

# World Drug Report 2021

## Focus on the Americas

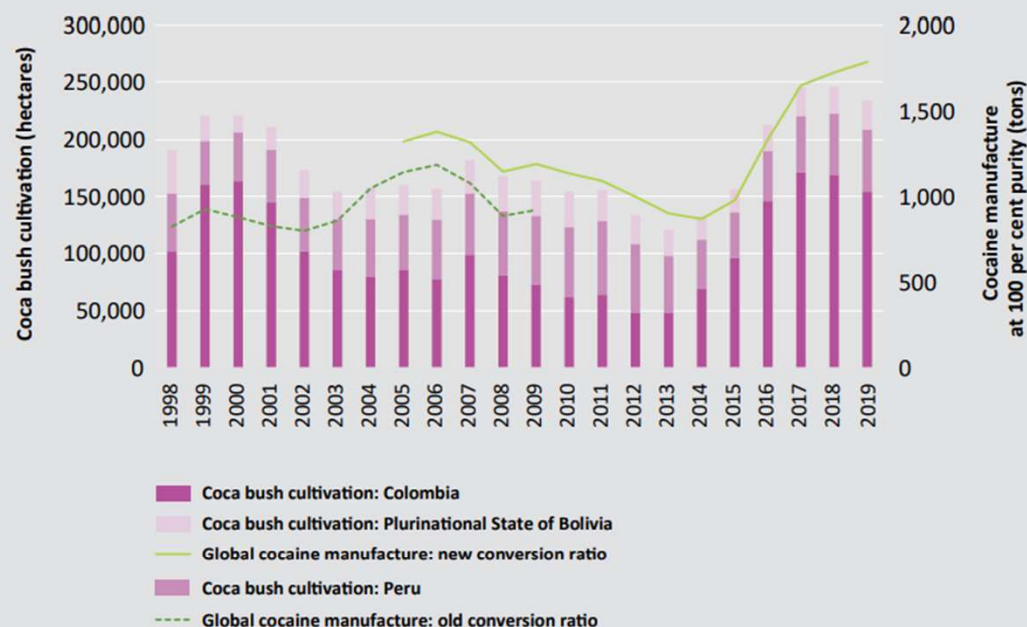


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# GLOBAL AREA UNDER COCA CULTIVATION DECLINES BUT COCAINE MANUFACTURE HITS RECORD HIGH

W O R L D  
D R U G  
R E P O R T 2021

AFTER REACHING A RECORD HIGH IN THE GLOBAL AREA UNDER COCA CULTIVATION, LAST ESTIMATE SHOWS A 5 PER CENT DECLINE, BUT COCAINE MANUFACTURING IS STILL ON A RISE



## GLOBAL CULTIVATION 2019



## GLOBAL PRODUCTION 2019



## GLOBAL NUMBER OF USERS 2019



## Area under coca cultivation in 2019

**Colombia:** 66%  
**Peru:** 23%  
**Plurinational State of Bolivia:** 11%

## Change on a year earlier

- 9%  
+ 1%  
+ 10%

# COCAINE

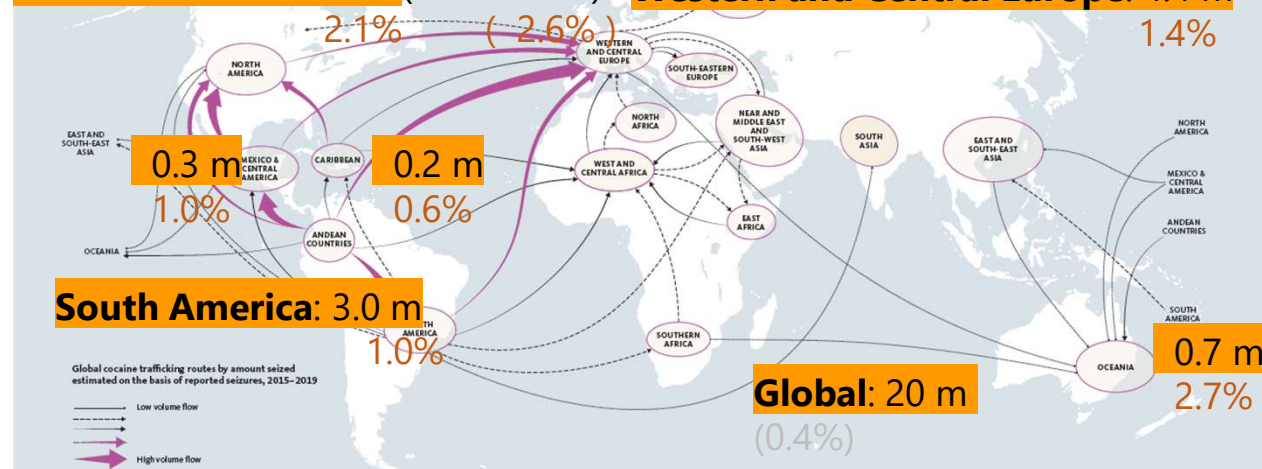
## Cocaine supply

### WORLD DRUG REPORT 2021

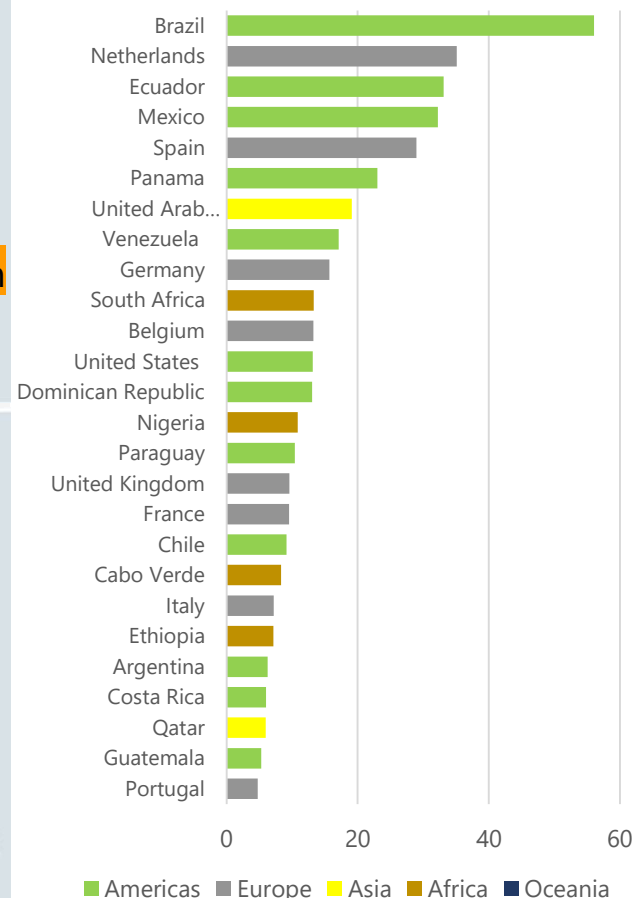
## Main global cocaine trafficking flows, 2015-2019

**Annual users of cocaine 2019** (million people/prevalence population aged 15-64)

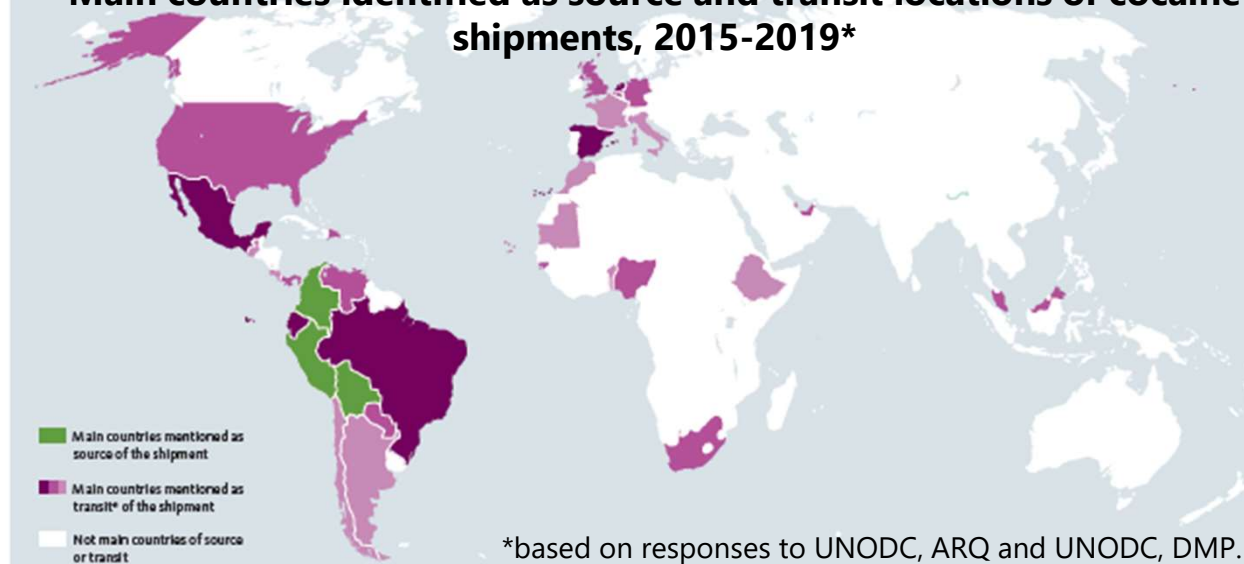
**North America: 6.9 m** (USA: 5.6 m) **Western and Central Europe: 4.4 m**



## Major cocaine transit countries, 2015-2019\*



## Main countries identified as source and transit locations of cocaine shipments, 2015-2019\*



\*based on responses to UNODC, ARQ and UNODC, DMP.

\*based on responses to UNODC, Source: UNODC, World Drug Report 2021

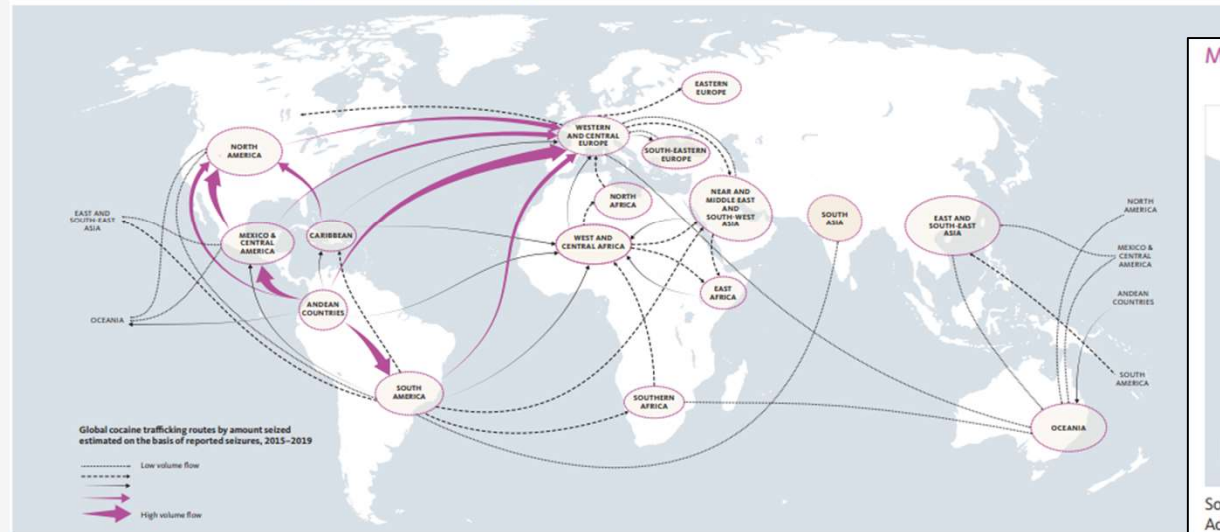


# COCAINE

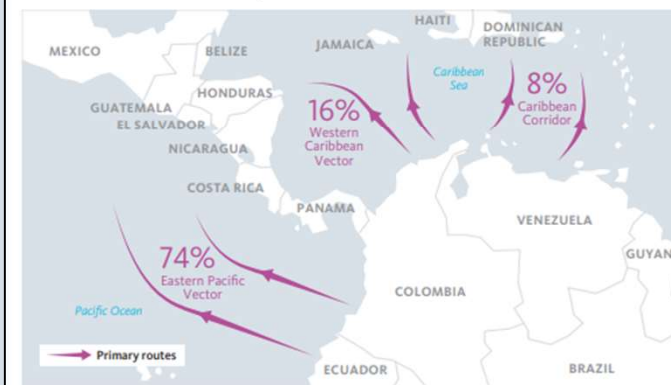
## Cocaine supply

# WORLD DRUG REPORT 2021

MAP 6 Main cocaine trafficking flows, as described by reported seizures, 2015–2019

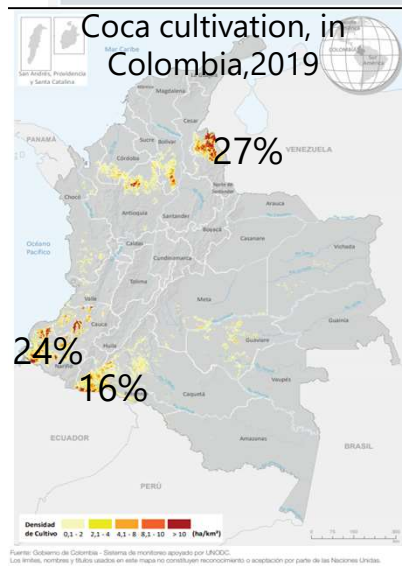


MAP 9 Trafficking in cocaine from the Andean region to North America, 2019

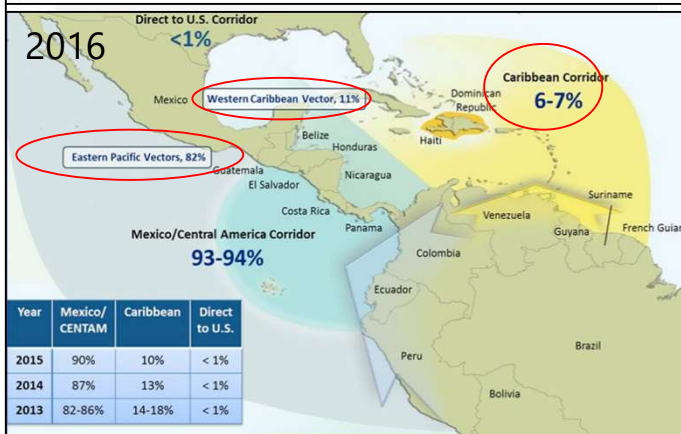
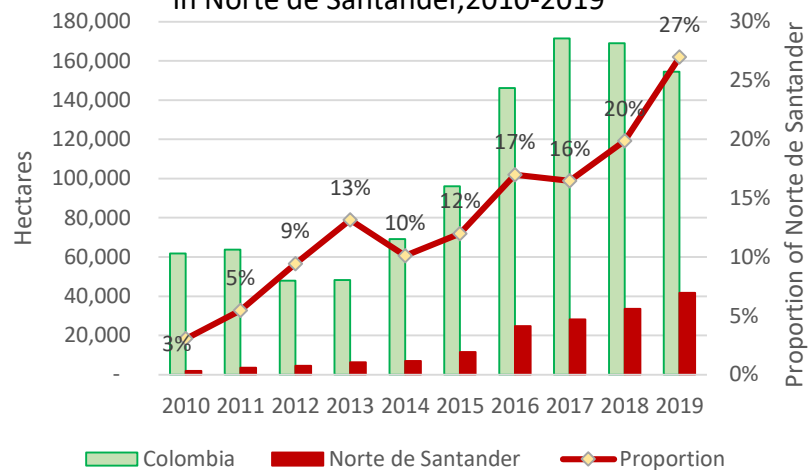


Source: map reproduced from: United States, Department of Justice, Drug Enforcement Administration, 2020 National Drug Threat Assessment (March 2021).

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.



Coca cultivation in Colombia and in Norte de Santander, 2010-2019

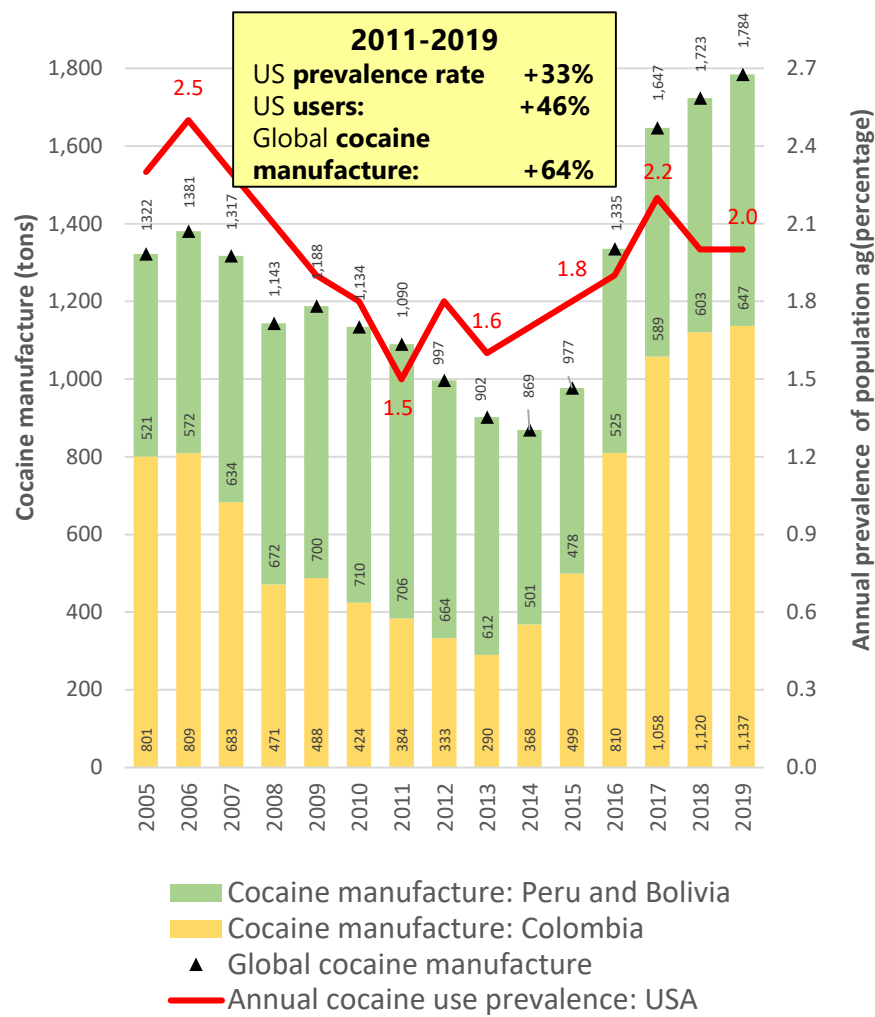


Source: U.S. Government database of drug seizures and movement  
Source: DEA, 2017 National Drug Threat Assessment, October 2017.

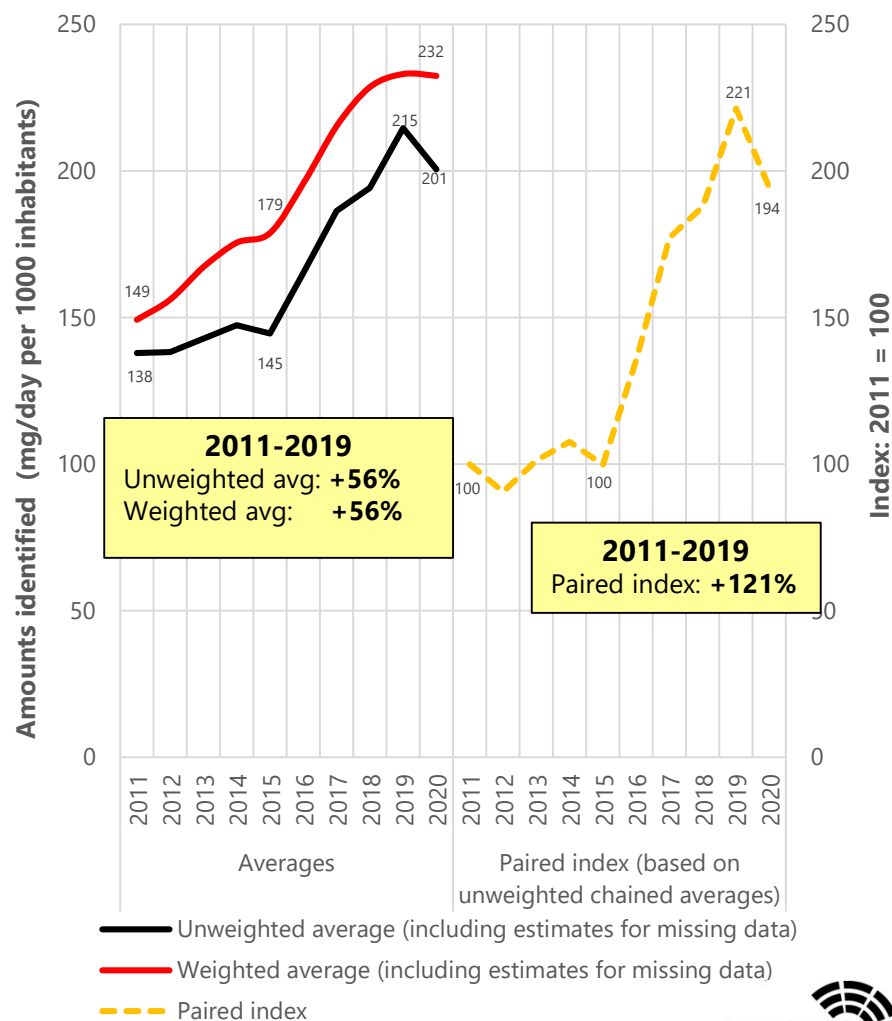
# COCAINE

## Demand for cocaine

### Global cocaine manufacture and cocaine prevalence in United States, 2005-2019



### Benzoylcegonine (cocaine metabolite) found in wastewater, 147 cities in Europe, 2011–2020



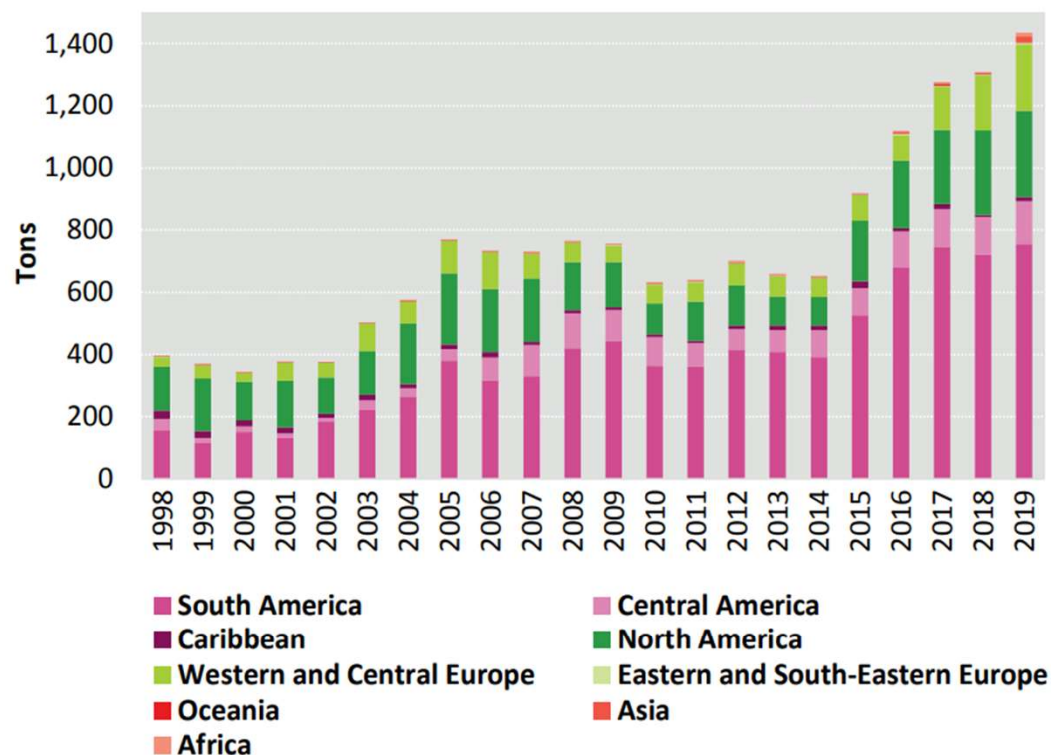
Source: UNODC, World Drug Report 2021 (and previous years).

# COCAINE

## Cocaine supply

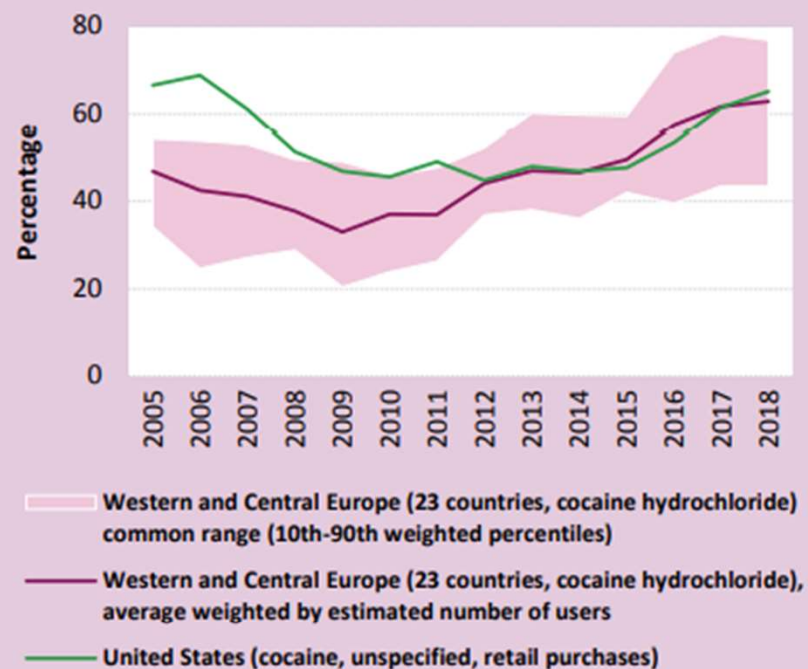
### WORLD DRUG REPORT 2021

**FIG. 4** Global quantities of cocaine seized, by region, 1998–2019



Source: UNODC, responses to the annual report questionnaire.

**Trend in cocaine retail purity, United States and Western and Central Europe, 2005–2018**

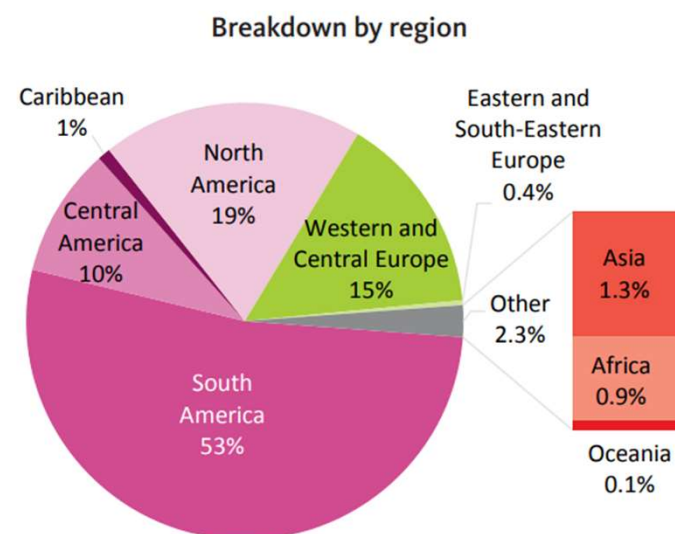
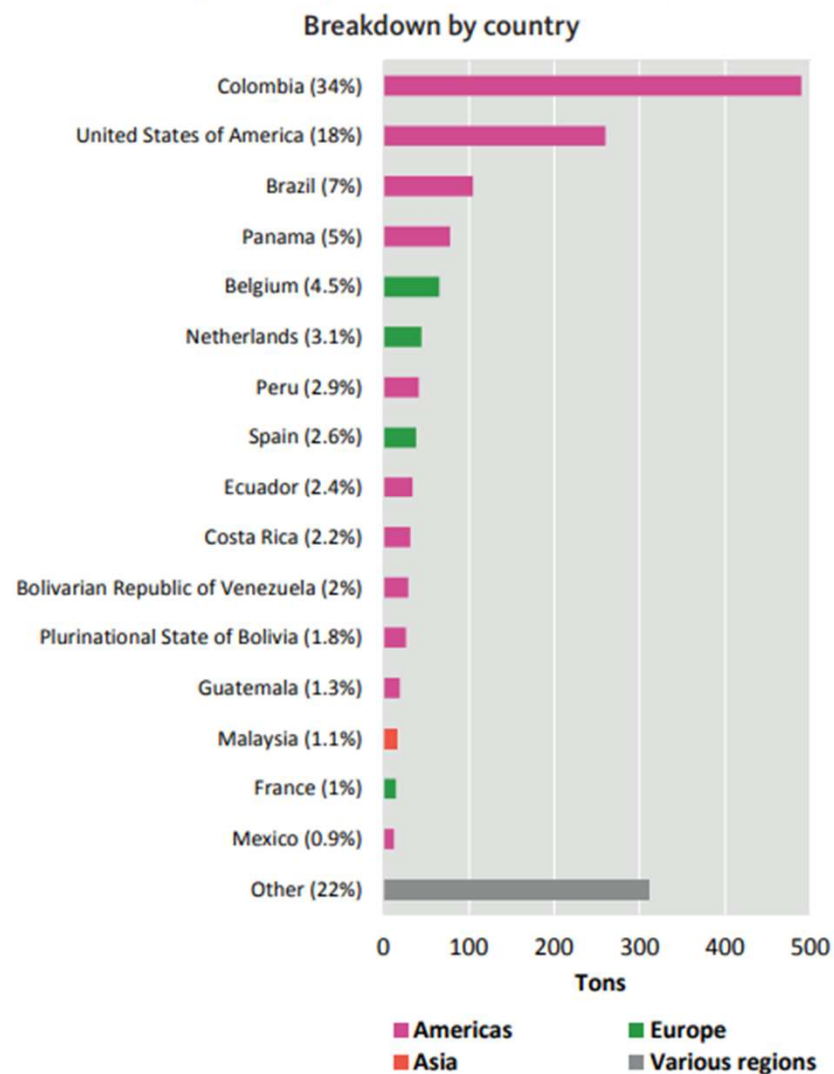


Sources: United States Office of National Drug Control Policy; and UNODC estimates, based on EMCDDA "Statistical bulletin 2020", and previous years.

# COCAINE

## Cocaine supply

FIG. 5 Global quantity of cocaine seized, 2019



Source: UNODC, responses to the annual report questionnaire.

Note: Based on a total amount seized of 1,436 tons, including cocaine hydrochloride, coca paste and base and "crack" cocaine.

## Proportion in 2019 global population

- \* North America: 5%
- \* Americas: 13%
- \* Europe: 10%

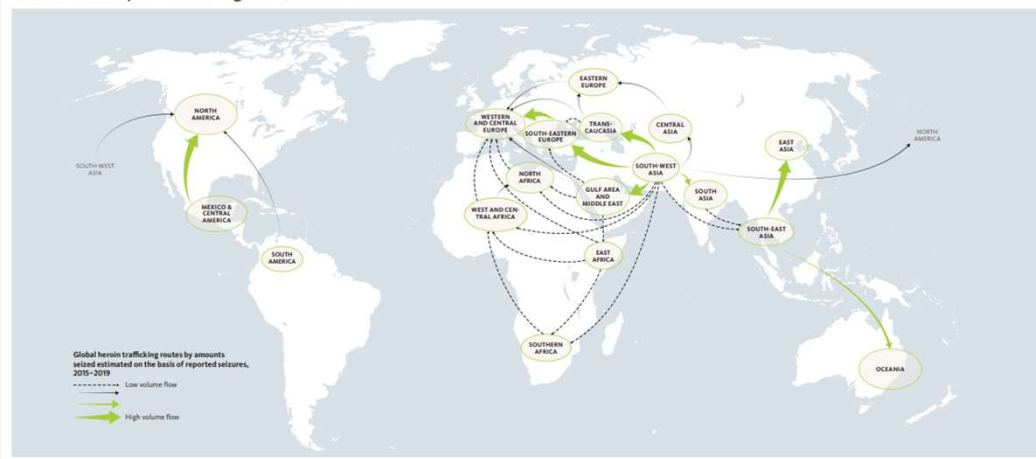


# OPIOIDS

## Supply of opiates

# WORLD DRUG REPORT 2021

MAP 1 Main opiate trafficking flows, 2015–2019



The size of the route is based on the total amount seized on that route, according to the information on trafficking routes provided by Member States in the annual report questionnaire, individual drug seizures and other official documents, over the 2015–2019 period. The routes are determined on the basis of reported country of departure/transit and destination in these sources. As such, they need to be considered as broadly indicative of existing trafficking routes while several secondary routes may not be reflected. Route arrows represent the direction of trafficking: origins of the arrows indicate either the area of departure or the one of last provenance, end points of arrows indicate either the area of consumption or the one of next destination of trafficking. Therefore, the trafficking origin may not reflect the country in which the substance was produced.

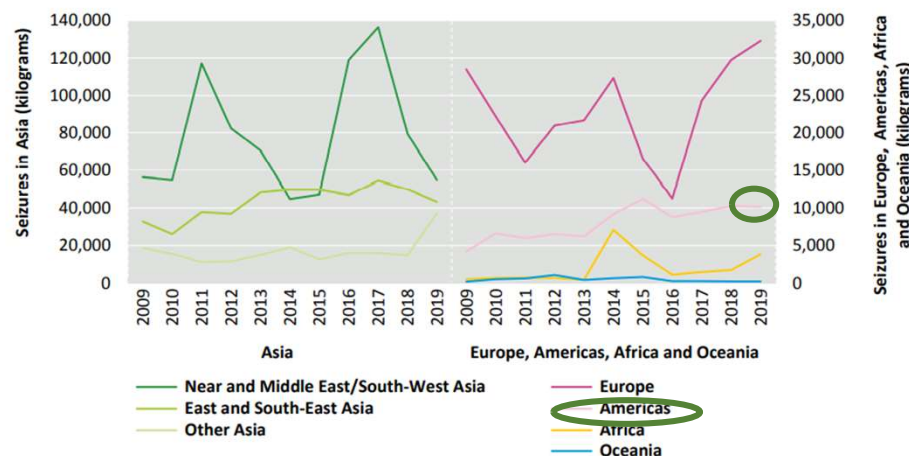
## Proportion in 2019 global population

\* North America: 5%

\* Americas: 13%

\* Europe: 10%

FIG. 7 Quantities of heroin and morphine seized, by region, 2009–2019

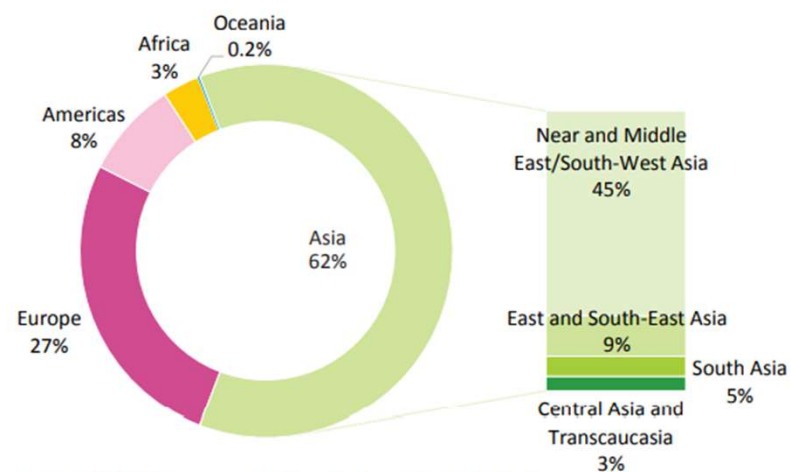


Source: UNODC, responses to the annual report questionnaire.

24 UNODC, Drugs Monitoring Platform.

25 UNODC, Drugs Monitoring Platform; and information provided by the UNODC Regional Office for West and Central Africa.

FIG. 6 Geographical distribution of global quantities of heroin and morphine seized, 2019



Source: UNODC, responses to the annual report questionnaire.

Note: Total of 121 tons of heroin and morphine seized in 2019.

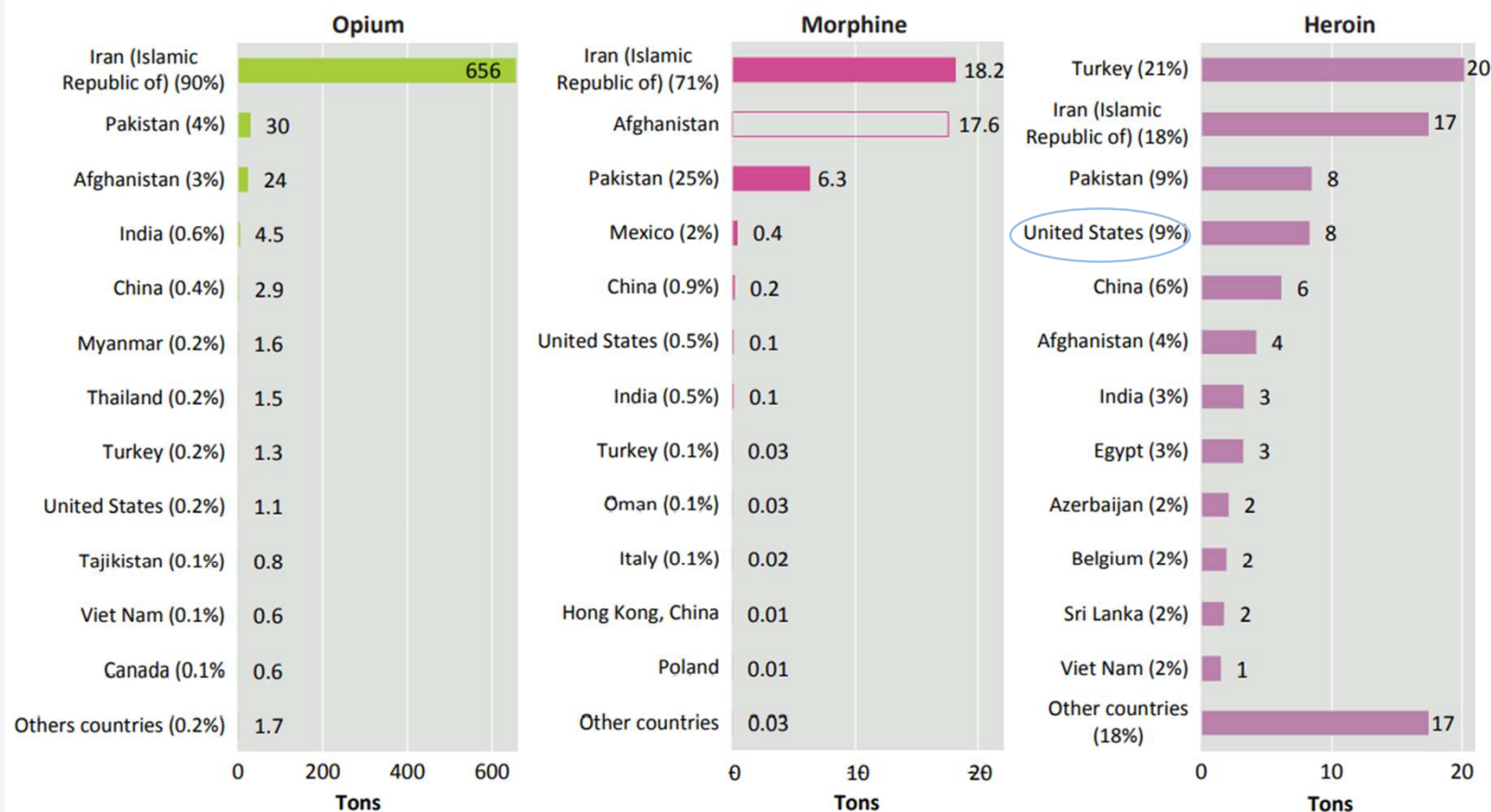


# OPIOIDS

## Supply of opiates

### WORLD DRUG REPORT 2021

**FIG. 5** Countries and territories reporting the largest quantities of opiates seized, 2019



Sources: UNODC, responses to the annual report questionnaire; and other government sources.

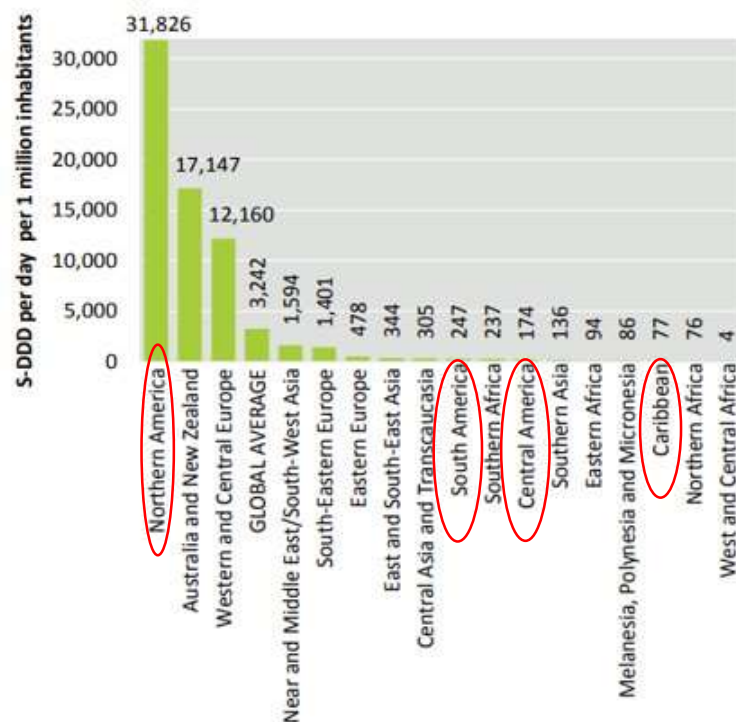
Note: Seizures of morphine in Afghanistan refer to 2018. The percentage distribution for each country refers to 2019, thus Afghanistan is not included.

# OPIOIDS

## Access to pharmaceutical opioids for pain management

### WORLD DRUG REPORT 2021

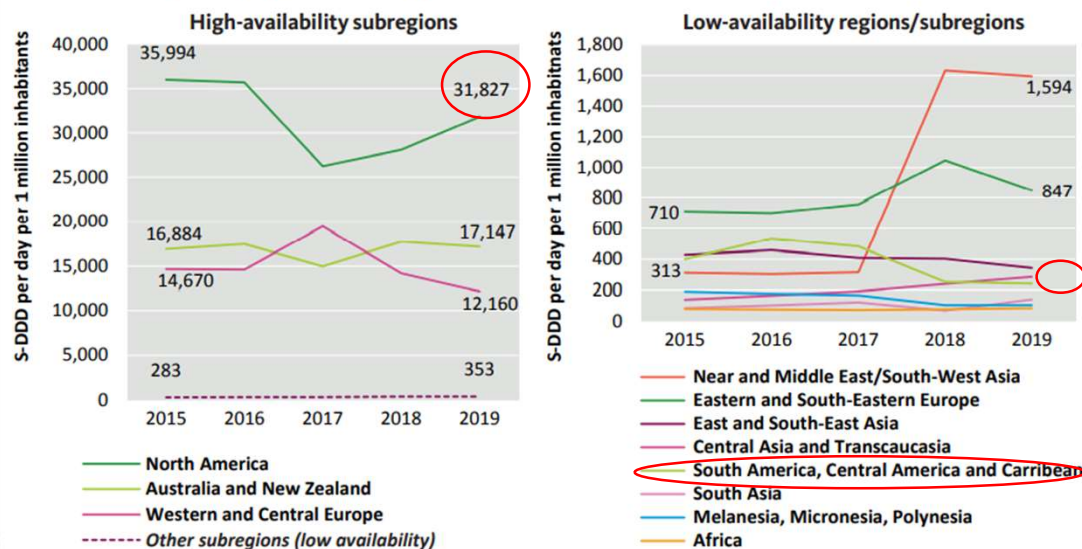
**FIG. 60** Amounts of opioids under international control (excluding preparations) available for medical consumption, by sub-region, 2019



Sources: UNODC calculations based on the following INCB reports: *Narcotic Drugs: Estimated World Requirements for 2021 – Statistics for 2019* (E/INCB/2020/2); and *Psychotropic Substances: Statistics for 2019 – Assessments of Annual Medical and Scientific Requirements for Substances in Schedules II, III and IV of the Convention on Psychotropic Substance of 1971* (E/INCB/2020/3).

Note: S-DDD refers to “defined daily doses for statistical purposes”. As defined by INCB, S-DDDs are “technical units of measurement” for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex to the present report. Regions and subregions are those designated by UNODC in the World Drug Report; they may differ partly from those used by INCB in its publications.

**FIG. 3** Trends in the availability of opioids under international control (excluding preparations) for medical consumption, by region and subregion, 2015–2019



Sources: UNODC calculations based on the following INCB reports: *Narcotic Drugs: Estimated World Requirements for 2021 – Statistics for 2019* (E/INCB/2020/2), and previous years; and *Psychotropic Substances: Statistics for 2019 – Assessments of Annual Medical and Scientific Requirements for Substances in Schedules II, III and IV of the Convention on Psychotropic Substance of 1971* (E/INCB/2020/3), and previous years.

Notes: S-DDDs refers to “defined daily doses for statistical purposes”. As defined by INCB, S-DDDs are “technical units of measurement” for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex to the present report.

Regions and subregions are those designated by UNODC in the World Drug Report; they may differ partly from those used by INCB in its publications; extrapolation techniques have been used in case of missing data.

“High availability subregions” include subregions with per capita availability of opioids for medical purposes that is above the global average, i.e., North America, Western and Central Europe, Australia and New Zealand.

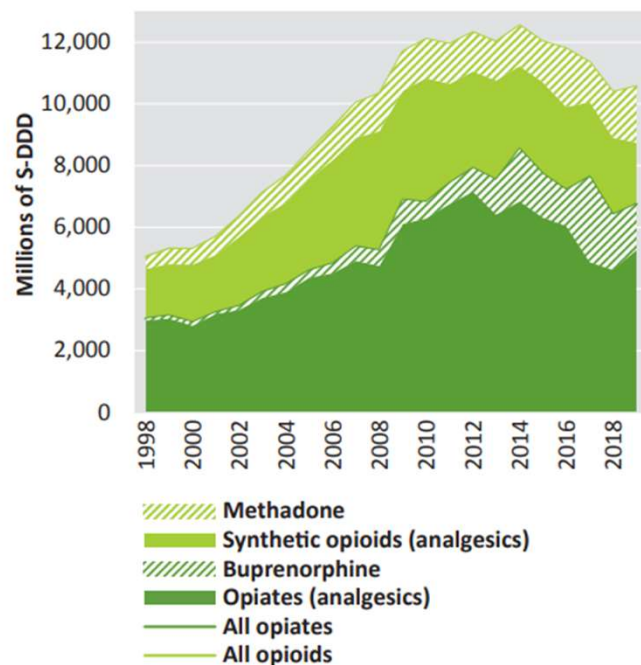
“Low-availability regions and subregions” include regions and subregions with per capita availability of opioids for medical purposes that is below the global average, i.e., Africa, Asia, Eastern Europe, South-Eastern Europe, the Caribbean, Central America, South America, Melanesia, Micronesia and Polynesia, i.e., all regions and subregions except North America, Western and Central Europe, and Australia and New Zealand.

# OPIOIDS

## Access to pharmaceutical opioids for pain management

### WORLD DRUG REPORT 2021

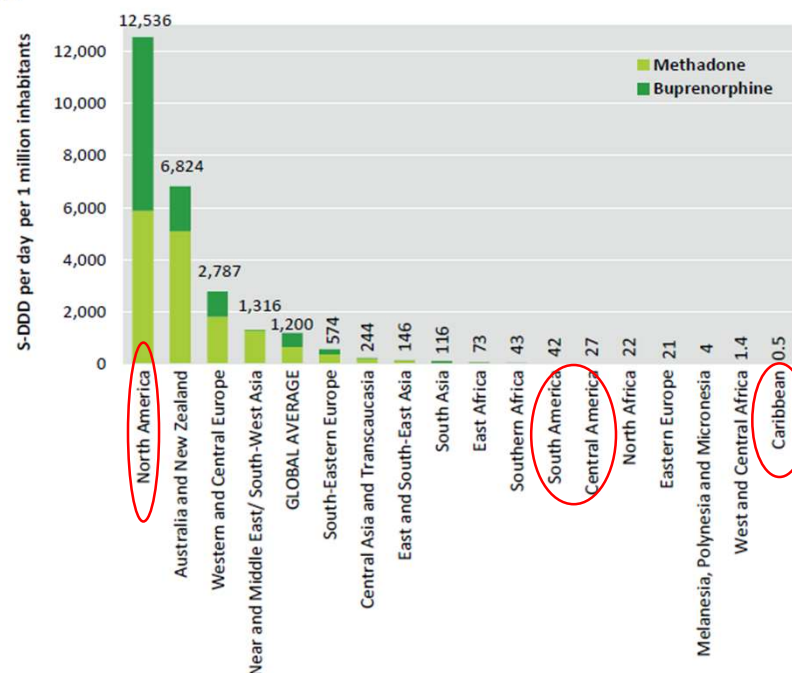
**FIG. 5** Global amounts of pharmaceutical opioids under international control available for medical consumption, 1998–2019



Source: INCB, *Narcotic Drugs 2020: Estimated World Requirements for 2021 – Statistics for 2019* (E/INCB/2020/2).

Notes: S-DDD refers to “defined daily doses for statistical purposes”. As defined by INCB, S-DDDs are “technical units of measurement” for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. The statistics exclude preparations of opioids listed in Schedule III of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol. Details of S-DDDs used for these calculations are provided in the methodological annex to the present report. The categories “opiates” and “synthetic opioids” include substances used as analgesics, excluding those used in opioid-substitution treatment. Buprenorphine and methadone are substances used in opioid-substitution treatment and also as analgesics.

**FIG. 66** Amounts of methadone and buprenorphine available for medical consumption, by region and subregion, 2019



Sources: UNODC calculations based on the following INCB reports: *Narcotic Drugs: Estimated World Requirements for 2021 – Statistics for 2019* (E/INCB/2020/2); and *Psychotropic Substances: Statistics for 2019 – Assessments of Annual Medical and Scientific Requirements for Substances in Schedules II, III and IV of the Convention on Psychotropic Substances of 1971* (E/INCB/2020/3).

Notes: S-DDD refers to “defined daily doses for statistical purposes”. As defined by INCB, S-DDDs are “technical units of measurement” for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex to the present report.

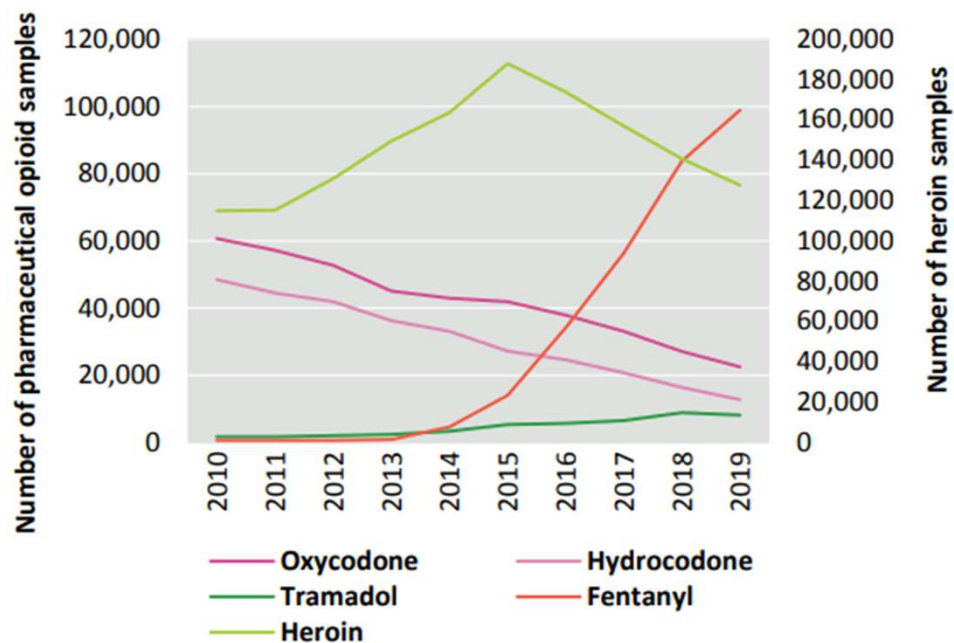


# OPIOIDS

## forensic labs / deaths

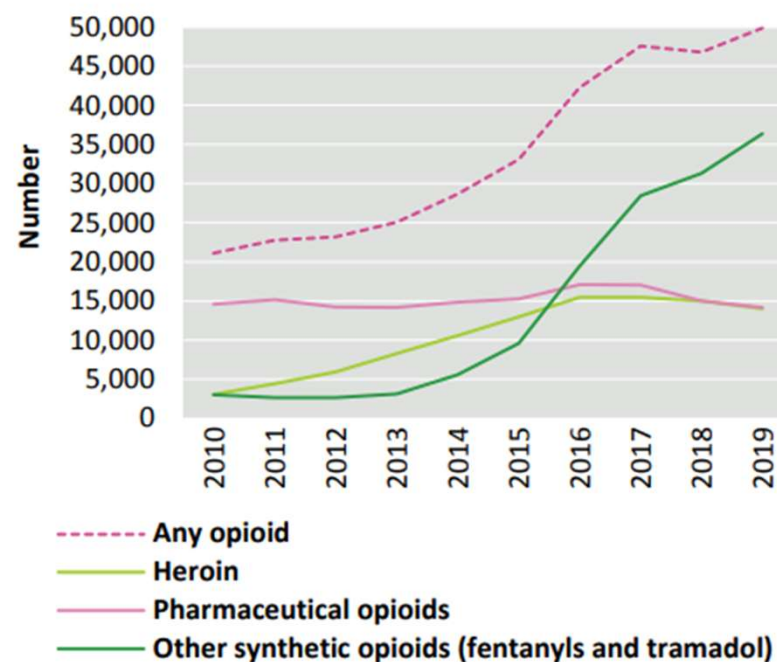
### WORLD DRUG REPORT 2021

**FIG. 10** Substances submitted to and analysed by forensic laboratories, by type of drug identified, United States, 2009–2019



Source: United States, Department of Justice, Drug Enforcement Administration, Diversion Control Division, National Forensic Laboratory Information System reports for different years.

**FIG. 8** Trends in opioid overdose deaths, United States, 2010–2019



Source: United States, Centers for Disease Control and Prevention, National Center for Health Statistics, Wide-ranging Online Data for Epidemiologic Research (CDC WONDER), "Multiple cause of death 1999–2019".

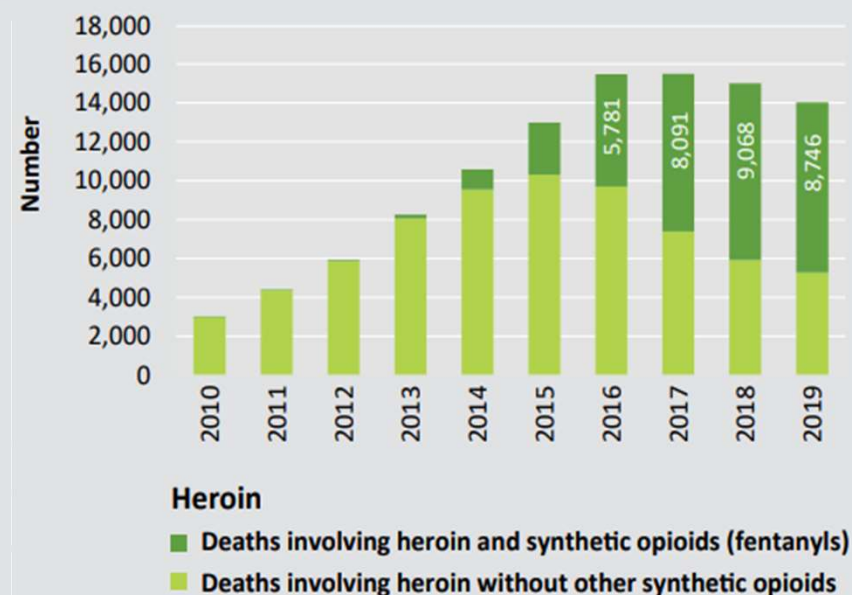
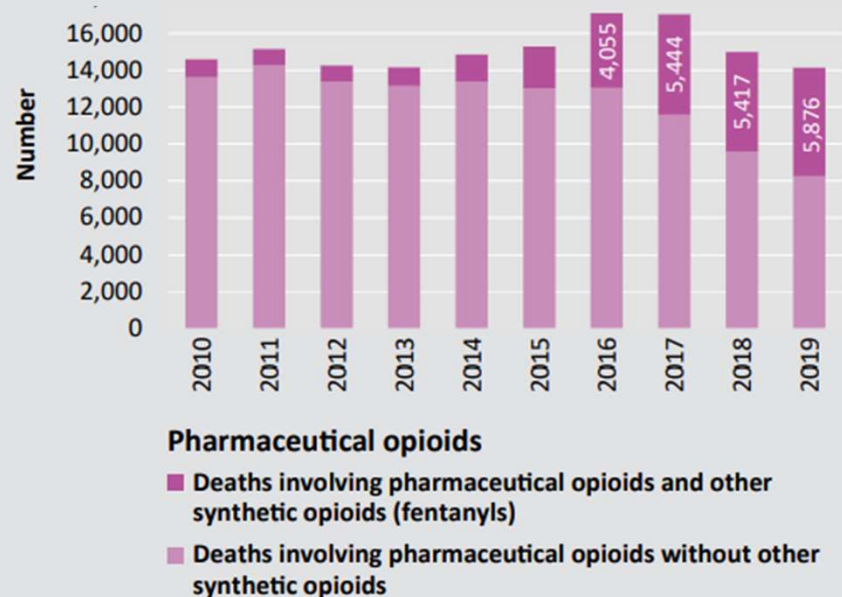
Note: The category "Any opioid" includes all categories of opioid overdose deaths.



# OVERDOSES INVOLVING FENTANYLS CONTINUE TO DRIVE THE OPIOID CRISIS IN NORTH AMERICA

W O R L D  
D R U G  
R E P O R T  
2021

IN THE UNITED STATES, NUMBER OF OVERDOSE DEATHS ATTRIBUTED TO HEROIN AND PHARMACEUTICAL OPIOIDS ALONE ARE DECREASING BUT THOSE ATTRIBUTED TO THE SAME SUBSTANCES MIXED WITH FENTANYLS ARE INCREASING

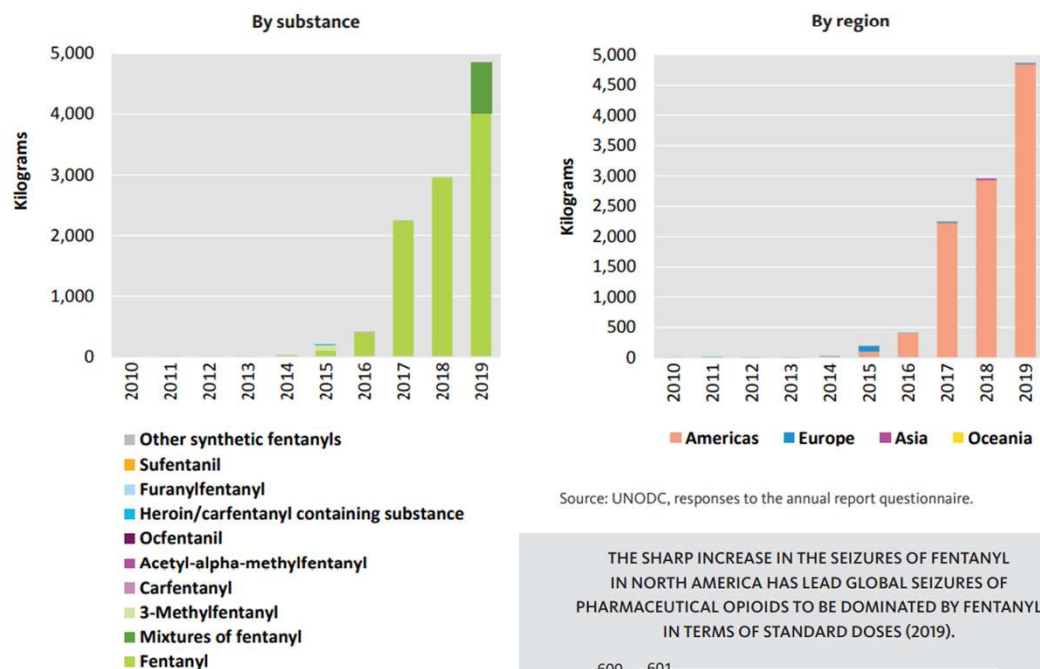


# OPIOIDS

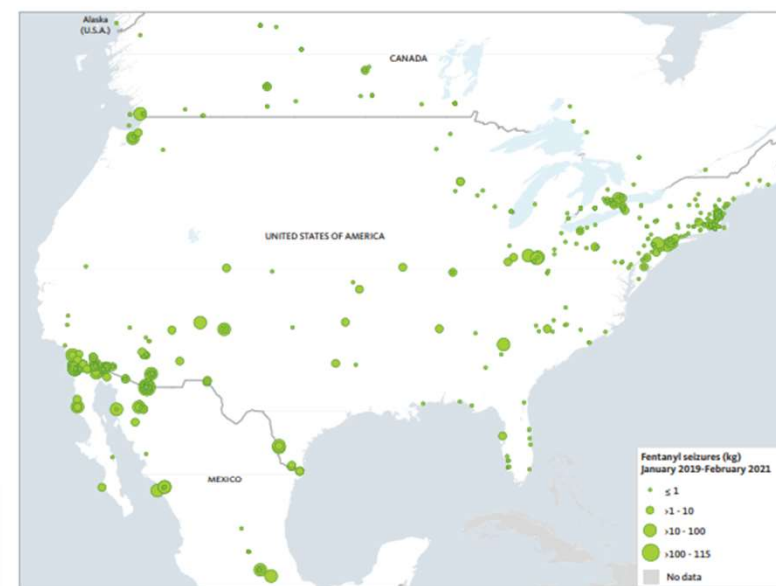
## Supply of other opioids

### WORLD DRUG REPORT 2021

**FIG. 4** Global quantities of fentanyls seized, 2010–2019



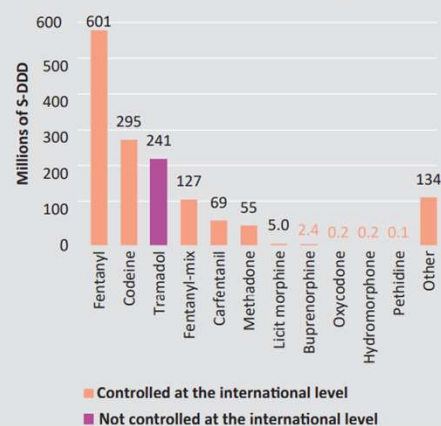
**MAP 1** Individual seizures of fentanyl and its analogues in North America, January 2019–February 2021



Source: UNODC, Drugs Monitoring Platform.

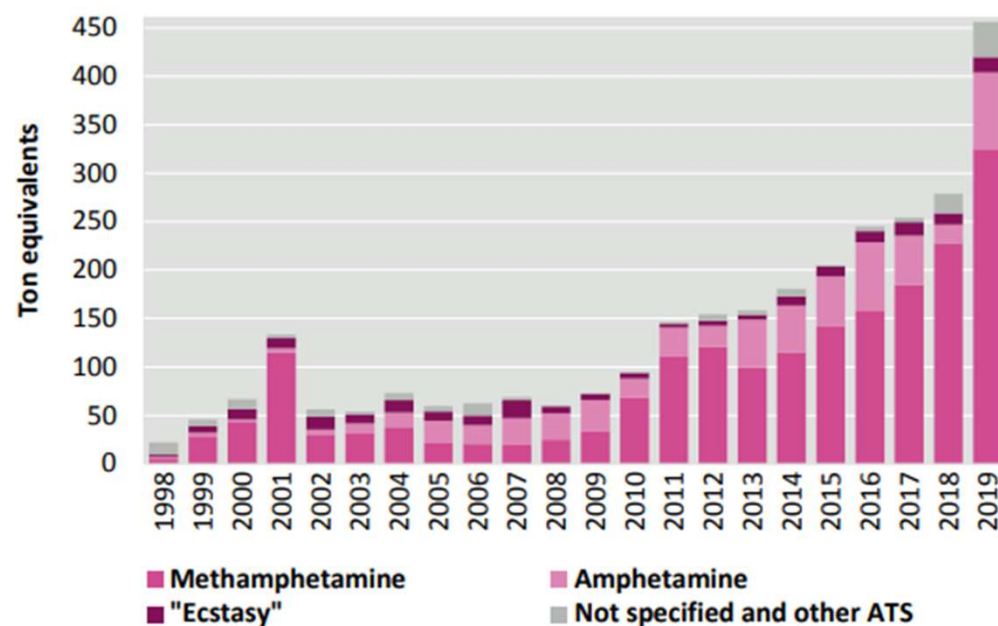
Note: The figure is based on information from individual seizures, which constitutes an opportunistically determined subset of all relevant seizures.

THE SHARP INCREASE IN THE SEIZURES OF FENTANYL IN NORTH AMERICA HAS LEAD GLOBAL SEIZURES OF PHARMACEUTICAL OPIOIDS TO BE DOMINATED BY FENTANYL IN TERMS OF STANDARD DOSES (2019).



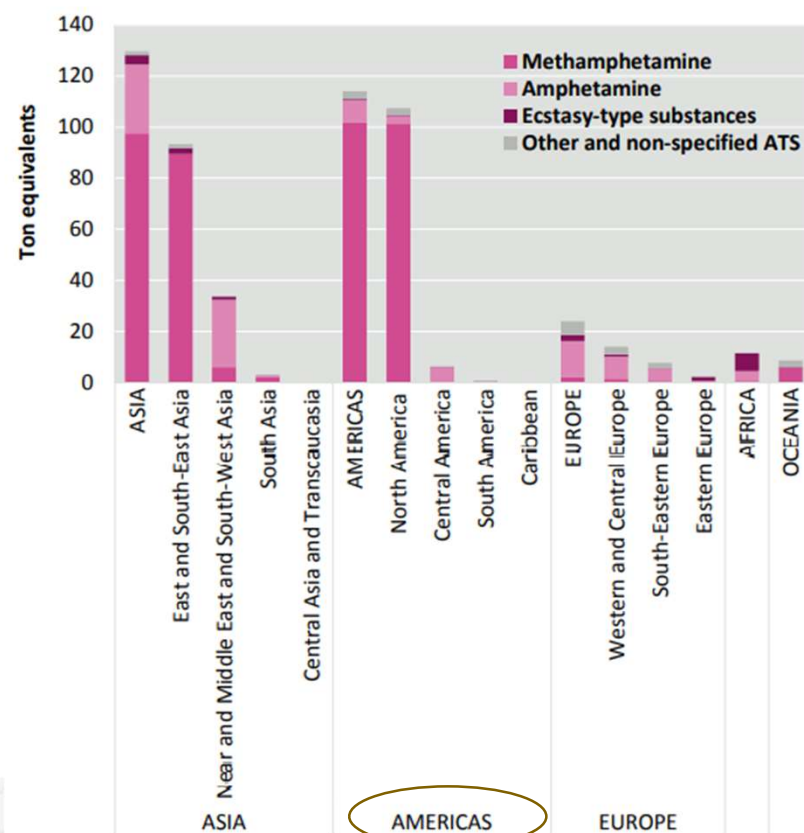
# AMPHETAMINE-TYPE STIMULANTS

**FIG. 1** Global quantities of amphetamine-type stimulants seized, 1998–2019



Source: UNODC, responses to the annual report questionnaire.

**FIG. 2** Average annual quantities of amphetamine-type stimulants seized, by region and subregion, 2015–2019



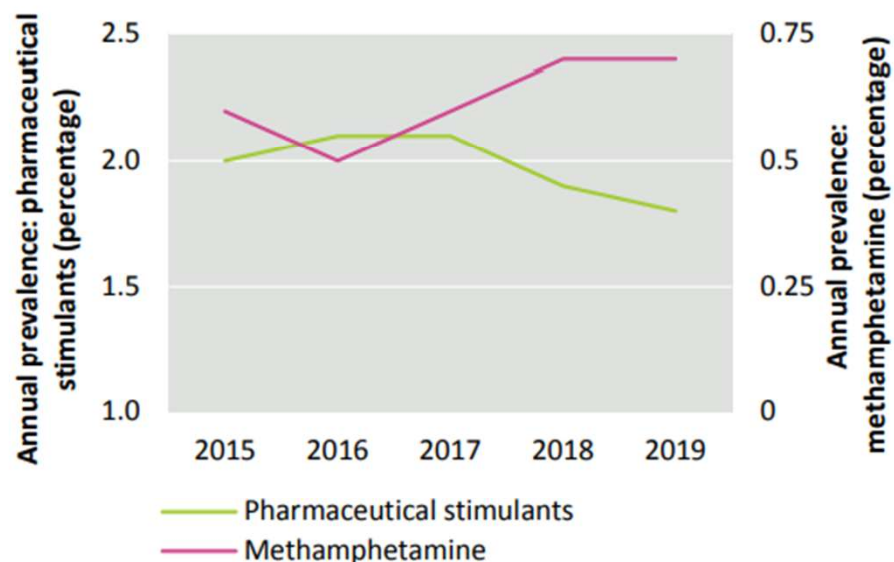
Source: UNODC, responses to the annual report questionnaire.



## Use of amphetamines

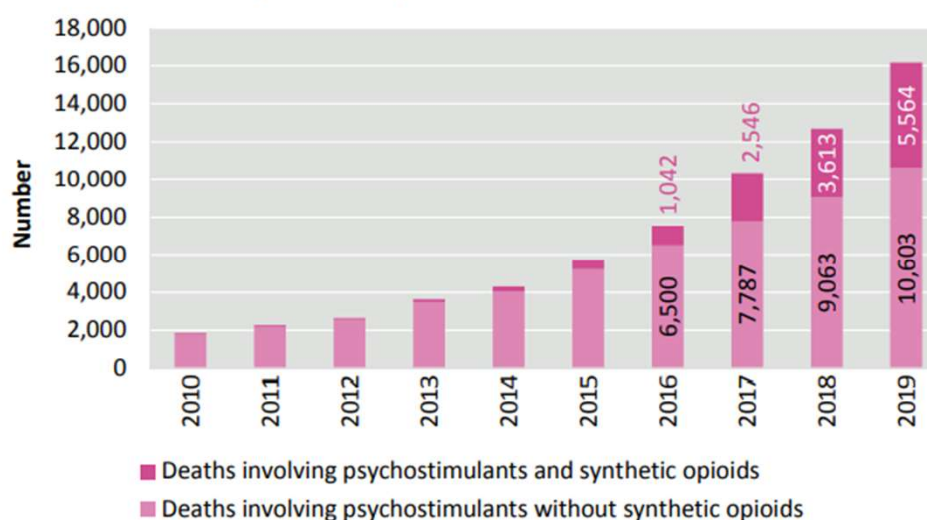
## WORLD DRUG REPORT

**FIG. 6** Non-medical use of pharmaceutical stimulants and use of methamphetamine among the population aged 12 and older, United States, 2015–2019



Source: United States, Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (for different years).

**FIG. 8** Overdose deaths attributed to psychostimulants with and without synthetic opioids, United States, 2010–2019



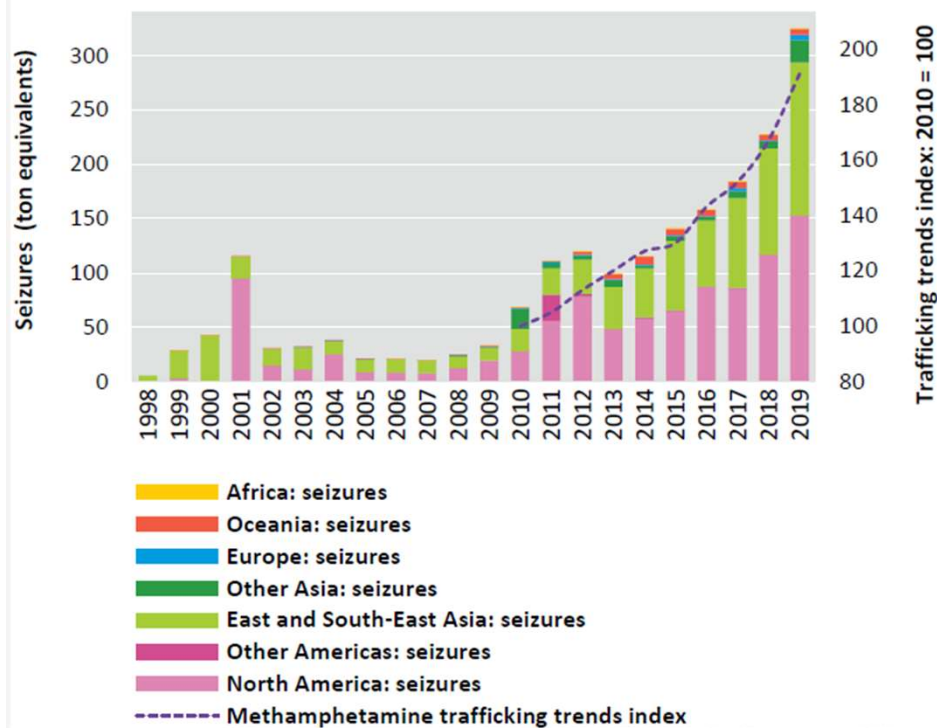
Source: United States, Centers for Disease Control and Prevention, National Center on Health Statistics, Wide-ranging Online Data for Epidemiologic Research (CDC Wonder).

Note: The category of "psychostimulants" refers to psychostimulants with abuse potential and mainly includes methamphetamine; and the category of "other synthetic opioids" is dominated by fentanyl.

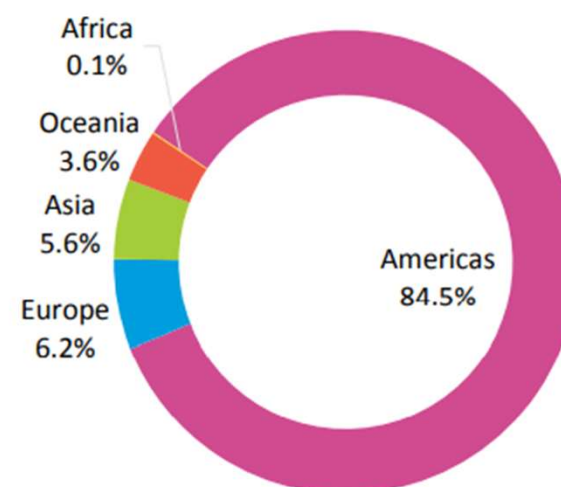


# Methamphetamine supply

**FIG. 9** Quantities of methamphetamine seized and reported trends in methamphetamine trafficking, 1998–2019



**FIG. 6** Distribution of detected methamphetamine laboratories, 2015–2019

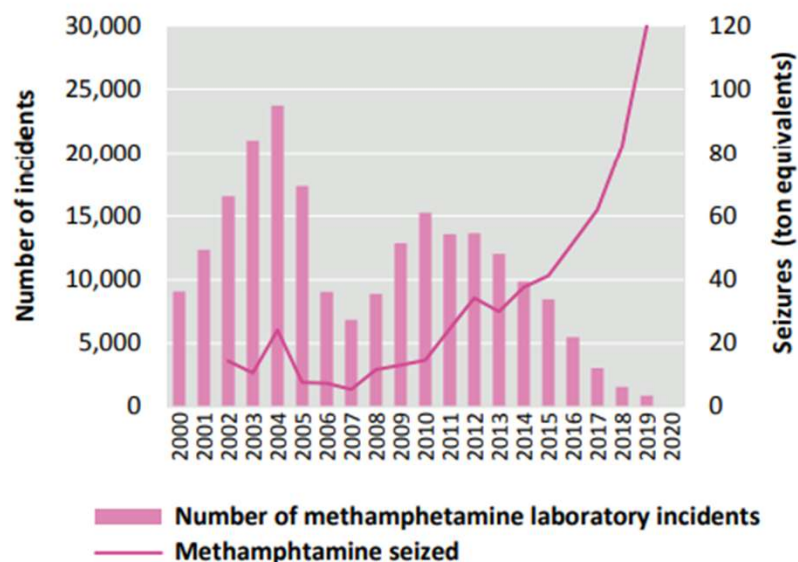


Source: UNODC, responses to the annual report questionnaire.

*Note: The total number of detected methamphetamine laboratories over the period 2015–2019 amounted to 22,657. This category, as defined in the UNODC annual report questionnaire, includes laboratories where methamphetamine was manufactured (including “kitchen laboratories”), as well as laboratories where the refining, tableting, cutting and packaging took place, sites where the equipment or the chemicals required for the manufacture of methamphetamine were stored and sites where equipment, packaging or the chemical waste related to the manufacture of methamphetamine was dumped.*

# Methamphetamine supply

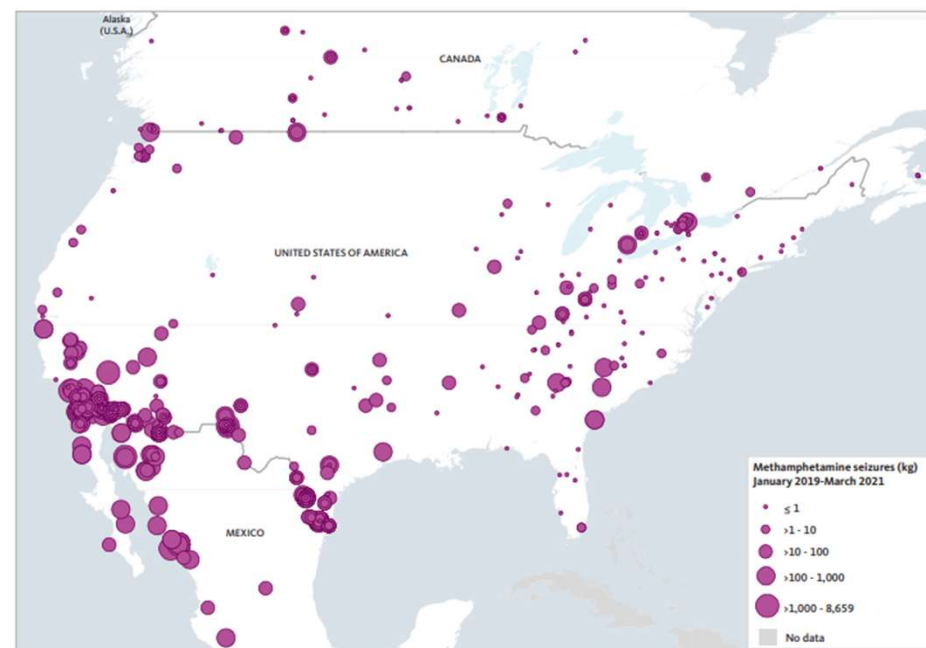
**FIG. 7** Methamphetamine laboratory incidents and quantities of methamphetamine seized, United States, 2000–2019



Sources: United States, Department of Justice, Drug Enforcement Administration, 2020 Drug Threat Assessment (March 2021); and UNODC, responses to the annual report questionnaire.

*Note: "Methamphetamine laboratory incidents" refers to the number of dismantled methamphetamine laboratories as well as the number of identified dumpsites related to the manufacture of methamphetamine and seizures of chemicals or equipment related to the manufacture of methamphetamine. This definition thus corresponds to the definition of "methamphetamine laboratories detected" used in the UNODC annual report questionnaire.*

**MAP 1** Significant individual seizures of methamphetamine, North America, January 2019–March 2021



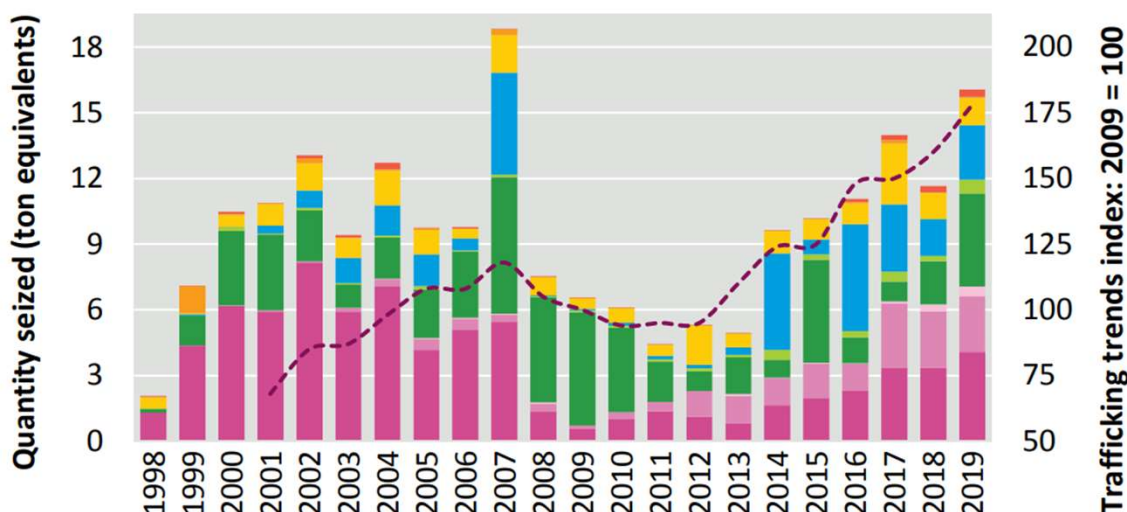
Source: UNODC, Drugs Monitoring Platform.

*The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.*

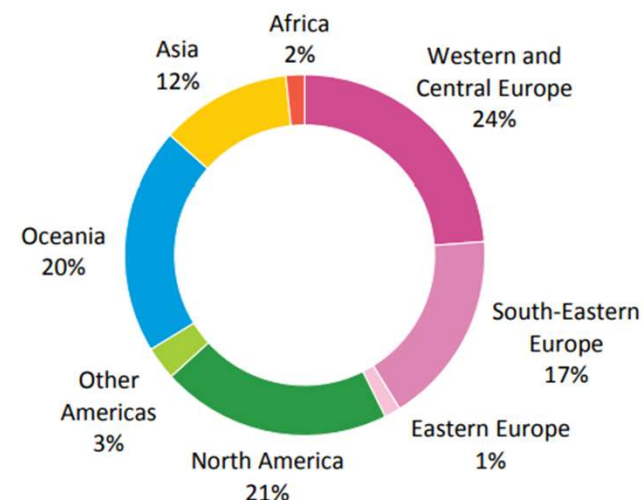
## "Ecstasy" supply

## WORLD DRUG REPORT

**FIG. 21** Quantities of "ecstasy" seized, by region and reported trends in "ecstasy" trafficking, 1998–2019



**FIG. 22** Regional distribution of the quantities of "ecstasy" seized, 2015–2019



Source: UNODC, responses to the annual report questionnaire.

Source: UNODC, responses to the annual report questionnaire.

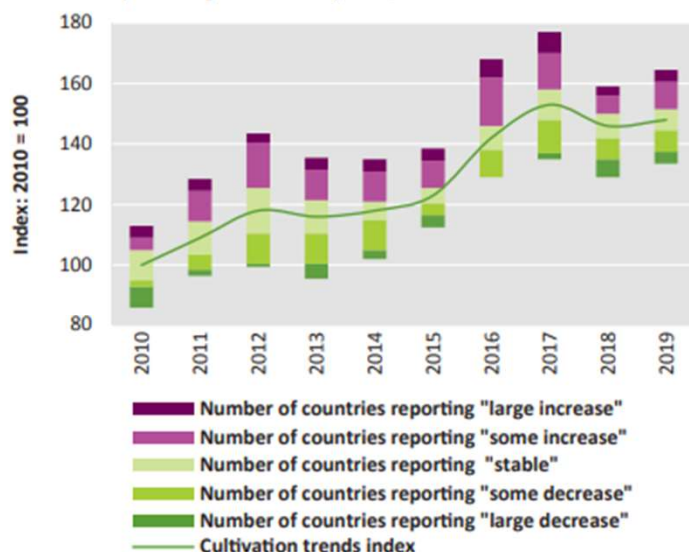
*Note: The trafficking trends index is based on qualitative information on trends in "ecstasy" trafficking reported by Member States. The trend line is calculated on the basis of the number of countries reporting increases minus the number of countries reporting decreases (2 points for "large increase", 1 point for "some increase", 0 points for "stable", -1 point for "some decrease" and -2 points for "large decrease").*



# CANNABIS Trends in cultivation

## WORLD DRUG REPORT 2021

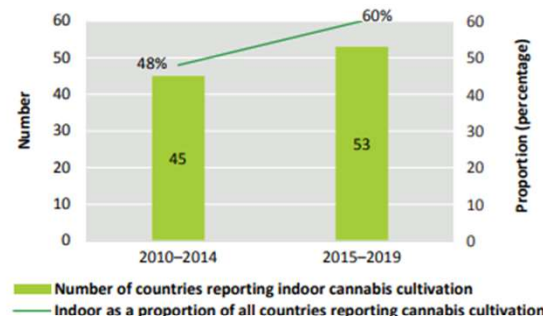
**FIG. 1** Qualitative information on trends in cannabis cultivation as reported by national experts, 2010–2019



Source: UNODC, responses to the annual report questionnaire.

Note: The cultivation trends index is based on qualitative information on trends in cannabis cultivation reported by Member States. Calculations are based on the reports of 112 countries – on average, 34 countries per year over the period 2010–2019. The trend line is calculated on the basis of the number of countries reporting increases minus the number of countries reporting decreases (2 points for "large increase"; 1 point for "some increase"; 0 points for "stable"; -1 point for "some decrease"; -2 points for "large decrease").

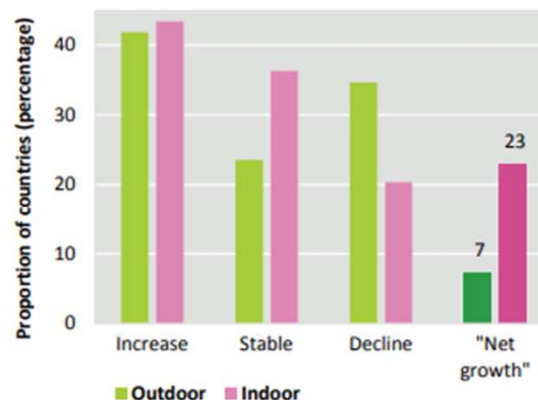
**FIG. 2** Number of countries reporting indoor cannabis cultivation and their share among all countries with cannabis cultivation, 2010–2014 and 2015–2019



Source: UNODC, responses to the annual report questionnaire.

Note: Figures are based on estimates reported by countries of the area under cannabis cultivation and/or area of cannabis eradicated and/or number of cannabis plants eradicated and/or number of cannabis sites eradicated and/or area available for cannabis cultivation after eradication.

**FIG. 3** Reported trends in outdoor and indoor cannabis cultivation, 2012–2019



Source: UNODC, responses to the annual report questionnaire.

Note: The figure is based on qualitative information on trends in indoor and outdoor cannabis cultivation reported by Member States. "Net growth" is defined here as the number of countries reporting increases minus the number of countries reporting decreases in cannabis cultivation over the period 2012–2019, presented as a proportion of the total number of countries providing trends on outdoor cannabis cultivation and on indoor cannabis cultivation, respectively.

The countries that were most frequently mentioned in the annual report questionnaire as the main countries of origin, departure and transit for cannabis herb in the period 2015–2019 were as follows (given in order of importance, for each subregion):

### > Americas

North America: United States, Mexico and Canada

South America: Colombia and Paraguay

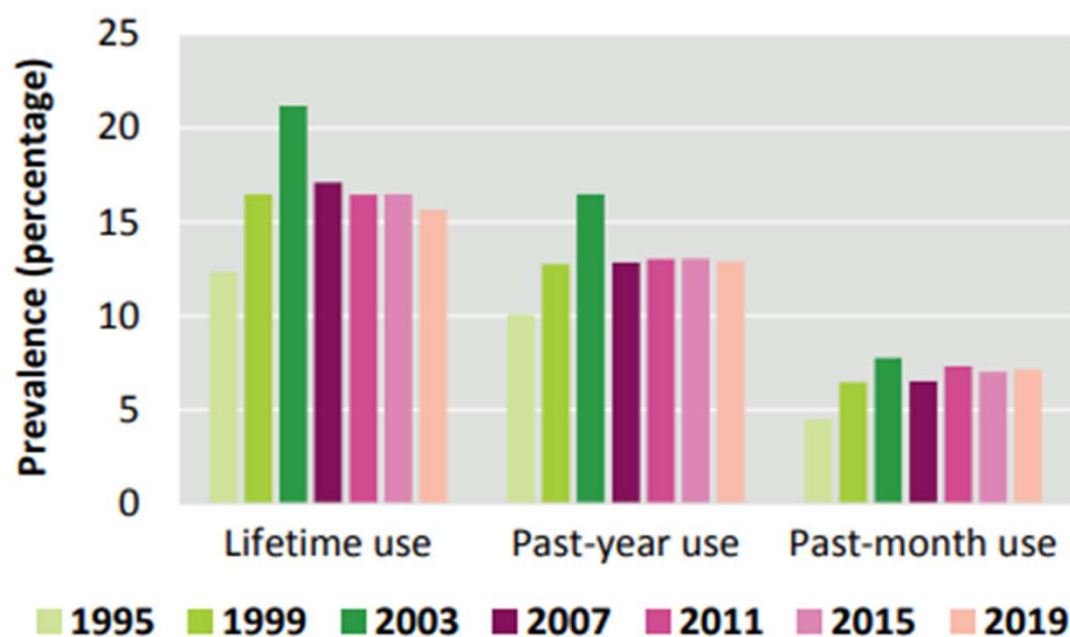
Central America: Guatemala and Honduras

Caribbean: Jamaica



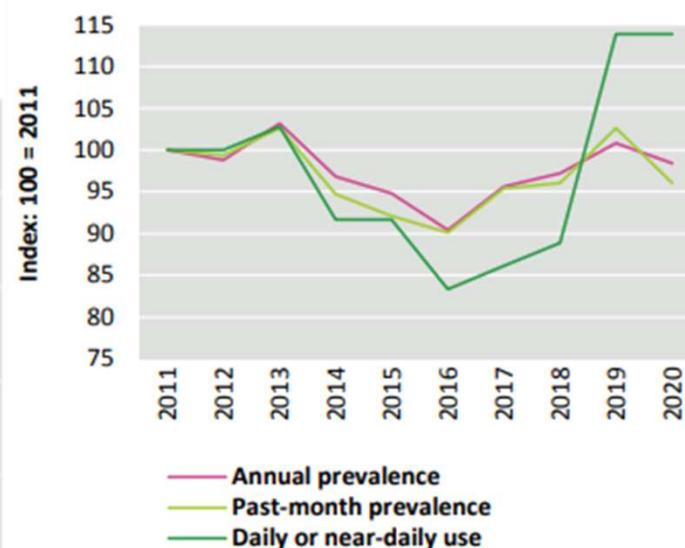
# CANNABIS use among students

**FIG. 12** Trends in cannabis use among secondary school students aged 15–16, Europe, 1995–2019



Source: EMCDDA and European School Survey Project on Alcohol and Other Drugs, *ESPAD Report 2019: Results from the European School Survey Project on Alcohol and Other Drugs*, EMCDDA Joint Publications Series (Luxembourg, Publications Office of the European Union, 2020).

**FIG. 7** Trends in cannabis use among high-school students (combined 8th, 10th and 12th grades), United States, 2011–2020



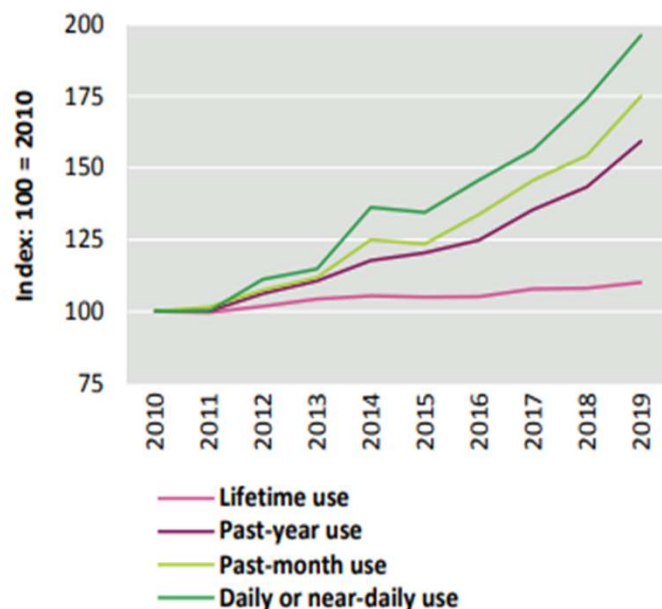
Source: United States, National Institute on Drug Abuse, Monitoring the Future, “2020 data from in-school surveys of 8th-, 10th-, and 12th-grade students” (December 2020).

# CANNABIS

## use in North America – general population

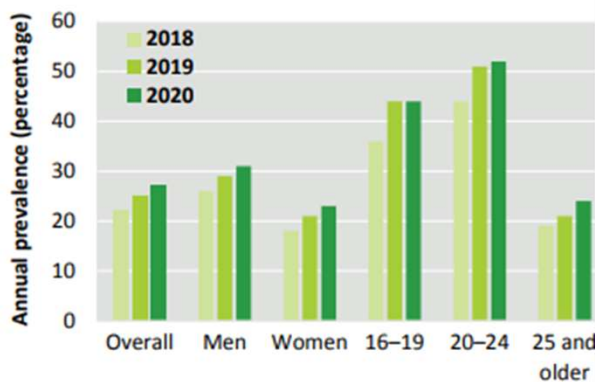
### WORLD DRUG REPORT 2021

**FIG. 5** Trends in cannabis use among the population aged 18 and older, United States, 2010–2019



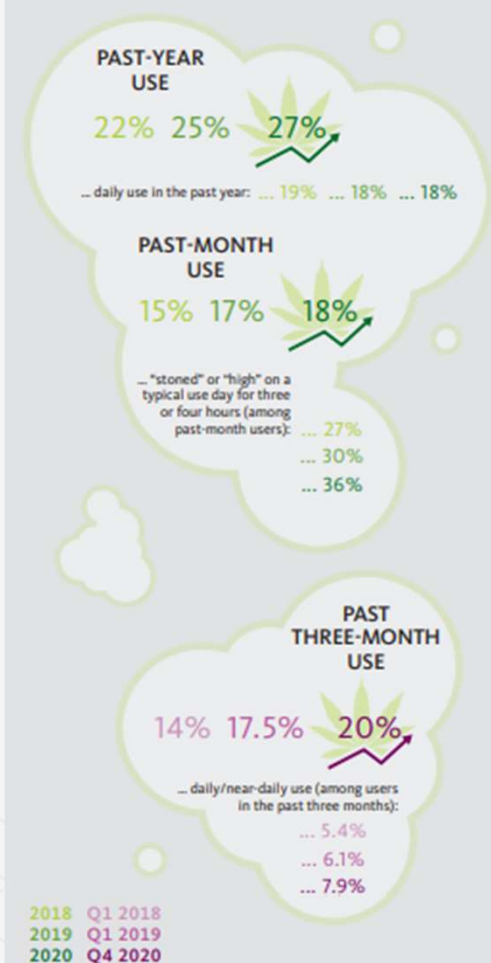
Source: United States, Substance Abuse and Mental Health Services Administration, *Results from the 2019 National Survey on Drug Use and Health: Detailed Tables* (Rockville, Maryland, 2020).

**FIG. 8** Cannabis use, by sex and age group, Canada, 2018–2020



Source: Health Canada, "Cannabis use for non-medical purposes among Canadians (Aged 16+)"; Data blog <https://health-infobase.canada.ca/cannabis/>.

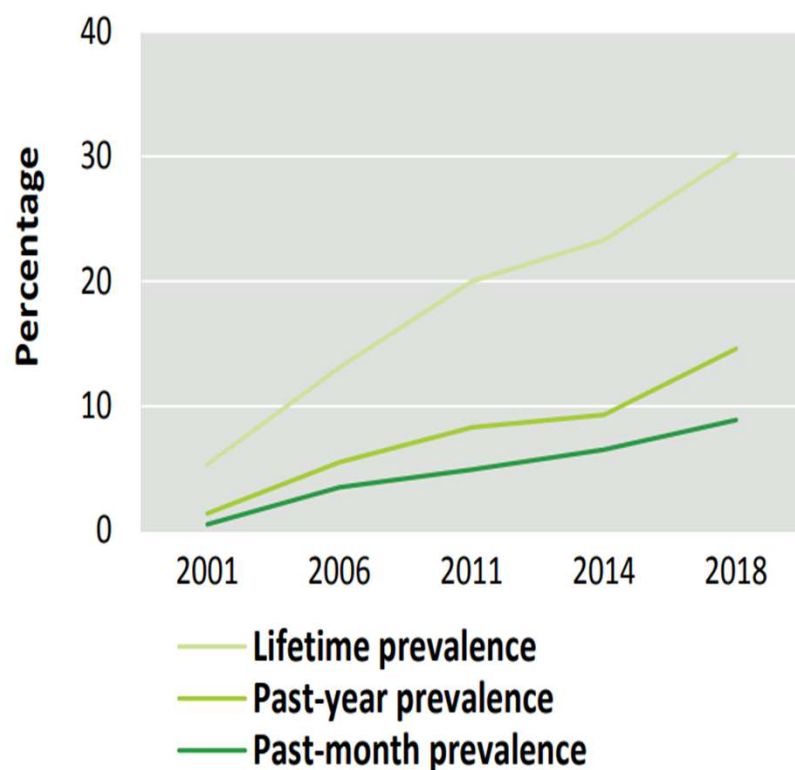
### TRENDS IN CANNABIS USE IN CANADA



Sources: Health Canada, "Canadian cannabis survey 2020: summary", and previous years; Michelle Rotermann, "Looking back from 2020, how cannabis use and related behaviours changed in Canada", *Health Reports* (Statistics Canada, Avril 2021).

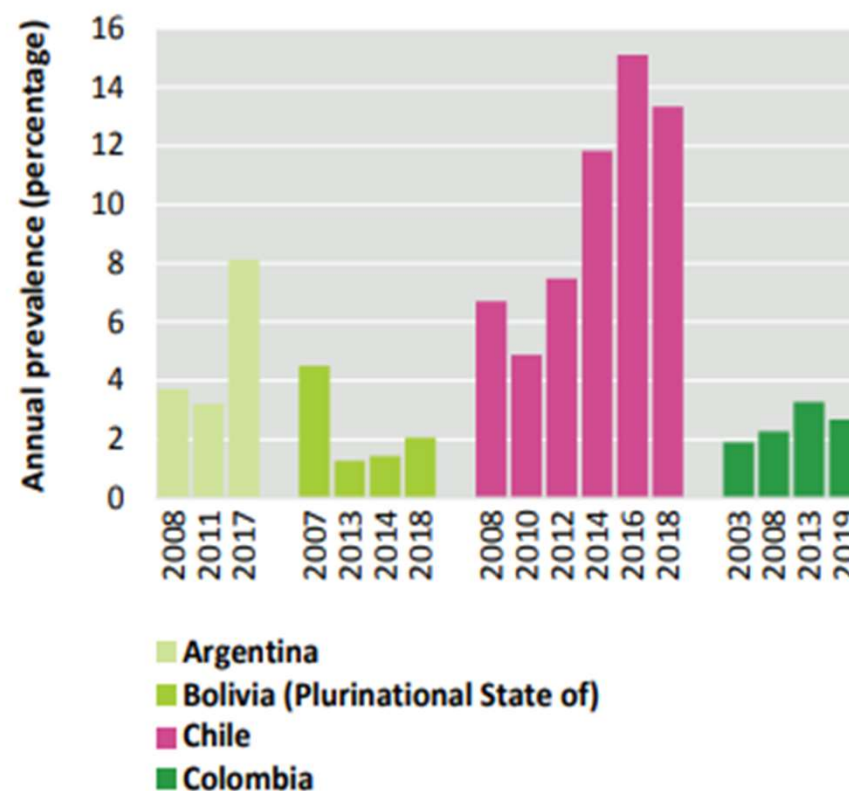
# CANNABIS use in South America

**FIG. 6** Non-medical use of cannabis, Uruguay, 2001–2018



Source: Uruguay, VII Encuesta Nacional Sobre Consumo de Drogas en Población General: Informe de Investigación (Montevideo, Junta Nacional de Drogas, Observatorio Uruguayo de Drogas, 2019).

**FIG. 3** Trends in cannabis use among the adult population, selected countries with recent data, South America



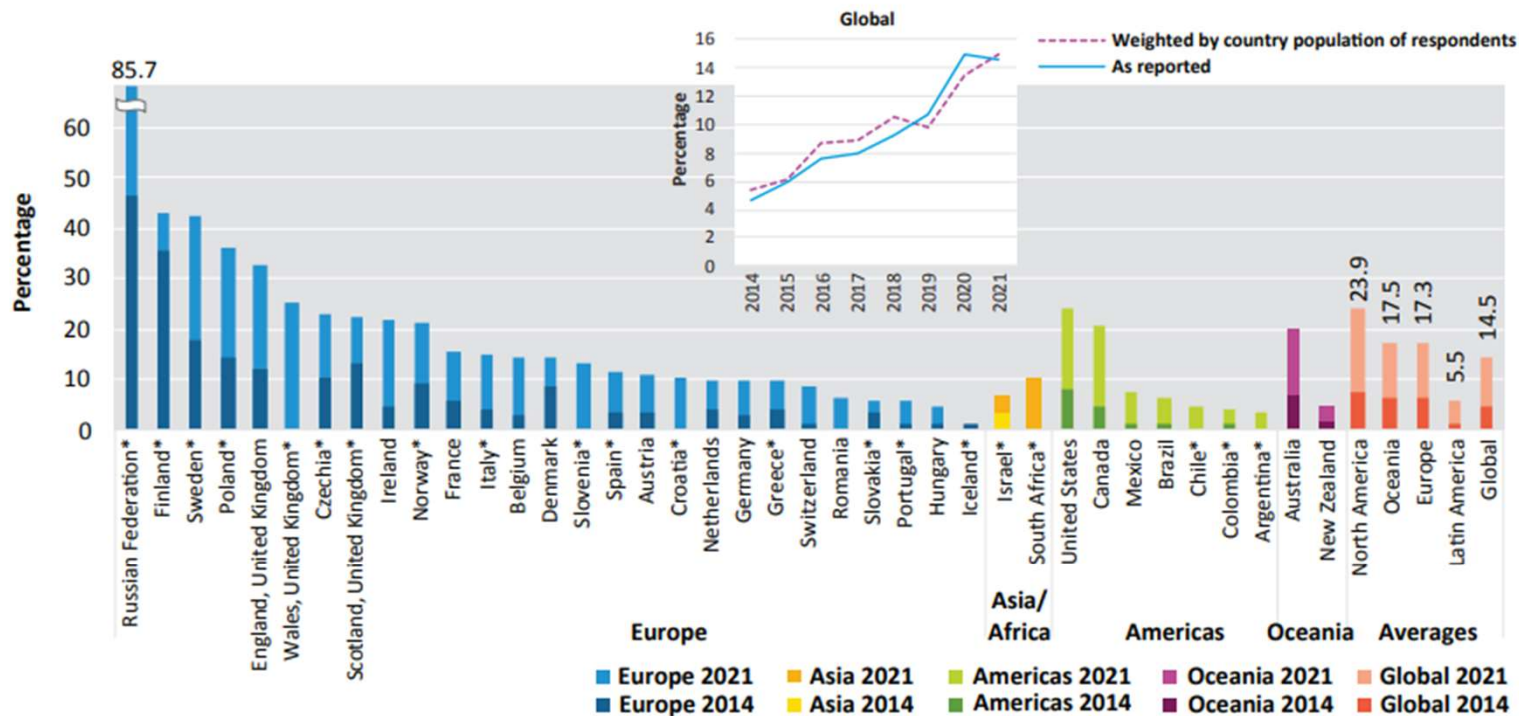
Source: UNODC, responses to the annual report questionnaire, multiple years.



## Drug trafficking over the dark web

# WORLD DRUG REPORT 2021

**FIG. 20** Proportion of people purchasing drugs over the dark web among surveyed Internet users who used drugs in the past year, global average and selected countries, January 2014 to January 2021 (or latest year available)



\*Data for either January 2014 or January 2021 were not available; data from the most recent year available were taken as a proxy.

Source: UNODC calculations based on Global Drug Survey 2021 data (and previous years): detailed findings on drug cryptomarkets.

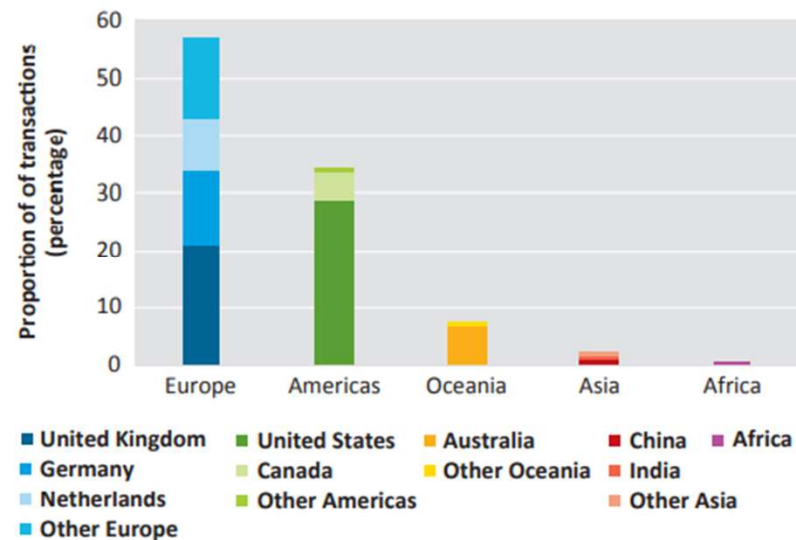
Note: The Global Drug Survey is based on a convenience sample of 100,000 to 500,000 people every year, of whom 20,000 to 90,000 replied to questions on drug purchases over the dark web (24,000 in January 2021). All regional averages are weighted by the population of each country. North America: averages based on information from respondents in Canada and the United States; Europe: averages based on information from respondents in 26 European countries (not included are data from the Russian Federation, which are only available for 2018 and 2020); Oceania: averages based on information from respondents in Australia and New Zealand; Latin America: averages based on information from respondents in Argentina, Brazil, Chile, Colombia and Mexico.



## Drug trafficking over the dark web

# WORLD DRUG REPORT 2021

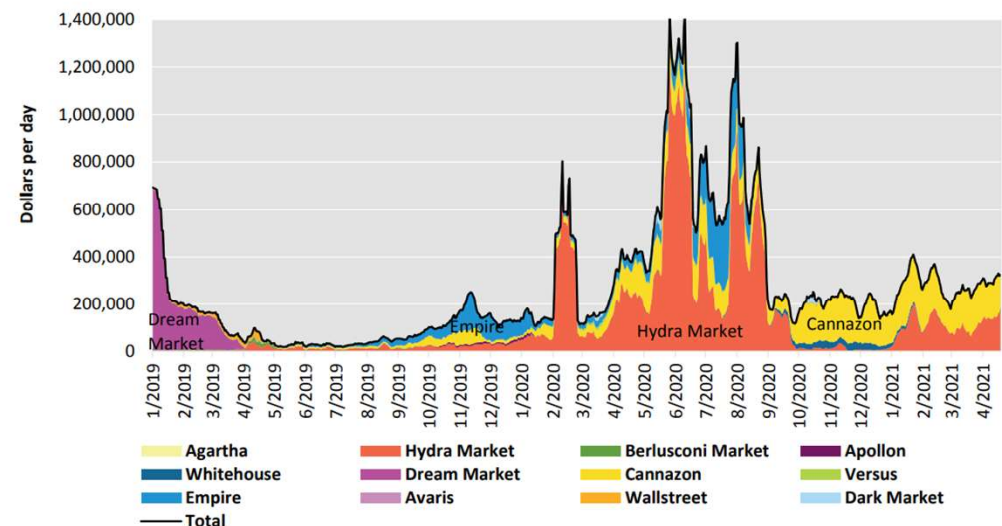
**FIG. 7** Departure location of shipments mentioned in drug transactions on 19 major darknet markets, 2011–2020



Source: UNODC analysis and estimates, based on data from Hikari Labs.

Note: Based on analysis of 294,000 drug transactions on 19 major darknet markets (Hydra Market, Whitehouse, Dark Market, Versus, Cannazon, Empire, Berlusconi Market, Wallstreet, Black Market Reloaded, Dream Market, Valhalla, TradeRoute, AlphaBay, Evolution, Agora, Silk Road 2, Pandora, Hydra and Silk Road).

**FIG. 9** Daily minimum sales on 10 major global darknet markets, 2019–2020



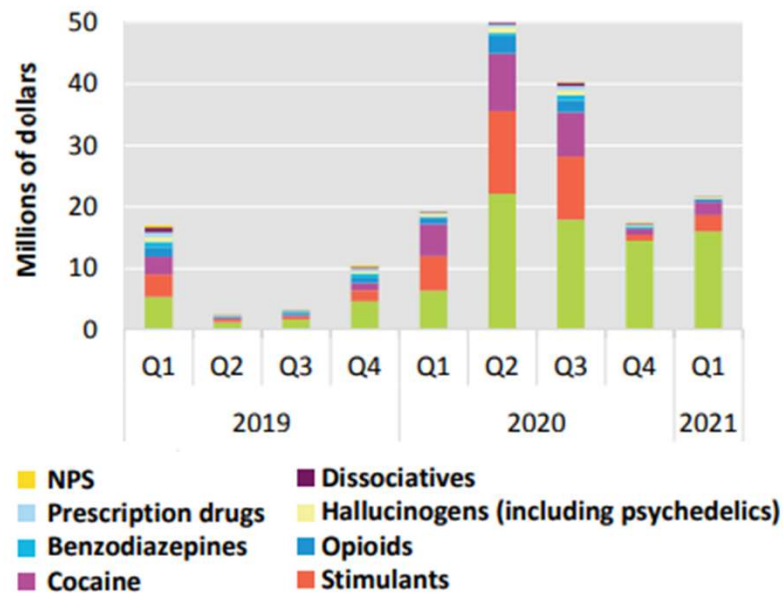
Source: UNODC analysis, based on data from Hikari laboratories.

Note: Data refer to minimum stacked market sales. Data are presented as seven-day averages. All data shown reflect a lower bound estimate of sales as the current web-crawler techniques do not cover all sites on a specific market and customers may purchase not just one but various units of a drug offered for sale over the dark web and this information may not necessarily be contained in the feedback received that is subsequently used for the analysis.

## Drug trafficking over the dark web

## WORLD DRUG REPORT 2021

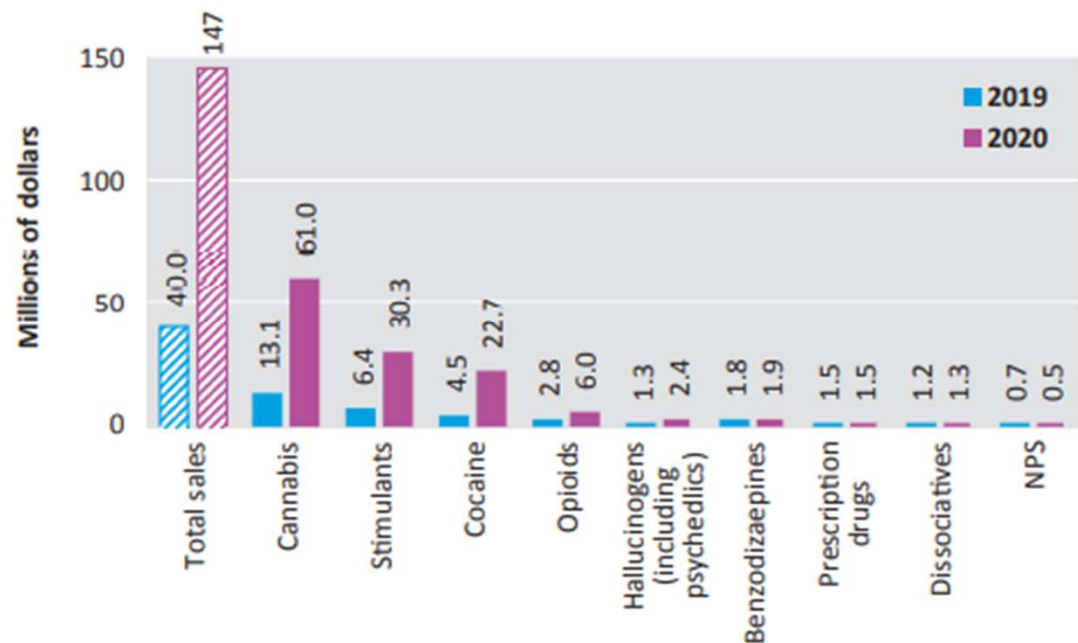
**FIG. 18** Minimum quarterly drug sales on nine major global darknet markets, 2019 and first quarter of 2021



Source: UNODC analysis and estimates, based on data from Hikari Labs.

Note: Aggregate minimum sales on nine major darknet markets operating, at least partially, between 2019 and the first quarter of 2021, ranked in terms of minimum sales over this period: Hydra Market, Cannazon, Empire, Dream Market, Whitehouse Wallstreet, Dark Market, Versus and Berlusconi Market. The marked decline of darknet sales after August 2020 reflects the demise of Empire. Stimulants refers to synthetic stimulants, including amphetamines and cathinones. All data shown reflect a lower bound estimate of sales as the current web-crawler techniques do not cover all sites on a specific market and customers may purchase not just one but various units of a drug offered for sale over the dark web and this information may not necessarily be contained in the feedback received that is subsequently used for the analysis.

**FIG. 17** Minimum drug sales on nine major global darknet markets, by drug type, 2019 and 2020



Source: UNODC analysis and estimates, based on data from Hikari Labs.

Note: Aggregate minimum sales on nine major darknet markets operating, at least partially, between January 2019 and the first quarter of 2021, ranked in terms of minimum sales over this period: Hydra Market, Cannazon, Empire, Dream Market, Whitehouse, Wallstreet, Dark Market, Versus and Berlusconi Market. Stimulants refers to synthetic stimulants, including ATS and cathinones. All data shown reflect a lower bound estimate of sales as the current web-crawler techniques do not cover all sites on a specific market and customers may purchase not just one but various units of a drug offered for sale over the dark web and this information may not necessarily be contained in the feedback received that is subsequently used for the analysis.

# For more detail: World Drug Report 2021



<https://www.unodc.org/unodc/en/data-and-analysis/wdr2021.html>