



INTERNATIONAL NARCOTICS CONTROL BOARD



Narcotic Drugs 2025

Estimated World Requirements for 2026
Statistics for 2024



**United
Nations**

Reports published by the International Narcotics Control Board for 2025

The *Report of the International Narcotics Control Board for 2025* (E/INCB/2025/1) is supplemented by the following reports:

Narcotic Drugs: Estimated World Requirements for 2026 — Statistics for 2024 (E/INCB/2025/2)

Psychotropic Substances: Statistics for 2024 — Assessments of Annual Medical and Scientific Requirements for Substances in Schedules II, III and IV of the Convention on Psychotropic Substances of 1971 for 2026 (E/INCB/2025/3)

Precursors, Chemicals and Equipment Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2025 on the Implementation of Articles 12 and 13 of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 (E/INCB/2025/4)

The updated lists of substances under international control, comprising narcotic drugs, psychotropic substances and substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, are contained in the latest editions of the annexes to the statistical forms (“Yellow List”, “Green List” and “Red List”), which are also issued by the Board.

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The text of the present report is also available on the website of the Board (www.incb.org).



INTERNATIONAL NARCOTICS CONTROL BOARD

Narcotic Drugs

Estimated World Requirements for 2026
Statistics for 2024



UNITED NATIONS
Vienna, 2026

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. Countries and areas are referred to by the names that were in official use at the time the relevant data were collected.

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General Information



Notes:

In 2012, the Board decided to modify the structure of the technical report on narcotic drugs by moving some information to the annexes. In 2024, the Board further decided to make part IV. “Statistical information” available only online. As of 2024, the report in its entirety, including the statistical information and annexes, has been made available on the INCB website (www.incb.org)

As of 2025, the initial section of the present publication provides general information for users of the technical report on narcotic drugs. It consists of a section entitled “Introduction” and two indexes:

- (a) An index of names of countries and non-metropolitan territories
- (b) An index of names of narcotic drugs.

The indexes facilitate referencing, since countries, non-metropolitan territories and narcotic drugs are listed in the tables in alphabetical order.

The main section of the present report, entitled “Comments on the reported statistics on narcotic drugs”, includes a section entitled “Introduction to the comments on the reported statistics on narcotic drugs”, which contains explanations with regard to the purpose of the technical report and to the main modifications to the structure and content of the report introduced in the report for 2024. Further items present in the main section include: a thematic focus on substances scheduled in the past decade; information on the supply of and demand for opiates; and the latest market trends in narcotic drugs.

INTRODUCTION

1. *Narcotic Drugs: Estimated World Requirements for 2026; Statistics for 2024* is one of the three annual technical reports published by the International Narcotics Control Board this year.¹
2. The technical report on narcotic drugs is published in accordance with the provisions of article 15 (Reports of the Board) of the Single Convention on Narcotic Drugs of 1961, which stipulates that:
 - “1. The Board shall prepare an annual report on its work and such additional reports as it considers necessary containing also an analysis of the estimates and statistical information at its disposal, and, in appropriate cases, an account of the explanations, if any, given by or required of Governments, together with any observations and recommendations which the Board desires to make. These reports shall be submitted to the [Economic and Social] Council through the Commission, which may make such comments as it sees fit.
 - “2. The reports shall be communicated to the Parties and subsequently published by the Secretary-General. The Parties shall permit their unrestricted distribution.”
3. Furthermore, article 12 (Administration of the estimate system), paragraph 6, of the 1961 Convention stipulates that:

“In addition to the reports mentioned in article 15, the Board shall, at such times as it shall determine but at least annually, issue such information on the estimates as in its opinion will facilitate the carrying out of this Convention.”
4. The technical data on narcotic drugs are published online for control purposes and to meet the needs of researchers, enterprises and the general public. They are based on information furnished by Governments to the Board in accordance with the relevant provisions of the 1961 Convention.
5. The publication of statistical data provides information for analytical purposes, inter alia, on the availability and use of narcotic drugs in various countries and territories. The publication of estimates and statistics on production, manufacture, stocks and utilization of narcotic drugs is also intended to furnish producing and manufacturing countries with information on prospective trends, in order to encourage them to adjust their plans in a manner that will enable them to maintain a balance between supply and demand.
6. The preparation of estimates and statistics for submission to the Board requires the participation of several national administrative departments (health, police, customs, justice etc.), and the furnishing of coherent data is frequently a positive sign that good national control exists. The degree of effectiveness with which national authorities are operating can be assessed by analysing the information they furnish to the Board, for example by comparing their estimates and statistics for a particular year, as is done for all countries and territories in annex III of this technical report.

¹The other two technical reports are: *Psychotropic Substances: Statistics for 2024; Assessments of Annual Medical and Scientific Requirements for Substances in Schedules II, III and IV of the Convention on Psychotropic Substances of 1971 for 2026* (United Nations publication, Sales No. T.26.XI.2); and *Precursors, Chemicals and Equipment Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2025 on the Implementation of Articles 12 and 13 of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988* (United Nations publication, Sales No. E.26.XI.1).

INDEX OF NAMES OF COUNTRIES AND NON-METROPOLITAN TERRITORIES

Name of country or non-metropolitan territory

Afghanistan	Comoros
Albania	Congo
Algeria	Cook Islands
Andorra	Costa Rica
Angola	Côte d'Ivoire
<i>Anguilla</i>	Croatia
Antigua and Barbuda	Cuba
Argentina	<i>Curaçao</i>
Armenia	Cyprus
<i>Aruba</i>	Czechia
<i>Ascension</i>	Democratic People's Republic of Korea
Australia	Democratic Republic of the Congo
Austria	Denmark
Azerbaijan	Djibouti
Bahamas (The)	Dominica
Bahrain	Dominican Republic
Bangladesh	Ecuador
Barbados	Egypt
Belarus	El Salvador
Belgium	Equatorial Guinea
Belize	Eritrea
Benin	Estonia
<i>Bermuda</i>	Eswatini
Bhutan	Ethiopia
Bolivia (Plurinational State of)	<i>Falkland Islands (Malvinas)</i>
Bosnia and Herzegovina	Fiji
Botswana	Finland
Brazil	France
<i>British Virgin Islands</i>	<i>French Polynesia</i>
Brunei Darussalam	Gabon
Bulgaria	Gambia
Burkina Faso	Georgia
Burundi	Germany
Cabo Verde	Ghana
Cambodia	<i>Gibraltar</i>
Cameroon	Greece
Canada	Grenada
<i>Cayman Islands</i>	Guatemala
Central African Republic	Guinea
Chad	Guinea-Bissau
Chile	Guyana
China	Haiti
<i>Hong Kong Special Administrative Region of China</i>	Holy See
<i>Macao Special Administrative Region of China</i>	Honduras
<i>Christmas Island</i>	Hungary
<i>Cocos (Keeling) Islands</i>	Iceland
Colombia	India

Name of country or non-metropolitan territory

Indonesia	<i>Norfolk Island</i>
Iran (Islamic Republic of)	North Macedonia
Iraq	Norway
Ireland	Oman
Israel	Pakistan
Italy	Palau
Jamaica	Panama
Japan	Papua New Guinea
Jordan	Paraguay
Kazakhstan	Peru
Kenya	Philippines
Kiribati	Poland
Kuwait	Portugal
Kyrgyzstan	Qatar
Lao People's Democratic Republic	Republic of Korea
Latvia	Republic of Moldova
Lebanon	Romania
Lesotho	Russian Federation
Liberia	Rwanda
Libya	<i>Saint Helena</i>
Liechtenstein	Saint Kitts and Nevis
Lithuania	Saint Lucia
Luxembourg	Saint Vincent and the Grenadines
Madagascar	Samoa
Malawi	San Marino
Malaysia	Sao Tome and Principe
Maldives	Saudi Arabia
Mali	Senegal
Malta	Serbia
Marshall Islands	Seychelles
Mauritania	Sierra Leone
Mauritius	Singapore
Mexico	<i>Sint Maarten</i>
Micronesia (Federated States of)	Slovakia
Monaco	Slovenia
Mongolia	Solomon Islands
Montenegro	Somalia
<i>Montserrat</i>	South Africa
Morocco	South Sudan
Mozambique	Spain
Myanmar	Sri Lanka
Namibia	State of Palestine
Nauru	Sudan
Nepal	Suriname
Netherlands (Kingdom of the) ^a	Sweden
<i>New Caledonia</i>	Switzerland
New Zealand	Syrian Arab Republic
Nicaragua	Tajikistan
Niger	Thailand
Nigeria	Timor-Leste
Niue	Togo

^aPursuant to the communication dated 3 March 2023 from the permanent mission addressed to the Executive Office of the Secretary-General, the short form of the country name was changed from "Netherlands (the)" to "Netherlands (Kingdom of the)".

Name of country or non-metropolitan territory

Tonga	United Republic of Tanzania
Trinidad and Tobago	United States of America
<i>Tristan da Cunha</i>	Uruguay
Tunisia	Uzbekistan
Türkiye ^b	Vanuatu
Turkmenistan	Venezuela (Bolivarian Republic of)
<i>Turks and Caicos Islands</i>	Viet Nam
Tuvalu	<i>Wallis and Futuna Islands</i>
Uganda	Yemen
Ukraine	Zambia
United Arab Emirates	Zimbabwe
United Kingdom of Great Britain and Northern Ireland	

^bSince 31 May 2022, “Türkiye” has replaced “Turkey” as the short name used in the United Nations.

INDEX OF NAMES OF NARCOTIC DRUGS

Name of narcotic drug

Acetorphine	Dimenoxadol
Acetyl- <i>alpha</i> -methylfentanyl	Dimepheptanol
Acetyldihydrocodeine	Dimethylthiambutene
Acetylfentanyl	Dioxaphetyl butyrate
Acetylmethadol	Diphenoxylate
Acrylfentanyl	Dipipanone
AH-7921	Drotebanol
Alfentanil	Ecgonine
Allylprodine	Ethylmethylthiambutene
Alphacetylmethadol	Ethylmorphine
Alphameprodine	Etazene
Alphamethadol	Etonitazene
<i>Alpha</i> -Methylfentanyl	Etonitazepipne
<i>Alpha</i> -Methylthiofentanyl	Etonitazepyne
Alphaprodine	Etorphine
Anileridine	Etoxidine
Benzethidine	Fentanyl
Benzylmorphine	4-Fluoroisobutyrfentanyl
Betacetylmethadol	Furanylfentanyl
<i>Beta</i> -Hydroxyfentanyl	Furethidine
<i>Beta</i> -Hydroxy-3-methyl fentanyl	Heroin
Betameprodine	Hydrocodone
Betamethadol	Hydromorphinol
Betaprodine	Hydromorphone
Bezitramide	Hydroxypethidine
Brophine	Isomethadone
Butonitazene	Isotonitazene
Butyrfentanyl	Ketobemidone
Cannabis	Levomethorphan
Cannabis resin	Levomoramide
Carfentanil	Levophenacilmorphan
Clonitazene	Levorphanol
Coca leaf	Metazocine
Cocaine	Methadone
Codeine	Methadone intermediate
Codeine- <i>N</i> -oxide	Methoxyacetylfentanyl
Codoxime	Methyldesorphine
Concentrate of poppy straw	Methyldihydromorphine
Crotonylfentanyl	2-Methyl-AP-237
Cyclopropylfentanyl	3-Methylfentanyl
Desomorphine	3-Methylthiofentanyl
Dextromoramide	Metonitazene
Dextropropoxyphene	Metopon
Diampromide	Moramide intermediate
Diethylthiambutene	Morpheridine
Difenoxin	Morphine
Dihydrocodeine	Morphine methobromide
Dihydroetorphine	Morphine- <i>N</i> -oxide
Dihydromorphine	MPPP

Name of narcotic drug

MT-45	Pethidine intermediate C
Myrophine	Phenadoxone
Nicocodine	Phenampromide
Nicodicodine	Phenazocine
Nicomorphine	Phenomorphan
Noracymethadol	Phenoperidine
Norcodeine	Pholcodine
Norlevorphanol	Piminodine
Normethadone	Piritramide
Normorphine	Proheptazine
Norpipanone	Properidine
N-Desethyl isotonitazene	Propiram
N-Pyrrolidino metonitazene	Protonitazene
N-Pyrrolidino protonitazene	Racemethorphan
Ocfentanil	Racemoramide
Opium	Racemorphan
Oripavine	Remifentanil
Orthofluorofentanyl	Sufentanil
Oxycodone	Tetrahydrofuranylfentanyl
Oxymorphone	Thebacon
Parafluorobutyrylfentanyl	Thebaine
Para-Fluorofentanyl	Thiofentanyl
PEPAP	Tilidine
Pethidine	Trimeperidine
Pethidine intermediate A	U-47700
Pethidine intermediate B	Valerylfentanyl



Comments on the reported statistics on narcotic drugs



COMMENTS ON THE REPORTED STATISTICS ON NARCOTIC DRUGS

Summary

Special session of the General Assembly on the world drug problem held in 2016: 10 years on

In the decade since the General Assembly unanimously adopted the outcome document of its special session on the world drug problem held in 2016, entitled “Our joint commitment to effectively addressing and countering the world drug problem”, the international community has become much more aware of the importance of the operational recommendations contained in that document on ensuring the availability of and access to controlled substances exclusively for medical and scientific purposes, while preventing their diversion. The momentum towards correcting the significant disparity in the consumption of opioid analgesics for pain management between high- and low-income countries has not only been transformed into political commitments in some countries, but also into practical national policies in others, thus proving that access to controlled substances can be scaled up even in low-cost settings.

However, the progress made in increasing the availability of and access to opioid analgesics at the global level has yet to be reflected in the data made available to the Board. The latest analysis of the consumption data on opioid analgesics, as reported by Governments to the Board, has reconfirmed the persistent divide with regard to the consumption of opioid analgesics between high- and low-income countries. In 2024, countries in high-income regions (Western and Central Europe, North America and Oceania) reported a total consumption of opioid analgesics, expressed in defined daily doses for statistical purposes per million inhabitants per day (S-DDD_{pmpd}), of 20,495 S-DDD_{pmpd}, leaving less than 2% of the amount of opioid analgesics available worldwide for consumption in countries in all other regions (286 S-DDD_{pmpd}). The persistence of the disparity with regard to controlled substances available for pain management is of particular concern, especially considering the increasing burden of disease and palliative care needs for people living in the regions with the lowest level of consumption of opioid analgesics (South Asia, Africa, and Central America and the Caribbean).

The analysis of the global supply of opiate raw materials and demand for opiates in 2024, considered together with projections for 2025 and 2026, indicates once again that an uneven distribution in the consumption of opioid analgesics does not stem from a shortage of opiate raw materials. On the contrary, the overall utilization of poppy straw and concentrate of poppy straw derived from both the morphine-rich and the thebaine-rich varieties of opium poppy, increased even further in 2024. That suggests that global supply exceeded global demand in 2024, although the demand expressed by some countries may not accurately reflect the actual medical needs of their populations.

One contributing factor is that, even though the proportion of morphine used for direct consumption has increased, the global manufacture of morphine has decreased at a much more significant rate over the past 10 years. In 2024, the amount of morphine used for direct consumption totalled 35.3 tons, or 24.5% of the morphine available globally in that year, more than double the share of morphine available globally in 2015 (39.6 tons, or 9.4%). However, the global manufacture of morphine decreased, from 420 tons in 2015 to only about one third of that in 2024 (144 tons), thus creating significant problems in the procurement of medications containing morphine.

A comparison of the level of consumption of different opioid analgesics, measured in total S-DDD_{pmpd}, in 2024 highlights once again the predominance of fentanyl in relation to both global consumption (26%) and

consumption in all regions except for North America and South Asia. It was followed by hydrocodone, which accounted for about a quarter of global consumption in 2024 but which was consumed almost exclusively in the Americas. The consumption of oxycodone was highest in North America, Oceania and Western and Central Europe, although the substance was also consumed in other regions.

Over the past 10 years, opium production (expressed in morphine equivalent) has decreased steadily, owing to the reduction in the global demand for opium, which decreased from 38 tons in 2015 to 30 tons in 2024. Almost all opium production took place in India, which has continued to report the production of significant quantities of opium, despite having recently started to report the cultivation of opium poppy for the production of poppy straw.

In 2024, the global manufacture of thebaine increased further, to 149.7 tons, almost the same level as its peak in the past 10 years (156 tons in 2016). In contrast, the demand for medicines derived from thebaine has been fluctuating in recent years, owing to the restrictions imposed on prescription drugs derived from thebaine in the main market for such medicines, the United States of America, in response to their misuse and the related high number of overdose deaths.

Oxycodone has, over the past decade, been one of the drugs commonly associated with overdose deaths in relation to the misuse of prescription drugs, in particular in North America. The global manufacture of oxycodone reached a record high of 130.2 tons in 2016. After that, manufacture followed a decreasing trend, dropping to 69.5 tons in 2022; however, it increased again, to 103.6 tons, in 2024. In contrast to the global manufacture of oxycodone, the global manufacture of hydromorphone decreased slightly, from 5.3 tons in 2023 to 4.4 tons in 2024.

Regarding synthetic opioids, the global manufacture of fentanyl decreased from 2.6 tons in 2023 to 2 tons in 2024. A similar trend has also been observed in alfentanil, remifentanil and sufentanil, for which there were further reductions in global manufacture in 2024.

Over the past 10 years, the global quantity of licitly manufactured heroin has remained stable, averaging approximately 800 kg per year and amounting to more than 1,000 kg in some years. In 2024, the global manufacture of heroin increased to a record high and reached 1.9 tons.

The licit cultivation, production and utilization of cannabis have undergone significant increases since 2000, when an expanding number of countries worldwide began using cannabis and cannabis extracts for medical purposes and scientific research. In 2024, global cannabis production decreased to 549.2 tons. Data on cannabis, however, need to be considered with caution. As a result of the consultations held by the Board with experts and Member States since 2020, changes in the requirements for reporting on cannabis (understood as the flowering and fruiting top of the cannabis plant) and cannabis-related substances have been introduced. As of 2024, cannabis and cannabis resin must be reported using the forms provided to Governments for reporting under the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol. However, any preparation or by-product derived from cannabis should be reported in terms of the cannabinoids that it contains, using the forms provided for reporting under the Convention on Psychotropic Substances of 1971.

For 2024, the Plurinational State of Bolivia reported the production of 25,728 tons of coca leaf obtained from licit coca bush cultivation, in accordance with the reservation made by the country in 2013. Peru reported the production of 1,259.3 tons of coca leaf. The global licit production and consumption of cocaine increased sharply in 2024, reaching 377.4 kg and 475.7 kg, respectively.

INTRODUCTION TO THE COMMENTS ON THE REPORTED STATISTICS ON NARCOTIC DRUGS

1. The present comments are intended to facilitate the use of the statistical information on the licit production, manufacture, consumption,¹ utilization² and stocks of, as well as trade in, opiate raw materials, the main opioids, including synthetic narcotic drugs under international control, and cannabis, coca leaf and cocaine that is presented in the tables of reported statistics. Unless otherwise indicated, the comments refer to developments during the past 10 years (2015–2024) or the past 20 years (2005–2024).

2. The tables of reported statistics in part IV of the present report, published online only, contain data furnished by Governments to the International Narcotics Control Board (INCB) in accordance with article 20 of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol.³ The most recent statistical data reflected in the comments are those relating to 2024. The failure by some Governments to submit reports or to provide precise and complete reports, which in some cases has been notable, may have a bearing on the accuracy of some of the information provided in the present report. The most pertinent conclusions and recommendations of INCB made on the basis of the analysis of statistical data are included in chapter II of its annual report for 2025.⁴

3. To streamline the analysis of data on all narcotic drugs and to provide a thematic focus on topics pertinent to the 1961 Convention as amended, the trends in the substances that have recently been scheduled under the 1961 Convention as amended, and the comparative trends in the consumption of opioid analgesics, are outlined in the present report. The report also contains an overview of the global supply of and demand for opiate raw materials, as well as the latest trends in the licit markets for natural alkaloids, semi-synthetic opioids, synthetic opioids, cannabis and coca leaf.

PART I. THEMATIC FOCUS: FROM FENTANYL ANALOGUES TO NOVEL SYNTHETIC OPIOIDS – SUBSTANCES SCHEDULED IN THE PAST DECADE UNDER THE 1961 CONVENTION AS AMENDED

4. More than 60 years since its entry into force, the 1961 Convention continues to play an important role in international drug control. In the face of the continuous emergence of various groups of new psychoactive substances and their associated public health risks, close to 30 substances have been scheduled under the 1961 Convention as amended over the past decade, thereby expanding the scope of control to a total of 145 substances as of 2025.

5. Substances controlled under the 1961 Convention as amended are subject to control measures that include licensing requirements, the estimation of required quantities, reporting, control and inspection, records and the prescription of medicines. Those control measures vary according to the different schedules of the Convention, with those included in both Schedules I and IV having the highest level of control, and those in Schedule III having the lowest level of control (see figure 1). While the substances in Schedule I are subject to standard drug control measures, additional control under Schedule IV involves the imposition of the strongest possible

¹For the purposes of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol, a drug is regarded as “consumed” when it has been supplied to any person or enterprise for retail distribution, medical use or scientific research; and “consumption” is construed accordingly (art. 1, para. 2, of the Convention).

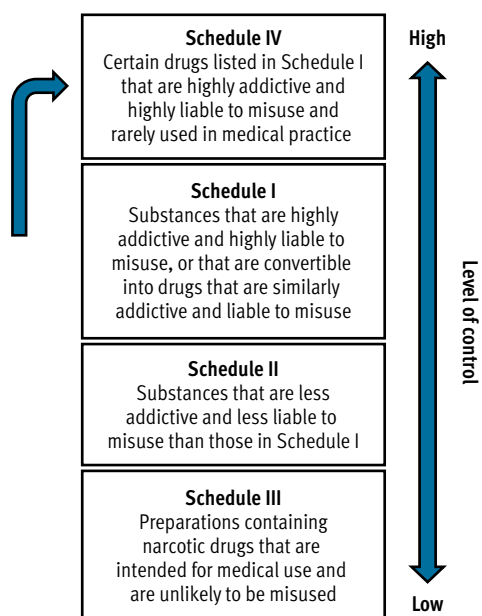
²Pursuant to article 20 of the 1961 Convention as amended, the Parties furnish the International Narcotics Control Board (INCB) with statistical returns on the utilization of narcotic drugs for the manufacture of other drugs, of preparations in Schedule III of the Convention and of substances not covered by the Convention and on the utilization of poppy straw for the manufacture of drugs.

³United Nations, *Treaty Series*, vol. 976, No. 14152.

⁴E/INCB/2025/1.

regulations on the relevant substances by prohibiting their production and supply, except under licence for specific purposes, such as medical treatment and research.

Figure 1. Schedules and level of control: the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol



6. Between 2016 and 2020, more than 10 fentanyl analogues were placed in Schedule I of the 1961 Convention as amended.⁵ Specifically, carfentanil and acetylfentanyl were placed in both Schedule I and Schedule IV of the Convention, owing to their addictive properties and potential for misuse. In its recommendations for the scheduling of those substances, the Expert Committee on Drug Dependence of the World Health Organization (WHO) stated that it was concerned about the extreme potency of the substances and the serious risk they posed to public health. The Committee also noted that the therapeutic advantages did not offset the severe threat to human health.

7. The scheduling since 2021 of a number of nitazene analogues, which are potent synthetic opioids, warrants even greater attention (see figure 2). Nitazenes are 2-benzylbenzimidazole opioids that were first synthesized in the late 1950s by pharmaceutical companies during their search for new analgesics. Structurally distinct from fentanyl and morphine, some nitazene analogues are much more potent than fentanyl and thus constitute significant public health risks.

8. In the context of the threat posed by synthetic opioids, the emergence of nitazenes represents a greater threat to the international community than ever before, owing to their ease of manufacture, structural diversity and extreme potency. **The Board recommends that Governments scale up their forensic capabilities in the development and use of nitazene-specific rapid forensic tests for the surveillance and identification of those substances and related precursor chemicals. The timely reporting of the manufacture, consumption and public health consequences of nitazenes to INCB, WHO or the United Nations Office on Drugs and Crime can greatly facilitate coordinated efforts in curbing their proliferation at the international level.**

Figure 2. Nitazene analogues scheduled under the 1961 Convention as amended, 2021–2025



⁵Those fentanyl analogues were: acetylfentanyl, butyrfentanyl, tetrahydrofurfanylfentanyl, ocfentanil, furanylfentanyl, 4-fluoroisobutyrfentanyl, carfentanil, acryloylfentanyl, parafluorobutyrylfentanyl, *ortho*-fluorofentanyl, methoxyacetylfentanyl, cyclopropylfentanyl, valerylfentanyl and crotonylfentanyl.

Comparative trends in the consumption of opioid analgesics

9. The international community is preparing for the review, in 2029, of the implementation of the commitments made in the Ministerial Declaration on Strengthening Our Actions at the National, Regional and International Levels to Accelerate the Implementation of Our Joint Commitments to Address and Counter the World Drug Problem, adopted in 2019. Meanwhile, the year 2026 will mark 10 years since the adoption by the General Assembly of the outcome document of its special session on the world drug problem held in 2016, entitled “Our joint commitment to effectively addressing and countering the world drug problem”. In that document, operational recommendations were made on ensuring the availability of and access to controlled substances exclusively for medical and scientific purposes, while preventing their diversion. Those recommendations incorporated the recommendations made by INCB in the supplement to its annual report for 2015, entitled *Availability of Internationally Controlled Drugs: Ensuring Adequate Access for Medical and Scientific Purposes—Indispensable, Adequately Available and Not Unduly Restricted*.⁶

10. The present section contains an analysis of the availability of narcotic drugs for medical and scientific purposes in the past 20 years, expressed in defined daily doses for statistical purposes per million inhabitants per day (S-DDD_{pmpd}).⁷ A regional analysis of the main trends in the consumption of the main opioid analgesics (codeine, dextropropoxyphene, dihydrocodeine, fentanyl, hydrocodone, hydromorphone, ketobemidone, morphine, oxycodone, pethidine, tilidine and tramperidine) shows that the highest consumption of those drugs has continued to take place in high-income countries in Europe, North America and Oceania.

11. The regional analysis confirms that a global disparity persists in the consumption of opioid analgesics. Regional S-DDD_{pmpd} is calculated on the basis of the total population of all countries in the region reporting consumption and the overall amounts of opioid analgesics reported as consumed. In 2024, countries in high-income regions (Western and Central Europe, North America and Oceania) reported a total consumption of opioid analgesics of 20,495 S-DDD_{pmpd}, leaving less than 2% of the amount of opioid analgesics available worldwide for consumption in countries in all other regions (286 S-DDD_{pmpd}).

12. In 2024, the reported consumption in some countries in North America, Oceania and Western and Central Europe resulted in regional averages of 17,341 S-DDD_{pmpd} for North America, 14,403 S-DDD_{pmpd} for Western and Central Europe and 5,102 S-DDD_{pmpd} for Oceania. North America remained the region with the highest consumption of opioids in the world (see figure 3). Compared with the levels of consumption in 2023, slight increases were observed in Western and Central Europe, while a small reduction was recorded in relation to North America and Oceania.

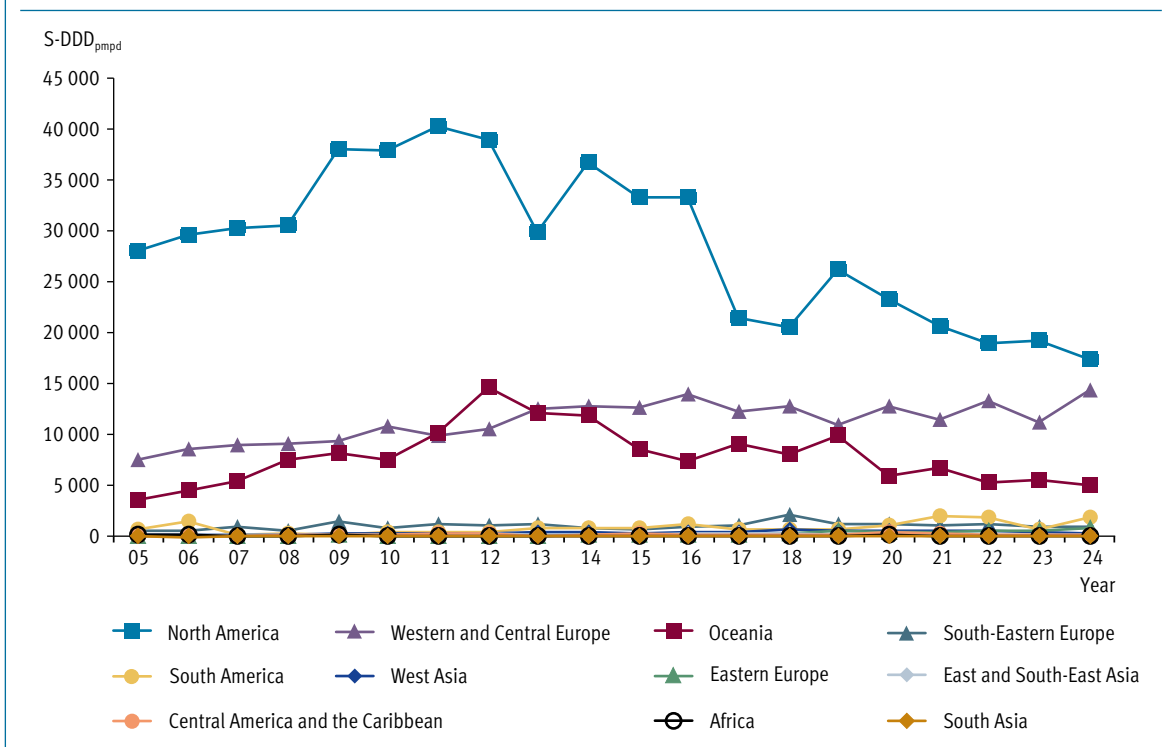
13. The levels of opioid consumption in North America, Oceania and Western and Central Europe are far higher than in all other regions of the world. However, there are also differences in the trends in such consumption among those regions. For example, in North America, the sharp decline in the consumption of opioids in terms of S-DDD_{pmpd} since the height of the opioid crisis in the early 2010s has been driven mainly by the decreased consumption of hydrocodone, together with a slight reduction in the consumption of oxycodone and fentanyl. In Western and Central Europe, there has been a trend of increased opioid consumption in the past 20 years, driven mostly by increases in the consumption of fentanyl.

14. In South-Eastern Europe and South America, levels of opioid consumption, although irregular in pattern, have remained below those in North America, Oceania and Western and Central Europe over the past 20 years. In 2024, they rose to 1,860 S-DDD_{pmpd} in South America and 1,005 S-DDD_{pmpd} in South-Eastern Europe. Countries in Eastern Europe have reported an increasing trend in consumption since 2013, and consumption levels reached 840 S-DDD_{pmpd} in 2024. Levels of opioid consumption in West Asia peaked in 2018, but have decreased since, and countries in the region reported a total consumption of 340 S-DDD_{pmpd} in 2024. Countries in East and South-East Asia have reported progress in relation to the consumption of opioids in their territory in the past 20 years, registering an increase from 102 S-DDD_{pmpd} in 2005 to 225 S-DDD_{pmpd} in 2024.

⁶E/INCB/2015/1/Supp.1.

⁷The list of defined daily doses for statistical purposes (S-DDD) and an explanation of that concept are contained in part IV, in the notes to tables XIV.1.a–i, XIV.2 and XIV.3.

Figure 3. Consumption of opioids for pain management by region, expressed in S-DDD per million inhabitants per day,^a 2005–2024



^aThe regional consumption of a drug is calculated as the average consumption of all countries reporting consumption of the drug in the region.

15. The Board considers levels of consumption of opioid analgesics in quantities between 100 and 200 S-DDD_{pmpd} to be inadequate, and in quantities of less than 100 S-DDD_{pmpd} to be very inadequate. In that context, the average levels of such consumption reported in Central America and the Caribbean (193 S-DDD_{pmpd}), Africa (79 S-DDD_{pmpd}) and South Asia (34 S-DDD_{pmpd}) in 2024 continue to be of particular concern.

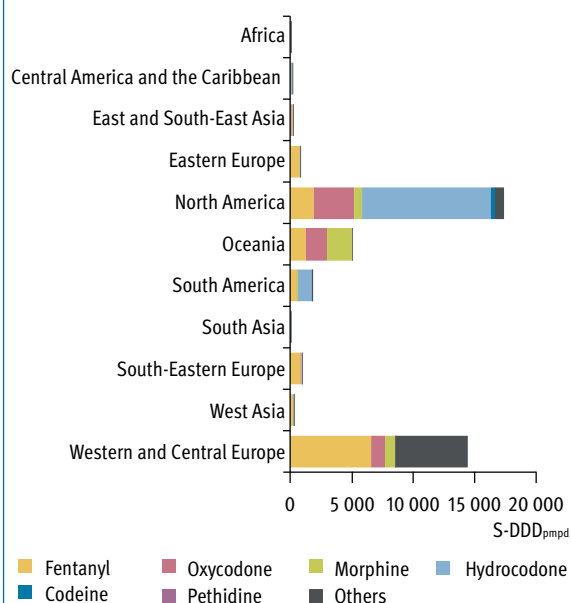
16. Figures 4 and 5 show the level of consumption of opioid analgesics by substance and region in 2024, in total S-DDD_{pmpd}. The data highlight, once again, the predominance of fentanyl, in comparison with other substances, in most regions of the world; the substance accounted for 26.4% of the global consumption of all drugs.

17. The consumption of oxycodone is highest in North America, Oceania and Western and Central Europe (90% of global consumption), although the substance is also consumed in other regions. Hydrocodone consumption is significant in North America (90% of global consumption) and South America (9.7%). Considerably more morphine is consumed in Oceania, Western and Central Europe and North America (93%) than in most other regions, where the levels of consumption are less pronounced.

18. Many countries have continued to report having difficulties in procuring medications containing morphine, despite the fact that opiate raw materials have been reported to be available in sufficient quantities. Although most countries and territories reported the consumption of morphine in 2024, many people still had limited access to it. The differences in consumption levels between countries continue to be significant (see table XIV of part IV). Various factors, such as economic and commercial interests, the knowledge and training of healthcare professionals and regulatory frameworks, are influencing the ability of countries to procure and administer morphine for the treatment of pain.

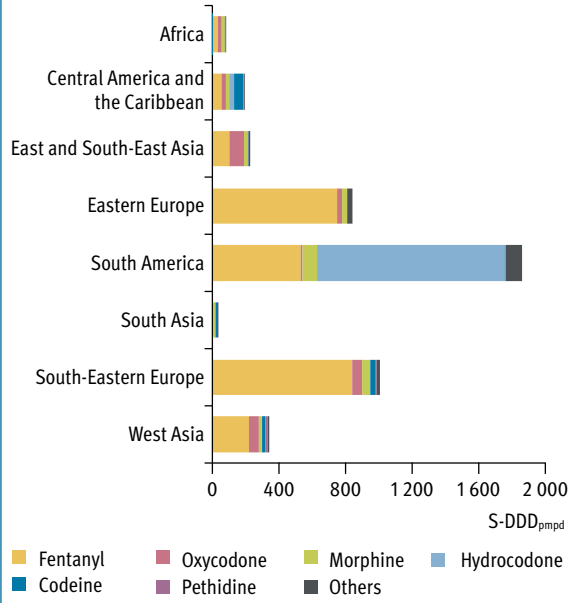
19. In 2024, 82% of the world population, mainly in low- and middle-income countries (represented by the category “Other countries” in figure 6), consumed only 14% of the total amount of morphine used worldwide for

Figure 4. Consumption of codeine, fentanyl, hydrocodone, morphine, oxycodone, pethidine and other opioids, by region, expressed in S-DDD per million inhabitants per day,^a 2024



^aThe regional consumption of a drug is calculated as the average consumption of all countries reporting consumption of the drug in the region.

Figure 5. Consumption of codeine, fentanyl, hydrocodone, morphine, oxycodone, pethidine and other opioids, by regions with the lowest consumption, expressed in S-DDD per million inhabitants per day,^a 2024

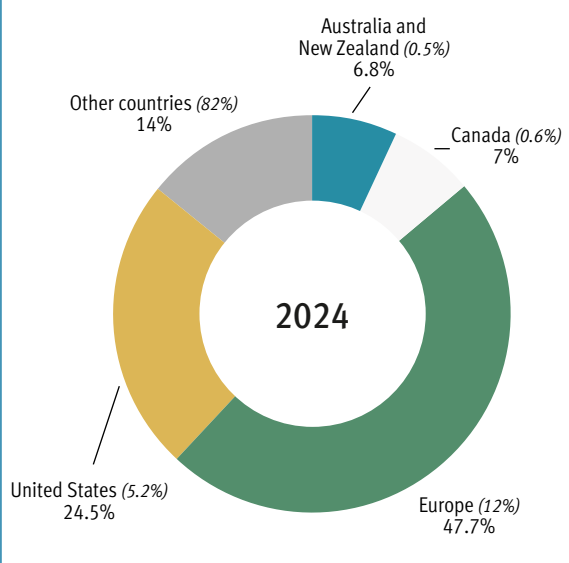


^aThe regional consumption of a drug is calculated as the average consumption of all countries reporting consumption of the drug in the region.

the management of pain and suffering. The remaining 86% of the total consumption of morphine, excluding preparations included in Schedule III of the 1961 Convention as amended, continued to be concentrated in a small number of countries, mainly in Europe and North America. The disparity in the consumption of narcotic drugs for palliative care has continued to be a matter of concern, particularly in relation to access to and the availability of affordable opioid analgesics such as morphine.

20. The Board reiterates that there is an urgent need to increase access to and the availability of opioid analgesics and to further promote and facilitate the rational prescription and use of opioid analgesics in all countries reporting inadequate and very inadequate levels of consumption, and to that end calls for targeted public policies supported by Governments, health systems and health professionals, civil society, the pharmaceutical industry and the international community.

Figure 6. Morphine: distribution of consumption in relation to the share of the world population, 2024



Note: Percentages in parentheses refer to share of the total population of all reporting countries worldwide.

PART II. SUPPLY OF OPIATE RAW MATERIALS AND DEMAND FOR OPIATES FOR MEDICAL AND SCIENTIFIC PURPOSES

Scope, definitions and methodology

21. INCB, in fulfilment of the functions assigned to it under the 1961 Convention as amended and the relevant resolutions of the Economic and Social Council and the Commission on Narcotic Drugs, regularly examines issues affecting the supply of opiate raw materials and the demand for opiates in relation to meeting the licit requirements and endeavours to ensure a standing balance between that supply and demand.

Opiate raw materials, opiates and opioids

22. The category of opiate raw materials comprises opium and poppy straw, which are the raw materials obtained from the opium poppy plant (*Papaver somniferum*), from which natural alkaloids such as morphine, thebaine, codeine and oripavine are extracted. Concentrate of poppy straw is a product obtained in the process of extracting natural alkaloids from poppy straw. “Opiate” is the term generally used to designate drugs derived from opium and their chemically related derivatives, including natural alkaloids, as well as semi-synthetic opioids such as dihydrocodeine, heroin, hydromorphone and oxycodone. “Opioid” is a more general term for both natural and synthetic drugs with morphine-like properties, although the chemical structure of such drugs may differ from that of morphine.⁸

Supply of opiate raw materials and demand for opiates

23. In previous annual reports of the Board, the analyses of the supply of opiate raw materials and of the demand for opiates for medical and scientific purposes were presented in separate parts of the reports. Henceforth, however, the analysis of supply and demand will be presented together with the analysis of the statistical information on consumption, utilization and stocks of, as well as trade in, the main opioids, including synthetic narcotic drugs under international control. The new methodology is aimed at streamlining the analysis of data on all narcotic drugs as defined in the 1961 Convention as amended.

24. The present analysis is based on the data provided by Governments through statistical returns and estimates of requirements for narcotic drugs that are furnished on an annual basis, as well as through consultations with the Board.⁹ The analysis of the supply of opiate raw materials is conducted on the basis of data on the cultivation of opium poppy for the extraction of alkaloids, on the production of opiate raw materials for medical and scientific purposes and on stocks, and involves the calculation of that production in relation to the level of stocks of opiate raw materials measured in morphine and thebaine equivalent. The analysis of the demand for opiates for medical and scientific purposes is conducted on the basis of data on the utilization of opiate raw materials and on the demand for finished opiates for global consumption for medical and scientific purposes derived from all opiates. The balance between supply and demand at the global level is analysed by comparing the supply (in terms of production and stocks) and the demand (in terms of utilization) as measured in morphine and thebaine equivalent, with the supply being sufficient at the global level when it is enough to cover, for at least 12 months, the expressed demand for the forthcoming years.

25. In the analysis of total global production, raw materials rich in morphine and the opiates derived from them are, in accordance with the methodology adopted by INCB, considered separately from raw materials rich in thebaine and the opiates derived from them. In table 1, the cultivation of opium poppy rich in codeine and of opium poppy rich in oripavine is reported separately in the data for Australia and Spain. However, in the

⁸From a clinical point of view, opioids may be classified according to their actions compared with those of morphine: similar affinity (agonist), competitive (antagonist) or mixed (agonist/antagonist) for the same receptor sites (the so-called “opioid receptors”) in the central and peripheral nervous systems.

⁹The analysis of production excludes data for China and the Democratic People’s Republic of Korea, which produce opiate raw materials solely for domestic use.

calculations of global supply in table 2, opium poppy rich in codeine is included in the totals for opium poppy rich in morphine while in the calculations of global demand in table 3, opium poppy rich in oripavine is included in the totals for opium poppy rich in thebaine; that approach has been taken pending the development of a system for the calculation of codeine and oripavine equivalency. The global supply of opiate raw materials is measured by the levels of stocks and production of those materials. The global demand for opiate raw materials is assessed on the basis of data on the global utilization of opiate raw materials for the manufacture of all opiates.

26. **Although the data reported by countries have been sufficient for the Board to conduct the analysis of the supply of opiate raw materials and the demand for opiates at the global level, not all data have been received. The Board encourages the major producing and importing countries to furnish all requested data related to supply and demand, including advance or indicative data in cases where actual data are not available. Those data are critical to the analysis of the global supply of opiate raw materials and the demand for opiates.**

Supply of opiate raw materials: cultivation, production and stocks

Cultivation of opium poppy for the extraction of alkaloids, 2021–2026

27. Table 1 provides information on the area cultivated with opium poppy (*Papaver somniferum*) for the extraction of alkaloids in the main producing countries; data on the varieties of opium poppy rich in morphine, thebaine, codeine or oripavine are listed separately, where applicable. For all types of raw materials, the estimated area of cultivation is given for each year for which such estimates are available. Data on the area sown and the area actually harvested are given for the years for which such data are available.

28. Although most cultivating countries extract alkaloids from poppy straw, India uses a little over half of its cultivation for the extraction of alkaloids from opium (also called “raw opium”), the latex obtained by making incisions on the green capsules of opium poppy plants. For statistical and comparison purposes, the data reported on the production of opium are standardized at 10% moisture content. When appropriate, the data on opium are also expressed in morphine equivalent,¹⁰ in order to enable comparisons between opium and poppy straw.

29. Poppy straw consists of all parts of the opium poppy plant after mowing, except for the seeds. Morphine is the predominant alkaloid found in the varieties of opium poppy plant cultivated in most producing countries. The commercial cultivation of the variety of opium poppy with a high thebaine content started in the second half of the 1990s. In the present report, poppy straw produced from varieties of opium poppy plant rich in morphine is referred to as “poppy straw (M)”, poppy straw produced from varieties of opium poppy plant rich in thebaine is referred to as “poppy straw (T)”, poppy straw produced from varieties of opium poppy plant rich in codeine is referred to as “poppy straw (C)”, poppy straw produced from varieties of opium poppy plant rich in oripavine is referred to as “poppy straw (O)”, and poppy straw produced from varieties of opium poppy plant rich in noscapine is referred to as “poppy straw (N)”. Some of those varieties contain, in addition to the main alkaloid (morphine, thebaine, codeine, oripavine or noscapine), other alkaloids that can be extracted.

30. Although the statistics and other data on the production of poppy straw are furnished on a voluntary basis, most countries cultivating opium poppy plants for the extraction of alkaloids did provide such data in 2024. There was a slight overall increase in the total area harvested for all varieties of opium poppy for the extraction of alkaloids, from 37,447 ha in 2023 to 39,778 ha in 2024. Cultivation increased for all varieties of opium poppy except the morphine-rich variety.

31. In 2023, the opium poppy varieties rich in codeine and oripavine were reported to have been cultivated only in Spain, and the thebaine-rich variety was reported to have been cultivated only in Australia. In the technical

¹⁰The morphine or thebaine equivalent is calculated by INCB on the basis of the industrial yield of each alkaloid obtained from opium or poppy straw. Lesser alkaloids contained in opium or poppy straw that are convertible into morphine or thebaine have also been included, adjusted using the appropriate conversion rates, whenever the Board has been informed of their extraction in commercially significant quantities.

report of the Board for 2024 on narcotic drugs, INCB highlighted that that situation might pose the risk of market shortages of raw materials in the event of crop failure. Conversely, in 2024, all varieties of opium poppy were reported to have been cultivated in at least two countries, thereby reducing that risk.

32. The overall cultivation of opium poppy for the extraction of alkaloids is expected to increase to 46,333 ha in 2025, on the basis of the advance data on the related harvest. A significant increase in such cultivation is expected in 2026, to a total of 122,850 ha. However, given that the data for 2026 are based on the estimates of the area to be cultivated, the actual area sown and harvested may be considerably lower. All the varieties of opium poppy are expected to be cultivated in at least two countries in both 2025 and 2026.

33. **The Board welcomes the fact that more countries are cultivating varieties of opium poppy rich in different alkaloids, thereby reducing the risk of shortages on the markets for those varieties, against which it cautioned in its report for 2024 on narcotic drugs.**

Table 1. Area cultivated with varieties of opium poppy rich in morphine, thebaine, codeine and oripavine, 2021–2026

(Estimated area, as confirmed by INCB, area sown and area harvested, in hectares)

	2021	2022	2023	2024 ^a	2025 ^b	2026 ^c
Australia						
Opium poppy rich in morphine						
Estimated area	3 900	600	330	—	250	400
Area sown	2 698	345	175	206	206	n/a
Actual area harvested	2 420	270	50	181	184	n/a
Opium poppy rich in thebaine						
Estimated area	5 993	3 750	4 050	4 050	4 300	4 500
Area sown	5 480	3 154	3 931	2 247	2 006	n/a
Actual area harvested	4 989	2 910	2 718	2 169	1 829	n/a
Opium poppy rich in codeine						
Estimated area	3 649	1 800	—	935	2 000	1 500
Area sown	2 286	1 421	—	1 284	1 537	n/a
Actual area harvested	1 954	1 314	—	1 167	1 417	n/a
Opium poppy rich in oripavine						
Estimated area	1 450	1 700	—	2 400	5 150	4 500
Area sown	727	1 678	—	1 169	4 320	n/a
Actual area harvested	641	1 394	—	1 063	3 539	n/a
Opium poppy rich in morphine, thebaine, codeine and oripavine						
Total estimated area	14 992	7 850	4 380	7 385	11 700	10 900
Total area sown	11 191	6 598	4 106	4 906	8 069	n/a
Total actual area harvested	10 004	5 888	2 768	4 580	6 969	n/a
France						
Opium poppy rich in morphine						
Estimated area	5 400	5 347	5 100	4 642	5 824	5 350
Area sown	5 253	5 347	5 100	4 440	5 783	n/a
Actual area harvested	4 921	4 929	5 100	3 866	5 354	n/a

	2021	2022	2023	2024 ^a	2025 ^b	2026 ^c
Opium poppy rich in thebaine						
Estimated area	800	—	—	1 588	1 858	1 650
Area sown	1 079	—	—	1 558	1 858	n/a
Actual area harvested	1 075	—	—	1 519	1 716	n/a
Opium poppy rich in morphine and thebaine						
Total estimated area	6 200	5 347	5 100	6 230	7 682	7 000
Total area sown	6 332	5 347	5 100	5 998	7 641	n/a
Total actual area harvested	5 996	4 929	5 100	5 385	7 070	n/a
Hungary						
Opium poppy rich in morphine						
Estimated area	8 000	1 700	500	600	500	500
Area sown	682	182	137	479	479	n/a
Actual area harvested	367	46	90	240	110	n/a
Opium poppy rich in thebaine						
Estimated area	—	—	—	—	—	—
Area sown	—	—	—	—	—	—
Actual area harvested	—	—	—	—	—	—
Opium poppy rich in morphine and thebaine						
Total estimated area	8 000	1 700	500	12 702	15 800	500
Total area sown	682	182	137	479	479	n/a
Total actual area harvested	367	46	90	240	110	n/a
India						
Opium poppy rich in morphine						
Total estimated area	5 498	8 500	11 000	10 200	9 830 ^d	15 000
Total area sown	5 498	8 500	8 446	9 661		n/a
Total actual area harvested	5 406	8 500	8 156	9 474		n/a
Slovakia						
Opium poppy rich in morphine						
Total estimated area	3 500	100	2 000	100	100	250
Total area sown	2 768	158	30	—	20	n/a
Total actual area harvested	2 540	67	—	—	—	n/a
Spain						
Opium poppy rich in morphine						
Estimated area	525	3 400	863	624	550	4 800
Area sown	510	3 049	750	619	199	n/a
Actual area harvested	510	3 041	725	619	199	n/a
Opium poppy rich in thebaine						
Estimated area	20	—	—	—	20	4 300
Area sown	20	—	—	—	15	n/a
Actual area harvested	20	—	—	—	15	n/a
Opium poppy rich in codeine						
Estimated area	6 705	2 389	3 022	4 244	5 515	5 400
Area sown	6 540	2 162	2 216	4 104	4 969	n/a
Actual area harvested	6 540	2 142	2 154	3 928	4 786	n/a

Table 1. Area cultivated with varieties of opium poppy rich in morphine, thebaine, codeine and oripavine, 2021–2026 (continued)

	2021	2022	2023	2024 ^a	2025 ^b	2026 ^c
Opium poppy rich in oripavine						
Estimated area	3 900	581	844	2 052	4 025	4 700
Area sown	3 495	581	734	2 041	3 732	n/a
Actual area harvested	3 495	581	631	2 036	3 633	n/a
Opium poppy rich in morphine, thebaine, codeine and oripavine						
Total estimated area	11 150	6 370	4 729	6 920	10 110	19 200
Total area sown	10 565	5 792	3 700	6 764	8 915	n/a
Total actual area harvested	10 565	5 764	3 510	6 583	8 633	n/a
Türkiye^e						
Opium poppy rich in morphine						
Total estimated area	51 673	41 162	21 754	64 600	20 081	70 000
Total area sown	51 673	41 159	21 065	20 081	18 982	n/a
Total actual area harvested	41 893	26 499	17 823	13 516	13 721	n/a
Total area harvested:						
Morphine-rich variety	58 057	43 352	31 944	27 896	29 398	96 300
Thebaine-rich variety	6 084	2 910	2 718	3 688	3 560	10 450
Codeine-rich variety	8 494	3 456	2 154	5 095	6 203	6 900
Oripavine-rich variety	4 136	1 975	631	3 099	7 172	9 200
Grand total	76 771	51 693	37 447	39 778	46 333	122 850

Notes: A field shaded in red signifies that the given area exceeds the estimated area or the total estimated area. Figures in italics reflect advance data and projected data. A dash (—) indicates that the amount is nil. Two dots (..) signify that statistical data were furnished but values were not submitted for the item in question. The annotation “n/a” indicates that data are not yet available.

^a Figures for 2024 are based on annual statistics furnished by Governments on form C, or where such information is not available, on advance data provided by Governments during consultations with the Board.

^b Figures for 2025 are based on advance data provided by Governments during consultations with the Board.

^c Figures for 2026 are based on estimates (form B) furnished by Governments to the Board.

^d At the time of the drafting of the present report, data for India could only be provided for the estimated area under cultivation, owing to the crop cycle.

^e Since 31 May 2022, “Türkiye” has replaced “Turkey” as the short name used in the United Nations.

Cultivation of opium poppy rich in morphine

34. Over the years, the global production of opium poppy rich in morphine has fluctuated sharply, mainly because of unstable weather conditions and varying needs in manufacturing countries. In recent years, the area under cultivation with the morphine-rich variety of opium poppy has been steadily decreasing at the global level, dropping to 27,896 ha in 2024, less than half the area cultivated in 2021. Although increases in cultivation are expected in 2025 and 2026, cultivation patterns are showing significant variation between countries.

35. After years of significant decreases in its cultivation of opium poppy rich in morphine, cultivation of this variety of opium poppy in Australia has slightly increased, to 181 tons in 2024, and the country is planning to continue to increase such cultivation in 2025 and 2026.

36. Cultivation in France decreased from 5,100 ha in 2023 to 3,866 ha in 2024. In 2025, however, France has observed an increase in the cultivation of opium poppy rich in morphine in its territory, to a total of 5,354 ha. Cultivation is expected to remain at approximately the same level in 2026, at 5,350 ha.

37. Cultivation in Hungary more than doubled in 2024, to 240 ha, from 90 ha in 2023, and the country is planning to halve it, to 110 ha, in 2025, before again increasing it, to 500 ha, in 2026.

38. India has been increasing its cultivation of opium poppy rich in morphine in recent years owing to the introduction of technology for the extraction of alkaloids from poppy straw, in addition to its traditional extraction of alkaloids from opium. The country's cultivation has further increased, from 8,156 ha in 2023 to 9,474 ha in 2024, of which 5,351 ha was to be used for the production of opium and 4,123 ha for the production of poppy straw. A further increase is expected in 2025, to a combined total of 9,830 ha, of which 5,547 ha is expected to be used for the production of opium and 4,283 ha for the production of poppy straw. A significant increase of up to 15,000 ha in the total area under cultivation is expected in 2026, although no information was available at the time of drafting the present report on the ratio of the areas to be used individually for opium and poppy straw.

39. Slovakia did not harvest any opium poppy for the extraction of alkaloids in 2023 and 2024 and is not expecting to harvest any in 2025. In 2026, Slovakia may harvest up to 250 ha of opium poppy rich in morphine.

40. Spain, in which 619 ha of opium poppy rich in morphine were cultivated in 2024 and 199 ha were expected to be cultivated in 2025, has continued its recent trend of reducing such cultivation as it focuses on cultivating other varieties of opium poppy. However, the country plans to significantly increase the cultivation of the morphine-rich variety of opium poppy in 2026, to 4,800 ha.

41. The largest decrease in cultivation has been noted in Türkiye, which has been steadily decreasing its cultivation of opium poppy rich in morphine for a number of years in order to reduce its stocks. Türkiye harvested 13,516 ha of that variety of opium poppy in 2024 and slightly more in 2025 (13,721 ha). That was a threefold decrease compared with 2021, when it harvested a total of 41,893 ha. However, the country is projecting a potential return in 2026 to the traditionally high levels of production (70,000 ha).

Cultivation of opium poppy rich in thebaine

42. The global cultivation of opium poppy rich in thebaine has generally followed a steadier trend than that of opium poppy rich in morphine, and that trend has more closely followed the expressed demand. In 2024, the total global harvested area of the thebaine-rich variety of opium poppy was 3,688 ha, an increase from 2,718 ha in 2023. Although there has been a small decrease in the area harvested in 2025, to 3,560 ha, a significant increase is expected in 2026, to 10,450 ha, driven by a higher projection for Australia.

43. Australia, France and Spain have historically been the most prominent countries cultivating the thebaine-rich variety of opium poppy, with some sporadic reporting by Hungary, albeit not in recent years. After a few years in which Australia was the sole country cultivating opium poppy rich in thebaine, France resumed, in 2024, such cultivation, which it had halted after 2021.

44. While Australia reduced its cultivation of opium poppy rich in thebaine in 2024 to 2,169 ha, from 2,718 ha in 2023, the cultivation in France of 1,519 ha raised the global total and alleviated the risk of shortages of this variety of opium poppy. In 2025, cultivation in Australia is expected to decrease further, to 1,829 ha, while France is expected to increase its cultivation, to 1,716 ha. Those cultivation patterns are expected to be reversed in 2026, when Australia is expected to considerably increase its production, to 4,500 ha, and France to decrease its cultivation slightly, to 1,650 ha.

Cultivation of opium poppy rich in codeine

45. The cultivation of opium poppy rich in codeine for commercial purposes was first reported by Australia in 2009. Since then, France and Spain have also reported the cultivation of this variety of opium poppy, specifically to meet the high global demand for codeine. The global cultivation of this variety of opium poppy decreased significantly in 2022 and 2023, but began rising and reached 5,095 ha in 2024. It is expected to rise further, to 6,203 ha in 2025 and 6,900 ha in 2026.

46. Spain was the only country to report the cultivation of the codeine-rich variety of opium poppy in 2023 and was the country reporting the highest level of production in 2024, having nearly doubled its cultivation, from 2,154 ha in 2023 to 3,928 ha in 2024. The country plans to increase its cultivation of this variety of opium poppy further in 2025 and 2026, to 4,786 ha and 5,400 ha, respectively. Australia resumed its cultivation of the codeine-rich variety of opium poppy in 2024, having paused it in 2023, and reported the cultivation of a total area of 1,167 ha, slightly larger than the area it had initially estimated. Australia plans to continue to slowly increase its cultivation of opium poppy rich in codeine, to 1,417 ha in 2025 and 1,500 ha in 2026.

Cultivation of opium poppy rich in oripavine

47. The Board has been following the global cultivation of opium poppy rich in oripavine since 2017, when Spain first reported its cultivation for the extraction of alkaloids, followed by Australia. After years of decreases in the global cultivation of the oripavine-rich variety of opium poppy, there was a significant increase in 2024, to 3,099 ha. Further increases are foreseen, with 7,172 ha expected to be harvested in 2025 and 9,200 ha estimated to be harvested in 2026.

48. In 2023, Spain was the sole country reporting the production of the oripavine-rich variety of opium poppy, but Australia resumed its cultivation of this variety in 2024 (an area of 1,063 ha). Australia is expected to continue increasing its cultivation of opium poppy rich in oripavine, tripling it to 3,539 ha in 2025 and increasing it further, to an estimated 4,500 ha in 2026. In 2024, Spain reported the cultivation of an area nearly double that reported by Australia in the same year; the area under cultivation in Spain, 2,036 ha, represented a threefold increase compared with the area under cultivation in the country in 2023. Spain is expected to maintain its role as the country with the highest production of opium poppy rich in oripavine in the coming years, as it is expected to harvest an area of 3,633 ha in 2025 and to cultivate an area of 4,700 ha in 2026.

Cultivation of opium poppy rich in noscapine

49. In recent years, an increase in the cultivation of opium poppy rich in noscapine has been reported by some countries. Although noscapine is not under international control, a significant amount of the morphine alkaloid can be extracted from opium poppy rich in noscapine. **For the purposes of monitoring the manufacture of morphine, the Board requests that the countries that cultivate opium poppy rich in noscapine provide information in a consistent and regular manner about its cultivation and intended use and report to the Board on any extraction and use of the morphine alkaloid obtained from such opium poppy.**

50. Although there were no reports of the cultivation of opium poppy rich in noscapine in 2023, two countries reported the cultivation or planned cultivation of this variety of opium poppy in the period 2024–2026. However, neither of those countries reported the extraction of morphine from it. Australia reported the cultivation of 339 ha of the noscapine-rich variety of opium poppy in 2024 and 491 ha in 2025, with the same area being expected to be cultivated in 2026. France harvested 1,817 ha of opium poppy rich in noscapine in 2024 and 1,776 ha in 2025. It plans to cultivate 1,750 ha of this variety of opium poppy in 2026.

Cultivation of opium poppy used for decorative purposes

51. In some countries, the poppy plant is cultivated for purposes other than the production or manufacture of narcotic drugs, such as culinary and decorative purposes. In 2024, seven countries reported the cultivation of the poppy plant for such purposes: Austria, Canada, Czechia, Germany, Hungary, the Russian Federation and Slovakia.

52. **The Board welcomes the fact that the cultivation of opium poppy for the extraction of alkaloids appears to be sufficient to ensure that the supply of opiate raw materials, expressed in production and stocks, will remain sufficient to cover the global demand.**

Production of opiate raw materials for medical and scientific purposes

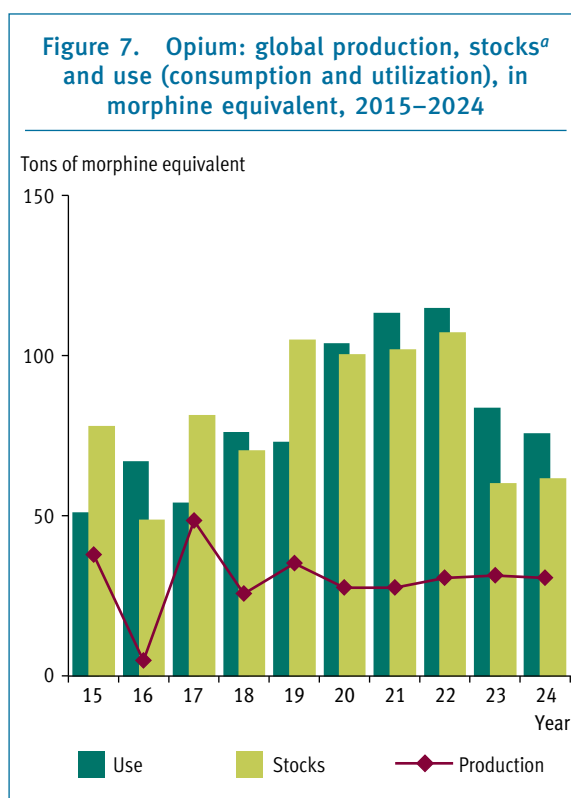
Opium

53. In the past 10 years, opium production has decreased considerably. In 2015, approximately 38 tons of opium in morphine equivalent were produced. Since then, the amount produced each year has followed an overall decreasing trend. The highest levels of opium production in the past 10 years were recorded in 2017, amounting to approximately 48 tons in morphine equivalent. Production of opium decreased in 2024, to 30 tons in morphine equivalent.

54. India has been the country reporting the highest level of production, and the only country reporting licit exports, of raw opium for many years. In 2024, the country continued to account for nearly all global production of raw opium, reporting 30 tons in morphine equivalent.

55. India has recently started to report the cultivation of opium poppy for the production of poppy straw. In 2025 and 2026, India is expected to continue its production of opium for the extraction of alkaloids at similar levels, and it is also expected to extract alkaloids from poppy straw.

56. As in previous years, in 2024, most of the opium produced globally was used for the extraction of alkaloids. In 2024, the Islamic Republic of Iran was the country reporting the highest utilization of opium obtained in seizures of the substance for the extraction of alkaloids, reporting 50 tons in morphine equivalent. India was the only other country reporting such utilization, which amounted to 25 tons in morphine equivalent. Details on the utilization of opium for the extraction of alkaloids and on the alkaloids obtained are provided in part IV of the present publication,¹¹ and the main information on the supply (represented by production and stocks) and demand (represented by utilization) of opium is presented in figure 7 and in table 2.



^aStocks as at 31 December of each year.

Production of poppy straw from opium poppy rich in morphine, thebaine, codeine and oripavine

57. The global production of poppy straw (M) amounted to 20,207 tons in gross weight in 2024. Australia, France, Spain and Türkiye had been the main countries reporting the production of poppy straw (M) in the previous two decades. In 2024, however, the country reporting the highest level of production of poppy straw (M) for the extraction of alkaloids was Türkiye, which accounted for 6,229 tons, followed by India (3,838 tons), France (2,954 tons) and China, whose production is excluded from the present analysis.¹² Hungary was the main exporting country for poppy straw (M). Türkiye was the country with the highest utilization of poppy straw (M), accounting for 80% of the total global utilization of 17,251 tons. Global stocks of poppy straw, which amounted to 10,192 tons, were distributed among Australia (82%), Hungary (12%) and Spain (6%).

¹¹Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

¹²The present analysis is based predominantly on raw materials obtained from opium poppy rich in morphine but includes the morphine alkaloid contained in opium poppy rich in thebaine and in opium poppy rich in codeine, whenever appropriate.

58. The global production of poppy straw (T) amounted to 5,090 tons in 2024, with Australia accounting for nearly 64% and France for almost all of the rest of the global total. Australia was virtually the sole country holding stocks of poppy straw (T), holding 99% of the global total of 269 tons; Hungary and Spain held the remaining 1%. Australia was also the main country utilizing poppy straw (T), accounting for 62% of the global total of 6,447 tons. France utilized 26% of that total, and Spain utilized 12%.

59. The global production of poppy straw (C) amounted to 6,275 tons in 2024, with Spain accounting for 69% of the global total and Australia for the remaining 31%. Of the total global utilization of poppy straw (C), which was 6,569 tons, Spain utilized 77% and Australia utilized 23%. Australia held 99% of the total global stocks of poppy straw (C), which amounted to 636 tons, while Spain held the remaining 1%.

60. The global production of poppy straw (O) amounted to 3,607 tons in 2024, with Spain accounting for 68% and Australia for 32% of that total. The global utilization of poppy straw (O) was distributed between those two countries at a similar ratio, with Spain accounting for 73% of the global total utilized for the manufacture of other drugs (4,151 tons) and Australia accounting for the remaining 27%. Spain was the sole holder of stocks of poppy straw (O), accounting for 2,477 tons, in 2024.

Concentrate of poppy straw

61. Most countries using poppy straw for the extraction of alkaloids first manufacture an intermediate product referred to as “concentrate of poppy straw”, although in some countries, morphine or thebaine is manufactured directly from poppy straw in a continuous process, which may involve a number of other intermediate products (for details, see part IV, tables IV and V).

62. Until the second half of the 1990s, only concentrate of poppy straw containing morphine as the main alkaloid was manufactured. Since then, concentrate of poppy straw containing mainly codeine, thebaine or oripavine has also been manufactured. Concentrate of poppy straw may contain a mixture of alkaloids and, in addition to the main alkaloid, other alkaloids may be extracted in industrial processes.

63. The different types of concentrate of poppy straw are distinguished by the main alkaloid contained therein. The quantities of anhydrous morphine alkaloid contained in concentrate of poppy straw are referred to as AMA (CPS), those of anhydrous codeine alkaloid as ACA (CPS), those of anhydrous thebaine alkaloid as ATA (CPS), and those of anhydrous oripavine alkaloid as AOA (CPS). The production of all the individual alkaloids contained in concentrate of poppy straw in the past 20 years is examined below and illustrated in figure 8, expressed in terms of an anhydrous alkaloid content of 100%.

64. The global manufacture of AMA (CPS) reached a total of 129 tons in 2024. The main manufacturing country was France, with 61 tons, or approximately 47% of the global total, followed by Türkiye (36 tons, or 28%), China (25 tons, or 19%, which have been excluded from the analysis on supply and demand) and Spain (4.6 tons, or 4%). The remaining 2% were manufactured in Australia and North Macedonia (the data relating to the latter of which have also been excluded from the analysis on supply and demand), each accounting for just under 1 ton.

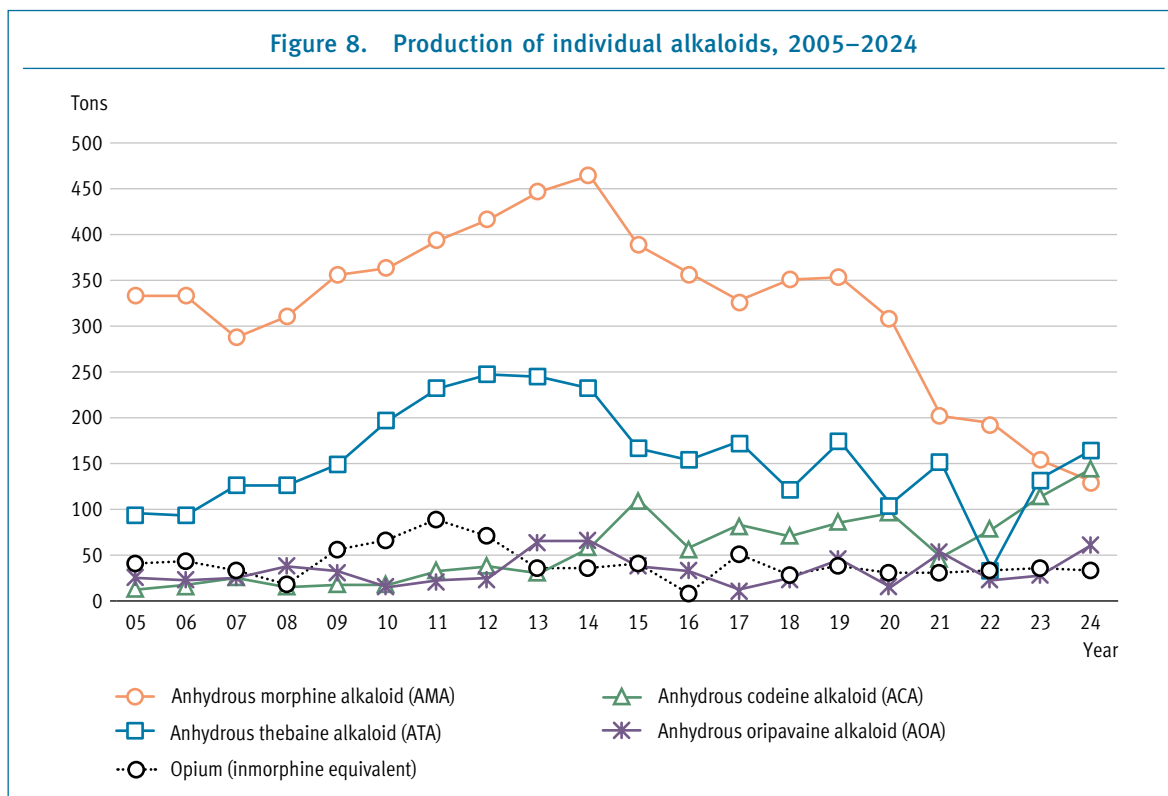
65. The global manufacture of ACA (CPS) in 2024 totalled 144 tons, with Spain being the main producer country (116 tons, or 81% of the global total). It was followed by Australia (26 tons, or 18%) and Türkiye (2 tons, or 1%).

66. The global manufacture of ATA (CPS) in 2024 amounted to 164 tons, with Australia being the main producer country (87 tons, over half of the global total), followed by Spain (57 tons, or 35%) and France (19 tons, or 12%).

67. The global manufacture of AOA (CPS) in 2024 totalled 60 tons. Spain was the main producer country (35 tons, or 59% of the global total), followed by Australia (25 tons, or 41%).

68. To monitor the balance between supply and demand, the production of alkaloids needs to be indicated in a manner that expresses the equivalency of raw materials, for statistical and comparison purposes. Tables 2 and 3 provide an overview of the global production of and demand for opiate raw materials expressed in morphine

Figure 8. Production of individual alkaloids, 2005–2024



and thebaine equivalent, respectively, for the period 2021–2026. Poppy straw and concentrate of poppy straw rich in codeine are included in the totals in table 2, expressed in morphine equivalent, and oripavine is included in the totals in table 3, expressed in thebaine equivalent; that approach has been taken pending the development of a system for the calculation of codeine and oripavine equivalency.

69. As in previous years, the actual production of opiate raw materials in 2025 and 2026 may differ from the projections, depending on the weather and other factors. In the current reporting period, the projections have been affected as a result of the lack of statistics or projections from some countries, or by the provision of incomplete statistics or projections by others.

70. Overall, there was an increase of 36% in the production of all raw materials expressed in morphine equivalent and an increase of 25% in the production of all raw materials expressed in thebaine equivalent in 2024, even though the stocks of those raw materials have been declining. Therefore, a shortage of opiate raw materials in the coming years is unlikely. It is expected that the production of both raw materials rich in morphine and those rich in thebaine will continue to rise at a considerable rate in 2025 and 2026, with most major producers expected to significantly increase such production.

Production and stocks of opiate raw materials rich in morphine

71. The global production of opiate raw materials rich in morphine¹² in the main producing countries, expressed in morphine equivalent, increased from 161 tons in 2023 to 237 tons in 2024 (see table 2). That rise was mainly due to trends observed in Australia and Spain, both of which had significantly increased their production of raw materials, as expressed in morphine equivalent, in 2024.

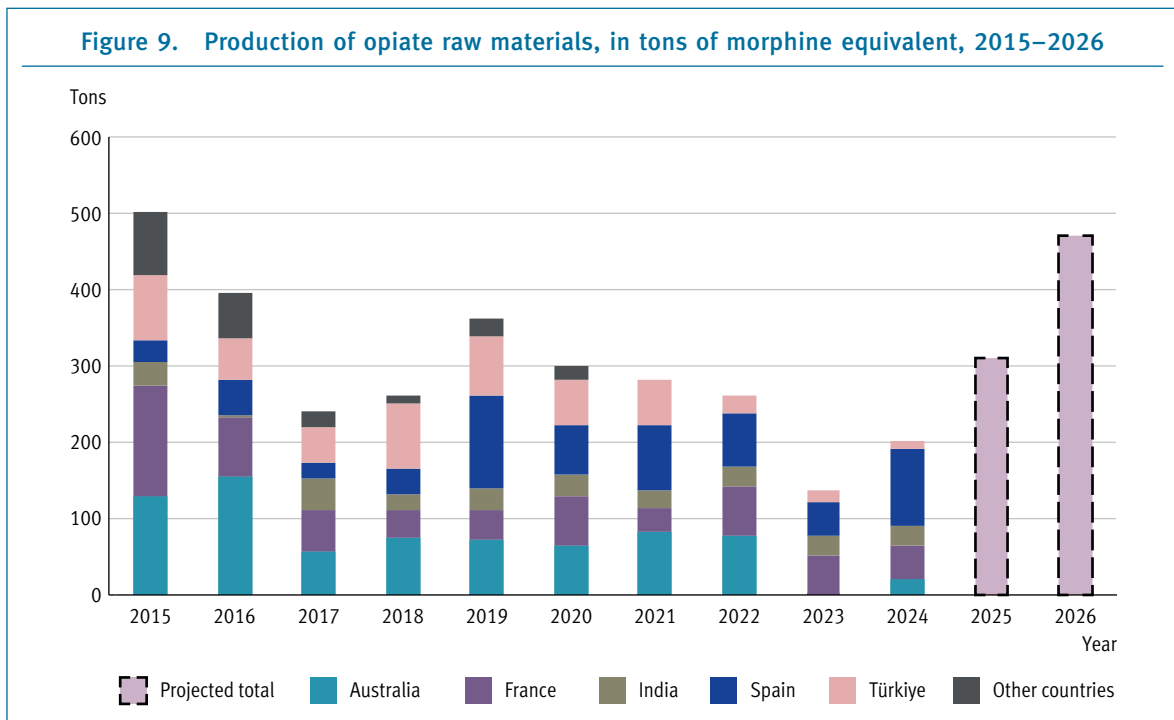
72. Spain was the country reporting the highest level of production of morphine-rich opiate raw materials in 2024, with a total production of 116 tons in morphine equivalent. Of that amount, 72 tons was derived from poppy straw (C) and 44 tons from concentrate of poppy straw (M). Virtually all of the production by Australia of morphine-rich opiate raw materials (25 tons in morphine equivalent) was derived from poppy straw (C).

France reported the production of 51 tons of morphine-rich opiate raw materials in morphine equivalent, and Türkiye reported the production of 15 tons, both deriving those raw materials from poppy straw (M). India was the sole country to produce morphine-rich opiate raw materials from opium, accounting for a total of 30 tons in morphine equivalent. Other producing countries reported the production of morphine-rich opiate raw materials at levels too low to be included in the present report (see figure 9).¹³

73. The reversal of the decreasing trend in the global production of opiate raw materials rich in morphine, which has been observed since 2020, is expected to continue in 2025 and 2026, as such production is expected to increase by 50% in 2025, to a total of 362 tons expressed in morphine equivalent, and by a further 50% in 2026, to 548 tons. The main producer country in 2025 is expected to be Spain, followed by France, Australia, India and Türkiye, in descending order of the amounts expected to be produced. Similar increasing trends are expected in 2026; India, Spain and Türkiye expect to further increase their production, but Australia and France expect to reduce theirs. More details on the projected production of opiate raw materials rich in morphine in 2025 and 2026 are provided in table 2.

74. As shown in table 2, global stocks of opiate raw materials rich in morphine (poppy straw, concentrate of poppy straw and opium) amounted to approximately 576 tons in morphine equivalent at the end of 2024,¹⁴ continuing a trend of significant decrease since the high level of 888 tons in 2021. That decrease is in line with suggestions made by the Board with regard to ensuring that stocks are not accumulated in excess but remain fully sufficient to cover the global demand as expressed by countries. Of the total global stocks, 322 tons were of poppy straw, 207 tons were of concentrate of poppy straw and 47 tons were of opium. Global stocks of morphine-rich opiate raw materials are projected to increase, to 820 tons, in 2025 and again, to 831 tons, in 2026, as indicated by the advance data provided by reporting countries.

75. At the end of 2024, Spain held the largest stocks of opiate raw materials rich in morphine, accounting for 176 tons in morphine equivalent, overtaking Türkiye (130 tons), which has typically held the largest stocks, but which has been significantly reducing its stocks since 2023. By the end of 2024, the respective stocks held by India



¹³The combined production of the other producing countries was below half a ton, which, in accordance with the Board’s methodology, would be rounded up to 1 ton.

¹⁴Data on stocks are collected from the annual statistics on production, manufacture, consumption, stocks and seizures of narcotic drugs (form C) relating to concentrate of poppy straw and opium or from advance data submitted by the major producing and importing countries in consultation with the Board.

had increased to 108 tons, and those of France and Australia had decreased to 64 tons and 38 tons, respectively. The United States had slightly increased its stocks, to 18 tons, while the stocks held by Hungary remained at the same level as in the previous year, 17 tons, and the stocks held by Japan amounted to 12 tons. The stocks held by Norway amounted to 4 tons, and those of South Africa to 2 tons. The aforementioned countries together accounted for approximately 99% of the global stocks of opiate raw materials rich in morphine. The remaining stocks were held in other countries producing morphine-rich opiate raw materials and in countries importing such opiate raw materials.

76. The global stocks of opiates derived from morphine-based opiate raw materials, mainly in the form of codeine and morphine, amounted to 416 tons in morphine equivalent at the end of 2024, a decrease from 514 tons at the end of 2023.

Table 2. Opiate raw materials rich in morphine: production, demand, balance between production and demand,^a and stocks, in tons of morphine equivalent, 2021–2026

	2021	2022	2023	2024 ^b	2025 ^c	2026 ^d
Australia						
Production	96	91	1	25	69	58
France						
Production	37	76	59	51	86	77
Hungary						
Production	0	0	0	0	4	4
India						
Production	27	30	31	30	55	81
Spain						
Production	100	81	50	116	126	244
Türkiye^e						
Production	69	26	20	15	22	82
Other countries						
Production	0	0	0	0	0	2
(1) Total production	329	304	161	237	362	548
Demand for:						
Opium	24	38	34	25	31	33
Poppy straw and concentrate of poppy straw	201	267	385	378	339	345
(2) Total demand for opiate raw materials	225	305	419	403	370	378
(3) Total demand for opiates for medical and scientific purposes^f	280	268	306	292	328	324
Balance, (1) minus (2)	104	-1	-258	-166	-8	170
Balance, (1) minus (3)	49	36	-145	-55	34	224
Stocks of:						
Opium	94	105	58	47	n/a	n/a
Poppy straw	496	431	353	322	n/a	n/a
Concentrate of poppy straw	298	303	254	207	n/a	n/a
Total stocks of opiate raw materials	888	839	665	566	820	831
Total stocks of all opiates	458	500	514	416	n/a	n/a

Note: Data in italics reflect advance data and projected data; “n/a” indicates that data are not yet available.

^a For more information about the balance between supply (stocks and production) of and demand for opiate raw materials rich in morphine, see part II of the present publication.

^b Figures for 2024 are based on annual statistics furnished by Governments on form C or, where such information is not available, on advance data provided by Governments during consultations with the Board.

^c Figures for 2025 are based on advance data provided by Governments during consultations with the Board.

^d Figures for 2026 are based on estimates (form B) furnished by Governments to the Board.

^e Since 31 May 2022, “Türkiye” has replaced “Turkey” as the short name used in the United Nations.

^f Excluding demand for substances not covered by the 1961 Convention as amended.

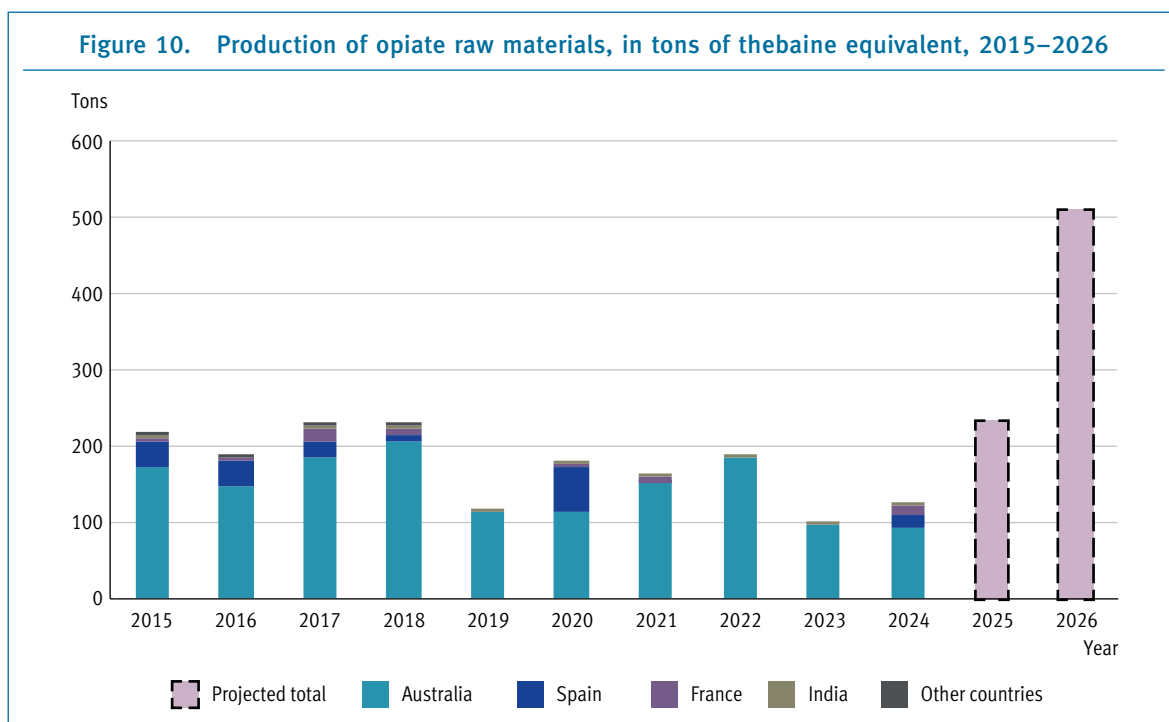
Production and stocks of opiate raw materials rich in thebaine

77. The global production of opiate raw materials rich in thebaine,¹⁵ expressed in thebaine equivalent, increased from 101 tons in 2023 to 126 tons in 2024 (see figure 10 and table 3). That was an increase anticipated in the report for the previous year. The reason for the increase was that, in 2024, Australia, the sole producer country in 2023, was joined by France and Spain, which both resumed such production after having halted it in 2022.

78. In 2024, Australia was the country reporting the highest level of production of opiate raw materials rich in thebaine, with a total production of 91 tons in thebaine equivalent, 82 tons of which were derived from ATA (CPS) and 9 tons from AOA (CPS). Spain reported the production of 17 tons of opiate raw materials in thebaine equivalent, all derived from AOA (CPS), as the country did not report any cultivation of the thebaine-rich variety of opium poppy in 2024. France reported the production of 15 tons of thebaine-rich opiate raw materials derived from ATA (CPS). The production of opium in India is expected to amount to 3 tons in thebaine equivalent.

79. The global production of opiate raw materials rich in thebaine is expected to nearly double in 2025, to 236 tons, and to increase once more in 2026, to a total of 511 tons. The main producer country in 2025 is expected to be Australia, with a projected increase of approximately 20 tons in thebaine equivalent, compared with 91 tons in 2024, to a total of 111 tons in 2025. Spain is expected to follow closely, with 90 tons in thebaine equivalent, a more than fivefold increase in its production compared with 17 tons in 2024. Both France and India are expected to double their production, to 29 tons and 6 tons expressed in thebaine equivalent, respectively. In 2026, Spain is expected to be the largest producer country, tripling its production to 293 tons in thebaine equivalent. It is expected to be followed by Australia, whose production is expected to reach 180 tons in thebaine equivalent, France, whose production is expected to reach 29 tons, and India, whose production is expected to reach 9 tons.

80. As shown in table 3, global stocks of opiate raw materials rich in thebaine (poppy straw, concentrate of poppy straw and opium) decreased to 216 tons in thebaine equivalent by the end of 2024, from 244 tons in 2023. Of that amount, 135 tons were concentrate of poppy straw and 81 tons were poppy straw; no stocks of opium were reported.



¹⁵The present analysis is based predominantly on raw materials obtained from opium poppy rich in thebaine but includes the thebaine alkaloid contained in opium poppy rich in oripavine and morphine, whenever appropriate.

81. Spain was the country with the largest stocks of opiate raw materials, accounting for 122 tons in thebaine equivalent, followed by Australia (41 tons), the United States (31 tons), France (21 tons), and Hungary and Japan (1 ton each). Those countries held virtually all global stocks of opiate raw materials, while the remaining countries held a combined amount of 1 ton.

82. By the end of 2024, global stocks of opiates of thebaine-based opiate raw materials (oxycodone, thebaine and a small quantity of oxymorphone) had decreased to a total of 176 tons in thebaine equivalent, from 213 tons in 2023.

Table 3. Opiate raw materials rich in thebaine: production, demand, balance between production and demand,^a and stocks, in tons of thebaine equivalent, 2021–2025

	2021	2022	2023	2024 ^b	2025 ^c	2026 ^d
Australia						
Production	152	184	98	91	111	180
France						
Production	8	0	0	15	29	29
Hungary						
Production	0	0	0	0	0	0
Spain						
Production	1	0	0	17	90	293
India						
Thebaine extracted from opium	3	3	3	3	6	9
Other countries						
Thebaine extracted from poppy straw (M)	0	0	0	0	0	0
(1) Total production	164	187	101	126	236	511
Demand for:						
Opium	2	2	3	2	2	3
Poppy straw and concentrate of poppy straw	120	103	130	143	135	139
(2) Total demand for raw materials	122	105	133	145	137	142
(3) Total demand for opiates for medical and scientific purposes^e	104	109	114	108	120	122
Balance, (1) minus (2)	42	82	-32	-19	99	369
Balance, (1) minus (3)	60	78	-13	18	116	389
Stocks:						
Opium	9	0	0	0	n/a	n/a
Poppy straw	266	248	170	81	n/a	n/a
Concentrate of poppy straw	98	54	74	135	n/a	n/a
Total stocks of opiate raw materials	373	302	244	216	320	320
Total stocks of all opiates	218	208	213	176	n/a	n/a

Notes: Data in italics reflect advance data and projected data; “n/a” indicates that data are not yet available.

^aFor more information about the balance between supply (stocks and production) of and demand for opiate raw materials rich in thebaine, see part II of the present publication.

^bFigures for 2024 are based on annual statistics furnished by Governments on form C, or where such information is not available, on advance data provided by Governments during consultations with the Board.

^cFigures for 2025 are based on advance data provided by Governments during consultations with the Board.

^dFigures for 2026 are based on estimates (form B) furnished by Governments to the Board.

^eExcluding demand for substances not covered by the 1961 Convention as amended.

Demand for opiates for medical and scientific purposes

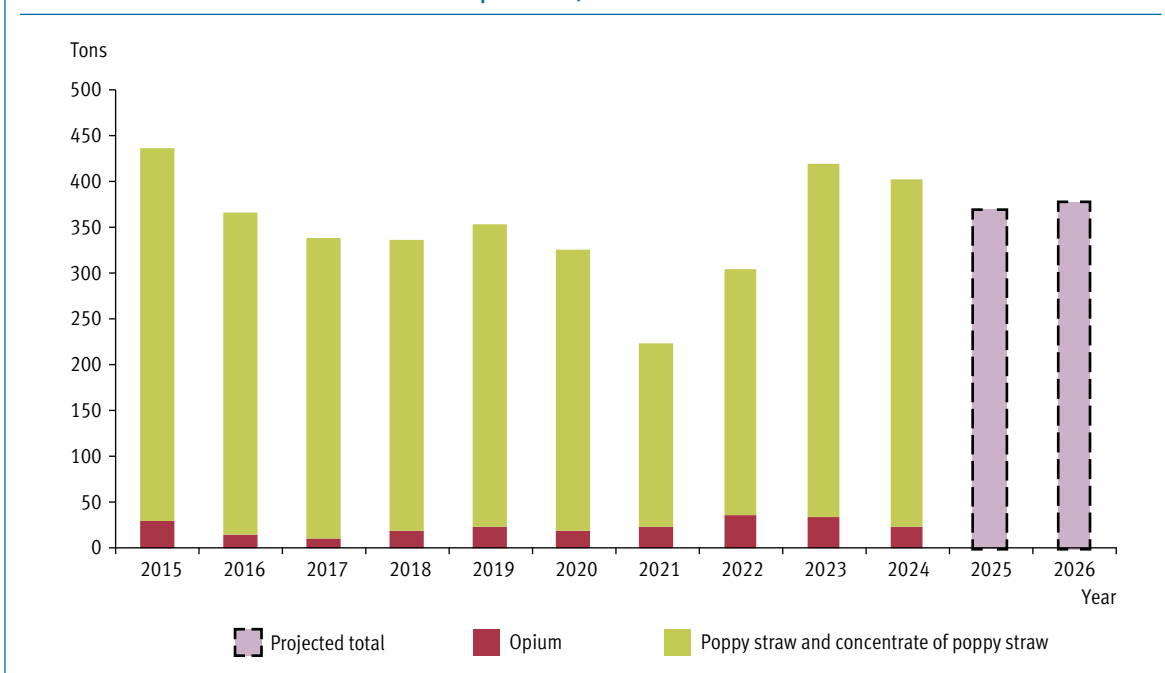
83. The Board measures the demand for opiates in terms of the utilization of opiate raw materials and in terms of demand for finished opiates for global consumption for medical and scientific purposes derived from all opiates controlled under the 1961 Convention as amended.¹⁶ The data regarding raw materials and finished opiates, expressed in morphine and thebaine equivalent, are presented in tables 2 and 3, respectively.

84. Overall, the demand for opiate raw materials and finished opiates has been following a decreasing trend in recent years; however, there have been fluctuations from year to year for opiates expressed in morphine equivalent and opiates expressed in thebaine equivalent.

Utilization of opiate raw materials and demand for opiates, in morphine equivalent

85. The global demand for opiate raw materials rich in morphine had been increasing in recent years, reaching 419 tons in morphine equivalent in 2023. However, in 2024, demand decreased to 403 tons, and it is expected to decrease even further in 2025 and 2026, to 370 and 378 tons, respectively (see figure 11).

Figure 11. Utilization of opiate raw materials for the extraction of morphine, in tons of morphine equivalent, 2015–2026

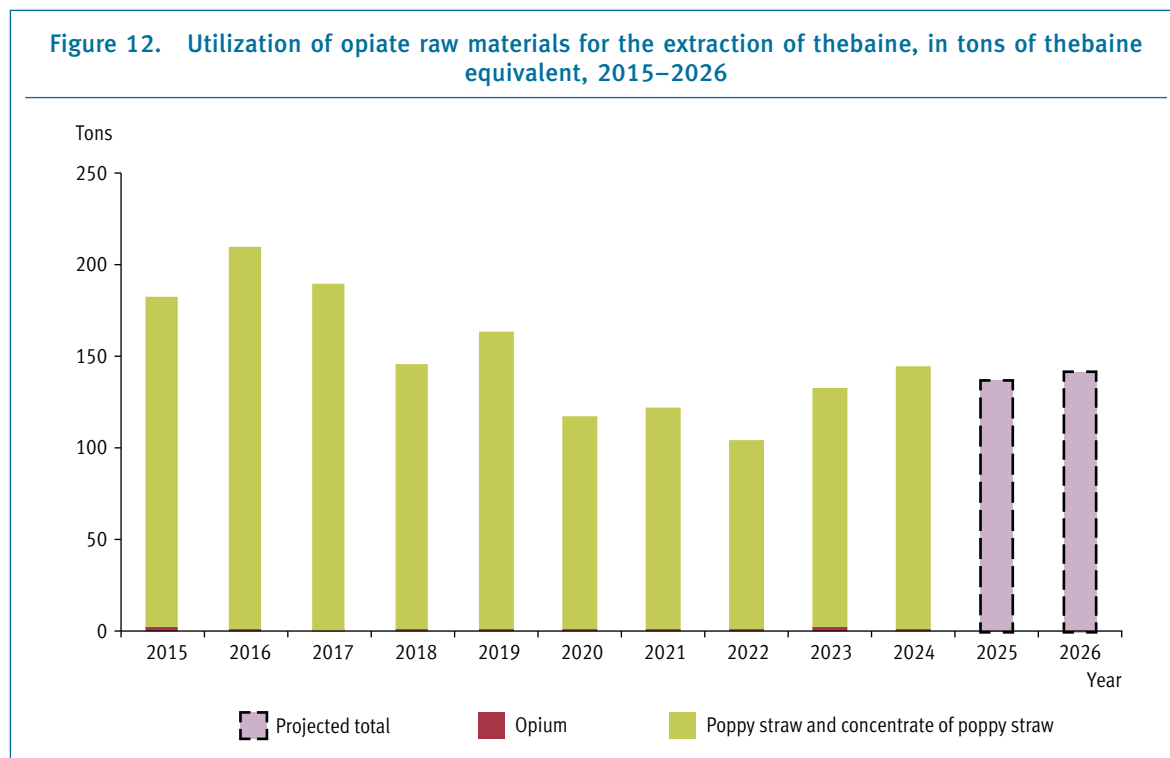


86. The demand for finished opiates expressed in morphine equivalent similarly declined in 2024, to a total of 292 tons, from 306 tons in 2023. However, that demand is expected to increase overall in 2025 and 2026, to a total of 328 tons and 324 tons, respectively (see table 2 above).

¹⁶Prior to 2003, INCB measured the global demand only by global consumption of major opiates controlled under the 1961 Convention as amended, expressed in morphine equivalent. However, by using that approximation, the following were excluded: (a) demand for less commonly used narcotic drugs; (b) demand for substances that are not controlled under the 1961 Convention as amended but are manufactured from opiate raw materials and for the consumption of which data are not available to INCB; and (c) fluctuations in the utilization of raw materials due to developments in the market anticipated by the manufacturers, such as expected sales of opiates and expected changes in the prices of raw materials or opiates.

Utilization of raw materials and demand for opiates, in thebaine equivalent

87. The global demand for opiate raw materials rich in thebaine has declined overall in recent years, from a high of 164 tons in thebaine equivalent in 2019. In 2024, it increased to 145 tons, from 133 tons in 2023, and it is expected to remain at similarly high levels in 2025 and 2026, at 137 and 142 tons, respectively (see figure 12).



88. Although the total demand for raw materials expressed in thebaine equivalent has increased since 2021, the total demand for finished opiates decreased to 108 tons at the end of 2024, from 114 tons in 2023. However, that demand is expected to increase in both 2025 and 2026, to a total of 120 tons and 122 tons, respectively (see table 3).

Balance between the supply of and demand for opiate raw materials

89. In examining the developments related to the supply of opiate raw materials and the demand for opiates in relation to meeting the licit requirements in major producing and importing countries, the Board endeavours to assist countries in maintaining a standing balance between that supply and demand, while helping to prevent the overaccumulation that may pose the risk of diversion. In that regard, the Board considers the relationship between the total production of opiate raw materials and the total demand for such raw materials and advises countries to maintain a relative balance between the two, and to ensure that there are sufficient stocks, in line with the dual objectives of ensuring that there is a sufficient supply to cover the demand and limiting the risks of diversion.

90. In order to ensure that the supply of opiate raw materials can cover the expected demand for at least one year in case of unforeseen supply issues, such as crop failure or a subsequent lack of production of opiate raw materials, the Board assesses the stocks of those materials at the end of the year to calculate whether they are sufficient to cover the projected demand for the following year. For that calculation, the Board determines the total

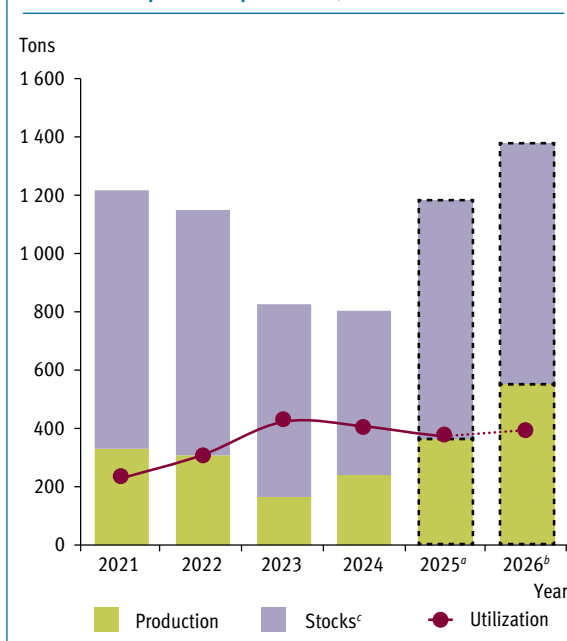
amount of stocks at the end of the year and divides that number by the total projected demand, then multiplies the resulting number by 12 to arrive at the total number of months for which the stocks would be sufficient to cover the projected demand for the following year.

Opiate raw materials expressed in morphine equivalent

91. In the past decade, the global stocks of opiate raw materials rich in morphine had been increasing significantly as the global production of opiate raw materials had been far exceeding the demand. As a result, the Board has been encouraging countries to adjust their level of production so that it corresponds to their level of stocks. Consequently, countries have been utilizing their stocks more and adjusting their production accordingly and, since 2022, global stocks of opiate raw materials rich in morphine have been decreasing. At the same time, the global demand for opiate raw materials, expressed in morphine equivalent, has been increasing, and the level of demand has been exceeding the level of production, differing by 1 ton in 2022 and as many as 258 tons in 2023. For 2024, that gap is expected to decrease to 166 tons, and it is expected to decrease further, to just 8 tons, in 2025. Meanwhile, the production of opiate raw materials, expressed in morphine equivalent, is again expected to exceed the global demand in 2026, by a total of 170 tons (see table 2).

92. The global stocks of opiate raw materials, expressed in morphine equivalent, decreased to 566 tons at the end of 2024, from 665 tons in 2023, continuing the overall decreasing trend observed in recent years. However, stocks are expected to increase again in 2025, to a total of 820 tons, and further, to 831 tons, in 2026, owing to the expected increase in production. The global stocks projected for 2025 and 2026 would be sufficient to cover the global demand at the expected levels, as expressed by countries, for well over the 12 months required by the Board. See figure 13 for an overview of demand compared with both production and stocks.

Figure 13. Supply of and demand for opiate raw materials rich in morphine, in tons of morphine equivalent, 2021–2026



^a Data for 2025 are based on advance data (dotted line) submitted by Governments.

^b Data for 2026 are based on estimates (dotted line) submitted by Governments.

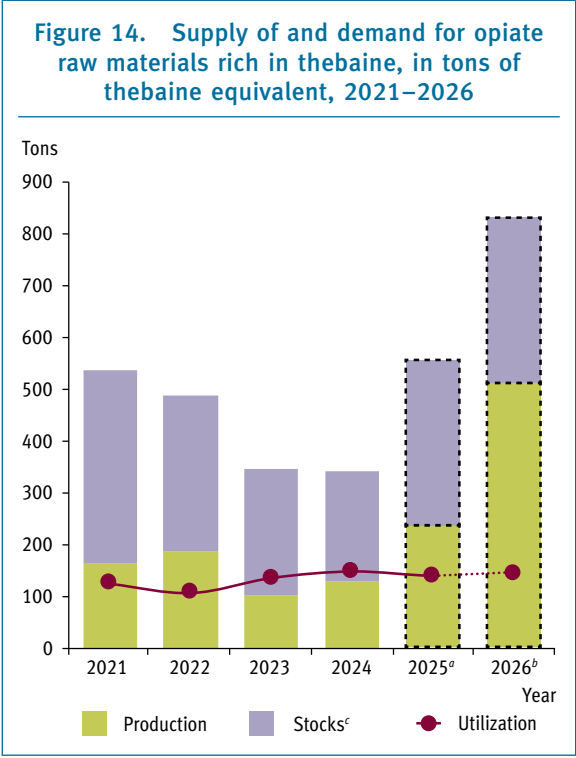
^c As at 31 December of each year.

Opiate raw materials expressed in thebaine equivalent

93. The past decade has mostly been marked by a higher level of production of opiate raw materials, expressed in thebaine equivalent, than the global demand for such materials. Consequently, the global stocks of thebaine-rich opiate raw materials had been increasing. That changed in 2023, when both global production and global stocks of thebaine-rich opiate raw materials decreased, but global demand increased, leading to an imbalance between production and demand in the amount of about 32 tons. That gap decreased in 2024, to only 19 tons, as production increased more than demand. Nevertheless, in the past decade, stocks have been notably higher than demand, with no risk posed to the overall balance between supply and demand. In 2025 and 2026, significant increases are expected in both the production and the stocks of opiate raw materials, expressed in thebaine equivalent, while the demand is expected to increase only slightly. On the basis of those projections, production is expected to be significantly higher than the expressed demand, at 99 tons in 2025, and at as many as 369 tons in 2026 (see table 3).

94. The global stocks of opiate raw materials, expressed in thebaine equivalent, decreased to 216 tons in 2024, from 244 tons in 2023, continuing the overall decreasing trend in recent years. However, stocks are expected to increase in the coming years, and are projected to amount to 320 tons in both 2025 and 2026. That projected amount of stocks is expected to be sufficient to cover global demand at the expected levels, as expressed by countries, for well over the 12 months required by the Board. See figure 14 for an overview of demand compared with both production and the stocks.

95. The supply of opiate raw materials rich in morphine and thebaine is sufficient to meet global demand, as reflected in the current statistical data and estimates submitted by countries. However, the Board notes large disparities in access due to inadequate estimates or limited availability and urges Governments to improve access, especially in low- and middle-income countries, by increasing the morphine allocation for oral preparations in line with the 1961 Convention as amended.



^a Data for 2025 are based on advance data (dotted line) submitted by Governments.

^b Data for 2026 are based on estimates (dotted line) submitted by Governments.

^c As at 31 December of each year.

PART III. LATEST TRENDS IN THE LICIT MARKETS OF NARCOTIC DRUGS

Finished opiates and opioids

96. Given their analgesic properties, opioids are used mostly to treat severe pain (fentanyl, hydromorphone, methadone, morphine and pethidine), moderate to severe pain (buprenorphine¹⁷ and oxycodone) and mild to moderate pain (codeine, dihydrocodeine and dextropropoxyphene), as well as to induce or supplement anaesthesia (fentanyl and fentanyl analogues such as alfentanil and remifentanyl). They are also used as cough suppressants (codeine, dihydrocodeine and, to a lesser extent, pholcodine and ethylmorphine), to treat gastrointestinal disorders, mainly diarrhoea (codeine and diphenoxylate), and to treat opioid dependence (methadone).

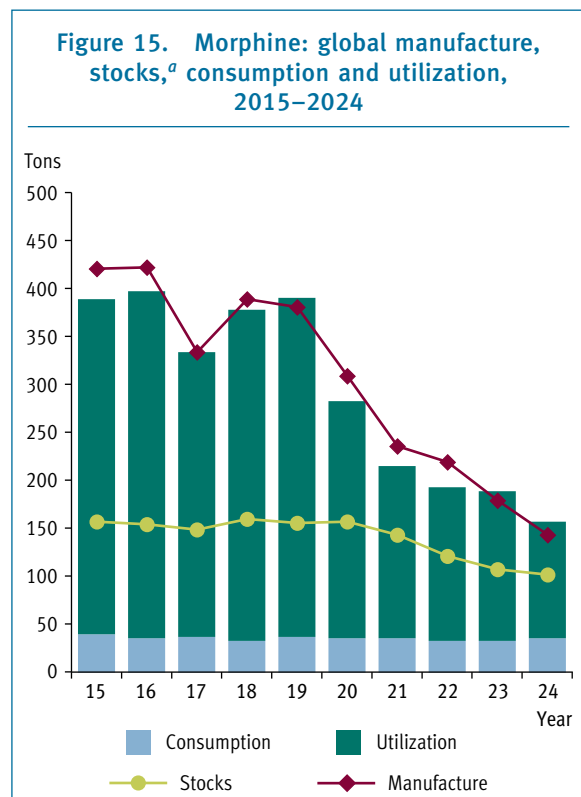
Natural alkaloids

97. Morphine, codeine, thebaine, noscapine, oripavine, papaverine and narceine are alkaloids contained in opium or poppy straw. Morphine and codeine are under international control because of their potential for misuse, while thebaine and oripavine are under such control because they can be converted into opioids that are subject to misuse. Noscapine, papaverine and narceine are not under international control. Morphine is the prototype of natural opiates and many opioids and, because of its strong analgesic potency, is used as a reference parameter for comparative purposes.

Morphine

98. The global manufacture of morphine has been steadily decreasing since 2018, and it fell to 144 tons in 2024, from 179 tons in 2023 (see figure 15). This represents a considerable decrease in the 10-year period since 2015, compared with the 420 tons manufactured that year. Global stocks of morphine have followed a similar trend since 2020, albeit with a less sharp decrease, and have stood at 102.3 tons since the beginning of 2024. This represents a decrease from the 107.2 tons available at the beginning of 2023. During 2024, of the total quantity of morphine available globally (246 tons, including quantities manufactured and opening stocks), almost half (121.8 tons, or 49.5% of the global total) was utilized for the manufacture of other drugs (mostly codeine) and of substances not covered by the 1961 Convention as amended, as well as for preparations included in Schedule III of that Convention. Only 35.3 tons, or 14.3%, were consumed directly for palliative care.

99. In 2024, the leading countries manufacturing morphine were France (56.7 tons, or 39.5% of global manufacture), India (21 tons, or 14.6%), Japan (14.4 tons, or 10%), the United Kingdom of Great Britain and Northern Ireland (13.1 tons, or 9.1%), Spain (10.2 tons, or 7%), the United States (7.3 tons, or 5.1%), the



^aStocks as at 31 December of each year.

¹⁷Buprenorphine is controlled under the Convention on Psychotropic Substances of 1971.

Islamic Republic of Iran (7.2 tons, or 5%), China (4.4 tons, or 3%), Australia (4.2 tons, or 3%) and Italy (2.1 tons, or 1.4%).

100. Global exports of morphine decreased from 35.6 tons in 2023 to 33 tons in 2024. The main exporting countries in 2024 were the Islamic Republic of Iran (7.1 tons, or 21.6% of global exports), followed by the United Kingdom (6.8 tons, or 20.9%), Australia (4.4 tons, or 13.3%), the Kingdom of the Netherlands (2.8 tons, or 8.4%), France (2.7 tons, or 8.3%), the United States (2.2 tons, or 6.6%) and Italy (2 tons, or 6.1%). Other countries, including Switzerland, Spain and Slovakia, in descending order of the quantities imported, each reported imports of less than 5% of the global total.

101. The main importing countries in 2024 were Hungary (3.7 tons, or 13.7% of the global total), the Kingdom of the Netherlands (2.9 tons, or 10.5%), Canada (2.7 tons, or 9.9%), Australia (2.6 tons, or 9.7%), India (2.1 tons, or 7.7%), the United Kingdom (2 tons, or 7.4%), Germany (1.9 tons, or 6.9%), Switzerland (1.7 tons, or 6.3%) and Austria (1.4 tons, or 5.1%). Other countries reported imports amounting to less than 1 ton each. Further details on exports and imports of morphine can be found in part IV of the present report.¹⁸

102. In 2015, the amount of morphine used for direct consumption totalled 39.6 tons, or 9.4% of the total amount of morphine manufactured globally. In 2024, it totalled 35.3 tons but represented a notably larger share of the total amount manufactured that year, at 24.5%. However, that increase was partly due to a decline in the amount of morphine manufactured globally in the past 10 years.

103. In 2024, the United States continued to be the country reporting the highest level of consumption of morphine, accounting for 8.4 tons, or 24.5% of the global total. It was followed by the United Kingdom (7.4 tons, or 21%), Canada (2.5 tons, or 7%), Australia (2.3 tons, or 6.6%), Austria (2.2 tons, or 6.4%) and France (1.9 tons, or 5.4%). Other countries reported levels of consumption below 5% of the global total in 2024.

104. In some countries, morphine is used for the manufacture of preparations included in Schedule III of the 1961 Convention as amended. In 2024, 10.8 tons of morphine were used for that purpose, mainly in China (9.4 tons, or 86.7% of the global total), followed by Italy (1.3 tons, or 12.1%). The remaining amount (1.2%) was utilized in small quantities by other countries.

105. The largest share of morphine is used for conversion into other opiates, such as codeine, ethylmorphine and pholcodine (see table VI of part IV), although it is important to note that codeine is increasingly obtained directly from opium poppy rich in codeine. The total amount utilized globally for conversion into other opiates peaked at 345 tons in 2016 and has decreased in line with the overall decrease in morphine production since, dropping to 111 tons in 2024. Morphine is also used for the manufacture of substances not controlled under the 1961 Convention as amended, such as noroxymorphone and apomorphine. In 2024, France accounted for virtually all the utilization of morphine for that purpose, at 980.7 kg.

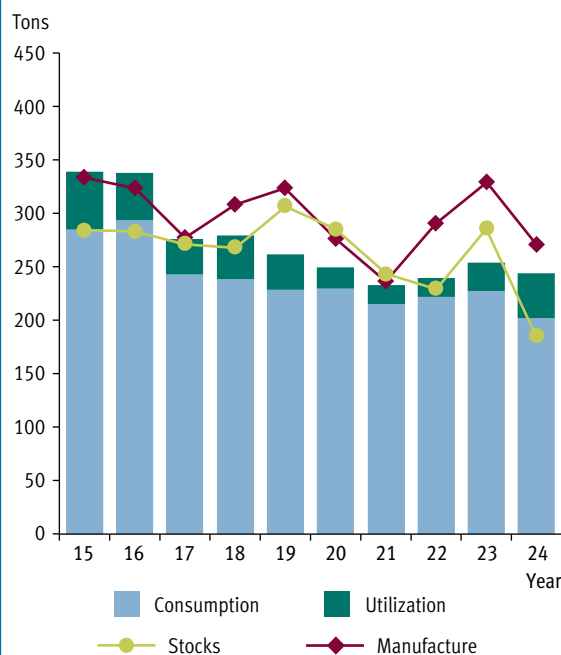
106. Global stocks of morphine stood at 102.3 tons in 2024. The largest stocks were held in France (46.7 tons, or 45.6% of global stocks), followed by the United States (10.1 tons, or 9.9%), Japan (8.2 tons, or 8.1%), the United Kingdom (7.4 tons, or 7.2%), Hungary (5.3 tons, or 5.2%), Italy (4.4 tons, or 4.3%), Switzerland (3.3 tons, or 3.2%), Austria (3 tons, or 2.9%), India (2.8 tons, or 2.7%) and Spain (1.9 tons, or 1.9%).

Codeine

107. Codeine is a natural alkaloid of the opium poppy plant, but most of the codeine currently being manufactured is obtained from morphine through a semi-synthetic process. In 2024, there was an increase in the cultivation of the codeine-rich variety of opium poppy, and in the manufacture of ACA (CPS), which is used for the extraction of codeine. Codeine is used almost entirely for the manufacture of preparations listed in Schedule III of the 1961 Convention as amended, while a smaller quantity is used for the manufacture of other narcotic drugs, such as dihydrocodeine and hydrocodone. The trends in global manufacture, consumption, utilization and stocks of codeine during the period 2015–2024 are shown in figure 16.

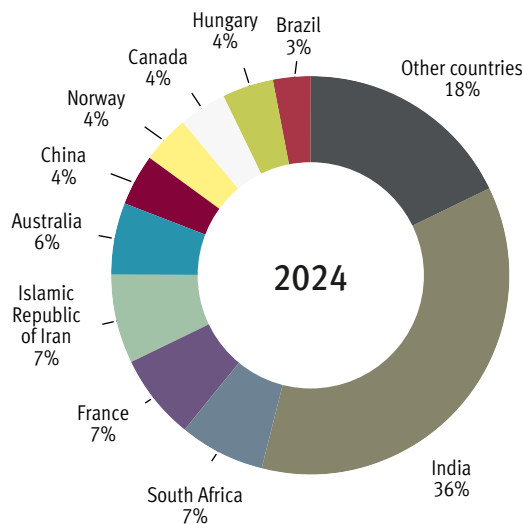
¹⁸Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

Figure 16. Codeine: global manufacture, stocks,^a consumption and utilization, 2015–2024



^aStocks as at 31 December of each year.

Figure 17. Codeine: utilization for the manufacture of preparations listed in Schedule III of the 1961 Convention as amended, 2024



108. The global manufacture of codeine followed an irregular trend from 2015, when it peaked at 334 tons, to 2024, when it was reported to amount to 270.6 tons. In 2024, the countries reporting the highest levels of manufacture of codeine were Spain (53.8 tons, or 19.9% of global manufacture), Australia (37.7 tons, or 14%), France (33.1 tons, or 12.2%), the Islamic Republic of Iran (25.8 tons, or 9.5%), Norway (24 tons, or 8.9%), Italy (19.3 tons, or 7.1%), India (16.9 tons, or 6.3%), Japan (15.1 tons, or 5.6%), South Africa (11.7 tons, or 4.3%) and China (8.9 tons, or 3.3%).

109. Stocks of codeine have followed a similar trend to that of codeine manufacture, except in 2019, when stocks peaked at 307 tons. In 2024, global stocks were reported at 185.4 tons. Stocks of codeine were mostly concentrated in France (43.4 tons, or 23.4% of the global total), India (36.7 tons, or 19.8%), the United Kingdom (14.1 tons, or 7.6%), Italy (10.8 tons, or 5.8%), the United States (10.3 tons, or 5.6%), Spain (8.2 tons, or 4.4%), Japan (8.1 tons, or 4.4%) and South Africa (5.1 tons, or 2.8%). Other countries reported stocks of less than 5 tons each.

110. In 2024, global exports of codeine reached 213.5 tons, a considerable increase compared with the 175.8 tons exported in 2023. The leading exporting country for codeine in 2024 was Italy (54.9 tons, or 25.7% of the global total), followed by Spain (47.7 tons, or 22.3%), France (29.1 tons, or 13.6%), Australia (20 tons, or 9.3%), the United Kingdom (19.4 tons, or 9.1%) and Norway (17.3 tons, or 8.2%). The other exporting countries accounted for less than 7 tons each, and included Switzerland, Slovakia, Denmark and Türkiye, in descending order of the amounts exported.

111. The countries importing the largest total amounts of codeine in 2024 were India (44.5 tons, or 26.4% of global imports), the United Kingdom (21.1 tons, or 12.5%), Italy (20.8 tons, or 12.4%), Hungary (12.4 tons, or 7.4%) and Brazil (10 tons, or 5.9%). A number of other countries imported less than 5% each, including Canada, Switzerland, Germany, Viet Nam and Denmark, in descending order of the amounts imported. More details on the international trade in codeine can be found in part IV of the present report.¹⁹

¹⁹Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

112. The global use of codeine for the manufacture of preparations listed in Schedule III of the 1961 Convention as amended decreased from 280.2 tons in 2015 to 200.1 tons in 2024. The countries manufacturing the largest quantities of such preparations for subsequent export are shown in figure 17.

113. The global consumption of codeine, mainly in the form of preparations listed in Schedule III of the 1961 Convention as amended, has been decreasing since it peaked in 2016 at 293.7 tons, and in 2024 it stood at 201.9 tons (see figure 16). The main countries reporting data in that respect were India (71.2 tons, or 35.3% of the global total), South Africa (14.9 tons, or 7.4%), France (14.6 tons, or 7.2%), the Islamic Republic of Iran (13.5 tons, or 6.7%) and Australia (12.9 tons, or 6.4%). Other countries with a level of codeine consumption below 10 tons, in descending order of the amounts consumed, included Canada, China, Norway, Hungary and Brazil.

114. The global utilization of codeine for the manufacture of other narcotic drugs, mainly dihydrocodeine and hydrocodone, decreased from its peak in 2015 at 54 tons, reaching 42 tons in 2024. However, that represented an increase in comparison with 2023, when it was reported at 27 tons. Only seven countries reported the utilization of codeine for the manufacture of other narcotic drugs. They were, in descending order of the amounts utilized, Japan, Italy, the United Kingdom, Hungary, Slovakia, China and the United States.

Thebaine

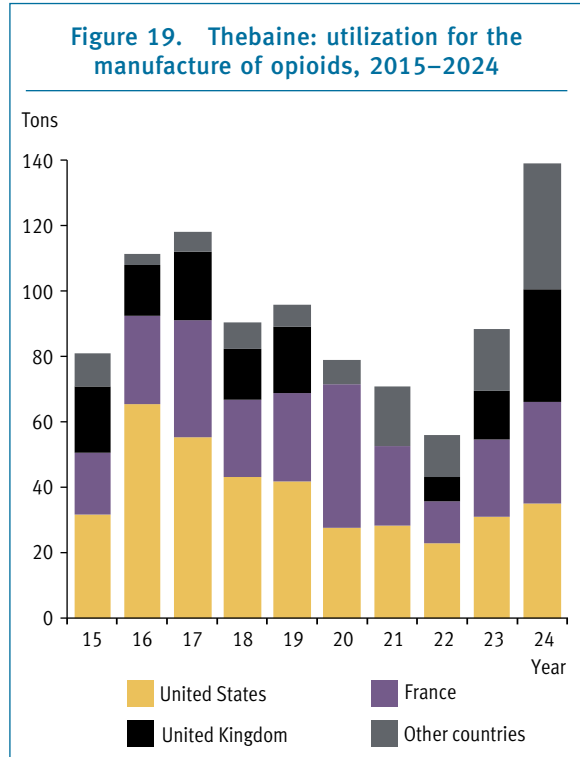
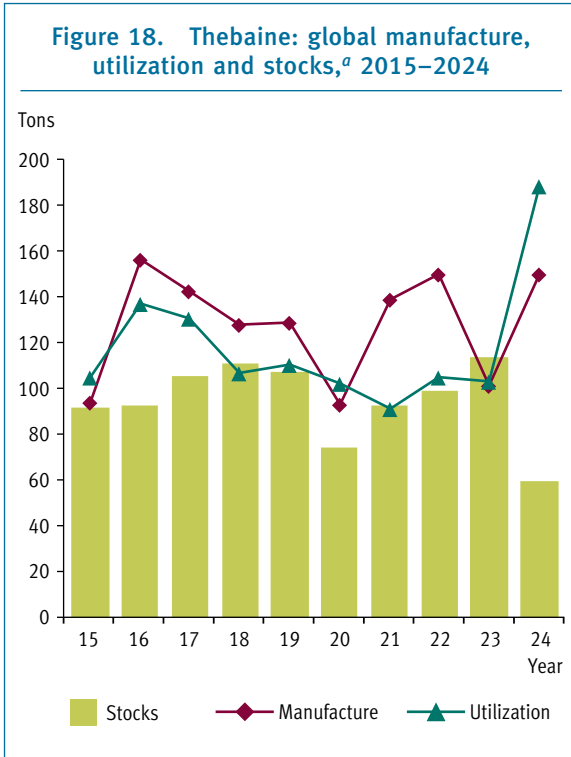
115. Until the 1990s, thebaine was manufactured mainly from opium; since 1999, it has been obtained primarily from poppy straw. Thebaine may also be obtained through the conversion of oripavine or from semi-synthetic opioids, such as hydrocodone. Thebaine itself is not used in medical therapy, but it is an important starting material for the manufacture of a number of opioids, mainly codeine, dihydrocodeine, etorphine, hydrocodone, oxycodone and oxymorphone (all of which are substances controlled under the 1961 Convention as amended) and buprenorphine (which is a substance controlled under the Convention on Psychotropic Substances of 1971),²⁰ as well as for the manufacture of substances not under international control, such as the derivatives naloxone, naltrexone, nalorphine and nalbuphine.

116. The global manufacture of thebaine has increased sharply since the late 1990s because of the growing demand for oxycodone and other drugs and substances that may be derived from it. However, it has fluctuated in the past 10 years and, in 2024, it increased to 149.7 tons, from 101 tons in 2023 (see figure 18). The demand for medicines derived from thebaine has been fluctuating in recent years owing to the restrictions on prescription drugs derived from thebaine imposed in the main market (the United States) in response to the misuse of such medicines and the related high number of overdose deaths, notably hydrocodone and oxycodone. The United States was the main manufacturing country in 2024 (35.3 tons, or 38.6% of the global total), followed by Spain (22.7 tons, or 24.8%), Australia (11.6 tons, or 12.7%), France (6.1 tons, or 6.7%) and Italy (6 tons, or 6.6%). Other manufacturing countries included, in descending order of the amounts manufactured, Denmark, the Islamic Republic of Iran, India, China and Japan.

117. In 2024, exports of thebaine reached 92.6 tons, an increase from the 62.5 tons exported in 2023. The main exporting countries in 2024 were Australia (65.2 tons, or 70.5% of total exports), Spain (19.6 tons, or 21.2%) and Italy (5.8 tons, or 6.3%). Quantities of less than 1% of the global total were exported by the United Kingdom, France, Germany, Slovakia, Czechia, the United States and the Russian Federation, in descending order of the amounts exported. The main countries importing thebaine were Hungary (31.9 tons, or 30.9% of the global total), the United Kingdom (29 tons, or 28.1%), France (17.2 tons, or 16.6%), Germany (14.4 tons, or 13.9%), Slovakia (6.6 tons, or 6.4%) and Czechia (2.3 tons, or 2.2%). Other countries each imported less than 1% of the global total.

118. The utilization of thebaine for the manufacture of other narcotic drugs has followed an overall decreasing trend since 2016, reaching a low in 2022 of 56.4 tons; however, it has increased since and jumped to 139.2 tons in 2024 (see figure 19 and table VII of part IV). In 2024, the United States accounted for 34.9 tons, or 25.1% of the global utilization of thebaine for that purpose, followed by the United Kingdom (34.4 tons, or 24.7%), France (31.6 tons, or 22.7%), Hungary (26.6 tons, or 19.1%), Slovakia (8.2 tons, or 5.9%) and India (2.3 tons, or 1.6%). Other countries reported the utilization of thebaine in quantities of less than 1% of the global total. The quantity

²⁰United Nations, *Treaty Series*, vol. 1019, No. 14956.



of thebaine reported to have been used for the manufacture of substances not covered under the 1961 Convention as amended (mainly buprenorphine) more than tripled, from 14.7 tons in 2023 to 48.9 tons in 2024. The United Kingdom, Germany, the Islamic Republic of Iran, Denmark, Czechia, India, the United States and China, in descending order of the amounts utilized, together accounted for all of the thebaine utilized worldwide in 2024.

119. After an overall fluctuating upward trend in the period since the early 2000s, global stocks of thebaine decreased sharply, from 113.7 tons in 2023, the highest level of stocks recorded in the period 2015–2024, to 59.6 tons in 2024, the lowest level recorded in that period. Major stocks were held in France (13.3 tons, or 22.3% of the global total), Hungary (8.7 tons, or 14.6%), Germany (8.5 tons, or 14.2%), Australia (5.6 tons, or 9.3%), the United States (4.9 tons, or 8.3%), the United Kingdom (4.8 tons, or 8.1%), Switzerland (4.7 tons, or 7.9%), Spain (4.1 tons, or 6.8%), China (3.7 tons, or 6.2%) and India (805 kg, or 1.4%).

Oripavine

120. In 2007, oripavine was included in Schedule I of the 1961 Convention as amended. The global manufacture of oripavine has increased since 2008, and in 2021 it reached 57.8 tons, the highest level ever recorded. It decreased after that, but rose again, to 36.2 tons, in 2024, from 22.4 tons in 2023. In 2024, manufacture of the substance was concentrated in a small number of countries: the United States (20.2 tons, or 55.7% of global manufacture), Spain (12.6 tons, or 34.7%) and Australia (3.5 tons, or 9.6%). Denmark and Germany manufactured minor quantities.

121. The use of oripavine in significant quantities for the manufacture of other drugs was reported in 2024 by the United States (19.9 tons, or 84.2% of the global total) and Germany (3.7 tons, or 15.8%), with Denmark reporting the use of minor quantities of the substance. In the United States and Germany, oripavine was used in 2024 mainly to manufacture oxycodone. In 2024, global stocks of oripavine stood at 9.3 tons, a decrease from 16.4 tons in 2023. Of the global stocks reported for 2024, Germany held 6.3 tons, or 68.2%, followed by Spain (1.4 tons, or 15.4%), Australia (1 ton, or 11.3%) and India (368 kg, or 4%). Quantities representing less than 1% were held by a number of other countries.

Semi-synthetic opioids

122. Semi-synthetic opioids are made by means of relatively simple chemical modifications of natural opiates such as morphine, codeine and thebaine. Some examples of semi-synthetic opioids are dihydrocodeine, ethylmorphine, heroin, hydrocodone, oxycodone and pholcodine. Some of the main manufacturing countries have reported that large losses occur during the processing of some semi-synthetic opioids.²¹ Those manufacturing losses account for the difference between the total quantities of hydrocodone and oxycodone manufactured and those consumed, which are reflected in figures 22 and 23, respectively.

Dihydrocodeine

123. The level of global manufacture of dihydrocodeine has remained relatively stable for the past 10 years, averaging approximately 30 tons per year, and it reached its peak in 2024. The global quantity manufactured amounted to 42.5 tons in 2024, considerably higher than the average of the past 10 years (see figure 20). The countries manufacturing the most significant quantities of dihydrocodeine in 2024 were Japan (18.1 tons, or 42.6% of the global total), Italy (9.5 tons, or 22.2%), the United Kingdom (6.2 tons, or 14.7%), Hungary (4.2 tons, or 9.9%) and Slovakia (2.9 tons, or 6.7%).

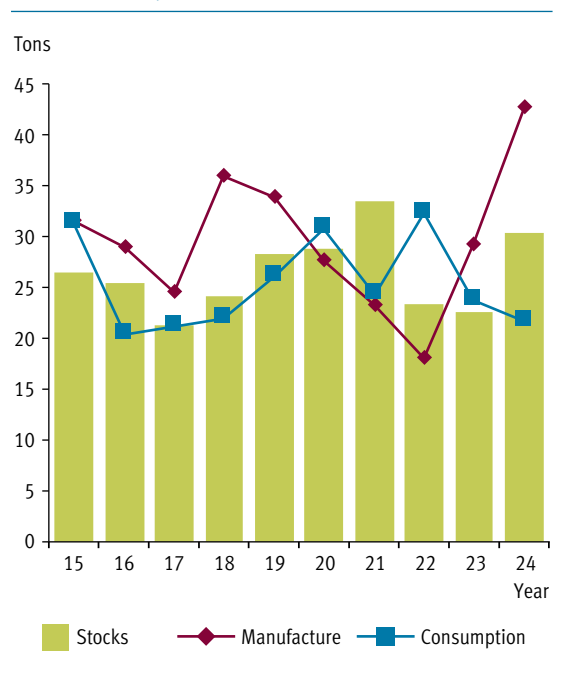
124. Global exports of dihydrocodeine amounted to 18.5 tons in 2024. The main exporting country was Italy (8.3 tons, or 44.5% of global exports), followed by the United Kingdom (4.4 tons, or 23.6%), Slovakia (3 tons, or 16%) and Hungary (2.8 tons, or 14.9%). In 2024, the Republic of Korea became the leading importing country for dihydrocodeine (7.5 tons, or 42.1% of global imports), followed by the United Kingdom (6.6 tons, or 37.2%), Germany (0.89 tons, or 5%), China (0.86 tons, or 4.8%), Colombia (0.7 tons, or 3.7%) and India (0.6 tons, or 3.4%). Other countries each imported less than 100 kg in 2024.

125. Dihydrocodeine is consumed mainly in the form of preparations included in Schedule III of the 1961 Convention as amended, which accounted for 99.5% of the total amount of dihydrocodeine consumed in 2024. The country reporting the highest level of consumption of dihydrocodeine for that purpose was Japan (55.9% of the global total), followed by the Republic of Korea (31.9%), China (4%) and Colombia (3.7%). A few other countries reported consumption of less than 500 kg of the substance. In 2024, the amount of dihydrocodeine used for direct consumption totalled 115 kg, and global stocks amounted to 30.2 tons. The countries holding the largest stocks were Japan (18 tons, or 59.4% of the global total), the United Kingdom (4.6 tons, or 15.1%) and the Republic of Korea (2 tons, or 6.7%).

Ethylmorphine

126. The global manufacture of ethylmorphine has fluctuated over the past 10 years. In 2024, global manufacture of the substance amounted to 2.4 tons, the highest amount recorded in the past 10 years. However, the total amount of both exports (358 kg) and imports (324 kg) was limited. The countries exporting the largest amounts of

Figure 20. Dihydrocodeine: global manufacture, consumption and stocks,^a 2015–2024



^a Stocks as at 31 December of each year.

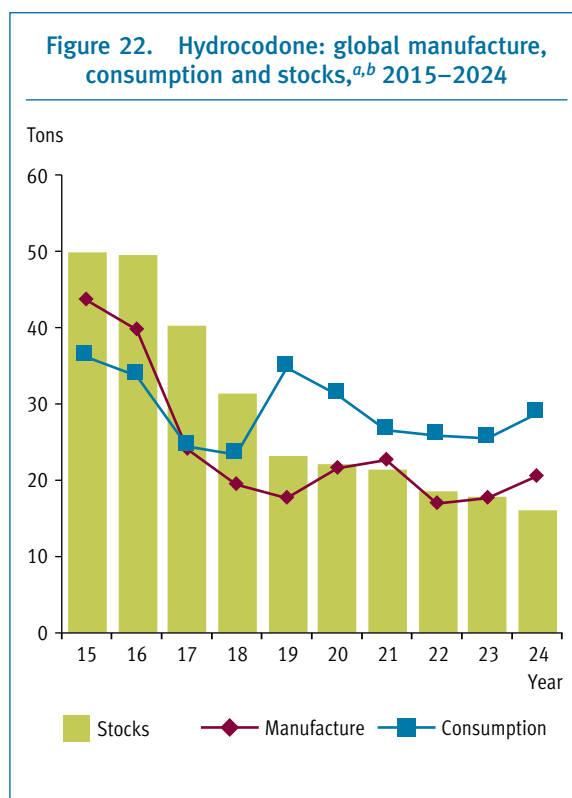
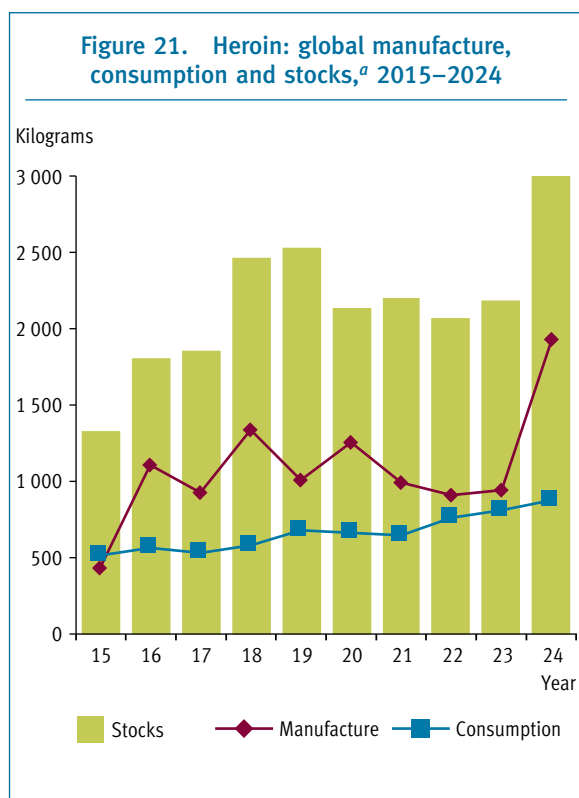
²¹Manufacturing losses are those occurring: (a) during the process of refining a drug; (b) during the process of transformation of a drug into its salts, isomers, esters and ethers, as applicable according to the schedules; and (c) during the manufacture of preparations other than those included in Schedule III of the 1961 Convention as amended. They may also be due to the chemical decomposition of a drug, leakage, evaporation, quality requirements or accidents.

ethylmorphine were, in descending order of the amounts exported, France, Hungary and Türkiye. The countries importing the largest amounts of the substance were, in descending order of the amounts imported, Sweden, Belgium, Poland, Tunisia and Finland. Approximately 96.1% of the total amount of ethylmorphine consumed globally (527.6 kg) was in the form of preparations listed in Schedule III of the 1961 Convention as amended. In 2024, global consumption rose to 21.2 kg, and global stocks stood at 926 kg. The largest stocks were held by France (561 kg), Hungary (121 kg) and Sweden (98 kg).

Heroin

127. Over the past 10 years, the global quantity of licitly manufactured heroin averaged approximately 800 kg per year, amounting to more than 1,000 kg in some years. The global manufacture of heroin reached its 10-year peak of 1.9 tons in 2024, of which a considerable amount was manufactured in the United Kingdom (1,315.7 kg, or 68.2% of the global total), followed by Switzerland (613.8 kg, or 31.8%) (see figure 21). The countries reporting the largest total amounts of exports of heroin in 2024 were the United Kingdom (465.4 kg, or 32.7% of total global exports), Switzerland (379 kg, or 26.6%), the Kingdom of the Netherlands (292.1 kg, or 20.5%) and Germany (286 kg, or 20.1%). In 2024, the main importing country was Germany (557.6 kg, or 43.6% of total global imports), followed by the Kingdom of the Netherlands (370.5 kg, or 29%), Switzerland (292.2 kg, or 22.9%), Denmark (26.8 kg, or 2.1%) and Norway (20.6 kg, or 1.6%). Several other countries imported much smaller amounts of heroin.

128. The global consumption of heroin has increased over the past 10 years, from 521.2 kg in 2015 to 877.2 kg in 2024. Switzerland, where heroin is prescribed for individuals with long-term opiate dependency, reported the consumption of 450.1 kg in 2024 (51.3% of global consumption). Other countries reporting significant levels of heroin consumption for medical purposes in 2024 were Germany (176.2 kg, or 20.1%) and the Kingdom of the Netherlands (146 kg, or 16.6%). Canada, Denmark and Norway also each reported approximately 30 kg of heroin consumption in 2024. Global stocks of heroin increased slightly and reached 3.1 tons in 2024. The



countries holding significant stocks in 2024 were Switzerland (1,136.2 kg, or 36.9% of total global stocks), the United Kingdom (950.1 kg, or 30.9%), the Kingdom of the Netherlands (444.9 kg, or 14.4%), Germany (241.7 kg, or 7.8%), Spain (163.8 kg, or 5.3%) and Canada (126.1 kg, or 4.1%).

Hydrocodone

129. The global manufacture of hydrocodone increased slightly, from 17.6 tons in 2023 to 20.6 tons in 2024, after decreasing from its peak of 43.6 tons in 2015 (see figure 22). The United States was, once again, the main manufacturing country for the substance (20.5 tons, or 99.6% of the global total), followed by the Islamic Republic of Iran (71.9 kg), China (11 kg) and Canada (0.01 kg).

130. In 2024, the global consumption of hydrocodone rose to 28.8 tons. The United States again accounted for almost all (98.4%) of the global consumption of the substance. Colombia reported consumption of 419 kg, or 1.5%. Several other countries reported consumption in minimal amounts.

131. In previous years, hydrocodone had been used in the United States in the manufacture of thebaine for the purpose of manufacturing other narcotic drugs; no such use has been reported since 2003, as the direct extraction of thebaine from poppy straw has been gradually replacing the use of hydrocodone in the manufacture of thebaine since the late 1990s. While most consumption of hydrocodone took place in the United States in 2024, some quantities of the substance were exported by the United States (306.5 kg, or 80.6% of global exports), followed by the Islamic Republic of Iran (71.8 kg, or 18.9%), as well as some other countries that exported minimal quantities.

Hydromorphone

132. The global manufacture of hydromorphone decreased from 5.3 tons in 2023 to 4.4 tons in 2024. The manufacture of hydromorphone stood at 2.2 tons, or 50.6% of the global total, in the United States, and 1 ton, or 22.9%, in the United Kingdom. In addition, Slovakia reported the manufacture of 916 kg of hydromorphone, or 20.9% of the global total, followed by Japan (139.6 kg, or 3.2%), Denmark (52.3 kg, or 1.2%) and China (50.2 kg, or 1.1%). Global exports of hydromorphone remained relatively stable, at 4.1 tons in 2024. The leading countries exporting hydromorphone were the United Kingdom (1.3 tons, or 32.1% of global exports), Switzerland (993.8 kg, or 24.2%), Slovakia (703.1 kg, or 17.1%), Estonia (417.4 kg, or 10.1%), the United States (276.6 kg, or 6.7%) and the Kingdom of the Netherlands (152.6 kg, or 3.7%). In 2024, Switzerland was the main importing country (1 ton, or 25.1% of global imports), followed by Canada (984.7 kg, or 24.2%), Germany (885.4 kg, or 21.8%), Estonia (513.9 kg, or 12.7%), the Kingdom of the Netherlands (156.4 kg, or 3.8%) and Austria (120.2 kg, or 3%). Other countries imported less than 20 kg each.

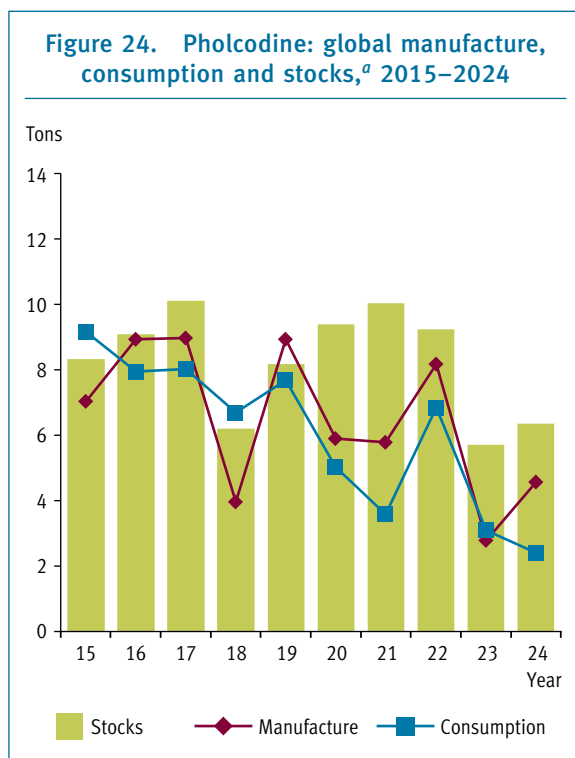
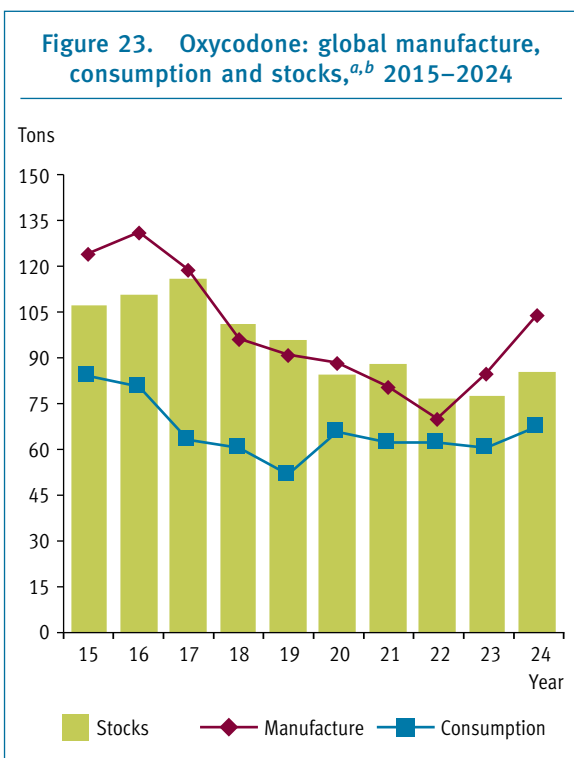
133. In 2024, the consumption of hydromorphone remained stable, at 3.9 tons. The United States continued to be the main consumer country in 2024 (1.7 tons, or 43.7% of global consumption), followed by Canada (1.1 tons, or 25.9%), Germany (0.9 tons, or 21%) and Austria (0.14 tons, or 3.2%). A number of other countries reported the consumption of less than 0.1 tons each. The global stocks of hydromorphone in 2024 stood at 6.6 tons, of which 1.6 tons (24% of the global total) were held in the United States, 0.9 tons (14%) in Germany, 0.9 tons (13.5%) in the United Kingdom, 0.8 tons (12.5%) in Canada and 0.7 tons (10.2%) in Slovakia. Other countries held stocks amounting to less than 10% each.

Oxycodone

134. Oxycodone has, over the past 10 years, been one of the drugs commonly associated with overdose deaths in relation to the misuse of prescription drugs, in particular in North America. The global manufacture of oxycodone increased after 2015, reaching a record high of 130.2 tons in 2016. After that, manufacture decreased gradually, dropping to 69.5 tons in 2022, but increased again, to 103.6 tons, in 2024 (see figure 23). Increases in manufacturing activities in 2024 were mainly attributable to France and Hungary. In 2024, the United States accounted for 34 tons, or 32.8% of global manufacture, followed by France (26 tons, or 25.1%), Hungary (22.5 tons, or 21.8%), the United Kingdom (13.4 tons, or 12.9%) and Slovakia (6.8 tons, or 6.6%). Several other countries manufactured smaller quantities of the substance.

135. There have been some fluctuations in global exports of oxycodone over the past 10 years. In 2024, such exports amounted to 41.9 tons, a slight increase from 40.7 tons in 2023 and almost as much as the 42.5 tons recorded in 2021, which was the highest level in the past 10 years. The United Kingdom continued to be the main exporting country in 2024 (15.9 tons, or 38.1% of global exports), followed by the United States (5.5 tons, or 13.1%), France, Slovakia and the Kingdom of the Netherlands (3.3 tons, or approximately 8%, each), Switzerland (2.8 tons, or 6.6%), Austria (2.5 tons, or 5.9%) and Bulgaria (1.1 tons, or 2.6%). A number of other countries exported smaller quantities. Global imports of oxycodone rose to 40 tons in 2024. The countries importing the most significant quantities of oxycodone were Germany (6.6 tons, or 16.4% of the global total), the United Kingdom (5.4 tons, or 13.4%), the Kingdom of the Netherlands and Austria (3.8 tons, or 9.5%, each), Switzerland (3 tons, or 7.6%), France (2.6 tons, or 6.5%), Canada (1.9 tons, or 4.8%), Bulgaria (1.5 tons, or 3.8%), China (1.4 tons, or 3.5%), Australia (1.4 tons, or 3.4%) and Italy (1.1 tons, or 2.8%). Further details on exports and imports of oxycodone are contained in part IV of the present report.²²

136. Along with the increase in manufacture in 2024, the global consumption of oxycodone rose to 67.5 tons in 2024. Consumption of oxycodone was concentrated in the United States (42.1 tons, or 62.3% of the global total). In 2024, other major consumer countries, in descending order of the amounts consumed, were the United Kingdom (5.4 tons, or 7.9%), China (4.2 tons, or 6.2%), Germany (2.9 tons, or 4.3%), Canada (2.3 tons, or 3.4%), France (1.5 tons, or 2.3%), Australia (1.4 tons, or 2%) and Italy (1.1 tons, or 1.6%). The increases in global consumption were mainly driven by the higher level of consumption reported by China and the United Kingdom. The global stocks of oxycodone also rose, to 84.6 tons, in 2024, with the United States holding 30 tons, or 35.4% of the global total. It was followed by the United Kingdom (15.9 tons, or 18.8%) and France (12 tons, or 14.1%). Other countries held stocks of less than 5 tons each.



^a Stocks as at 31 December of each year.

^b Considerable losses occur in the manufacturing process of this substance, which explains some of the gaps between the figures for manufacture and those for consumption and stocks.

^a Stocks as at 31 December of each year.

²²Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

Pholcodine

137. During the 10-year period 2015–2024, the global manufacture of pholcodine was characterized by volatile trends. Manufacture dropped from its peak of 9 tons in 2017 to 2.7 tons in 2023 and then increased again, to 4.6 tons, in 2024 (see figure 24). It is still considered possible that those fluctuations are related to health concerns about the use of pholcodine that were not confirmed by a review carried out in 2012 by the European Medicines Agency. The main manufacturing countries in 2024 were Hungary (2.5 tons, or 54.4% of the global total), China (1.5 tons, or 32.2%) and France (615 kg, or 13.4%). Total exports of pholcodine increased slightly, from 2.8 tons in 2023 to 2.9 tons in 2024. Those exports were mostly from Hungary (2.6 tons, or 89.7% of global exports) and France (276.5 kg, or 9.5%). The main destinations were Hong Kong, China (2.6 tons, or 79.4% of global imports) and China (675.8 kg, or 20.6%). Further details on exports and imports of pholcodine are provided in part IV of the present report.²³

138. In 2024, the global consumption of pholcodine (the total of the amount directly consumed, and the amount utilized for the manufacture of preparations listed in Schedule III of the 1961 Convention as amended) further decreased, to 2.4 tons, the lowest level recorded in the past 10 years. The main consumer countries and territories were Hong Kong, China (2,600 kg, or 97.9% of the global total), India (27.8 kg, or 1.2%) and Nigeria (20 kg, or 0.8%). In 2024, global stocks of pholcodine increased, reaching 6.3 tons. Major stocks were held by China; France; Hong Kong, China; Norway; Slovakia; and Hungary, in descending order of the amounts held.

Synthetic opioids

139. Synthetic opioids are used in the treatment of chronic, moderate and severe pain. They are also used for the induction of general anaesthesia and in the treatment of specific conditions, such as gastrointestinal disorders. In addition, methadone is used in treatment related to drug dependency.

Dextropropoxyphene

140. The global manufacture of dextropropoxyphene increased from 85.2 kg in 2023 to 202.8 kg in 2024, although the drug has been withdrawn from the market in several countries owing to concerns over serious side effects, including the risk of death from overdose. Consumption, imports and exports increased in 2024, with approximately 15.5 tons held in stocks, mostly in India (14.9 tons, or 96.4% of global stocks).

Diphenoxylate

141. Diphenoxylate is used mostly as an antidiarrhoeal agent. In 2024, the global manufacture of diphenoxylate decreased, from 4.1 tons in 2023 to 2.8 tons. Most of the global manufacture of diphenoxylate was reported by India (1.9 tons, or 68.3% of the global total), the United States (0.5 tons, or 19.5%) and China (0.3 tons, or 9.2%). India continued to be the main country exporting diphenoxylate in 2024 (0.8 tons, or 83.8% of global exports). The main importing countries were Malaysia (114.4 kg, or 29.4% of global imports), Singapore (105 kg, or 27%) and the Islamic Republic of Iran (100 kg, or 25.7%).

142. Diphenoxylate was consumed in the form of preparations listed in Schedule III of the 1961 Convention as amended. Global consumption further decreased, to 2.6 tons, from 3.7 tons in 2023. The countries reporting the highest consumption (the total of the amount directly consumed, and the amount utilized for the manufacture of preparations listed in Schedule III) in 2024 were India (1.2 tons, or 47.5% of the global total), China (0.7 tons, or 27%) and the Islamic Republic of Iran (0.5 tons, or 20%).

²³Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

Fentanyl and fentanyl analogues

Fentanyl

143. Fentanyl, when used as an analgesic, is about 100 times more potent than morphine and is therefore used only in very small doses (for example, 0.005–0.1 mg in injectable form). Until the 1980s, fentanyl was used mainly for the induction of anaesthesia and, in combination with other substances, for balanced anaesthesia in short-term surgical interventions. Since the early 1990s, however, controlled-release preparations (patches) of fentanyl and new delivery methods, including a sublingual spray for cancer patients, have been increasingly used in all parts of the world for the treatment of severe pain.

144. Over the past 10 years, the global manufacture of fentanyl has decreased from its peak of 3.1 tons in 2015 to 2 tons in 2024 (see figure 25). The United States reported the highest level of fentanyl manufacture in 2024 (836.9 kg, or 42.5% of the global total), followed by Germany (570 kg, or 28.9%), Belgium (231.3 kg, or 11.7%) and South Africa (136.2 kg, or 6.9%). Other countries manufactured less than 100 kg each.

145. Exports of fentanyl decreased slightly, from 1.1 tons in 2023 to 940.9 kg in 2024. Germany continued to be the leading exporting country (388.5 kg, or 41.3% of global exports), followed by the United States (230.5 kg, or 24.5%), Belgium (165.8 kg, or 17.6%) and Greece (48.4 kg, or 5.1%). Other countries exported quantities of less than 2% each. Germany was also the principal importing country for fentanyl in 2024 (313.6 kg, or 28.8% of global imports), followed by Spain (143.5 kg, or 13.2%), Greece (105.7 kg, or 9.7%), France (82.3 kg, or 7.6%), the Kingdom of the Netherlands (56.7 kg, or 5.2%), the United Kingdom (43.7 kg, or 4%), Italy (41.9 kg, or 3.8%) and Canada (38.2 kg, or 3.5%). Some other countries imported quantities of less than 3% each. Further details on exports and imports of fentanyl are contained in part IV of the present report.²⁴

146. Global consumption of fentanyl, which peaked at 1.7 tons in 2015, decreased to 0.98 tons in 2022; the decrease may be associated with continued concerns about the number of overdose deaths attributed to the misuse of fentanyl or fentanyl-type substances, mainly in North America. As in the period prior to 2015, the global consumption of fentanyl increased, reaching 1.1 tons, with 13 countries accounting for most of it (82.5%). The three countries reporting the highest level of consumption (more than 130 kg each) were Germany (200.2 kg, or 18.4% of the global total), the United States (164.5 kg, or 15.2%) and Spain (137.5 kg, or 12.7%). Other countries reporting a considerable level of consumption of fentanyl were, in descending order of the amounts reported consumed, Greece, France, the Kingdom of the Netherlands, Italy, Brazil, Canada, the Russian Federation, Belgium, the United Kingdom and Austria (see figure 26).

147. In 2024, global stocks of fentanyl dropped to 3.4 tons. The largest stocks were reported by Germany (1.5 tons, or 45.4%), the United States (487.8 kg, or 14.5%), the United Kingdom (277.3 kg, or 8.3%), South Africa (260 kg, or 7.7%) and Belgium (241.7 kg, or 7.2%). Other countries each reported stocks of less than 100 kg.

148. The fentanyl analogues alfentanil, remifentanil and sufentanil are used mainly as anaesthetics. Their use increased in some countries during the coronavirus disease (COVID-19) pandemic, as reported below.

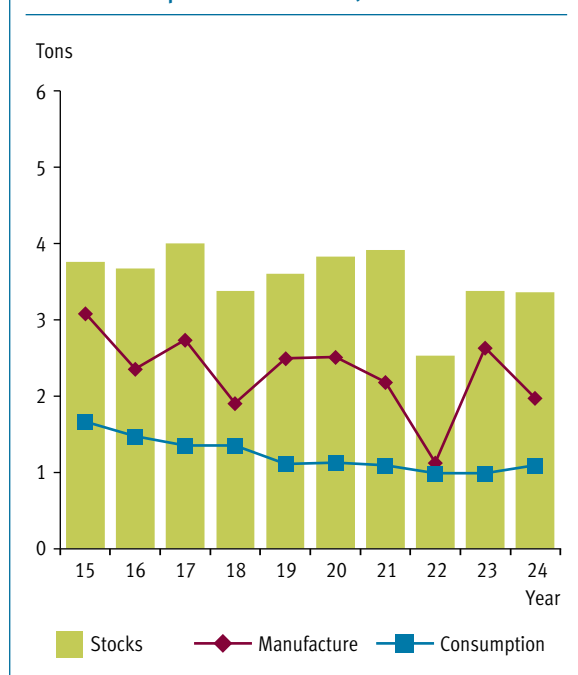
Alfentanil

149. Alfentanil is a potent opioid analgesic indicated for analgesia and suppression of respiratory activity in mechanically ventilated patients in intensive care and to provide analgesic cover for painful manoeuvres.

150. The level of manufacture of alfentanil has fluctuated significantly in the past 10 years. Global manufacture first increased from 51.2 kg in 2015 to 92.7 kg in 2021 (its peak in the past 10 years), but then decreased considerably, to 31.8 kg, in 2023. It further dropped to 11.1 kg in 2024. The increase in 2021 may have been due to the increasing demand related to the use of alfentanil for the treatment of people affected by COVID-19 in intensive care. Most of the global manufacture of the substance in 2024 was reported by China (6.6 kg, or 59.5% of the global total), the United Kingdom (3.4 kg, or 30.6%) and Brazil (1.1 kg, or 9.8%).

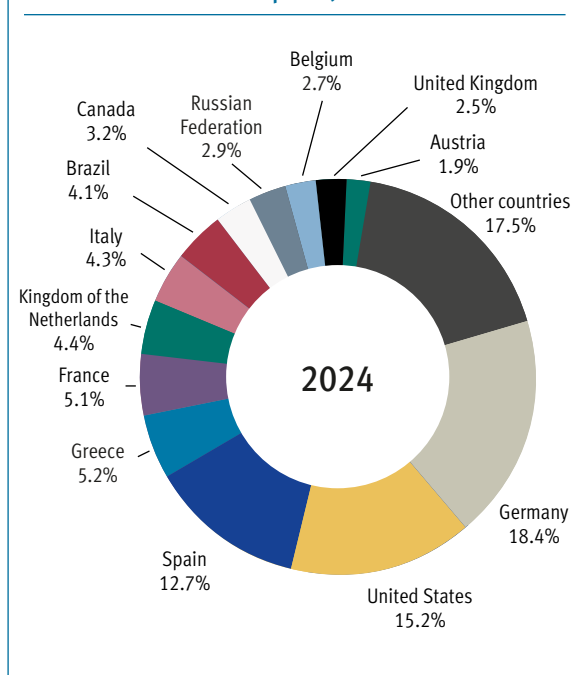
²⁴Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

Figure 25. Fentanyl: global manufacture, consumption and stocks,^a 2015–2024



^aStocks as at 31 December of each year.

Figure 26. Fentanyl: distribution of consumption, 2024



151. The global consumption of alfentanil dropped from 35 kg in 2023 to 27.1 kg in 2024. As in previous years, the United Kingdom was the main consumer country, accounting for 11.2 kg (41.4% of the global total). It was followed by Greece (4.3 kg, or 15.9%) and China (4.3 kg, or 15.7%). France, Germany, Australia and Brazil, in descending order of the amounts consumed, each accounted for more than 3% of the global consumption of the substance. Detailed information on the consumption of fentanyl analogues is provided in table XIII.1 of part IV of the present report.²⁵

152. Global stocks of alfentanil increased further, from 117.8 kg in 2023 to 208.2 kg in 2024. China was the main holder of global stocks of alfentanil, with stocks of 108.6 kg, or 52.2% of the global total. It was followed by Greece (36.7 kg, or 17.1% of the global total), the United Kingdom (26.3 kg, or 12.7%), Slovakia (16.5 kg, or 7.9%) and Serbia (7.1 kg, or 3.4%). Other countries held stocks of less than 4 kg each.

Remifentanil

153. Remifentanil is a potent, short-acting synthetic opioid analgesic given to patients during surgery to relieve pain and as an adjunct to an anaesthetic. It is approximately twice as potent as fentanyl and 100 to 200 times more potent than morphine. As in the case of alfentanil, there were increases in the manufacture, consumption and stocks of remifentanil, probably related to increasing demand created by COVID-19-related treatment needs. Global manufacture of remifentanil increased from 73 kg in 2015 to 219 kg in 2021, but dropped to 152 kg in 2024. In 2024, China continued to be the main manufacturing country, accounting for 65.4 kg, or 43% of total global manufacture. It was followed by Spain (26 kg, or 17.1% of the global total), Belgium (24.9 kg, or 16.4%), Germany (16.6 kg, or 10.9%) and Slovakia (10.9 kg, or 7.2%). Other countries manufactured less than 3 kg each. The main exporting countries in 2024 were, in descending order of the amounts exported, Spain, Belgium, Slovakia, Italy, Serbia and Germany, which together accounted for 90.6 kg (or 85% of global exports). Serbia was the main importing country in 2024, reporting the import of 15.2 kg (or 12.6% of global imports). It was followed by Italy (14 kg, or 11.6% of global imports) and Germany (10.7 kg, or 8.9%), as well as the Republic of Korea, Japan and Türkiye (approximately 8 kg, or 6.6%, each). All other importing countries imported less than 8 kg of remifentanil.

²⁵Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

154. The global consumption of remifentanyl increased from 132.4 kg in 2023 to 150 kg in 2024. The countries reporting the highest level of consumption of the substance were China (61.3 kg, or 40.8% of global consumption), Germany (12.5 kg, or 8.3%), Japan (9.2 kg, or 6.1%) and Türkiye (8.8 kg, or 5.8%). The United Kingdom and Greece also reported consumption of approximately 6.5 kg each. All other countries reported consumption of remifentanyl in quantities of less than 6 kg each. As mentioned above, stocks of remifentanyl reached a high in 2022 (365.3 kg), likely because of the demand for remifentanyl related to the COVID-19 pandemic, and then dropped to 168.7 kg in 2024. Most of the global stocks were held by Belgium (31.4 kg, or 18.6%), the United Kingdom (25.6 kg, or 15.2%), Germany (20.1 kg, or 11.9%), Italy (15.9 kg, or 9.4%) and Slovakia (15.3 kg, or 9.1%). A number of other countries held stocks of less than 8 kg each.

Sufentanil

155. The level of global manufacture of sufentanil remained above 10 kg each year from 2019 to 2022, but then decreased gradually to 7.2 kg in 2024. The main manufacturing countries were China (4.3 kg, or 59.5% of the global total), Latvia (0.9 kg, or 13%), Slovakia (0.9 kg, or 13%) and the United States (0.7 kg, or 10.4%). The main exporting countries continued to be Slovakia (1.3 kg, or 48.1% of global exports), Serbia (0.4 kg, or 15.6%), Greece (0.3 kg, or 11%) and the United States (0.2 kg, or 7.4%). Other countries exported less than 6% of the global total each. In 2024, the global consumption of sufentanil remained stable, at approximately 5 tons. The countries reporting the highest level of consumption were, in descending order of the amounts consumed, China, Germany, the United States, Greece, France, Czechia and Austria. In 2024, global stocks further increased, to 40 kg, most of which were held by China (27 kg, or 67.5% of global stocks). In addition, Greece and Slovakia accounted for stocks of 2 kg, or approximately 6%, each.

Ketobemidone

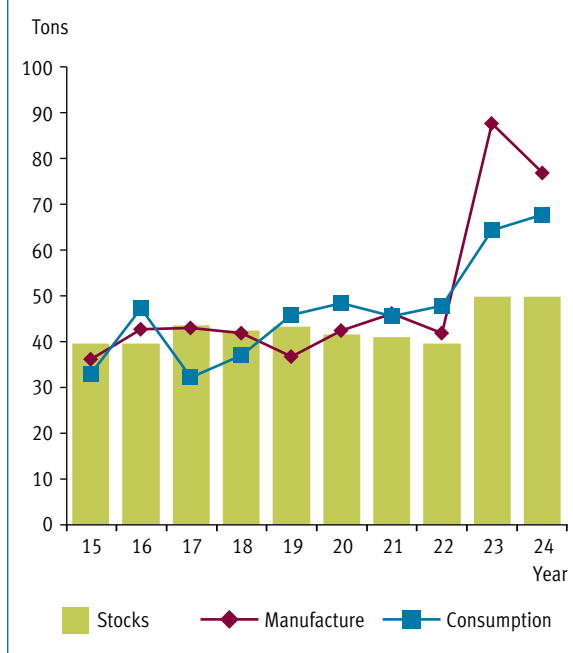
156. Ketobemidone is a powerful opioid analgesic with an effectiveness against pain similar to that of morphine. The drug is manufactured and used in a small number of countries, mostly in Northern Europe. It appears to be manufactured only every third year; manufacture of the drug was reported in 2015 (365.9 kg), 2018 (279.8 kg) and 2021 (0.6 kg). No manufacture has been reported since 2021. Global stocks of ketobemidone dropped to only 1 kg in 2024, from 11.5 kg in 2023. In 2024, only 0.4 kg of the substance were traded. Denmark was the main exporting country, and Iceland was the main importing country.

Methadone

157. Methadone, together with buprenorphine (which is controlled under the 1971 Convention), is sometimes used for pain management, but is primarily used in the treatment of opioid dependence. As shown in figure 27, the trends related to its consumption, manufacture and stocks reveal an overall gradual increase over the 10-year period 2015–2024, albeit with some fluctuations. The manufacture of methadone decreased from its 10-year peak of 87.7 tons in 2023, to 76.7 tons in 2024. The main manufacturing countries were the Islamic Republic of Iran (34.1 tons, or 48.4% of global manufacture), the United States (18 tons, or 23.5%), Switzerland (10.7 tons, or 13.9%), India (5.6 tons, or 7.3%), Slovakia (2.5 tons, or 3.2%) and Spain (1.6 tons, or 2.1%). In 2024, the Islamic Republic of Iran became the leading exporting country (7.2 tons, or 28.9% of global exports), followed by Switzerland (5.6 tons, or 22.8%), India (4.7 tons, or 18.8%), Slovakia (2 tons, or 8.2%) and the United States (1.1 tons, or 4.5%). The main importing countries were Canada (2.6 tons, or 15.2% of global imports), Italy (2.1 tons, or 12.4%), France (2 tons, or 11.4%) and Germany (2 tons, or 11.4%). A number of other countries imported less than 1 ton each.

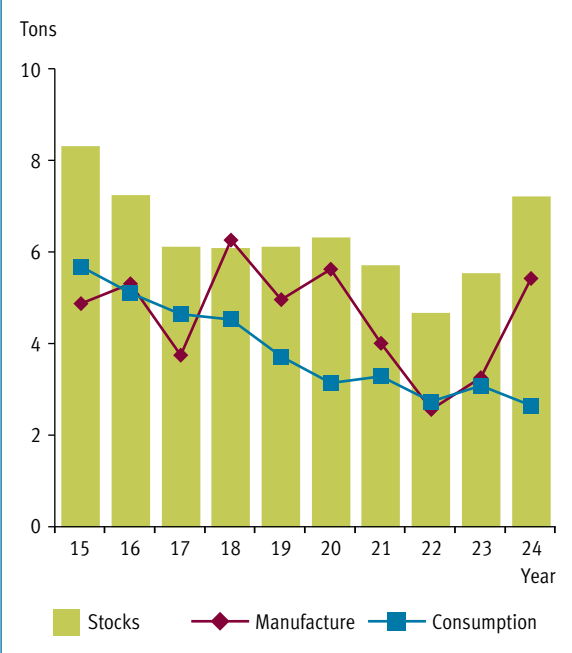
158. In 2024, the consumption of methadone was concentrated in a few countries, and there were large differences in consumption patterns among countries. The global consumption of the substance increased from 64.3 tons in 2023 to 67.7 tons in 2024. The countries reporting the highest level of consumption in 2024 were the Islamic Republic of Iran (27.2 tons, or 40.1% of global consumption), the United States (24.9 tons, or 36.7%), the United Kingdom (2.2 tons, or 3.3%), Canada (1.7 tons, or 2.5%), France (1.4 tons, or 2.1%), Germany (1.4 tons, or 2.1%) and Spain (1.1 tons, or 2%). Another 90 countries reported consumption of less than 1 ton of methadone each. In most cases, the countries reporting the highest level of consumption were those with a high number of people who inject drugs. In other cases, despite the fact that there was a significant number of people who

Figure 27. Methadone: global manufacture, consumption and stocks,^a 2015–2024



^aStocks as at 31 December of each year.

Figure 28. Pethidine: global manufacture, consumption and stocks,^a 2015–2024



^aStocks as at 31 December of each year.

inject drugs, little or no methadone consumption was reported, indicating that opioid agonist therapy services for drug-dependent persons were not available.

159. In 2024, stocks of methadone amounted to 49.6 tons and were mainly held by the United States (14.1 tons, or 20.2% of global stocks), Switzerland (9.4 tons, or 18.4%), Germany (3.2 tons, or 6.5%), Italy (2.9 tons, or 5.9%) and Canada (2.6 tons, or 5.3%). Approximately 75 countries held stocks of less than 2.5 tons.

Pethidine

160. Pethidine is used mostly for pain relief in childbirth. The decrease in the level of global consumption of the substance is attributable to several factors, such as its low potency, short duration of action and unique toxicity (symptoms of which include seizures, delirium and other neuropsychological effects) compared with other available opioid analgesics. It is considered an effective analgesic for acute pain, but is not considered useful for chronic pain. For those reasons, several countries have placed strict limits on its use, but some physicians continue to use it as a strong first-line opioid.

161. The manufacture of pethidine has fluctuated over the past 10 years; after falling to 3.2 tons in 2023, it rose again to 5.4 tons in 2024 (see figure 28). In 2024, pethidine was mostly manufactured in Slovakia (4.5 tons, or 82.4% of global manufacture), the United States (492.4 kg, or 9.1%), China (365.8 kg, or 6.7%) and India (94.3 kg, or 1.7%). The main exporting countries were Slovakia (2.6 tons, or 74.7% of global exports), the United Kingdom (314 kg, or 9%) and India (202 kg, or 5.8%). A total of 109 countries reported imports of pethidine in 2024. Major importing countries included the United Kingdom (612.5 kg, or 20% of global imports), Bangladesh (210 kg, or 6.9%) and India (186.2 kg, or 6.1%). Further details on exports and imports of pethidine are contained in part IV of the present report.²⁶

162. The global consumption of pethidine, which stood at 5.7 tons in 2015, has been decreasing steadily since then, and it dropped to 2.7 tons in 2024. Despite the decline in the level of global consumption, a total of

²⁶Part IV is available online only, at www.incb.org/incb/en/narcotic-drugs/Technical_Reports/narcotic_drugs_reports.html.

113 countries reported consumption of the substance in 2024, indicating that it is one of the most widely used narcotic drugs. The countries reporting the highest level of consumption of the substance in 2024 were Türkiye (317.3 kg, or 11.9%), China (242.2 kg, or 9.1%), South Africa (209.2 kg, or 7.9%), the Islamic Republic of Iran (187.1 kg, or 7%) and Bangladesh (185.3 kg, or 7%). Global stocks of pethidine rose to 7.2 tons in 2024, with the largest share being held by Slovakia (2.3 tons, or 32.5% of global stocks). It was followed by China (862.9 kg, or 11.9%), the United Kingdom (798.1 kg, or 11%), the United States (564.8 kg, or 7.8%) and Türkiye (406.6 kg, or 5.6%). A number of other countries held quantities of less than 0.3 tons each.

Tilidine

163. The global manufacture of tilidine increased from 47.6 tons in 2023 to 83.4 tons in 2024, largely because of considerable expansion in the manufacture of the drug in Germany. As the leading manufacturing country, Germany continued to account for the bulk of the global manufacture of tilidine (79.5 tons, or 95.3% of the global manufacture). As in previous years, Germany was also the main exporting country in 2024 (43 tons, or 66.3% of global exports), followed by Serbia (20.8 kg, or 32.1%).

164. The global consumption of tilidine has declined in the past 10 years. It was highest in 2018, at 46.4 tons, then dropped to 42.8 tons in 2023 and further, to 36.1 tons, in 2024. In 2024, Germany accounted for almost all global consumption (35.9 tons, or 99.5% of global consumption) and global stocks of tilidine (53.4 tons, or 90% of the global total).

Trimeperidine

165. Trimeperidine was developed around 1945 in the former Union of Soviet Socialist Republics and, historically, manufacture and consumption of the substance were concentrated there. India has been reporting the manufacture of trimeperidine since 2002. From 2015 to 2024, the global level of trimeperidine manufacture fluctuated; it first dropped, from 203.8 kg, in 2015 to 35.3 kg in 2022, then rose to its 10-year high of 341.9 kg in 2024. As in previous years, India was the main manufacturing country (341.8 kg, or 99.9% of the global total).

166. In 2024, the global consumption of trimeperidine rose to 304.4 kg, with the Russian Federation once again reporting the highest level of consumption (146.2 kg, or 48% of the global total), followed by India (132 kg, or 43.4%), Uzbekistan and Belarus (8.9 kg, or 2.9%, each). Imports and exports of the substance increased slightly in 2024, with the main importing country continuing to be the Russian Federation (176 kg, or 83% of global imports). India was the top exporting country of the substance in 2024, reporting a total of 158.4 kg of exports (87.9% of global exports). Global stocks of trimeperidine further decreased to 295.2 kg in 2024; they were mainly held by the Russian Federation (252.6 kg, or 85.6% of the global total), India (25.3 kg, or 8.6%) and Ukraine (9.9 kg, or 3.3%).

Cannabis

167. Since December 2020, following the vote of the Commission on Narcotic Drugs on the WHO recommendations on cannabis and cannabis-related substances, the Board has held various consultations with experts and Member States to revise the reporting requirements for cannabis and cannabis-related substances, with a view to achieving harmonization. As a result of those consultations, the Board introduced new reporting requirements, effective for data relating to 2024.

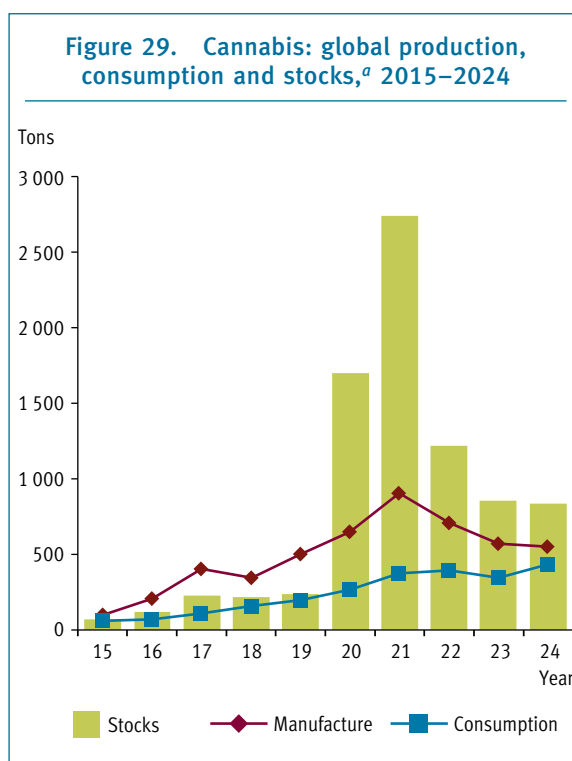
168. As part of the new reporting requirements, changes in the requirements for reporting on cannabis (understood as the flowering and fruiting top of the cannabis plant) and cannabis-related substances have been introduced. As of 2024, cannabis and cannabis resin must be reported using the forms provided to Governments for reporting under the 1961 Convention as amended. However, any preparation or by-product derived from cannabis should be reported in terms of the cannabinoids that it contains, using the forms provided for reporting under the 1971 Convention.

169. Owing to those changes, it is expected that, in the coming years, the data relating to the consumption, trade and stocks of cannabis presented in the reports of the Board on narcotic drugs will change noticeably, as more countries are expected to report data on controlled cannabinoids using separate forms provided for reporting under the 1971 Convention, rather than the forms for reporting under the 1961 Convention as amended.

170. Until 2010, the United States was the only country reporting the licit use of cannabis for medical and scientific purposes. Since 2011, however, an increasing number of countries have started to use cannabis and cannabis extracts for those purposes, and there has consequently been an overall increase in the global production of cannabis. Production amounted to 721.1 tons in 2022, representing a decrease compared with the 907.9 tons recorded for 2021, when the trend in production reached its historical peak. In 2023, reported production decreased again, to 568.7 tons, and then decreased further, to 549.2 tons, in 2024 (see figure 29).

171. In 2024, the largest shares of the production of cannabis for medical and scientific purposes were reported by Canada (248.2 tons, or 45.2% of global production), the United Kingdom (95 tons, or 17.2%), Portugal (46.8 tons, or 8.5%), Australia (41.3 tons, or 7.5%) and Denmark (25.4 tons, or 4.6%). Among the countries each reporting less than 2% of global production were Colombia, Ecuador, South Africa, North Macedonia and Spain. It must be taken into account that variations in the data are probably due to the change in reporting requirements.

172. In 2024, the main country reporting exports of cannabis was Canada (145.8 tons, or 57.3% of the global total), followed by Portugal (46.9 tons, or 18.4%), Colombia (11.7 tons, or 4.6%), Denmark (10.7 tons, or 4.1%), Spain (8.1 tons, or 3.2%) and Germany (7.4 tons, or 3%). Countries whose exports each amounted to less than 2% of the global total included, in descending order of amounts exported, the Kingdom of the Netherlands, Czechia, North Macedonia and Australia.



^aStocks as at 31 December of each year.

173. In 2024, Germany continued to be the country reporting the largest share of cannabis imports, with 72.6 tons, or 29.1% of the global total. It was followed by Australia (52.4 tons, or 21%), Portugal (39.1 tons, or 15.7%), Israel (24.6 tons, or 9.8%), the United Kingdom (12.8 tons, or 5.2%), Czechia (10.5 tons, or 4.2%), North Macedonia (9.8 tons, or 3.9%) and Poland (7.9 tons, or 3.2%). Countries importing amounts of less than 3 tons of cannabis included Spain and New Zealand, in descending order of the amounts imported.

174. The global stocks of cannabis amounted to 836 tons in 2024, a slight decrease from the 852.1 tons reported in 2023. The United Kingdom continued to hold the largest share of the global stocks in 2024 (530 tons, or 63.4% of the global total), followed by Colombia (65 tons, or 7.8%), Australia (56.3 tons, or 6.7%), Portugal (46.6 tons, or 5.6%), North Macedonia (22.8 tons, or 2.7%), Germany (22.5 tons, or 2.7%) and Uruguay (20.2 tons, or 2.4%). Countries reporting less than 2% of the global stocks included New Zealand, Spain and Canada, in descending order of the amounts held in stock.

Coca leaf and cocaine

Coca leaf

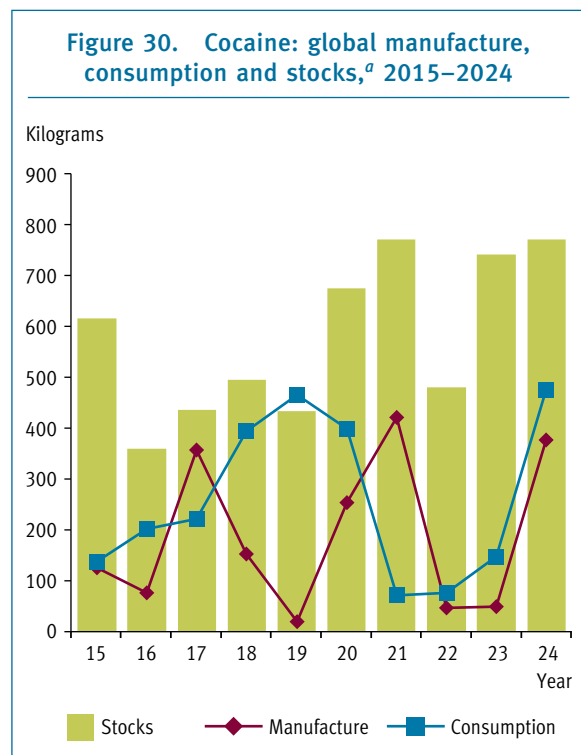
175. In the Plurinational State of Bolivia, the cultivation of coca bush for the chewing of coca leaf and the consumption and use of coca leaf in its natural state for cultural and medicinal purposes, such as for preparing infusions, is allowed in accordance with the reservation made by the country in 2013, when it reaccessed to the 1961 Convention as amended. In that connection, the Plurinational State of Bolivia reported the production of 25,728 tons of coca leaf in 2024. Peru reported the production of 1,259.3 tons in that year.

176. Peru has been the only country exporting coca leaf for the global market since 2000. Most of the coca leaf is exported to the United States, where it is utilized for the extraction of flavouring agents and the manufacture of cocaine as a by-product. In 2024, Peru reported the export of 150.3 tons of coca leaf, and the United States reported the import of 84.1 tons. That discrepancy in trade for 2024 is due to some exports from Peru in late 2024 that entered the United States in early 2025. In 2024, the United States reported the utilization of 137.5 tons of coca leaf, while Peru reported the utilization of 86.5 tons. Significant stocks of coca leaf were held by the United States (692.5 tons, or 62.2% of the global total) and Peru (420.2 tons, or 37.8%). Italy, Australia, the Kingdom of the Netherlands, Canada and France, in descending order of the amounts held in stock, each reported stocks amounting to 0.01% or less of the global total.

Cocaine

177. The level of global licit manufacture of cocaine has fluctuated for more than 20 years. In 2024, licit manufacture of the substance increased to 377.4 kg, from 50.7 kg in 2023 (see figure 30). The main exporting country in 2024 continued to be the United Kingdom (48.1 kg, or 69.6% of global exports), followed by Germany (9.3 kg, or 13.4%), the Kingdom of the Netherlands (5.11 kg, or 7.4%), the United States (4.4 kg, or 6.4%) and Switzerland (1.7 kg, or 2.5%). Other countries reported the export of minimal quantities of the substance. Imports of cocaine were reported by the Kingdom of the Netherlands (20.1 kg, or 29.8% of global imports), followed by Poland (9.8 kg, or 14.5%), Denmark (5.3 kg, or 7.9%), Germany (5.2 kg, or 7.7%) and Australia (5.1 kg, or 7.6%). Other countries importing lower amounts included, in descending order of the amounts imported, Switzerland, Canada, Malaysia, Belgium and Austria.

178. The global licit consumption of cocaine, which has also fluctuated since 2011, reached its highest level since 1992, 475.7 kg, in 2024. The countries reporting the highest level of consumption of cocaine in 2024 were the United States (287 kg, or 60.3% of global consumption), the United Kingdom (142.9 kg, or 30%) and the Kingdom of the Netherlands (9.4 kg, or 2%). Other countries reporting consumption of less than 2% of total global consumption included, in descending order of the amounts consumed, Denmark, Australia, New Zealand, Belgium, Canada, Austria and Switzerland. Stocks of cocaine were held by Peru (515.6 kg, or 66.8% of the global total), the United Kingdom (79.7 kg, or 10.3%), the United States (62.4 kg, or 8.1%) and the Russian Federation (46.4 kg, or 6%). Other countries reporting stocks of less than 2% of the global total included the Kingdom of the Netherlands, Switzerland, Türkiye, Poland, Canada and Germany, in descending order of the amounts held in stock.



International Narcotics Control Board

About the International Narcotics Control Board

The International Narcotics Control Board (INCB) is an independent and quasi-judicial control organ, established by treaty, that monitors the implementation of the international drug control treaties. It had predecessors under the former drug control treaties as far back as the time of the League of Nations.

Composition

INCB consists of 13 members who are elected by the Economic and Social Council and who serve in their personal capacity, not as government representatives. Three members with medical, pharmacological or pharmaceutical experience are elected from a list of persons nominated by the World Health Organization (WHO) and 10 members are elected from a list of persons nominated by Governments. Members of INCB are persons who, by their competence, impartiality and disinterestedness, command general confidence. The Council, in consultation with INCB, makes all arrangements necessary to ensure the full technical independence of the Board in carrying out its functions. INCB has a secretariat that assists it in the exercise of its treaty-related functions. The INCB secretariat is an administrative entity of the United Nations Office on Drugs and Crime, but it reports solely to the Board on matters of substance. INCB closely collaborates with the Office in the framework of arrangements approved by the Council in its resolution 1991/48. INCB also cooperates with other international bodies concerned with drug control, including not only the Council and its Commission on Narcotic Drugs, but also the relevant specialized agencies of the United Nations, particularly WHO. It also cooperates with bodies outside the United Nations system, especially the International Criminal Police Organization (INTERPOL) and the World Customs Organization (WCO).

Functions

The functions of INCB are laid down in the following treaties: the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol; the Convention on Psychotropic Substances of 1971; and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988. Broadly speaking, INCB deals with the following:

(a) As regards the licit manufacture of, trade in and use of drugs, INCB endeavours, in cooperation with Governments, to ensure that adequate supplies of drugs are available for medical and scientific uses and that the diversion of drugs from licit sources to illicit channels does not occur. INCB also monitors Governments' control over chemicals used in the illicit manufacture of drugs and assists them in preventing the diversion of those chemicals into illicit traffic.

(b) As regards the illicit manufacture of, trafficking in and use of drugs, INCB identifies weaknesses in national and international control systems and contributes to correcting such situations. INCB is also responsible for assessing chemicals used in the illicit manufacture of drugs in order to determine whether they should be placed under international control.

In the discharge of its responsibilities, INCB:

(a) Administers a system of estimates for narcotic drugs and a voluntary assessment system for psychotropic substances and monitors licit activities involving drugs through a statistical returns system, with a view to assisting Governments in achieving, inter alia, a balance between supply and demand;

(b) Monitors and promotes measures taken by Governments to prevent the diversion of substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances and assesses such substances to determine whether there is a need for changes in the scope of control of Tables I and II of the 1988 Convention;

(c) Analyses information provided by Governments, United Nations bodies, specialized agencies and other competent international organizations, with a view to ensuring that the provisions of the international drug control treaties are adequately carried out by Governments, and recommends remedial measures;

(d) Maintains a permanent dialogue with Governments to assist them in complying with their obligations under the international drug control treaties and, to that end, recommends, where appropriate, the provision of technical or financial assistance.

INCB is called upon to ask for explanations in the event of apparent violations of the treaties, to propose appropriate remedial measures to Governments that are not fully applying the provisions of the treaties or are encountering difficulties in applying them and, where necessary, to assist Governments in overcoming such difficulties. If, however, INCB notes that the

measures necessary to remedy a serious situation have not been taken, it may bring the matter to the attention of the parties concerned, the Commission on Narcotic Drugs and the Economic and Social Council. As a last resort, the treaties empower INCB to recommend to parties that they stop importing drugs from a defaulting country, exporting drugs to it or both. In all cases, INCB acts in close cooperation with Governments.

INCB assists national administrations in meeting their obligations under the conventions. To that end, it proposes and participates in regional training seminars and programmes for drug control administrators.

Reports

The international drug control treaties require INCB to prepare an annual report on its work. The annual report contains an analysis of the drug control situation worldwide so that Governments are kept aware of existing and potential situations that may endanger the objectives of the international drug control treaties. INCB draws the attention of Governments to gaps and weaknesses in national control and in treaty compliance; it also makes suggestions and recommendations for improvements at both the national and international levels. The annual report is based on information provided by Governments to INCB, United Nations entities and other organizations. It also uses information provided through other international organizations, such as INTERPOL and WCO, as well as regional organizations.

The annual report of INCB is supplemented by detailed technical reports, which contain data on the licit movement of narcotic drugs and psychotropic substances required for medical and scientific purposes, together with an analysis of those data by INCB. Those data are required for the proper functioning of the system of control over the licit movement of narcotic drugs and psychotropic substances, including their diversion to illicit channels. More-over, under the provisions of article 12 of the 1988 Convention, INCB reports annually to the Commission on Narcotic Drugs on the implementation of that article. That report, which gives an account of the results of the monitoring of precursors and of the chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, is also published as a supplement to the annual report.



INTERNATIONAL NARCOTICS CONTROL BOARD

The International Narcotics Control Board (INCB) is the independent monitoring body for the implementation of United Nations international drug control conventions. It was established in 1968 in accordance with the Single Convention on Narcotic Drugs, 1954. It had predecessors under the former drug control treaties as far back as the time of the League of Nations.

Based on its activities, INCB publishes an annual report that is submitted to the United Nations Economic and Social Council through the Commission on Narcotic Drugs. The report provides a comprehensive survey of the drug control situation in various parts of the world. As an impartial body, INCB tries to identify and predict dangerous trends and suggests necessary measures to be taken.

