamine and GHB) in their general population surveys, although differences in methods and survey questions limit comparisons between countries. Among young adults (aged 15-34), last year prevalence of use of these substances ranged from 0.1 % in Norway to 3.2 % in the most recent findings from the Netherlands, in 2016, with 4-fluoroamphetamine (4FA) being the most commonly used. Survey data on the use of mephedrone are available for the United Kingdom (England and Wales). In the most recent survey (2017), last year use of this drug among 16- to 34-year-olds was estimated at 0.2 %, down from 1.1 % in 2014/15. In their most recent surveys, last year estimates of the use of synthetic cannabinoids among 15- to 34-year-olds ranged from 0.1 % in the Netherlands to 1.5 % in Latvia.

While consumption levels of new psychoactive substances are low overall in Europe, in a 2016 EMCDDA study over two-thirds of countries reported that their use by high-risk drug users resulted in health concerns. In particular, the use of synthetic cathinones by opioid and stimulant injectors has been linked to health and social problems. In addition, the smoking of synthetic cannabinoids in marginalised populations, including among homeless people and prisoners, has been identified as a problem in a number of European countries.

Overall, few people currently enter treatment in Europe for problems associated with use of new psychoactive substances. For some countries, however, these substances are significant. In the most recent data, the use of synthetic cannabinoids was reported as the main reason for entering specialised drug treatment for 19 % of clients in Turkey and for 6 % in Hungary. Problems related to the primary use of synthetic cathinones were cited by 0.2 % of treatment entrants in the United Kingdom. All three countries, however, have reported a recent decrease in treatment entries related to new psychoactive substances in the most recent data.





# National estimates of annual prevalence rate of high-risk opioid use: selected trends and most recent data



# High-risk opioid use: first-time heroin presentations decrease in most countries

In Europe, the most commonly used illicit opioid is heroin, which may be smoked, snorted or injected. A range of synthetic opioids such as methadone, buprenorphine and fentanyl are also misused.

Europe has experienced different waves of heroin addiction, the first affecting many western countries from the mid-1970s and a second wave affecting other countries, especially those in central and eastern Europe, in the mid to late 1990s. In recent years, the existence of an ageing cohort of high-risk opioid users, who are likely to have been in regular or sporadic contact with substitution treatment and other services, has been identified.

The prevalence of high-risk opioid use among adults (15-64) is estimated at 0.4 % of the EU population, the equivalent of 1.3 million high-risk opioid users in 2017. At national level, prevalence estimates of high-risk opioid use range from less than 1 to more than 8 cases per 1 000 population aged 15-64. The five most populous countries in the European Union, accounting for 62 % of its population, contain three-quarters (77 %) of its estimated

number of high-risk opioid users (Germany, Spain, France, Italy, United Kingdom). Of the 12 countries with regular estimates of high-risk opioid use between 2008 and 2017, Greece, Malta, Slovenia and Spain show a statistically significant decrease while Czechia and Ireland (up to 2014) show a statistically significant increase (Figure 2.12). In 2017, use of opioids was reported as the main reason for entering specialised drug treatment by 171 000 clients or 35 % of all those entering drug treatment in Europe. Of these, 32 000 were first-time entrants. Primary heroin users accounted for 78 % (20 500 clients) of first-time primary opioid users entering treatment, a drop of 4 700 clients or 17 % compared with the previous year.

According to available trend data, the number of first-time heroin clients more than halved from a peak in 2007, to a low point in 2013 before stabilising in recent years. Between 2016 and 2017, the number of first-time treatment entrants for primary heroin use decreased in 16 countries out of the 27 with available data.

# Synthetic opioids: diverse substances seen across Europe

While heroin remains the most commonly used illicit opioid, a number of sources suggest that licit synthetic opioids (such as methadone, buprenorphine and fentanyl) are increasingly misused. Opioids other than heroin reported by treatment entrants include misused methadone, buprenorphine, fentanyl, codeine, morphine, tramadol and oxycodone. Such opioids now account for 22 % of all primary opioid clients and in some countries, non-heroin opioids represent the most common form of opioid use among specialised treatment entrants. In 2017, 19 European countries reported that more than 10 % of all opioid clients entering specialised services presented for problems primarily related to opioids other than heroin (Figure 2.13). In Estonia, the majority of treatment entrants reporting an opioid as their primary drug were using fentanyl, while buprenorphine was the most cited primary opioid among treatment entrants in Finland. Buprenorphine misuse is reported by around 22 % of opioid clients in Czechia and the misuse of methadone by 33 % of opioid clients in Germany and 19 % in Denmark. In Cyprus and Poland, between 20 % and 50 % of opioid clients enter treatment for problems related to the use of other opioids, such as oxycodone (Cyprus) and 'kompot' heroin made from poppy straw (Poland). In addition, those entering treatment for problems relating to new psychoactive substances with opioid-like effects may be reported under the general heading of opioids.

### HEROIN USERS ENTERING TREATMENT



NB: Apart from trends, data are for all treatment entrants with heroin as primary drug. Data for Germany are for entrants with 'opioids' as primary drug. Trends in first-time entrants are based on 24 countries. Only countries with data for at least 11 of the 12 years are included in the trends graph. Missing values are interpolated from adjacent years. Due to changes in the flow of data at national level, data since 2014 for Italy are not comparable with earlier years. Due to changes to the reporting system, 2017 totals for Germany are estimates based on 2016 data.



Treatment entrants citing opioids as primary drug: by type of opioid (left) and percentage reporting opioids other than heroin (right)

# Percent < 10 10-24 25-50 > 50 No data

# Injecting drug use continues to decline among new heroin clients

Injecting drug use is most commonly associated with opioids, although in a few countries, the injection of stimulants such as amphetamines or cocaine is also common.

Only 16 countries have estimates of the prevalence of injecting drug use since 2012, where they range from less than 1 to more than 10 cases per 1 000 population aged 15-64. In most of these countries, the main injected drug can be identified clearly, though in some countries two drugs have similar high levels of use. Opioids are reported as a main injected drug in the majority (14) of the countries (see Figure 2.14). Heroin is mentioned in 12 of these countries, while buprenorphine is named in Finland and fentanyl in Estonia. Stimulants are reported as a main injected drug in 4 countries, where the substances used include synthetic cathinones (Hungary), cocaine (France), amphetamine (Latvia) and methamphetamine (Czechia).

Injecting drug use is most commonly associated with opioids

Injecting drug use: most recent estimates of prevalence of injecting any drug in the last year and main drug injected



Among first-time clients entering specialised drug treatment in 2017 with heroin as their primary drug, 25 % reported injecting as their main route of administration, down from 43 % in 2006. In this group, levels of injecting vary between countries, from 8 % in Spain to 90 % or more in Latvia. Injecting is reported as the main route of administration by less than 1 % of first-time cocaine clients and 9 % of first-time primary amphetamines clients. The overall picture for amphetamines, however, is influenced by Czechia, which accounts for more than 50 % of new amphetamines clients injecting the drug in Europe. Considering the three main injected drugs together, among first-time entrants to treatment in Europe, injecting as the main route of administration has declined from 26 % in 2006 to 11 % in 2017 (Figure 2.15).

The injection of synthetic cathinones, although not a widespread phenomenon, continues to be reported in specific populations, including opioid injectors and drug treatment clients in some countries and among needle exchange clients in Hungary. In a recent EMCDDA study, 10 countries reported synthetic cathinone injection often with other stimulants and GHB. This is most usually reported in the context of sex parties among men who have sex with men.

### FIGURE 2.15





NB: Trends are based on the 21 countries with data for at least 9 of the 11 years.

### Drug residues in used syringes in selected European cities



NB: Circle area is proportional to percentage of syringes in each location in which substance was detected. More than one substance may be detected in a single syringe. Study conducted in 2017

Source: European Syringe Collection and Analysis Project Enterprise (ESCAPE) network.

### Insights from syringe residue data: stimulant drugs commonly found

Data from drug treatment and high-risk drug use estimates can be complemented by findings from the European Syringe Collection and Analysis Project Enterprise (ESCAPE) network, which collates information on injected substances by analysing the residual content of used syringes. The syringes were collected from the bins of street automatic injection kit dispensers and at harmreduction services in a network of five sentinel EU cities in 2017: Amsterdam, Budapest, Glasgow, Helsinki and Paris. The contents of 1 288 used syringes were tested in five laboratories.

The results suggest that the substances injected vary between and within cities (Figure 2.16). A high proportion of the syringes in all five cities contained stimulants, with cocaine, amphetamines and synthetic cathinones often found. Half of the syringes tested contained two or more drugs; the most frequent combination being a mix of stimulant and opioid. Where benzodiazepines were found, they were often in syringes with opioids.

Half of the syringes tested contained two or more drugs

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# 3

Chronic and acute health problems are associated with the use of illicit drugs

# Drug-related harms and responses

The use of illicit drugs is a recognised contributor to the global burden of disease. Chronic and acute health problems are associated with the use of illicit drugs, and these are compounded by various factors including properties of the substances, the route of administration, individual vulnerability and the social context in which drugs are consumed. Chronic problems include dependence and drug-related infectious disease, while there is a range of acute harms, with drug overdose the best documented of these. Although relatively rare, the use of opioids still accounts for much of the morbidity and mortality associated with drug use. Injecting drug use increases risks. In comparison, although the health problems associated with cannabis use are clearly lower, the high prevalence of use of this drug may have implications for public health. The variation in content and purity of substances now available to users increases potential harms and creates a challenging environment for drugrelated responses.

### Monitoring drug-related harms and responses

Information on health and social responses to drug use, including drug strategies and drug-related public expenditure, are provided to the EMCDDA by Reitox national focal points and expert working groups. Expert ratings provide supplementary information on the availability of interventions where more formalised datasets are unavailable. This chapter is also informed by reviews of the scientific evidence on the effectiveness of public health interventions. Supporting information can be found on the EMCDDA website in the *Health and social responses to drug problems: a European guide* and associated online material, and the *Best practice portal*.

Drug-related infectious diseases and mortality and morbidity associated with drug use are the principal health harms monitored systematically by the EMCDDA. These are complemented by more limited data on acute drug-related hospital presentations and data from the EU Early Warning System, which monitors harms associated with new psychoactive substances. Further information is available online under *Key epidemiological indicators*, the Statistical Bulletin and *Action on new drugs*. The design and delivery of effective evidence-based responses to drug problems is a central focus for European drug policies and involves a range of measures. Prevention and early intervention approaches aim to prevent drug use and related problems, while treatment, including both psychosocial and pharmacological approaches, represents the primary response to dependence. Some core interventions, such as opioid substitution treatment and needle and syringe programmes, were developed in part as a response to injecting opioid use and related problems, particularly the spread of infectious diseases and overdose deaths. As drug problems change new approaches need to be developed and evaluated, some of which are discussed below.

### Drug strategies: approaches to evaluation

Nearly half of the 30 countries monitored by the EMCDDA now have national drug strategies that include different combinations of substance-based and behavioural addiction issues alongside illicit drugs. These planning tools are used by governments to elaborate their overall approach and specific responses to the different health, social and security dimensions of drug problems. While Denmark's national drug policy is expressed in a range of strategic documents, legislation and concrete actions, all other countries have a national drug strategy document. In 14 countries, the policy focus is broader, also giving consideration to other addictive substances and behaviours (see Figure 3.1). However, within the United Kingdom, the devolved administrations of Scotland, Wales and Northern Ireland have broad strategy documents. When these three documents are included, the total number of broad illicit drug strategies increases to 17. These documents generally focus on illicit drugs, and there is variation in how other substances and addictions are considered. All documents address alcohol, 10 consider tobacco, 9 cover medicines, 8 also include other addictive behaviours, such as gambling. Whatever the focus, all national drug strategies explicitly endorse the balanced approach to drug policy put forward in the EU drug strategy (2013-20) and action plan (2017-20), which emphasises the importance of both drug demand reduction and drug supply reduction. This extended strategy scope brings with it the possibility of achieving a more integrated public health approach, but also challenges in terms of coordinating implementation, monitoring and evaluation.

### FIGURE 3.1

Focus of national drug strategy documents (left) and approaches to evaluation (right) in 2018



NB: Strategies with broader focus may include, for example, licit drugs and other addictions. While the United Kingdom has an illicit drug strategy, Scotland, Wales and Northern Ireland have broad strategy documents which include alcohol.

All European countries evaluate their national drug strategies, though they do so through a range of different approaches. Evaluations generally aim to assess the level of strategy implementation achieved and changes in the overall drug situation over time. In 2018, 13 multi-criteria evaluations, 9 implementation progress reviews and 3 issue-specific evaluations were reported as having recently taken place, while 5 countries used other approaches, such as a mix of indicator assessments and research projects (see Figure 3.1). The trend towards the use of broadly focused strategies is gradually being mirrored by the use of evaluations with an equally broader focus. Currently, France, Luxembourg, Sweden and Norway have published evaluations of broadly focused strategies.

# Substance use prevention: environmental approaches

The prevention of drug use and drug-related problems among young people is a key objective in European national drug strategies and covers a wide range of approaches. Environmental and universal approaches target entire populations, selective prevention targets vulnerable groups who may be at greater risk of developing drug use problems and indicated prevention focuses on atrisk individuals.

The 'Icelandic model' of prevention, which involves the consistent application of a combination of effective prevention principles at population level, has recently received much international attention. The approach includes supervised after-school leisure time with universal access to sport and cultural activities for youth, alongside parental monitoring and curfew hours for under-18-year-olds. In Europe, the Icelandic model has been implemented in some municipalities in Spain, the Netherlands and Romania. Further evaluation will be needed to clarify whether the significant decline in substance use observed in Iceland during the last decade, which mirrors adolescent substance use decline in some other European countries, is linked primarily to the country's prevention strategy and its alcohol policy, or whether other factors are important.

The lcelandic model is based on an environmental prevention approach that posits the idea that it is possible to change unwanted behaviour by altering the physical, economic and regulatory aspects of the environment that provide or reduce opportunities for the behaviour to occur. This in turn can lead to a decrease in their acceptability, normality and visibility. Measures can include regulating the availability and pricing of substances, reducing alcohol serving sizes and reducing outlet density.

Environmental prevention principles are also central to the Good Behaviour Game, a manual-based programme for primary school children, which has been shown in some research studies to have beneficial effects. It is intended to reduce risk behaviours by using behavioural incentives at the group level to reinforce positive norms and rules. At a broader level, the changed status and reduction in cigarette smoking in many EU countries is arguably an example of an environmental prevention approach in practice.

Professional training does appear to be important for the successful introduction of prevention approaches. A recent initiative has seen the launch of a European Universal Prevention Curriculum, based on evidence and international standards, for regional or local decision and opinion-makers. In 2018, the curriculum was being implemented at some level in one-third of EU Member States.

All European countries evaluate their national drug strategies

Spectrum of m-health apps based on their primary objectives



### Responding to drug use: new technologies

Interventions for drug prevention and treatment are constantly evolving, and the use of novel digital solutions including the use of computer-based technologies is increasing. Digital interventions ('apps') may use a range of devices, from desktop computers to mobile devices, and increasingly smartphones. These mobile or m-health apps are used for a wide range of purposes, including drug prevention, harm-reduction, digital outreach within social media platforms, patient monitoring and supervision, and treatment delivery (Figure 3.2). Some apps provide practical assistance, including drug glossaries, information and advice. An innovative example is the use of geolocation to help people who inject drugs find needle and syringe exchange points. Others are based on effective prevention techniques such as social norms approaches, and challenging misperceptions around peer drug use. Although there are now many m-health apps available to the public, a recent EMCDDA study found that few had been scientifically evaluated, quality standards were lacking and there were concerns around data protection.

The application of virtual reality technology is also being investigated as a medium for providing exposure therapy. Using virtual reality headsets, realistic and immersive drug-related environments are created that induce cravings, and patients are trained in techniques to address these.

### Drug treatment: outpatient services dominate

Drug treatment remains the primary intervention utilised for individuals who experience problems with their drug use, including dependence. Ensuring good access to appropriate treatment services is therefore a key policy objective.

The majority of drug treatment in Europe is provided in outpatient settings, with specialised treatment centres representing the largest provider in terms of number of drug users treated (Figure 3.3). Low-threshold agencies are the second largest providers followed by primary healthcare and general mental healthcare centres. This last category includes general practitioners' surgeries, which are important prescribers of opioid substitution treatment in some large countries such as France and Germany. Elsewhere, for example in Poland and Slovenia, outpatient mental healthcare centres play a role in treatment provision.

A smaller share of drug treatment in Europe is provided in inpatient settings, mainly hospital-based residential centres (e.g. psychiatric hospitals), but also therapeutic communities and specialised residential treatment centres. The relative importance of outpatient and inpatient provision within national treatment systems varies greatly between countries.

# Accessing drug treatment: self-referral is most common route

An estimated 1.2 million people received treatment for illicit drug use in the European Union during 2017 (1.5 million including Norway and Turkey). Self-referral continues to be the most common route into specialised drug treatment. It can include referral by family members or friends and accounted for more than half (54 %) of those entering specialised drug treatment in Europe in 2017. About 17 % of clients were referred by the criminal justice system, while 15 % were referred by health, education and social services, including other drug

The majority of drug treatment in Europe is provided in outpatient settings

Numbers of clients receiving drug treatment in Europe in 2017, by setting

### Outpatient



treatment centres. In a number of countries, schemes are in place to divert drug offenders away from the criminal justice system and into drug treatment programmes. This may involve a court order to attend treatment or a suspended sentence conditional on treatment.

In 2017, among countries with more than 100 people referred to treatment through the criminal justice system, the share of clients entering treatment by this route ranges from less than 5 % in Czechia, Greece, the Netherlands and Poland to about 70 % in Hungary. Overall, primary cannabis users are the most likely to be referred to treatment by the criminal justice system while primary opioid users are the least likely.

### FIGURE 3.4

# Trends in percentage of clients entering specialised drug treatment, by primary drug



Client pathways through drug treatment are often characterised by the use of different services, multiple entries and varying lengths of stay. Opioid users represent the largest group entering and undergoing specialised treatment and consume the greatest share of available treatment resources, mainly in the form of substitution treatment. Cannabis and cocaine users are the second and third largest groups entering treatment services (Figure 3.4). The services offered for these clients are often more diverse but usually based around some form of psychosocial intervention. An insight into treatment journeys is provided by results from an analysis of specialised treatment data from 10 European countries between 2014 and 2017. Of the 300 000 clients reported in treatment in these countries, over half had been in continuous treatment for more than 1 year, many of whom had problems related to the use of opioids, particularly heroin. The remainder entered treatment in that year. Of these, 16 % entered treatment for the first time in their life, while 28 % re-entered treatment, having received treatment in an earlier year. These data reflect the reoccurring and long-term nature of many drug-related disorders.



Coverage of opioid substitution treatment (percentage of estimated high-risk opioid users receiving the intervention) in 2017 or most recent year and in 2007/8

NB: Data displayed as point estimates and uncertainty intervals

# Opioid substitution treatment: varying coverage levels

Substitution treatment, often combined with psychosocial interventions, is the most common treatment for opioid dependence. The available evidence supports this approach, with positive outcomes found in respect to treatment retention, illicit opioid use, reported risk behaviour, drug-related harms and mortality.

An estimated 654 000 opioid users received substitution treatment in the European Union in 2017 (662 000 including Norway). Following a continuous decline between 2010 and 2015, the 2017 EU total represents a 4 % increase on the previous year. Between 2015 and 2017, increases were observed in 17 countries, including Sweden (21 %), Romania (21 %) and Italy (16 %), while recent declines were reported for 9 countries including Lithuania (18 %) and Cyprus (17 %).

A comparison with current estimates of the number of high-risk opioid users in Europe would suggest that overall about half receive substitution treatment, but there are differences in coverage between countries (Figure 3.5) and some remain below recommended levels. Overall, considering those countries where data from 2007 or 2008 are available for comparison, there was generally an increase in coverage. Methadone is the most commonly prescribed opioid substitution drug, received by almost two-thirds (63 %) of substitution clients in Europe. A further 34 % are treated with medications based on buprenorphine, which is the principal medicine used for substitution treatment in 8 countries (Figure 3.6). Other substances, such as slow-release morphine or diacetylmorphine (heroin), are more rarely prescribed, being received by an estimated 3 % of substitution clients in Europe. The European substitution client cohort is ageing, with the majority of clients now being over 40 years old and typically receiving treatment for more than 2 years. Alternative treatment options for opioid users are available in all European countries but less commonly used. In the 11 countries for which data are available, between 2 % and 17 % of all opioid users in treatment receive interventions not involving opioid substitution.



### Proportion of clients receiving different types of prescribed opioid substitution medication in European countries

NB: In the Netherlands, about 10 % of clients receiving methadone are also prescribed diacetylmorphine. In Finland, buprenorphine includes the medication alone or combined with naloxone. United Kingdom data are for Wales only.

### CLIENTS IN OPIOID SUBSTITUTION TREATMENT



NB: Only countries with data for at least 8 of the 11 years are included in the trends graph. Missing data are interpolated from adjacent years.

# Responding to drug problems: expenditure and implementation mechanisms

Understanding the costs of drug-related actions is important for both policy development and policy evaluation. However, the information available on drugrelated public expenditure in Europe, at both local and national level, remains sparse and heterogeneous. In the past decade, 26 countries have produced estimates of drug-related public expenditure. The estimates vary in scope and range from 0.01 % to 0.5 % of gross domestic product (GDP), with about half of the estimates falling between 0.05 % and 0.2 % of GDP.

Between 2006 and 2017, 19 countries produced an estimate of spending on demand reduction initiatives as a share of overall drug-related expenditure. These vary substantially between countries, with estimates ranging from 8 % to 80 % (Figure 3.7). Where it is known, expenditure on drug treatment accounts for a large share of estimated demand reduction expenditure.

Successful programme implementation requires a focus on, among other things, costs, standards and training. Analysis of the cost-effectiveness of drug treatment interventions can help optimise the allocation of financial resources. Despite the outpatient and prescription costs associated with pharmacotherapy for opioid dependence, it results in lower total health costs. This is due to those receiving this treatment making less frequent use of high-cost services such as emergency and inpatient care.

A recent EMCDDA survey found that at least 80 % of the reporting countries published some type of guidelines to support the implementation of demand reduction practices, and 60 % report the use of quality standards. Accreditation systems linking the authorisation of service provision under publicly funded schemes to the implementation of quality standards are reported by 70 % of the countries. In addition, most of the countries report the availability of training for professionals (80 %). Less commonly reported are registries or inventories of evidence-based or best practice programmes but these do exist in a quarter of the countries. Positively, compared to previous years, there has been a substantial increase in the proportion of countries that now report that they have published guidelines and standards for interventions and have set up some kind of accreditation systems for service provision. Overall, it appears that the training opportunities for professionals working in the drugs field are increasing, although it is widely recognised as an area in which further investment would be beneficial.

Drug-related public expenditure: estimated breakdown between demand reduction and supply reduction




Top 25 drugs recorded in emergency presentations in sentinel hospitals in 2017 (left) and frequencies of cocaine and amphetamines presentations (percentage of presentations), aggregated by country (right)



NB: Results of 7 267 presentations in 26 Euro-Den Plus (sentinel) hospitals in 18 European countries. Source: European Drug Emergencies Network (Euro-DEN Plus).

# Acute drug-related harms: cocaine increases and heroin decreases

Hospital emergency data can provide an insight into acute drug-related harms and the public health impact of the use of drugs in Europe. Drug-related acute toxicity presentations to 26 (sentinel) hospitals in 18 European countries are monitored by the European Drug Emergencies Network (Euro-DEN Plus). In 2017, the hospitals recorded 7 267 presentations, most of whom were male (76 %). Almost three-quarters of the presentations were brought to hospital by ambulance, with the majority (78 %) discharged within 12 hours. A small minority needed, however, to be admitted to critical care (6 %) or to a psychiatric ward (4 %). Among the sample, 30 in-hospital deaths were recorded, of which 17 involved opioids.

Cocaine was the drug most commonly involved in presentations in 2017, followed by heroin and cannabis (Figure 3.8). Almost a quarter of presentations involved the misuse of prescription or over-the-counter drugs (most commonly benzodiazepines and opioids), over 10 % were related to GHB/GBL, and 4 % involved new psychoactive substances. Differences in the drugs involved in emergency presentations between sites appear to reflect variations in hospital catchment area and local patterns of use. For example, emergencies involving amphetamines were most common in the north and east of Europe, whereas presentations related to cocaine were predominant in the south and west of Europe. The overall trend for the 15 centres that have reported data for 2014-17 shows a decrease in the number of presentations related to heroin and an increase for cocaine powder and crack cocaine (Figure 3.9). During the same period, there was an overall decrease in presentations related to synthetic cathinones and an increase related to synthetic cannabinoids.

Only a small number of countries monitor acute drug emergencies at the national level. Among these, Czechia, Denmark, Lithuania and Slovenia reported a decreasing trend in heroin-related emergencies. Between 2013 and 2017, Denmark reported an increase in intoxications related to opioids other than heroin and methadone and a doubling in the number of cocaine-related intoxications. In Spain, cocaine was involved in almost half of the reported drug-related emergencies in 2016, while sentinel regional reporting in the Netherlands noted a decline in emergencies related to MDMA and the stimulant 4-fluoroamphetamine (4-FA) at first aid posts between 2016 and 2017. Almost a third of drug-related ambulance call outs in the Netherlands were linked to the use of GHB.

#### Cocaine and crack: health responses

Interventions are available to treat people who use cocaine and crack. In Europe these measures tend to focus on psychosocial interventions, including cognitive behavioural therapy, motivational interviewing, brief interventions, contingency management and symptomatic pharmacological treatment. Other treatment options currently being explored include the use of stimulant medications, like modafinil and lisdexamfetamine, to reduce craving and withdrawal symptoms, and a cocaine vaccine to reduce the euphoric and rewarding effects of cocaine.

Currently, the evidence base for what constitutes effective treatment options for cocaine-related problems remains relatively weak, and this is an area in which more research and development is needed. Correspondingly, there is limited availability of specialised programmes that specifically target cocaine users in Europe. However, in response to increases in the numbers seeking treatment for cocaine-related problems, some countries report the development of tailored interventions. These include programmes combining community reinforcement approaches with contingency management (Belgium) and adapting opening hours to fit the needs of cocaine clients (Luxembourg, Austria).

#### FIGURE 3.9

## Trends in the number of presentations to sentinel hospitals related to selected drugs



NB: Data from the 15 Euro-Den Plus sentinel hospitals reporting in each year from 2014 to 2107. Source: Euro-Den Plus.

Harm reduction interventions for cocaine and crack users, targeting health risks related to cocaine injection or crack smoking and risky sexual behaviours, are also available in some countries. These include supervised drug consumption rooms in Denmark, Germany, France, Luxembourg and the Netherlands, and provision of crack cocaine kits (pipes and filters in France and Portugal). Drug checking services exist in some EU countries, and these are intended to reduce the risks associated with high-purity or adulterated cocaine.

#### Joint investigations and risk assessment

In 2017, the risks posed by 9 new psychoactive substances, including 5 fentanyl derivatives (acryloylfentanyl, furanylfentanyl, 4-fluoroisobutrylfentanyl, tetrahydrofuranylfentanyl and carfentanil), were formally risk-assessed by the Scientific Committee of the EMCDDA. They have since been controlled at international level under the terms of the 1961 UN convention.

Following on from the joint EMCDDA-Europol investigations launched in 2017 on cyclopropylfentanyl and methoxyacetylfentanyl, these two fentanyl derivatives — involved in more than 90 deaths — were formally risk-assessed by the EMCDDA during 2018 (Table 1). Based on the findings of the risk assessment reports, and on the initiative of the European Commission, the Council of the EU and the European Parliament decided to subject these two substances to control measures throughout Europe.

Common name	Cyclopropylfentanyl	Methoxyacetylfentanyl
Chemical name	N-phenyl-N-[1-(2-phenylethyl)piperidin- 4-yl]cyclopropanecarboxamide	2-methoxy- <i>N</i> -phenyl- <i>N</i> -[1-(2- phenylethyl)piperidin-4-yl]acetamide
Chemical structure		
Formal notification to the EU Early Warning System	4 August 2017	9 December 2016
Reports of deaths associated with use	78	13
Number of countries where associated deaths occurred	3	4
Number of seizures by law enforcement	144	48
Number of countries where it has been seized (EU, Turkey and Norway)	6	10
Total quantity seized	1.76 kg powder; 772 ml liquid; 329 tablets	180 g powder; 352 ml liquid; 119 tablets

#### Table 1. Key findings from the risk assessments of two fentanyl derivatives carried out in 2018

#### New drugs: high-potency synthetic opioids

New psychoactive substances, including synthetic opioids, synthetic cannabinoids and synthetic cathinones, continue to be associated with deaths and acute intoxications in Europe and, despite a range of new measures introduced in this area, continue to represent a challenge to current drug policy models.

Although playing a small role in Europe's drug market, new opioids pose a serious threat to individual and public health. Of particular concern are fentanyl derivatives, which make up the majority of new opioids reported to the EMCDDA. These substances can be particularly potent, with minute quantities capable of causing life-threatening poisoning from rapid and severe respiratory depression. Reported overdose cases include people who believed they were buying heroin, other illicit drugs or pain medicines. In addition to the acute risks of overdose, where the use of naloxone may be indicated, fentanyl derivatives are also reported to have high abuse liabilities and dependence-producing potential.

New opioids pose a serious threat to individual and public health

#### Newly diagnosed HIV cases related to injecting drug use: overall and selected trends and most recent data





# Chronic drug-related harms: local HIV outbreaks, late diagnosis

As well as the risks posed by unprotected sex, people who use drugs, particularly those who inject them, are at risk of contracting infections such as hepatitis C virus (HCV) and the human immunodeficiency virus (HIV) through the sharing of drug use material. Correspondingly, the prevalence of HIV among people who inject drugs is higher than in the general population.

In 2017, an estimated 1 046 new HIV diagnoses attributable to injecting drug use were notified in the European Union, with 83 % being male, mostly over 35 and representing 5 % of all HIV diagnoses for which the route of transmission is known. This proportion has remained low and stable for the last decade. Notifications of newly diagnosed HIV infections among people who inject drugs have declined in most European countries between 2008 and 2017 (Figure 3.10). However, injecting drug use remains an important mode of transmission in some countries. In 2017, according to the data reported to the European Centre for Disease Prevention and Control, injecting drug use was linked to 62 % of newly diagnosed HIV cases in Lithuania and 33 % in Latvia. Seroprevalence studies — based on blood samples — from people who inject drugs, conducted in Estonia, Latvia and Poland in 2016-17, found that more than 10 % of those tested were HIV-positive.

Localised HIV outbreaks have been documented among marginalised populations of people who inject drugs in Dublin (2014-15), Luxembourg (2014-16), Munich (2015-16) and Glasgow (2015-18). All four outbreaks have been associated with stimulant injecting.

Where the information was available, half of the new HIV diagnoses attributed to drug injecting in the European Union in 2017 were diagnosed late — that is, when the virus had already begun to damage the immune system. Late HIV diagnosis is associated with delays in initiation of anti-retroviral therapy and increased morbidity and mortality. The policy of 'test-and-treat' for HIV, whereby anti-retroviral therapy is started directly after an HIV diagnosis, can result in a reduction of transmission and is especially important among groups with higher risk behaviours, such as people who inject drugs. Early diagnosis and initiation of anti-retroviral therapy offers those infected a normal life expectancy.



HCV antibody prevalence among people who inject drugs: seroprevalence studies (SP) and diagnostic test results (DT) with national and subnational coverage, 2016-17

In 2017, 14 % of newly reported AIDS cases in the European Union, where the route of transmission was known, were attributed to injecting drug use. These 379 injection-related notifications represent less than a quarter of the number reported a decade ago.

#### HCV prevalence: variation in national trends

Viral hepatitis, particularly infection caused by the hepatitis C virus (HCV), is highly prevalent among injecting drug users across Europe. For every 100 people infected with HCV, 75 to 80 will develop chronic infection. This has important long-term consequences, as chronic HCV infection, often worsened by heavy alcohol use, will lead to increasing numbers of deaths and cases of severe liver disease, including cirrhosis and cancer, among an ageing population of high-risk drug users.

The prevalence of antibodies to HCV among people who inject drugs, indicating present or past infection, is estimated from seroprevalence studies or routine diagnostic tests offered in drug services. In 2016-17, HCV antibody prevalence in national samples of people who inject drugs varied from 15 % to 82 %, with 8 of the 14 countries with national data reporting rates in excess of 50 % (Figure 3.11). Among countries with national trend data for the period 2011-17, declining HCV prevalence among people who inject drugs was reported in 6 countries, while 3 reported an increase.

Among people who inject drugs, hepatitis B virus (HBV) infection is less common than HCV infection, but still higher than in the general population, despite the availability of an effective vaccine. The presence of the HBV surface antigen indicates current infection, which may be acute or chronic. In the 7 countries with national data for 2016/17, between 1 % and 9 % of people who inject drugs were estimated to be currently infected with HBV.

Drug injection is a risk factor for other infectious diseases, and drug-related clusters of hepatitis A were reported in Czechia and Germany in 2016. In the United Kingdom, the number of notified group A streptococcus cases associated with injecting drug use has increased since 2013, and wound botulism cases continue to be reported in Europe.



Coverage of specialised syringe programmes: number of syringes provided per estimated person who injects drugs

NB: Data displayed as point estimates and uncertainty intervals. Targets defined in the WHO global health sector strategy on viral hepatitis 2016-2021.

# Infectious disease prevention: varying availability of effective measures

A range of measures are recommended to reduce drugrelated infectious diseases among people who inject drugs. These include the provision of opioid substitution treatment, the distribution of sterile syringes, needles and other clean injecting equipment, vaccination, testing and treatment for viral hepatitis and HIV as well as health promotion interventions focused on reducing injecting and sexual risk behaviours.

For those who inject opioids, substitution treatment significantly lowers infection risk, with some analyses indicating increased protective effects when high treatment coverage is also combined with high levels of syringe provision. Evidence shows that needle and syringe programmes are effective in reducing the transmission of HIV among people who inject drugs. Of the 30 countries monitored by the EMCDDA, all except Turkey provide clean injecting equipment at specialised outlets free of charge. Information on the provision of syringes through specialised programmes is available from 25 countries, which together report the distribution of 53 million syringes in the most recent year for which data are available (2015/17). This is a major underestimation, as several large countries, such as Germany, Italy and the United Kingdom, do not report full national data on syringe provision. In addition, syringes may be purchased from pharmacies in some countries. There appears, however, to be large variation in coverage of syringe distribution schemes across the 15 countries for which data are available to allow a comparison with recent estimates of the number of people who inject drugs (Figure 3.12).

Besides sterile syringes and needles, pads to disinfect the skin, water to dissolve drugs, and clean mixing containers are routinely or often provided by harm reduction services in many countries (Figure 3.13), while non-injecting paraphernalia such as foil and pipes are less common. HIV home testing kits can help people who inject drugs diagnose infection early. The kits are available for purchase in pharmacies in a growing number of European countries and, in some, they are provided by harm reduction services.



Availability of safer use/safer sex equipment in 30 European countries

NB: Based on expert opinion.

# HCV elimination: enhancing access to testing and treatment

Europe aims to eliminate viral hepatitis as a public health threat in line with the global Agenda 2030 for Sustainable Development. Providing people who inject drugs with greater access to prevention, testing and treatment for HBV and HCV is central to achieving this objective. In 2018, 17 EU countries and Norway had national hepatitis strategies or action plans.

HCV screening is the entry point to hepatitis care and effective treatment for those tested, and plays a crucial role in preventing transmission. Barriers to testing and uptake of treatment exist at the system, service provider and client levels, and can include factors such as financial constraints, poor knowledge about HCV treatment, and stigma and marginalisation of drug users. Innovative methods are required to overcome these challenges, and community-based drugs agencies represent a key setting for reaching people who inject drugs with testing and referral to care. European expert guidelines recommend offering HCV treatment without delay to individuals at high risk of transmitting the virus — which includes prisoners and people actively injecting drugs. New oral treatment regimens with direct-acting antiviral agents result in a cure within 8 to 12 weeks in 95 % of cases. After reductions in the price of these medications, the number of European countries now providing unrestricted access to directacting antivirals for all groups of patients and all genotypes of the virus, regardless of the stage of the infection, is increasing.

#### Interventions in prisons: national availability differs

Prisoners report higher lifetime rates of drug use and more harmful patterns of use, including injecting, than the general population, making prisons an important setting for drug-related interventions. A recent EMCDDA review identified new psychoactive substance use in prisons in 22 countries (Figure 3.14), with synthetic cannabinoids identified as posing the main challenge. New psychoactive substances were linked to a wide range of physical and mental health harms, whether through acute intoxication or chronic consumption. In Latvia, the use of new synthetic opioids in prison has been linked to increases in overdoses, as well as injecting and needle-sharing.

Infectious diseases testing (HIV, HBV, HCV and tuberculosis) is available in prisons in most countries, although this may be limited to testing on entry or of symptomatic individuals only. The provision of hepatitis C treatment is reported in 24 countries, but only in 5 is the treatment received by more than 60 % of those in need of it. Hepatitis B vaccination programmes are reported to exist in 16 countries. The provision of clean injecting equipment is less common, with the implementation of syringe programmes in this setting reported by 3 countries. An analysis of HIV and HCV prevalence among people who inject drugs from 17 European countries, covering 2006 to 2017, found significantly higher HIV and HCV rates among individuals with a history of incarceration.

Coverage of treatment interventions offered to prisoners varies considerably by country but can include detoxification, individual and group counselling, treatment in therapeutic communities and in special inpatient wards. Some European countries have established interagency partnerships between prison health services and providers in the community, in order to facilitate delivery of health education and treatment interventions in prison and to ensure continuity of care upon prison entry and release. Preparation for prison release, including social reintegration, is reported by all countries. Programmes to prevent the risk of drug overdose, which is particularly high among opioid injectors in the period after leaving prison, are reported in 5 countries, with prisoners trained to recognise and respond to overdose, and receiving naloxone on release.

In 2017, 28 countries reported allowing the provision of opioid substitution treatment in prisons; however, the coverage is often low. Opioid substitution treatment can be initiated within prison in 24 countries, and in 5 countries it can only be continued if treatment started in the community.



Use of new psychoactive substances among prisoners

NB: Based on reports from national experts.

Prisoners report higher lifetime rates of drug use and more harmful patterns of use

# Overdose: a main cause of death for high-risk drug users

Drug use is a recognised cause of avoidable mortality among European adults. Overall, in Europe, people who use opioids are between 5 and 10 times more likely to die than their peers of the same age and gender. The importance of reducing the mortality related to overdose among those who use opioids is widely recognised. However, other causes of death indirectly related to drug use, such as infections, accidents, violence including homicide and suicide, are also important causes of mortality in this group. Chronic pulmonary and liver conditions as well as cardio-vascular problems are frequent and now account for an increased share of deaths among older and chronic drug users.

Overdose data, especially the European cumulative total, must be interpreted with caution. Among the reasons for this are systematic under-reporting in some countries, differences in the ways toxicological examinations are conducted and registration processes that can result in reporting delays. Annual estimates therefore represent a provisional minimum value.

It is estimated that at least 8 238 overdose deaths, involving one or more illicit drug, occurred in the European Union in 2017. This rises to an estimated 9 461 deaths if Norway and Turkey are included, representing a stable situation in relation to the revised estimated figure of 9 397 in 2016. The overall EU total is also stable compared with 2016. As in previous years, the United Kingdom (34 %) and Germany (13 %) together account for almost half of all reported overdose deaths in the EU, Norway and Turkey. This figure needs to be interpreted in the context of both the size of the at-risk populations in these countries and under-reporting in some other countries.

Over three-quarters of those dying from overdose are male (78 %). The mean age at death continued to increase, reaching 39.4 years of age in 2017, with males 2 years younger than females. This reflects the ageing nature of Europe's opioid-using population who are at greatest risk of drug overdose death. In some countries, a proportion of opioid cases may relate to deaths involving opioids in the context of long-term pain management.



## DRUG-INDUCED DEATHS

NB: Data refer to EU Member States, Turkey and Norway (EU + 2).

79

Number of drug-induced deaths reported in the European Union in 2012 and 2017, or most recent year, by age band



Between 2012 and 2017, overdose deaths in the European Union increased in all age categories above 30 years (Figure 3.15). Deaths among the 50+ age groups increased by 62 % overall, while deaths among younger age groups have generally been stable. Analysis of fatal overdoses reported by Turkey in 2017 shows a younger profile than the European Union average, with a mean age of 32 years (Figure 3.16).

# Drug-induced mortality: above-average rates reported in northern Europe

The mortality rate due to overdoses in Europe in 2017 is estimated at 22.6 deaths per million population aged 15-64. The rate among males (35.8 cases per million males) is almost four times that among females (9.3 cases per million females). National mortality rates and trends vary considerably (Figure 3.17) and are influenced by factors such as prevalence and patterns of drug use, particularly injecting opioid use; risk and protective factors, such as the availability of treatment; as well as by national practices of reporting, recording information and coding overdose cases, including variable levels of underreporting, in national mortality databases. According to the latest data available, rates of over 40 deaths per million population were reported in 8 northern European countries, with the highest rates reported in Estonia (130 per million) and Sweden (92 per million) (Figure 3.17).

#### FIGURE 3.16

Distribution of drug-induced deaths reported in 2017, or most recent year, by 10-year age band





#### Drug-induced mortality rates among adults (15-64): selected trends and most recent data



NB: Trends in the eight countries reporting the highest rates in 2017 or 2016 and overall European trend. EU + 2 refers to EU Member States, Turkey and Norway.

#### Fatal overdoses: most deaths involve opioids

Opioids, mainly heroin or its metabolites, often in combination with other substances, are present in the majority of fatal overdoses reported in Europe. The most recent data show an increase in the number of opioidrelated deaths in some European countries, for example in the United Kingdom, where 9 out of 10 overdose deaths (89 %) involved some form of opioid.

In France, heroin was implicated in 26 % of overdose deaths in 2016, compared with 15 % in 2012, whereas methadone was present in more than a third (36 %) of the deaths. Other opioids are also regularly found in toxicological reports. These substances, primarily methadone, but also buprenorphine (Finland), fentanyl and its derivatives (particularly in Estonia) and tramadol, are associated with a substantial share of overdose deaths in some countries. The increase in overdose deaths reported in Czechia in 2017 was mainly due to an increase in cases related to fentanyl-like substances, morphine and codeine; the increase reported in Slovakia mostly involved tramadol.

Stimulants such as cocaine, amphetamines, MDMA and cathinones are implicated in a smaller number of overdose deaths in Europe, although their significance varies by country. In France, a fifth of the deaths involved cocaine, and half of these also involved opioids. In Slovenia, where most of the deaths involved heroin, cocaine was found in around a third of cases. In 2017, Turkey reported 185 MDMA-related deaths, a decline compared with 2016.

Turkey also reported a large increase in the number of deaths related to synthetic cannabinoids: from 137 in 2015 to 563 in 2017. Synthetic cannabinoids were present in 60 % of all drug-related deaths reported in the country, and most of the cases were young males in their twenties. In more than a quarter of these cases, cannabis was also found. In the United Kingdom, in particular for Scotland, an increase in the number of deaths involving new psychoactive substances linked with benzodiazepines has been reported.

Key approaches for reducing opioid-related deaths



# Preventing overdoses and drug-related deaths: key approaches

Reducing overdose morbidity and mortality is a major public health challenge in Europe. A broader public health response in this area aims at reducing vulnerability among those who use drugs, especially by removing barriers and making services accessible, and by empowering drug users to take fewer risks (Figure 3.18). Assessing overdose risk among people who use drugs and strengthening their overdose awareness, combined with providing effective drug treatment, helps to prevent the occurrence of overdoses. Periods of known elevated risk, such as release from prison and discharge or drop-out from treatment, require particular attention. Interventions such as supervised drug consumption facilities as well as 'takehome' naloxone programmes are targeted responses, which aim at improving the likelihood of surviving an overdose. The importance of opioid substitution treatment in reducing mortality is evident in a 2018 meta-analysis of studies in this area.

Supervised drug consumption facilities are spaces where drug users can consume drugs in hygienic and safer conditions. This intervention aims both to prevent overdoses from occurring and to ensure that professional support is available if an overdose occurs. They also provide an opportunity to engage with often marginalised and hard-to-reach populations of users and deliver drug-related and general health advice and support. Typically, consumption rooms also provide a point of access and referral to other medical and social services, including drug treatment services. It has also been argued that by reducing drug use in public, they contribute to improving the social environment in areas where this occurs, for example urban drug markets.

Individual facilities may supervise a large number of consumptions — with 80 000 consumptions per year reported by some of the bigger facilities — that would otherwise would have taken place in the streets or in other risky settings. The first generation of drug consumption facilities in the 1980s and 1990s focused mainly on supervising injecting heroin use. Today, however, facilities may also supervise people who snort, smoke or inhale drugs. In the European Union and Norway, supervised consumption facilities operate in 51 cities, with a total of 72 facilities in operation.

#### Reversing opioid overdose: take-home naloxone

Naloxone is an opioid antagonist medication used in hospital emergency departments and by ambulance personnel to reverse opioid overdose. In recent years, there has been an expansion of take-home naloxone programmes, which provide overdose training and make the medication available to those likely to witness an opioid overdose.

Recent systematic reviews of the effectiveness of takehome naloxone programmes have found evidence that its provision in combination with educational and training interventions reduces overdose-related mortality.

In 2018, community-based take-home naloxone programmes were operating in 10 European countries. These programmes are commonly run by drugs and health services, with the exception of Italy, where naloxone is an over-the-counter medication. Prisoners are included as a target population in the take-home naloxone programmes in Estonia, France, the United Kingdom and Norway. Reducing overdose morbidity and mortality is a major public health challenge

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Guidance in brief: prevention and control of bloodborne viruses in prison settings.

All publications are available at www.emcdda.europa.eu/publications

# Annex

National data for estimates of drug use prevalence including problem opioid use, substitution treatment, total number in treatment, treatment entry, injecting drug use, drug-induced deaths, drug-related infectious diseases, syringe distribution and seizures. The data are drawn from and are a subset of the EMCDDA Statistical Bulletin 2019, where notes and meta-data are available. The years to which data refer are indicated.

#### **OPIOIDS**

			Entrants into treatment during the year							
	High-ris		Opioids client	ts as % of treat	ment entrants		oids clients inje ute of adminis		Clients in substitution	
	use es	timate	All entrants	First-time entrants	Previously treated entrants	All entrants	First-time entrants	Previously treated entrants	treatment	
Country	Year of estimate	cases per 1 000	% (count)	% (count)	% (count)	% (count)	% (count)	% (count)	count	
Belgium	-	-	22.5 (2 493)	8.2 (345)	32 (2 048)	14.1 (309)	9 (28)	15.2 (272)	16 546	
Bulgaria	-	-	67.8 (1 136)	55.9 (100)	89.7 (600)	64.4 (437)	53.8 (50)	66.7 (377)	3 247	
Czechia	2017	1.8-2.0	19.1 (799)	10.9 (192)	25.6 (565)	63.9 (470)	57.4 (101)	66.1 (347)	5 000	
Denmark	-	-	12 (587)	7.5 (170)	16.5 (399)	17.5 (94)	5.6 (9)	22 (80)	7 050	
Germany (1)	2016-17	0.9-3.0	29.9 (-)	9.6 ()	-	20.1 (-)	17.9 (–)	-	78 800	
Estonia	-	-	93.4 (271)	87.4 (76)	95.5 (150)	69.3 (187)	72 (54)	80.7 (121)	1 186	
Ireland	2014	6.1-7.0	44.9 (3 837)	24.8 (807)	58.8 (2 860)	31.7 (1 180)	23 (184)	33.6 (930)	10 3 16	
Greece	2017	1.8-2.5	60.9 (2 593)	38.9 (652)	74.8 (1 892)	28.7 (733)	22.2 (143)	31 (581)	9 388	
Spain	2016	1.5-2.9	26.8 (12 235)	13.3 (3 043)	42.6 (8 573)	14.9 (1 796)	7 (212)	17.2 (1 454)	58 749	
France	2017	4.5-5.9	27.3 (12 899)	13.7 (1 813)	44 (8 039)	16.4 (1 842)	10.4 (174)	19.3 (1 360)	178 665	
Croatia	2015	2.5-4.0	-	21.2 (203)	-	-	30.9 (56)	-	4 792	
Italy	2017	5.7-6.4	43.1 (20 095)	28.3 (5 921)	55.3 (14 174)	40.9 (7 137)	28.4 (1 395)	45.8 (5 742)	69 642	
Cyprus	2017	1.6-2.6	25.2 (212)	13.8 (58)	41.8 (137)	50.5 (104)	40.4 (23)	56 (75)	209	
Latvia	2017	4.7-7.0	49.4 (399)	28.7 (123)	72.8 (276)	82.8 (323)	73.8 (90)	86.9 (233)	669	
Lithuania	2016	2.7-6.5	85.3 (1 448)	57 (138)	91.1 (1 298)	85.5 (1 236)	86.9 (119)	85.4 (1 108)	1 136	
Luxembourg	2015	4.5	60.9 (109)	60.4 (29)	59.5 (47)	41.7 (43)	50 (14)	41.9 (18)	1 142	
Hungary	2010-11	0.4-0.5	4 (192)	1.8 (61)	9.4 (104)	40.5 (66)	36.2 (21)	43.9 (43)	669	
Malta	2017	4.2-4.9	69.7 (1 274)	32.8 (76)	75.1 (1 198)	55.2 (690)	21.1 (16)	57.5 (674)	1 0 2 5	
Netherlands	2012	1.1-1.5	11.5 (1 262)	6.2 (402)	19.3 (860)	6.1 (39)	7.6 (13)	5.6 (26)	5 241	
Austria	2017	6.1-6.5	48.7 (1 793)	27.8 (432)	63.8 (1 361)	37.7 (529)	21.8 (70)	42.5 (459)	18 632	
Poland	2014	0.4-0.7	15.8 (1 122)	5.9 (211)	26.2 (898)	57.4 (636)	37.4 (79)	62.2 (550)	2 685	
Portugal	2015	3.8-7.6	41.4 (1 247)	23 (376)	63.3 (871)	13.1 (155)	9.3 (33)	14.7 (122)	16 888	
Romania	2017	0.8-2.9	25.7 (918)	14.1 (359)	56.9 (551)	84.7 (729)	83.3 (295)	85.8 (429)	1 530	
Slovenia	2017	3.2-4.2	86.5 (211)	67.7 (42)	93.4 (169)	44.1 (93)	21.4 (9)	49.7 (84)	3 0 4 2	
Slovakia	-	-	26.3 (760)	12 (154)	39.5 (601)	70.7 (525)	53.6 (81)	75.2 (442)	620	
Finland	2012	3.8-4.5	51.1 (363)	36.5 (92)	59.2 (271)	76 (275)	66.3 (61)	79.3 (214)	3 329	
Sweden ( <sup>2</sup> )	-	-	24.2 (9 387)	15.5 (2 140)	29 (7 247)	-	-	-	4 468	
United Kingdom ( <sup>3</sup> )	2014-15	8.3-8.7	49.8 (57 430)	21.8 (8 051)	63.1 (49 252)	31.8 (12 407)	16.5 (746)	33.9 (11 633)	149 420	
Turkey	2011	0.2-0.5	58.6 (6 817)	43.4 (2 451)	72.9 (4 366)	27.3 (1858)	17.8 (437)	32.5 (1 421)	-	
Norway ( <sup>4</sup> )	2013	2.0-4.2	17 (973)	11.2 (302)	22.1 (672)	-	-	_	7 622	
European Union	-	-	35.1 (163 557)	16.6 (28 845)	47.9 (129 944)	29.1 (38 450)	20.8 (4 988)	31.3 (32 839)	654 086	
EU, Turkey and Norway	-	-	35.4 (171 347)	17.4 (31 598)	48.2 (134 982)	29.0 (40 308)	20.5 (5 425)	31.4 (34 260)	661 708	

Data on entrants into treatment are for 2017 or most recent year available: Estonia and Spain, 2016; Netherlands, 2015.

Data on clients in substitution treatment are for 2017 or most recent year available: Spain and Slovenia, 2016; Denmark, Hungary, Netherlands and Finland, 2015. The number for Sweden does not represent all clients.

 (<sup>1</sup>) Due to changes in treatment entry reporting system, only proportions are presented.
(<sup>2</sup>) Data for clients entering treatment refer to hospital-based care and specialised outpatient care facilities. Data shown are not fully representative of the national picture.

(3) The high-risk opioid use estimate does not include Northern Ireland. Clients in substitution treatment relates to England and Wales.

(4) The percentage of clients in treatment for opioid-related problems is a minimum value, not accounting for opioid clients registered as polydrug users.

#### COCAINE

		Prevalen	ice estimates	5	Entrants into treatment during the year							
	G	ieneral popu	lation	School population	Cocaine c	lients as % of t entrants	treatment		ne clients ir te of admin	· · · · · · · · · · · · · · · · · · ·		
	Year of survey	Lifetime, adults (15-64)	Last 12 months, young adults (15-34)	Lifetime, students (15-16)	All entrants	First-time entrants	Previously treated entrants	All clients	First-time entrants	Previously treated entrants		
Country		%	%	%	% (count)	% (count)	% (count)	% (count)	% (count)	% (count)		
Belgium	2013	-	0.9	1	24.3 (2 690)	23.9 (1 007)	24.2 (1 552)	6.2 (124)	1.4 (11)	8.6 (97)		
Bulgaria	2016	0.9	0.5	2	2.7 (46)	3.9 (7)	1.6 (11)	0 (0)	0 (0)	0 (0)		
Czechia	2017	2.4	0.2	1	0.7 (28)	0.7 (12)	0.7 (15)	0 (0)	0 (0)	0 (0)		
Denmark	2017	6.4	3.9	2	15.9 (776)	17.9 (407)	14 (338)	2.1 (15)	0.3 (1)	4.1 (13)		
Germany (1)	2015	3.8	1.2	3	4.8 (-)	6.4 (-)	-	1.5 (-)	0.8 (-)	-		
Estonia	2008	-	1.3	1	0.3 (1)	1.1 (1)	-	-	-	-		
Ireland	2015	7.8	2.9	3	16.8 (1 431)	23 (748)	12.8 (623)	1.3 (18)	0 (0)	2.6 (16)		
Greece	2015	1.3	0.6	1	8.1 (345)	10.3 (172)	6.8 (172)	9.9 (34)	4.7 (8)	15.2 (26)		
Spain	2017	10.3	2.8	3	39.2 (17 889)	39.7 (9 052)	38.2 (7 678)	0.8 (134)	0.4 (33)	1.3 (98)		
France	2017	5.6	3.2	4	8.4 (3 988)	7.8 (1 035)	9.8 (1 801)	8.8 (324)	3.8 (37)	13.6 (229)		
Croatia	2015	2.7	1.6	2	-	3.2 (31)	-	-	3.2 (1)	-		
Italy	2017	6.9	1.7	2	33 (15 394)	38.1 (7 993)	28.9 (7 401)	2 (299)	1.1 (86)	3 (213)		
Cyprus	2016	1.4	0.4	3	14.7 (124)	12.1 (51)	19.8 (65)	5 (6)	2 (1)	7.9 (5)		
Latvia	2015	1.5	1.2	2	0.5 (4)	0.7 (3)	0.3 (1)	0 (0)	0 (0)	0 (0)		
Lithuania	2016	0.7	0.3	2	0.8 (13)	2.1 (5)	0.5 (7)	11.1 (1)	33.3 (1)	0 (0)		
Luxembourg	2014	2.5	0.6	2	21.8 (39)	14.6 (7)	25.3 (20)	40.5 (15)	57.1 (4)	42.1 (8)		
Hungary	2015	1.2	0.9	2	3.5 (167)	3.9 (132)	2.4 (26)	2.5 (4)	2.3 (3)	4 (1)		
Malta	2013	0.5	-	3	18.6 (340)	41.8 (97)	15.2 (243)	13.4 (43)	4.1 (4)	17.5 (39)		
Netherlands	2017	6.2	4.5	2	24.3 (2 675)	20.8 (1 357)	29.6 (1 318)	0.4 (5)	0.1 (1)	0.6 (4)		
Austria	2015	3.0	0.4	2	9.2 (339)	10.1 (156)	8.6 (183)	9.3 (30)	5.4 (8)	12.6 (22)		
Poland	2014	1.3	0.4	4	2.3 (163)	2.5 (88)	2.1 (72)	2.5 (4)	1.2 (1)	2.9 (2)		
Portugal	2016	1.2	0.3	2	17.3 (522)	20.8 (341)	13.2 (181)	2.6 (13)	0.6 (2)	6.3 (11)		
Romania	2016	0.7	0.2	3	1.2 (44)	1.4 (36)	0.6 (6)	0 (0)	0 (0)	0 (0)		
Slovenia	2012	2.1	1.2	2	4.5 (11)	6.5 (4)	3.9 (7)	45.5 (5)	25 (1)	57.1 (4)		
Slovakia	2015	0.7	0.3	2	1.1 (31)	1.9 (24)	0.3 (5)	3.3 (1)	-	25 (1)		
Finland	2014	1.9	1.0	1	0.1 (1)	0 (0)	0.2 (1)	0 (0)	0 (0)	0 (0)		
Sweden (2)	2017	-	2.5	1	1.4 (552)	2.7 (371)	0.7 (181)	-	-	-		
United Kingdom	2017	10.7	4.7	3	17.6 (20 290)	22.1 (8 185)	15.4 (12 054)	1.9 (259)	0.5 (31)	2.9 (226)		
Turkey	2017	0.2	0.1	-	3.9 (456)	4.4 (247)	3.5 (209)	0 (0)	0 (0)	0 (0)		
Norway	2017	5.1	2.1	1	1.8 (102)	2.7 (72)	1 (30)	_	_	-		
European Union	-	5.4	2.1	-	15.5 (72 424)	19.1 (33 178)	16.5 (36 594)	2.1 (1 550)	0.8 (259)	3.1 (1 241)		
EU, Turkey and Norway	-	-	-	-	15.1 (72 982)	18.4 (33 497)	15.9 (36 833)	2.1 (1 550)	0.8 (259)	3.1 (1 241)		

Prevalence estimates for the school population are extracted from ESPAD Survey 2015, except for Belgium (2017; Flanders only), Bulgaria (2017), Germany (2011), Italy (2017), Luxembourg (2014, age 15 years), Spain (2016), Sweden (2017) and United Kingdom (2016; England only, age 15 years). Due to uncertainty of data collection procedures, Latvia data may not be comparable.

United Kingdom general population prevalence estimates refer to England and Wales only. Age range for general population prevalence rates: France, Germany, Greece and Hungary, 18-64, 18-34; Denmark and Norway, 16-64, 16-34; Malta, 18-65; Sweden, 17-34; United Kingdom, 16-59, 16-34.

Data on entrants into treatment are for 2017 or most recent year available: Estonia and Spain, 2016; Netherlands, 2015.

 $(^1)$  Due to changes in treatment entry reporting system, only proportions are presented.

(<sup>2</sup>) Data for clients entering treatment refer to hospital-based care and specialised outpatient care facilities. Data shown are not fully representative of the national picture.

#### **AMPHETAMINES**

		Prevalen	ce estimates		Entrants into treatment during the year					
	G	ieneral popu	lation	School population	Amphetamine	es clients as % entrants	of treatment		amines client ute of admini	
	Year of survey	Lifetime, adults (15-64)	Last 12 months, young adults (15-34)	Lifetime, students (15-16)	All entrants	First-time entrants	Previously treated entrants	All entrants	First-time entrants	Previously treated entrants
Country		%	%	%	% (count)	% (count)	% (count)	% (count)	% (count)	% (count)
Belgium	2013	-	0.5	1	9.1 (1 011)	7.5 (315)	10.6 (681)	11.8 (96)	6.2 (16)	14.6 (80)
Bulgaria	2016	1.5	1.8	3	12.6 (211)	12.8 (23)	2.7 (18)	4.9 (2)	0 (0)	11.8 (2)
Czechia	2017	3.3	0.7	1	49.6 (2 078)	52.8 (933)	47.2 (1 0 4 1)	62.8 (1 256)	57.6 (520)	67.2 (683)
Denmark	2017	7.0	1.4	1	6.2 (303)	5.4 (122)	7 (170)	1.8 (5)	0.9 (1)	2.5 (4)
Germany (1)	2015	3.6	1.9	4	14.5 (-)	15.3 (–)	-	2.1 (-)	1.9 (-)	_
Estonia	2008	-	2.5	2	3.8 (11)	6.9 (6)	2.5 (4)	50 (5)	66.7 (4)	33.3 (1)
Ireland	2015	4.1	0.6	3	0.4 (38)	0.6 (19)	0.3 (17)	-	-	-
Greece	-	-	-	2	0.8 (33)	1.3 (22)	0.4 (11)	18.2 (6)	22.7 (5)	9.1 (1)
Spain	2017	4	0.9	2	1.7 (754)	1.9 (431)	1.4 (291)	0.9 (7)	0.9 (4)	1 (3)
France	2017	2.2	0.6	2	0.4 (212)	0.5 (63)	0.5 (91)	9.7 (18)	8.5 (5)	10.8 (9)
Croatia	2015	3.5	2.3	3	-	3.4 (33)	-	-	0 (0)	-
Italy	2017	2.4	0.3	2	0.2 (93)	0.3 (55)	0.1 (38)	1.2 (1)	2 (1)	0 (0)
Cyprus	2016	0.5	0.1	3	6.8 (57)	6.2 (26)	9.5 (31)	9.1 (5)	4 (1)	13.3 (4)
Latvia	2015	1.9	0.7	3	17.5 (141)	22.9 (98)	11.3 (43)	64.1 (84)	54.9 (50)	85 (34)
Lithuania	2016	1.2	0.5	1	3.5 (59)	9.9 (24)	2 (29)	29.6 (16)	13.6 (3)	48.1 (13)
Luxembourg	2014	1.6	0.1	1	-	-	-	-	-	-
Hungary	2015	1.7	1.4	3	11.1 (534)	11.2 (378)	11.3 (124)	9.7 (51)	4.8 (18)	27 (33)
Malta	2013	0.3	-	2	0.2 (3)	0.4 (1)	0.1 (2)	66.7 (2)	100 (1)	50 (1)
Netherlands	2017	5.4	3.9	2	7.4 (817)	7.5 (487)	7.4 (330)	1.3 (4)	1 (2)	1.9 (2)
Austria	2015	2.2	0.9	3	5.5 (203)	7.2 (111)	4.3 (92)	2.2 (4)	1 (1)	3.6 (3)
Poland	2014	1.7	0.4	4	29.4 (2 085)	31.6 (1 126)	26.9 (924)	2.7 (55)	1.3 (15)	4.3 (39)
Portugal	2016	0.4	0.0	1	0.1 (3)	0.1 (2)	0.1 (1)	0 (0)	0 (0)	0 (0)
Romania	2016	0.3	0.1	1	0.8 (30)	1 (26)	0.4 (4)	0 (0)	0 (0)	0 (0)
Slovenia	2012	0.9	0.8	1	0.8 (2)	3.2 (2)	0 (0)	0 (0)	0 (0)	0 (0)
Slovakia	2015	1.4	0.8	1	40.8 (1 182)	44 (566)	38.1 (580)	30.9 (350)	26.8 (148)	34.9 (192)
Finland	2014	3.4	2.4	1	18.9 (134)	20.2 (51)	18.1 (83)	71.2 (94)	52 (26)	82.9 (68)
Sweden ( <sup>2</sup> )	2017	-	1.2	1	5.3 (2 076)	7.3 (1 007)	4.3 (1 069)	-	-	-
United Kingdom	2017	9.9	1.0	1	2.1 (2 476)	2.7 (1 015)	1.9 (1 450)	18.9 (295)	11.7 (70)	23.6 (225)
Turkey	2017	0.0	-	-	6.5 (751)	9.7 (549)	3.4 (202)	0 (0)	0 (0)	0 (0)
Norway	2017	3.9	0.8	1	13 (744)	10.3 (277)	15.4 (467)	-	-	-
European Union	-	3.7	1.0	-	6.1 (28 291)	6.6 (11 393)	5.9 (16 465)	9.4 (2 871)	8.8 (1015)	9.3 (1 714)
EU, Turkey and Norway	-	-	-	-	6.2 (29 786)	6.7 (12 219)	6.0 (17 134)	9.2 (2 871)	8.4 (1 015)	9.2 (1 714)

Prevalence estimates for the school population are extracted from ESPAD Survey 2015, except for Belgium (2017; Flanders only), Bulgaria (2017), Germany (2011), Italy (2017), Luxembourg (2014, age 15 years), Spain (2016), Sweden (2017) and United Kingdom (2016; England only, age 15 years). Due to uncertainty of data collection procedures, Latvia data may not be comparable.

United Kingdom general population prevalence estimates refer to England and Wales only. Age range for general population prevalence rates: France, Germany and Hungary, 18-64, 18-34; Denmark and Norway, 16-64, 16-34; Malta, 18-65; Sweden, 17-34; United Kingdom, 16-59, 16-34.

Data on entrants into treatment are for 2017 or most recent year available: Estonia and Spain, 2016; Netherlands, 2015. Data for Germany, Sweden and Norway refer to users of 'stimulants other than cocaine'.

(1) Due to changes in treatment entry reporting system, only proportions are presented.

(2) Data for clients entering treatment refer to hospital-based care and specialised outpatient care facilities. Data shown are not fully representative of the national picture.

#### **MDMA**

		Prevalence	estimates		Entrants in	Entrants into treatment during the year			
	Ge	neral populati		School population	MDMA clien	ts as % of treatme	ent entrants		
	Year of survey	Lifetime, adults (15-64)	Last 12 months, young adults (15-34)	Lifetime, students (15-16)	All entrants	First-time entrants	Previously treated entrants		
Country		%	%	%	% (count)	% (count)	% (count)		
Belgium	2013	-	0.8	2	0.5 (53)	0.8 (32)	0.3 (19)		
Bulgaria	2016	2.1	3.1	2	1.7 (29)	1.1 (2)	0 (0)		
Czechia	2017	5.8	2.1	3	0.6 (27)	1 (17)	0.4 (9)		
Denmark	2017	3.2	1.5	1	0.3 (16)	0.6 (14)	0.1 (2)		
Germany	2015	3.3	1.3	2	-	-	-		
Estonia	2008	-	2.3	3	0.3 (1)	-	0.6 (1)		
Ireland	2015	9.2	4.4	4	0.5 (42)	0.9 (29)	0.3 (13)		
Greece	2015	0.6	0.4	1	0.2 (10)	0.4 (7)	0.1 (3)		
Spain	2017	3.6	1.2	2	0.2 (89)	0.3 (66)	0.1 (16)		
France	2017	3.9	1.3	2	0.4 (168)	0.4 (54)	0.3 (56)		
Croatia	2015	3.0	1.4	2	-	0.8 (8)	-		
Italy	2017	2.7	0.8	1	0.1 (59)	0.2 (34)	0.1 (25)		
Cyprus	2016	1.1	0.3	3	0.1 (1)	-	-		
Latvia	2015	2.4	0.8	3	0.4 (3)	0.2 (1)	0.5 (2)		
Lithuania	2016	1.7	1.0	2	0.1 (2)	0 (0)	0.1 (2)		
Luxembourg	2014	1.9	0.4	1	0.6 (1)	2.1 (1)	-		
Hungary	2015	4.0	2.1	2	2.3 (111)	1.7 (57)	3.7 (41)		
Malta	2013	0.7	-	2	0.7 (12)	0.9 (2)	0.6 (10)		
Netherlands	2017	9.4	7.1	3	0.7 (80)	1 (67)	0.3 (13)		
Austria	2015	2.9	1.1	2	0.9 (32)	1.2 (19)	0.6 (13)		
Poland	2014	1.6	0.9	3	0.3 (23)	0.3 (12)	0.3 (9)		
Portugal	2016	0.7	0.2	2	0.2 (7)	0.2 (3)	0.3 (4)		
Romania	2016	0.5	0.2	2	0.9 (33)	1.2 (30)	0.2 (2)		
Slovenia	2012	2.1	0.8	2	0 (0)	0 (0)	0 (0)		
Slovakia	2015	3.1	1.2	3	0.1 (4)	0.1 (1)	0.1 (2)		
Finland	2014	3.0	2.5	1	0.1 (1)	0.4 (1)	0 (0)		
Sweden	2017	-	2.0	1	-	-	-		
United Kingdom	2017	10.0	3.3	4	0.5 (616)	1.1 (415)	0.3 (200)		
Turkey	2017	0.4	0.2	-	2 (230)	2.9 (161)	1.2 (69)		
Norway	2017	4.1	2.2	1	_	-	-		
European Union	-	4.1	1.7	-	0.3 (1 428)	0.5 (872)	0.2 (442)		
EU, Turkey and Norway	-	-	-	_	0.3 (1 658)	0.6 (1033)	0.2 (511)		

Prevalence estimates for the school population are extracted from ESPAD Survey 2015, except for Belgium (2017; Flanders only), Bulgaria (2017), Germany (2011), Italy (2017), Luxembourg (2014, age 15 years), Spain (2016), Sweden (2017) and United Kingdom (2016; England only, age 15 years). Due to uncertainty of data collection procedures, Latvia data may not be comparable.

United Kingdom general population provalence estimates refer to England and Wales only. Age range for general population prevalence rates: France, Germany, Greece and Hungary, 18-64, 18-34; Denmark and Norway, 16-64, 16-34; Malta, 18-65; Sweden, 17-34; United Kingdom, 16-59, 16-34. Data on entrants into treatment are for 2017 or most recent year available: Estonia and Spain, 2016; Netherlands, 2015.

#### **CANNABIS**

		Prevalence	estimates		Entrants in	nto treatment durin	ng the year
	Ge	neral populati		School population	Cannabis clie	ents as % of treatm	nent entrants
	Year of survey	Lifetime, adults (15-64)	Last 12 months, young adults (15-34)	Lifetime, students (15-16)	All entrants	First-time entrants	Previously treated entrants
Country		%	%	%	% (count)	% (count)	% (count)
Belgium	2013	15.0	10.1	18	34.2 (3 786)	50.7 (2 132)	23.2 (1 487)
Bulgaria	2016	8.3	10.3	20	9.9 (166)	5 (9)	2.5 (17)
Czechia	2017	28.6	19.3	37	23.6 (988)	28.4 (501)	19.6 (433)
Denmark	2017	38.4	15.4	12	62.7 (3 069)	65.9 (1 501)	59.5 (1 435)
Germany (1)	2015	27.2	13.3	19	43.1 (-)	64.1 (-)	-
Estonia	2008	-	13.6	25	1 (3)	2.3 (2)	0.6 (1)
Ireland	2015	27.9	13.8	19	24.6 (2 102)	39 (1 270)	14.6 (712)
Greece	2015	11.0	4.5	9	26.9 (1 148)	46.1 (773)	14.7 (373)
Spain	2017	35.2	18.3	31	29.2 (13 304)	40.7 (9 278)	15.9 (3 208)
France	2017	44.8	21.8	31	59.6 (28 205)	74.4 (9 828)	41.1 (7 517)
Croatia	2015	19.4	16.0	21	-	62.9 (602)	-
Italy	2017	32.7	20.9	19	21.8 (10 155)	30.9 (6 483)	14.3 (3 672)
Cyprus	2016	12.1	4.3	7	52.7 (444)	67.5 (284)	28.4 (93)
Latvia	2015	9.8	10.0	17	24 (194)	36 (154)	10.6 (40)
Lithuania	2016	10.8	6.0	18	6.5 (110)	22.7 (55)	3.5 (50)
Luxembourg	2014	23.3	9.8	20	16.2 (29)	22.9 (11)	13.9 (11)
Hungary	2015	7.4	3.5	13	63 (3 031)	68.2 (2 310)	49.2 (542)
Malta	2013	4.3	_	13	9.1 (167)	19 (44)	7.7 (123)
Netherlands	2017	26.6	17.5	22	47.3 (5 202)	55.5 (3 625)	35.4 (1 577)
Austria	2015	23.6	14.1	20	33.2 (1 222)	51.7 (802)	19.7 (420)
Poland	2014	16.2	9.8	24	31.2 (2 209)	39 (1 390)	23.2 (796)
Portugal	2016	11.0	8.0	15	37.2 (1 120)	51.8 (848)	19.8 (272)
Romania	2016	5.8	5.8	8	49.3 (1 764)	62.4 (1 585)	15.8 (153)
Slovenia	2012	15.8	10.3	25	6.1 (15)	19.4 (12)	1.7 (3)
Slovakia	2015	15.8	9.3	26	25.7 (743)	38.5 (495)	14.3 (218)
Finland	2014	21.7	13.5	8	18 (128)	31.3 (79)	10.7 (49)
Sweden ( <sup>2</sup> )	2017	_	9.6	6	10 (3 878)	15.4 (2 125)	7 (1 753)
United Kingdom	2017	30	12.3	19	24.2 (27 920)	45.3 (16 733)	14.2 (11 114)
Turkey	2017	2.7	1.9	-	6.4 (745)	9.2 (520)	3.8 (225)
Norway	2017	24.5	10.1	7	28.8 (1 651)	36.8 (989)	21.8 (662)
European Union	-	27.4	14.4	-	32.7 (152 373)	47.0 (81 566)	17.5 (58 103)
EU, Turkey and Norway	_	-	-	_	32.0 (154 769)	45.7 (83 075)	17.2 (58 990)
Prevalence estimates for the scho		a outracted from		201E aveant fo			. ,

Prevalence estimates for the school population are extracted from ESPAD Survey 2015, except for Belgium (2017; Flanders only), Bulgaria (2017), Germany (2011), Italy (2017), Luxembourg (2014, age 15 years), Spain (2016), Sweden (2017) and United Kingdom (2016; England only, age 15 years). Due to uncertainty of data collection procedures, Latvia data may not be comparable.

United Kingdom general population prevalence estimates refer to England and Wales only. Age range for general population prevalence rates: France, Germany, Greece and Hungary, 18-64, 18-34; Denmark and Norway, 16-64, 16-34; Malta, 18-65; Sweden, 17-34; United Kingdom, 16-59, 16-34.

Data on entrants into treatment are for 2017 or most recent year available: Estonia and Spain, 2016; Netherlands, 2015.

<sup>(1)</sup> Due to changes in treatment entry reporting system, only proportions are presented.

(?) Data for clients entering treatment refer to hospital-based care and specialised outpatient care facilities. Data shown are not fully representative of the national picture.

#### **OTHER INDICATORS**

	Dr	ug-induced deat	hs	HIV diagnoses		Syringes	
		All ages	Aged 15-64	related to injecting drug use (ECDC)	Injecting drug	use estimate	distributed through specialised programmes
Country	Year	count	cases per million population (count)	cases per million population (count)	year of estimate	cases per 1 000 population	count
Belgium	2014	61	8 (60)	0.6 (7)	2015	2.32-4.61	1 203 077
Bulgaria	2017	18	4 (18)	4.4 (31)	_	_	52 927
Czechia	2017	42	5 (35)	0.5 (5)	2017	6.18-6.47	6 409 862
Denmark (1)	2016	237	55 (202)	1 (6)	_	_	-
Germany (1) (2)	2017	1 272	21 (1 120)	1.5 (127)	-	-	-
Estonia	2017	110	130 (110)	10.6 (14)	2015	9.01-11.25	1 997 158
Ireland	2015	224	69 (215)	2.9 (14)	-	-	519 578
Greece	2017	62	- (-)	8 (86)	2017	0.43-0.68	278 415
Spain ( <sup>3</sup> )	2016	483	16 (482)	2.3 (105)	2016	0.25-0.57	1 503 111
France (4)	2015	373	7 (299)	0.6 (43)	2017	2.58-3.29	11 907 416
Croatia	2017	65	23 (64)	0 (0)	2015	1.79-2.87	244 299
Italy	2017	294	8 (293)	1.6 (94)	_	_	-
Cyprus	2017	16	26 (15)	0 (0)	2017	0.38-0.59	245
Latvia	2017	22	17 (22)	40 (78)	2016	5.31-6.83	833 817
Lithuania	2017	83	44 (83)	47.8 (136)	2016	4.37-4.89	251 370
Luxembourg	2017	8	19 (8)	15.2 (9)	2015	3.77	447 681
Hungary	2017	33	5 (33)	0.1 (1)	2015	0.98	137 580
Malta	2017	5	16 (5)	0 (0)	_	_	315 541
Netherlands	2017	262	22 (243)	0.1 (2)	2015	0.07-0.09	-
Austria	2017	154	26 (151)	1.4 (12)	_	_	6 293 593
Poland (1)	2016	204	7 (181)	0.7 (27)	-	-	59 958
Portugal	2016	30	4 (30)	1.7 (18)	2015	1.00-4.46	1 421 666
Romania ( <sup>5</sup> )	2017	32	2 (32)	4.4 (86)	-	-	1 095 284
Slovenia	2017	47	32 (44)	0 (0)	-	-	578 926
Slovakia	2017	19	5 (18)	0 (0)	-	-	395 877
Finland	2017	200	55 (189)	1.8 (10)	2012	4.1-6.7	5 824 467
Sweden	2017	626	92 (574)	2 (20)	-	-	517 381
United Kingdom (6)	2016	3 256	74 (3 108)	1.7 (115)	2004-11	2.87-3.22	_
Turkey (1)	2017	941	17 (907)	0.2 (14)	-	-	-
Norway	2016	282	75 (258)	1.3 (7)	2016	2.15-3.04	2 884 230
European Union	-	8 2 3 8	23 (7 634)	2.0 (1 046)	-	-	-
EU, Turkey and Norway	-	9461	22.6 (8 799)	1.8 (1067)	-	-	-

(1) In some cases, the age band is not specified and these cases were not included in the calculations of mortality rate: Germany (147), Denmark (5), Poland (1), Turkey (22).

(2) HIV data for Germany refer to 2016.

(3) Syringes distributed through specialised programmes refer to 2016.
(4) Syringes distributed through specialised programmes refer to 2015.

(<sup>5</sup>) Drug-induced deaths: sub-national coverage.

(\*) Syringe data: England, no data; Scotland 4 401 387 and Wales 2 630 382 (both in 2017): Northern Ireland 310 005 (2016).

#### **SEIZURES**

Quantity seizedNumber seizedQuantity seizedNumber seizedQuantity seizedNumber of seizedCountryKgcountKgcountKgcount1602Belgium53170344 /82460516332885491 183 (-)1602Bulgaria6983022424003406802335 (322)41Czechia11990272279051703115279 (5)387Denmark12980141784786228224403368 (-)-Estonia-001725-772-91(-)344Greece359195223455616416589 (6)3Spain52477284096422062724505363138 (-)358France665845481750122440051130839 (-)1013Cotatia22714046641838775(-)343Italy6162296408781273159(3)15931593Lutwaia441736231224400513360121405Usembourg1164173622629733583(1)550Mata1322902269735183(1)550Mata1417362314614131451451468145<		Hei	roin	Coc	aine	Amphe	tamines	MDMA, MDA, N	IDEA
Belgium55179944 7524 69516132 8554 91 1B3 (-)1692Bulgaria69832423004068002 323 (322)411Czechia1990272727905170315279 (5)8373Demmark11666111514 78632222442731 476 (34)9333Germany2988165-17744663368(-)Estonia0.01133177154333454(6)3100Ireland765-792491(-)344Greece359195223440960422062724505363 1383586(-)3589France66584544175001221440057731130 839(-)1073Croata27714046641838775(-)743Italy610226408471127110844(8)2076Cyprus0.44881711313 1393131Latvia0.0266261215023660(28)1603Unterhands0.17315386(1)5031331538133Jata0.26626121503133133Latvia0.26626121503133133Latvia0.2 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Quantity seized</th><th>of</th></th<>								Quantity seized	of
Bulgaria66983.34.423.04.068.02.235 (32.2)4.1Czechia19902.72.279.51.7031.5279 (5)3.87Denmark165.611.514.7663.222.2442.731 476 (34)9.33Germany2.981.78.1661.7849.9368 (2)Estonia0.70133.171.1541.3334.543.101Ireland7.657.797.729.113.454 <th>Country</th> <th>kg</th> <th>count</th> <th>kg</th> <th>count</th> <th>kg</th> <th>count</th> <th>tablets (kg)</th> <th>count</th>	Country	kg	count	kg	count	kg	count	tablets (kg)	count
Czechia19992722799170315279.5387Denmark16561151478632222442731476(34)933Germany22881661784693668.0Estonia-0755-7227343454(6)310Ireland765-722133454(6)310Greece3391952234456616416589(6)83Spain524728340900422062724505363138(-)3589France658454417500122144057731130839(-)1073Croata2714046641838775(9)473Italy0.6122646811811731130839(-)1033Croata271404664183877510.844(8)267Cyprus0.44811811731515(3)133Latvia0.216622612121203660(2)163Luxembourg116933222629351836(1)650Mata132514844645(4)1133133153164Jutembourg111282769960833(2)164Jutembourg1110	Belgium	53	1 790	44 752	4 695	163	2 855	491 183 (-)	1 692
Denmark116561151478632222442731476'G933Germany298-8166-1784-693666',-Estonia(-0)310175134333454-(-0)310Ireland-705-792-91344Greece3591952234592-91527363136',3589Spain5247283409604220662724505363138',3569France65845441750121440057731130839',1073Croatia277140466418387759743Italy6102264781712271108446267Cyprus0.448181173159(3)113Latvia0.26626121627340503660(2)161Latvia0.2662612162733600(2)160360(2) </td <td>Bulgaria</td> <td>698</td> <td>32</td> <td>42</td> <td>30</td> <td>406</td> <td>80</td> <td>2 335 (322)</td> <td>41</td>	Bulgaria	698	32	42	30	406	80	2 335 (322)	41
Germany298··8166··1784··693 666 · ·Estonia····1784····693 666 · ···Estonia····7765····7722········Ireland··	Czechia	19	90	27	227	95	1 703	15 279 (5)	387
Estonia<<<15433454Ireland76579291344Greece35919522345961164116589(6)83Spain524723409042206272450536313(-)3569France65845441070012144057731130839(-)1073Croatia27714046641838755- (9)743Ialy61022964084781272227110844(8)267Cyprus0.4468118173159(3)13Latvia0.266261215023660(28)169Lithuania41736239828278-(22)140Luxembourg169332220226956(c01)25Mungary21346762597351836(1)650Mata131250.32220226956(c01)99Netherlands (*)111014629146(1250)-Austria709977111571555148844645641183Polad228169211515820(0)477Slovenia41228169211515820(	Denmark	16	561	151	4 786	322	2 244	2 731 476 (34)	933
Ireland76579291(-)344Greece3591952234596164166589(6)83Spain524728340960422062724505363138(-)3569France658454417500122144057731130839(-)1073Creatia27714046641838775-(-9)743Italy6610229640847812722010844(8)267Cyprus0.448118173159(3)131Latvia0.0266261215023660(28)169Lithuania1.41736239828278-(-22)140Luxembourg1.11.693.32220.226956(c0.1)25Hungary2.13.462.762.559.7351836(1)650Matta1.32.50.32.220.22.6956(c0.1)2.5Austria709677115715514.8844645(4)1183Polad2.269960833-(-)-Portugal2.94.922.81692.81.81.92.8Romania4.42.281692.1151.8810(0.94.77Slovenia1.112.861.22.74 </td <td>Germany</td> <td>298</td> <td>-</td> <td>8 166</td> <td>-</td> <td>1 784</td> <td>-</td> <td>693 668 (-)</td> <td>-</td>	Germany	298	-	8 166	-	1 784	-	693 668 (-)	-
Greece3591952234596164161596(6)83Spain524728340 96042 2062724 505363 138 (-)3 569France6584 54417 50012 2144057731 130 839 (-)1 073Croatia2714046641838775- (-9)743Italy66102 2964 0847 8127227110 844 (8)267Cyprus0.448118173159(3)13Latvia0.2666261261322227227110 844 (8)Lithuania0.448118173519(3)13Latwia0.266626132220.22763660 (28)169Lithuania1613623982220.227697351836 (1)650Murgary2134662762597351836 (1)650Muta131250.3232<0.11405 (0.1)99Netherlands (')1110-1462-146Austria7099751838 (1)6503146833Potagal2949227348161511888(1)33Slovenia11286118327766824218	Estonia	<0.1	3	17	154	33	454	- (6)	310
Spain552472834096042206272244505363136(-)3569France658454417500122144057731130839(-)1073Croatia277140466418388775-(9)743Italy66102296408478127227110844(8)267Cyprus0.448118173159(3)13Latvia0.2662612120223660(28)160Lituania0.4481181735153(3)13Latvia0.46022612220223660(28)610Lituania0.41736232220.226956(-01)25Hungary0.1632220.22026956(-01)25Mata133232220.22026956(-01)25Mutafi110146422214622340610610Netherlands()1110-14629-1468416833Potugal0.24.96115514881446465(4)1183183163Potugal124.92.734816115111589(2)2.8Romania4.44.12.82.7348161.15111589(2)2.8Sl	Ireland	-	765	-	792	_	91	- (-)	344
France66584 54417 50012 214440577311 30 839(-)1073Croatia2714046641838775(9)743Italy6102 2964 0847 81272227110 844 (8)267Cyprus0.0448118173159 (3)13Latvia0.02666261215023 660 (28)169Lithuania0.44.736239828278(22)140Luxembourg116932220.226956 (0.1)25Hungary213462762597351 836 (1)650Malta13250.3232<0.1	Greece	359	1 952	234	596	164	16	589 (6)	83
Croatia2714046641838775-100743Italy61022964084781272227110844(8)267Cyprus0.4481181173159(3)113Latvia0.266261215023660(28)169Lithuania0.441736239828278(22)140Luxembourg116932220.226956(c01)255Hungary21134627625597351836(1)650Maita132550.3232c.0111405(c01)99Netherlands (*)1110-14629-1466Austria709973183323c.013333Portugal294922734816151148844645(4)1183Poland29203660833Slovenia11222816921151583(1)633Slovenia1420236403773643181(0)477Slovenia40418738325922636642(1)695Sweden456751623640770552434919(2)1933United Kingdom844110755697 <td>Spain</td> <td>524</td> <td>7 283</td> <td>40 960</td> <td>42 206</td> <td>272</td> <td>4 505</td> <td>363 138 (–)</td> <td>3 569</td>	Spain	524	7 283	40 960	42 206	272	4 505	363 138 (–)	3 569
Italy6102.2964.0847.8127.22.711.0.84.02.67Cyprus0.4481.1817.31.59(3)1.3Latvia0.2662612.15.023.660(28)1.69Lithuania41736239.82.82.78(22)1.40Luxembourg16932.220.22.69.56(<0.1)	France	658	4 5 4 4	17 500	12 214	405	773	1 130 839 (-)	1073
Cyprus0.448118173159(3)13Latvia0.266261215023660(28)169Lithuania41736239828278(2)140Luxembourg16932220.226956(<0.1)25Hungary2134662762597351836(1)650Maita133250.3232<0.11405(<0.1)99Netherlands (*)11101462914670Austria709671711551488446465(4)1183Poland2269960833(-)Portugal29492273481611511588(2)282Romania442228169211518810(0.9)477Slovenia1128612277662421537(1)63Slovakia0.64134246612448(<0.1)74Finland0.413873832592263666420(-)695Sweden456751623640770552434919(24)1933United Kingdom8441107556971891213564043513259(2)3483Norway99648801185503 <th< td=""><td>Croatia</td><td>27</td><td>140</td><td>466</td><td>418</td><td>38</td><td>775</td><td>- (9)</td><td>743</td></th<>	Croatia	27	140	466	418	38	775	- (9)	743
Latvia     0.2     66     2     61     21     502     3660(2)     169       Lithuania     4     173     623     98     28     278     -(22)     140       Luxembourg     1     69     3     222     0.2     26     956(<0.1)     25       Hungary     21     34     66     276     25     973     51836(1)     650       Malta     13     25     0.3     232     <0.1     1     405(<0.1)     99       Netherlands (¹)     1110     -     14 629     -     146     -     -     (1250)     -       Austria     70     967     71     1571     55     1488     446 465(4)     1183       Poland     2     2     69     9     608     33     -(-)     -       Portugal     2     492     2734     816     1     51     1598(2)     282       Romania     44     222     8     169 </td <td>Italy</td> <td>610</td> <td>2 296</td> <td>4 0 8 4</td> <td>7 812</td> <td>72</td> <td>271</td> <td>10 844 (8)</td> <td>267</td>	Italy	610	2 296	4 0 8 4	7 812	72	271	10 844 (8)	267
Lithuania     4     173     623     98     28     278     - (22)     140       Luxembourg     1     69     3     222     0.2     26     956 (<0.1)     25       Hungary     21     34     6     276     25     973     51836 (1)     650       Maita     13     25     0.3     232     <0.1     1     405 (<0.1)     99       Netherlands (')     1110     -     14 629     -     1466     -     -     -     1250     -       Austria     70     967     71     1571     55     1488     446 465 (4)     1183       Poland     2     2     69     9     608     33     -(-)     -       Portugal     29     492     2734     816     1     51     1583(0)     477       Slovenia     11     286     12     277     6     242     1537 (1)     63       Slovakia     0.6     41     <	Cyprus	0.4	4	8	118	1	73	159 (3)	13
Luxembourg16932220.226956 (0.1)25Hungary213462762597351836 (1)650Malta13250.3232<0.1	Latvia	0.2	66	2	61	21	502	3 660 (28)	169
Hungary213462762597351836(1)660Malta13250.3232<0.1	Lithuania	4	173	623	98	28	278	- (22)	140
Malta     13     25     0.3     232     <0.1     1     405 (     99       Netherlands (')     1110     -     14629     -     146     -     -(1250)     -       Austria     70     967     71     1571     55     1488     446 465 (4)     1183       Poland     2     2     69     9     608     33     -(-)     -       Portugal     29     492     2734     816     1     51     18810(0.9)     477       Slovenia     11     286     12     277     66     242     1537(1)     63       Slovenia     11     286     12     277     66     242     1537(1)     63       Slovakia     0.6     41     3     42     4     661     2448(<0.1)	Luxembourg	1	69	3	222	0.2	26	956 (<0.1)	25
Netherlands (*)111014 6291461466146(1250)1Austria7096711571551488446 465(4)1183Poland2266996608333(-)Portugal29492273481611511589(2)282Romania14222816927766242118810(0)447Slovenia111286112277662421587(1)663Slovakia0.0411286112277662421537(1)663Slovakia0.04138773832592263666420.1749Sweden456751623640770552434919(2)1933United Kingdom8441107556971891213564043513259(2)3483Norway996288681185503573433657(1)11232European Union5418367861404351043487037643726581823(1727)22803	Hungary	21	34	6	276	25	973	51 836 (1)	650
Austria70967711571551488446 465 (4)1183Poland2269960833-(-)-Portugal29492273481611511598 (2)282Romania42228169211518810 (0.9)477Slovenia1128612277662421537 (1)63Slovakia0.64134246612448 (<0.1)	Malta	13	25	0.3	232	<0.1	1	405 (<0.1)	99
Poland12111111Portugal129492273481615111598(2)282Romania142228169211518810(09)477Slovenia112861227762421537(1)63Slovakia0.64134246612448(<01)	Netherlands (1)	1 110	-	14 629	-	146	-	- (1 250)	_
Portugal2949227348161511598(2)282Romania42228169211518810(0.9)477Slovenia1128612277662421537(1)63Slovakia0.641342446612448(<0.1)74Finland0.413877383259226366420(-)695Sweden456751623640770552434919(24)1993United Kingdom8441107556971891213564043513259(2)3483Norway99628801185503573433657(12)1122European Union541836786140431034387037437206581823(1727)22803	Austria	70	967	71	1571	55	1 488	446 465 (4)	1 183
RomaniaM222MMMMMMMSloveniaM1286M2277G2421537(1)G3SlovakiaM.G.M41MM42M4G612448(<0.1)	Poland	2	2	69	9	608	33	- (-)	-
Slovenia112861227762421537(1)63Slovakia0.64134246612448(<0.1)	Portugal	29	492	2 734	816	1	51	1 598 (2)	282
Slovakia     O.G.	Romania	4	222	8	169	2	115	18 810 (0.9)	477
Finland0.413873832592 26366 420 (-)695Sweden456751623 6407705 5243 4 919 (24)1 993United Kingdom84411 0755 6971 8 9121 3 564 0435 13 259 (2)3 4 83Turkey17 3851 2 9321 4 763 8 297 2 689 4 058 6 06 7 65 (-)6 6 6 6 3Norway996 288 01 1 855 035 7 343 3 6 5 7 (12)1 1 22European Union5 41836 786140 435104 3487 03743 7 206 5 81 823 (1 7 27)2 2 8 03	Slovenia	11	286	12	277	6	242	1 537 (1)	63
Sweden     45     675     162     3 640     770     5 524     3 4 919 (24)     1 993       United Kingdom     844     11 075     5 697     18 912     1 356     4 043     5 13 259 (2)     3 483       Turkey     17 385     12 932     1 476     3 829     7 268     9 405     8 606 765 (-)     6 663       Norway     099     628     8 08     1 185     5 03     5 734     3 3 657 (12)     1 122       European Union     5 418     36 786     140 435     104 348     7 037     43 720     6 581 823 (1 727)     2 2 803	Slovakia	0.6	41	3	42	4	661	2 448 (<0.1)	74
United Kingdom     844     11075     5697     18912     1356     4043     513 259(2)     3483       Turkey     17385     12932     1476     3829     7268     9405     8606 765(-)     6663       Norway     99     628     80     1185     503     5734     33657(12)     1122       European Union     5418     36786     140435     104 348     7037     43720     6581823(1727)     22803	Finland	0.4	138	7	383	259	2 263	66 420 (-)	695
Turkey     17 385     12 932     1 476     3 829     7 268     9 405     8 606 765 (-)     6 663       Norway     99     628     80     1 185     503     5 734     3 3 657 (12)     1 122       European Union     5 418     36 786     140 435     104 348     7 037     43 720     6 581 823 (1 727)     22 803	Sweden	45	675	162	3 640	770	5 524	34 919 (24)	1993
Norway     99     628     80     1185     503     5734     33 657 (12)     1 122       European Union     5418     36 786     140 435     104 348     7 037     43 720     6 581 823 (1 727)     22 803	United Kingdom	844	11 075	5 697	18 912	1 356	4 0 4 3	513 259 (2)	3 483
European Union     5 418     36 786     140 435     104 348     7 037     43 720     6 581 823 (1 727)     22 803	Turkey	17 385	12 932	1 476	3 829	7 268	9 405	8 606 765 (–)	6 663
	Norway	99	628	80	1 185	503	5 734	33 657 (12)	1 122
EU, Turkey and Norway 22 902 50 346 141 990 109 362 14 808 58 859 15 222 245 (1739) 30 588	European Union	5 418	36 786	140 435	104 348	7 0 3 7	43 720	6 581 823 (1 727)	22803
	EU, Turkey and Norway	22 902	50 346	141 990	109 362	14 808	58 859	15 222 245 (1 739)	30 588

Amphetamines includes amphetamine and methamphetamine. All data are for 2017 or most recent year. (<sup>1</sup>) Data on number and quantity of seizures do not include all relevant law enforcement units and should be considered partial, minimum figures. Cocaine seizures represent the majority of large seizures.

## SEIZURES (continued)

	Cannabis resin		Herbal c	annabis	Cannabis plants		
	Quantity seized	Number of seizures	Quantity seized	Number of seizures	Quantity seized	Number of seizures	
Country	kg	count	kg	count	plants (kg)	count	
Belgium	947	6 133	946	28 519	416 576 (-)	1 234	
Bulgaria	0.2	9	1 580	57	16 087 (33 822)	102	
Czechia	9	173	1 095	5 369	54 392 (-)	502	
Denmark	6 637	16 678	293	1 803	38 859 (236)	380	
Germany	1 295	-	7 731	-	101 598 (-)	-	
Estonia	80	54	54	823	- (24)	35	
Ireland	-	257	-	1546	- (-)	280	
Greece	6 251	257	24 940	8 866	46 907 (-)	742	
Spain	334 919	157 346	34 517	151 968	1 124 674 (-)	3 0 3 8	
France	67 300	82 797	20 200	44 301	137 074 (-)	395	
Croatia	8	351	2 410	7 057	7 405 (–)	213	
Italy	18 755	8 922	90 097	11 253	265 635 (-)	1 545	
Cyprus	1	8	151	826	161 (-)	23	
Latvia	202	36	43	848	- (102)	55	
Lithuania	2 089	53	124	924	- (-)	-	
Luxembourg	19	348	113	935	74 (-)	13	
Hungary	114	153	3 674	3 751	5 287 (–)	156	
Malta	591	109	0.2	175	11 (-)	5	
Netherlands (1)	942	-	3 104	-	722 618 (-)	-	
Austria	100	1841	1 557	16 969	31 102 (-)	533	
Poland	1 237	18	1043	93	448 (-)	8	
Portugal	14 790	3 647	410	437	22 910 (-)	158	
Romania	6	185	276	2861	6 780 (1 540)	179	
Slovenia	20	126	838	3 768	13 594 (–)	218	
Slovakia	1	26	144	1 115	2 299 (-)	31	
Finland	693	252	322	1 158	15 200 (-)	1 150	
Sweden	2 809	13 140	1 125	8 825	- (-)	-	
United Kingdom	6 281	12 093	12 615	103 695	340 531 (-)	9 583	
Turkey	81 429	8 718	94 379	41 929	- (-)	3 143	
Norway	2 035	9 533	385	3 473	- (43)	167	
European Union	466 097	311 071	209 401	440 295	3 370 222 (35 725)	22 745	
EU, Turkey and Norway	549 561	329 322	304 165	485 697	3 370 222 (35 768)	26 055	

All data are for 2017 or most recent year.

(1) Data on number and quantity of seizures do not include all relevant law enforcement units and should be considered partial, minimum figures.

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#### About this report

The Trends and Developments report presents a toplevel overview of the drug phenomenon in Europe, covering drug supply, use and public health problems as well as drug policy and responses. Together with the online Statistical Bulletin and 30 Country Drug Reports, it makes up the 2019 European Drug Report package.

#### About the EMCDDA

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is the central source and confirmed authority on drug-related issues in Europe. For over 20 years, it has been collecting, analysing and disseminating scientifically sound information on drugs and drug addiction and their consequences, providing its audiences with an evidence-based picture of the drug phenomenon at European level.

The EMCDDA's publications are a prime source of information for a wide range of audiences including: policymakers and their advisors; professionals and researchers working in the drugs field; and, more broadly, the media and general public. Based in Lisbon, the EMCDDA is one of the decentralised agencies of the European Union.

