

European Monitoring Centre for Drugs and Drug Addiction

# ΕN

# European Drug Report

Trends and Developments

2017



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## Preface

It is our great pleasure to introduce the *European Drug Report 2017: Trends and Developments*, the EMCDDA's flagship publication, which provides the latest data on the drug situation and responses in Europe. We offer you a package of information and analysis that is rich and multi-layered, based on the most recent data and statistics provided by our national partners.

The 2017 report is accompanied by a new set of national overviews, in the form of 30 Country Drug Reports, presenting accessible online summaries of national drug trends and developments in policy and practice taking place in European countries.

While this publication provides an annual update of the drug phenomenon in Europe, it also builds on the triennial *EU Drug Markets Report*, published in 2016. And later this year it will be complemented by the first dedicated EU report on health and social responses to drugs.

At the EMCDDA, we are tasked with collecting data and ensuring that it is fit for purpose. In doing so, we strive to provide the best possible evidence and contribute to realising our vision of a healthier and more secure Europe. As a top-level overview and analysis of drug-related trends and developments, we intend this report to be a useful tool for European and national policymakers and planners who wish to base their strategies and interventions on the most recent information available. In line with our objective to deliver high quality services to our stakeholders, this latest report will allow access to data that can be used for multiple purposes: as baseline and follow-up data for policy and service evaluations; to give context and help define priorities for strategic planning; to enable comparisons to be made between national situations and datasets; and to highlight emerging threats and issues.

This year's report highlights some potentially worrying changes in the market for illicit opioids, the substances that continue to be associated with a high level of morbidity and mortality in Europe. We note the overall increase in opioid-related overdose deaths as well as the increasing reports of problems linked with opioid substitution medications and new synthetic opioids. As the drug phenomenon continues to evolve, so too must Europe's response to drugs. The framework for concerted action, set out in the European drug strategy 2013–20, allows for this. A new drug action plan for the period 2017–20 has been

proposed by the European Commission and is being discussed by the European Parliament and the Council. It builds on the findings of the mid-term assessment of the current EU drug strategy and the final evaluation of the 2013–17 action plan. The EMCDDA's work to support evidence-informed drug policymaking in Europe is reflected in these key policy documents.

In conclusion, we wish to thank our colleagues in the Reitox network of national focal points, who alongside national experts, provide most of the data that underpin this publication. We also acknowledge the contribution of numerous European research groups, without which this analysis would be less rich. The report also benefits from collaboration with our European partners: the European Commission, Europol, the European Medicines Agency and the European Centre for Disease Prevention and Control.

#### 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 the form of a national reporting package.

The purpose of the current report is to prove an overview and summary of the European drug situation and responses to it. The statistical data reported here relate to 2015 (or the last year available). Analysis of trends is based only on those countries providing sufficient data to describe changes over the period specified. Statistical significance is tested at the 0.05 level, unless otherwise stated. The reader should also be aware that monitoring patterns and trends in a hidden and stigmatised behaviour such as 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 on the methods and data used for European level estimates, where interpolation may be used.

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;

- I 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;
- I the European Parliament, the Council of the European Union in particular its Horizontal Working Party on Drugs — and the European Commission;
- I 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);
- I 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

A snapshot of the European drug situation

# The European drug situation in 2017

This report offers a snapshot of the European drug situation based on the latest available information from EU monitoring activities. A European overview of the drug market, drug use and harms and responses forms the body of this report. This is accompanied by 30 complementary national reports as well as extensive online data and methodological information.

This introductory section features a short analytical comment on some of the key themes emerging from this year's data. As the drug problems facing Europe are increasingly influenced by and interact with developments occurring internationally, the analysis gains value by being placed in a wider global context. For two important topics, cannabis use among young people and changes in the opioid market, the current European situation and its evolution is compared and contrasted with that in North America, and notable similarities and differences are found to exist.

# Do international cannabis policy developments have implications for Europe?

Recent changes in the regulatory framework for cannabis occurring in parts of the Americas have generated interest among policymakers and the public in Europe. These developments have been quite diverse, and there is a need to wait for robust evaluations before the relative costs and benefits of differing cannabis policy approaches can be assessed. Furthermore, the extent to which developments occurring elsewhere can be directly transferable to the European context is unclear.

Considerable diversity on attitudes to cannabis regulation and use exists within the European Union's 28 Member States; with current approaches ranging from restrictive models, to the tolerance of some forms of personal use. Nonetheless, a lively debate is now taking place, with issues such as permitting the production of cannabis for personal use, and making cannabis available for treating medical conditions, of growing interest in some countries.

Regardless of any wider impact on drug policy, the existence of a commercially regulated cannabis market in some countries outside Europe is fuelling innovation and product development, for example, vaporisers, E-liquids and edible products. It is possible that some of these developments will impact on consumption patterns in Europe, underlining the importance of behavioural monitoring in this area and the need to evaluate the potential health implications of any changes in future consumption patterns.

The European cannabis market has already changed considerably in recent years, in part driven by a move to more domestic production. The historically high overall potency levels of both resin and herbal cannabis available in Europe, reached in recent years, are still observed. The drug also continues to be associated with health problems, and is responsible for the greatest share of reported new entrants to drug treatment in Europe. For all these reasons, understanding trends in cannabis use and related harms is important to the debate on what constitutes the most appropriate policy responses to this drug.

# Comparing substance use behaviours among EU and US school students

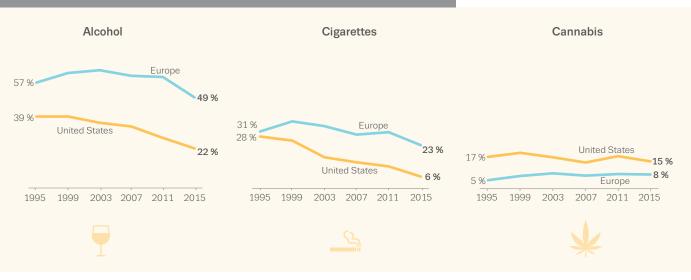
In this respect, the release in 2016 of two new major school surveys of students (aged around 15 to 16) is helpful, as it allows comparisons to be made between patterns of cannabis and other substance use among European and American students. Encouragingly, in both regions, the most recent data show a decline in use of tobacco and, albeit to a lesser extent, alcohol; though trends in cannabis use appear more stable. However, in respect to levels and patterns of use of these substances, important differences exist between European and American students.

In Europe, measures of cannabis use are lower than those found in the United States, and cannabis use is less commonly reported than tobacco use. In contrast, US students' use of cannabis exceed their use of tobacco, which is very low. Levels of alcohol consumption also differ, with more European students reporting alcohol consumption, and more intense patterns of drinking, than their American peers.

Further analysis of both the similarities and differences in the students' substance use is needed to explore the relative influence of the social, contextual and regulatory factors on the choices made by young people. Understanding, for example, what has led to the reductions in cigarette smoking observed in both the United States and Europe may offer insights for addressing the use of other substances, such as cannabis. It is also important to remember that differences exist in how substances are consumed. In Europe, for example, in contrast to the United States, cannabis is often smoked in combination with tobacco, and this is likely to have implications for public health policies.

> Understanding trends in cannabis use and related harms is important

## SUBSTANCE USE AMONG SCHOOL STUDENTS IN EUROPE AND THE UNITED STATES



NB: Trends in last month substance use among 15- to 16-year-old school students in Europe and the United States. European averages (unweighted) are based on data from 21 EU countries and Norway (source: ESPAD). US averages are based on samples of 10th grade students (source: Monitoring the Future).

# Europe's stimulants market: is cocaine availability on the rise?

Europe's most commonly used illicit stimulant drugs cocaine, MDMA and the amphetamines — continue be associated with diverse and geographically differentiated patterns of use, and all have higher reported purity levels than a decade ago. This sector of the illicit drug market has grown in complexity, with the ready availability of new stimulants including cathinones and phenethylamines. Last year's report highlighted increases in the availability and use of high-dose MDMA tablets, and this trend is still evident in the most recent data. The high MDMA content now found in seized tablets would suggest that producers are having no difficulty acquiring the precursor chemicals necessary to manufacture the drug. Seizures data also indicate that Europe remains an important producer for the global MDMA market.

Multiple indicators, including wastewater monitoring, seizures, and price and purity data, suggest that the availability of cocaine may once more be on the rise in parts of Europe. This drug has historically been the most commonly used illicit stimulant in a number of countries, mainly located in the south and west of Europe. New data reported here supports this, with increasing seizures noted along the established trafficking routes to the main European markets for this drug. In contrast, in northern and central Europe, amphetamine and, to a lesser extent, methamphetamine play a more significant role in the drug market than cocaine. For the amphetamines, a number of developments reported previously continue to be of concern. Among these are changes in the availability of precursors and in the routes of synthesis; the expansion of the methamphetamine market; and some evidence of increasing levels of injection and related harm.

# Injecting declines but remains a challenge for public health policies

Information from drug treatment and other sources indicates that the overall long-term trend in injecting as a route of administration continues to be downward. Among heroin users entering specialised drug treatment for the first time in their life, for example, reports of injecting are now at their lowest point for over a decade, although considerable variation exists between countries. Some of the health-harm indicators linked to this route of administration, particularly rates of new HIV diagnoses attributed to injecting drug use, have shown a parallel decline. This does not mean, however, that concerns have disappeared in this area. Although the 1 233 new HIV infections reported in 2016 were the lowest for more than two decades, this still represents a significant public health problem. Moreover, there have been recent outbreaks in some vulnerable populations and among users who are injecting stimulants and new psychoactive substances.

There is also evidence that blood-borne infections are often diagnosed relatively late among people who inject drugs, compared with other groups, thereby reducing the opportunity for successful intervention. Late diagnosis is also important in respect to HCV infection, which is often

found at high rates among those who have injected drugs. In the past few years, the possibilities for the treatment of viral hepatitis have improved greatly, with the arrival of a new generation of medicines, which are highly effective. The eradication of this disease can now be seen as both an opportunity and a challenge for general healthcare providers and specialised drug services.

### The changing nature of the opioid problem

Comparison with developments in North America is also relevant to an analysis of Europe's opioid drug problem. A review of the data presented in this report suggests that, while the overall EU situation remains different, some parallels do exist.

The latest data show that heroin use still accounts for the majority, around 80 %, of new opioid-related treatment demands in Europe. In addition, the overall decline in treatment demand related to heroin, observed since 2007, is no longer evident. Of particular concern is the increasing European estimate for drug overdose deaths, which has now risen for the third consecutive year; heroin is implicated in many of these deaths.

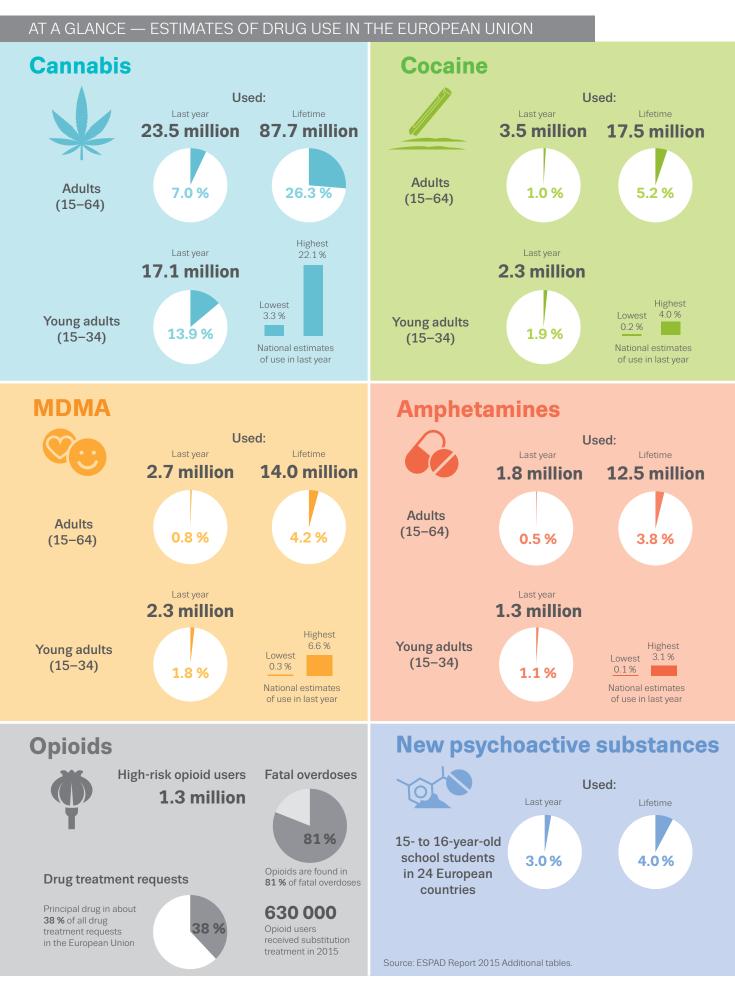
North America has also experienced considerable morbidity and mortality associated with the misuse of prescription opioids, rising levels of heroin use and, most recently, the emergence of highly potent synthetic opioids, in particular fentanyl derivatives. One difference between the two regions is that in Europe, very few clients presenting for specialised drug treatment do so for addiction to opioid pain medicines. This probably reflects the different regulatory frameworks and approaches to marketing and prescribing that exist between Europe and the North America. However, the possibility of underreporting cannot be dismissed, as Europeans experiencing problems with prescription medicines may access different services than those used by illicit drug users. Medicines used for opioid substitution treatment, however, now play a more significant role in treatment demands and health harms in a number of European countries. Overall, non-heroin opioids account for around a fifth of all opioidrelated demands to specialised drug services. The role that synthetic opioids, such as methadone, play in overdose deaths is difficult to quantify at EU level, but in many countries these substances are now important, and in a few countries they predominate. Reducing the misuse of medicines, including those used for opioid substitution treatment, is a growing challenge for many European healthcare providers. A strong evidence base supports the appropriate use of opioid substitution medicines, which has been shown to reduce morbidity, mortality and

offending among those receiving it. Good clinical practice together with an understanding of how prescription opioids are diverted from their legitimate use, and how to reduce this, are therefore important if the clear health benefits that accrue from this treatment approach are not to be undermined.

# Highly potent synthetic opioids: a growing health threat

In both Europe and North America, the recent emergence of highly potent new synthetic opioids, mostly fentanyl derivatives, is causing considerable concern. Since 2012, the EU Early Warning System has been receiving an increasing number of reports of these substances and of harms caused by them. These substances have been sold on online markets, and also on the illicit market. They have sometimes been sold as, or mixed with, heroin, other illicit drugs and even counterfeit medicines. Highly potent synthetic opioids present serious health risks, not only to those who use them, but also to those involved in their manufacture, as well as postal workers and law enforcement officers. With only small volumes needed to produce many thousands of doses, these substances are easy to conceal and transport. This poses a considerable challenge for drug control agencies. At the same time, they present a potentially attractive and profitable commodity for organised crime.

# Highly potent synthetic opioids present serious health risks



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

In Europe, problems related to highly potent synthetic opioids appear to be growing, as indicated by increasing reports of non-fatal intoxications and deaths received by the Early Warning System. In early 2017, the EMCDDA carried out risk-assessment exercises on the fentanyl derivatives acryloylfentanyl and furanylfentanyl. These substances are being considered for control at European level, and a number of other drugs in this category are currently under scrutiny.

#### The changing face of new psychoactive substances

This year's analysis suggests that while responses, both in Europe and elsewhere, may be having an impact on the emergence of new substances, the new psychoactive substances phenomenon continues to represent a considerable public health challenge. Although new drugs were reported to the EU Early Warning System at a rate of one per week in 2016, the overall number of new detections was lower than in previous years. This may be a positive sign, especially if this decline is sustained. However, other data are less encouraging, with no strong indication that the overall availability of new psychoactive substances has reduced. Moreover, even if the pace at which new substances are being introduced may be slowing, the overall number of substances available on the market continues to grow. There are also signs that some classes of new psychoactive substances, notably synthetic cathinones and synthetic cannabinoids, are now establishing a foothold in the drug market.

There are a number of reasons that may explain why the pace of new substances appearing on the market may be slowing. Some European countries have introduced blanket bans, generic and analogue based legislation and other measures to target the producers and retailers of new psychoactive substances. This has created a more restrictive legal environment, in which there may be less incentive for producers to engage in a 'cat and mouse game' with regulators, in which innovation is used to keep ahead of legal controls.

In addition, much of the supply of new psychoactive substances to Europe originates in China, and new controls there may also have had some impact on availability in the European Union. In parts of Europe, control measures targeting high street shops appear to have impacted on access to new psychoactive substances. Sales of these substances have become more clandestine, with online access and the illicit drug market now playing a more important role than in the past. In this context, the legal status of new substances, especially when they are sold alongside illicit drugs, may be less important and, correspondingly, be a less powerful driver for product innovation.

# New psychoactive substances: cheap intoxicants for marginalised and chronic drug users

Negative consumer attitudes may also have impacted on demand for new psychoactive substances. Prevention, harm reduction and the reporting of adverse consequences appear to have influenced the perception among young people that new substances are relatively safe legal alternatives to established illicit drugs. In spite of this, however, among more chronic and marginalised user populations, there is also evidence that the availability and use of these substances may be growing.

Problematic use of new psychoactive substances is becoming more apparent in certain settings and among some vulnerable populations. Injecting cathinone use, for example, among current and former opioid users, has been associated with increased levels of both physical and mental health problems.

Synthetic cannabinoids also are a growing concern. Despite some pharmacological similarities, these drugs should not be confused with cannabis products. Synthetic cannabinoids are often highly potent substances, which can have serious, potentially lethal, consequences. There is evidence to suggest that in parts of Europe, synthetic cannabinoids are now being consumed as cheap and powerful intoxicants by marginalised groups such as the homeless. Difficulties in detection mean that synthetic cannabinoids have become a particular problem in some European prisons, resulting in serious implications for prisoner health and security.

The European drug market continues to evolve

# **Drug supply and the market**

In the global context, Europe is an important market for drugs, supplied with both domestically produced drugs and drugs trafficked from other world regions. South America, West Asia and North Africa are important source areas for illicit drugs entering Europe, while China is a 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, with cannabis mostly produced for local consumption, while some of the synthetic drugs are manufactured for export to other parts of the world.

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 the last decade witnessing the emergence of a wide range of new psychoactive substances. 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 online markets.

#### 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 can be found on the EMCDDA website under Action on new drugs.

#### Drug markets: emergence of internet-based supply

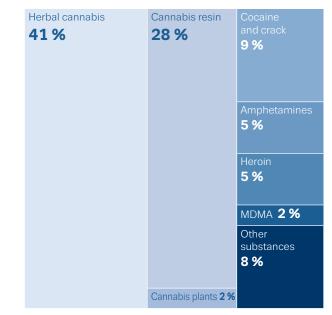
Illicit drug markets link consumers to producers through chains of intermediaries. These complex systems generate large sums of money at all levels of the market. A conservative estimate values the retail market for illicit drugs in the European Union at EUR 24 billion in 2013 (likely range EUR 21 billion to EUR 31 billion).

The last decade has seen the development of online marketplaces, facilitated by the emergence of new internet technologies, which exist in parallel with the physical drugs market. Some online vendors utilise the surface web, typically retailing non-controlled precursor chemicals, new psychoactive substances or medicines, which may be falsified or counterfeit. Other vendors work on the deep web, through darknet markets, supported by technologies that hide buyer and seller identities. These markets share characteristics with legitimate online marketplaces such as eBay and Amazon, and customers can search for and compare products and vendors. Various strategies are used to conceal both transactions and the physical locations of servers. These include anonymisation services, such as Tor and I2P, that hide a computer's internet protocol address; cryptocurrencies, such as bitcoin and litecoin, for making relatively untraceable payments; and encrypted communication between market participants. Reputation systems also play a role in regulating vendors on the markets.

Most sales on darknet markets are drug-related. A recent study, exploring sales on 16 major darknet markets between 2011 and 2015, estimated that drug sales were responsible for more than 90 % of the total economic revenue of global darknet marketplaces. Nearly half (46 %), of all darknet drug sales reportedly originated from vendors based in Europe, representing an estimated EUR 80 million over the period of the study. The main European source countries, in order of sales volumes, were Germany, the Netherlands and the United Kingdom, with stimulants, in particular MDMA and cocaine, accounting for most of the sales revenue.

## FIGURE 1.1

Number of reported drug seizures, breakdown by drug, 2015



#### Drug seizures: over one million in Europe

Over one million seizures of illicit drugs are reported annually in Europe. Most of these are small quantities of drugs confiscated from users, however, multi-kilogram consignments of drugs seized from traffickers and producers account for most of the total quantity of drugs seized.

Cannabis is the most commonly seized drug, accounting for over 72 % of seizures in Europe (Figure 1.1). Cocaine ranks second overall (9 %), followed by amphetamines (5 %), heroin (5 %) and MDMA (2 %).

# Most sales on darknet markets

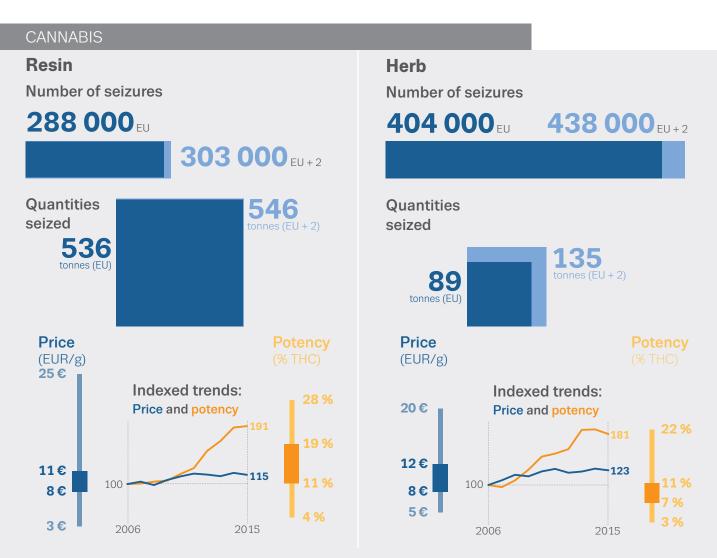
are drug-related

In 2015, more than 60 % of all drug seizures in the European Union were reported by just 3 countries, Spain, France and the United Kingdom; considerable numbers of seizures were also reported by Belgium, Denmark, Germany, Greece, Italy and Sweden. It should also be noted that recent data on the number of seizures are not available for the Netherlands or for Poland and Finland. These gaps in the data add uncertainty to the analysis.

The large numbers of drug seizures reported by Turkey reflects both its significant consumer market and its position on drug trafficking routes between the European Union, the Middle East and Asia.

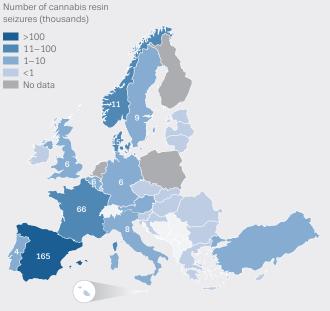
# Recent decline in quantity of herbal cannabis seized

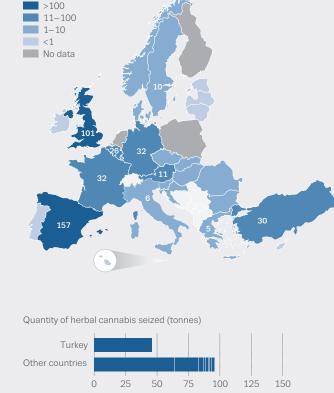
Herbal cannabis (marijuana) and cannabis resin (hashish) are the two main cannabis products found on the European drugs market, while cannabis oil is comparatively rare. Cannabis products account for the largest share (38 %) of the illicit drug retail market in Europe, with an estimated value of EUR 9.3 billion (likely range EUR 8.4 billion to EUR 12.9 billion). Herbal cannabis consumed in Europe is both cultivated domestically and trafficked from external countries. The herbal cannabis produced in Europe is mostly cultivated indoors. Most of the cannabis resin is imported, mainly from Morocco. Recent reports indicate changes in cannabis trafficking routes, with increases in the trafficking of both herbal cannabis and cannabis oil from the western Balkans, notably Albania, linked to increased cannabis cultivation in



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, 2015 or most recent year



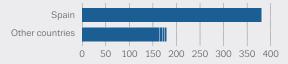


Number of herbal cannabis

seizures (thousands)

NB: Number of seizures for 10 countries with highest values.

Quantity of cannabis resin seized (tonnes)

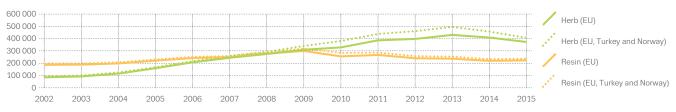


those countries. In addition, evidence suggests that Libya has become a major hub for the trafficking of resin to various destinations including Europe.

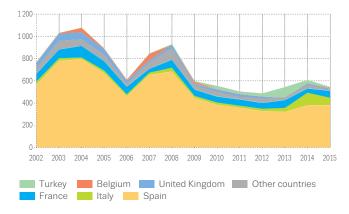
In 2015, 732 000 seizures of cannabis products were reported in the European Union including 404 000 of herbal cannabis, 288 000 of cannabis resin and 19 000 of cannabis plants. The quantity of cannabis resin seized, however, is more than 6 times that of herbal cannabis (536 tonnes versus 89 tonnes). This is partially a consequence of cannabis resin being trafficked in volume over large distances and across national borders, making it more vulnerable to interdiction. In the analysis of the quantity of cannabis seized, a small number of countries are particularly important due to their location on major cannabis trafficking routes. Spain, for example, as a major point of entry for cannabis resin produced in Morocco, reported more than 70 % of the total quantity seized in Europe in 2015 (Figure 1.2). The number of seizures of herbal cannabis in Europe has exceeded that of cannabis resin since 2009, with relatively stable trends in the number of both resin and herbal cannabis seizures since 2011 (Figure 1.3). An estimated 135 tonnes of herbal cannabis was seized in Europe in 2015, a decrease of 38 % compared with the 217 tonnes seized in 2014. Notable declines were reported in Belgium, Greece and Italy. A similar decrease in the quantity of herbal cannabis seized in Turkey is also evident from 2013. A number of factors may be behind this overall drop in Europe. These may include initiatives to tackle large-scale production in countries outside the European Union, such as Albania; increased focus on domestic cultivation rather than trafficking; changes in the way seizures are registered, and changing law enforcement priorities in some countries. In the latest data, the quantity of cannabis resin seized in the European Union has remained relatively stable since 2009.

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

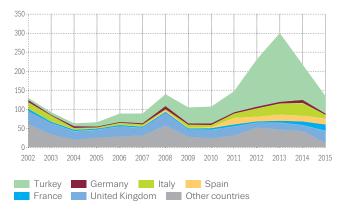




Resin (tonnes)



Herb (tonnes)

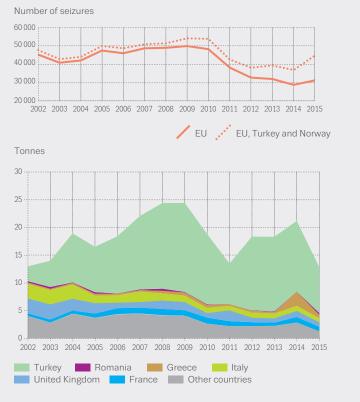


Seizures of cannabis plants may be regarded as an indicator of the production of the drug within a country. Because of reporting differences between countries, data on cannabis plant seizures must be considered with caution. Nevertheless, the number of plants seized has shown a long-term increase, from 1.5 million plants in 2002 to 3.3 million in 2014, rising sharply to 11.4 million plants in 2015, with a large increase in the number of plants seized reported from the Netherlands. This trend may reflect changes in law enforcement priorities, with cannabis cultivation more intensively targeted.

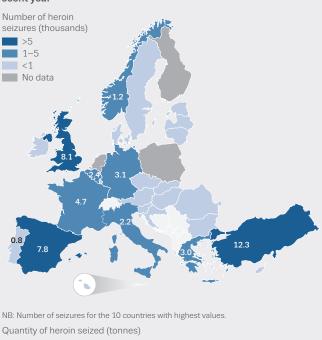
In 2015, 335 seizures of cannabis oil were reported, with Greece and Turkey seizing the largest quantities.

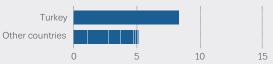
Analysis of indexed trends among those countries reporting consistently shows a large increase in the potency (content of tetrahydrocannabinol, THC) of both herbal cannabis and cannabis resin between 2006 and 2014, stabilising in 2015. Drivers of this increasing potency may include the introduction of intensive production techniques within Europe and, more recently, the introduction of high-potency plants and new techniques in Morocco. The most recent data suggest that resin and herb have similar prices, whereas on average, resin has a higher potency.

The number of seizures of herbal cannabis in Europe has exceeded that of cannabis resin since 2009



#### Number of heroin seizures and quantity seized: trends and 2015 or most recent year





#### Continuing increase in heroin purity

Heroin is the most common opioid on the European drug market, with an estimated retail value of EUR 6.8 billion (likely range EUR 6.0 billion to EUR 7.8 billion). Historically, imported heroin has been available in Europe in two forms, the more common of which is brown heroin (its chemical base form), originating mainly from 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 seized by law enforcement agencies in European countries in 2015 included opium and the medicines morphine, methadone, buprenorphine, tramadol and fentanyl (Table 1.1). Some medicinal opioids may be diverted from legitimate pharmaceutical supplies, while others such as the 27 kilograms of morphine powder seized in 2015, are illicitly 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.



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.

Since the 1970s, illicit opioid production in Europe has been limited to homemade poppy products produced in some eastern countries. However, the discovery of two laboratories converting morphine to heroin in Spain and one in the Czech Republic in recent years suggests that a small amount of heroin is manufactured in Europe.

Heroin enters Europe along four main trafficking routes. The two most important are the 'Balkan route' and the 'southern route'. The first 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' and a route through the southern Caucasus and across the Black Sea.

Following a decade of relative stability, markets in a number of European countries experienced reduced heroin availability in 2010/11. This is evident in the number of heroin seizures reported, which declined in the European Union from 2009 to 2014, before stabilising in 2015. Between 2002 and 2013, the quantity of heroin seized within the European Union halved, from 10 to 5 tonnes. After the seizure of 8.4 tonnes in 2014, a year when several countries reported large heroin seizures (100 kg and above), in 2015 the quantity of heroin seized in Europe (4.5 tonnes) returned to the levels registered in the early 2010s. After reaching around 13 tonnes in 2014,

Turkish heroin seizures decreased to 8.3 tonnes in 2015 — a figure still greater than all other European countries combined — while the number of seizures rose during the same period (Figure 1.4). Among those countries reporting consistently, indexed trends suggest that heroin purity continued to increase in Europe in 2015.

In addition to heroin, other opioid products are seized in European countries, but these represent a small fraction of the total seizures. The other opioids most commonly seized are the medicinal opioids buprenorphine, tramadol and methadone (see Table 1.1).

## TABLE 1.1

Seizures of opioids other than heroin in 2015

Opioid	Number	Quantity			Number
		Kilograms	Litres	Tablets	of countries
Methadone	1 566	31	8	60 472	17
Buprenorphine	3 377	4		68 419	17
Tramadol	2 467			690 080	12
Fentanyls (fentanyl, ocfentanil, carfentanil)	287	3		41	10
Morphine	775	27		8 837	15
Opium	293	734			14
Codeine	293	3		9 855	8
Oxycodone	16	0.0003		962	5

Most frequently seized stimulant drug in Europe, 2015 or most recent data  $% \left( {{{\rm{T}}_{{\rm{T}}}}} \right)$ 



#### Stimulant seizures: regional variations

The main illicit stimulant drugs available in Europe are cocaine, amphetamine, methamphetamine and MDMA. The retail value of the stimulant market in the European Union is estimated to be worth between EUR 6.3 billion and EUR 10.2 billion. There are marked regional differences regarding which 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, closely reflecting where the drug enters Europe. Amphetamines seizures are predominant in northern and central Europe, with methamphetamine the most commonly seized stimulant in the Czech Republic, Latvia, Lithuania and Slovakia. MDMA is the most commonly seized stimulant drug in Croatia, Romania and Turkey.

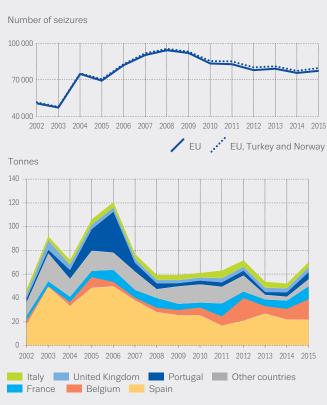
#### Cocaine: recent increases in market indicators

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 smokeable form of the drug. Cocaine is produced from the leaves of the coca bush. The drug is produced mainly in Bolivia, Colombia and Peru. Cocaine is transported to Europe by various means, including passenger flights, air freight, postal services, private aircraft, yachts and maritime containers. The retail cocaine market in the

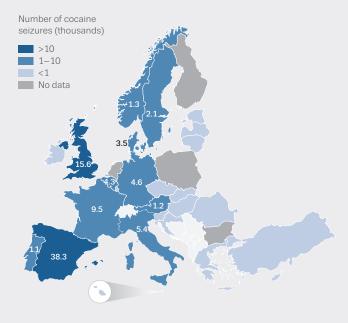
### COCAINE



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 cocaine seizures and quantity seized: trends and 2015 or most recent year



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



10

0

European Union is estimated to be worth a minimum of EUR 5.7 billion.

In total, around 87 000 seizures of cocaine were reported in the European Union in 2015. Together, Belgium, Spain, France, Italy and Portugal account for 78 % of the estimated 69.4 tonnes seized (Figure 1.6). The situation has remained relatively stable since 2007, although both the number of seizures and the quantity seized increased between 2014 and 2015 (see Figure 1.6). While Spain (22 tonnes) continues to be the country seizing the most cocaine, Belgium (17 tonnes) and France (11 tonnes) seized very large amounts in 2015, and notable increases in quantities seized, compared with the previous year, were reported by Belgium, Germany and Portugal. Overall, indexed trends suggest a small increase in the purity of cocaine in 2015.

20

30

40

50

Other coca products were seized in Europe in 2015, including 76 kilograms of coca leaves and 377 kilograms of coca paste. Seizures of coca paste suggest the existence of illicit laboratories producing cocaine hydrochloride in Europe. This is a new development as, to date, most of the cocaine laboratories found in Europe have been 'secondary extraction facilities', where cocaine is recovered from materials in which it had been incorporated (such as wines, clothes, plastics).

The main illicit stimulant drugs available in Europe are cocaine, amphetamine, methamphetamine and MDMA

# Precursor chemicals: new alternatives for amphetamines available

Drug precursors are essential chemicals needed to manufacture illicit drugs. As many of these have legitimate uses, EU regulations schedule certain chemicals, and their trade is monitored and controlled. The availability of precursors has a large impact on the market and on the production methods used in illicit laboratories. In 2015, producers continued to circumvent control mechanisms by introducing non-scheduled chemicals to produce drug precursors close to production locations. This practice, however, increases the risk of detection, as more processing requires more chemicals and creates more waste.

Data on seizures and stopped shipments of drug precursors confirm the use of both scheduled and nonscheduled substances in the production of illicit drugs in the European Union, in particular for amphetamines and MDMA (Table 1.2). The amphetamine precursor BMK (benzyl methyl ketone) was seized in large quantities in 2015, with Polish authorities seizing 7 000 kilograms in a single shipment linked to production in the Netherlands. The control of the BMK precursor APAAN (alphaphenylacetoacetonitrile) in late 2013 appears to have had an impact, with seizures falling from 48 000 kilograms in 2013 to 780 kilograms in 2015. However, this control measure appears to have prompted some innovative developments, with alternative chemicals such as APAA (alpha-phenylacetoacetamide) and glycidic derivatives of BMK reported for the first time in 2015.

Seizures of non-scheduled MDMA pre-precursors remained steady at around 5 500 kilograms. However, while safrole seizures were negligible, PMK seizures resumed, with the Netherlands reporting 622 kilograms in 2015 compared to zero in 2014.

# Amphetamine and methamphetamine: domestic production

Amphetamine and methamphetamine are synthetic stimulant drugs, often grouped under the umbrella term 'amphetamines', and hence can be difficult to differentiate in some datasets. Over the last decade, seizures indicate that the availability of methamphetamine has increased, but it is still much lower than that of amphetamine.

#### TABLE 1.2

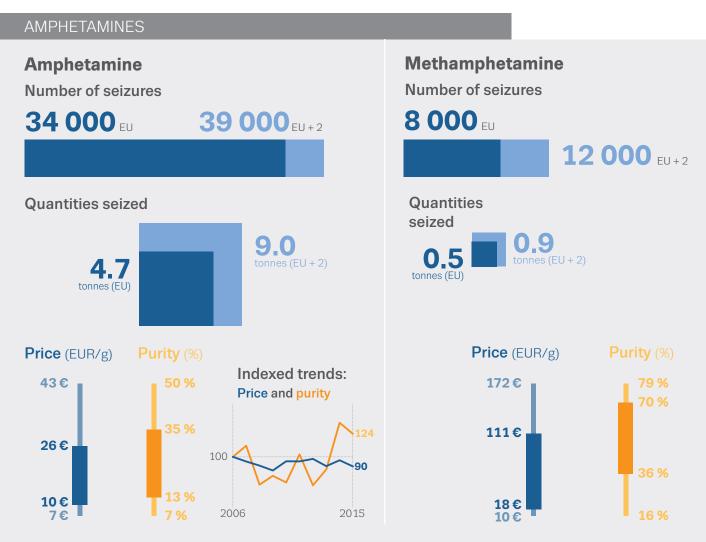
Summary of seizures and stopped shipments of precursors used for selected synthetic drugs produced in the European Union, 2015

	Seizures		Stopped shipments		TOTALS			
Precursor/pre-precursor	Number	Quantity	Number	Quantity	Number	Quantity		
MDMA or related substances								
PMK (litres)	6	622	0	0	6	622		
Safrole (litres)	2	2	0	0	2	2		
Piperonal (kg)	7	45	4	1 925	11	1970		
Glycidic derivatives of PMK (kg)	11	5 461	0	0	11	5 461		
Amphetamine and methamphetamine								
APAAN (kg)	10	778	0	0	10	778		
BMK (litres)	17	1 0 2 9	0	0	17	1029		
PAA, phenylacetic acid (kg)	6	261	4	103	10	364		
Ephedrine bulk (kg)	12	8	1	500	13	508		
Pseudoephedrine bulk (kg)	8	32	0	0	8	32		
APAA (kg)	1	201	0	0	1	201		
Glycidic derivatives of BMK (kg)	5	14	0	0	5	14		

Both drugs are produced in Europe for the European market. There are indications that amphetamine production mainly takes place in Belgium, the Netherlands and Poland, and to a lesser extent in the Baltic States, Germany and Hungary. There are also indications that the final stage of production, the conversion of amphetamine base oil to amphetamine sulphate, is carried out in Europe.

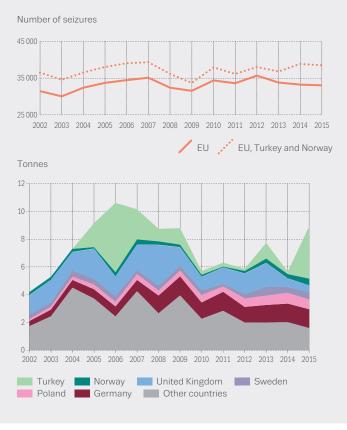
Some amphetamine is also manufactured for export, principally to the Middle East, the Far East and Oceania. Seizures of amphetamine tablets with a 'Captagon' logo have also increased recently, especially in Turkey where more than 15 million tablets were seized in 2015.

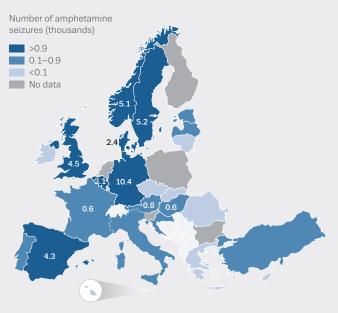
The Czech Republic, and more recently, the border areas of neighbouring countries, has long been the source of much of Europe's methamphetamine. The drug is also produced in Bulgaria, Lithuania and the Netherlands. In the Czech Republic, methamphetamine is produced mainly from the precursors ephedrine and pseudoephedrine, which are extracted from medicinal products smuggled chiefly from Poland. The drug may also be produced using BMK. In 2015, of the 291 illegal methamphetamine laboratories reported in the European Union, 263 were located in the Czech Republic. Production in that country has shifted from small-scale operations, involving users making quantities for personal use or local supply, to a situation dominated by larger-scale production, by organised crime groups, producing the drug for both consumption in European countries and export.



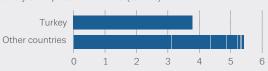
NB: EU + 2 refers to EU Member States, Turkey and Norway. Price and purity of amphetamines: national mean values — minimum, maximum and interquartile range. Countries covered vary by indicator. Indexed trends are not available for methamphetamine.

#### Number of amphetamine seizures and quantity seized: trends and 2015 or most recent year





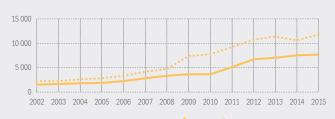
NB: Number of seizures (thousands) for 10 countries with highest values. Quantity of amphetamine seized (tonnes)

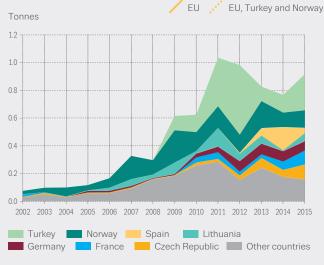


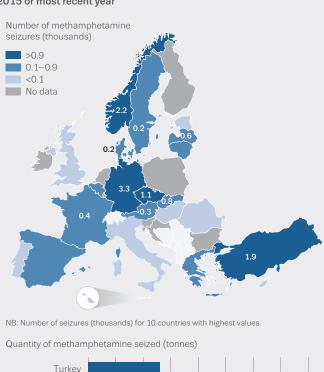
## FIGURE 1.8

Number of methamphetamine seizures and quantity seized: trends and 2015 or most recent year

Number of seizures







0.3

0.4

0.5

0.6 0.7

0.8

# 4th proof - embargo 6 June 12.45 CET (11.45 WET)

Other countries

0

0.1 0.2

In 2015, 34 000 seizures of amphetamine were reported by EU Member States, amounting to 4.7 tonnes. Overall, the quantity of amphetamine seized in the European Union has increased, fluctuating between 4 and 6 tonnes over the period 2002 to 2015 (Figure 1.7). Methamphetamine seizures are far lower, with 7 700 seizures reported in the European Union in 2015, amounting to 0.5 tonne, with the Czech Republic seizing the largest amount (Figure 1.8). In 2015, large quantities of amphetamines were also seized in Turkey (3.8 tonnes amphetamine and 0.3 tonne methamphetamine) and Norway (0.1 tonne methamphetamine). The number of seizures and quantity of methamphetamine seized show an upward trend since 2002.

Typically, the average reported purity is higher for methamphetamine than for amphetamine samples. Indexed trends suggest that amphetamine purity has increased in recent years.

#### MDMA: high-strength products available

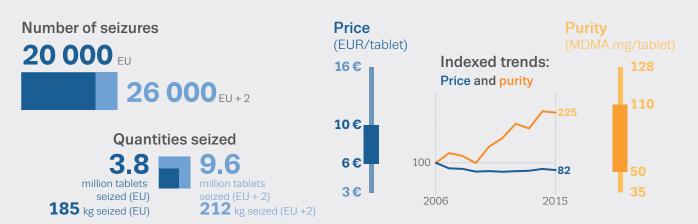
MDMA (3,4-methylenedioxymethamphetamine) is a synthetic drug chemically related to amphetamines, but with different effects. MDMA is consumed as tablets (often called ecstasy), and powder and crystalline forms of the drug are also available. New MDMA tablet designs, in various colours, shapes and brand logos, are constantly being introduced into the market. After a period of low availability linked to a lack of precursor chemicals needed for its manufacture, the MDMA market has seen a revival in recent years. The retail MDMA market is estimated to be worth about EUR 0.7 billion. The average content of MDMA in tablets has increased in recent years, and high amounts of MDMA in some batches have been linked with harms and deaths.

Production of MDMA in Europe appears to be concentrated in Belgium and the Netherlands, with 4 MDMA laboratories dismantled in the European Union in 2015 (3 in the Netherlands, 1 in Belgium). MDMA produced in Europe is also exported to other parts of the world.

Assessing recent trends in MDMA seizures is difficult due to the absence of data from some countries that are likely to make important contributions to this total. For 2015, no data are available from the Netherlands, which reported MDMA seizures of 2.4 million tablets in 2012, and the numbers of seizures are not available from Poland and Finland. Without these important contributions, the quantity of MDMA seized in the European Union in 2015 is estimated at 4 million tablets and 0.2 tonnes of MDMA powder.

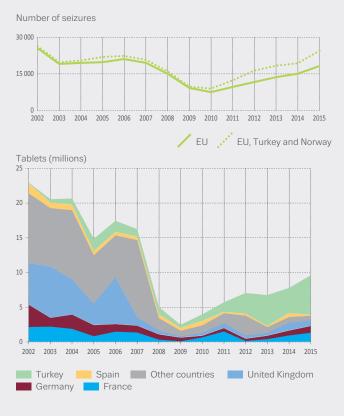
The average content of MDMA in tablets has increased in recent years

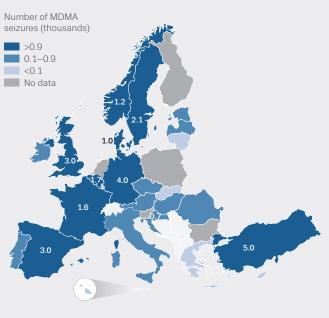
## MDMA



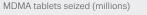
NB: EU + 2 refers to EU Member States, Turkey and Norway. Price and purity of MDMA: national mean values — minimum, maximum and interquartile range. Countries covered vary by indicator.

#### Number of MDMA seizures and quantity seized: trends and 2015 or most recent year





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





The overall number of reported MDMA seizures has continued to rise since 2010, while the quantity seized has been relatively stable over the same period. Large quantities of MDMA were also seized in Turkey in 2015, amounting to 5.7 million tablets, more than the quantity reported by all other countries combined (Figure 1.9).

#### Seizures of LSD, GHB and ketamine

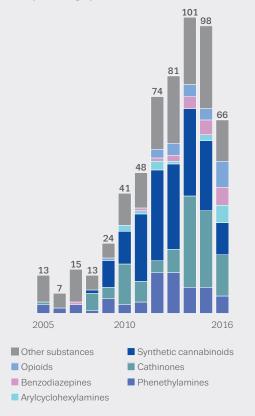
Seizures of other illicit drugs are reported in the European Union, including around 1 400 seizures of LSD (lysergic acid diethylamide) in 2015, amounting to 100 000 units. In addition, Belgium seized 1 kilogram of the drug. The overall number of LSD seizures has doubled since 2010, although the quantity seized has been fluctuating. In 2015, seizures of GHB (gamma-hydroxybutyrate) or GBL (gammabutyrolactone) were reported by 14 countries. The estimated 1 300 seizures amounted to 320 kilograms and over 1 500 litres of the drug, with Belgium (33 %) and Norway (35 %) together accounting for two thirds of these seizures. Twelve countries reported around 1 200 seizures of ketamine, amounting to an estimated 130 kilograms of the drug, most of which was accounted for by Denmark, Italy and the United Kingdom.

#### New psychoactive substances: many and diverse

By the end of 2016, the EMCDDA was monitoring more than 620 new psychoactive substances that have appeared on Europe's drug market. These substances are not covered by international drug controls and make up a broad range of drugs such as synthetic cannabinoids, stimulants, opioids and benzodiazepines (Figure 1.10). In most cases they are marketed as 'legal' replacements for illicit drugs, while others are aimed at small groups who wish to explore them for possible novel effects.

In many cases, new 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. In addition, some new substances may be sourced as medicines, which are either diverted from the legitimate supply chain or sourced illegally. The substances may also be produced in clandestine laboratories, either in Europe or elsewhere. Various indicators, including detections of illicit laboratories, analysis of dumped synthetic drug waste and precursor seizures, suggest an increase in this form of production in the last few years in Europe.

Number and categories of new psychoactive substances notified to the EU Early Warning System for the first time, 2005–16

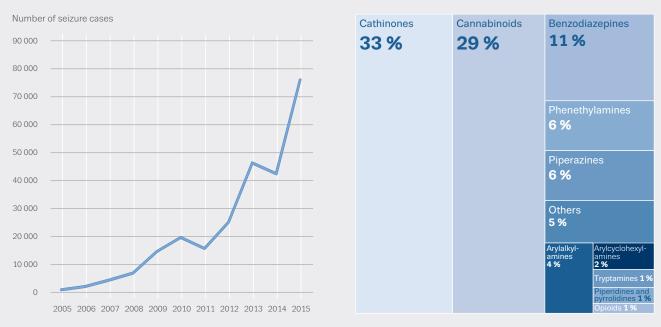


Some new substances are sold openly on the surface web and in specialised physical shops — often as branded 'legal high' products. In addition, they are sold on darknet markets and on the illicit market, sometimes under their own name and sometimes falsely as illicit drugs such as heroin, cocaine, ecstasy and benzodiazepines.

More than 70 % of new substances that were detected through the European Union Early Warning System have been made in the last 5 years. During 2016, 66 new substances were detected for the first time in Europe. This is fewer than in either of the previous 2 years but is similar to the numbers detected in 2012 and 2013. The causes of this decrease are unclear, but may in part be due to measures taken by national governments in Europe to prohibit new substances, particularly their open sale as 'legal highs'. In addition, control measures and law enforcement operations in China targeting laboratories producing new substances may be another factor. Growing links with the broader illicit drug market may also be important. The number of new substances detected each year is just one of a range of metrics that the EMCDDA uses in order to understand the overall market. For example, of the 620 new substances currently being monitored, 423 (almost 70 %) were detected on the drug market during 2015; this compares with 365 in 2014 and 299 in 2013 — illustrating how complex this market has become.

By the end of 2016, the EMCDDA was monitoring more than 620 new psychoactive substances

Number of seizures of new psychoactive substances reported to the EU Early Warning System: trends and distribution by category in 2015



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

# Increase in seizures of new psychoactive substances

In 2015, almost 80 000 seizures of new psychoactive substances were reported through the EU Early Warning System. Together, the synthetic cathinones and synthetic cannabinoids accounted for over 60 % of all seizures of new substances in 2015 (over 47 000). Increases were also observed in the quantities seized in 2015, compared with the previous year, for synthetic cathinones, synthetic cannabinoids and new opioids.

European seizure totals for new substances must be understood as minimum values, as data are drawn from case reports rather than monitoring systems. Reported seizures are influenced by a range of factors such as increasing awareness of new substances, their changing legal status, law enforcement capacities and priorities, and the reporting practices of law enforcement agencies.

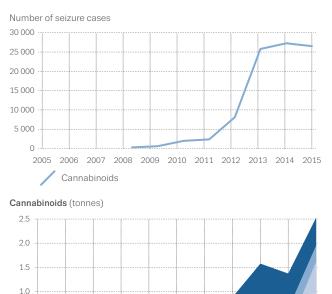
#### New synthetic opioids

Overall, 25 new opioids have been detected on Europe's drug market since 2009 — including 9 reported for the first time in 2016. This includes 18 fentanyls, 8 of which were reported for the first time in 2016. Although currently playing a small role in Europe's drug market, the new fentanyls are highly potent substances that pose a serious threat to individual and public health.

New opioids have been seized in various forms: mainly powders, tablets, capsules, and since 2014, also as liquids. Over 60 % of the 600 seizures of new synthetic opioids reported in 2015 were fentanyls. Almost 2 litres of synthetic opioids was seized in 2015, an increase from the 240 ml reported the previous year. Fentanyls were found in 85 % of the liquids seized. One concern in this respect is the appearance on the market of nasal sprays containing fentanyls such as acryloylfentanyl and furanylfentanyl. Reflecting their low share of the market as well as their high potency, these opioids account for 0.75 % of the total number of seizures of new substances but for only 0.04 % of the total quantity seized.

#### FIGURE 1.12

#### Seizures of synthetic cannabinoids and cathinones reported to the EU Early Warning System: trends in number of seizures and quantity seized

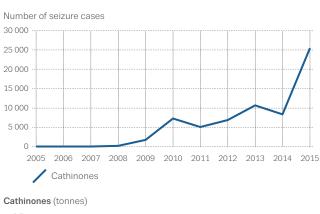


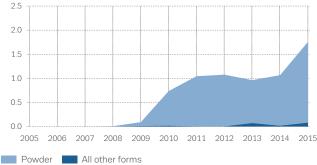
2005 2006 2007 2008 2009 2010 2011 2012

Plant material Powder All other forms

2013

2014 2015





NB: Data for EU, Turkey and Norway.

0.5

#### Synthetic cannabinoids

Synthetic cannabinoids are substances that mimic the effects of delta-9-tetrahydrocannabinol (THC), which is largely responsible for the major psychoactive effects of cannabis. Since at least 2008, producers in Europe have exploited this effect by importing bulk powders of the cannabinoids and mixing them with dried plant material in order to create hundreds of different 'legal high' products. These were then marketed as legal replacements for cannabis and sold as ready-to-use 'herbal smoking mixtures'. Synthetic cannabinoids continue to be the largest group of new substances monitored by the EMCDDA and are becoming increasingly chemically diverse, with 169 detected since 2008 — including 11 reported in 2016, a decrease from the 24 reported in 2015.

In 2015, just over 22 000 seizures of synthetic cannabinoids were reported (Figure 1.12). The five most commonly seized synthetic cannabinoids in 2015 were ADB-FUBINACA, AB-CHMINACA, UR-144, 5F-AKB48 and ADB-CHMINACA.

These seizures amounted to more than 2.5 tonnes of the substances. Almost two thirds (64 %) of the synthetic

cannabinoid seizures were in the form of herbal mixtures, with powders accounting for 13 %.

The detection of synthetic cannabinoids in powder form and of processing facilities in Europe indicates that products are packaged in Europe. These powders, when processed into 'herbal smoking mixtures', could have been capable of producing many millions of doses. The most commonly seized cannabinoids in powder form in 2015 were 5F-AMB (61 kg), 5F-AKB48 (61 kg) and ADB-FUBINACA (57 kg).

#### Synthetic cathinones

Synthetic cathinones are chemically related to cathinone, which is a naturally occurring stimulant found in the khat plant (*Catha edulis*). These substances have effects similar to common illicit stimulant drugs such as amphetamine, cocaine and MDMA. Synthetic cathinones are the second largest group of new drugs monitored by the EMCDDA, with 118 detected in total — including 14 detected for the first time in 2016, a decrease from the 26 reported in 2015.

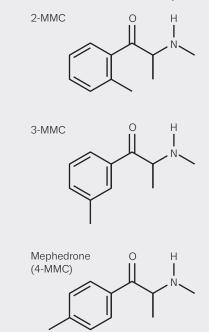
Synthetic cathinones were the most frequently seized new psychoactive substances in 2015, with over 25 000 seizures, accounting for one third of the total number of seizures. This represents an increase of over 17 000 seizures on the previous year. These seizures amounted to just over 1.8 tonnes, an increase of approximately 0.75 tonne compared with 2014 (Figure 1.12). Synthetic cathinones are generally found in powder form. The five most commonly seized cathinones in 2015 were alpha-PVP, 3-MMC, ethylone, 4-CMC and pentedrone. Where reported, more than 60 % (1.2 tonnes) of the synthetic cathinones seized in 2015 were shipped from China. A large share (42 %) of the synthetic cathinones seized were 2-MMC (156 kg) and 3-MMC (616 kg), which are chemically related to mephedrone (4-MMC), but are not under international drug control. Mephedrone has become established in the illicit drug market in some countries, and it is likely that some of the 2-MMC and 3-MMC is being sold as mephedrone (see Figure 1.13).

#### New benzodiazepines

Also of concern is the recent growth in the market for new benzodiazepines. Some 20 of these substances are being monitored by the EMCDDA — 6 of which were detected for the first time in Europe in 2016. During 2015, more than 300 000 tablets containing new benzodiazepines such as clonazolam, diclazepam, etizolam and flubromazolam were seized — almost twice the number reported in 2014. Some new benzodiazepines were sold as tablets, capsules or powders under their own names. In other cases, counterfeiters used these substances to produce fake versions of commonly prescribed anti-anxiety medicines, such as diazepam and alprazolam, which were sold directly on the illicit drug market.

#### FIGURE 1.13

Chemical formulas of 2-MMC, 3-MMC and mephedrone (4-MMC)

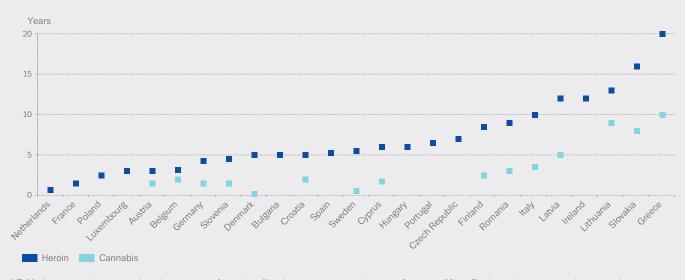


# Laws targeting supply of new psychoactive substances

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. There is wide variation in the definitions of the offences and the penalties — as is the case for drug laws across Europe. The general trend in national drug control laws, that is to reduce penalties for personal possession, is also evident in recent laws on new drugs. Most of the new laws specific to new psychoactive substances only penalise illegal supply and have no penalty for personal possession.

#### FIGURE 1.14



#### Expected prison sentence for supply of 1 kilogram of heroin or cannabis in EU Member States

NB: Median expected sentences based on opinions of samples of legal practitioners in each country; for cases of first offenders, with no organised crime involvement. Where suspension of sentence was considered possible, median sentence is not presented.

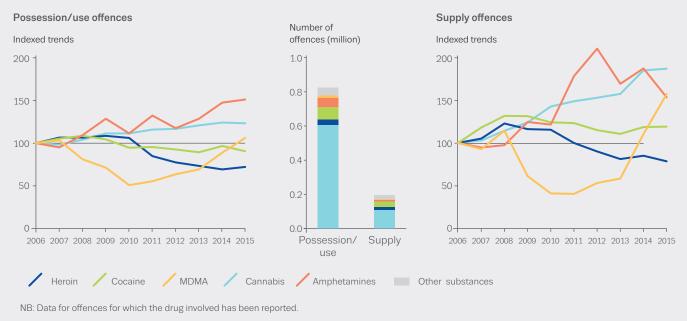
At EU level, the current legal framework for the control of new psychoactive substances, which dated from 2005, is under revision, with the aim of establishing a swifter, more effective system for submitting conduct related to harmful new psychoactive substances to criminal law measures.

#### Drug supply penalties: vary by drug and country

Unauthorised drug supply is a crime in all European countries, but the penalties written in the law vary widely. A recent EMCDDA survey of the opinions of legal practitioners in EU Member States found that the penalties expected by these experts for similar drug trafficking offences varied considerably between countries (see Figure 1.14). These variations may be a result of national historical and cultural factors influencing a country's criminal law systems, as well as different national views on the effectiveness of sentencing as a deterrent. The study also revealed that, although the legislation may contain similar penalties for different substances, in most countries the practitioners predicted that penalties would vary by substance. This would imply that judges take into account aspects such as perceived harm to society caused by the different drugs.

#### FIGURE 1.15

Drug law offences in Europe related to drug use or possession for use or drug supply: indexed trends and reported offences in 2015



#### Drug law offences: majority related to cannabis

The implementation of laws is monitored through data on reported drug law offences. In the European Union, an estimated 1.5 million drug law offences were reported in 2015, most of them (57 %) related to cannabis use or possession, involving around 1 million offenders. Reported offences increased by almost a third (31 %) between 2006 and 2015.

Overall, reports of drug supply offences increased by 18 % since 2006, with an estimate of more than 214 000 cases in 2015. Cannabis accounted for the majority of supply offences (57 %). There has been a sharp increase in reports of supply offences for MDMA since 2013 (Figure 1.15).

In Europe, overall, it is estimated that more than 1 million offences related to use or possession for personal use were reported in 2015, a 27 % increase compared with 2006. Of the reported drug offences related to possession, about three quarters involve cannabis (74 %). The upward trends in offences for amphetamines and MDMA possession have continued in 2015 (Figure 1.15).

1.5 million drug law offences were reported in 2015

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Country Drug Reports 2017.

Drug trafficking penalties across the European Union: a survey of expert opinion, Technical reports.

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#### 2016

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

# $\sum$

Among drug users, 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 drug users, polydrug consumption is common and individual patterns of use range from experimental to habitual and dependent consumption. Use of all drugs is generally higher among males, and this difference is often accentuated for more intensive or regular patterns of use. The prevalence of cannabis 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.

#### 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 can be 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 can help 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, can inform understanding on the nature and trends in high-risk drug use.

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

# Diverse national substance use trends among school students

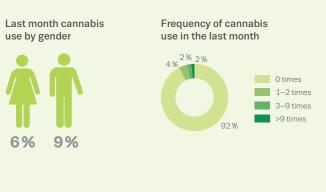
Monitoring substance use among students provides an important insight into current youth risk behaviours and potential future trends. In 2015, the European School Survey Project on Alcohol and Other Drugs (ESPAD) conducted the sixth round of data collection since its inception in 1995. The latest survey collected comparable data on substance use among 15- to 16-year-old students from 35 European countries, including 23 EU Member States and Norway. Among students in these 24 countries, on average, 18 % reported having used cannabis at least once (lifetime prevalence), with the highest levels reported by the Czech Republic (37 %) and France (31 %). Use of the drug in the last 30 days ranged from 2 % in Sweden, Finland and Norway to 17 % in France, with an average of 8 % across the 24 countries. Gender differences varied across Europe, with the ratio of boys to girls among lifetime cannabis users ranging from parity in the Czech Republic and Malta to 2.5 boys to each girl in Norway.

The use of illicit drugs other than cannabis was far lower, with an overall lifetime prevalence of 5 %. The most frequently used illicit drugs after cannabis were MDMA/ ecstasy, amphetamine, cocaine, methamphetamine and LSD or other hallucinogens, each reported by 2 % of students. In addition, lifetime use of new psychoactive substances was reported by 4 % of students, with the highest rates in Estonia and Poland (10 % each).

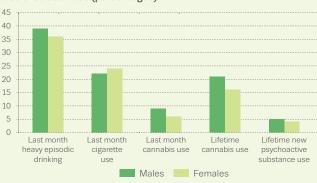
Among the 22 countries with sufficient data for analysis (21 EU Member States and Norway), overall trends in last month cannabis prevalence peaked in 2003 and slightly decreased in subsequent surveys (Figure 2.1). Between the most recent surveys, 2011 and 2015, prevalence of both lifetime and last month cannabis use was stable for most of these countries. Since 1995, the lifetime prevalence of use of illicit drugs other than cannabis has remained largely unchanged, with a slight decrease between 2011 and 2015.

Lifetime use of new psychoactive substances was reported by 4 % of students

# SUBSTANCE USE AMONG 15- TO 16-YEAR-OLD EUROPEAN SCHOOL STUDENTS (2015 ESPAD)

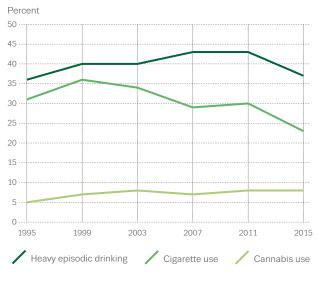


Use of substances (percentages)



NB: Based on data for the 23 EU Member States and Norway that participated in the 2015 round of ESPAD.

Trends in last month prevalence of heavy episodic drinking, cigarette use and cannabis use among 15- to 16-year-old European school students



NB: Based on the 21 EU Member States and Norway that have participated in at least four rounds of ESPAD.

# Recent decreases in tobacco use and heavy episodic drinking among school students

ESPAD also reports on the use of alcohol and tobacco. More than four fifths (83 %) of the students had consumed alcohol at least once in their lifetime. Half of the students reported drinking alcohol at least once in the last month, with 39 % of boys and 36 % of girls having had five or more drinks on one occasion during the last month (heavy episodic drinking).

Just under half (47 %) of students had smoked cigarettes. In the month prior to the survey, 23 % of students reported smoking one or more cigarette a day, with 3 % smoking more than 10 a day.

Among the 22 EMCDDA countries with sufficient data for trend analysis, an overall decrease in lifetime and last month use of both alcohol and cigarettes can be observed between 1995 and 2015. Changes in heavy episodic drinking were less pronounced, although an increase was observed for girls over the period. Between the 2011 and 2015 surveys, there was a decrease in both heavy episodic drinking and last month cigarette use.

#### More than 93 million adults have tried illicit drugs

More than 93 million or just over a quarter of 15- to 64-year-olds in the European Union are estimated to have tried illicit drugs during their lives. Experience of drug use is more frequently reported by males (56.8 million) than females (36.8 million). The most commonly tried drug is cannabis (53.8 million males and 34.1 million females), with much lower estimates reported for the lifetime use of cocaine (12.2 million males and 5.3 million females), MDMA (9.3 million males and 4.7 million females) and amphetamines (8.4 million males and 4.2 million females). Levels of lifetime use of cannabis differ considerably between countries, ranging from around 8 in 20 adults in France to less than 1 in 20 in Malta and Romania.

Last year drug use provides a measure of recent drug use and is largely concentrated among young adults. An estimated 18.7 million young adults (aged 15–34) used drugs in the last year, with twice as many males as females.

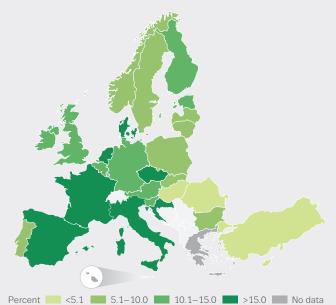
#### Cannabis use: varying national trends

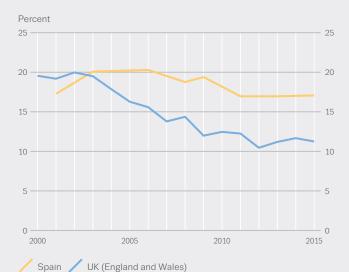
Across all age groups, cannabis is the illicit drug most likely to be used. The drug is generally smoked and, in Europe, is commonly mixed with tobacco. Patterns of cannabis use can range from the occasional to the regular and dependent.

It is estimated that 87.7 million European adults (aged 15–64), or 26.3 % of this age group, have experimented with cannabis at some time in their lives. Of these, an estimated 17.1 million young Europeans (aged 15–34), or 13.9 % of this age group, used cannabis in the last year, with 10 million of these aged 15–24 (17.7 % of this age group). Last year prevalence rates among 15- to 34-year-olds range from 3.3 % in Romania to 22 % in France. Among young people using cannabis in the last year, the ratio of males to females is two to one.

The most commonly tried drug is cannabis

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





The most recent survey results show that countries continue to follow divergent paths in last year cannabis use. Of the countries that have produced surveys since 2014 and reported confidence intervals, 7 reported higher estimates, 6 were stable and 2 reported lower estimates than in the previous comparable survey.

Few countries have sufficient survey data to permit statistical analysis of trends in last year use of cannabis among young adults (15–34). Among these, the long-term decreasing trends, previously observed over the last decade in Spain and the United Kingdom, have now stabilised in the more recent data (Figure 2.2).

In the last decade, an increasing trend can be seen in Ireland and Finland, and also in Sweden, though the prevalence in that country has been stable since 2009. In Germany, France and Denmark, no upward statistical trend is evident during this period, though the latest surveys point to recent increases in last year cannabis use among young adults. In 2014, France reported a new high of 22 %, while the 13 % reported in Germany in 2015 is the highest prevalence of last year cannabis use among young adults reported in that country in the last decade. Among countries lacking sufficient data for a statistical analysis of trends, in 2015, the second comparable annual survey from the Netherlands confirmed a prevalence of around 16 %, while Austria's first national survey since 2008 reported a prevalence of 14 %.

# High-risk cannabis users: rising numbers entering treatment

Based on surveys of the general population, it is estimated that around 1 % of European adults are daily or almost daily cannabis users — that is, they have used the drug on 20 days or more in the last month. Around 30 % of these are older drug users, aged 35 to 64, and over 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. Overall, the number of first-time treatment entrants for cannabis problems increased from 43 000 in 2006 to 76 000 in 2015. Multiple factors may lie behind this rise, including higher prevalence of cannabis use among the general population, increases in the number of intensive users, the availability of higher potency products, and increases in treatment referral and levels of provision.

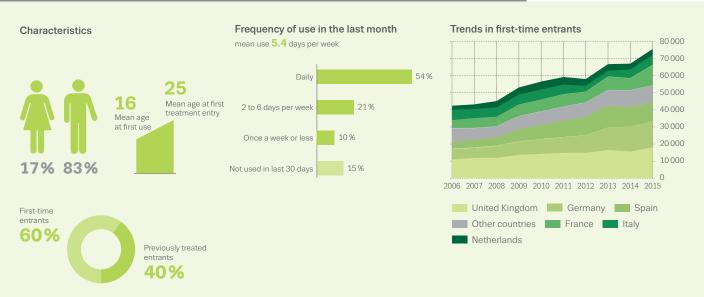
#### Cocaine prevalence: stable national trends

Cocaine is the most commonly used illicit stimulant drug in Europe, and its use is more prevalent in southern and western countries. Among regular consumers, a broad distinction can be made between more socially integrated users, who often sniff powder cocaine (cocaine hydrochloride), and marginalised users, who inject cocaine or smoke crack (cocaine base), sometimes alongside the use of opioids.

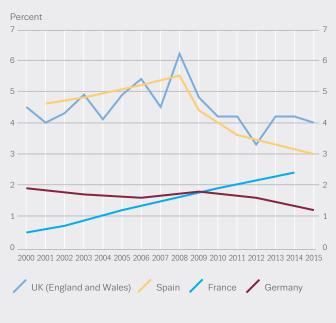
It is estimated that 17.5 million European adults (aged 15–64), or 5.2 % of this age group, have experimented with cocaine at some time in their lives. Among these are about 2.3 million young adults aged 15 to 34 (1.9 % of this age group) who have used the drug in the last year.

Only Ireland, Spain, the Netherlands and the United Kingdom report last year prevalence of cocaine use among young adults of 2.5 % or more. Across Europe, the decreases in cocaine use reported in previous years have not been observed in the most recent surveys. Of the countries that have produced surveys since 2014 and reported confidence intervals, 2 reported higher estimates, 11 reported a stable trend, and 1 reported a lower estimate than in the previous comparable survey.

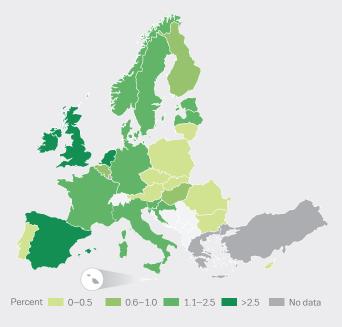
#### CANNABIS USERS ENTERING TREATMENT



NB: Characteristics are for all treatment entrants with cannabis as primary drug. Trends in first-time entrants are based on 23 countries. Due to changes in the flow of data at national level, data since 2014 for Italy is not comparable with earlier years.



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



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, and new data confirm existing trends. Spain and the United Kingdom both reported trends of increasing prevalence until 2008, followed by stability or decline (Figure 2.3). While at lower levels of prevalence, an upward trend can be observed in France, with prevalence for the first time rising above 2 % in 2014. Statistically, the 2015 survey in Germany showed a decline in cocaine prevalence, which had remained stable between 2000 and 2009.

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.

A 2016 analysis found the highest mass loads of benzoylecgonine — the main metabolite of cocaine — in cities in Belgium, Spain and the United Kingdom and very low levels in the majority of eastern European cities (see Figure 2.4). Of the 33 cities that have data for 2015 and 2016, 22 reported an increase, 4 a decrease and 7 a stable situation. Stable or increasing longer-term trends are reported for most of the 13 cities with data for 2011 and 2016.

#### High-risk cocaine use: stable treatment demand

The prevalence of high-risk cocaine use in Europe is difficult to gauge as only 4 countries have recent estimates and different definitions and methodologies have been used. In 2015, based on severity of dependence scale questions, Germany estimated high-risk cocaine use among the adult population at 0.20 %, while Spain used frequency of use to estimate high-risk cocaine use at 0.24 %. In 2015, Italy produced an estimate of 0.65 % for those in need of treatment for cocaine use. High-risk cocaine use in Portugal was estimated at 0.62 % in 2012, based on reported last year use.

Spain, Italy and the United Kingdom account for three quarters (74 %) of all reported treatment entries related to cocaine in Europe. Overall, cocaine was cited as the primary drug by around 63 000 clients entering specialised drug treatment in 2015 and by around 28 000 first-time clients. After a period of decline, the overall number of cocaine first-time treatment entrants has been relatively stable since 2012.

In 2015, 7 400 clients entering treatment in Europe reported primary crack cocaine use, with the United Kingdom accounting for almost two thirds (4 800). Spain, France and the Netherlands together (1 900) account for most of the remainder.

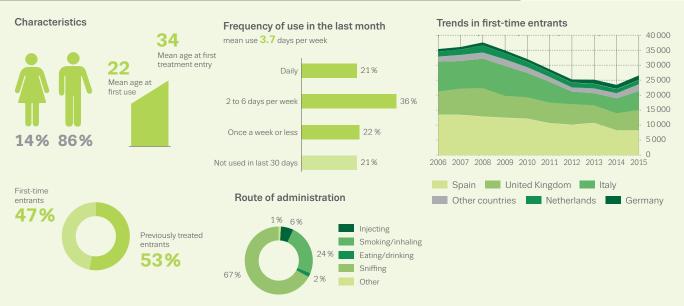
#### mg/1000 population/day Utrecht 1000 900 Antwerp Stockholm Helsinki Eindhoven Espoo 800 Oslo 700 Brussels 600 London Dortmund 500 Bristol Dresden 400 Krakow Budweis Munich Piestany Paris 300 Innsbruck-Bratislava 200 Bordeaux Zagreb Milan 100 Porto Barcelona 0 Lisbon 2012 2011 2013 2014 2015 2016 Nicosia Athens Valencia Limassol Antwerp London Barcelona 🥖 Milan mg/1000 population/day Paris Zagreb Oslo 250 100 50 10

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

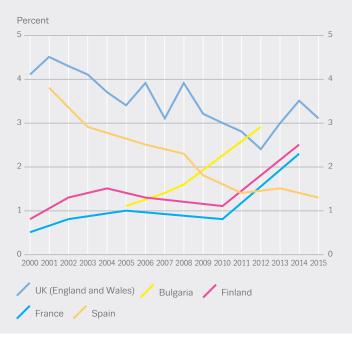
NB: Mean daily amounts of benzoylecgonine in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in 2016. Source: Sewage Analysis Core Group Europe (SCORE).

In addition, the United Kingdom (England) estimated crack cocaine use among the adult population at 0.48 % during 2011/12. The majority of these crack users were also using opioids.

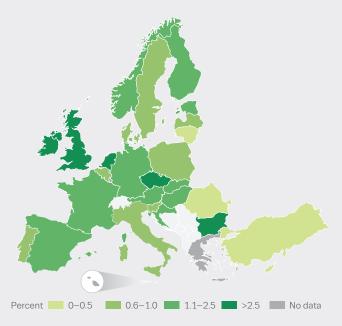
#### COCAINE USERS ENTERING TREATMENT



NB: Characteristics are for all treatment entrants with cocaine as primary drug. Trends in first-time entrants are based on 23 countries. Due to changes in the flow of data at national level, data since 2014 for Italy is not comparable with earlier years.



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



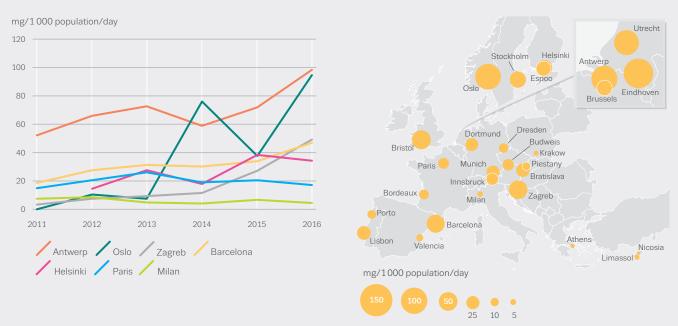
#### MDMA: use continues to increase

MDMA (3,4-methylenedioxy-methamphetamine) is used in the form of tablets (often called ecstasy), and also in the form of crystals and powders; tablets are usually swallowed, but crystals and powder are taken orally and can also be 'dabbed' or snorted. Most European surveys have historically collected data on ecstasy rather than MDMA use, although this is now changing.

It is estimated that 14 million European adults (aged 15–64), or 4.2 % of this age group, have experimented with MDMA/ecstasy at some time in their lives. Figures for more recent use, among the age group in which drug use is highest, suggest that 2.3 million young adults (15–34) used MDMA in the last year (1.8 % of this age group), with national estimates ranging from 0.3 % in Cyprus, Lithuania and Romania to 6.6 % in the Netherlands.

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 indicate increased use of MDMA. Among the countries that have produced new surveys since 2014 and reported confidence intervals, results suggest a continued increasing trend in Europe, with 5 countries reporting higher estimates than in the previous comparable survey and 9 reporting stable estimates.

Where data exist for a statistical analysis of trends in last year use of MDMA among young adults, the more recent data suggest changes. Following stability or gradual increase since 2000, France and Finland report large increases in 2014 (Figure 2.5). In the United Kingdom, the increase observable since 2012 has been reduced by the 2015 data, while in Spain, the long-term trend remains downward, although recent values are stable.



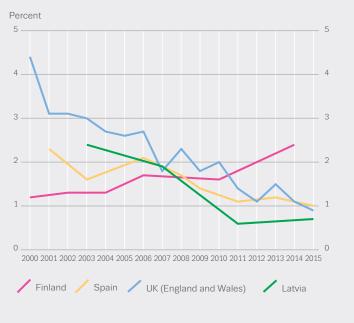
#### MDMA residues in wastewater in selected European cities: trends and most recent data

NB: Mean daily amounts of MDMA in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in 2016. Source: Sewage Analysis Core Group Europe (SCORE).

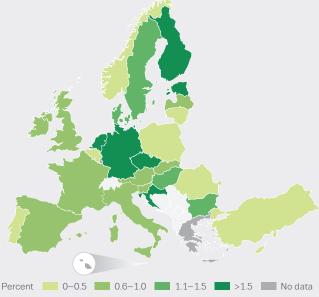
A 2016 multi-city analysis found the highest mass loads of MDMA in the wastewater in cities in Belgium, the Netherlands and Norway (Figure 2.6). Of the 32 cities that have data for 2015 and 2016, 17 reported an increase, 11 reported a decrease and 4 a stable situation. Looking at longer-term trends, in most cities with data for both years, wastewater MDMA loads were higher in 2016 than in 2011, with sharp increases observed in some cities.

MDMA is often taken alongside other substances, including alcohol, and has historically been closely linked with nightlife settings and especially with electronic dance music. Current indications suggest that, in higherprevalence 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. MDMA use is rarely cited as a reason for entering specialised drug treatment. In 2015, MDMA was reported by less than 1 % (around 900 cases) of first-time treatment entrants in Europe.

Monitoring sources indicate increased use of MDMA



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



#### Amphetamines use: divergent national situations

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 the Czech Republic and, more recently, Slovakia, although recent years have seen increases in use in other countries. In some data sets, 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, injection is common among high-risk users in some countries. Methamphetamine can also be smoked, but this route of administration is not commonly reported in Europe.

It is estimated that 12.5 million European adults (aged 15–64), or 3.8 % of this age group, have experimented with amphetamines at some time in their lives. Figures for more recent use, among the age group in which drug use is highest, suggest that 1.3 million (1.1 %) young adults (aged 15–34) used amphetamines during the last year, with the most recent national prevalence estimates ranging from 0.1 % in Cyprus, Portugal and Romania to 3.1 % in the Netherlands. The available data suggest that since around 2000, most European countries have experienced a relatively stable situation in respect to trends in use. Of the countries that have produced new surveys since 2014 and reported confidence intervals, 2 reported higher estimates, 10 reported a stable trend and

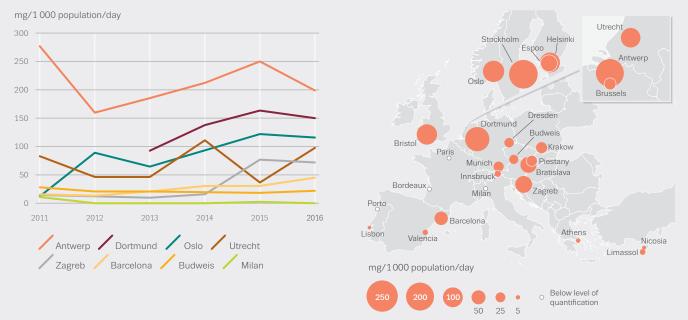
2 reported lower estimates than in the previous comparable survey.

A statistical analysis of trends in last year prevalence of amphetamines in young adults is only possible in a small number of countries. In Spain, Latvia and the United Kingdom long-term downward trends are observable (Figure 2.7). In contrast, Finland has seen prevalence increases since 2000.

Analysis of municipal wastewater carried out in 2016 found that mass loads of amphetamine varied considerably across Europe, with the highest levels reported in cities in the north of Europe (see Figure 2.8). Amphetamine was found at much lower levels in cities in the south of Europe. Of the 32 cities that have data for 2015 and 2016, 13 reported an increase, 9 a stable situation and 10 a decrease. Overall, the data from 2011 to 2016 showed relatively stable trends for amphetamine.

Methamphetamine use, generally low and historically concentrated in the Czech Republic and Slovakia, now appears to be present also in the east of Germany and northern Europe, particularly in cities in Finland (see Figure 2.9). In 2015 and 2016, of the 30 cities that have data on methamphetamine in wastewater, 13 reported an increase, 10 a stable situation and 7 a decrease.

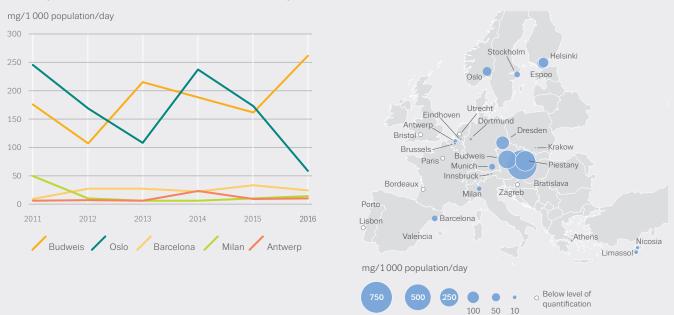
#### Amphetamine residues in wastewater in selected European cities: trends and most recent data



NB: Mean daily amounts of amphetamine in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in 2016. Source: Sewage Analysis Core Group Europe (SCORE).

#### FIGURE 2.9

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



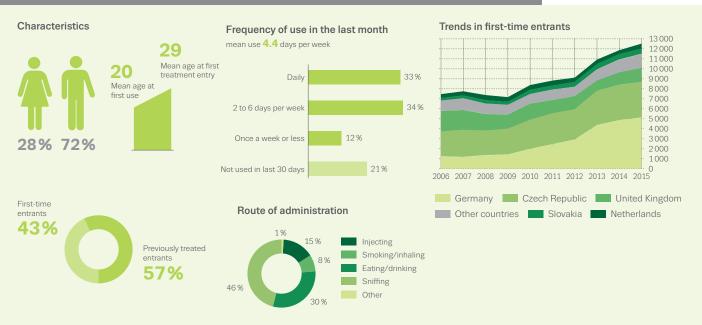
NB: Mean daily amounts of methamphetamine in milligrams per 1 000 population. Sampling was carried out in selected European cities over a week in 2016. Source: Sewage Analysis Core Group Europe (SCORE).

# High-risk amphetamines use: rising treatment demand

Problems related to long-term, chronic and injecting amphetamine use have, historically, been most evident in northern European countries. In contrast, long-term methamphetamine problems have been most apparent in the Czech Republic and Slovakia. Recent estimates of high-risk use of amphetamines are available for Norway, estimated at 0.33 % or 11 200 adults and for Germany, estimated at 0.19 % or 102 000 users in 2015. Users of amphetamines are likely to make up the majority of the estimated 2 180 (0.17 %) high-risk stimulant users reported by Latvia in 2014, down from 6 540 (0.46 %) in 2010. Recent estimates of high-risk methamphetamine use are available for the Czech Republic and Cyprus. In the Czech Republic, high-risk methamphetamine use among adults (15-64) was estimated at around 0.49 % in 2015. High-risk use of the drug, mainly injecting, increased from 20 900 users in 2007 to a peak of 36 400 in 2014, declining to 34 200 in 2015. The estimate for Cyprus is 0.14 % or 678 users in 2015.

Approximately 34 000 clients entering specialised drug treatment in Europe in 2015 reported amphetamines as their primary drug, of whom around 14 000 were first-time clients. Primary amphetamine users account for more than 15 % of first-time treatment entrants only in Bulgaria, Germany, Latvia, Poland and Finland. Treatment entrants reporting primary methamphetamine use are concentrated in the Czech Republic and Slovakia, which together account for 90 % of the 9 000 methamphetamine clients in specialised treatment in Europe. Overall, the increasing trend in first-time treatment entrants reporting amphetamine or methamphetamine as their primary drug, observed from 2006 until 2014, continued in 2015 in most countries.

#### AMPHETAMINES USERS ENTERING TREATMENT



NB: Characteristics are for all treatment entrants with amphetamines as primary drug. Trends in first-time entrants are based on 23 countries.

# 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 2015 survey, Norway reported last year prevalence of GHB use at 0.1 % for adults (16–64). In 2015, last year prevalence of ketamine, poppers and GHB use among young adults (15–34) was estimated at 0.6 % in the Czech Republic and 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, with the exception of the Netherlands (1.1 %) and the Czech Republic (2.2 %) for hallucinogenic mushrooms in 2015, and Finland with a prevalence of 1.3 % for LSD in 2014.

# New psychoactive substance use: low in the general population

A number of countries have included new psychoactive substances in their general population surveys, although different methods and survey questions limit comparisons between countries. Since 2011, 11 European countries have reported national estimates of the use of new psychoactive substances (not including ketamine and GHB). For young adults (aged 15–34), last year prevalence of use of these substances ranges from 0.3 % in Austria, to 1.6 % in the Czech Republic and Ireland.

Survey data on the use of mephedrone are available for the United Kingdom (England and Wales). In the most recent survey (2015/16), last year use of this drug among 16- to 34-year-olds was estimated at 0.5 %; down from 1.1 % in 2014/15.

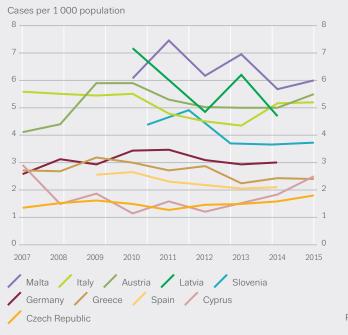
A small number of surveys include questions on the use of synthetic cannabinoids. Last year use of synthetic cannabinoids among 15- to 34-year-olds was estimated at 1.5 % in Latvia and 0.4 % in Slovakia in 2015 and at 0.1 % in Finland in 2014. Also in 2014, an estimated 4 % of 18to 34-year-olds in France reported having ever used synthetic cannabinoids.

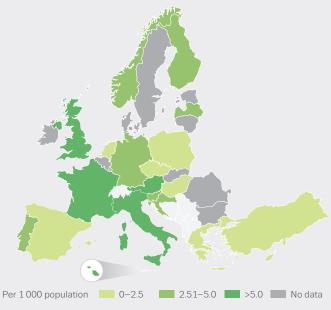
# New psychoactive substances: high-risk use in marginalised populations

The use of new psychoactive substances by high-risk drug users was explored by the EMCDDA in 2016. The study found that while consumption levels were low overall in Europe, patterns of use were linked to multiple problems. A majority of European countries (22) reported some level of use of new psychoactive substances among high-risk user groups, although more extensive use among opioid and stimulant injectors was limited to Hungary and parts of the United Kingdom. The injection of synthetic cathinones was reported in half (15) of countries, with the substance used often varying by country; for example, mephedrone in the United Kingdom, alpha-PVP in Finland, pentedrone in Hungary and 3-MMC in Slovenia. The smoking of synthetic cannabinoids in marginalised populations, including among homeless people and prisoners, is an emerging problem identified in around two thirds of European countries.

Few people currently enter treatment in Europe for problems associated with use of new psychoactive substances, although under-reporting in this area is likely. In 2015, around 3 200 clients, or less than 1 % of those entering specialised drug treatment in Europe, reported problems related to these substances. In the United Kingdom, around 1 500 treatment entrants (or around 1 % of all drug clients) reported primary use of synthetic cathinones; Hungary and Romania also report relatively high numbers of new psychoactive substance users entering drug treatment.

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





#### High-risk opioid users: heroin still dominates

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 contact with substitution treatment services, has been identified.

The average 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 Europe in 2015. 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 (Figure 2.10). Five countries account for three quarters (76 %) of the estimated high-risk opioid users in the European Union (Germany, Spain, France, Italy, United Kingdom). Of the 10 countries with multiple estimates of high-risk opioid use between 2007 and 2015, Spain shows a statistically significant decrease (Figure 2.10). In 2015, 191 000 clients who entered specialised treatment in Europe reported opioids as their primary drug, 37 000 of whom were first-time entrants. Primary heroin users accounted for 79 % of first-time primary opioid users entering treatment.

#### An ageing population of opioid users

The number of first-time heroin clients more than halved from a peak of 56 000 in 2007, to 23 000 in 2013 before increasing to 29 000 in 2015. The recent increase can be seen in several countries, but it needs to be interpreted with caution, as changes in national reporting may have had an impact on the EU total.

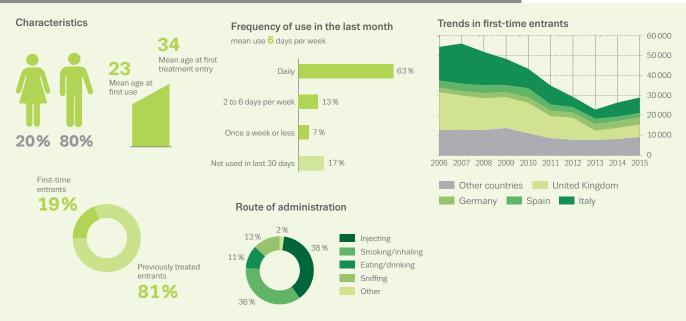
Many long-term opioid users in Europe, typically with polydrug use histories, are now aged in their 40s and 50s. Between 2006 and 2015, the mean age of those entering treatment for problems related to opioid use increased by 4 years (see Figure 2.11). During the same period, the average age of drug-induced deaths (which are mainly related to opioids) increased by 5.5 years. A history of injecting drug use and poor health, bad living conditions and tobacco and alcohol use makes these users susceptible to a range of chronic health problems, including cardiovascular and lung problems. Long-term opioid users also report chronic pain conditions, while

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Treatment entrants with opioids as primary drug: shifts in the age structure over time (left) and mean age by country (right)

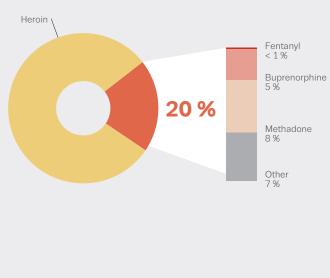
chronic infection with the hepatitis C virus can place them at increased risk of cirrhosis and other liver problems. The cumulative effects of polydrug use, overdose and infections over many years accelerate physical ageing among these users, with considerable implications for treatment, social support services and prevention of drug-related deaths.

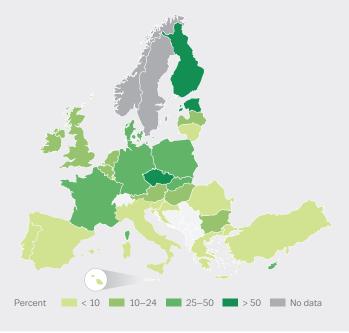
### HEROIN USERS ENTERING TREATMENT



NB: Characteristics are for all treatment entrants with heroin as primary drug. Trends in first-time entrants based on 23 countries. Due to changes in the flow of data at national level, data since 2014 for Italy is not comparable with earlier years.

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





# Synthetic opioids: increasingly seen in high-risk opioid use

While heroin remains the most commonly used illicit opioid, a number of sources suggest that licit synthetic opioids (such as methadone, buprenorphine, fentanyl) are increasingly misused. In 2015, 17 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 2.12). Opioids reported by treatment entrants include methadone, buprenorphine, fentanyl, codeine, morphine, tramadol and oxycodone. In some countries, non-heroin opioids represent the most common form of opioid use among treatment entrants. In Estonia, the majority of treatment entrants reporting an opioid as their primary drug were using fentanyl, while buprenorphine is the most frequently misused opioid in Finland. In the Czech Republic, although heroin is the most common primary opioid, other opioids account for just over half of those entering treatment for opioid-related problems.

# Injecting drug use: lowest levels ever among new treatment entrants

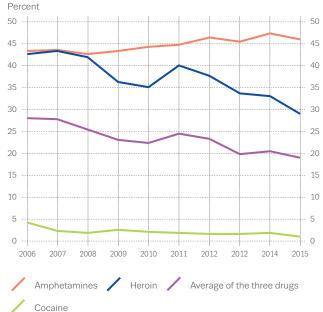
Injecting drug use is most commonly associated with opioids, although in a few countries, the injection of stimulants such as amphetamines or cocaine is a problem.

Only 12 countries have estimates of the prevalence of injecting drug use since 2012, where they range from less than 1 to 9 cases per 1 000 population aged 15–64.

Among first-time clients entering drug treatment in 2015 with heroin as their primary drug, 29 % reported injecting as their main route of administration, down from 43 % in 2006 (Figure 2.13). In this group, levels of injecting vary between countries, from 8 % in Spain to 90 % or more in Latvia, Lithuania and Romania. Injecting is reported as the main route of administration by 46 % of first-time primary amphetamines clients — a small increase since 2006 — and by 1 % of first-time cocaine clients. Taking the main three injected drugs together, among first-time entrants to treatment in Europe, injecting as the main route of administration has declined from 28 % in 2006 to 19 % in 2015.

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. In a recent EMCDDA study, 10 countries reported synthetic cathinone injection (often with other stimulants and GHB) in the context of sex parties among small groups of men who have sex with men.

Trends in first-time treatment entrants reporting injecting as the main route of administration of their primary drug



Licit synthetic opioids are increasingly misused

#### FIND OUT MORE

#### **EMCDDA** publications

#### 2017

High-risk drug use and new psychoactive substances, Rapid communications.

Country Drug Reports 2017.

#### 2016

Wastewater analysis and drugs — a European multi-city study, Perspectives on Drugs.

Assessing illicit drugs in wastewater: advances in wastewater-based drug epidemiology, Insights.

Recent changes in Europe's MDMA/ecstasy market, Rapid communication.

#### 2015

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Injection of synthetic cathinones, Perspectives on Drugs.

#### 2013

Characteristics of frequent and high-risk cannabis users, Perspectives on Drugs.

Trends in heroin use in Europe — what do treatment demand data tell us?, Perspectives on Drugs.

#### 2012

Treatment demand indicator (TDI) standard protocol 3.0: Guidelines for reporting data on people entering drug treatment in European countries, Manuals.

Driving under the influence of drugs, alcohol and medicines in Europe: findings from the DRUID project, Thematic paper.

Fentanyl in Europe, EMCDDA Trendspotter study.

Prevalence of daily cannabis use in the European Union and Norway, Thematic paper.

#### **EMCDDA and ESPAD joint publications**

#### 2016

ESPAD Report 2015 — Results from the European School Survey Project on Alcohol and Other Drugs.

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

# 3

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

# Drug-related harms and responses

Illicit drug use 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. Risks are elevated through injecting drug use. 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 drug-related responses.

The design and delivery of effective evidenced-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.

#### Monitoring drug-related harms and responses

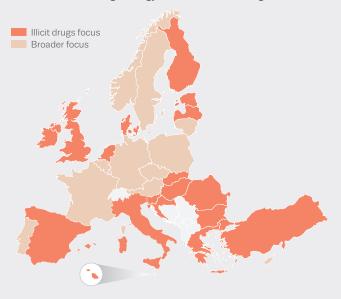
Information on health and social responses to drug use, including drug strategies and drug-related public expenditure, are provided to the EMCDDA by Reitox national focal points and expert working groups. Expert ratings provide supplementary information on the availability of interventions where more 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 profiles 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.

#### Drug strategies: coordinating responses

National drug strategies are planning and coordination tools commonly used by European countries to set out their responses to the various health, social and security challenges linked to drug problems. They usually include some general principles, objectives and priorities, while also specifying actions and those responsible for implementation. While Denmark has a national drug policy that is expressed in a range of strategic documents, legislation and concrete actions, all other countries have a national drug strategy document. In 18 countries, the drug strategy is focused mainly on illicit drugs. In the other 12 countries, the policy focus is broader, giving greater consideration to other addictive substances and behaviours. However, within the United Kingdom, the devolved administrations of Wales and Northern Ireland have broad strategy documents. When these two documents are included, the total number of broad illicit drug strategies increases to 14 (see Figure 3.1). These broad documents mainly address illicit drugs, and there is variation in how other substances and addictions are considered. All 14 documents address alcohol, 9 consider tobacco, 8 cover medicines, 3 include doping in sports (e.g. performance enhancing drugs) and 7 look at addictive behaviours (e.g. gambling). National drug strategies support the balanced approach to drug policy put forward in the EU drug strategy (2013-2020) and action plans (2013-2016 and 2017-2020), which place equal emphasis on drug demand reduction and drug supply reduction.

Focus of national drug strategy documents: illicit drugs or broader



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

Evaluating a national drug strategy is now a standard practice among the EU Member States. Evaluations generally aim to assess the level of strategy implementation achieved and changes in the overall drug situation over time. In 2016, 10 multi-criteria evaluations, 10 implementation progress reviews and 4 issue-specific evaluations were reported as having recently taken place, while 6 countries used other approaches such as a mix of indicator assessment and research projects. As some countries extend the scope of their drug strategies to include other substances and behavioural addictions, devising methods and indicators to monitor and evaluate these policy documents may become more challenging.

#### Drug-related responses: the costs of actions

Understanding the costs of drug-related actions is an important aspect of policy evaluation. However, the information available on drug-related public expenditure in Europe, at both local and national level, remains sparse and heterogeneous. For the 23 countries that have produced estimates in the past 10 years, drug-related public expenditure is estimated at between 0.01 % and 0.5 % of gross domestic product (GDP).

Spending on demand reduction as a share of the overall drug budget varied substantially across countries, representing between 23 % and 83 % of drug-related public expenditure. While differences are due in part to different policy options and the organisation of public services, the completeness of estimates also has a large impact. In current estimates, drug treatment and other health costs account for a large share of demand reduction expenditure. While the monitoring of expenditure on drug treatment remains the most developed to date, methodological improvements are still required.

Public spending on responses to the drug problem is only part of the cost borne by society in relation to illicit drugs. To this can be added the costs borne by the individual, such as private contributions to medical care, and external costs to society, such as losses of productivity and the financial costs due to premature deaths and illness linked to drug use. Assessment of these wider costs to society may allow resources to be more effectively targeted. In the European countries for which information is available, the social cost of illicit drugs is estimated to be between 0.1 % and 2 % of GDP.

#### Demand reduction: European standards

At European and national level, guality standards for drug demand reduction are increasingly recognised as a tool for the implementation of evidence-based interventions. In 2015, the EU Council of Ministers adopted 16 minimum quality standards in drug demand reduction in the European Union, and countries have been encouraged to integrate them into their drug policies. The European quality standards are a set of aspirational statements for prevention, treatment, harm reduction and social reintegration. These standards link intervention quality to concrete measures, including appropriate staff training and provision of evidence-based interventions, and to principles such as respect for individual needs and adherence to ethics. They also highlight the need for the participation of all the stakeholders, including civil society, in the implementation and evaluation of interventions.

EMCDDA data collection reveals that quality standards currently exist in most European countries and others are in the process of developing them. Quality standards are being put into use in different ways. In some countries, standards are linked to service delivery and are used to evaluate the provision. They are also being used as a requirement for participation in competitions for service contracts and as instruments for service-level selfassessment.

#### Delivering prevention: a systems approach

The prevention of drug use and drug-related problems among young people encompasses 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 at-risk individuals.

> Quality standards currently exist in most European countries

Many differences exist between European countries in the way prevention is addressed, with some tending to adopt broader community-based and environmental approaches (e.g. regulating alcohol and nightlife) and others primarily using manual-based programmes. The use of manualbased prevention programmes, characterised by strictly defined content and delivery, can be an effective way to reach large populations with evidence-based interventions. Such programmes are reported as a central component in national prevention approaches in 6 Member States.

Other countries have prioritised a broader systems approach to their prevention interventions, focusing not just on individual programmes, but also on factors such as delivery mechanisms, interaction between interventions and the social and policy context. An example of this is the Communities That Care approach, which is being implemented in 5 EU countries. This approach, developed in the United States, is based on the premise that a reduction in the prevalence of health and behavioural problems among youth can be achieved by identifying risk and protective factors, and selecting effective early intervention programmes that address these. A recent systematic review found some positive evidence of effectiveness of the Communities That Care approach as a drug prevention initiative in US studies, although it has yet to be evaluated in the European context.

#### Addressing vulnerability and risk

Selective prevention responses for vulnerable groups are implemented in European countries through interventions that address both individual behaviours and social contexts. At the local level, such approaches can involve multiple services and stakeholders (e.g. social, family, youth and police), and are common in the Nordic countries and Ireland, as well as parts of Spain and Italy. The groups most frequently targeted are young offenders, pupils with academic and social problems and youth in care institutions. Little is known about the actual contents of these prevention strategies and evaluation is limited. Expert opinion data, however, indicates that the most commonly used selective prevention techniques are based on information provision. Prevention approaches that target high-risk neighbourhoods have been implemented in some countries, utilising new methods such as the redesigning of urban spaces, and risk maps to help prioritise interventions. Provision for these types of interventions is reported to be highest in the north and west of Europe (see Figure 3.2), and approaches which have good evidence of effectiveness (normative and environmental) are implemented in just over a quarter of countries.

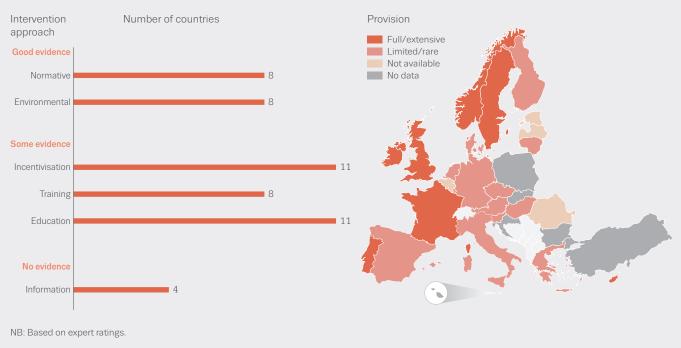
Indicated prevention targets at-risk individuals. Provision of this type of intervention is limited in Europe, with only 4 countries reporting that indicated prevention programmes are available to the majority of those in need.

#### Brief interventions

Brief interventions aim to prevent or delay substance use, reduce its intensity or prevent escalation into problem use. These time-limited interventions operate in the grey area between prevention and treatment, and typically target young people or people at risk of substance use problems. They can be delivered by a variety of health and social professionals, including general practitioners, counsellors, youth workers and police officers, and often incorporate elements of motivational interviewing.

Current data indicate that brief interventions are not widely implemented in Europe, with 3 countries reporting full and extensive provision of such interventions in schools, and 2 reporting that level of provision in low-threshold services.

Brief interventions have been characterised as relatively low-cost, with the potential for delivery in multiple settings by a variety of professionals after brief training. Examples of brief interventions implemented in several countries are eSBIRT, which provides brief interventions in emergency departments (Belgium), and Fred, which targets young people at an initial stage of criminal prosecution (Germany, Cyprus, Poland, Romania, Slovenia). However, a recent EMCDDA review found that while research supporting the effectiveness of brief interventions exists, it is still incomplete and more knowledge is needed on the extent of implementation.



Prevention interventions targeting high-risk neighbourhoods implemented in European countries: evidence base and level of provision

#### Referral to treatment and length of stay

Drug treatment is the primary intervention utilised for individuals who experience problems with their drug use, including dependence, and ensuring good access to appropriate treatment services is a key policy aim. Monitoring treatment outcomes is important for improving the treatment journeys that clients take and adjusting services to better fit observed needs. Self-referral continues to be the most common route into treatment. This form of referral, which also includes referral by family members or friends, accounted for around half of those entering specialised drug treatment in Europe in 2015. An additional 25 % of clients were referred by health and social services, while 15 % were referred by the criminal justice system. 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 some countries diversion is also possible at earlier stages of the criminal justice process. In 2015, cannabis clients were the most likely to be referred by the criminal justice system; in Hungary, around 80 % of cannabis treatment referrals came from this source.

Client pathways through drug treatment are often characterised by the use of different services, multiple entries and varying lengths of stay. An insight into treatment journeys is provided by results from an analysis of specialised treatment data from 7 European countries in 2015. Of the 400 000 clients reported in treatment in these countries during that year, just under 20 % had entered treatment for the first time in their life; around 30 % had re-entered treatment, having received treatment in an earlier year; and around half had been in continuous treatment for more than 1 year. Most of the clients in continuous treatment for more than 3 years and had problems related to opioid use, especially heroin.

#### Cannabis treatment: a range of approaches

Regular and long-term cannabis use is associated with increased risk of a number of physical and mental health problems including dependence. While many countries offer treatment for people with cannabis problems within generic substance use programmes, around half have developed some cannabis-specific treatment options. Services for cannabis users can be diverse, ranging from brief interventions delivered online, to longer-term therapeutic engagement in specialist centres. Although most treatment for this group takes place in community or outpatient settings, around one in five people entering specialist inpatient drug treatment services reported a primary cannabis-related problem.

Treatment for cannabis problems is based mainly on psychosocial approaches; family-based interventions are often used for adolescents and cognitive-behavioural interventions for adults. The available evidence supports the use of a combination of cognitive-behavioural therapy, motivational interviewing and contingency management approaches. In addition, there is some evidence to support the use of multidimensional family therapy for young cannabis users. Internet and digital-based interventions are increasingly employed to reach cannabis users, and studies to measure the effects of this type of interventions show promising preliminary results with regard to reducing levels of consumption and facilitating face to face treatment entry (when needed). A number of studies are investigating the use of pharmacological interventions for cannabis-related problems. This includes looking at the potential for using THC, and synthetic THC, in combination with other psychoactive medicines, including antidepressants, anxiolytics and mood stabilisers. To date, results have been inconsistent, and no effective pharmacological approach to treat cannabis dependence has been identified.

# Drug treatment: mainly provided in community settings

An estimated 1.4 million people received treatment for illicit drug use in the European Union during 2015 (1.6 million including Norway and Turkey). Opioid users represent the largest group 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 these services (Figure 3.3), with psychosocial interventions the main treatment modality for these clients. Differences between countries can be very large, however, with opioid users accounting for more than 90 % of treatment entrants in Estonia and less than 5 % in Hungary.

The majority of drug treatment in Europe is provided in outpatient settings, with specialised outpatient centres representing the largest provider in terms of number of drug users treated (Figure 3.4). General healthcare centres are the second largest providers. This category includes general practitioners' surgeries, which are important prescribers of opioid substitution treatment in some large countries such as Germany and France. Elsewhere, for example in Slovenia, mental healthcare centres may play a key role in outpatient treatment provision.

> Services for cannabis users can be diverse

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

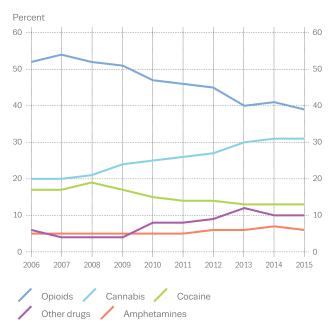


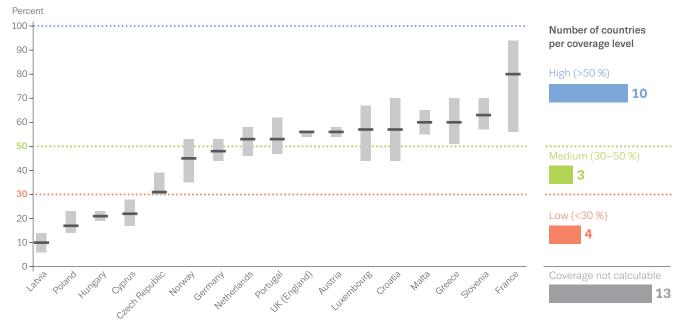
FIGURE 3.4

Numbers receiving drug treatment in Europe in 2015, by setting

Outpatient Specialised treatment centres (974 000) General/mental healthcare Low-threshold (269 000) agencies (179 700) Other settings / (21800) Inpatient Hospital-based residential Other settings (9 800) (56 000) Non hospital-based residential (23 100) Therapeutic communities (27 900) **Prisons** 

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

Increasingly, a wide range of drug treatment interventions are also provided online. Internet-based interventions have the potential to extend the reach and geographical coverage of treatment programmes to people experiencing drug use problems who may not otherwise access specialist drug services.



Coverage of opioid substitution treatment (percentage of estimated high-risk opioid users receiving the intervention)

NB: Data displayed as point estimates and uncertainty intervals

#### Substitution treatment for opioid use problems

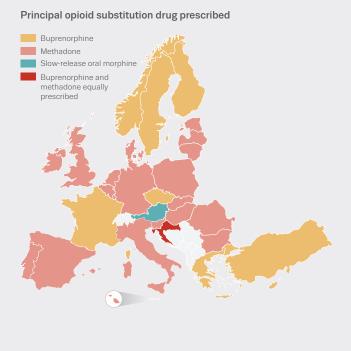
Substitution treatment, typically combined with psychosocial interventions, is the most common treatment for opioid dependence. The available evidence supports this approach, with positive outcomes found in respect to treatment retention, illicit opioid use, reported risk behaviour, drug-related harms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

An estimated 630 000 opioid users received substitution treatment in the European Union in 2015 (650 000 including Norway and Turkey). The trend shows an increase in clients up to a peak in 2010, followed by a 6 % decline to 2015. Between 2010 and 2015, decreases were observed in 12 countries, with the largest (decreases of more than 25 %) reported by Spain, Hungary, the Netherlands and Portugal. This decline may be explained by factors related to demand or provision, including a falling population of ageing, chronic opioid users or shifts in treatment goals in some countries. Other countries have continued to expand provision, as they seek to improve treatment coverage, with 12 countries reporting increases between 2010 and 2015, including Latvia (157 %), Finland (67 %) and Greece (61 %). These two tendencies are confirmed in the most recent data (2014–15), with 12 countries reporting increases in the overall number of clients in substitution treatment and 9 reporting decreases.

A comparison with current estimates of the number of high-risk opioid users in Europe would suggest that half receive substitution treatment, but there are differences between countries (Figure 3.5). However, these findings must be interpreted cautiously for methodological reasons.

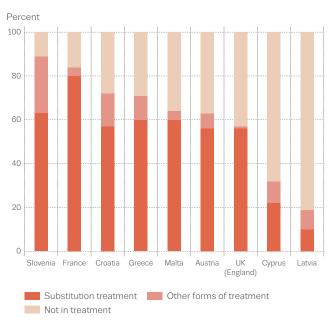
Methadone is the most commonly prescribed opioid substitution drug, received by around two thirds (63 %) of substitution clients. A further 35 % of clients are treated with buprenorphine-based medications, which is the principal substitution drug in 8 countries (Figure 3.6). Other substances, such as slow-release morphine or diacetylmorphine (heroin), are more rarely prescribed, being received by an estimated 2 % of substitution clients in Europe.

> Methadone is the most commonly prescribed opioid substitution drug



## FIGURE 3.7

Percentage of high-risk opioid users receiving drug treatment (estimate)



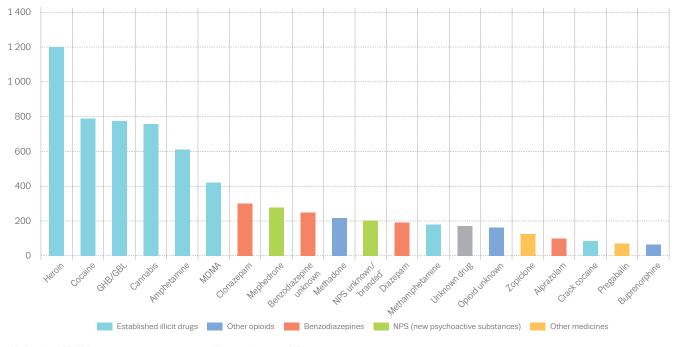
Although less common than substitution treatment, alternative treatment options for opioid users are available in all European countries. In the 9 countries for which data are available, between 1 % and 26 % of all opioid users in treatment receive interventions not involving opioid substitution (Figure 3.7).

#### Prisons: low availability of hepatitis C treatment

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. Many prisoners have complex healthcare needs, and assessment of drug use and drug-related problems is an important part of the health screening at prison entry in many countries. Two important principles for the implementation of health interventions in prison are equivalence with provision in community settings and continuity of care after prison release. The availability of opioid substitution treatment in prisons is reported by 28 of the 30 countries monitored by the EMCDDA. Detoxification, individual and group counselling, and therapeutic communities or special inpatient wards are available in most countries. Many 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.

#### Top 20 drugs recorded in emergency presentations in sentinel hospitals in 2015

Drug identifications



NB: Results of 5 054 emergency presentations in 15 sentinel sites in 9 European countries. Source: European Drugs Emergencies Network (Euro-DEN plus).

Infectious diseases testing (HIV, HBV, HCV) is available in prisons in most countries, although the provision of hepatitis C treatment is rare. Hepatitis B vaccination programmes are reported to exist in 16 countries. The provision of clean injecting equipment is less common, with only 4 countries reporting the existence of syringe programmes in this setting.

Preparation for prison release, including social reintegration, is carried out in most countries. Programmes to prevent the risk of drug overdose, particularly high among opioid injectors in the period after leaving prison, are reported in 5 countries and include training and information and the provision of naloxone upon prison release.

# Many prisoners have complex healthcare needs

# Hospital emergencies: multiple substances implicated

Hospital emergency data can provide an insight into acute drug-related harms. Information is available from the European Drug Emergencies Network (Euro-DEN Plus), which monitors drug-related presentations in 15 (sentinel) hospitals in 9 European countries. The 5 054 presentations recorded by the project in 2015 had a median age of 31 years, and most were male (77 %).

On average about 1.5 drugs were reported per presentation (7 768 in total) (see Figure 3.8). Nearly two thirds of presentations (65 %) involved the use of established drugs, and the most common were heroin, cocaine, cannabis, GHB/GBL, amphetamine and MDMA; one quarter (24 %) involved the misuse of prescription or over the counter drugs (most commonly opioids and benzodiazepines); and 9 % involved new psychoactive substances (up from 6 % in 2014). Half of the presentations for new psychoactive substances involved a synthetic cathinone and 14 % a synthetic cannabinoid. The drugs involved in emergency presentations differed between sites, reflecting local patterns of use. For example, emergencies related to heroin were the most common presentations in Dublin (Ireland) and Oslo (Norway), whereas presentations related to GHB/GBL, cocaine and MDMA were predominant in London (United Kingdom).

The majority (80 %) of those presenting with acute drug toxicity were discharged from hospital within 12 hours; a small minority (6 %) developed severe toxicity requiring admission to critical care and 4 % were admitted to a psychiatric ward. Around half (9) of the 17 deaths recorded involved opioids.

Only a few countries have monitoring systems in place that allow a national analysis of trends in acute drug intoxications. Among these, acute heroin emergencies have increased in the United Kingdom, but continued to decline in the Czech Republic and Denmark, where methadone emergencies are increasing. In Lithuania, opioid-related emergencies almost doubled between 2013 and 2015. In Spain, cocaine is involved in about half of the reported drug-related emergencies, and the trend is stabilising after a decline, while cannabis emergencies are continuing to increase. Slovenia also reports an upward trend in cannabis emergencies. In the Netherlands, half of the cases presenting at first aid stations at festivals (51%) involved MDMA and the proportion is decreasing. Methamphetamine-related emergency cases, recorded by sentinel centres in the Czech Republic, increased by more than 50 % between 2014 and 2015.

## New drugs: high potency and harms

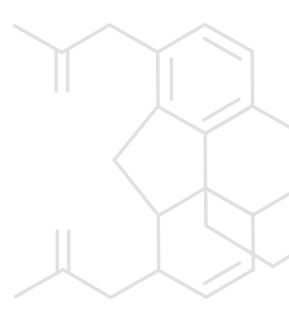
New psychoactive substances, including new synthetic opioids, synthetic cannabinoids and synthetic cathinones, are causing a range of serious harms in Europe.

Fentanyls are exceptionally potent opioids which, although playing a small role in Europe's drug market, pose a serious threat to individual and public health. In part this stems from the increased risk of severe and fatal poisonings in users — often manifesting as outbreaks as fentanyls cause rapid and profound respiratory depression. It is also because of the increased risk of accidental exposure resulting in poisoning in others; families and friends of users, as well as law enforcement, other emergency services, medical staff and those working in laboratories, may be at risk. The use of protective equipment to reduce the risk of harm from accidental exposure may be necessary in some settings, such as customs facilities at Europe's borders, where seizures of bulk fentanyl powders may be handled. Additionally, there is some evidence to suggest that fentanyls have been sold to unsuspecting users as established illicit drugs and fake pain medicines, potentially increasing the risk of severe and fatal poisoning in some user groups. In such circumstances, the availability of the antidote naloxone may need to be assessed. In addition to the acute risks of overdose, fentanyls also have high abuse liabilities and

dependence-producing potentials, which could worsen public health and social problems commonly associated with high-risk opioid use.

During 2016, the EMCDDA and Europol launched special investigations into acryloylfentanyl and furanylfentanyl, after signals were detected through the EU Early Warning System. More than 50 deaths were reported, many of which were attributed directly to these substances. In addition, the EMCDDA also issued five alerts to its network across Europe related to these and other new fentanyls.

> New psychoactive substances are causing a range of serious harms in Europe



The synthetic cannabinoids are another group of new substances that continued to cause problems in 2016. The EMCDDA issued alerts on three substances — MDMB-FUBINACA, MDMB-CHMICA and 5F-MDMB-PINACA — based on 45 serious adverse events, including 18 deaths and 27 non-fatal intoxications. In addition, the EMCDDA launched a procedure which led to a risk assessment of MDMB-CHMICA, which ultimately resulted in the substance being been subjected to control measures throughout Europe (see box).

#### New drugs: developing response skills

The harms associated with new drugs bring a new set of challenges to frontline responders. A recent EMCDDA analysis found that European health professionals in various settings (treatment, prevention and harm reduction) rely predominantly on professional experience acquired in response to established illicit drugs and on the interventions used in that context. These interventions include dissemination of educational material, provision of sterile injecting equipment or symptomatic management of acute emergency cases. Often, evidence-based interventions may be adjusted to account for specific toxicities, to reflect socio-cultural characteristics of risk groups (e.g. party-goers, men who have sex with men) or respond to particular risk behaviours (e.g. increased access to syringes to respond to high injecting frequency) associated with new psychoactive substances. A need for professional training, guidance and competence building activities on responding to new drugs was also highlighted in the analysis.

Delivering interventions targeting hard-to-reach drug-using populations experiencing significant harms related to new psychoactive substances, such as men who have sex with men, homeless people and prison inmates is a particular challenge. In some countries, increased use of synthetic cannabinoids among prisoners has caused concern due to the impact on mental health, the strong withdrawal effects and increasing levels of associated violence.

Multidisciplinary responses and collaborations involving a range of health providers across intervention settings (e.g. sexual health clinics or custodial settings and drug treatment centres) appear to be an important feature of adequate health responses to harms related to use of new psychoactive substances in Europe.

#### **Risk assessment of MDMB-CHMICA**

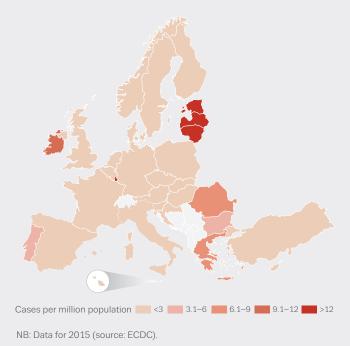
In July 2016, MDMB-CHMICA became the first synthetic cannabinoid to be risk-assessed by the EMCDDA. It was first reported to the EU Early Warning System in 2014 by Hungary, and was subsequently detected in 23 EU Member States, Turkey and Norway. The substance was involved in more than 20 serious poisonings and 28 deaths.

Bulk powders of MDMB-CHMICA are produced in China and imported into Europe, where they are processed and packaged into 'herbal smoking mixtures'. It is thought that many of the adverse events caused by MDMB-CHMICA and other synthetic cannabinoids are related to the high potency of these substances and poor manufacturing practices. Evidence suggests that producers guess the quantities of substance to apply when manufacturing 'smoking mixtures'. In addition, the crude manufacturing techniques used may not distribute the substance uniformly in the product. This may lead to some samples containing elevated amounts of the substance, resulting in high doses and an increased risk of severe poisoning and death.

# Chronic drug-related harms: HIV declines but local outbreaks continue

Drug users, particularly those who inject drugs, are at risk of contracting infectious diseases through the sharing of drug use material and through unprotected sex. Drug injection continues to play a central role in the transmission of blood-borne infections such as the hepatitis C virus (HCV) and, in some countries, the human immunodeficiency virus (HIV). In 2015, 1 233 new HIV diagnoses in people infected through injecting drug use were notified in the European Union (Figure 3.9), representing 5 % of diagnoses for which the route of transmission is known. This proportion has remained low and stable for the last decade. New HIV infections among people who inject drugs have declined in most European countries, with an overall decrease of 41 % between 2007 and 2015. However, injecting drug use remains an important mode of transmission in some countries: in 2015, a quarter or more of newly diagnosed HIV cases were attributed to injecting drug use in Lithuania (34 %), Latvia (32 %), Luxembourg (27 %) and Estonia (25 %).

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



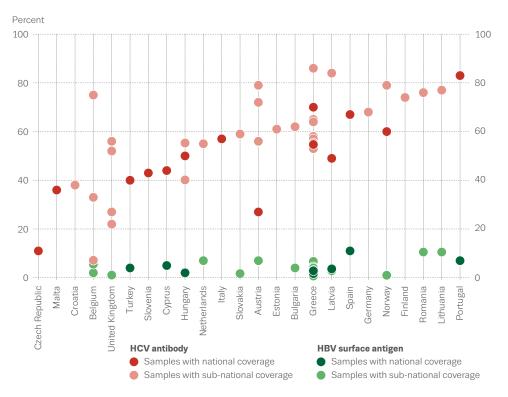
While a majority of countries reported decreases in injecting-related HIV cases between 2014 and 2015, Germany, Ireland and the United Kingdom reported rises to levels not seen for 7 to 8 years. In Ireland and the United Kingdom, this was in part related to localised outbreaks of new HIV infections among people who inject drugs. Luxembourg also reported an outbreak in 2014. Increased stimulant injection, alongside high levels of user marginalisation, have been common factors in these outbreaks. In addition, the injection of stimulant drugs in a sexual context ('slamming') among small groups of men who have sex with men has been linked to an increased risk of infection transmission.

In 2015, 14 % of new AIDS cases in the European Union, for which the route of transmission was known, were attributed to injecting drug use. The 479 injection-related notifications represent just over a quarter of the number reported a decade ago. Many of the cases were reported in Greece, Latvia and Romania, where HIV testing and treatment responses require further strengthening.

#### HCV prevalence: national variation

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 (antibody-positive), 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.

> New HIV infections among people who inject drugs have declined



#### Prevalence of HCV antibody and HBV surface antigen among injecting drug users, 2014/15

The prevalence of antibodies to HCV, indicating present or past infection, among national samples of injecting drug users in 2014–15, varied from 16 % to 84 %, with 5 out of the 13 countries with national data reporting a rate in excess of 50 % (Figure 3.10). Among the countries with national trend data for the period 2010–15, declining HCV prevalence in injecting drug users was reported in 4 countries, while 3 observed an increase.

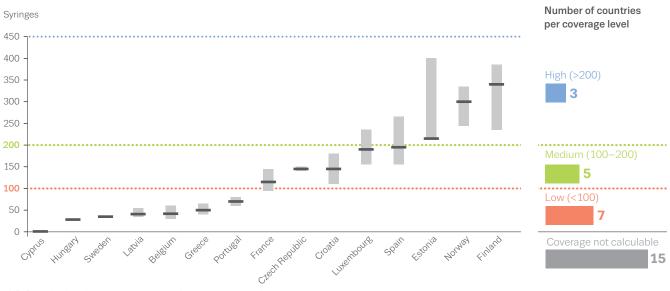
Among drug users, hepatitis B virus (HBV) infection is less common than HCV infection. For this virus, however, the presence of the HBV surface antigen indicates a current infection, which may be acute or chronic. In the 7 countries with national data, between 1.7 % and 11 % of drug injectors were estimated 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 the Czech Republic, Germany and Luxembourg in 2016. Clusters and sporadic cases of wound botulism among injecting drug users were also reported in Germany, Norway and the United Kingdom.

#### Infectious diseases: prevention measures

The main approaches taken to reduce drug-related infectious diseases among people who inject drugs include the provision of opioid substitution treatment, sterile injecting equipment, injection risk behaviour counselling, hepatitis B vaccination, infectious disease testing, hepatitis treatment and HIV treatment.

For those who inject opioids, being in substitution treatment significantly lowers infection risk, with some analyses indicating increasing protective effects when high treatment coverage is 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. However, considerable differences exist between countries regarding the geographical distribution of syringe outlets and the coverage of the target population by the intervention (Figure 3.11). Information on the provision of syringes through specialised programmes is available from



Coverage of specialised syringe programmes: number of syringes provided per estimated injecting drug user

NB: Data displayed as point estimates and uncertainty intervals

25 countries, which together report the distribution of over 52 million syringes in 2014/15. 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.

Establishing links between drug and sexual health service providers may be particularly important for responding effectively to problems linked to the injection of stimulants by men who have sex with men. Important prevention interventions for this group include testing and treatment of infections, health education and the distribution of prevention materials, including condoms and sterile injecting equipment. To prevent sexually acquired HIV infection, pre-exposure prophylaxis is an additional prevention option for populations at highest risk.

# Increasing early HIV diagnosis: extended testing opportunities

Late HIV diagnosis — when the infection has already begun to damage the immune system — is a particular problem for people who inject drugs. In 2015, 58 % of newly notified injecting-related transmissions were diagnosed late. This compares with an EU average of 47 % diagnosed late for all routes of transmission. Late HIV diagnosis is associated with increased morbidity and mortality, and delays in initiation of anti-retroviral therapy. The policy of 'test-and-treat' for HIV, whereby anti-retroviral therapy is started directly after a HIV diagnosis, results 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 antiretroviral therapy, offers those infected a normal life expectancy.

In many countries, community-based and low-threshold drug services are providing and extending HIV testing opportunities with the aim of increasing testing uptake and earlier detection of infections. EU minimum quality standards promote voluntary testing for blood-borne infectious diseases at community agencies alongside counselling on risky behaviours and assistance to manage illness. However, stigma and marginalisation of drug users remain important barriers to uptake of testing and treatment.

## HCV treatment: more effective medications

As HCV infection is highly prevalent among people who inject drugs in Europe, they are a key target for testing and treatment, in order to prevent liver disease progression and deaths. Moreover, reducing the number of people who can transmit the infection, by offering HCV treatment, is an essential component of a comprehensive prevention response. European clinical guidelines recommend that all patients with chronic liver disease due to HCV infection must be considered for therapy. The guidelines also recommend that treatment should be considered without delay in individuals at risk of transmitting the virus (including active injecting drug users) and that HCV treatment should be provided to drug users on an individualised basis and delivered in a multidisciplinary setting.

Since 2013, effective, better tolerated, all-oral, interferonfree regimens with direct-acting antiviral agents are becoming the mainstay of the treatment of HCV infection. Furthermore, treatment with these medicines may be offered in specialised drug services in community settings, which may increase uptake and availability. Many European countries are adopting new viral hepatitis strategies, updating treatment guidelines and improving HCV testing and linkage to care. However, challenges remain, such as low levels of testing, unclear referral and treatment pathways in many countries, and the high cost of the new drugs.

Drug use is a recognised cause of avoidable mortality among European adults

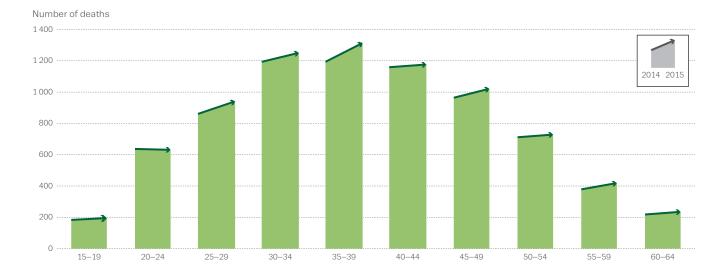
#### Overdose deaths: recent increases

Drug use is a recognised cause of avoidable mortality among European adults. Studies on cohorts of high-risk drug users commonly show total mortality rates in the range of 1-2 % per year. Overall, opioid users in Europe are 5 to 10 times more likely to die than their peers of the same age and gender. Increased mortality among opioid users is primarily related to overdose, but other causes of death indirectly related to drug use, such as infections, accidents, violence and suicide, are also important. Ill-health, marked by accumulated and interlinked conditions is common. Chronic pulmonary and liver conditions as well as cardio-vascular problems are frequent and account for an increased share of deaths among the older and chronic drug users.

In Europe, drug overdose continues to be the main cause of death among high-risk drug users, and over three quarters of overdose victims are male (78 %). Overdose data, especially the European cumulative total, must be interpreted with caution. Among the reasons for this are systematic under-reporting in some countries and registration processes that result in reporting delays. Annual estimates therefore represent a provisional minimum value.

It is estimated that at least 7 585 overdose deaths, involving at least one illicit drug, occurred in the European Union in 2015. This rises to an estimated 8 441 deaths if Norway and Turkey are included, representing a 6 % increase from the revised 2014 figure of 7 950, and increases have been reported in almost all age bands (Figure 3.12). As in previous years, the United Kingdom (31%) and Germany (15%) together account for around half of the European total. This relates partly to the size of the at-risk populations in these countries, but also to the under-reporting in some other countries. Focusing on countries with relatively robust reporting systems, revised data for 2014 confirm an increase in the number of overdose deaths in Spain, while increases in the number of overdose deaths reported in 2014 in Lithuania and the United Kingdom have continued into 2015, and increases are also now reported in Germany and the Netherlands. A continued upward trend is also observed in Sweden, though it may be partly due to the combined effects of changes in investigation, coding and reporting practices. Turkey is continuing to report increases, but this appears to be largely driven by improvements in data collection and reporting.

Reflecting the ageing nature of Europe's opioid-using population, who are at greatest risk of drug overdose death, the reported number of overdose deaths increased

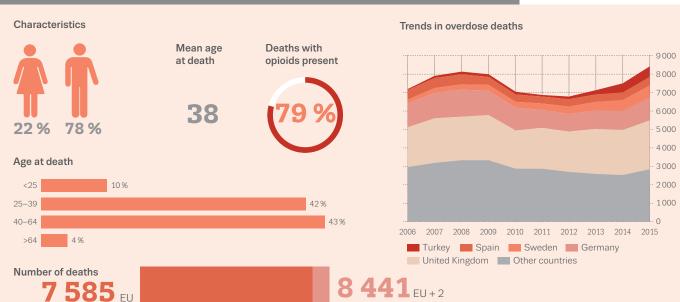


#### Number of drug-induced deaths reported in Europe in 2014 and 2015, by age band

among older age groups between 2007 and 2015, while those among younger age groups decreased. However, 10 % of the overdose cases are younger than 25 years, and there has recently been a slight increase in the number of overdose deaths reported among those aged under 25 in several countries including Sweden and Turkey.

#### Opioid-related deaths fuel overall increase

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 heroin-related deaths in Europe, notably in the United Kingdom. In England and Wales, heroin or morphine was mentioned in 1 200 deaths registered in 2015, representing a 26 % increase on the previous year and a 57 % increase in relation to 2013. Deaths related to heroin also increased in Scotland (United Kingdom), Ireland and Turkey. Other opioids are also regularly found in toxicological reports. These substances, primarily



## DRUG-INDUCED DEATHS

methadone and buprenorphine, but also fentanyls and tramadol, are associated with a substantial share of overdose deaths in some countries. According to the most recent data, the number of recorded methadone-related deaths exceeded heroin-related deaths in Croatia, Denmark, France and Ireland.

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 the United Kingdom (England and Wales), deaths involving cocaine increased from 169 in 2013 to 320 in 2015, although many of these are thought to be heroin overdoses among people who also used crack. In Spain, where cocaine-related deaths have been stable for some years, the drug continued to be the second most often cited illicit drug in overdose deaths in 2014 (269 cases). In 2015, stimulant-related deaths in Turkey included 56 cases associated with cocaine, 206 cases with amphetamines and 166 cases with MDMA (62 of which were attributed to use of MDMA alone). Synthetic cannabinoids were reported in 137 cases in Turkey, 63 of which were attributed solely to the use of these drugs.

#### Mortality rates highest in northern Europe

The mortality rate due to overdoses in Europe in 2015 is estimated at 20.3 deaths per million population aged 15-64. The rate among males (32.3 cases per million males) is almost four times that among females (8.4 cases per million females). Overdose mortality rates peak at age 35-39 for males and age 30-34 for females. Mean age at death, however, is lower among males: 38 compared with 41 among females. National mortality rates and trends vary considerably (Figure 3.13), and are influenced by factors such as prevalence and patterns of drug use as well as by national practices of reporting, recording information and coding overdose cases 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 (103 per million), Sweden (100 per million), Norway (76 per million) and Ireland (71 per million) (Figure 3.13).

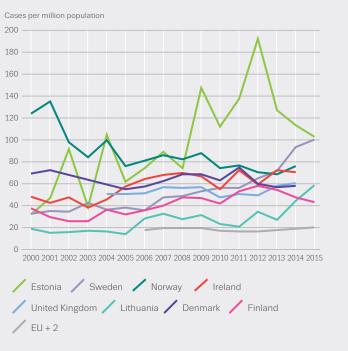
#### Preventing overdoses and drug-related deaths

Reducing fatal drug overdoses and other drug-related deaths is a major public health challenge in Europe. Targeted responses in this area focus either on preventing the occurrence of overdoses, or on improving the likelihood of surviving an overdose.

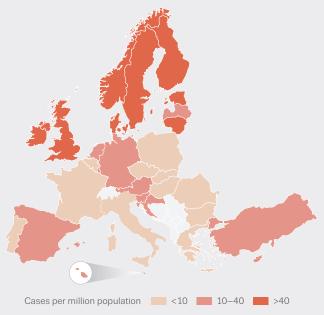
A meta-analysis of observational studies supports the effectiveness of methadone substitution treatment in reducing mortality (overdose and all causes) among opioid-dependent people. The mortality rate of clients in methadone treatment was less than a third of the expected rate in opioid users out of treatment. Analysis of risk of death at different stages of treatment suggests a need to focus interventions at the start of treatment (during the first 4 weeks, in particular with methadone) and once it has finished. After the conclusion of treatment, the first 4 weeks are associated with a higher risk of overdose. This suggests patients who frequently enter and leave treatment are particularly vulnerable to overdose.

Supervised drug consumption facilities aim both to prevent overdoses from occurring and to ensure professional support is available if an overdose occurs. Such facilities currently operate in 6 EU countries and Norway; 78 facilities in total. In 2016, 2 consumption rooms opened in France for a 6-year trial, and new facilities were established in Denmark and Norway.

# Patients who frequently enter and leave treatment are particularly vulnerable to overdose



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



NB: Trends in the eight countries reporting the highest values in 2015 or 2014 and overall European trend. EU + 2 refers to EU Member States, Turkey and Norway.

#### Naloxone: new products being developed

Naloxone is an opioid antagonist medication that can reverse opioid overdose and is used in hospital emergency departments and by ambulance personnel. In recent years, there has been a growth in the provision of 'take-home' naloxone to opioid users, their partners, peers and families, alongside training in recognising and responding to overdose. Naloxone has also been made available for use by staff of services that regularly come into contact with drug users. Take-home naloxone programmes currently exist in 10 European countries. Naloxone kits provided by drugs and health services generally include syringes pre-filled with the medication, although in Denmark and Norway an adaptor allows naloxone to be administered intra-nasally. In France, a new nasal formulation of the medication has been granted a temporary authorisation for use. After being scaled up in community settings since 2013, naloxone take-home provision in Estonia was extended to prisons in 2015. A recent systematic review of the effectiveness of take-home naloxone found evidence that its provision in combination with educational and training interventions reduces overdose-related mortality. Some populations with an elevated risk of overdose, such as recently released prisoners, may particularly benefit, and an evaluation of the national naloxone programme in the United Kingdom (Scotland) found that it was associated with a significant reduction in the proportion of opioid-related deaths that occurred within a month of prison release.

## **FIND OUT MORE**

#### **EMCDDA** publications

#### 2017

Report on the risk assessment of MDMB-CHMICA, Risk assessments.

Drug supply reduction: an overview of EU policies and measures, EMCDDA Papers.

Country Drug Reports 2017.

Evaluating drug policy: a seven-step guide to support the commissioning and managing of evaluations.

#### 2016

Drug-related infectious diseases in Europe. Update from the EMCDDA expert network, Rapid communications.

Hospital emergency presentations and acute drug toxicity in Europe — update from the Euro-DEN Plus research group and the EMCDDA, Rapid communications.

Hepatitis C among drug users in Europe: epidemiology, treatment and prevention, Insights.

Health responses to new psychoactive substances.

Preventing opioid overdose deaths with take-home naloxone, Insights.

Strategies to prevent diversion of opioid substitution treatment medications, Perspectives on Drugs.

#### 2015

Drugs policy and the city in Europe, EMCDDA Papers.

Comorbidity of substance use and mental disorders in Europe, Insights.

Mortality among drug users in Europe: new and old challenges for public health, EMCDDA Paper.

Prevention of addictive behaviours, Insights.

Treatment of cannabis-related disorders in Europe, Insights.

Drug consumption rooms: an overview of provision and evidence, Perspectives on Drugs.

The role of psychosocial interventions in drug treatment, Perspectives on Drugs.

#### 2014

Treatment for cocaine dependence — reviewing current evidence, Perspectives on Drugs.

Health and social responses for methamphetamine users in Europe, Perspectives on Drugs.

Internet-based drug treatment, Perspectives on Drugs.

#### 2013

Drug policy advocacy organisations, EMCDDA Papers.

The EU drugs strategy (2013–20) and its action plan (2013–16), Perspectives on Drugs.

Emergency health consequences of cocaine use in Europe, Perspectives on Drugs.

Preventing overdose deaths in Europe, Perspectives on Drugs.

## **EMCDDA and ECDC joint publications**

#### 2015

HIV and hepatitis B and C in Latvia.

#### 2012

HIV in injecting drug users in the EU/EEA, following a reported increase of cases in Greece and Romania.

#### 2011

ECDC and EMCDDA guidance. Prevention and control of infectious diseases among people who inject drugs.

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 2017, where notes and meta-data are available. The years to which data refer are indicated.

## **OPIOIDS**

			Entrants into treatment during the year						
		opioid use	Opioids clier	nts as % of treatn	nent entrants		ids clients inje ute of administ		Clients in substitution
	estimate		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	-	-	27.7 (3 234)	10.3 (411)	37.4 (2 773)	14 (409)	8.3 (31)	14.9 (374)	16 681
Bulgaria	-	-	84.8 (1 530)	64.5 (207)	96 (932)	73 (772)	69.9 (116)	75.5 (580)	3 423
Czech Republic	2015	1.8-1.9	17 (1 720)	7 (333)	25.9 (1 387)	82.6 (1 412)	79.8 (264)	83.2 (1 148)	4 000
Denmark	-	-	13 (613)	5.5 (124)	20.6 (472)	26.6 (121)	10.5 (11)	31.4 (108)	6 268
Germany	2014	2.7-3.3	32.9 (28 669)	13.3 (3 552)	41.4 (25 117)	32.6 (11 392)	29.4 (1 549)	33.2 (9 843)	77 200
Estonia	-	-	93.3 (263)	87.3 (55)	95 (153)	70.7 (183)	67.3 (37)	82.2 (125)	1 166
Ireland	-	-	47.6 (4 515)	25.9 (971)	62.4 (3 403)	38.2 (1 672)	30.9 (293)	39.9 (1 318)	9 917
Greece	2015	2.1-2.8	69.8 (2836)	52.9 (834)	80.8 (1984)	32.4 (914)	26.6 (221)	34.9 (690)	10 082
Spain	2014	1.6-2.6	24.6 (12 032)	10.5 (2 486)	42.9 (8 056)	13.7 (1 568)	7.4 (178)	15.2 (1 173)	61 859
France	2013-14	4.4-7.4	28 (13 744)	15 (2 378)	48.9 (8 310)	18.5 (2 150)	12.3 (263)	21.1 (1 505)	168 840
Croatia	2015	2.5-4.0	81.3 (6 124)	20.8 (176)	89.1 (5 917)	72.1 (4 377)	36.5 (62)	73.2 (4 299)	5 061
Italy	2015	4.6-5.9	53.3 (25 144)	38.8 (8 040)	64.6 (17 104)	50.8 (10 620)	39.5 (2 521)	55.8 (8 099)	60 047
Cyprus	2015	1.9-3.2	25.7 (205)	11.5 (50)	44.2 (142)	48 (97)	46 (23)	48.9 (68)	252
Latvia	2014	3.4-7.5	53.5 (402)	32.7 (128)	76.1 (274)	92.3 (370)	82.8 (106)	96.7 (264)	609
Lithuania	2007	2.3-2.4	89 (2 268)	66.1 (261)	94 (1 991)	87.2 (1 970)	89.3 (233)	87 (1 724)	596
Luxembourg	2007	5-7.6	56.2 (163)	25 (6)	57.9 (125)	43 (68)	16.7 (1)	42.7 (53)	1078
Hungary	2010-11	0.4-0.5	3.6 (156)	1.6 (46)	8.4 (93)	53.5 (77)	48.9 (22)	56 (51)	669
Malta	2015	5.6-6.5	73.2 (1 296)	28.7 (66)	79.8 (1 230)	61.9 (760)	43.9 (25)	62.8 (735)	1 0 2 6
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)	7 421
Austria	2015	5.3-5.6	55.4 (2 016)	26.9 (351)	71.4 (1 665)	32.3 (516)	23 (73)	34.5 (443)	17 599
Poland	2014	0.4-0.7	16.3 (1 465)	4.8 (208)	27.6 (1 224)	62.1 (902)	40.8 (84)	65.6 (800)	2 564
Portugal	2012	4.2-5.5	49.2 (1 357)	28.9 (458)	76.8 (899)	16.6 (209)	9.9 (40)	19.8 (169)	17 011
Romania	-	-	32.6 (1 057)	17.3 (360)	66.3 (686)	88.2 (834)	85.6 (286)	90 (543)	547
Slovenia	2015	3.4-4.1	74.7 (236)	42 (37)	87.7 (199)	44.5 (105)	24.3 (9)	48.2 (96)	3 261
Slovakia	2008	1.0-2.5	24.1 (602)	14.8 (179)	33.6 (414)	68.5 (402)	51.4 (91)	75.7 (305)	600
Finland	2012	3.8-4.5	51.7 (339)	38.3 (106)	61.5 (233)	73.3 (247)	65.7 (69)	76.7 (178)	3 000
Sweden (1)	-	-	25.2 (8 907)	16.8 (2 101)	29.5 (6 562)	-	-	-	3 679
United Kingdom	2010-11	7.9-8.4	49.7 (59 763)	21.7 (8 595)	63.5 (50 984)	31.8 (13 125)	17.5 (929)	34 (12 139)	142 085
Turkey	2011	0.2-0.5	74.2 (8 073)	67.5 (3 627)	80.7 (4 446)	24.7 (1 994)	15.5 (561)	32.2 (1 433)	12 500
Norway ( <sup>2</sup> )	2013	2.0-4.2	17 (1 005)	-	-	-	-	-	7 498
European Union	-	-	37.6 (181 918)	18.3 (32 921)	51.4 (143 189)	36.6 (55 311)	28.2 (7 550)	39 (46 856)	626 541
EU, Turkey and Norway	-	-	38.2 (190 996)	19.8 (36 548)	52 (147 635)	36 (57 305)	26.7 (8 111)	38.8 (48 289)	646 539

Data on clients in substitution treatment are for 2015, or most recent year available: Denmark, Finland, Netherlands and Spain, 2014; Turkey, 2011. (<sup>1</sup>) First-time and previously treated entrants available only for two of the three data sources available in Sweden and, therefore, not comparable with data for all entrants.

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

## COCAINE

	Prevalence estimates				Entrants into treatment during the year							
		eneral popu		School population	Cocaine clier	its as % of treatn	nent entrants		ine clients ir 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 clients	First- time entrants	Previously treated entrants		
Country		%	%	%	% (count)	% (count)	% (count)	% (count)	% (count)	% (count)		
Belgium (1)	2013	-	0.9	3	18.9 (2 207)	18.9 (756)	18.9 (1 401)	6.5 (125)	1.1 (7)	9.4 (116)		
Bulgaria	2012	0.9	0.3	5	1.6 (29)	6.5 (21)	0.8 (8)	7.1 (2)	0 (0)	25 (2)		
Czech Republic	2015	1.8	0.3	1	0.3 (27)	0.3 (12)	0.3 (15)	0 (0)	0 (0)	0 (0)		
Denmark	2013	5.2	2.4	2	5.5 (260)	5.9 (134)	5.4 (124)	3.9 (8)	-	8.6 (8)		
Germany (3)	2015	3.8	1.2	3	6 (5 209)	5.6 (1 494)	6.1 (3 715)	17.1 (2 843)	8.8 (353)	19.7 (2 490)		
Estonia	2008	-	1.3	1	0.7 (2)	-	1.2 (2)	50 (1)	-	50 (1)		
Ireland	2015	7.8	2.9	3	10.5 (996)	13.7 (513)	8.4 (457)	0.8 (8)	0.2 (1)	1.6 (7)		
Greece	-	-	-	1	6.6 (269)	8.9 (141)	5.2 (128)	11.6 (31)	4.3 (6)	19.5 (25)		
Spain	2015	9.1	3.0	2	36.5 (17 864)	34.8 (8 234)	37 (6 954)	1.3 (224)	0.7 (56)	2.1 (141)		
France	2014	5.4	2.4	4	6.1 (3 013)	6.1 (963)	8.1 (1 369)	10.2 (269)	3.6 (32)	16.5 (198)		
Croatia	2015	2.7	1.6	2	1.4 (104)	2.8 (24)	1.2 (80)	2 (2)	-	2.5 (2)		
Italy	2014	7.6	1.8	3	25.3 (11 935)	30.4 (6 296)	21.3 (5 639)	4.2 (479)	2.6 (159)	5.9 (320)		
Cyprus	2016	1.4	0.4	3	10 (80)	8.3 (36)	11.8 (38)	5.1 (4)	0 (0)	7.9 (3)		
Latvia	2015	1.5	1.2	2	1.2 (9)	1.8 (7)	0.6 (2)	0 (0)	0 (0)	0 (0)		
Lithuania	2012	0.9	0.3	2	0.6 (15)	1.8 (7)	0.3 (7)	13.3 (2)	14.3 (1)	14.3 (1)		
Luxembourg	-	-	-	-	19 (55)	16.7 (4)	20.4 (44)	44.4 (24)	-	50 (22)		
Hungary ( <sup>3</sup> )	2015	1.2	0.9	2	2.3 (99)	2.5 (75)	1.7 (19)	5.2 (5)	1.4 (1)	15.8 (3)		
Malta	2013	0.5	-	3	15.9 (281)	39.6 (91)	12.3 (190)	17.6 (45)	8.1 (7)	22.4 (38)		
Netherlands	2015	5.1	3.6	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	0.4	2	7.1 (258)	9.6 (125)	5.7 (133)	6.3 (15)	0.8 (1)	11.6 (14)		
Poland	2014	1.3	0.4	4	2.1 (189)	1.9 (83)	2.3 (101)	2.2 (4)	1.3 (1)	3 (3)		
Portugal	2012	1.2	0.4	2	12 (331)	15.1 (239)	7.9 (92)	4.4 (13)	2.3 (5)	9.6 (8)		
Romania	2013	0.8	0.2	3	0.6 (19)	0.9 (18)	0 (0)	0 (0)	0 (0)	-		
Slovenia	2012	2.1	1.2	2	4.1 (13)	9.1 (8)	2.2 (5)	23.1 (3)	0 (0)	60 (3)		
Slovakia	2015	0.7	0.3	2	0.8 (19)	0.7 (9)	0.7 (9)	5.9 (1)	-	12.5 (1)		
Finland	2014	1.9	1.0	1	0 (0)	0 (0)	0 (0)	-	-	-		
Sweden (4,5)	2013	-	1.2	2	0.9 (318)	1.7 (211)	0.5 (103)	0 (0)	0 (0)	0 (0)		
United Kingdom ( <sup>2,4</sup> )	2015	9.7	4.0	2	13.9 (16 673)	17.2 (6 830)	12.2 (9 806)	1.5 (168)	0.4 (18)	2.3 (146)		
Turkey	2011	-	-	-	1.8 (198)	1.5 (79)	2.2 (119)	-	-	-		
Norway (4)	2015	4.2	2.2	1	1.4 (83)	-	-	-	-	-		
European Union	-	5.2	1.9	-	13 (62 949)	15.4 (27 688)	11.4 (31 759)	6.5 (4 281)	2.4 (649)	10 (3 556)		
EU, Turkey and Norway	-	-	-	-	12.6 (63 230)	15 (27 767)	11.2 (31 878)	6.5 (4 281)	2.4 (649)	10 (3 556)		

Prevalence estimates for the school population are taken from national school surveys or the ESPAD project. Due to uncertainty of data collection procedures, Latvia data may not be comparable.

<sup>(1)</sup> Prevalence estimates for the general population refer to Flanders only.

<sup>(2)</sup> Prevalence estimates for the general population refer to England and Wales only.

(<sup>3</sup>) Age range for prevalence estimates in the general population: 18–64, 18–34.

 $(^{4})$  Age range for prevalence estimates in the general population: 16–64, 16–34.

(<sup>5</sup>) First-time and previously treated entrants are available only for two of the three data sources available in Sweden and, therefore, not comparable with data for all entrants.

## **AMPHETAMINES**

	Prevalence estimates				Entrants into treatment during the year							
	Ger	neral popul	ation	School population	Amphetamin	ies clients as % entrants	of treatment		tamines clients oute of administ			
	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 (1)	2013	-	0.5	2	9.9 (1 160)	8.6 (345)	10.7 (794)	13.5 (130)	3.9 (11)	17.8 (118)		
Bulgaria	2012	1.2	1.3	6	4.7 (84)	15.9 (51)	1.6 (16)	2 (1)	0 (0)	0 (0)		
Czech Republic	2015	4.4	2.2	1	69.7 (7 033)	75.1 (3 550)	65 (3 483)	78.1 (5 446)	73.8 (2 586)	82.6 (2 860)		
Denmark	2013	6.6	1.4	1	6.6 (311)	6.2 (140)	7.1 (163)	4 (11)	1.7 (2)	6.2 (9)		
Germany ( <sup>3,4</sup> )	2015	3.6	1.9	4	16.8 (14 646)	19.3 (5 134)	15.7 (9 512)	2.2 (719)	1.5 (168)	2.5 (551)		
Estonia	2008	-	2.5	2	2.1 (6)	3.2 (2)	2.5 (4)	66.7 (4)	100 (2)	50 (2)		
Ireland	2015	4.1	0.6	3	0.6 (59)	0.9 (33)	0.4 (24)	3.4 (2)	3 (1)	4.2 (1)		
Greece	-	-	-	2	0.4 (18)	0.4 (7)	0.4 (11)	0 (0)	0 (0)	0 (0)		
Spain	2015	3.6	1.0	1	1.3 (655)	1.6 (385)	1.1 (209)	0.9 (6)	1.1 (4)	0.5 (1)		
France	2014	2.2	0.7	2	0.5 (264)	0.5 (84)	0.6 (108)	11.6 (26)	14.9 (11)	15.6 (15)		
Croatia	2015	3.5	2.3	3	1.4 (102)	2.7 (23)	1.1 (74)	-	-	-		
Italy	2014	2.8	0.6	2	0.2 (91)	0.3 (59)	0.1 (32)	5.2 (4)	6.4 (3)	3.3 (1)		
Cyprus	2016	0.5	0.1	3	4.9 (39)	3.9 (17)	5.6 (18)	2.6 (1)	5.9 (1)	0 (0)		
Latvia	2015	1.9	0.7	3	16.2 (122)	21.5 (84)	10.6 (38)	67.5 (81)	62.2 (51)	78.9 (30)		
Lithuania	2012	1.2	0.5	1	2.5 (63)	7.1 (28)	1.5 (31)	26.7 (16)	3.7 (1)	45.2 (14)		
Luxembourg	-	-	-	-	0.3 (1)	-	0.5 (1)	-	-	-		
Hungary ( <sup>4</sup> )	2015	1.7	1.4	3	11.4 (489)	12 (354)	8.9 (98)	9.6 (46)	5.7 (20)	23.7 (23)		
Malta	2013	0.3	-	2	0.3 (5)	0.4 (1)	0.3 (4)	20 (1)	-	25 (1)		
Netherlands	2015	4.7	3.1	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	4.8 (174)	5.7 (75)	4.2 (99)	3.8 (6)	2.9 (2)	4.3 (4)		
Poland	2014	1.7	0.4	4	24.3 (2 194)	25.4 (1 0 9 1)	23.8 (1 056)	3.7 (80)	1.7 (18)	5.8 (60)		
Portugal	2012	0.5	0.1	1	0.1 (4)	0.3 (4)	-	0 (0)	0 (0)	-		
Romania	2013	0.3	0.1	1	0.4 (12)	0.3 (7)	0.3 (3)	0 (0)	0 (0)	0 (0)		
Slovenia	2012	0.9	0.8	1	1.3 (4)	4.5 (4) 44.7 (539)	0 (0)	0 (0)	0 (0)	24 (102)		
Slovakia Finland	2015 2014	1.4 3.4	0.8	1	45.2 (1 132)	· · ·	45.4 (559)	28.7 (315) 77.6 (76)	24.3 (129) 62.8 (27)	34 (183)		
Sweden ( <sup>3,5,6</sup> )		3.4	1.3		15.2 (100) 7 (2 645)	16.2 (45)	14.5 (55) 5.8 (1 376)	77.0(70)	02.0 (27)	89.1 (49)		
United Kingdom ( <sup>2,5</sup> )	2013	10.3	0.9	1	2.8 (3 332)	3.6 (1 414)	2.4 (1 913)	- 18.9 (382)	- 11 (89)	24.3 (293)		
Turkey	2011	0.1	0.1	-	1.8 (196)	2.5 (133)	1.1 (63)	0.5 (1)	0.8 (1)	0 (0)		
Norway ( <sup>3,5</sup> )	2011	3.1	0.1	1	13.9 (823)	2.0 (100)	1.1 (00)	0.0(1)	0.0(1)	0 (0)		
European Union	- 2013	<b>3.8</b>	1.1	-	<b>7.4 (35 562)</b>	8.4 (15 092)	7.2 (20 011)	15.1 (7 357)	16.8 (3 128)	14.1 (4 217)		
EU, Turkey and Norway	-	-	-	-	7.3 (36 581)	8.2 (15 225)	7.1 (20 074)	15 (7 358)	16.6 (3 129)	14.1 (4 217)		

Prevalence estimates for the school population are taken from national school surveys or the ESPAD project. Due to uncertainty of data collection procedures, Latvia data may not be comparable.

(1) Prevalence estimates for the general population refer to Flanders only.

(2) Prevalence estimates for the general population refer to England and Wales only.

(\*) Entrants into treatment refer to clients with stimulants other than cocaine, not just amphetamines.
(4) Age range for prevalence estimates in the general population: 18–64, 18–34.

 $(^5)$  Age range for prevalence estimates in the general population: 16–64, 16–34.

(<sup>6</sup>) First-time and previously treated entrants are available only for two of the three data sources available in Sweden and, therefore, not comparable with data for all entrants.

## **MDMA**

		Prevalence	estimates	Entrants into treatment during the year			
	G	eneral population		School population	MDMA clien	ts as % of treatm	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 (1)	2013	-	0.8	3	0.3 (36)	0.6 (25)	0.1 (11)
Bulgaria	2012	2.0	2.9	5	0.2 (3)	0.6 (2)	0.1 (1)
Czech Republic	2015	6.3	3.5	3	0 (4)	0.1 (3)	0(1)
Denmark	2013	2.3	0.7	1	0.3 (15)	0.5 (11)	0.2 (4)
Germany ( <sup>3</sup> )	2015	3.3	1.3	2	-	-	-
Estonia	2008	-	2.3	3	_	_	-
Ireland	2015	9.2	4.4	4	0.5 (47)	0.8 (31)	0.3 (15)
Greece	-	-	-	1	0.2 (7)	0.2 (3)	0.2 (4)
Spain	2015	3.6	1.3	1	0.3 (133)	0.5 (111)	0.1 (13)
France	2014	4.2	2.3	2	0.4 (188)	0.5 (76)	0.3 (49)
Croatia	2015	3.0	1.4	2	0.4 (32)	0.8 (7)	0.3 (23)
Italy	2014	3.1	1.0	3	0.2 (80)	0.2 (40)	0.2 (40)
Cyprus	2016	1.1	0.3	3	-	-	-
Latvia	2015	2.4	0.8	3	0.3 (2)	0.3 (1)	0.3 (1)
Lithuania	2012	1.3	0.3	2	0.1 (3)	0.3 (1)	0.1 (2)
Luxembourg	-	-	-	-	-	-	-
Hungary ( <sup>3</sup> )	2015	4.0	2.1	2	2 (85)	1.8 (54)	1.9 (21)
Malta	2013	0.7	-	2	0.9 (16)	1.7 (4)	0.8 (12)
Netherlands	2015	8.4	6.6	3	0.7 (80)	1 (67)	0.3 (13)
Austria	2015	2.9	1.1	2	0.5 (20)	1.1 (14)	0.3 (6)
Poland	2014	1.6	0.9	3	0.3 (23)	0.3 (14)	0.2 (9)
Portugal	2012	1.3	0.6	2	0.3 (8)	0.4 (7)	0.1 (1)
Romania	2013	0.9	0.3	2	0.5 (16)	0.8 (16)	0 (0)
Slovenia	2012	2.1	0.8	2	0.3 (1)	1.1 (1)	0 (0)
Slovakia	2015	3.1	1.2	3	0.1 (3)	0.1 (1)	0.2 (2)
Finland	2014	3.0	2.5	1	0.5 (3)	1.1 (3)	0 (0)
Sweden (4)	2013	-	1.0	1	-	-	-
United Kingdom ( <sup>2,4</sup> )	2015	9.4	3.1	3	0.4 (490)	0.8 (312)	0.2 (174)
Turkey	2011	0.1	0.1	-	1 (106)	1.4 (77)	0.5 (29)
Norway ( <sup>4</sup> )	2015	2.3	1.2	1	_	-	-
European Union	-	4.2	1.8	-	0.3 (1 295)	0.4 (804)	0.1 (402)
EU, Turkey and Norway	-	-	-	-	0.3 (1 401)	0.5 (881)	0.2 (431)

Prevalence estimates for the school population are taken from national school surveys or the ESPAD project. Due to uncertainty of data collection procedures, Latvia data may not be comparable.

 $(\ensuremath{^1})$  Prevalence estimates for the general population refer to Flanders only.

 $(^2)$  Prevalence estimates for the general population refer to England and Wales only.

(<sup>3</sup>) Age range for prevalence estimates in the general population: 18–64, 18–34.

(<sup>4</sup>) Age range for prevalence estimates in the general population: 16–64, 16–34.

## CANNABIS

		Prevalence	estimates	Entrants into treatment during the year			
	G	eneral population		School population	Cannabis clie	nts as % of treatn	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 (1)	2013	15	10.1	17	31.9 (3 737)	51.6 (2 065)	21.3 (1 582)
Bulgaria	2012	7.5	8.3	27	3.2 (58)	8.4 (27)	0.7 (7)
Czech Republic	2015	29.5	18.8	37	11.8 (1 195)	16.4 (776)	7.8 (419)
Denmark	2013	35.6	17.6	12	70.9 (3 338)	79 (1 783)	62.5 (1 430)
Germany ( <sup>3</sup> )	2015	27.2	13.3	19	39.1 (34 108)	56.9 (15 168)	31.2 (18 940)
Estonia	2008	-	13.6	25	3.5 (10)	7.9 (5)	1.2 (2)
Ireland	2015	27.9	13.8	19	28.3 (2 681)	45.2 (1 693)	16.8 (918)
Greece	-	-	-	9	19.4 (789)	34.2 (539)	9.8 (240)
Spain	2015	31.5	17.1	27	33.7 (16 478)	48.1 (11 386)	16.4 (3 084)
France	2014	40.9	22.1	31	60.4 (29 621)	74.9 (11 855)	37.6 (6 391)
Croatia	2015	19.4	16.0	21	12.8 (967)	62 (526)	6.5 (432)
Italy	2014	31.9	19.0	27	19.5 (9 225)	28 (5 810)	12.9 (3 415)
Cyprus	2016	12.1	4.3	7	58.8 (469)	75.9 (330)	38 (122)
Latvia	2015	9.8	10.0	17	23.3 (175)	35.5 (139)	10 (36)
Lithuania	2012	10.5	5.1	18	3.5 (89)	11.9 (47)	1.6 (33)
Luxembourg	-	-	-	-	23.1 (67)	58.3 (14)	19.9 (43)
Hungary ( <sup>3</sup> )	2015	7.4	3.5	13	56.2 (2 420)	62.7 (1 854)	41.4 (458)
Malta	2013	4.3	-	13	8.9 (158)	29.1 (67)	5.9 (91)
Netherlands	2015	25.6	16.1	22	47.3 (5 202)	55.5 (3 625)	35.4 (1 577)
Austria	2015	23.6	14.1	20	29.2 (1 063)	54.4 (711)	15.1 (352)
Poland	2014	16.2	9.8	24	28 (2 525)	36.3 (1 558)	20.3 (901)
Portugal	2012	9.4	5.1	15	33.9 (934)	50.8 (806)	10.9 (128)
Romania	2013	4.6	3.3	8	39.3 (1 272)	54.8 (1 137)	9.5 (98)
Slovenia	2012	15.8	10.3	25	14.2 (45)	38.6 (34)	4.8 (11)
Slovakia	2015	15.8	9.3	26	24.6 (616)	35.7 (430)	13.7 (169)
Finland	2014	21.7	13.5	8	20.7 (136)	35.7 (99)	9.8 (37)
Sweden ( <sup>4,5</sup> )	2015	14.7	7.3	7	11.1 (3 924)	16.9 (2 113)	7.9 (1 752)
United Kingdom ( <sup>2,4</sup> )	2015	29.4	11.3	19	25.9 (31 129)	46.3 (18 345)	15.8 (12 686)
Turkey	2011	0.7	0.4	-	6 (653)	7.7 (416)	4.3 (237)
Norway (4)	2015	20.9	8.6	7	27.2 (1 609)	-	-
European Union	-	26.3	13.9	-	31.5 (152 431)	46.2 (82 942)	19.9 (55 354)
EU, Turkey and Norway	-	-	-	-	30.9 (154 693)	45.1 (83 358)	19.6 (55 591)

Prevalence estimates for the school population are taken from national school surveys or the ESPAD project. Due to uncertainty of data collection procedures, Latvia data may not be comparable.

(1) Prevalence estimates for the general population refer to Flanders only.

(2) Prevalence estimates for the general population refer to England and Wales only.

(<sup>3</sup>) Age range for prevalence estimates in the general population: 18–64, 18–34.

<sup>(4)</sup> Age range for prevalence estimates in the general population: 16–64, 16–34.

(<sup>5</sup>) First-time and previously treated entrants are available only for two of the three data sources available in Sweden and, therefore, not comparable with data for all entrants.

## **OTHER INDICATORS**

	Drug-induced deaths (aged 15–64)	HIV diagnoses attributed to injecting drug use (ECDC)	Injecting drug use estimate		Syringes distributed through specialised programmes
Country	cases per million population (count)	cases per million population (count)	Year of estimate	cases per 1 000 population	count
Belgium	9 (67)	1.3 (15)	2015	2.3-4.6	1 034 242
Bulgaria	4 (17)	3.6 (26)	-	-	364 111
Czech Republic	6 (39)	0.4 (4)	2015	6.1-6.4	6 421 095
Denmark	58 (210)	1.4 (8)	-	-	-
Germany	22 (1 185)	1.7 (134)	-	-	-
Estonia	103 (88)	41.9 (55)	2009	4.3-10.8	2 136 691
Ireland (1)	71 (213)	10.8 (50)	-	-	393 275
Greece	0 (0)	6.4 (70)	2015	0.6-1.0	268 157
Spain (¹)	15 (455)	2.1 (96)	2014	0.2-0.3	1 483 399
France (1)	7 (294)	0.9 (58)	2014	2.1-3.2	12 314 781
Croatia	19 (54)	0.5 (2)	2012	0.4-0.6	923 650
Italy	8 (304)	1.8 (112)	-	-	-
Cyprus	15 (9)	1.2 (1)	2015	0.3-0.7	164
Latvia	14 (18)	44.3 (88)	2012	7.3–11.7	524 949
Lithuania	59 (115)	15.1 (44)	-	-	200 630
Luxembourg	31 (12)	24.9 (14)	2009	4.5-6.9	361 392
Hungary	4 (25)	0.2 (2)	2015	1	188 696
Malta	28 (8)	0 (0)	-	-	340 644
Netherlands	16 (182)	0.1 (1)	2008	0.2-0.2	-
Austria	26 (152)	2.6 (22)	-	-	5 953 919
Poland	9 (249)	1 (37)	-	-	10 142
Portugal	6 (39)	4.2 (44)	2012	1.9-2.5	1 004 706
Romania	2 (21)	7.1 (142)	-	-	1 425 592
Slovenia	22 (30)	0.5 (1)	-	-	500 757
Slovakia	7 (27)	0.6 (3)	-	-	347 162
Finland	43 (150)	1.3 (7)	2012	4.1-6.7	5 301 000
Sweden	100 (618)	1.5 (15)	2008-11	1.3	281 397
United Kingdom (²)	60 (2 528)	2.8 (182)	2004-11	2.9-3.2	-
Turkey	10 (533)	0.2 (13)	-	-	-
Norway	76 (257)	1.5 (8)	2014	2.2-3.0	2 500 192
European Union	21.3 (7 109)	2.4 (1 233)	-	-	-
EU, Turkey and Norway	20.3 (7 899)	2.1 (1 254)	-	-	-

Caution is required when comparing drug-induced deaths due to issues of coding, coverage and under-reporting in some countries.

<sup>(1)</sup> Syringes distributed through specialised programmes refer to 2014.

(2) UK syringe data: England, no data; Scotland, 4 376 456 and Wales, 3 398 314 (both in 2015); Northern Ireland, 292 390 (2014).

## **SEIZURES**

	Heroin		Coc	aine	Amphet	amines	MDMA		
	Quantity seized	Number of seizures	Quantity seized	Number of seizures	Quantity seized	Number of seizures	Quantity seized	Number of seizures	
Country	kg	count	kg	count	kg	count	tablets (kg)	count	
Belgium	121	2 375	17 487	4 330	73	3 260	59 696 (9)	1 739	
Bulgaria	265	-	9	-	73	-	17 284 (<0.01)	-	
Czech Republic	2	76	120	113	127	1 125	3 110 (0.4)	133	
Denmark	29	571	548	3 470	193	2 626	70 244 (10)	1 0 0 5	
Germany	210	3061	3 114	3 592	1 423	13 680	967 410 (0)	4 015	
Estonia	< 0.01	2	4	60	119	391	41 549 (13)	239	
Ireland	-	758	-	364	-	63	- (0)	204	
Greece	567	2 957	102	575	3	118	300 (0)	56	
Spain	256	7 755	21 621	38 273	360	4 500	135 110 (0)	2 958	
France	818	4 692	10 869	9 483	486	1 0 2 7	1 325 305 (0)	1 592	
Croatia	145	154	12	359	15	597	- (7)	747	
Italy	768	2 2 3 0	4 035	5 403	26	278	17 573 (11)	406	
Cyprus	< 0.01	8	107	95	1.68	55	173 (1)	50	
Latvia	3	142	4	62	36	763	238 (3)	154	
Lithuania	2	368	533	16	62	205	(1)	11	
Luxembourg	8	208	11	190	0.27	13	543 (0)	14	
Hungary	12	48	31	153	34	706	56 420 (7)	287	
Malta	4	35	21	156	< 0.01	2	1 404 (0.01)	46	
Netherlands	-	-	-	-	-	-	- (-)	-	
Austria	70	605	120	1 190	70	1 088	10 148 (3)	512	
Poland	4	-	219	-	747	-	120 886 (78)	-	
Portugal	97	763	6 0 2 9	1 079	2	111	35 484 (2)	180	
Romania	334	335	71	119	0.4	55	13 852 (0.1)	280	
Slovenia	6	273	3	178	3	-	2 908 (2)	-	
Slovakia	3	63	2	42	5	819	1 460 (0)	40	
Finland	0.4	-	9	-	300	-	23 660 (0)	-	
Sweden	8	483	114	2 086	546	5 398	95 421 (35)	2 095	
United Kingdom	806	8 0 8 3	4 228	15 588	491	4 517	812 127 (2)	3 030	
Turkey	8 294	12 271	511	941	4 057	2 336	5 673 901 (0)	5 012	
Norway	62	1 178	85	1 332	628	7 304	116 353 (27)	1 241	
European Union	4 5 37	36 045	69 421	86 976	5 196	41 397	3 812 305 (212)	19 793	
EU, Turkey and Norway	12 893	49 494	70 017	89 249	9 880	51 037	9 602 559 (185)	26 046	

Amphetamines refers to both amphetamine and methamphetamine. All data are for 2015. Data for Scotland (UK) are not available.

# **SEIZURES (continued)**

	Cannabi	s resin	Herbal ca	nnabis	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	7 045	5 569	764	26 401	- (-)	-	
Bulgaria	13	-	1 176	-	9 811 (37 775)	-	
Czech Republic	8	105	655	3 672	30 770 (0)	361	
Denmark	3 6 1 9	14 680	616	1 214	14 560 (464)	545	
Germany	1 599	6 0 5 9	3 852	32 353	154 621 (0)	2 167	
Estonia	812	21	60	597	0 (12)	44	
Ireland	-	192	-	1 049	- (-)	182	
Greece	330	542	2 474	5 499	59 242 (0)	735	
Spain	380 361	164 760	15 915	156 984	379 846 (0)	2 0 2 9	
France	60 790	65 503	16 835	32 446	153 895 (0)	-	
Croatia	12	764	409	4 546	5 687 (0)	270	
Italy	67 825	7 684	9 286	5 838	138 013 (0)	1 566	
Cyprus	3	21	226	777	2 814 (0)	58	
Latvia	1 272	63	71	712	- (20)	17	
Lithuania	591	32	143	456	- (-)	-	
Luxembourg	1	130	20	1040	81 (0)	10	
Hungary	18	141	590	1945	4 659 (0)	127	
Malta	70	132	4	106	28 (0)	8	
Netherlands	-	-	-	-	9 940 000 (0)	-	
Austria	287	2 0 3 8	851	11 426	- (687)	379	
Poland	843	-	1830	-	103 339 (0)	-	
Portugal	2 412	4 180	224	582	6 102 (0)	298	
Romania	5	178	180	1 987	- (293)	90	
Slovenia	3	109	458	3 103	14 006 (0)	167	
Slovakia	27	33	70	1 204	2 085 (0)	35	
Finland	63	-	208	-	23 000 (125)	-	
Sweden	1 065	8 897	1 054	9619	- (-)	-	
United Kingdom	7 219	5 959	30 680	100 811	399 230 (0)	9 735	
Turkey	7 855	3 750	45 816	29 652	0 (0)	2 471	
Norway	2 015	11 394	255	4 411	0 (69)	339	
European Union	536 293	287 792	88 649	404 362	11 441 789 (39 376)	18 823	
EU, Turkey and Norway	546 163	302 936	134 719	438 425	11 441 789 (39 445)	21 633	

All data are for 2015. Data for Scotland (UK) are not available.

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## About this report

The Trends and Developments report presents a top-level 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 2017 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.



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