



European Monitoring Centre
for Drugs and Drug Addiction

Cannabis laws in Europe

Questions and answers for policymaking
June 2023





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European Monitoring Centre
for Drugs and Drug Addiction

Praça Europa 1, Cais do Sodré, 1249-289 Lisbon, Portugal

Tel. +351 211210200

info@emcdda.europa.eu | www.emcdda.europa.eu

twitter.com/emcdda | facebook.com/emcdda

Contents

5	Introduction
9	PART 1 Why is defining cannabis important?
9	What are cannabinoids?
10	Does all cannabis contain THC?
10	What are the challenges in quantifying an individual's cannabis consumption?
11	Route of administration: why is this important?
12	What is hemp?
13	PART 2 What are countries' international obligations to control cannabis?
13	Why should countries control cannabis?
16	What types of cannabis are controlled?
16	Are countries under any obligation to penalise cannabis users?
17	Do countries have flexibility in how they interpret the UN conventions?
19	PART 3 How do EU countries respond to illegal use and supply of cannabis?
19	Is there a harmonised EU law on illicit cannabis?
19	Do EU countries impose the same penalties for cannabis as for other drugs?
20	Will a positive drug test for cannabis lead to police action?
21	Can you be imprisoned for possession of a small amount of cannabis?
22	Where is cannabis possession for personal use decriminalised?
22	What limits have European countries set for possession for personal use?
23	How and why have countries changed their laws (or punishments) for possession of cannabis?
23	Does changing the penalty in the law have an impact on levels of cannabis use?
25	What alternative approaches do countries take to respond to cannabis use?
27	How do countries respond to the cultivation of cannabis for personal use?
27	What are the possible penalties for cannabis sale or trafficking?
29	Is it illegal to drive with cannabis in the body?
31	PART 4 Is there a trend towards cannabis regulation in Europe — and if so, why?
31	Is it true that selling cannabis for recreational use is already legal in some places in Europe?
32	What forms of cannabis regulation are proposed in Europe, and why?
36	What are the possible effects of cannabis regulation?
39	PART 5 What laws cover medical and commercial cannabis-derived products?
39	Is the medical use of cannabis legal?
41	Are products containing low THC levels legal?
42	Is it legal to sell low-THC cannabis products for smoking?
43	Is cannabis legal as a wellness product?
44	Are cosmetic products containing cannabis legal?
44	Is cannabis legal as a food or food supplement?
46	Is industrial cannabis legal?
47	Is it possible to trademark cannabis varieties or cannabis products?

49		Conclusion
52		Abbreviations
53		References
55		Resources
55		Acknowledgements

Project group: Brendan Hughes, Liesbeth Vandam, Alexander Söderholm, Eoghan Quigley, Danilo Ballotta, Nicola Singleton, Ana Gallegos, Rachel Christie, Jane Mounteney, Paul Griffiths

Introduction

Cannabis is Europe's most commonly consumed illicit drug and also the substance associated with the most drug law offences in the region. It is conservatively estimated that over 27 % of all adults in the European Union (EU) aged 15–64 have used cannabis at least once during their lifetime, while nearly 20 % of those in the 15–24 age group are estimated to have used it in the last year. There were an estimated 1.5 million drug law offences reported in the European Union in 2020. With approximately 642 000 reported offences in 2020, cannabis accounted for more than three quarters of the use or possession offences in which the drug was known. About 93 000 cannabis supply offences were reported in 2020, accounting for over half of all drug supply offences.

While these figures give an indication of the scale of public health and criminal justice system challenges related to this drug, the estimated rates of use, size of the illegal market and nature of policy responses to cannabis vary considerably across countries in Europe. Rapid changes have been taking place in this field, including the creation of legal recreational cannabis markets in the Americas, and, in many parts of the world, the emergence of new forms of the drug and the introduction into commercial markets of products containing material that has been derived from the cannabis plant. These changes underline the importance of monitoring and evaluation data to understand the potential health and social impacts of these developments and to support evidence-based drug policymaking.

Since 2014, the supply and use of cannabis for recreational purposes, as opposed to medical or industrial purposes, have been legalised in many American states, as well as in Uruguay since 2012 and in Canada since 2018. This has led to an increase in media and public discussions about the laws and regulatory frameworks that prohibit or, under some circumstances, may permit cannabis use and supply in Europe. Policy models for cannabis supply adopted by jurisdictions in the Americas are diverse and include private commercial sales, state-managed sales, non-profit communal cultivation (such as cannabis social clubs) and personal cultivation, among other approaches. The impact of these regulatory models is being closely monitored, following concerns that they may lead to increases in cannabis use and related harms. Meanwhile, many in favour of legalisation have argued that a regulated supply of the drug may in fact mitigate some of the social and health harms related to cannabis use and illegal cannabis markets.

This is all happening at a time when scientific understanding regarding the effects of cannabis potency on mental health (e.g. psychosis, anxiety and cannabis use disorders) is still evolving. Overall, use of higher potency cannabis has been associated with an increased risk of mental health problems. At the same time reports continue to emerge regarding natural cannabis products purchased as illegal cannabis being adulterated with synthetic cannabinoids, some of which are highly potent and have been linked to poisonings and deaths.

Competing claims, in the context of policy changes that have occurred in various parts of the world on an issue about which the public and political debate is highly polarised, have underscored the importance of carefully considered and rigorously implemented policy evaluation frameworks. Such frameworks are crucial to informing evidence-based assessments that consider how well and to what extent a policy has been implemented, whether its objectives have been achieved and whether it has had any unintended effects.

In the European Union, important developments are also taking place in cannabis policy. In December 2021, Malta passed a law that permitted the limited growing of cannabis at home and in registered non-profit growing clubs, as well as its use in private homes. An

Authority for Responsible Use of Cannabis to coordinate implementation has also been established. The system of limited cannabis distribution that has existed in the Netherlands since the 1970s has seen further developments, with the recent establishment of a 'closed coffeeshop supply circuit'. This pilot project aims to assess the possibility of regulating a quality-controlled supply of cannabis to coffeeshops and to study the effects of such a regulated supply chain on crime, safety, public nuisance and public health. Currently, while sales of cannabis from coffeeshops are tolerated, the shops themselves must obtain their supplies from the illicit market.

Meanwhile, governments in Czechia, Germany, Luxembourg and the non-EU country Switzerland have announced plans for the regulated supply of cannabis for recreational use. Switzerland started pilot trials of legal cannabis sales in early 2023. Germany is planning to permit home growing and non-profit clubs, and Luxembourg is planning to permit home growing; both countries expect a system of sales to be developed later. Czechia has stated the intention to establish a regulated and taxed distribution system for recreational use.

The last decade has seen considerable research into potential medicinal uses of cannabis. Some cannabis-derived medicinal products are now authorised for specific therapeutic indications in the European Union. Programmes for permitting the medical use of cannabis preparations have also been implemented for certain medical conditions in some EU Member States. These programmes are usually highly controlled to reduce the risk of cannabis being diverted onto the illicit market.

Since 2016, there has been considerable commercial promotion of cannabis products that contain low amounts of tetrahydrocannabinol (THC), the cannabinoid most associated with cannabis intoxication. In addition, products are being marketed that purportedly contain cannabidiol (CBD), a cannabinoid that is now promoted as having many potential health benefits, although for most conditions the currently available evidence base is limited, making it difficult to judge the veracity of these claims. The therapeutic use of cannabis preparations in state-approved programmes and the proliferation of commercial sales of low-THC cannabis products in some countries only serves to further complicate an already challenging policy landscape.

These developments have influenced action at the international level. A 2018 critical review by the World Health Organization (WHO) Expert Committee on Drug Dependence, focusing on cannabis and related substances and their effects, led to a vote in December 2020 at the United Nations (UN) Commission on Narcotic Drugs on the reclassification of these substances under international law. On the occasion of this vote, the EU Member States declared that 'The EU stands together to support scientific progress in relation to cannabinoids, also with regard to possible medical use, while opposing the trivialisation of their non-medical use that represents a health risk' (EEAS, 2020). While cannabis and related substances remain controlled under Schedule I of the 1961 Convention, one of the WHO's recommendations on reclassification was approved, removing cannabis from Schedule IV of the UN Single Convention on Narcotic Drugs. This schedule lists the drugs that are considered most dangerous and of little or no therapeutic benefit.

The speed and scale of cannabis policy change and the potential impact of these policies on public health and safety, has prompted the EMCDDA to publish this report, which outlines key issues related to cannabis legislation, including an overview of current policies and laws at the EU level and in individual Member States. The topic of synthetic cannabinoids, and in particular the rise in illicit marketing and use of these substances, is

not addressed here, as it is covered in detail in a forthcoming module of the European Drug Markets Report ⁽¹⁾.

The reader should note that while every effort has been made to ensure that the current report is accurate at the time of its drafting, this a highly dynamic area and it is possible that the situation may have changed by the time the document is released.

While the primary focus of this report is on the use of cannabis for recreational purposes, relevant legislation for other uses is included in order to provide the necessary context for various policy initiatives. Written for a broad audience, the report aims to give brief answers to some of the more frequently asked questions raised in discussions about cannabis legislation. These have been grouped into five parts:

- Why is defining cannabis important?
- What are countries' international obligations to control cannabis?
- How do EU countries respond to illegal use and supply of cannabis?
- Is there a trend towards cannabis regulation — and if so why?
- What laws cover medical and commercial cannabis-derived products?

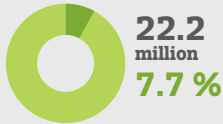
⁽¹⁾ See also the EMCDDA topics hub on [new psychoactive substances](#).

CANNABIS IN THE EUROPEAN UNION

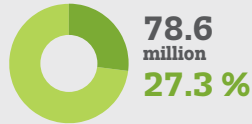
Use among the general population

Adults (15–64)

Last year use

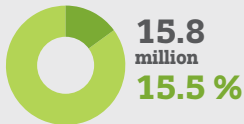


Lifetime use

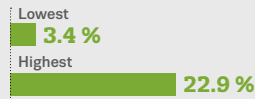


Young adults (15–34)

Last year use



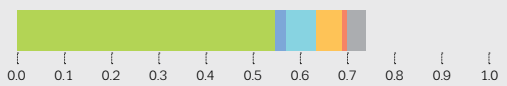
National estimates of use in last year



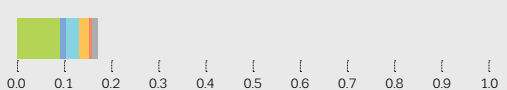
Drug law offences

Number of offences (million)

Possession/use



Supply



Legend: Cannabis (green), Heroin (blue), Cocaine (light blue), Amphetamines (orange), MDMA (red), Other substances (grey)

Data for offences for which the drug is known.

Seizures, price and potency

RESIN

Seizures

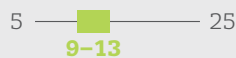
Number



Quantity



Price retail (EUR/g)



Price wholesale (EUR/kg)



Potency retail (% THC)



Indexed trends

Retail price and potency



HERB

Seizures

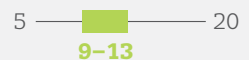
Number



Quantity



Price retail (EUR/g)



Price wholesale (EUR/kg)

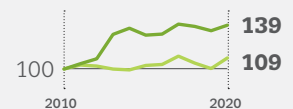


Potency retail (% THC)



Indexed trends

Retail price and potency



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. Source: 2022 European Drug Report: Trends and Developments.

Part 1

Why is defining cannabis important?

The cannabis plant (*Cannabis sativa* L.) has been grown for several hundred years for fibre, seeds and seed oil and, historically, has also been used for medicinal and recreational purposes. In this part of the report the definition of cannabis is clarified, providing the foundation for the rest of the paper and the discussions on what types of cannabis are controlled. This section briefly answers questions around the main chemical substances the plant contains — what a ‘dose’ of cannabis is, and the importance of different routes of administration and of cannabis plant varieties. In this time of increasing debate about the legal status of cannabis, clarifying these concepts is crucial to understanding some of the sometimes-misleading claims that ‘cannabis may be legal’ or ‘has been legalised’ in a particular country or jurisdiction.

What are cannabinoids?

Cannabinoids is a term used to cover several structural classes of compounds. Cannabinoids found naturally occurring in the cannabis plant are known as phytocannabinoids, while cannabinoids found in the human body are referred to as endocannabinoids. Cannabinoids can also be synthesised in the laboratory and these are generally referred to either as semi-synthetic cannabinoids, synthesised from naturally occurring phytocannabinoids, or synthetic cannabinoids, also often referred to as synthetic cannabinoid receptor agonists. Synthetic cannabinoids are defined as new psychoactive substances that mimic the effects of THC, the major psychoactive substance in cannabis.

The chemical structure of synthetic cannabinoids may not always closely resemble that of naturally occurring cannabinoids. Synthetic cannabinoids generally bind to cannabinoid receptors in the brain and other organs in the same way THC does, and may produce similar effects to naturally occurring cannabinoids. However, synthetic cannabinoids may differ in potency and other features.

Emerging new synthetic cannabinoids can be extremely potent and can cause more serious intoxication than cannabis, with severe poisonings more common and deaths also reported. In general, while our understanding of this class of compounds and the effect they have on humans has grown over the last decade, it remains limited, and this is currently an active and dynamic area for scientific research and medical studies.

The cannabis plant contains a wide variety of cannabinoids, about which scientific knowledge is still limited in many cases. The quantity of each cannabinoid found within a plant can vary greatly by plant variety and growing conditions, as well as other factors. Overall, the cannabis plant synthesises at least 144 unique cannabinoids. The two most abundant of these are the non-psychoactive THCA (tetrahydrocannabinolic acid) and CBDA (cannabidiolic acid). When these cannabinoid acids are activated through the process of decarboxylation they convert into the better-known THC and CBD. Decarboxylation usually takes place through heating, such as by smoking, vaporising or baking into edibles. This also has implications for measuring the quantities of THCA and THC, and CBDA and CBD respectively, in various cannabis products (see the box [Determining THCA and THC content in cannabis products](#)).

Determining THCA and THC content in cannabis products

Determining the THCA and THC content in a cannabis product can pose analytical challenges. Commonly used analytical techniques are gas chromatography and liquid chromatography. Gas chromatography includes a heating stage, initiating a decarboxylation process in the injection port of the instrument, and converting THCA to THC. However, this process may also reduce the weight of the plant material, further complicating the calculation of THCA and THC. This is particularly relevant when measuring and labelling the sum of THCA and THC content in food. Accordingly, from January 2023, the amended annex to Regulation (EC) No. 1881/2006 defines the calculation of the maximum level of delta-9-THC in foodstuffs derived from hemp seed, as $\text{delta-9-THC total} = \text{delta-9-THC} + 0.877 \times \text{delta-9-THCA}$.

Both THCA and CBDA are synthesised in the glandular trichomes of the cannabis plant as cannabinoid acids, and these cannabinoids help defend the plant against herbivores and environmental stresses. The production of THCA and CBDA is genetically determined, with

plants producing high levels of THCA, high levels of CBDA or a mixture of the two. As THCA and CBDA are synthesised from the same precursor in the cannabis plant, this means that CBDA production limits the amount of THCA synthesised, and vice versa (for further information, see Chapter 3 of the *EU Drug Markets Report*; EMCDDA and Europol, 2019).

When THCA is decarboxylated into THC it produces effects such as feeling 'high', relaxation and altered perception — the effects that people who use cannabis recreationally usually seek from the drug — while the decarboxylation of CBDA into CBD does not result in the same intoxicating effects. Notably, CBD has been found to offset some of the possible harmful, less sought after, or aversive effects sometimes associated with THC (such as memory impairment and paranoia). For simplicity, henceforth the two main cannabinoids will be referred to as 'THC' and 'CBD', bearing in mind that when they are first synthesised in the cannabis plant and not 'activated' they are in fact THCA and CBDA.

Does all cannabis contain THC?

Not all cannabis plants produce a useable amount of THC (i.e. an amount capable of producing intoxicating effects in humans). To further complicate the picture, different parts of any cannabis plant contain different amounts of THC. For example, the roots and seeds have very low levels of THC, while dried stem material will typically contain 0.3 % or less and the lower leaves less than 1 %. However, in the female flowers of some varieties, and the resin-producing trichomes (plant hairs) that grow among them, the THC concentration can reach 20 % or more. Many countries legally control the plant only when it is capable of producing amounts of THC that would make the plant attractive to those seeking to use it for the purposes of intoxication. However, in some countries all varieties of the cannabis plant are controlled, even those with negligible THC content. It should be noted that the cannabis plant, when it is not controlled under drug laws, potentially has a number of legitimate commercial and industrial uses, for example, as a source of fibre used in the manufacture of clothing.

Cannabis products available on the illicit drug market tend to differ widely in THC levels. The two main cannabis products used as recreational drugs in Europe are herbal cannabis (marijuana) and cannabis resin (hashish); both are typically smoked in rolled cigarettes (joints) containing

tobacco. The cannabis resin sold in Europe now is more potent than it was in the past, with an average THC content in 2020 of 21 %, almost twice that of herbal cannabis, at 11 %. More recently, extracts and concentrates have started to appear on the European market, such as butane hash oil, wax and shatter, as well as e-cigarette cartridges and edibles. The emergence of these products and new ways of consuming them is probably driven, in part at least, by developments occurring outside the European Union, notably the creation of legalised markets for cannabis use in the Americas. Some of these new products have been documented as containing up to 90 % THC, representing a new challenge for monitoring, and control and regulation, in addition to creating new concerns for safeguarding public health.

What are the challenges in quantifying an individual's cannabis consumption?

The term 'dose' usually refers to a specified amount of medication taken at one time. However, when used in the context of the recreational use of cannabis, this term can be a source of confusion. References to 'doses' of cannabis have been included in national legislation or

guidelines, but the definition of a dose of THC or CBD used often remains unclear and may also vary according to the product type. In this section examples of defined doses are included to illustrate this complexity, but are not intended to be prescriptive or comprehensive.

| Examples of a 'dose' of THC

Illicit cannabis is often discussed in terms of the percentage of THC (Freeman et al., 2021). In respect to describing cannabis use for recreational purposes, cannabis dose levels have been suggested by research studies or in guidelines. For example, in 2015–2016 researchers in Spain collected over 300 cannabis cigarettes from volunteers and found that the average THC content was 7 milligrams per cigarette (Casajuana Kögel et al., 2017). Legislation governing recreational cannabis edibles in North America defines one 'serving size' (e.g. a square of a chocolate bar in some US states, and the entire bar in Canada) as limited to 10 milligrams of THC in Colorado, California and Canada, and 5 milligrams in Oregon. In May 2021, following research undertaken in the United Kingdom (Freeman and Lorenzetti, 2020), the US National Institute on Drug Abuse proposed a 5-milligram standard unit of THC to be used to improve standardisation for research purposes (NIH, 2021). This can be contrasted with how this term is typically used for medicinal purposes. For example, the antiemetic medication Marinol, is prescribed for nausea and anorexia. It contains synthetic dronabinol (delta-9-THC) in a capsule to be swallowed. The dosage of Marinol is recommended at 2.5 milligrams per square metre body surface, thus approximately 4.5 milligrams per day for an adult. An additional factor to consider in some contexts is the ratio of THC to CBD. For example, the medicinal product Sativex, prescribed to treat spasticity, a common symptom of multiple sclerosis, has a near 1:1 THC:CBD ratio.

Examples of threshold quantities, which may refer to doses, determining the severity of penalties in Europe are given in the section [What limits have European countries set for possession for personal use?](#)

| Examples of a 'dose' of CBD

In circumstances where CBD is used as a medicine to control the symptoms of epilepsy, the pure CBD isolate Epidyolex is recommended at a starting daily dose of 5 milligrams per kilogram bodyweight. For a 70-kilogram adult, this works out at approximately 350 milligrams per day. By contrast, a scan of websites offering CBD capsules and oils without prescription in Canada suggest that a

dose may vary from 2 to 30 milligrams per day (Canadian Pharmacists Association, no date).

There is currently no consensus from a regulatory or toxicological perspective on the appropriate approach to defining CBD levels and this remains therefore an area requiring further research. However, some proposals have been made. For example in 2021, a body representing the interests of the hemp sector (the European Industrial Hemp Association) proposed that, for the average adult, products containing over 160 milligrams of CBD should require a prescription; those providing a daily oral intake of over 70 milligrams of pure CBD should be regulated as medicinal products; those providing a daily oral intake of 10–70 milligrams should be regulated as food supplements; and products leading to a daily intake of under 10 milligrams should be permitted in food products without restrictions (EIHA, 2021). In addition, applications received by the European Commission in recent years for authorisation of CBD as a novel food relate to dosages mainly in the range of 4 to 70 milligrams per day.

| Route of administration: why is this important?

Legislation may also authorise or prohibit certain routes of administration of cannabis preparations, depending on the purpose of taking the drug.

The traditional administration route for recreational users of cannabis is to roll the herbal cannabis or cannabis resin into a cigarette (often mixed with tobacco) and smoke it. When the smoke is inhaled, THC passes through the lungs into the bloodstream and its effects on the brain are rapid, typically experienced in less than a minute.

Inhaling smoke from burning plant material is not considered a healthy method of delivering cannabinoids to a patient's bloodstream for medicinal purposes, as the patient will inhale harmful tars and particles which may damage the lungs. Furthermore, accurate dosage is also difficult to ensure when cannabis is smoked, particularly when the cannabinoids are not intoxicating, such as CBD. For this reason national approaches in the European Union to the medical uses of cannabis do not promote the use of the drug by this route of administration. More precise and potentially safer methods of administration are available, however, such as vaporising below the point of combustion, infusing in hot water ('tea') or placing drops of oil in the mouth. Moreover, THC-infused edibles, such as chocolates and baked goods, have become a significant

method of administration in the United States. The use of cannabis in the form of edibles, infusions or capsules results in delayed effects because the THC is first digested and then metabolised in the liver before entering the bloodstream. While more accurate pharmaceutical dosing is possible through ingesting, the effects are only felt after 30–60 minutes, which has implications for user safety (for example, when driving).

What is hemp?

In many countries, including across the European Union, certain varieties of cannabis plants are legally cultivated for fibre and seed oil (see the section [Is industrial cannabis legal?](#)), for which the product is known as 'hemp'. According to Eurostat (European Commission, no date), a total of 32 000 hectares was dedicated to industrial hemp production in the European Union in 2021, a considerable increase since 2015 (19 970). In this respect, legal cultivation and sale of cannabis plants, together with a number of their products, take place in Europe with no connection to illegal use (as described in [Part 2](#) of this report, the cultivation of cannabis plants exclusively for industrial purposes (fibre and seeds) is not illegal under the international drug control treaties). The ambiguity caused by this is increasingly exploited by retailers, for example in cases where some hemp products are marketed using pictures of cannabis leaves, or a product is referred to as 'cannabis oil' when it is extracted from hemp seed. During policy discussions and in public debates, it is crucial to keep this possible ambiguity in mind.

Find out more

[EMCDDA, Cannabis profile.](#)

Part 2

What are countries' international obligations to control cannabis?

This section describes why and how countries are obliged to control cannabis. Specifically, it outlines the obligations placed on the EU Member States to control cannabis under UN drug control treaties. It also provides an overview of the 2018 critical review on cannabis and related substances, conducted by the WHO Expert Committee on Drug Dependence, which led to a rescheduling of cannabis in the Single Convention on Narcotic Drugs at the UN Commission on Narcotic Drugs in December 2020. The extent of current controls on cannabis and the corresponding room for manoeuvre open to countries that choose to vary their legislation within these international obligations are explored.

Why should countries control cannabis?

In order to answer this question it is important to recall the history of international drug law, which legally binds signatory countries to take certain measures to control

drugs. Cannabis was first placed under international control by the Second Opium Convention of 1925, which banned the export of cannabis resin to countries that prohibited its use and required 'adequate' penalties for unauthorised possession of cannabis extract and tincture.

Currently, three UN conventions (see the box [Overview of the UN drug conventions](#)) describe the basic framework for controlling the production, trade and possession of around 300 psychoactive substances (most of which have a recognised medical use). These conventions have been signed by all EU Member States. The 1961 and 1971 conventions classify narcotic drugs and psychotropic substances in four schedules each, according to their perceived danger to health, risk of abuse and therapeutic value (see [Table 1](#) and [Table 2](#) for summaries of the schedules). This classification directly affects international trade in the listed substances by imposing the need for import and export controls. Substances should only be made available for scientific or medical purposes.

TABLE 1

1961 United Nations Single Convention on Narcotic Drugs: four schedules

Schedule	Harmfulness	Degree of control	Examples of listed drugs
I	Substances with addictive properties, presenting a serious risk of abuse	High: 'the drugs in Schedule I are subject to all measures of control applicable to drugs under this Convention' (art. 2.1)	Cocaine, heroin, methadone, morphine, opium Cannabis and cannabis resin and extracts and tinctures of cannabis
II	Substances normally used for medical purposes and given a lower risk of abuse	Medium: as Schedule I but excluding some prescription and labelling requirements (art. 2.2)	Codeine, dihydrocodeine, propiram
III	Substances unlikely to be abused	Lower: fewer import/export and reporting requirements	Preparations of codeine, dihydrocodeine, propiram, as well as preparations of cocaine (< 0.1 %)
IV	Certain substances already listed in Schedule I that are considered particularly harmful, highly liable to abuse and with little or no therapeutic value	Very high: leading to a complete ban on 'the production, manufacture, export and import of, trade in, possession or use of any such drug except for amounts which may be necessary for medical and scientific research' (art. 2.5.b)	Heroin

Note: This table is for reference purposes only. It is not exhaustive and contains selected examples that do not necessarily appear with the exact wording used in the conventions.

Overview of the UN drug conventions

United Nations Single Convention on Narcotic Drugs, 1961

The United Nations Single Convention on Narcotic Drugs (1961) imported the system of control of narcotic substances and cannabis from previous treaties and elevated it to a global level. Under the system introduced in 1961, cannabis was classified as one of the most harmful existing drugs.

Cannabis, cannabis resin and extracts, and tincture of cannabis are listed in Schedule I of the 1961 Convention among substances whose properties might give rise to dependence and which present a serious risk of abuse. These substances are subject to all control measures envisaged by the convention.

Cannabis and cannabis resin were also listed in Schedule IV of the 1961 Convention, until their removal from Schedule IV in December 2020 following a vote at the Commission on Narcotic Drugs. Schedule IV comprises substances already listed in Schedule I that are considered particularly dangerous by virtue of their harmful characteristics, risks of abuse and extremely limited therapeutic value.

United Nations Convention on Psychotropic Substances, 1971

Psychotropic substances were placed under international control by the 1971 United Nations Convention on Psychotropic Substances. This convention responded to the diversification and broadening of the spectrum of drugs of abuse and introduced controls on a number of synthetic drugs on the basis of their abuse potential on the one hand and their therapeutic value on the other.

The objectives of this convention are to limit the use of these substances to medical and scientific purposes (Articles 5 and 7). As the convention notes, while some psychotropic substances may have therapeutic value they also present a risk of abuse.

The 1971 Convention on Psychotropic Substances also has four schedules, with cannabis-associated substances found in Schedules I (THC) and II (Dronabinol). As illustrated in [Table 1](#) and [Table 2](#), the logic of these schedules is different from that of the 1961 Convention.

United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988

The 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances was introduced in response to the increasing illicit production, demand and trafficking of narcotic drugs and psychotropic substances. Its aim is to provide additional legal mechanisms for enforcing the 1961 Single Convention on Narcotic Drugs and the 1971 Convention on Psychotropic Substances.

The convention includes measures against drug trafficking, including provisions against money laundering and the diversion of precursor chemicals. It provides for international cooperation through, for example, the extradition of drug traffickers, controlled deliveries and the transfer of proceedings.

Find out more

[International drug control conventions.](#)

TABLE 2
1971 Convention on Psychotropic Substances: four schedules

Schedule	Harmfulness	Degree of control	Examples of listed drugs
I	Substances presenting a high risk of abuse, with little or no therapeutic value, posing a particularly serious threat to public health	Very high: Use is prohibited except for scientific or limited medical purposes	LSD, MDMA (ecstasy), mescaline, psilocybine, tetrahydrocannabinol (THC)
II	Substances presenting a risk of abuse, posing a serious threat to public health which are of low or moderate therapeutic value	High: These substances are available for medical purposes	Amphetamines and amphetamine-type stimulants Dronabinol
III	Substances presenting a risk of abuse, posing a serious threat to public health which are of moderate or high therapeutic value	Medium (as II but without the need for reporting statistics to INCB): These substances are available for medical purposes	Barbiturates, including amobarbital, buprenorphine
IV	Substances presenting a risk of abuse, posing a minor threat to public health with a high therapeutic value	Lower: These substances are available for medical purposes, prescriptions not mandatory	Tranquillisers, analgesics, narcotics, including allobarbital, diazepam, lorazepam, phenobarbital, temazepam

Note: This table is for reference purposes only. It is not exhaustive and contains selected examples that do not necessarily appear with the exact wording used in the conventions.

WHO critical review and rescheduling of cannabis

In 2018, a critical review of cannabis and associated substances was conducted by the WHO Expert Committee on Drug Dependence (ECDD). Following this critical review, on 24 January 2019, the Director General of the WHO sent a letter to the Secretary General of the UN recommending, among other measures, that cannabis and associated substances be rescheduled in the international drug control framework. The recommendations by the WHO Director General and the findings of the ECDD are summarised below.

- Cannabis and cannabis resin to be removed from Schedule IV of the 1961 Convention (but kept in Schedule I) as it is not ‘particularly harmful’ (e.g. their use is not associated with a significant risk of death) and there is now evidence that cannabis preparations have therapeutic advantages.
- ‘Extracts and tinctures’ to be removed from Schedule I of the 1961 Convention as it is a complicated and imprecise term, covering preparations that have psychoactive properties as well as those that do not. As ‘preparation’ is a general term covering mixtures, solids or liquids containing a substance, the ECDD concluded that control of preparations of cannabis would result in greater certainty with regard to the control measure.
- Delta-9-THC/dronabinol to be deleted from the 1971 Convention Schedule II and added to Schedule 1 of the 1961 Convention (with cannabis and cannabis resin).

This would be a similar approach to that taken for the scheduling of coca leaf/cocaine in the conventions.

- THC isomers to be deleted from Schedule I of the 1971 Convention and added to Schedule I of the 1961 Convention.
- Cannabidiol (CBD) preparations considered to be pure CBD and not more than 0.2 % delta-9-THC should not be scheduled under international control by adding a footnote to the entry for cannabis and cannabis resin in Schedule I of the 1961 Convention. The ECDD recommended that CBD is explicitly excluded as it does not satisfy the criteria for control under the conventions (e.g. there is no relevant risk to public health). States can still control CBD under their own national legislations if they wish to.
- Pharmaceutical preparations of cannabis and delta-9-tetrahydrocannabinol (Dronabinol) to be added to Schedule III of the 1961 Convention.

After two years of detailed discussions, on 2 December 2020 the members of the Commission on Narcotic Drugs voted to accept the first proposal, to remove cannabis and cannabis resin from Schedule IV of the 1961 Convention, but to reject the other five proposals. Therefore ‘extracts and tinctures’ remain under control of the 1961 Convention.

There is no explicit mention of CBD in the UN conventions, which has resulted internationally in different

interpretations of whether plant-derived CBD should be considered an 'extract of cannabis' or a substance unlikely to be abused and therefore not requiring control. The approach used in Europe is discussed below.

Find out more

WHO Expert Committee on Drug Dependence, *Critical review of cannabis and associated substances*.

What types of cannabis are controlled?

Since 1961, the UN drug control conventions have defined the cannabis plant as 'any plant of the genus *Cannabis*', to cover the species *Cannabis indica* Lam. and *Cannabis sativa* L. and any variety discovered in the future. The treaties prescribe what types of cannabis are controlled. The 1961 Convention defines 'cannabis' as the flowering or fruiting tops of the cannabis plant (excluding the seeds and leaves when not accompanied by the tops) from which the resin has not been extracted. The international treaties also require that the whole plant is controlled under national drug laws, and the 1961 Convention explicitly includes the leaves in such control, to prevent their misuse and trafficking (Article 28.3), but excludes its application to the cultivation of the plant exclusively for industrial purposes (fibre and seeds) and horticultural use (Article 28.2). The 1988 Convention also requested countries to take appropriate measures to prevent illicit cannabis cultivation and to eradicate cannabis plants on their territory (Article 14). However, the 1988 Convention also does not apply to the cultivation of cannabis plants exclusively for industrial purposes (fibre and seeds).

In many countries, permission to cultivate cannabis for industrial purposes has been operationalised through permitting plants which have a defined maximum THC content — typically for example between 0.2 % and 0.5 %. Moreover, national control is not obligatory for cannabis seeds under the UN conventions. However, some countries, including Cyprus and Portugal, have specified seeds as subject to their national drug control laws. In other countries, the supply of cannabis seeds for cultivation might be covered by a more general offence, such as 'facilitating drug production'.

Are countries under any obligation to penalise cannabis users?

The UN conventions specify that unauthorised actions, such as possession, acquisition, distribution or offering for sale, must be punishable offences, and that serious cases should be punished by the deprivation of liberty. Nevertheless, the conventions do not explicitly specify that drug use itself should be a punishable offence, and thus they offer some room for manoeuvre in their interpretation.

The 1961 and 1971 conventions largely set out terms and mechanisms for regulating international trade, so the extent to which they required punishment in the case of possession for personal use only was debatable. The UN Convention of 1988 (United Nations, 1988, Article 3(2)) specifically requested that, 'subject to constitutional principles and basic concepts', countries' legal systems establish 'as a criminal offence [...] the possession, purchase or cultivation of drugs [...] for personal consumption', though it also permitted 'alternatives to conviction or punishment'.

Countries are not required to use the schedules as a basis for the distinctions they make between different drugs in terms of establishing penalties in national law. Countries can therefore apply the same or different penalties in relation to cannabis than they do for other substances.

Furthermore, the 1961 and 1971 conventions allow parties to adopt stricter national control measures than those provided by the conventions if they are considered desirable or necessary for the protection of public health and welfare. For example, while the conventions do not specify that drug use itself should be a punishable offence, each country can classify simply using a drug as a specific offence if it chooses to do so.

Since the conventions were first drafted, however, the emphasis in many countries has shifted away from penalising people who use drugs and this has been reflected to some extent in debates at international level. In November 2018, the UN System Chief Executives Board for Coordination published the 'United Nations system common position supporting the implementation of the international drug control policy through effective inter-agency collaboration' (CEB/2018/2). This common position among the UN system entities reiterated the 'strong commitment of the United Nations system to supporting Member States in developing and implementing truly balanced, comprehensive, integrated, evidence-based, human rights-based, development-oriented and sustainable responses to the world drug

problem'. Among other measures, the agencies agreed, in appropriate cases, to promote alternatives to conviction and punishment, including the decriminalisation of drug possession for personal use.

Find out more

Cannabis control and the right to privacy, EMCDDA
Cannabis drug policy news, 3 January 2019.

Do countries have flexibility in how they interpret the UN conventions?

There is considerable flexibility available to countries in their implementation of the UN drug conventions, and this has resulted in a wide variety of different responses, both internationally and within the European Union. The following three elements are relevant to the discussion concerning the conventions' impact on national legislation and the flexibility that countries have in respect to interpreting these conventions:

- the safeguard clause referring to constitutional principles and basic concepts;
- the different national interpretations of what constitutes 'a criminal offence'; and
- the explicit possibility of providing 'alternatives to conviction or punishment'.

Drawing on these elements of the conventions, there have recently been several legal interpretations, at the national level, of countries' constitutional principles relevant to cannabis control. In 2018, the highest courts of three non-European Union countries found that penalising the use of cannabis in private was in breach of these nations' constitutional principles. Specifically, it was found to be in breach of the right to privacy in South Africa and the right to free development of the personality in Mexico and Georgia. Within the European Union, Spain does not formally penalise cultivation for personal use in places not visible to the public, or personal possession and use in private. In 2021, Malta changed its legislation to specify that personal possession of up to 7 grams of cannabis is not an offence, and other countries are now considering similar — see [Part 4](#).

Part 3

How do EU countries respond to illegal use and supply of cannabis?

While the recreational use of cannabis remains illegal across nearly all EU Member States, the laws and the practice of implementing them differ greatly. This section includes a discussion of the relevant EU laws and legislative texts of Member States that penalise illegal cannabis use and supply. This includes laws passed by parliaments and governments, ministerial decrees, directives to national prosecutors and guidance to national police forces. As described, in some cases national sentencing guidelines and constitutional court decisions also shape the legal framework on cannabis. In many countries, a lack of comprehensive outcome data means that it is not possible to discern how the laws are actually implemented; for example, while incarceration for use or personal possession offences is possible by law in many countries, experts often state that the actual implementation of this sanction is very rare. In some countries informal approaches may exist at national or local level, which influence how the legal framework is actually implemented, meaning that the police may not always proactively attempt to enforce laws that could be applicable to some forms of cannabis use. Such arrangements are difficult to monitor or report on here but may impact on how cannabis users or the public perceive the legal status of the drug or the risk that using the drug may attract a sanction.

Is there a harmonised EU law on illicit cannabis?

There is no harmonised EU law on illicit cannabis use or personal possession; this is the responsibility of EU Member States individually. However, the European Union does have legislative competence to 'establish minimum rules concerning the definition of criminal offences and sanctions in the areas of particularly serious crime with a cross-border dimension', which specifically includes illicit drug trafficking (Article 83, TFEU). In this context, the Council Framework Decision (2004/757/JHA) provides minimum provisions on the constituent elements of criminal acts and penalties in the field of illicit trafficking in drugs and precursors. Thus, there is some harmonisation

with respect to a common approach at the EU level to the fight against illicit drug trafficking.

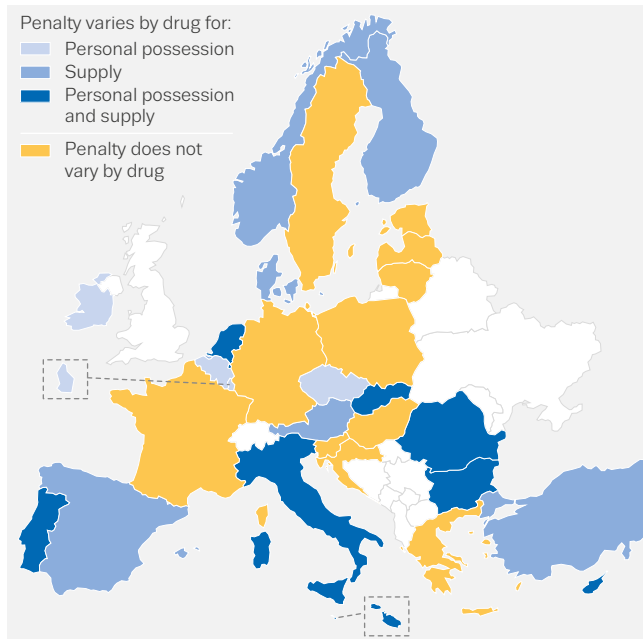
Drug possession for personal consumption is, however, specifically excluded from this Council Framework Decision (Article 2(2)). Member States are obliged to take the measures necessary to ensure that the offences covered by the Framework Decision are punishable by 'effective, proportionate and dissuasive' criminal penalties. Besides this general obligation, minimum and maximum levels of sanctions are provided (Article 4). Aggravating circumstances include offences involving 'those drugs which cause the most harm to health' (Article 4 (2)(b)), but the definition of what drugs are included under this category is left to the interpretation of Member States.

Do EU countries impose the same penalties for cannabis as for other drugs?

In general, European countries can be divided into two groups with regard to the approach they take to imposing penalties for cannabis-related offences according to the wording of the laws (see [Figure 1](#)). In the first group, cannabis is treated differently from other drugs by law, typically because penalty levels are applied according to the amount of harm that the use of a specific drug is considered to cause. In these countries, lists or classes of drugs established in (or directly linked to) laws are used to determine different degrees of severity in defining and prosecuting drug offences. In Europe, cannabis is often included among those drugs that do not incur the most severe legal penalties.

In the second group of countries, penalties under the law are the same for all drugs, including cannabis. However, instructions to police or prosecutors, and judicial discretion in practice, may distinguish between substances on the basis of perceptions of their relative harm, in the context of resource prioritisation or for other reasons. These distinctions may apply to offences related to drug use, supply or both.

FIGURE 1
Penalties in law for drug offences in European countries



Note: An interactive version of the map is available on the EMCDDA website.

Example: Cannabis use offences in Europe

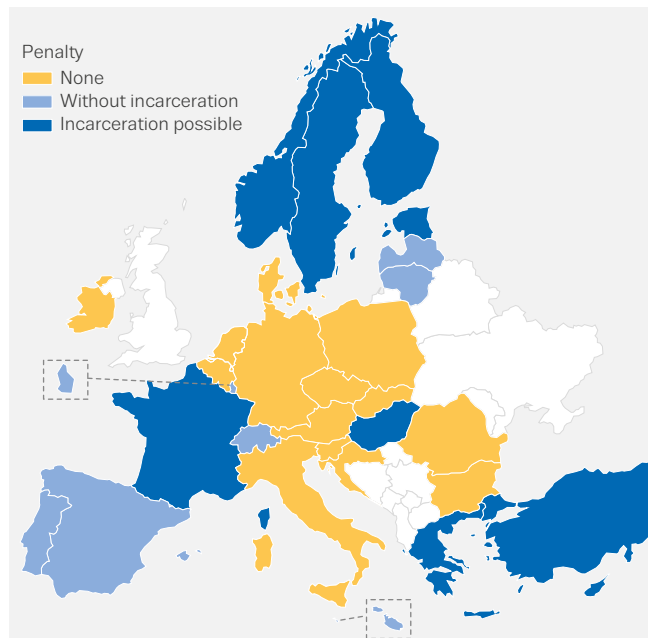
The consumption of cannabis is an offence with a maximum punishment of a prison sentence in Cyprus, France, Finland, Greece, Hungary, Norway, Sweden and Türkiye, although the relevant authorities are often instructed to use non-custodial penalties or powers of dismissal for minor consumption offences. It is an offence with a maximum punishment of a fine or other minor penalty in Latvia, Lithuania and Portugal. It is also punishable in Spain if the use of drugs takes place in a public place. In all these countries, a positive drug test could theoretically lead to police action, but the law is implemented in different ways in different countries. In Estonia and Sweden for example, it is reported that the law is usually used to enforce public order in cases of public intoxication; in Sweden it is also used to give the police power to apprehend people who use drugs and direct them to treatment.

Will a positive drug test for cannabis lead to police action?

A positive drug test might lead to police action if drug use (not merely possession for personal use) is a punishable offence under national law. Such an offence is not required by the UN conventions, which are primarily aimed at limiting drug supply and the import and export of controlled drugs. Nevertheless, several countries specify drug use as a distinct offence, whether as a signal of society’s disapproval of drug use or as a practical measure to give the police certain powers to investigate a crime or apprehend people who use drugs (see the box [Example: Cannabis use offences in Europe](#) and [Figure 2](#)).

In other countries, being subjected to a drug test in a public place, and potentially facing subsequent police action, is only likely if the person is driving a vehicle. This can be considered more as part of a road safety policy than a drug control policy (see the section [Is it illegal to drive with cannabis in the body?](#), for further details). Drug use in more specific circumstances and locations, such as safety-critical situations (e.g. where workers are operating heavy machinery or involved in public transport) or in prisons or military premises, may be addressed by other laws, with the approach used varying considerably by country.

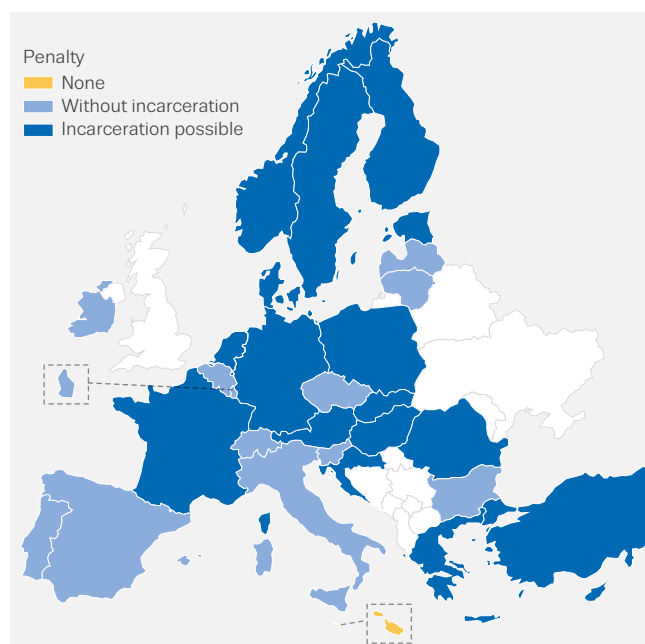
FIGURE 2
Penalties in law for consumption of cannabis in European countries



Note: An interactive version of the map is available on the EMCDDA website.

FIGURE 3

Penalties in laws: the possibility of incarceration for possession of cannabis for personal use (minor first offence)



Note: In Spain possession is penalised when the offence is committed in a public place. In Malta personal possession of up to 7 grams is not an offence. An interactive version of the map is available on the EMCDDA website.

Can you be imprisoned for possession of a small amount of cannabis?

About more than half of the EU countries include imprisonment as a possible penalty for unauthorised possession of cannabis for personal use. Overall, since around 2000, there appears to have been a general trend across Europe towards reducing the likelihood of imprisonment for the possession of cannabis for personal use.

In some European countries, a prison sentence (or other incarceration) for possession of cannabis for personal use is possible according to the law; in other countries it is not (see Figure 3). However, in several of these, the relevant authorities are instructed to use non-custodial penalties or powers of dismissal for minor 'personal use' offences. In some countries, in the absence of aggravating circumstances, the law does not allow incarceration in the case of possession of small quantities of cannabis for personal use only (see the box [Example: Custodial and non-custodial approaches to drug possession for personal use](#)).

Example: Custodial and non-custodial approaches to drug possession for personal use

Eleven EU countries take a non-custodial approach to drug possession offences under certain circumstances (see Figure 3). In eight EU countries a non-custodial approach is applied to the possession of all drugs, while in three this only applies to cannabis. The main non-custodial punishment is usually a fine. Definitions of what constitutes a 'small amount', 'aggravating circumstances', 'minor possession', 'personal use' and so on vary considerably between countries. In some countries, custody in police cells, for a month or more, is considered to be different from imprisonment. While some other countries' laws theoretically allow for imprisonment for minor possession for personal use offences, this is never or rarely applied in practice.

In Belgium, while a prison sentence is theoretically possible for minor cannabis possession, police are instructed to give the lowest prosecution priority to non-problematic infractions and to record the case locally but not centrally. In Austria, where drug possession for personal use can theoretically be punishable by up to 6 months' imprisonment or a fine, police report minor drug possession offences directly to the health authority and not to the judicial authorities, in order to ensure a faster health response and to allow public prosecutors to concentrate on more serious offences. In Estonia, penalties in the law for the use or personal possession of small quantities of any drug include either a fine or the punishment of 'administrative arrest' (detention in police cells) for up to 30 days, while in Croatia, since 2019 the law has stipulated either a fine or imprisonment for up to 90 days for such offences. Apart from these conditions, and for the supply of any amount of drugs, prison sentences are still possible.

In Denmark, the first response to possession for personal use should be a fine. In Germany, following a decision of the Constitutional Court in 1994, prosecutors may close a case that is considered to be minor according to certain criteria. These vary between federal states, but typically relate to possession of less than 6 grams of cannabis. In 2019 an on-the-spot fine of EUR 200 was introduced in France, without the requirement to carry out a full prosecution procedure, to make the process of punishment more efficient. The Dutch Opium Act Directive instructs police in the Netherlands to give the lowest investigation priority to possession of less than 5 grams of cannabis, with seizure on discovery the only action to be taken.

Where is cannabis possession for personal use decriminalised?

As there is no consensus on the criteria to be used to test for whether a country has decriminalised cannabis possession for personal use, there is no simple answer to this question. In common use, 'decriminalisation' denotes a move away from prohibition that is enforced by criminal penalties (see Key definitions). Other terms used to describe reductions in penalties are 'depenalisation' and 'legalisation', but these terms may sometimes be used interchangeably, often leading to inconsistent descriptions of national laws, even by experts within that particular country. In fact, it is perfectly possible for a country to incorporate more than one of these options in their laws or criminal justice system guidelines. For example, a country may opt for the decriminalisation of cannabis-related offences, the depenalisation of cocaine offences and diversion for heroin offences. Although the different terms mentioned above may be applied in respect of a country's laws, the implementation of those laws may also differ in practice because of directives to police or prosecutors or because of informal working practices.

What limits have European countries set for possession for personal use?

The approach to cannabis possession offences may sometimes be determined by the amount of cannabis found. Threshold quantities are often understood as guidelines for quantity limits, with exceptions allowed under certain circumstances. The objective of these threshold quantities varies in several respects across Europe — to delimit personal use, small quantities, minor offences etc. — and there is little consistency between countries in terms of the limits that they have established. For example, criminal prosecution for the possession of cannabis resin starts at 0.25 grams in Lithuania, while in Germany the threshold quantity is 6 grams or higher, depending on the regulations in the respective federal state. Threshold quantities for different drugs also vary widely across countries. For a given offence, the established weight threshold for the possession of cannabis herb may be equal to that of resin (e.g. in Belgium) or up to 20 times more (as is the case in Lithuania). Furthermore, the threshold for possession of cannabis can be between three times (in Cyprus) or ten times (in the Netherlands) that set for the possession of

Key definitions

Decriminalisation refers to the removal of criminal status from a certain behaviour or action. This does not mean that the behaviour is legal, as drugs can be confiscated and non-criminal penalties may still be applied. Such non-criminal penalties are not always 'small'; in Spain, a first drug use offence may result in a (non-criminal) fine of EUR 600. In the drugs debate, 'decriminalisation' is usually used to describe laws related to personal possession or use rather than drug supply. Examples of countries which have decriminalised drug use or personal possession include Luxembourg (only cannabis), Croatia, Portugal and Slovenia.

Depenalisation refers to the policy of closing a criminal case without imposing punishment, for example because the case is considered 'minor' or if prosecution is not in the public interest. Examples include Austria, Germany and Poland.

Diversion refers to any mechanism that moves an offender away from the path of punishment by the criminal justice system and towards a health-oriented response such as counselling, treatment or social reintegration. The system in Portugal, whereby people

found using drugs or in possession of a small quantity of drugs for personal use are diverted away from the criminal justice system, provides an example of this approach.

Legalisation refers to making an act (that was previously prohibited) lawful. In the context of the drugs debate, this usually refers to removing all criminal and non-criminal sanctions. A regime of **regulation** may limit the extent of permissions involved, as is the case for regulations related to alcohol and tobacco purchase and use (e.g. age rules). Penalties for breaching these regulations may be criminal or non-criminal. The term 'legalisation' is often used in the context of removing criminal sanctions for some forms of drug supply. Examples of this kind of approach include the responses seen in Uruguay, Canada and 20 US states, at the time of writing. In addition, this could include the system established to permit home-grown and private use of cannabis in Malta and in the Australian Capital Territory.

See the EMCDDA video '[What is decriminalisation of drugs?](#)

heroin. Estonia, Lithuania, the Netherlands and Slovakia set maximum limits for personal possession, above which the offender is likely to be charged with a supply offence. Belgium and Czechia may respond to the possession of a small amount with a non-criminal penalty, while Austria, Germany and Poland may suspend or close a 'minor' case.

How and why have countries changed their laws (or punishments) for possession of cannabis?

Since the EMCDDA began monitoring drug laws in the late 1990s, the general trend among countries has been to reduce their legal penalties for cannabis-use-related offences, as summarised in Table 3. However, this refers to the legislation and police or prosecutor directives only. In the absence of comparable national data on criminal justice system outcomes, it is not possible to comment on how these penalties are operationalised and impact on practice.

Changes to laws on cannabis possession, or the penalties attached to them, have been made for various reasons. These include, for example, ensuring that punishments are consistent; matching the severity of the punishment to the health risks posed by different drugs; and prioritising treatment over punishment. In some countries, changes in cannabis laws were incidental to legislative changes targeting other drugs or broader criminal justice system issues. This was the case, for example, with the decriminalisation of all illicit drugs in Portugal in 2000 (a move that appears to have been primarily motivated by the need to respond to the country's heroin problem); a 2005 change in Slovenia, which removed prison penalties for all types of minor offences (including drugs possession); a 2013 amendment to the legislation in Croatia, which was motivated by considerations of proportionality in punishments; and a 2015 legal change in Malta, which was

intended to facilitate the rehabilitation of people suffering from drug dependence.

Does changing the penalty in the law have an impact on levels of cannabis use?

It is not easy to show whether or not changing the severity of the punishments set out in the drug laws of countries such as Croatia, Malta, Portugal and Slovenia has affected levels of cannabis use. This is in large part because factors other than the legal status of the drug may have a bearing on trends in consumption, and because legal changes may not necessarily have a direct impact on police practices or the perceptions of individuals concerning the risk of incurring a legal or other form of sanction because of their cannabis use. It should also be remembered that the primary objectives of these changes were usually to address other issues, and therefore reducing consumption was not always an explicit policy objective. Furthermore, impact evaluations are rarely carried out, meaning that it is difficult to judge if these changes have had any direct or indirect impact on levels of cannabis consumption. How the laws are actually put into practice may create a further complication.

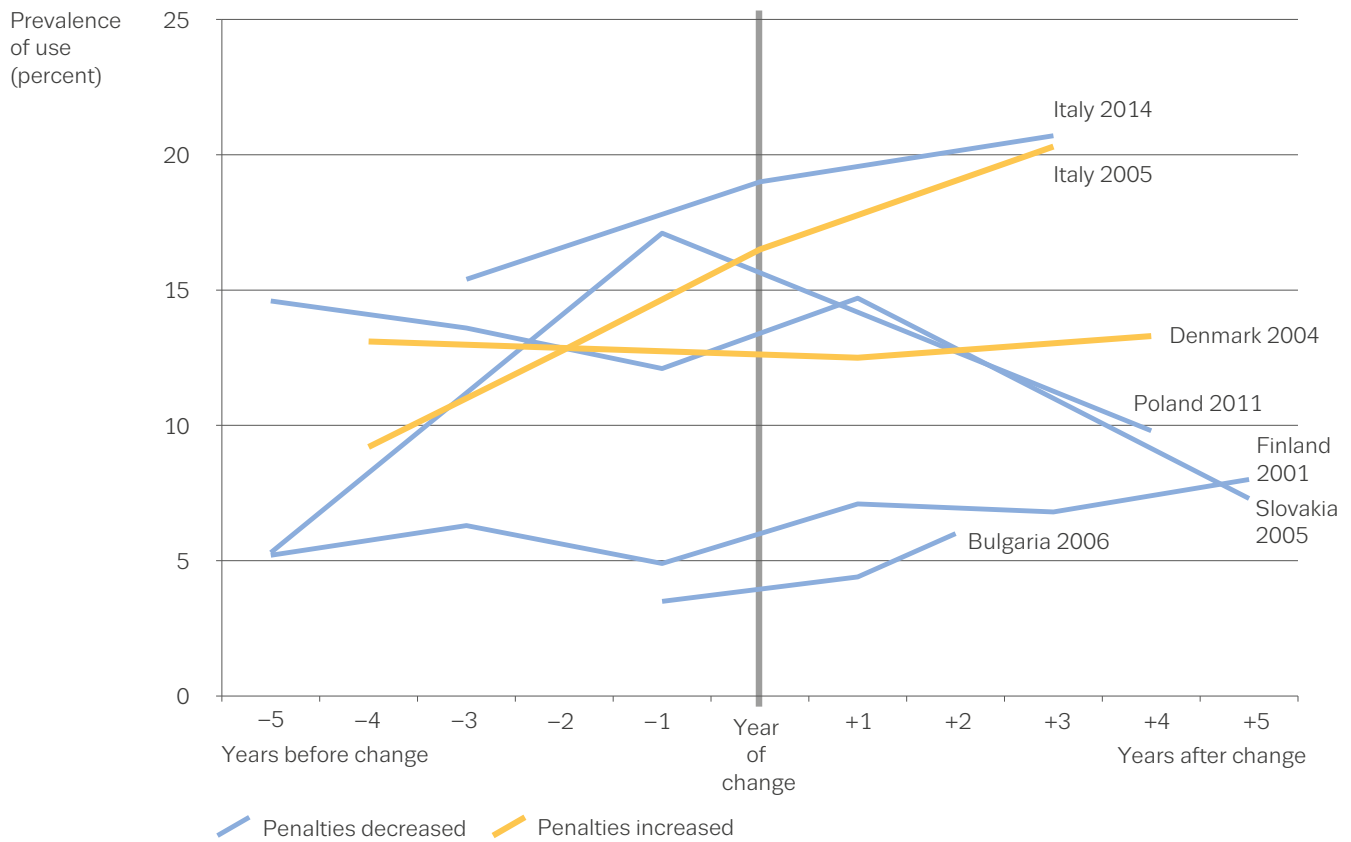
One frequently expressed concern is that reducing the penalties for cannabis use will send a message that consumption of the drug is more acceptable, leading to an increase in prevalence of use. Conversely, when cannabis use increases, concerns are expressed that the penalties are too low and should be raised in order to discourage consumption. To examine the evidence behind these assumptions, the EMCDDA published a simple comparison of estimated prevalence rates for the use of cannabis in the years before and after legal changes in countries where the law had changed (EMCDDA, 2011). As cannabis

TABLE 3
Types of change in the law for cannabis use-related offences

Form of change	Country, year of change
Reducing the maximum prison sentence	Finland (2001), Greece (2006, 2013), Czechia (2010)
Removing the prison sentences for minor offences (may include changing the status of the offence from criminal to non-criminal)	Portugal (2001), Luxembourg (2001), Belgium (2003), Slovenia (2005), Croatia (2013), Switzerland (2013), Malta (2015)
Decreasing the non-prison penalty	Italy (2014)
Increasing the non-prison penalty	Denmark (2004), Italy (2006)
Increasing the prison penalty	Hungary (2013)
Facilitating closure of a minor case	Austria (2008, 2015), Poland (2011)

FIGURE 4

Cannabis use before and after changes in legislation in selected countries: use in the previous 12 months among young adults (age 15–34)



Source: Hughes et al., 2018.

use is concentrated among younger age groups, the analysis was performed using EMCDDA prevalence estimates for 15- to 34-year-olds, who were asked if they had used cannabis in the last year.

The legal impact hypothesis, in its simplest form, predicts that increased penalties will decrease drug use and reduced penalties will increase drug use. However, in the original analysis and an updated version (Figure 4), mapping data relevant to the policy changes in Table 3, no simple association could be found between legal changes and the prevalence of cannabis use.

This is a very simple analysis, and there are a number of caveats to be considered in relation to it, including whether the (sometimes minor) legal changes were understood by cannabis users, or if they impacted upon their perception, or the reality, of the risks of receiving a penalty. It is also likely that factors other than the nature of the changes to the legal frameworks may be driving changes in drug consumption trends. Surveys are also likely to provide imperfect and not always very timely assessments of

levels of drug prevalence. Furthermore, it is possible that legal changes may impact more on future initiation levels (incidence) rather than on the behaviour of current users (prevalence). Nonetheless, despite these limitations, this analysis does illustrate that it is difficult to observe any consistent or direct relationship between legal changes and consumption levels as measured by surveys, and this is important as at times these data appear to have been selectively used to support arguments regarding the impact of legal changes on consumption patterns.

What alternative approaches do countries take to respond to cannabis use?

Some countries employ policies of diversion for people who use drugs, referring them to rehabilitative measures, known as alternatives to punishment or alternatives to coercive sanctions (ACS). ACS is an umbrella term referring to measures that may be implemented at the national or local level and are primarily intended to be used instead of 'punitive' criminal justice system measures, such as incarceration, a fine or other forms of punishment.

Examples of ACS for cannabis users include arrest referral schemes, commissions for the dissuasion of drug use (in Portugal), diversionary measures, drug awareness courses, probation with a treatment element, and sentencing to rehabilitative programmes (see the box [Example: alternatives to coercive sanctions in Europe](#)). In line with recent EU drug strategies and action plans, some countries are increasing their use of ACS, and they may be the primary response to drug users (see [Figure 5](#) and [Figure 6](#)). While evaluations of the different models of interventions are currently limited, it is recognised that diverting drug-using offenders towards rehabilitative measures and away from incarceration can have a number of positive effects.

ACS vary in their design and implementation, and recent European studies have found that implementation issues might be considered at the levels of the system (e.g. the legal context), the provider (e.g. available resources) and the client (e.g. motivation). The EMCDDA is working on tools to facilitate stakeholder cooperation in this field (see [Find out more, page 29](#)).

Information on criminal justice referrals to specialised drug treatment services is reported annually through the EMCDDA treatment demand indicator (TDI) data. While these data are imperfect and there are methodological challenges related to this dataset ⁽²⁾, it was documented in 2020 that an estimated 12 000 cannabis users were referred for the first time to specialised drug treatment by the criminal justice system in Europe, which represented 31 % of referrals among new cannabis clients. This proportion varies by country, ranging from less than 10 % in Slovenia, Czechia, Denmark, Turkey, Poland, Finland and Greece to more than 60 % in Romania and Hungary.

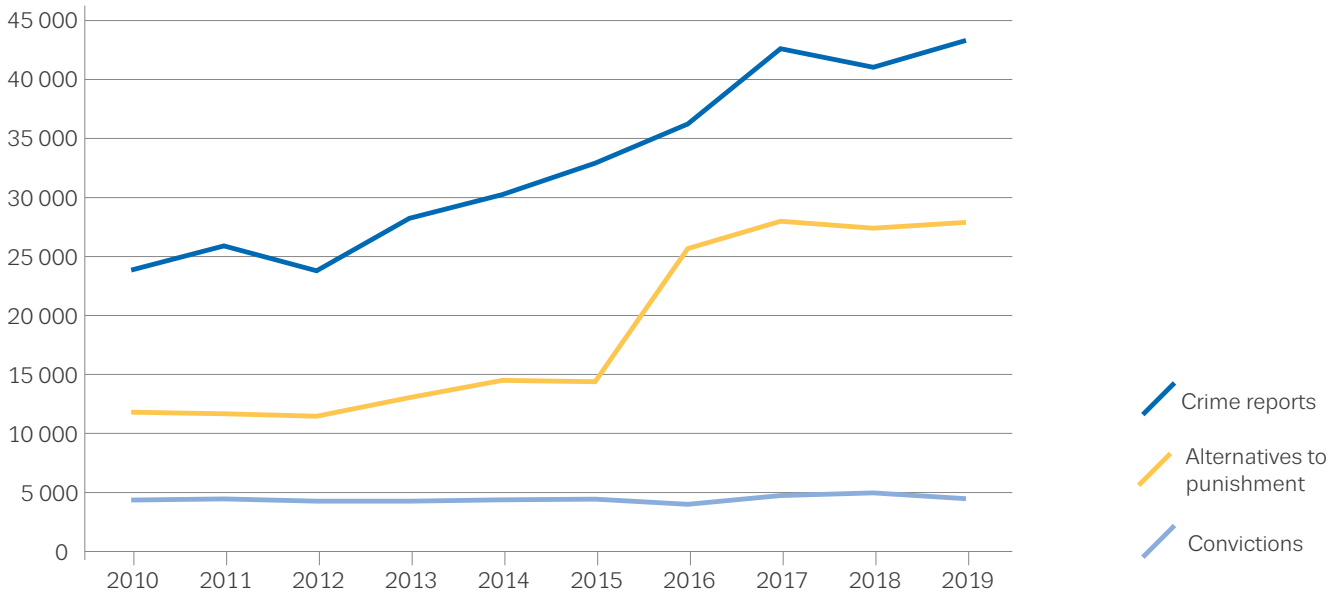
⁽²⁾ Methodological challenges include differences in national monitoring systems, coverage and definitions, and disruptions to services due to COVID-19, which will influence the interpretation and comparability of the results. The identification of cannabis use disorder as well as access to specialised treatment and reporting on it are also impacted by the use of different screening tools in EU Member States at the service provider level.

Example: alternatives to coercive sanctions in Europe

Upon detection by law enforcement, people who use drugs in Italy are first interviewed by the Prefecture and may then be sent to a local public drug addiction services unit to complete a rehabilitation programme. In Luxembourg, the prosecutor may suspend proceedings and in Latvia the court may suspend a punitive sentence on condition that the offender attends some form of treatment or counselling course. In Croatia, the court may sentence an offender to undergo rehabilitative measures. In Malta, the Drug Dependence (Treatment not Imprisonment) Act 2015 introduced a new system in which a second drug offence would lead to an assessment by a three-person panel that could make a treatment order. In France, the option of a 'drugs awareness course' was established in 2007, for which an offender would have to pay the cost of up to EUR 450. However, an evaluation in 2012 found that the course was not often taken up. In recent years in Portugal, around three quarters of the rulings of the commissions for the dissuasion of drug addiction were suspended; over 80 % of these suspensions of rulings were for users who were not considered to be addicted. In 2019, 83 % of the rulings of the Portuguese dissuasion commissions applied to possession offences that only involved cannabis.

FIGURE 5

Comparison of reported drug offences, convictions and application of statutory alternatives to punishment in Austria, 2009–2019

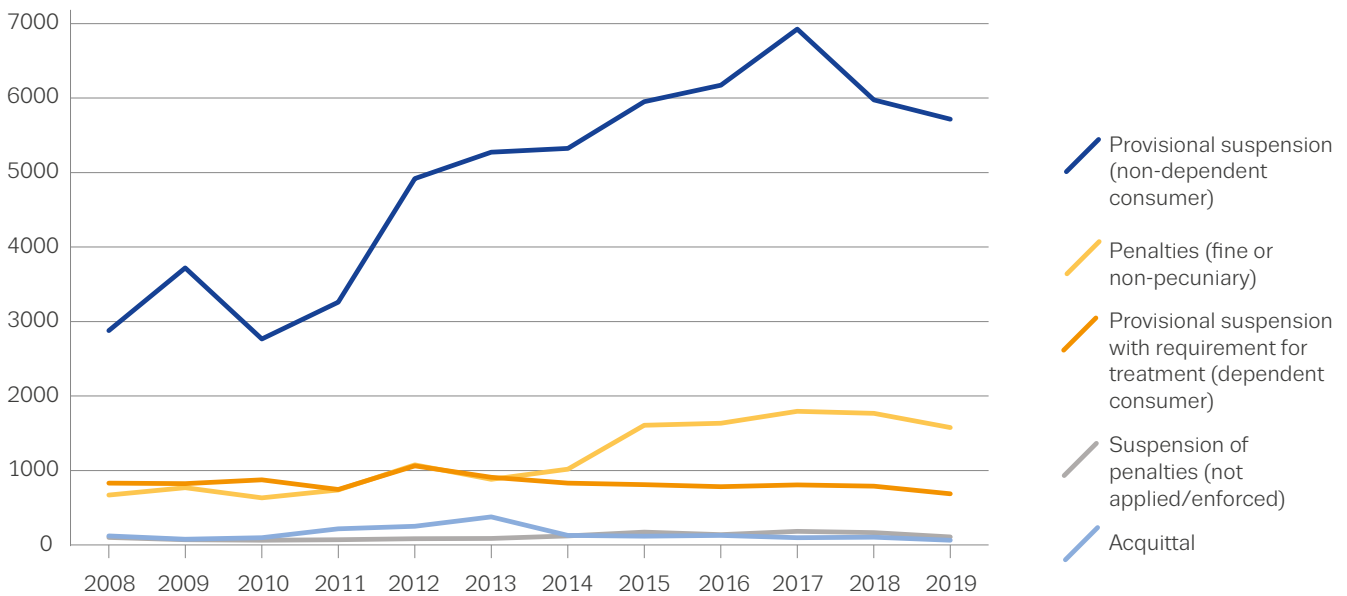


The figures concerning convictions refer to the leading offence, that is, the offence that is most severe with regard to the range of punishment. For instance, if a person who has committed several offences is convicted, for example, for robbery, an additional conviction under the SMG is not included in the statistics. As of 2012, data on the legal basis of conviction have no longer been compiled by Statistics Austria but by the courts. As of 2014, the data on the application of statutory alternatives to punishment have been provided by the Federal Ministry of Justice, which has resulted in a break in the time series.

Sources: BMI/BK, Statistics Austria, BMSGPK, BMJ; calculation and graphic representation: GÖG.

FIGURE 6

Drug law offences related to possession or use: type of ruling for administrative offences, by year, 2009–2019



Source: SICAD (General Directorate for Intervention on Addictive Behaviours and Dependencies).

How do countries respond to the cultivation of cannabis for personal use?

A few countries define the exact quantity of cannabis plants grown for personal use that will lead to prosecution or punishment, while others take a more general approach. Also, the punishments for cultivation for personal use are not always comparable to those for *possession* for personal use.

In some countries, the lower priority given to prosecuting owners of one cannabis plant has been interpreted by some plant growers as permitting collective growing, known as cannabis social clubs (see [page 32](#)). Usually these clubs are not legally recognised by any national governments in the European Union and thus their activities remain illegal, but they appear to be informally tolerated in some locations and are now a possibility in Malta.

Example: Penalties and limits to cultivation for personal use

In Spain, cultivation for personal use in places visible to the public is considered an administrative offence, punishable by a fine. In Belgium, cultivation of not more than one plant should be a minor offence resulting in a fine. In the Netherlands, cultivation of not more than five plants would normally not be formally prosecuted. In Cyprus, cultivation of three or more plants is presumed to be a supply offence. In Denmark, prosecution guidelines consider 100 grams of cannabis plants as the limit for possession for personal use.

By contrast, in Portugal and Croatia, where drug use and personal possession offences have been decriminalised, cultivation of any amount, even for personal use, remains a criminal offence. In Finland, any cultivation is considered as a narcotics offence, which is more serious than an offence of unlawful narcotics use. In Malta, cultivation of more than one plant was previously punishable by an obligatory prison sentence, but since 2020 imprisonment is no longer obligatory if cultivation is deemed to be for personal use, and since December 2021 discreet cultivation of up to four plants is permitted.

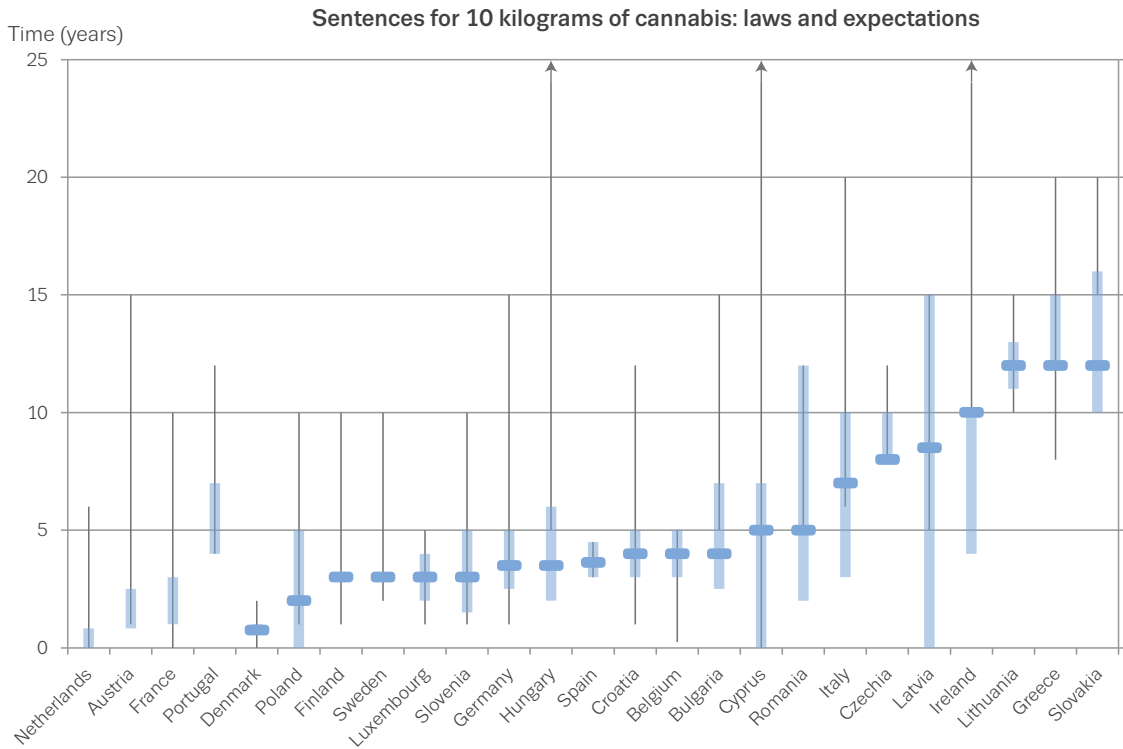
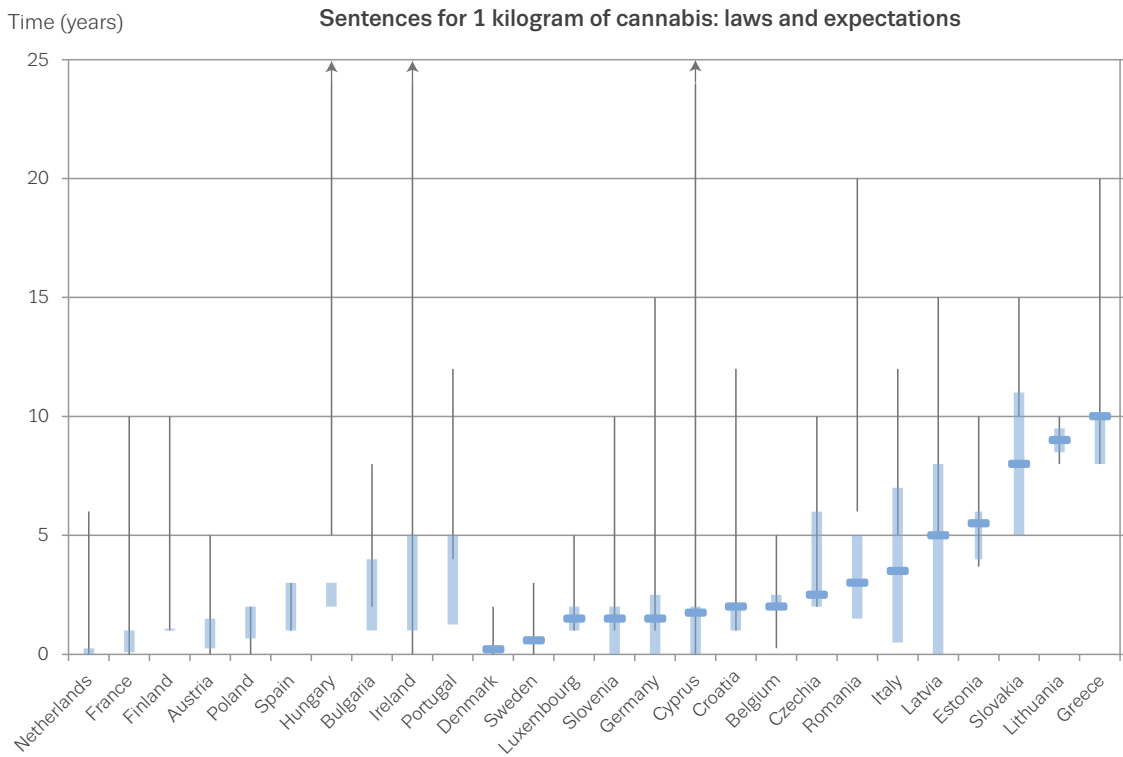
What are the possible penalties for cannabis sale or trafficking?

The maximum penalties for cannabis supply offences vary considerably between European countries, in ways that can be difficult to describe simply. For example, the maximum penalties for minor cannabis supply offences range from 2 to 3 years in Denmark, Estonia, Finland, Norway, Spain and Sweden to life imprisonment in Cyprus, Ireland and Malta. However, the first group of countries have established a scale of offences with graduated punishments, within which an offence of aggravated supply may attract maximum sentences of 10 to 20 years in prison, while the second group of countries have one maximum sentence for any supply offence, but allow judicial discretion to play a wider role. Yet in both groups the sentence received for similar offences may be nuanced by factors such as the court in which the offender is tried, involvement in organised crime and profit motives, among other considerations.

An EMCDDA (2017b) study of expert opinion found the expected penalties for the supply of 1 kilogram and 10 kilograms of cannabis resin, by a defined profile of offender, varied greatly between EU Member States ([Figure 7](#)). However, the maximum penalties provided by law were not necessarily reliable indicators of the expected length of typical sentences, as reported by experts who were familiar with the judicial practice of a given country. The penalty ranges established in the law may also not be directly correlated with the penalties expected for a first offender in practice.

This study also supports a general observation found in other studies and across offences that the criminal policies of the Member States, with regard to their penalties, often differ considerably. These variations may be based on different sentencing frameworks and also rooted in the history and culture of individual criminal law systems. Furthermore, political and contextual factors may be influential here and include, for example, the prevalence of different drugs and their associated harms, as well as divergent beliefs in the proportionality of sentences appropriate for particular offences or the effectiveness of sentencing as a general deterrent.

FIGURE 7
Sentences for supply of a given quantity of cannabis resin in EU Member States



Sentence range in law | Expected sentence range | Expected median sentence

Where the sentence range in law starts at 0, this excludes any general minimum duration of prison sentence in a country. Expected median sentences were only calculated when immediate imprisonment was expected in 80% or more of responses.
Source: EMCDDA, 2017a.

Example: 'Drug use in group' as a supply offence

Belgium ceased to regard 'drug use in a group' as a criminal offence in 2003. Malta, acknowledging that a minimum penalty of 6 months for supply was disproportionate in such cases, changed the law in 2006 to permit the exclusion of that punishment for a first offence if 'the offender intended to consume the drug on the spot with others'. In Hungary, a clause introduced into the drug control sections of the penal code in 2003 allowed drug suppliers to qualify for diversion to treatment as an alternative to punishment if the offence 'involves a small quantity offered or supplied to be consumed jointly'. The following year, however, the Constitutional Court struck down the clause, on the grounds that the word 'jointly' was too vague to form the basis of a criminal offence.

At the other end of the scale from a consideration of maximum sentences for the most serious offences is the concept of minor supply or reduced penalties for supply offences that are seen as less serious. Although some laws consider the profit motive (or lack thereof) of the offender, there have also been attempts to take account of group use, where the practice of sharing a cannabis cigarette, for example, could be viewed under some circumstances to amount to an offence of drug supply, which may require a proportional response.

Find out more

[Penalties at a glance](#), EMCDDA Topics overview, 18 November 2022.

[Drug trafficking penalties across the European Union: a survey of expert opinion](#), EMCDDA, 2017.

[Drug law offence statistics](#), EMCDDA Statistical bulletin, 2022.

[Treatment demand](#), EMCDDA Statistical Bulletin, 2022.

[Study on alternatives to coercive sanctions as response to drug law offences and drug-related crimes](#), European Commission, 2016.

Is it illegal to drive with cannabis in the body?

One review of the available evidence found that driving after recent use of cannabis and cannabis intoxication were associated with a 35 % increase in the risk of having a car accident. The review also found that the presence of a high level of THC in the blood may double the risk of such an accident (Rogeberg and Elvik, 2016). In all countries in Europe, it is illegal to drive when skills are impaired due to cannabis consumption. However, the laws vary both in their phrasing and in their interpretation.

The two definitions of 'drug driving' — 'under the influence' and 'after consumption' — suggest different policy emphases: one on traffic safety and the other, more generally, on illicit drug control (see [Driving under the influence: definition](#)). Yet, this distinction is not always clear. In practice, some experts report that 'under the influence' may be interpreted by prosecutors as including any trace of drugs in a biological sample — thus effectively creating a system of prosecuting anyone who is detected driving 'after consumption'.

Over the last 10 years, advances in roadside screening technology have resulted in roadside oral fluid screening devices now being used in 15 countries ⁽³⁾ and many EU countries also report a two-stage screening with both THC saliva tests and behavioural tests being used together.

Driving under the influence: definition

In some countries, it is illegal to drive 'under the influence', that is, while driving skills are adversely affected by the driver's drug consumption. In these countries, if the driver is able to pass cognitive or psychomotor tests, such as walking in a straight line, no driving offence has been committed, even if biological samples taken from the driver test positive for the presence of cannabis metabolites. In other countries, it is illegal to drive 'after the consumption' of drugs, with no reference to effects on driving skills. In these countries, a positive urine test for cannabis metabolites, which could reflect cannabis consumption several days earlier, may lead to a drug-driving conviction, without there being any visible effect on driving skills at the time of the test (see Find out more, [page 30](#)).

⁽³⁾ Croatia, Cyprus, Czechia, Denmark, Finland, France, Italy, Ireland, Luxembourg, Norway, Poland, Portugal, Romania, Slovenia, Spain.

Most will go on to collect a confirmatory blood test as evidence to convict, though convictions are possible after two saliva screens in Cyprus and Spain. These technological advances have facilitated the introduction of laws in some countries that penalise drivers found with the presence of more than a defined amount of THC in their blood. The specified level may vary, from a low level that confirms the presence of the drug (as is the case in Denmark and Spain), to a level that is considered equivalent to the drink-driving limit in terms of its association with impairment (Norway).

As policymakers try to avoid condoning drivers with small amounts of illicit substances in their bodies, the binary classification of drug driving as either legal or illegal is being replaced in several countries by graduated punishments, with a lower punishment for any detection of THC and a higher one for being clearly impaired (such as in Belgium, Finland, Germany and Spain). There is also the possible combination of road safety and drug laws; when cannabis metabolites are detected in a driver at levels unlikely to impair driving, the driver can be charged with a drug use offence rather than a road traffic offence (as reported in Estonia, Finland and Norway).

With the increase in popularity of 'low-THC food products', countries may be faced with new challenges in terms of their policies to deter drug-impaired driving. In addition, the increase in authorisations and prescriptions of cannabis products for medical purposes has also raised the potential for drivers to test positive for cannabis use. At present, the overall number of people prescribed cannabis for therapeutic reasons remains relatively low, but if this number increases the issue may grow in importance in the future. It should be noted that many prescribed medicines have adverse effects on driving ability, and this will often be indicated on a warning label on the product.

The new legal recreational cannabis markets are driving more detailed studies of the distinctions between modes of consumption (smoking, digesting, vaping) and their varying effects on the body (Ramaekers et al., 2021). From such studies, there are emerging signs that any maximum tolerated blood-THC content, often 5 nanograms per millilitre, may need reviewing.

Find out more

[Legal approaches to drugs and driving](#), EMCDDA Topics overview.

[Cannabis and driving: questions and answers for policymaking](#), EMCDDA and Canadian Centre on Substance Use and Addiction, 2018.

[Cannabis and driving](#), International Council on Alcohol, Drugs and Traffic Safety, 2023.

Part 4

Is there a trend towards cannabis regulation in Europe — and if so, why?

Over the last 20 years the general trend in national laws in Europe has been to reduce, or even remove, prison penalties for minor cannabis possession offences, although in a minority of countries the penalties for these offences have increased. In some countries there have been experiments with tolerating a restricted supply of cannabis for recreational use by adults, sometimes at city level. In these cases, the most common questions raised have been why the local authorities might choose to tolerate such use and distribution, and what happens as a result?

A Eurobarometer survey published in February 2022 (European Commission, 2022), canvassed the opinions of over 25 000 people aged 15+ in 27 Member States and found that in 22 EU Member States a majority support the regulation of cannabis, with the figure rising to 70 % in Czechia, 71 % in Poland, 71 % in Slovenia and 72 % in Croatia. In four EU Member States, half or more of respondents think that the sale of cannabis should continue to be banned. In response to a subsequent question, an overwhelming majority of respondents (93 %) expressed the belief that cannabis should be available for medical use.

In this context, this section explores the various current proposals for cannabis regulation in Europe for recreational purposes and speculates on the possible motivations behind introducing them, while providing a brief overview of evidence from jurisdictions where the recreational use of cannabis has been legalised for some years already.

These proposals remain controversial at the international level, with the International Narcotics Control Board reminding governments in 2021 that the legalisation of the use of controlled substances for non-medical or non-scientific purposes is inconsistent with the obligations States parties have to the international drug control conventions (INCB, 2022).

Is it true that selling cannabis for recreational use is already legal in some places in Europe?

Before the change of law in Malta in December 2021 (see [page 33](#)), the two most well-known models for 'legal' cannabis supply in Europe were cannabis coffeeshops in the Netherlands and the cannabis 'social clubs' that existed in some other countries in Europe; but arguably neither of these approaches meant that supply of the drug was considered 'legal'.

Cannabis coffeeshops in the Netherlands

In the Netherlands, according to the law, the cultivation, supply and personal possession of cannabis are all criminal offences punishable with prison sentences. However, a practice of tolerance, first set out in local guidelines in 1979, has evolved into the present-day concept of 'coffeeshops'. These cannabis sales outlets are licensed by individual municipalities. About three quarters of Dutch municipalities do not allow coffeeshops and their number across the country has decreased from 846 in 1999 to 567 in 2018 (Mennes et al., 2019). The sale of small quantities of cannabis to adults (aged over 18) in these coffeeshops is tolerated in an attempt to keep young adults who wish to experiment with cannabis away from what are regarded as more dangerous drugs (a policy referred to as 'separation of the markets').

A coffeeshop may be closed down and the operator or owner prosecuted if he or she does not meet the Prosecutor General's criteria, which prohibit advertising, nuisance, sale to minors and the sale of hard drugs or alcohol, as well as prohibiting the sale of sizeable quantities or the holding of large amounts of stock. From January 2013, coffeeshops could only legally be used by residents of the Netherlands on production of an identity card or residence permit. However, the implementation and enforcement of this rule appears to vary by municipality.

No more than 5 grams of cannabis may be sold to any person in any one transaction and coffeeshops are not allowed to keep more than 500 grams in stock. As the wholesale cultivation and distribution of cannabis is not tolerated in the Netherlands, this results in what is known as 'the back-door problem'; that is, cannabis may be 'legally' sold at the front door of the coffeeshop but it cannot be legally supplied through the back door. Alongside the coffeeshop system, police have the discretionary power to confiscate small amounts of cannabis or plants cultivated for personal use, but the owner will not be formally prosecuted if he or she hands over such items voluntarily.

An evaluation of this policy in 2009 found that the coffeeshops were the main source of cannabis for users, with the markets for soft and hard drugs remaining separate as the policy had originally intended, and that adult cannabis use was relatively low compared with other European countries (WODC, 2009). However, underage use of cannabis remained high (although it is unclear if this is linked to the existence of coffeeshops, greater acceptance of use, or other factors), while the sector had become increasingly commercialised and in some areas was creating a serious nuisance from drug tourism. There also appeared to be concerns about the involvement of organised crime groups, while the 'back-door' problem meant that money from coffeeshop sales was being funnelled into the illicit economy. Concerns about these issues were partly responsible for the residence criterion introduced in 2013, and in turn have been one reason for the new state-run experiment of regulating the supply of cannabis to coffeeshops in the Netherlands, discussed later in this chapter.

| Cannabis social clubs

Cannabis social clubs operate on the assumption that if one person will not be prosecuted for cultivating a single cannabis plant in private for their personal use, then (for example) 20 people should not be prosecuted for cultivating 20 plants together, in private, exclusively for their own use. Clearly, this concept is not without problems. Establishing what constitutes 'shared' cultivation, for example, is problematic, and it is unclear how these activities can be legally distinguished from other drug supply offences. Across the European Union, drug supply offences themselves have varying legal definitions. However, they usually require the passing of drugs between persons and quantity criteria also sometimes apply.

In response, cannabis social clubs have tried to establish operating rules in order to avoid charges related to drug trafficking or supply or encouraging drug use. For example, the advocacy group ENCOD has proposed that clubs should operate under a collective agreement, with a register of members, costs calculated to reflect expected individual consumption, and the amount produced per person limited and intended for immediate consumption (ENCOD, 2011). Guidelines from this advocacy group also suggest that cannabis social clubs should be closed to the public and new members should be existing cannabis users who are admitted by invitation only. This model, although promoted by activists in Belgium, France, Germany, Slovenia and Spain, is not officially tolerated by the national authorities in those countries. This means that clubs cultivating cannabis are likely to be subject to legal sanctions should they be identified, or, if some degree of informal tolerance exists, they are operating in a legal grey area at best. In December 2021, Malta passed a law providing the basis for legally establishing such a model, and it has been proposed by the German government in April 2023 (see [What forms of cannabis regulation are proposed in Europe, and why?](#)).

Cannabis social clubs do not appear to be widespread in Europe, although only limited information is available about their actual numbers. In a 2018 research project, which described the phenomenon as 'volatile', social clubs were found in 13 countries in Europe. The study discovered that these clubs were very heterogeneous, with variations in membership size, activities (cultivation, activism or both) and members' motivations for joining (e.g. growing cannabis for recreational or medical purposes) (Pardal et al., 2022). In some regions of Spain, some clubs have tried to take advantage of the fact that although the production, supply and personal possession of cannabis in public are prohibited under Spanish law, possession in private spaces is not penalised. However, in 2015 three judgements of the Spanish Supreme Court concluded that organised, institutionalised and persistent cultivation and distribution of cannabis within an association open to new members is considered to be drug trafficking.

| What forms of cannabis regulation are proposed in Europe, and why?

Over the last decade, some national parliaments in the European Union started to see detailed proposals for the regulation (legalisation with several restrictions) of cannabis for recreational use. These tended to be from political parties not in government. The models proposed

were heterogeneous, with approaches including permitting home cultivation, allowing membership of non-profit social clubs, or planning for retail sales outlets, with associated taxation. Such proposals were rejected, and up to 2017 no national government in the European Union had expressed any support for the idea of regulating cannabis for recreational purposes.

Since then, however, there have been significant policy developments by national governments in five EU Member States, as well as in Switzerland, and it is interesting to explore the possible motivations for why such changes are being considered in some countries.

In Malta, the 2017 election manifesto of the incoming Labour Party promised a national debate on cannabis, including recreational use. A government White Paper was published in March 2021 which put forward eight proposals 'guided by the principles of justice, proportionality and the individual's freedom to make responsible choices', and resulted in a [law passed in December 2021](#). The law establishes that there will be no legal proceedings or punishment for possession of up to 7 grams of cannabis for personal use or the personal cultivation of up to four plants in a safe and discreet place, and allows non-profit cannabis clubs which could sell up to 7 grams of cannabis per day to a maximum of 500 members, cultivated from approved seeds. It also allows for the expungement of criminal records related to cannabis, an administrative fine in cases of public consumption, and an appropriate educational campaign. These measures will be overseen by the new Authority for the Responsible Use of Cannabis. The minister responsible for the reform stated that its aims were to stop 'humiliating' people caught with small quantities of cannabis, to increase the opportunities for harm reduction, and to reduce illicit drug market activities.

In October 2017, a new Dutch coalition government agreed to a cannabis policy experiment with a 'closed coffeeshop circuit' in 6–10 municipalities, known as the '[controlled supply chain experiment](#)'. In its introduction to the initiative, the government noted that 'Public opinion is increasingly urging the government to address the problems caused by the toleration policy. Mayors, in particular, say that the policy has caused problems in their municipalities, for example in relation to public order, public health and crime that undermines society.' In 2018 a new scientific advisory committee delivered a report on how to proceed. The Dutch parliament agreed that the experiment would take place in four phases, namely: preparation (launching the Experiment Act and legal

basis), transitional, experiment (production and sale of cannabis in participating municipalities), and completion (a six-month period to revert to the situation before the experiment began). A requirement was that all coffeeshops in a municipality should participate, and this appears to have resulted in larger cities not applying to participate. Ten small to medium-sized municipalities were selected ⁽⁴⁾, covering 79 coffeeshops; in 2021, a revised Coalition Agreement stated that one large municipality should also be included. Results from the participating sites will be compared with 9–10 matched municipalities not participating in the programme. Eight Dutch-based growers have been selected who will need to be able to supply the coffeeshops with sufficient quantities and varieties of cannabis. The maximum stock level that the stores can hold will be adjusted to the average expected weekly sales of the coffeeshop, rather than the previous 500-gram limit. The Experiment Act entered into force in July 2020 and the experiment phase should last for four years. In February 2023 the public health and justice ministries announced that a preliminary phase of the experiment should start in Tilburg and Breda by the end of 2023. A scientific evaluation will accompany the experiment overall (Government of the Netherlands, no date).

In Luxembourg, the coalition agreement of 2018 stated that legislation on recreational cannabis would be developed, with the objective of regulating the purchase, consumption and possession of state-produced and controlled cannabis by adult residents. The stated aim of this new model is to remove consumers from the illicit market and its associated dangers, and to fight drug-supply-related crime. In October 2021, five government ministers announced that the plan for selling to residents would be delayed, but they would move forward with a proposal to permit the cultivation of up to four plants per household from seeds, as well as significantly reducing the penalties for consumption or possession in public. In June 2022, the minister of justice presented these draft amendments to the [law](#), including the four-plant cultivation limit per household and non-criminal fines of EUR 145 for minor possession in public. In April 2023, the government published a report from the working group on a [pilot project for legal access to cannabis for non-medical purposes](#). The two-step pilot model would permit home growing and foresee non-criminal fines of EUR 145 for possession in public of up to 3 grams, and later a system of 14 'dispensaries' permitting sales of up to 30 grams per month per customer, at a price set by the state, tracked by a common computer system.

(⁴) Arnhem, Almere, Breda, Groningen, Heerlen, Hellevoetsluis, Maastricht, Nijmegen, Tilburg and Zaanstad.

Following elections, the new government in Germany announced in the [Coalition Agreement](#) of December 2021 that it would 'introduce the controlled sale of cannabis to adults for recreational purposes in licensed shops' in order to control its quality, prevent the sale of contaminated substances, and ensure the protection of minors. In October 2022, the government published the '[Key issues paper](#)' by the Federal Government on the introduction of the controlled dispensing of cannabis to adults for non-medical use', stating that the aim was to enable quality control, prevent the distribution of contaminated substances and ensure youth and consumers' health protection in the best possible way, with an evaluation of its impacts after four years. These key issues were further developed in a paper published in April 2023, '[Controlled dispensing of cannabis to adults for non-medical use: Outline of a 2-pillar model](#)'. This 2-pillar model was developed by several ministries but with the federal health ministry leading. The two pillars are national non-commercial private and community cultivation for personal use (first pillar), and a regional and time-limited pilot project including commercial supply chains (second pillar). For the first pillar, expected limits shall include private cultivation of no more than 3 female flowering plants, and public carrying of a maximum of 25 grams. Non-profit associations (cannabis clubs) shall be limited to 500 adult members domiciled or habitually resident in Germany. The harvested cannabis may be supplied exclusively to members (a maximum of 50 grams per person per month) with no on-site consumption. The regulations under this pillar shall be evaluated after 4 years. The second pillar shall permit sale in some specialist shops within particular regions in a scientific project to examine the effects on health and youth protection and the illegal market. For the limited sales, the project duration shall be 5 years after establishment of the supply chain. Health and youth protection shall be central to both pillars.

In Czechia, in April 2023, the government approved the revised [addiction policy action plan 2023-2025](#), 'based on a scientifically proven and balanced concept of risk prevention and harm reduction'. Overall, the action plan states that it balances regulation with a degree of freedom for individuals, the principle of the free market and the degree of harmfulness of individual addictive products. The action plan lists five priorities, one of which is a regulated drug market for cannabis and other substances, including tobacco and alcohol (and gambling), with varying regulatory models corresponding to their level of public health risk, including regulation of prices, taxation and advertising. The proposal for a regulated market includes a scientific assessment of the effects of cannabis regulation in order to preserve the principle of public health protection and minimisation of harm and risks, while also

aiming to limit the illegal market. The models are expected to be supported by another of the five priorities, namely prevention and treatment of addictions, including early intervention programmes.

In Switzerland, in September 2020, Parliament passed an amendment to the Federal Act on Narcotics and Psychotropic Substances, to provide a legal basis for conducting limited scientific pilot trials on non-medical cannabis use in adults. The aim is to establish a sound scientific basis for any possible decisions on the design of cannabis regulation. The amended act came into force on 15 May 2021 and will remain in effect for 10 years. The pilot trials must be limited geographically to one or several communes and their duration limited to five years (with the possibility of extending this by up to two years). The number of participants will be limited to that necessary for the trial to be scientifically evaluated, but not more than 5 000 subjects will be recruited per pilot trial. The trials are designed to give a better understanding of the effects of controlled access to cannabis on the physical and mental health of users and on behaviour linked to cannabis consumption, as well as examining various socio-economic aspects, such as the effects on users' work capacity (absenteeism) and on their family and social relationships. Also taken into consideration will be the impact on the local illicit market and the protection of young people and public safety. The implementing ordinance sets out measures to protect minors, which include childproof packaging for cannabis products for oral use; rules for the safe storage of cannabis products; and provisions for labelling with appropriate warnings (Federal Office of Public Health, 2023). The first pilot trial in Basel was launched in January 2023 and allows participants to buy cannabis products from selected pharmacies.

How to plan for, or evaluate, changing cannabis laws

Changing a cannabis policy is often controversial, and evaluation is therefore likely to be an essential element to help ensure that policies and programmes have the desired effect, provide value for money and do not lead to unacceptable levels of negative unintended consequences.

Policy evaluations may be defined as evidence-based judgements concerning to what extent and how well a policy, strategy or intervention (e.g. a change in a country's drug laws) has been implemented or if its objectives have been achieved, together with any other effects it has had. The importance of policy evaluation has been recognised in all EU drug strategies as well as in those of many Member States, and the EMCDDA has published a seven-step guide to support the commissioning and managing of evaluations, a topic on which the agency provides training workshops (EMCDDA, 2017b).

A number of factors merit consideration when appraising the performance of a policy or law over a defined period, or when planning a change for the future. One of the first steps is to undertake an information system assessment and establish the reporting and monitoring framework necessary for the evaluation exercise. To achieve scientifically robust evaluations it is necessary both to make a baseline situation assessment and to collect data over time from appropriately chosen indicators in order to be in a position to pass judgement on any changes that have occurred over the exercise's observational period.

It will also be necessary to define the main operational objectives of the policy and any specific legal changes made, and select indicators that can measure these. These might include domains such as reducing drug prevalence or incidence; lessening harm; protecting minors; producing economic benefits and/or decreasing involvement in the market of, or financial flows to, organised crime groups. In addition, any possible adverse consequences that might be attributed to the change should be identified to ensure that these are also addressed by the evaluation exercise. Domains here might include the risk of increasing drug use and harm; encouraging drug use among young people; raising the risk of traffic

accidents; creating additional public nuisance; or causing negative impacts on the economy.

The scope of any policy evaluation will always necessarily be, to some extent, limited, so it needs to be regarded as a pragmatic endeavour informed by a number of practical and methodological issues, including the resources available for the exercise. In general, the wider the scope of the evaluation with respect to the possible outcomes considered, the greater the amount of resources required to carry out the appraisal process.

Another challenge for any evaluation is to explore the process by which the change was actually implemented on the ground. This requires consideration of whether the practitioners had interpreted the new provisions as the planners had originally intended, or whether they had encountered barriers to implementation that need to be taken into account. Barriers might include such factors as a lack of resources; delays in implementation; political, institutional or public resistance to change; a lack of training of key actors; poor or uneven fidelity to the intended plan; or other contextual factors that could have impacted on the outcomes observed and are therefore important for interpreting the findings from the evaluation exercise.

Establishing a robust evaluation framework is therefore highly desirable before making changes to existing policies in this area. In particular, identifying the resources necessary to collect baseline data *before* changes are implemented is likely to be a crucial step for conducting an evidence-based evaluation exercise. Key data should be collected and monitored to respond to the most appropriate research questions, using theories of change and/or logic models that coherently track the objectives, actions or inputs, outputs, outcomes, and, where feasible, impacts, in order to assess the progress of the change and identify whether the implementation and its effects are in line with the original policy intentions.

Find out more

[Evaluating drug policy: a seven-step guide to support the commissioning and managing of evaluations](#), EMCDDA, 2017.

What are the possible effects of cannabis regulation?

Different countries in the Americas have undertaken the regulation of recreational cannabis use and supply since 2012. Models of regulating the legalised cannabis market have included permitting private cultivation, sale and consumption, cannabis social clubs, and the provision of state-grown cannabis, among other models. To see what lessons might be learned from these experiences of cannabis regulation in the Americas, the EMCDDA commissioned a review of studies that have been conducted on this topic (EMCDDA, 2020b). The review prioritised peer-reviewed studies over grey literature and excluded some studies that were considered to be too methodologically weak to be helpful in evaluating the impact of policy change.

Given that many of the jurisdictions relevant to this study are in the United States (US), the reader should keep in mind three key aspects of the US situation that are not found in the European Union.

- Legalisation had been preceded by well-established private systems of 'medical cannabis dispensaries', distributing loosely-controlled cannabis, which in turn supported a well-funded industry that could potentially have an influence on legislators' decisions.
- Direct advertising of prescription medicines to consumers already existed and arguably supported a policy perspective that is open to a commercial model in which commercial marketing is an accepted practice.
- The First Amendment to the US Constitution protects 'freedom of speech', which has been interpreted as limiting a state's ability to regulate the advertising of cannabis products if they are made commercially available.

Most American jurisdictions legalised cannabis via public ballots, forcing the legislators to construct a detailed regulatory model in a very short time. In contrast, the Canadian legalisation of cannabis in 2018 was initiated with a task force that took a year to draft a preliminary report, and it took over another year, and many parliamentary hearings, before the government was able to draft the legislation that was enacted.

The approach in Uruguay differed again. A highly state-supervised public health implementation model was developed after cannabis regulatory measures were passed in 2013. The Uruguayan model, for example,

includes the registration of purchasers and their fingerprint identification at participating pharmacies, thus rendering its approach more restrictive than the commercial regimes adopted in the United States.

The EMCDDA-commissioned report noted that the stated objectives of these different legislative approaches were very diverse. However, both the objectives for legalisation and the concerns cited by critics lobbying against legislative change can broadly be classified into five categories: crime and public safety; health; prevention; economic/budgetary issues; and normative reasons. Policy objectives, that can be included in the law itself or based on statements made by policymakers, provide a sense of what might motivate a jurisdiction to reform its cannabis laws. These objectives provide the starting point for metrics to be considered when measuring the outcome of such a policy change.

Based on a review of the available studies on the topic of cannabis legalisation in the Americas, the report lists and discusses results found in the areas of:

- prevalence of use among different age groups;
- consumption patterns;
- product differentiation and price;
- treatment admissions;
- adverse medical events;
- impaired driving;
- consumption of other substances;
- criminal justice and public nuisance outcomes;
- tax revenues;
- public opinion.

Since cannabis regulation is a recent phenomenon in many of these jurisdictions, the report urges caution in interpreting short-term results identified across any of these areas. As a simple example, problematic cannabis use typically takes several years to develop and may not be identified in studies undertaken one or two years after a new cannabis policy has been implemented. The one- to two-year delay between the law passing and cannabis shops opening, and the fact that several municipalities within a state maintain a ban on any shops, even though recreational cannabis may have been legalised in their

jurisdictions, are also points to bear in mind in interpreting results from the studies that have been conducted in this area.

Importantly, to come to any conclusion regarding the possible 'success' or 'failure' of a policy change, it would be crucial to establish the metrics of evaluation according to the original objectives of the change, and then to ensure that the appropriate data infrastructure is available to monitor these metrics. Having a baseline measurement pre-legalisation is also clearly important and desirable, but as many of the policy changes in North America have taken place rapidly following a public vote this has often not been possible. This complicates the interpretation of the data that is available and is a helpful point for policymakers in Europe who are considering changes to their cannabis laws.

Find out more

[Monitoring and evaluating changes in cannabis policies: insights from the Americas. EMCDDA, 2020.](#)

Part 5

What laws cover medical and commercial cannabis-derived products?

This section provides an overview of legislation around the legal use and supply of cannabis in Europe. The EU has many directives and regulations that may be applicable to low-THC cannabis products in their different forms and components. This includes the medical use of cannabis, and low-THC products, such as wellness products, cosmetics and food, including food supplements. Some of these laws may apply automatically and uniformly to all EU Member States; others will need to be transposed into national law.

Is the medical use of cannabis legal?

As the UN conventions call for the drugs under international control to be limited to 'medical and scientific purposes', there is scope under international law to allow cannabis, or cannabis-derived products to be used as a medicine to treat certain defined conditions. This is

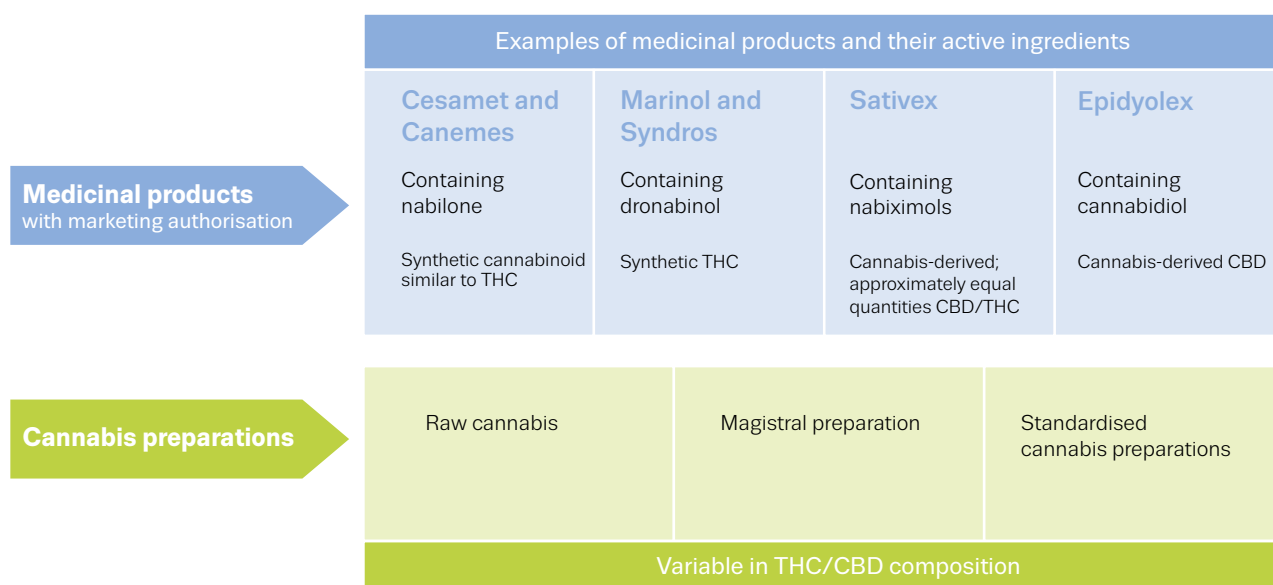
reflected in the fact that there are many narcotic substances listed in the drug control conventions that have an authorisation for use in or as medicinal products in the European Union.

In the public debate, the term 'medical use of cannabis and cannabinoids' has been used non-technically and non-consistently to refer to a wide variety of preparations and products (see [Figure 8](#)) that may contain different active ingredients and be taken through different routes of administration. Although in practice some of the terms in this area have often been used rather loosely, the distinctions between them can have both regulatory and medical implications.

It is important to note the term 'cannabis and cannabinoids for therapeutic purposes' includes medicinal products with marketing authorisation and cannabis preparations being made available through other regulatory measures for therapeutic purposes.

FIGURE 8

Cannabis and cannabinoids for medical or therapeutic purposes: some examples



Having a marketing authorisation means that an application for a medicinal product was submitted to a regulatory authority and, after evaluating the application, the regulatory authority granted authorisation. This usually implies that the product went through extensive clinical trials and that the drug has been tested for safety, efficacy and side effects. Regulatory authorities also consider whether the product can be manufactured to a required quality level.

There are several ways for medicines to receive cross-national marketing authorisation within Europe; and cannabis-derived medicinal products are subject to the general requirements applicable to medicinal products. Further information on approval procedures can be found on the dedicated websites of the European Commission and the European Medicines Agency (EMA, no date).

Cannabis-derived medicinal products can be authorised in the EU after their safety, efficacy and quality are assessed in line with the EU pharmaceutical legislation ⁽⁵⁾. As a result, cannabis-derived medicines are already available on the EU market (for example Epidyolex).

In the absence of such authorisation, some Member States may allow patients access to cannabis-derived medicinal preparations, when such a preparation is prescribed to an individual patient by a medical doctor, via an exception provided in the EU pharmaceutical legislation, that is, Article 5 of Directive 2001/83/EC.

The Committee on Herbal Medicinal Products of the EMA has compiled a list of terms and definitions for cannabis-derived medicinal products, as a summary of relevant scientific and legislative terminology (Committee on Herbal Medicinal Products, 2021).

Several countries in Europe permit the cultivation of cannabis for medicinal purposes, with the cultivation and subsequent processing taking place under the usually strict rules that are applicable to agricultural, manufacturing, distribution, security and clinical good practice. Broadly speaking, the cultivated cannabis is intended either for domestic use or for export. The countries with programmes of cultivation primarily destined for domestic use include Czechia, Denmark, Germany, Italy and the Netherlands, with a new law in Poland allowing this from May 2022, while those cultivating cannabis primarily for export include Austria, Greece and Portugal.

⁽⁵⁾ Directive 2001/83/EC of the European Parliament and the Council of 6 November 2001 on the Community code relating to medicinal products for human use.

Examples of cannabis-derived medicinal products in Europe

Across the European Union, a plant-derived, purified CBD oral solution (Epidyolex) was assessed by the EMA and approved by the European Commission in September 2019, as an adjunctive therapy for seizures associated with Lennox Gastaut syndrome or Dravet syndrome (intractable childhood epilepsy). It is the first cannabinoid-containing medicinal product to receive EU-wide marketing authorisation.

Another widely approved cannabis-derived medicinal product in Europe is Sativex (nabiximols), an oromucosal spray containing equal amounts of THC and CBD derived from the cannabis plant. Sativex is reported to be nationally approved in 16 EU countries, as well as Norway and Switzerland, for the treatment of muscle spasticity from multiple sclerosis.

Medicinal products containing the cannabinoids dronabinol and nabilone, such as antiemetic medications, are less widespread (Abuhasira et al., 2018; Bramness et al., 2018; Krcevski-Skvarc et al., 2018). In some of these countries, national health insurance systems will reimburse the cost under certain conditions, such as prior approval or prescription by a specialist.

In 2018, a summary of the evidence on the effectiveness of cannabis and cannabinoids as medicine found that some cannabinoids can relieve the symptoms of some illnesses, although they are often used as adjunctive treatments (meaning that they are added to other medical therapies) and are typically used after a patient has failed to respond to recommended treatments for these conditions (Hall, 2018) ⁽⁶⁾. As significant knowledge gaps and considerable uncertainty exist when interpreting the currently available evidence in this area, there is a need for additional research and clinical studies, including larger and better-designed trials. There is also a need for more studies that explore issues of dosage and interactions between medicines, as well as those that include a longer-term follow-up of participants. It is interesting to note in this context that in February 2019 the European Parliament passed a resolution calling for more research

⁽⁶⁾ Hall, 2018, provides a general description of the available evidence on the efficacy and safety of cannabis/cannabinoids. It is important to note that there are differences between this and the evidence that is required to apply for the authorisation of a particular medicine with a specific active substance and presented for a specific therapeutic indication, for which product-specific quality, non-clinical and clinical data will have to be generated and submitted for assessment.

into the medical uses of cannabis (7). There is also currently a lack of research evidence available about the potential abuse and dependence liability of cannabis-derived medical products and what measures might be effective in mitigating any risks in this area (Cooper and Abrams, 2019).

In addition to cannabis-derived medicinal products with a marketing authorisation, a number of EU countries allow patients to use cannabis preparations for medical purposes. The most common initial approach has been to set up some form of special access scheme, typically by creating a system that provides a certain degree of medical approval and oversight, limits use to a restricted set of medical conditions and often restricts the cannabis preparations that patients can use. The decision to subsidise or reimburse patient costs, or for patients to pay full price for the medicine or preparation will also have an impact on the extent of use.

Member States vary in terms of whether cannabis preparations not currently available for prescription can be brought into their territories by non-EU visitors from countries where they are legal with an accompanying medication prescription, and if so in what quantities.

Find out more

[Medical use of cannabis and cannabinoids: questions and answers for policymaking](#), EMCDDA, 2018.

[A summary of reviews of evidence on the efficacy and safety of medical use of cannabis and cannabinoids](#), background paper by Wayne Hall, 2018.

For further information on the EU regulatory framework see:

European Medicines Agency, About us, [What we do](#).

European Commission, [Authorisation procedures: The centralised procedure](#).

WHO Expert Committee on Drug Dependence, [Critical review of cannabis and associated substances](#).

Are products containing low THC levels legal?

In recent years an increasing number of cannabis products, including herbal cannabis and cannabis oils, have been offered for open sale in Europe. There also appears to be a growing commercial interest in developing products that contain cannabidiol (CBD) or other extracts of the cannabis plant, but without tetrahydrocannabinol (THC), or with only very low levels of THC present. These low levels mean the products might not be controlled under drug laws in some countries, but manufacture and sale may be limited by other trade regulations, and the approach used may not be uniformly applied in different Member States.

A recent EMCDDA study found that low-THC cannabis products are being offered for sale in most EU countries, with a wide variety of retailers active in the market for low-THC products in Europe (EMCDDA, 2020a). While products containing material from the cannabis plant can be found in everyday retail outlets (e.g. health food chain stores, chemists and cafés), there are also dedicated shops selling low-THC cannabis products. Some of these focus on health and well-being, while others appear to be concentrating more on products that look similar to those that exist on the illicit recreational cannabis market. This means that products containing extracts of the cannabis plant are appearing in a number of different commercial sectors where different regulatory frameworks operate. In some cases, this is also creating tension with drug control regulations.

These developments have given rise to concerns at the policy level regarding the legal status of these products and their potential to cause harm. A specific challenge therefore that is faced by both policymakers and those wishing to supply low-THC products lies in establishing the legal status of low-THC products and which regulatory frameworks should apply to their sale. The EU has many directives and regulations that may be applicable to low-THC cannabis products in their different forms and components, and which provide standardised definitions of different types of products, such as foods and cosmetics (see subsequent sections). Some of these may apply automatically and uniformly to all EU Member States; others will need to be transposed into national law.

Other phytocannabinoids (cannabinoids produced in plants), such as CBN (cannabinol), CBC (cannabichromene) and CBG (cannabigerol), have in recent years been the subject of scientific studies investigating their use for medicinal, cosmetic and other purposes. The regulatory frameworks for such products are still developing.

(7) Use of cannabis for medicinal purposes.

Is it legal to sell low-THC cannabis products for smoking?

Low-THC cannabis products can be sold for smoking in some countries, provided they comply with certain regulations.

Herbal products that are marketed for smoking, claiming to have a low THC content and/or as being extracted from industrial cannabis plants, have been openly offered for sale in many EU countries since 2017. An EU-wide policy instrument is the regulatory system established in EU Directive 2014/40/EU on tobacco and related products ('Tobacco Products Directive', TPD). The Directive defines 'herbal products for smoking' as 'a product based on plants, herbs or fruits which contains no tobacco and that can be consumed via a combustion process'. The Directive in itself does not exclude the possibility that cannabis or related products may be regulated as herbal products for smoking. However, if these products are legally placed on the market and deemed to fall within the definition of 'herbal products for smoking', they will need to comply with the TPD.

If products are classified as falling within the remit of the TPD, Articles 21 and 22 make specific provisions for product labelling and for the reporting of ingredients. Prior to placing a new herbal product for smoking on the market, manufacturers and importers need to submit to the competent national authorities a list of ingredients and respective quantities by brand name and type. According to the submitted information, herbal products for smoking which contain or may be otherwise associated with cannabis have been reported in most Member States to date, with an increase observed in the number of products since 2019.

The sale of low-THC cannabis herb and resin products can pose a new challenge for law enforcement, as distinguishing between low- and high-THC cannabis on the street, in shops or at the border is not simple, and testing all products would be impractical and costly. In countries such as Austria, Italy and Switzerland, police now have a rapid reagent test for use on the street. Some portable tests can analyse whether a product contains THC or not and others can indicate the amount of THC present. However, not all law enforcement agencies across Europe have these instruments available. It is also important to note that it can be difficult to achieve consistent test results from the same product, even when tested in a laboratory (Giese et al., 2015).

This issue from a policy perspective is further complicated by the reported adulteration of low-THC herbal and resin cannabis with potent synthetic cannabinoids, which are then sold as illicit cannabis on the illicit drug market (EMCDDA, 2022).

Find out more

[Low-THC cannabis products in Europe, EMCDDA, 2020.](#)

THC sampling procedure: [Commission Delegated Regulation \(EU\) No 639/2014.](#)

[Tobacco Products Directive 2014/40/EU.](#)

Is cannabis legal as a wellness product?

Low-THC cannabis products might be sold as ‘wellness products’ in some countries, provided they comply with certain regulations.

The concept of a wellness product has no formal legal recognition at the EU level, but it is a popular non-scientific term which is loosely used to describe a product aiming to optimise physical, mental or social well-being. As such, wellness products may be included within several different EU regulatory frameworks, depending on their intended use. To answer the question of whether cannabis is legal as a wellness product, we briefly consider the current situation and the legislation that might be applied; more details can be found under the specific sections of this report.

While a large number of different cannabis wellness products have appeared on the European market, the most widespread cannabinoid marketed in these products is CBD. Several countries in Europe have treated CBD as an ‘extract of cannabis’ and thus a controlled drug in accordance with the 1961 UN Convention.

Since the Court of Justice of the European Union (CJEU) decision in November 2020 (see [the box](#)), CBD has been recognised as not falling within the scope of narcotics control laws when interpreting EU laws — though some countries may choose to maintain CBD in their lists of controlled substances.

Broad health claims appear to be a significant contributor to the demand for CBD-related products. However, despite claims that these products may be useful for treating a wide range of illnesses or symptoms, there is currently insufficient evidence available with respect to many conditions to enable an informed assessment of the veracity of these claims. According to Regulation (EU) no 1169/2011 on the provision of food information to consumers, any claims that a product prevents or treat disease, or relieves symptoms, are not permitted, and would bring these products under the scope of medicines regulations, requiring them to have a licence for sale (see [Is the medical use of cannabis legal?](#)). To avoid this, the marketing or reviews of these products tend to use non-specific words or phrases, often claiming that CBD improves ‘well-being’ or something similar, but without directly stating that these products have medicinal properties.

Any claims made for foods that they are beneficial for health should be authorised under Regulation (EC) No 1924/2006 on nutrition and health claims made on foods

(Claims Regulation), after a scientific assessment of the highest possible standard, for which the European Food Safety Authority (EFSA) is responsible. Also, reference to general, non-specific benefits of the nutrient or food for overall good health or health-related well-being may only be made if accompanied by a specific health claim included in the Union list of permitted health claims.

To date, no such health claims have been authorised for cannabis products, although there are submissions for authorisation on the health claims of hempseed oil (*Cannabis sativa*) and on hemp-agrimony (*Eupatorium cannabinum*) (leaves) that are awaiting a final decision by the European Commission (see also the section [Is cannabis legal as a food or food supplement?](#)). Pending a final decision, the use of health claims for botanical substances has been put ‘on hold’, although these may continue to be used provided that they comply with the general principles and conditions of the Claims Regulation and the relevant national provisions.

Court of Justice of the European Union ruling on CBD, November 2020

In 2018 a business in France imported low-THC cannabis oil from Czechia and began selling it to the public in e-cigarette cartridges, promoting its CBD content. The oil was made from the whole cannabis plant, which was legal in Czechia but not in France, where the commercial use of hemp was restricted to fibre and seeds. The business owner was convicted, and appealed. The case was referred to the Court of Justice of the European Union (C-663/18), which declared in November 2020 that while the CBD in the case was not a drug within the meaning of the 1961 Convention, the fundamental principle of free movement of goods between Member States could still be limited on grounds of protecting human health and life. However, such a limit should not go beyond what is necessary in order to achieve its objective and should be applied in a consistent and systematic manner. The court stated that, while the evidence for CBD posing a risk to health, although still limited, may justify precautionary restrictive measures, it was inconsistent to apply the marketing ban only to organic, and not synthetic, CBD. The court’s statement that CBD was not a drug within the meaning of the 1961 Convention has implications for interpretations of the EU laws discussed here.

Are cosmetic products containing cannabis legal?

Some parts of the cannabis plant may be used in cosmetics; others are expressly prohibited. The EU Regulation on cosmetic products, Regulation (EU) No 1223/2009, Article 2(1)(a) defines cosmetics as ‘any substance or mixture intended to be placed in contact with the external parts of the human body (epidermis, hair system, nails, lips and external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance, protecting them, keeping them in good condition or correcting body odours’.

Annex II of this Regulation lists substances prohibited in cosmetic products. All substances in Tables I and II of the 1961 Convention are incorporated by entry 306 of this annex, including cannabis and extract of cannabis. However, as described earlier in this report, the 1961 Convention defines cannabis as ‘the flowering or fruiting tops of the cannabis plant’ and excludes the seeds and leaves of the plant when not accompanied by the flowering or fruiting tops⁽⁹⁾. CBD is not a prohibited substance in cosmetic products, as it is not covered by Tables I and II of the 1961 Convention in light of the CJEU ruling in case C-663/18 (see the box [Court of Justice of the European Union ruling on CBD, November 2020](#)) and consequently, by entry 306 of Annex II.

Several cosmetic ingredients derived from the cannabis plant are listed in the EU Cosmetic Ingredients database (CosIng). As announced on the introductory page to the database, even if an ingredient is assigned an INCI name (International Nomenclature of Cosmetic Ingredients) that appears in the inventory section of CosIng, this does *not* necessarily mean it is to be used in cosmetic products nor that it is approved for such use. In line with this, some listed ingredients derived from the cannabis plant’s flowers are prohibited for use under the EU Regulation on cosmetic products, although others that are derived from the plant’s roots or seeds, are not. Some listed ingredients are subject to a noted restriction, such as ‘II/306’ (considered a cannabis extract under the 1961 UN Convention) but others, including cannabigerol and cannabidiol, which are used in some skin conditioning products, are not. For some of these listed ingredients, CosIng notes that national legislations on controlled substances may also apply.

Article 3 of the Regulation on cosmetic products imposes a general condition that all such products made available on the market must be safe for human health when used under normal or reasonably foreseeable conditions of use. The same Regulation requires notification of new products on the EU market at the EU Cosmetics Products Notification Portal, and several cosmetic products containing CBD can be found there.

Find out more

European Commission, [EU cosmetics regulations](#).

Is cannabis legal as a food or food supplement?

When some parts of the hemp plant or hemp-derived products are placed on the market as ‘food’ in line with the General Food law, numerous other regulations may apply. Some of these are listed below⁽⁹⁾.

In Regulation (EC) No 178/2002 laying down the general principles and requirements of food law, Article 2 states that the definition of ‘food’ is any substance or product intended to be or reasonably expected to be ingested by humans, but it does not include medicinal products, cosmetics, or narcotic or psychotropic substances within the meaning of the 1961 and 1971 Conventions, implying that substances regarded in the conventions as narcotic or psychotropic substances cannot be classified as a food. The national authorities of the EU Member States are responsible for determining whether each product qualifies as a medicinal product or as a foodstuff. Producers may also have conflicting interests in the classification of their product; while medicinal products require extensive trials, they attract zero import duty, in contrast to food products, which are subject to considerable duty tariffs.

The Regulation on novel foods ((EU) 2015/2283), which repealed Regulation (EC) No 258/97, defines novel foods as food that had not been consumed to a significant degree by humans in the European Union before 15 May 1997. Novel foods may only be placed on the market within the European Union subject to an authorisation, and only after they have been found safe by EFSA.

⁽⁹⁾ This is not an exhaustive overview of all potentially relevant EU regulations that may apply to cannabis as cosmetic products.

⁽⁹⁾ This is not an exhaustive overview of all potentially relevant EU regulations that may apply to cannabis as food products.

Directive 2002/46/EC on the laws relating to food supplements states that food supplements are foodstuffs (i.e. foods) that are concentrated sources of minerals or vitamins or other substances with a nutritional or physiological effect, intended to supplement a normal diet and marketed in dose form.

Cannabis products including extracts, which are not considered narcotics, medicines or cosmetics might be considered a food, provided that all other conditions of Article 2 of Regulation (EC) No 178/2002 are met. Hemp seed and hemp-seed derived products, such as flour, are considered traditional foods. A number of applications for CBD products — including synthetic CBD — have been made, seeking EU approval as novel foods. According to the Regulation on novel foods ((EU) 2015/2283)), food business operators must verify whether or not the food which they intend to place on the EU market qualifies as a novel food, consulting the relevant national authorities as necessary.

The EU Novel food catalogue is a non-exhaustive and non-binding database which presents the outcome of discussions within the European Commission Working Group on Novel Foods with regard to whether or not specific foods were used for human consumption to a significant degree within the European Union before 15 May 1997. The catalogue can indicate the position taken by Member States on certain products, but it does not replace the various legally mandated procedures. The catalogue currently has three entries relevant to this report, *Cannabis sativa* L., cannabidiol (CBD) and cannabinoids. Under the heading *Cannabis sativa*, the catalogue observes that some products derived from the *Cannabis sativa* plant, or plant parts such as seeds, seed oil, and hemp seed flour, have a history of consumption in the European Union and are therefore not novel. However, national legislation may restrict the marketing of some of these foods. Since January 2019, the entry on CBD has also directed the user to the entry 'Cannabinoids' which states that extracts of *Cannabis sativa* and derived products containing cannabinoids, and products containing cannabinoids as added ingredients, as well as synthetically obtained cannabinoids, are considered novel foods as a history of consumption has not been demonstrated.

Food business operators can place a novel food on the EU market only after the European Commission has processed an application for the authorisation of a novel food. This includes verification of whether the specific product falls within the definition of 'food' (see definition above) and the performance of the safety evaluation by EFSA, and has adopted an implementing act authorising placing a novel food on the market.

In recent years there has been an increase in applications (Norwinski et al., 2019) for the authorisation of CBD-containing products under the EU Regulation on novel foods. Following the decision of the CJEU in Case C-663/18 (see page 43), the European Commission noted that CBD should not be considered as a narcotic drug within the meaning of the UN Single Convention on Narcotic Drugs of 1961. It also noted that CBD can be qualified as a food, provided that the other conditions of EU food-related regulations, such as the EU Regulation on novel foods, are also met.

By December 2022, the European Commission had received about 190 novel food applications for food products containing CBD, either produced synthetically or extracted from *Cannabis sativa*. The intended use mainly relates to ingredients for food supplements rather than ingredients in other foods. Many of these applications are incomplete, with poor data in parts, while a common procedural error made in some of these applications has been to simply rely on safety results of CBD submitted for the medicinal product Epidyolex, which now has EU-wide marketing approval. As the data related to the safety results of Epidyolex is the intellectual property of that applicant it cannot be transferred to another applicant without permission from the owner of the intellectual property rights.

When starting to evaluate some of the CBD applications, it became clear to EFSA that there are knowledge gaps that need to be addressed before a conclusion on the safety of CBD can be reached, including its possible effects on the liver, gastrointestinal tract, endocrine system, nervous system and psychological function, as well as concerns regarding reproductive toxicity. There are data gaps in the research regarding drug-drug interactions of CBD and the effects of increasing solubility for bioavailability (the proportion of a substance which enters the circulation when introduced into the body to have an active effect), both of which can have the effect of making substances more potent than originally expected. 'Full spectrum' product applications that contain whole cannabis plant extracts are even more complex as they comprise a mixture of compounds. Finally, side effects for novel foods are not acceptable as compared to medicines, which may allow some undesirable side effects in order to prevent or treat a disease when the benefits are judged to be greater than the risks. As there have been a large number of incoming applications for CBD-containing food products, EFSA adopted in May 2022 a statement on the safety of CBD as a novel food. Considering the significant uncertainties and data gaps outlined above, the EFSA panel on nutrition, novel foods and food allergens (NDA) concluded that at this date the safety of CBD as a novel food, that is, a product with a safe daily intake for humans, cannot be established.

Find out more

[Food safety in the European Union](#), European Union.

[Scientific report on 'Acute human exposure assessment to THC'](#), EFSA, November 2019.

[Statement on cannabidiol as a novel food: data gaps and uncertainties](#), *EFSA Journal*, June 2022.

Is industrial cannabis legal?

In the European Union it is legal to cultivate and supply cannabis plants for hemp fibre and seeds if they have low levels of THC. Rules on the marketing of seeds of oil and fibre plants are laid down in Council Directive 2002/57/EC. Only varieties of hemp listed in the European Union Common catalogue of varieties of agricultural plant species (the 'Plant variety database') can be marketed in the European Union for agricultural purposes, and some varieties may be cultivated and supplied for hemp fibre. The relevant EU regulations are listed below ⁽¹⁰⁾.

When cultivating hemp, farmers are only eligible for support under the common agricultural policy when using certified seed of specified hemp varieties; only varieties with a THC content not exceeding 0.3 % may be used (Regulation (EU) No 2021/2115). Standardised procedures for the determination of their THC content state that, for example, the samples to be tested for THC should be taken from the top 30 centimetres of the plant, with at least one female flower, dried, with stems and seeds removed (Commission Delegated Regulation (EU) No 639/2014, Annex III).

According to the Court of Justice of the European Union (CJEU), case C-207/08 (Babanov), the cultivation of hemp fulfilling the strict conditions in the EU legislation cannot be prohibited in any Member State, as this would be in conflict with EU law. New countries joining the European Union whose national narcotic control laws may have stipulated that it is illegal to grow any cannabis plant have sometimes needed to change their laws in order to permit this exception. This case provides an example of where differences in national drug control approaches can be incompatible with EU regulations.

The EU Common catalogue of varieties of agricultural plant species lists varieties whose seed can be marketed throughout the European Union, including approximately 100 varieties of the species 'hemp: *Cannabis sativa*' that have been notified by 14 Member States. The number has increased by 30 varieties since 2019 (European Commission, 2022). Only certified seeds of agricultural cannabis varieties may be marketed in the European Union, in line with the Council Directive 2002/57/EC on the marketing of seed of oil and fibre plants. The seed certification carried out in Member States ensures the identity, health and quality of seeds for farmers. Some EU Member States may explicitly exclude all derivatives of those varieties from their narcotic schedules. This includes all parts of the plant, seeds, extracts and tinctures, as well as the resin. An amendment to Regulation (EC) No 1881/2006 (Commission Regulation (EU) 2022/1393) establishes the maximum levels of delta-9-THC (sum of delta-9-THC and delta-9-THCA, expressed as delta-9-THC) in hemp seeds of 3.0 milligrams per kilogram, in hemp seed oil of 7.5 milligrams per kilogram and for other hemp seed derived products of 3 milligrams per kilogram.

Imports of raw hemp and hemp seeds are also subject to certain conditions to ensure that the maximum THC limit is respected (Regulation (EU) No 1308/2013). It should be stressed, however, that this legislative framework was developed for the hemp industry (raw hemp and seeds) and was not intended to have implications for other products or product safety in humans. Importantly, the application of a safety limit expressed as a percentage (e.g. 0.2 % or 0.3 % THC limit) is not appropriate for products intended for human consumption as the actual dose ingested will be dependent on the volume of the product consumed. Additionally, intra-EU trade in hemp products may remain subject to national legislation.

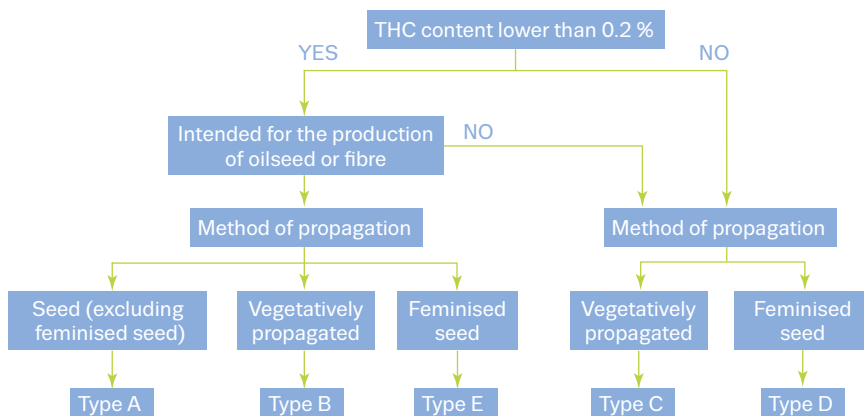
Find out more

[EU Plant variety database.](#)

⁽¹⁰⁾ This is not an exhaustive overview of all potentially relevant EU regulations that may apply to cannabis as industrial products.

FIGURE 9

Flow chart for the classification of new cannabis varieties into types



Source: Community Plant Variety Office.

Is it possible to trademark cannabis varieties or cannabis products?

It is possible to protect the intellectual property rights of plant varieties, seeds and products, which require distinct applications and authorisations. The EU Community Plant Variety Office (CPVO) is responsible for issuing intellectual property rights (Community plant variety rights, CPVR) for a new cannabis variety if it fulfils certain criteria. The requirements for protecting a plant variety are novelty, distinctness, uniformity, stability (the ‘DUS criteria’) and a suitable denomination. The intended use (fibre, oil, chemicals, etc.) and the content of THC must be specified in the application to ensure correct classification of the plant variety.

Varieties yielding any content of THC may still be registered nationally or at the European level to protect plant breeders’ rights, but to be marketed they have to fulfil the requirements for trading.

While there were approximately 22 applications to register new varieties of cannabis over the period 1999–2015, with most of them being seed-propagated varieties mainly used for fibre, woody core or oil seed, this increased to approximately 300 applications between 2018 and 2021, mostly originating from plant breeders in the Netherlands, Spain and Italy. Over 80 % of these applications are for ‘other than fibre use, vegetatively propagated’ (see Figure 9).

In recent years the European Union Intellectual Property Office (EUIPO) has also seen a considerable increase in applications to register trademarks and designs containing

references to cannabis. Its Guidelines for Examination ⁽¹¹⁾ have clarified that applications may be refused as being contrary to public policy or acceptable principles of morality (Article 7(1)(f) EU trade mark Regulation 2017/1001) if they could be perceived as promoting the illegal use of drugs. As national legislations generally prohibit drug use and aim to counter drug supply, this represents an objective basis for refusal if the product is not intended for medicinal use.

Example: Cannabis-related trademark applications

The application for the trademark ‘Cannabis Store Amsterdam’ was rejected as contrary to public policy (EU General Court, Case T-683/18 Santa Conte v EUIPO). An application for low-THC cannabis products may be accepted, for example ‘Hemptouch’ (EUTM 18 000 042), which suggested low THC levels and some medicinal use. The use of slang terms that might promote drug use is not always a reason for refusal; the mark ‘BavariaWeed’ for medical cannabis was refused but ‘LegalWeed’ was approved, as, despite the nature of the mark, the product itself was for services that were deemed not to promote illegal use.

⁽¹¹⁾ EUIPO, Trade mark and designs guidelines, Chapter 7 Trade marks contrary to public policy or acceptable principles of morality (Article 7 (1)(f) EUTMR, 3. Accepted Principles of Morality, Edition 2022.

The exponential increase in the licit use of cannabis plants or products and related applications for authorisation has highlighted a number of challenges; for example, the complexity of procedures to transport cannabis-related materials and products, such as propagated plant material or THC products, to CPVO offices for testing. Moreover, individual laboratories in different countries might not use harmonised or standardised techniques, which could complicate obtaining consistent results when assessing THC levels in different forms of cannabis (powders, oil, edibles, herbal material, etc.). Obtaining differing results may further complicate authorisations for transport, and some customs authorities are currently working on a solution for this issue.

Find out more

[EU Community Plant Variety Office.](#)

[EU Intellectual Property Office.](#)

Conclusion

The policy challenges in this area are growing in both importance and complexity

This report is published at a time of mounting public and political debate on cannabis policy issues. This is not particularly new, as for some time now cannabis has been the illicit drug about which public and political attitudes have been most polarised. What is new however is that in the Americas a number of different examples of regulated recreational markets for cannabis have now been established, and this has been accompanied by a growth in the legal cannabis industry.

A further difference is that in some countries in Europe public and political support for reconsidering the approach to cannabis control has grown significantly, and this has led to proposals for policy changes in this area. At the time of writing, five EU Member States and Switzerland are now introducing, or are giving serious consideration to introducing, new approaches to regulate recreational cannabis supply. The developments under discussion often appear to be informed, at least in part, by aspects of the policy approaches now established in Uruguay, or parts of the United States and Canada. At the same time, in Europe, a number of medicines derived from the cannabis plant have been authorised for use, while in some countries there is a strong public lobby for, and in others provision exists to allow, greater access to cannabis for therapeutic purposes outside of the procedures that exist for the formal regulation of medicines. Furthermore, cannabis-based products are appearing in the 'wellness' space and there is growing commercialisation and promotion of products containing derivatives of the cannabis plant in other areas. These developments are happening rapidly and create complex challenges for national policies as they can sometimes result in tensions and blurred boundaries between the regulatory approaches used in commercially important areas and drug control regulations. At the European level these challenges are magnified further, as the approaches adopted by one Member State can have implications for its neighbours, and some developments may even have possible implications for the free movement of legal goods and services. This report is not intended to solve these complex policy issues, rather our intention here is simply to describe for a general audience the current state of play and map regulatory and other issues that need to be considered when assessing different approaches to cannabis regulation and control.

The importance of having a robust evaluation framework in place

All policy approaches to drug regulation and control bring with them both potential costs and benefits. However, understanding and quantifying what these may be and measuring change over time requires the establishment of a robust evaluation framework, and in this report we have reviewed the elements that are necessary to support this process. Some advocates for reducing or removing penalties claim that cannabis is less harmful than other drugs, often pointing to the legalisation of cannabis for recreational purposes across several jurisdictions in the Americas. They also highlight the harms that can be caused to an individual from receiving a criminal sanction for their cannabis use and the income that the sale of the drug generates for criminal organisations. On the other hand, others point to European statistics showing the increasing potency of illicit cannabis and that the drug features prominently in both drug-related presentations to emergency services and new drug-related treatment demands. They also argue that our understanding of the health problems associated with cannabis use is growing and that liberalisation will result in greater health and social problems accruing from the use of this drug. We make no attempts in this report to evaluate these claims. We do note however that currently it is difficult to judge the impact of changes that have been made in the Americas. Importantly, even if this was possible, caution is necessary when generalising from these experiences to the EU situation. This is because no single policy approach has been applied in the Americas, resulting in the operation of a diversity of models in different jurisdictions, in a context different from that of the European Union. However, one thing is clear from the experiences to date. If the impact of any possible changes in policy are to be understood, a robust evaluation framework should be put in place prior to the change being enacted. This needs to be informed by the development of operational measures that are appropriate to the policies' stated objectives and any possible adverse consequences, as well as by the collection of baseline data enabling any changes over time to be observed.

Currently does a common EU approach exist and do policies always reflect practice?

As questions on what constitutes an appropriate policy response to the recreational use of cannabis have become both topical and important, it is worth reflecting on the current situation with respect to how European countries respond to the use of this drug. As this review has shown, it is not easy to discern a common approach across all EU

countries. That said, generally, notwithstanding the formal legal punishments, in most EU countries the actual penalties for the possession and use (and often supply) of cannabis are often less severe than those for other illicit substances. Some countries have implemented changes in their legislation affecting the penalties for cannabis use, but these have rarely been followed by rigorous scientific evaluation. It can be observed, however, that most of the changes that have been made, until recently at least, have been relatively minor, and neither increasing or reducing legal penalties for cannabis use offences appear to have resulted in an observable or consistent effect on the estimated prevalence of cannabis use. An additional consideration for evaluating change in this area is that the formal statements on national policies may not reflect the reality of enforcement practice in some countries. This is because informal or formal rules may exist that influence police practices and create a degree of tolerance for cannabis use, or because other factors, for example, the prioritisation of other types of criminal activity for law enforcement efforts, mean that resources are not available for vigorous enforcement of the laws that may be in place.

Are tensions growing between drug control approaches and regulatory approaches in other areas?

Developments are not only taking place in the area of cannabis as a recreational drug. The laws regulating cannabis as an industrial product, a medicine, and even as a food or cosmetic ingredient, are becoming more nuanced and changing rapidly around Europe. Over the last few years, low-strength herbal cannabis and cannabis oils for sale in health food outlets or specialist shops have appeared across the region. Sales take place based on the claim that these products have little or no intoxicating effect, and therefore they are not controlled under drug laws. These new products often claim to have less than 0.2 % or 0.3 % THC, even though that EU limit is for agricultural subsidies not for finished products, and broadly fit within two categories of products: one marketed as replacement products for cannabis users, and the other — including formulations like oils and creams — aimed at people interested in possible healthcare or ‘wellness’ uses.

With the increase in popularity of low-THC products and cannabis used for medicinal purposes, countries may start to see further policy challenges. Notably, the increase in prescriptions for cannabis products with medical purposes has also raised the potential for drivers testing positive for cannabis use. Although current prescription numbers suggest that this remains a relatively minor issue, countries may need to decide on their policies in response

to this eventuality. In addition, the distinction between legal and illegal cannabis products may become less clear, with resulting challenges for law enforcement agencies.

Currently, some EU Member States regard some low-THC products as cannabis extracts subject to criminal penalties; others may consider them as medicines that cannot be sold without authorisation; and a few classify them as products that do not pose a threat to public health and so do not require any licence to trade. The recent ruling from the Court of Justice of the European Union in November 2020, which declared that cannabidiol (CBD) was not a drug within the meaning of the United Nations 1961 Convention on narcotic substances, has further implications for the trade in these cannabis-derived products across Europe. In addition, the December 2020 removal of cannabis and cannabis resin from Schedule IV of the 1961 UN Convention may also have future implications for the way these drugs are treated.

Simultaneously with the increased diversification of ‘low-THC products’, the creation of legal recreational cannabis markets in the Americas is driving innovation in the supply of new cannabis products such as edibles, e-liquids and concentrates. Some of these are now appearing on the European market, where they represent a new public health, monitoring and drug control challenge.

There is a need for greater definitional clarity

At the level of policy and public debate, the broad term ‘legalisation of cannabis’ risks being misinterpreted, as industrial, medical and recreational cannabis — and the different cannabinoids within — are often conflated by advocates and commentators. The debate is complex and cannabis policies will need to respond to this comprehensively if they are to address the existing and new public health challenges and other policy implications being raised by developments in this area. Monitoring and evaluation will be an essential component of any new regulated systems for cannabis, be they in Europe or elsewhere. Building in these frameworks from the start will be key to assessing the intended and unintended effects of any new policies and whether or not they have achieved their objectives.

Investments in monitoring and research are needed

At present, a range of routine data on the estimated prevalence of cannabis use and cannabis markets is collected in jurisdictions that have established regulated cannabis markets. However, more work is needed to

understand the impact of policy changes on population health, crime and public safety.

A forthcoming EMCDDA report on monitoring and evaluating cannabis policies in the Americas will provide insights into the challenges of this evolving policy area. As noted earlier, a key resource issue is the need to have the data-gathering infrastructure in place prior to cannabis policy changes taking place so that comprehensive baseline data are available to consider changes over time. New indicators will need to be developed to track developments in any legal markets, including prices, product types, retail outlets and sales information, advertising, and impacts on the residual illicit market.

The earlier EMCDDA (2020b) report on cannabis policies in the Americas put forward an evaluation framework for monitoring the impact of cannabis policy changes across four data domains: health, crime and criminal justice, economics, and others. With growing diversity in the categories of cannabis-based products likely to continue, greater conceptual clarity will likely be required to develop an operational framework for all products containing 'cannabis'. It will be important to distinguish between the predominant cannabinoids present (THC, CBD); product forms (seed, fibre, flower, resin, oil, crystals, and finished product); intended or expected use (recreational, food, cosmetic, medical, industrial, etc.); product potency; intended route of exposure; and intensity of use (Hughes et al., 2021).

In addition, further harmonisation of criminal justice system outcome statistics and data on the use of alternatives to coercive sanctions (ACS) would provide important insights into how cannabis laws are actually operationalised and implemented. Adopted ACS policies are often carried out without robust monitoring or evaluation. Further investment in the evaluation of ACS policies will provide the information needed to improve the effectiveness of ACS.

The current policy debates around cannabis and the legislative situation throughout Europe and beyond will undoubtedly see further developments in the coming years. The EMCDDA will continue to closely monitor cannabis use, supply and policies, and provide sound information on cannabis-related issues to support the development of evidence-based policy and practice in this complex area.

Abbreviations

ACS	alternatives to coercive sanctions
CBC	cannabichromene
CBD	cannabidiol
CBDA	cannabidiolic acid
CBG	cannabigerol
CBN	cannabinol
CJEU	Court of Justice of the European Union
CPVO	Community Plant Variety Office
ECDD	Expert Committee on Drug Dependence
EFSA	European Food Safety Authority
EMA	European Medicines Agency
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EU	European Union
EUIPO	European Union Intellectual Property Office
GP	general practitioner
TDI	treatment demand indicator
THC	tetrahydrocannabinol
THCA	tetrahydrocannabinolic acid
TPD	Tobacco Products Directive
UN	United Nations
US	United States
WHO	World Health Organization

References

- Abuhasira, R., Schleider, L. B.-L., Mechoulam, R. and Novack, V. (2018), 'Epidemiological characteristics, safety and efficacy of medical cannabis in the elderly', *European Journal of Internal Medicine* 49, pp. 44–50.
- Bramness, J. G., Dom, G., Gual, A., Mann, K. and Wurst, F. M. (2018), 'A survey on the medical use of cannabis in Europe: a position paper', *European Addiction Research* 24, pp. 201–205.
- Canadian Pharmacists Association (no date), *How to help patients find a safe and effective dose*, Cannabis for Medical Purposes.
- Casajuana Kögel, C., Balcells-Olivero, M. M., López-Pelayo, H., Miquel, L., Teixidó, L., Colom, J., Nutt, D. J., Rehm, J. and Gual, A. (2017), The Standard Joint Unit, *Drug and Alcohol Dependence* 176, pp. 109–116.
- Committee on Herbal Medicinal Products (2021), *Compilation of terms and definitions for cannabis-derived medicinal products*, European Medicines Agency, Amsterdam.
- Cooper, Z. D. and Abrams, D. I. (2019), 'Considering abuse liability and neurocognitive effects of cannabis and cannabis-derived products when assessing analgesic efficacy: a comprehensive review of randomized-controlled studies', *American Journal of Drug and Alcohol Abuse* 45(6), pp. 580–595.
- EEAS (European External Action Service) (2020), 'Delegation of the European Union to the International Organisations in Vienna EU votes at the UN Commission on Narcotic Drugs to ensure most relevant international control for cannabis and cannabis-related substances, Delegation of the European Union to the International Organisations in Vienna', 2 December.
- EIHA (European Industrial Hemp Association) (2021), *Reasonable regulation of cannabidiol (CBD) in food, supplements, medicine and cosmetics*, Brussels.
- EMA (European Medicines Agency) (no date), *About us, what we do*.
- EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2011), *Annual report 2011: the state of the drugs problem in Europe*, Publications Office of the European Union, Luxembourg.
- European Monitoring Centre for Drugs and Drug Addiction (2017a), *Drug trafficking penalties across the European Union: a survey of expert opinion*, Technical report.
- EMCDDA (2017b), *Evaluating drug policy: a seven-step guide to support the commissioning and managing of evaluations*, Publications Office of the European Union, Luxembourg.
- EMCDDA (2020a), *Low-THC cannabis products in Europe*, Publications Office of the European Union, Luxembourg.
- EMCDDA (2020b), *Monitoring and evaluating changes in cannabis policies: insights from the Americas*, Technical report, Publications Office of the European Union, Luxembourg.
- EMCDDA (2022), *European drug report: trends and developments 2022*, Publications Office of the European Union, Luxembourg.
- EMCDDA and Europol (2019), *EU drug markets report 2019*, Publications Office of the European Union, Luxembourg.
- ENCOD (2011), *Code of conduct for European cannabis social clubs*, ENCOD, Antwerp.
- European Commission (2022), *Impact of drugs on communities*, Flash Eurobarometer 493.
- European Commission (no date), *Hemp*, accessed on 12 May 2023.
- Federal Office of Public Health (2023), *Pilot trials with cannabis*, accessed on 12 May 2023.
- Freeman, T. P. and Lorenzetti, V. (2020), 'Standard THC units': a proposal to standardize dose across all cannabis products and methods of administration', *Addiction* 115, pp. 1207–1216, doi:10.1111/add.14842.
- Freeman, T. P., Craft, S., Wilson, J., Stylianou, S., ElSohly, M., Di Forti, M. and Lynskey, M. T. (2021), 'Changes in delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD) concentrations in cannabis over time: systematic review and meta-analysis', *Addiction* 116, pp. 1000–1010, doi:10.1111/add.15253.

- | Giese, M., Lewis, M., Giese, L. and Smith, K. (2015), 'Development and validation of a reliable and robust method for the analysis of cannabinoids and terpenes in cannabis', *Journal of AOAC International* 98(6), pp. 1503–1522.
- | Government of the Netherlands (no date), [Controlled cannabis supply chain experiment](#), accessed on 12 May 2023.
- | Hall, W. (2018), *A summary of reviews of evidence on the efficacy and safety of medical use of cannabis and cannabinoids*, EMCDDA.
- | Hughes, B., Matias, J. and Griffiths, P. (2018), 'Inconsistencies in the assumptions linking punitive sanctions and use of cannabis and new psychoactive substances in Europe', *Addiction* 113(12), pp. 2155–2157.
- | Hughes, B., Vandam, L., Mounteney J. and Griffiths, P. (2021), 'Regulatory approaches to cannabidiol in the European Union: are market developments sowing the seeds of confusion?', *Addiction* 117(1), pp. 3–4.
- | International Narcotics Control Board (INCB) (2022), *Report of the International Narcotics Control Board for 2021*, United Nations, Vienna.
- | Krcevski-Skvarc, N., Wells, C. and Hauser, W. (2018), 'Availability and approval of cannabis-based medicines for chronic pain management and palliative/supportive care in Europe: a survey of the status in the chapters of the European Pain Federation', *European Journal of Pain* 22, pp. 440–454.
- | Mennes, R., Schoonbeek, I., Molen, J. van der and Bieleman, B. (2019), *Coffeeshops in Nederland 2018*, Breuer & IntraVal.
- | NIH (National Institutes of Health) (2021), *Establishment of a standard THC unit to be used in research*, Notice of Information, Notice Number, NOT-DA-21–049.
- | Norwinski, E. J., Pippins, R., Tsang, L., Willcocks, J. and Williams, A. (2019), *EU regulation of CBD in foods and cosmetics*, Advisory, Arnold & Porter.
- | Pardal, M., Decorte, T., Bone, M., Parés, Ò. and Johansson, J. (2022). 'Mapping cannabis social clubs in Europe', *European Journal of Criminology* 19(5), pp. 1016–1039, doi:[10.1177/1477370820941392](https://doi.org/10.1177/1477370820941392).
- | Ramaekers, J. G., Mason, N. L., Kloft, L. and Theunissen, E. L. (2021), 'The why behind the high: determinants of neurocognition during acute cannabis exposure', *Nature Reviews Neuroscience* 22, pp. 439–454
- | Rogeberg, O. and Elvik, R. (2016), 'The effects of cannabis intoxication on motor vehicle collision revisited and revised', *Addiction* 111, pp. 1348–1359.
- | United Nations (1961), *Single convention on narcotic drugs*.
- | United Nations (1971), *Convention on psychotropic substances*.
- | United Nations (1988), *Convention against illicit traffic in narcotic drugs and psychotropic substances*.
- | WODC (2009), *Evaluation of the Dutch national drug policy*, Trimbos-instituut, Utrecht/Den Haag.

Resources

Penalties at a glance, 2022.

Cannabis control in Europe, 2008.

Cannabis production and markets in Europe, 2012.

European drug reports, 2013–2022.

EU drug markets report (EMCDDA and Europol), 2019.

Findings from the DRUID project, 2012.

Characteristics of frequent and high-risk cannabis users, 2015.

Drug offences: sentencing and other outcomes, 2009.

EMCDDA publications are available online from the agency's [website](#).

Other sources include reports from the Reitox network of national focal points, the Legal and Policy Correspondents network and the European Commission.

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EMCDDA publications on cannabis

Miniguide: Cannabis — health and social responses (October 2021)

This is one of a larger set of miniguides, which together comprise *Health and social responses to drug problems: a European guide*. It provides an overview of the most important aspects to consider when planning or delivering health and social responses to cannabis-related problems, and reviews the availability and effectiveness of the responses. It also considers implications for policy and practice.

Low-THC cannabis products in Europe (December 2020)

In order to map the spread of low-THC products across Europe and to begin addressing knowledge gaps in this area, the EMCDDA initiated an exploratory trendspotter study in the autumn of 2018. The specific objectives of this study were to identify and further explore the types of products available and the range of sales outlets, user profiles, associated harms and responses undertaken in different EU countries. This EMCDDA report brings together the findings of the trendspotter study and provides an initial overview of the situation in Europe with respect to the open sale of low-THC products.

Monitoring and evaluating changes in cannabis policies: insights from the Americas (January 2020)

Over the past 50 years, several jurisdictions in Europe, Australia and the Americas have reduced the penalties associated with using or possessing small amounts of cannabis. Recently, however, several jurisdictions have gone further and established regulated markets for the sale and use of cannabis for recreational purposes. The EMCDDA commissioned a review of the changes to recreational cannabis policies in the Americas and an overview of preliminary evaluations. In addition to providing EU audiences with a clearer picture of the developments occurring in the Americas, this technical report highlights some of the challenges associated with monitoring and evaluating regulatory changes in the drugs field. The report's findings are intended to inform discussions about the development of frameworks for monitoring and evaluating policy developments related to cannabis regulatory reform.

Developments in the European cannabis market (June 2019)

The creation of regulated recreational cannabis markets has led to a diversification of the availability of different cannabis products. This EMCDDA report on key developments in Europe reviews how a number of factors impact on the diversity and content of products and forms of cannabis available in Europe, focusing mainly on illicit cannabis products (e.g. herbal cannabis and cannabis resin), extracts, edibles and synthetic cannabinoids for recreational use. Drivers of change in the diversity and availability of cannabis products include policy developments in Europe and elsewhere; advances in production and extraction techniques; and consumer interest.

Medical use of cannabis and cannabinoids: questions and answers for policymaking (December 2018)

In the past 20 years, there has been a resurgence of interest among patients regarding the use of cannabis and cannabinoids to treat a variety of conditions, including chronic pain, cancer pain, depression, anxiety disorders, sleep disturbances and neurological disorders. This increased interest in the medical use

of cannabis has also been accompanied by renewed scientific interest in the medical use of cannabinoids found in the cannabis plant. In this context, this EMCDDA report provides a brief overview of current knowledge and the latest developments relating to the medical use of cannabis and cannabinoids, including the products that have received marketing authorisation in Europe and the regulatory frameworks governing their provision.

Cannabis and driving: questions and answers for policymaking (May 2018)

With changes to cannabis use and policies taking place internationally, drug-impaired driving has become an increasingly relevant policy issue. This EMCDDA joint policy briefing, written with the Canadian Centre on Substance Use and Addiction, provides those concerned with policy developments in the cannabis field with a brief overview of current knowledge and the latest developments in the area of driving.

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About this publication

This publication answers some of the more frequently asked questions raised in discussions about cannabis legislation. While the primary focus is on the use of cannabis for recreational purposes, relevant legislation for other uses, including medical and commercial cannabis-derived products such as cosmetics, wellness products and foods, is included in order to provide the necessary context for various policy initiatives.

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 25 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.