



UNODC
United Nations Office on Drugs and Crime



1 EXECUTIVE SUMMARY IMPACT OF COVID-19 POLICY IMPLICATIONS

WORLD 2020 DRUG REPORT

© United Nations, June 2020. All rights reserved worldwide.
ISBN: 978-92-1-148345-1
eISBN: 978-92-1-005047-0
United Nations publication, Sales No. E.20.XI.6

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. The United Nations Office on Drugs and Crime (UNODC) would appreciate receiving a copy of any publication that uses this publication as a source.

Suggested citation:

World Drug Report 2020 (United Nations publication, Sales No. E.20.XI.6).

No use of this publication may be made for resale or any other commercial purpose whatsoever without prior permission in writing from UNODC. Applications for such permission, with a statement of purpose and intent of the reproduction, should be addressed to the Research and Trend Analysis Branch of UNODC.

DISCLAIMER

The content of this publication does not necessarily reflect the views or policies of UNODC or contributory organizations, nor does it imply any endorsement.

Comments on the report are welcome and can be sent to:

Division for Policy Analysis and Public Affairs
United Nations Office on Drugs and Crime
PO Box 500
1400 Vienna
Austria
Tel: (+43) 1 26060 0
Fax: (+43) 1 26060 5827

E-mail: wdr@un.org

Website: www.unodc.org/wdr2020

PREFACE

This is a time for science and solidarity, as United Nations Secretary-General António Guterres has said, highlighting the importance of trust in science and of working together to respond to the global COVID-19 pandemic.

The same holds true for our responses to the world drug problem. To be effective, balanced solutions to drug demand and supply must be rooted in evidence and shared responsibility. This is more important than ever, as illicit drug challenges become increasingly complex, and the COVID-19 crisis and economic downturn threaten to worsen their impacts, on the poor, marginalized and vulnerable most of all.

Some 35.6 million people suffer from drug use disorders globally. While more people use drugs in developed countries than in developing countries, and wealthier segments of society have a higher prevalence of drug use, people who are socially and economically disadvantaged are more likely to develop drug use disorders.

Only one out of eight people who need drug-related treatment receive it. While one out of three drug users is a woman, only one out of five people in treatment is a woman. People in prison settings, minorities, immigrants and displaced people also face barriers to treatment due to discrimination and stigma. Of the 11 million people who inject drugs, half of them are living with hepatitis C, and 1.4 million with HIV.

Around 269 million people used drugs in 2018, up 30 per cent from 2009, with adolescents and young adults accounting for the largest share of users. More people are using drugs, and there are more drugs, and more types of drugs, than ever.

Seizures of amphetamines quadrupled between 2009 and 2018. Even as precursor control improves globally, traffickers and manufacturers are using designer chemicals, devised to circumvent international controls, to synthesize amphetamine, methamphetamine and ecstasy. Production of heroin and cocaine remain among the highest levels recorded in modern times.

The growth in global drug supply and demand poses challenges to law enforcement, compounds health risks and complicates efforts to prevent and treat drug use disorders.

At the same time, more than 80% of the world's population, mostly living in low- and middle-income

countries, are deprived of access to controlled drugs for pain relief and other essential medical uses.

Governments have repeatedly pledged to work together to address the many challenges posed by the world drug problem, as part of commitments to achieve the Sustainable Development Goals, and most recently in the 2019 Ministerial Declaration adopted by the Commission on Narcotic Drugs (CND). But data indicates that development assistance to address drug control has actually fallen over time.

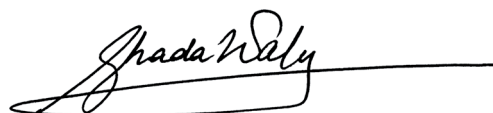
Balanced, comprehensive and effective responses to drugs depend on governments to live up to their promises, and provide support to leave no one behind.

Health-centred, rights-based and gender-responsive approaches to drug use and related diseases deliver better public health outcomes. We need to do more to share this learning and support implementation, most of all in developing countries, including by strengthening cooperation with civil society and youth organizations.

The international community has an agreed legal framework and the commitments outlined in the 2019 CND Ministerial Declaration. The United Nations Office on Drugs and Crime (UNODC) provides integrated support to build national capacities and strengthen international cooperation to turn pledges into effective action on the ground.

The theme for this year's International Day against Drug Abuse and Illicit Trafficking, "Better Knowledge for Better Care", highlights the importance of scientific evidence to strengthen responses to the world drug problem and support the people who need us. It also speaks to the ultimate goal of drug control, namely the health and welfare of humankind. Through learning and understanding we find compassion and seek solutions in solidarity.

It is in this spirit that I present the UNODC *World Drug Report 2020*, and I urge governments and all stakeholders to make the best use of this resource.



Ghada Waly
Executive Director
United Nations Office on Drugs and Crime

Acknowledgements

The *World Drug Report 2020* was prepared by the Research and Trend Analysis Branch, Division for Policy Analysis and Public Affairs, United Nations Office on Drugs and Crime (UNODC), under the supervision of Jean-Luc Lemahieu, Director of the Division, and Angela Me, Chief of the Research and Trend Analysis Branch, and the coordination of Chloé Carpentier, Chief of the Drug Research Section.

Content overview

Chloé Carpentier
Angela Me

Francesca Rosa
Ali Saadeddin
Keith Sabin (UNAIDS)
Antoine Vella

Analysis and drafting

Andrada-Maria Filip
Jaqueline Garcia-Yi
Karin Haar
Barbara Hastie (Indiana University)
Maria Melchior
Kamran Niaz
Thomas Pietschmann
Irmgard Zeiler

Mapping
Antero Keskinen
Francesca Massanello
Deniz Mermerci
Irina Tsoy
Lorenzo Vita

Data management and estimate production

Sonia Arias Garcia (UNAIDS)
Tsegahiwot Belachew
Enrico Bisogno
Diana Camerini
Conor Crean
Hernan Epstein
Riku Lehtovuori
Sabrina Levissianos
Virginia Macdonald (WHO)
Andrea Oterová
Umidjon Rakhmonberdiev
Martin Raithelhuber

Editing
Joseph Boyle
Jonathan Gibbons

Graphic design and production

Anja Korenblik
Suzanne Kunnen
Kristina Kuttinig
Federica Martinelli

Data support

Natalia Ivanova
Lisa Weijler

Administrative support

Andrada-Maria Filip
Iulia Lazar

Review and comments

The *World Drug Report 2020* benefited from the expertise of and invaluable contributions from UNODC colleagues in all divisions.

The Research and Trend Analysis Branch acknowledges the invaluable contributions and advice provided by the *World Drug Report* Scientific Advisory Committee:

Jonathan Caulkins
Paul Griffiths
Marya Hynes
Vicknasingam B. Kasinather
Charles Parry

Afarin Rahimi-Movaghar
Peter Reuter
Alison Ritter
Francisco Thoumi

The research and production of the joint UNODC/UNAIDS/WHO/World Bank estimates of the number of people who inject drugs in Booklet 2 were funded by the HIV/AIDS Section of the Drug Prevention and Health Branch of the Division for Operations of UNODC.

The analysis on purchases of drugs on the darknet in Booklet 4 is based on original data graciously shared by the *Global Drug Survey team*.

The research for booklet 5 benefitted from the support of the Informal International Scientific Network to the Commission on Narcotic Drugs, as well as of the Prevention, Treatment and Rehabilitation Section of the Drug Prevention and Health Branch of the Division for Operations of UNODC, which also funded it.

The analysis on access to controlled medicines in Booklet 6 is based on original data graciously shared by INCB and benefitted from the contribution of the Walther Center in Global Palliative Care of the University of Indiana.

CONTENTS

BOOKLET 1 EXECUTIVE SUMMARY, IMPACT OF COVID-19, POLICY IMPLICATIONS

- PREFACE 1
- EXPLANATORY NOTES 5
- EXECUTIVE SUMMARY 7
 - EFFECTS OF COVID-19 ON DRUG MARKETS 7
 - Impact could be like the 2008 economic crisis*..... 7
 - EXPANSION AND COMPLEXITY 7
 - Market growth*..... 7
 - Increased complexity* 11
 - Rapid market changes* 13
 - Policy changes and changing trends* 13
 - Disadvantaged face harm from legal and illicit drug markets*..... 14
 - LATEST TRENDS..... 17
 - Drug use* 17
 - Supply chains* 18
 - RESPONSE TO THE DRUG PROBLEM STILL INADEQUATE 20
 - COVID-19 AND THE DRUG SUPPLY CHAIN: FROM PRODUCTION AND TRAFFICKING TO USE 23
 - Measures implemented to prevent the spread of COVID-19 are having a mixed impact on the drug supply chain*..... 23
 - IMPACT OF COVID-19..... 23
 - Drug production*..... 24
 - Drug trafficking* 25
 - Drug use* 27
 - Addressing the global drug problem requires drug policy implemented in tandem with broader agendas for sustainable development, security and human rights* 29
 - POLICY IMPLICATIONS..... 29
 - Mainstream evidence-based prevention of drug use and treatment of drug use disorders and the delivery of services aimed at reducing the associated harm in community settings are required*..... 30
 - The disparity in the access to and availability of controlled substances for pain management and palliative care needs to be addressed*..... 31
 - Alternative development initiatives need to avoid generalizations if they are to enhance farmers' livelihoods and reductions in illicit crop cultivation areas*..... 32
 - The distinctive needs of women have to be addressed if the particular vulnerability of those in contact with the criminal justice system for drug-related offences is to be reduced*..... 32
 - The cannabis market needs to be monitored closely*..... 33
 - Enhanced understanding of international cooperation is necessary to address the transnational nature of the drug problem*..... 34

Further research is needed to improve understanding of the complexities of drug markets, including on the impact of COVID-1934

ANNEX.....	37
GLOSSARY	57
REGIONAL GROUPINGS	59

BOOKLET 2	DRUG USE AND HEALTH CONSEQUENCES
BOOKLET 3	DRUG SUPPLY
BOOKLET 4	CROSS-CUTTING ISSUES: EVOLVING TRENDS AND NEW CHALLENGES
BOOKLET 5	SOCIOECONOMIC CHARACTERISTICS AND DRUG USE DISORDERS
BOOKLET 6	OTHER DRUG POLICY ISSUES

EXPLANATORY NOTES

The designations employed and the presentation of the material in the *World Drug Report* 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.

Since there is some scientific and legal ambiguity about the distinctions between “drug use”, “drug misuse” and “drug abuse”, the neutral term “drug use” is used in the *World Drug Report*. The term “misuse” is used only to denote the non-medical use of prescription drugs.

All uses of the word “drug” and the term “drug use” in the *World Drug Report* refer to substances controlled under the international drug control conventions, and their non-medical use.

All analysis contained in the *World Drug Report* is based on the official data submitted by Member States to the UNODC through the annual report questionnaire unless indicated otherwise.

The data on population used in the *World Drug Report* are taken from: *World Population Prospects: The 2019 Revision* (United Nations, Department of Economic and Social Affairs, Population Division).

References to dollars (\$) are to United States dollars, unless otherwise stated.

References to tons are to metric tons, unless otherwise stated.

The following abbreviations have been used in the present booklet:

AIDS	acquired immunodeficiency syndrome
<i>alpha</i> -PVP	<i>alpha</i> -pyrrolidinovalerophenone
APAA	<i>alpha</i> -phenylacetoacetamide
APAAN	<i>alpha</i> -phenylacetoacetonitrile
ATS	amphetamine-type stimulant
CBD	cannabidiol
COVID-19	coronavirus disease
DALYs	disability-adjusted life years
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
HIV	human immunodeficiency virus
INCB	International Narcotics Control Board
MAPA	methyl <i>alpha</i> -phenylacetoacetate
NPS	new psychoactive substances
P-2-P	1-phenyl-2-propanone
THC	Δ -9 – tetrahydrocannabinol
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organization

EXECUTIVE SUMMARY

EFFECTS OF COVID-19 ON DRUG MARKETS

Impact could be like the 2008 economic crisis

The global COVID-19 pandemic has plunged the world into an unprecedented crisis. The disease has stretched health providers to breaking point in many countries, and the restrictions put in place by Governments have created a significant dislocation in the global economy.

As for drug markets, the impact of the pandemic is unknown and hard to predict, but it could be far-reaching. Some producers could be forced to seek out new ways to manufacture drugs as restrictions on movement constrict access to precursors and essential chemicals. Traffickers may have to find new routes and methods as travel restrictions stop them from crossing borders. Patterns of drug use and availability may change, and the capacity of Governments to respond may be hobbled.

The transformation brought about by COVID-19 is unprecedented, but some things can be learned from previous crises. Following the economic crisis of 2008, some users began seeking out cheaper synthetic substances, and patterns of use shifted towards injecting drugs. Meanwhile, Governments reduced drug-related budgets.

If Governments respond the same way to the current economic slump, interventions such as prevention of drug use and related risk behaviours and drug treatment services could be hard hit. Also, interception operations and international cooperation may become less of a priority, making it easier for traffickers to operate.

The biggest immediate impact on drug trafficking can be expected in countries where large quantities are smuggled on commercial airliner flights. Synthetic drugs such as methamphetamine are carried, sometimes in large amounts, by couriers using body packs or concealing drugs in their personal luggage.

Given the restrictions imposed almost everywhere on passenger air traffic, the supply of drugs using commercial air travel may be completely disrupted. Trafficking activities using the darknet and shipments by mail may increase, even though the international postal supply chain has also been disrupted.

In the longer run, the economic downturn and associated lockdowns have the potential to disrupt drug markets. Rising unemployment and lack of opportunities will make it more likely that poor and disadvantaged people engage in harmful patterns of drug use, suffer drug use disorders and turn to illicit activities linked to drugs – either production or transport. And drug trafficking organizations are likely to exploit the situation by providing services to the vulnerable and boosting their ranks with new recruits. With Governments less able to respond, these shifts could quickly take root and become the new reality for many communities.

EXPANSION AND COMPLEXITY

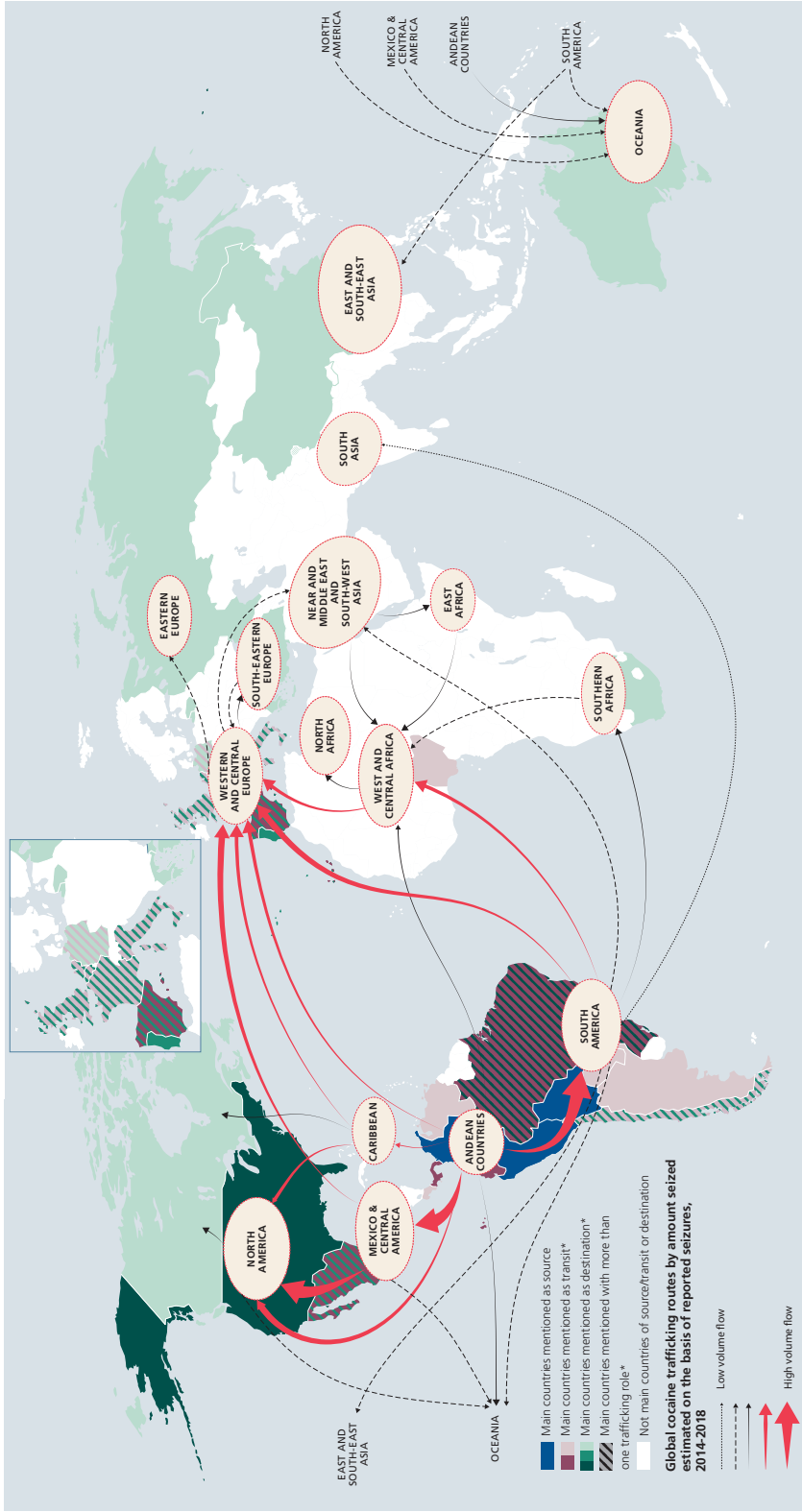
Market growth

Patterns of population growth partially explain the market expansion

Drug use around the world has been on the rise, in terms of both overall numbers and the proportion of the world's population that uses drugs. In 2009, the estimated 210 million users represented 4.8 per cent of global population aged 15–64, compared with the estimated 269 million users in 2018, or 5.3 per cent of the population.

Over the past two decades, drug use increased far more rapidly in developing countries than in developed countries. This partly reflects differences in overall population growth over the same period – 7 per cent in developed countries and 28 per cent in developing countries – but also the faster growth of the young population in developing countries. Adolescents and young adults account for the largest

Cocaine trafficking routes as described in reported seizures, 2014–2018

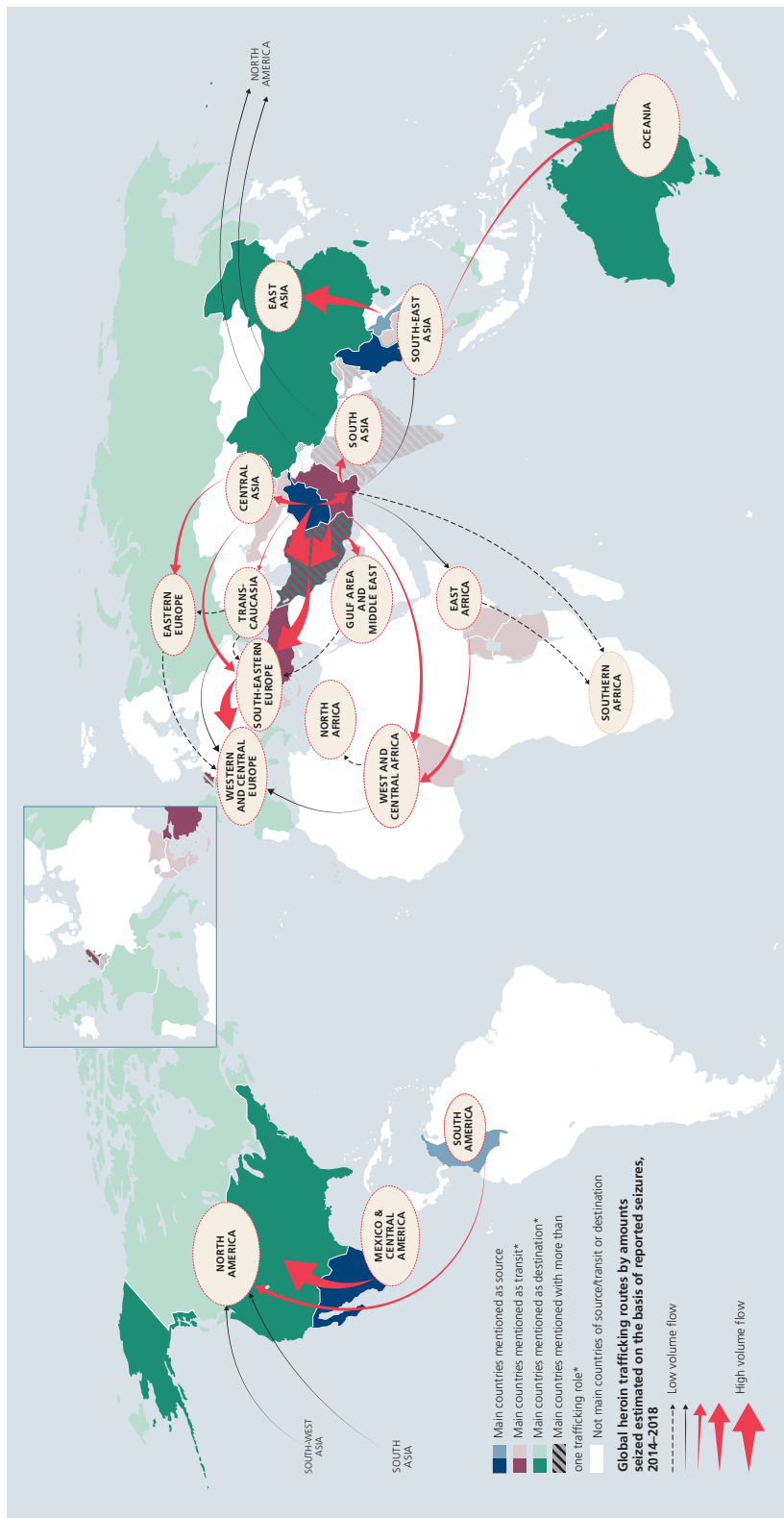


Source: UNODC, responses to the annual report questionnaire, and individual drug seizure database.

* A darker shade indicates a larger amount of cocaine being seized with the country as transit/destination. 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 2014–2018 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, and points of arrows indicate either the area of consumption or the one of next destination of trafficking. Therefore, the trafficking origin does not reflect the country in which the substance was produced. The main countries mentioned as transit or destination were identified on the basis of both the number of times they were identified by other Member States as departure/transit or destination of seizures, and the annual average amount that these seizures represent during the 2014–2018 period. For more details on the criteria used, please see the Methodology section of the present report.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

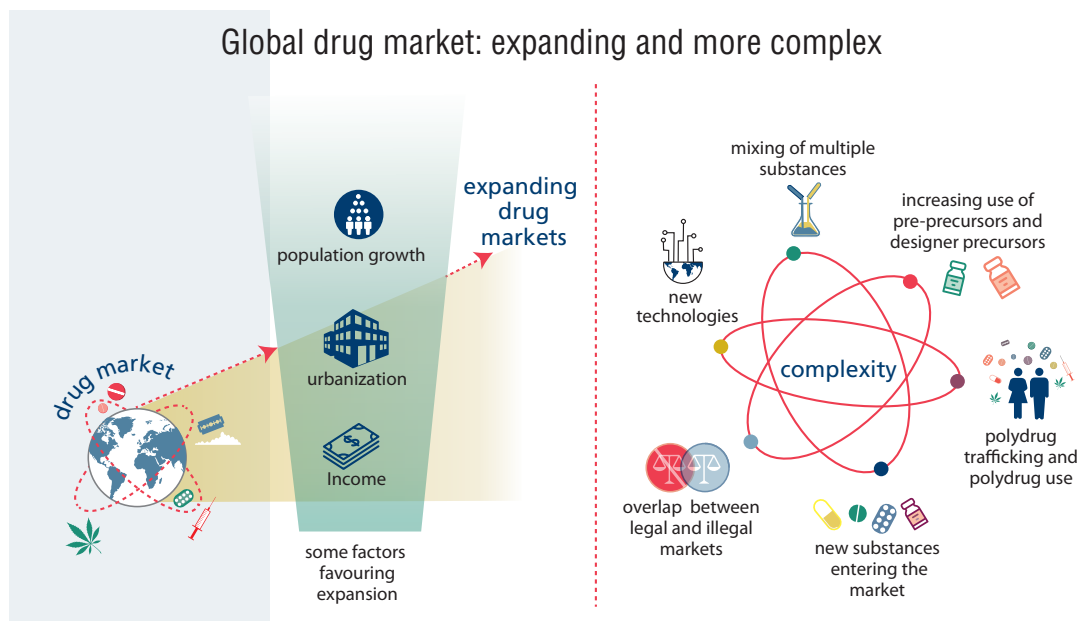
Main heroin trafficking routes as described in reported seizures, 2014–2018



Source: UNODC, responses to the annual report questionnaire, and individual drug seizure database.

* A darker shade indicates a larger amount of heroin being seized with the country as source/transition/destination. 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 2014–2018 period. The routes are determined on the basis of reported country of departure/transition 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 does not reflect the country in which the substance was produced. The main countries mentioned as transit or destination were identified on the basis of both the number of times they were identified by other Member States as departure/transit or destination of seizures, and the annual average amount that these seizures represent during the 2014–2018 period. For more details on the criteria used, please see the Methodology section of the present report.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.



share of those using drugs. While that age group grew by 16 per cent in developing countries over the period 2000–2018, it declined by 10 per cent in developed countries.

Urbanization is a driving factor in current and future drug markets

Drug use is higher in urban areas than in rural areas, in both developed and developing countries. The mass movement of people from the countryside to towns and cities – more than half the world's population now live in urban areas compared with 34 per cent in 1960 – partially explains the overall rise in drug use.

Urbanization can be a crucial element in the future dynamics of drug markets, particularly in developing countries where the trend towards urbanization is more prominent.

Increasing wealth is linked to rising drug use, but the poorest suffer the largest burden of disorders

Worldwide, drug use is more widespread in developed countries than in developing countries. Drugs such as cocaine are even more firmly associated with the wealthier parts of the world.

Likewise, within countries, the wealthier sectors of

society have a higher prevalence of drug use. But the transition to drug use disorders is more prevalent among people with a lower socioeconomic status. Data from a handful of countries suggest an association between harmful patterns of drug use and disorders and low income. Those patterns seem to be less common among wealthier sections of society.

Economic constraints caused by the global COVID-19 crisis are likely to exacerbate the risk for the most vulnerable population groups, including people using drugs. For example, changes in labour markets, such as rising unemployment, have been linked to increases in drug use in the past, and the pandemic has forced tens of millions around the world out of their jobs.

COVID-19 may lead to further expansion of drug markets

As a result of the COVID-19 pandemic, more farmers may increase or take up illicit crop cultivation, either because State authorities may be less able to exert control or because more people may have to resort to illicit activities due to the economic crisis.

The reduction in air and land traffic resulting from COVID-19 restrictions may have already led to an increase in maritime trafficking – with a reduced

risk of interception and the ability to smuggle larger quantities than by air or land. Direct cocaine shipments by sea from South America to Europe have recently been reported.

Increased complexity

Emergence of substances not under international control stabilizes, but new potentially harmful opioids are on the increase

Drug markets are becoming increasingly complex. Plant-based substances such as cannabis, cocaine and heroin have been joined by hundreds of synthetic drugs, many not under international control. There has also been a rapid rise in the non-medical use of pharmaceutical drugs.

Roughly 500 NPS are found on the national markets of Member States each year. Currently, most of those are stimulants, followed by synthetic cannabinoid receptor agonists and a smaller number of opioids. However, while the overall number of NPS

has stabilized, the proportions have changed. Opioid NPS accounted for just 2 per cent of the number of NPS identified in 2014 but by 2018 that figure had risen to 9 per cent.

Opioid NPS, many of them fentanyl analogues, have proved both potent and harmful, fuelling overdose deaths in North America and to a lesser extent in other regions. In North America, fentanyls are either used as adulterants in heroin and other drugs (including cocaine and methamphetamine) or used to make falsified pharmaceutical opioids. Some evidence suggests NPS stimulants are also being injected in Europe: a study of residues in discarded syringes in six European cities found that many were tainted with stimulant NPS.

Use of new psychoactive substances may become cemented among vulnerable population groups

Individual NPS hardly ever establish their own significant market. However, evidence from Europe suggests synthetic cannabinoids are a significant problem among marginalized sections of society such as the homeless and prison inmates. NPS use in prisons was reported by 22 countries in Europe, with most of those countries identifying synthetic cannabinoids as the main challenge.

Controls on precursor chemicals force drug manufacturers to innovate

Many of the chemicals most commonly used as precursors to synthesize drugs such as amphetamine, methamphetamine and “ecstasy” have been placed under international control. Traffickers and manufacturers have sought alternatives – not only less well-controlled substances but also chemicals specifically designed to circumvent controls, known as “designer precursors”.

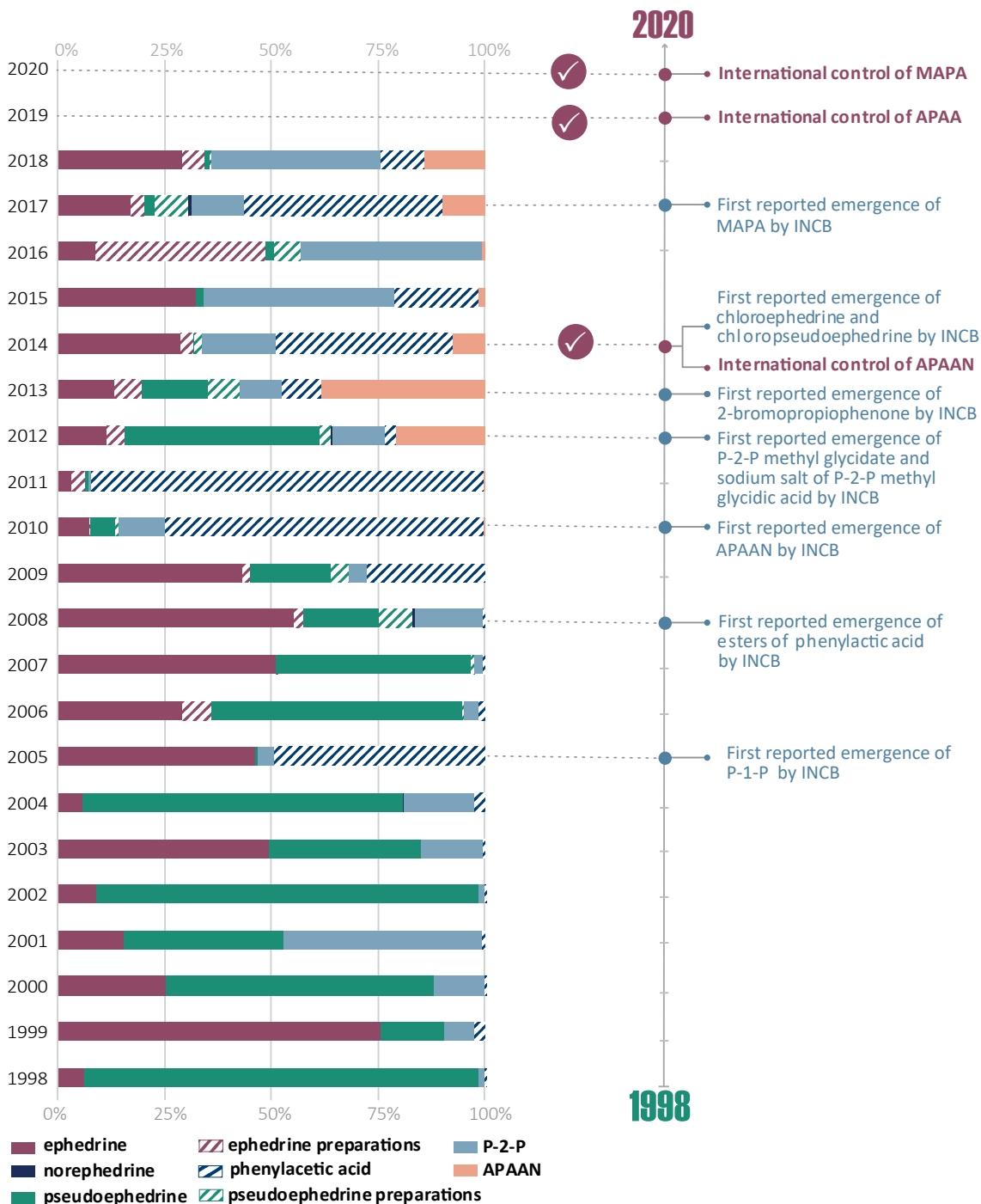
Restrictive measures designed to halt the spread of COVID-19 are likely to further squeeze manufacturers reliant on precursor chemicals. Evidence from Mexico suggests this is already the case: shortages in imported methamphetamine precursors from East Asia reportedly prompted a hike in methamphetamine prices in Mexico and the United States in March 2020.

The market for NPS is in a constant state of flux



Source: UNODC, Early Warning Advisory.

Share of global seizures of amphetamines chemical precursors under international control and emergence of amphetamines pre-precursors and designer precursors



Source: UNODC calculations based on INCB, *2019 Annual Report on Precursors* (E/INCB/2019/4) (and previous years) and United Nations Commission on Narcotic Drugs, *Report on the sixty-third session* (2-6 March 2020), C.CN.7/2020/15 (and previous years)

Note: The x-axis shows the proportion of seized internationally controlled amphetamines precursors converted into amphetamines equivalents. The substances seized were not necessarily the starting material, but may well have been substances found in the process of manufacturing.

Rapid market changes

Synthetics replace opiates in Central Asia and the Russian Federation

The market for opiates in Central Asia and the Russian Federation appears to have been transformed between 2008 and 2018. The amount of opiates intercepted by the authorities in the Russian Federation fell by roughly 80 per cent, while the number of people in treatment for opioid use has decreased sharply.

However, the market in stimulants appears to be booming. Evidence suggests methamphetamine and various cathinones, including mephedrone and *alpha*-PVP, are now widely available on the Russian drug market. Russian authorities reported a recent steep rise in the detection of clandestine laboratories for the manufacture of various drugs, rising by 70 per cent in three years to 68 laboratories in 2018.

Methamphetamine market grows in Afghanistan and Iraq

Surveys of people in hospitals, prisons and other institutions had already revealed the importance of methamphetamine in Iraq as far back as 2012. Along with “captagon” and tramadol, crystalline methamphetamine has emerged as a main drug of concern. A study in 2015 further confirmed those findings, with drug users saying they found cannabis more difficult to get hold of than “captagon” or

methamphetamine. More recently, Iraqi authorities have discovered methamphetamine laboratories and, INCB has expressed concern over large-scale imports of pseudoephedrine preparations – used as precursors in methamphetamine laboratories.

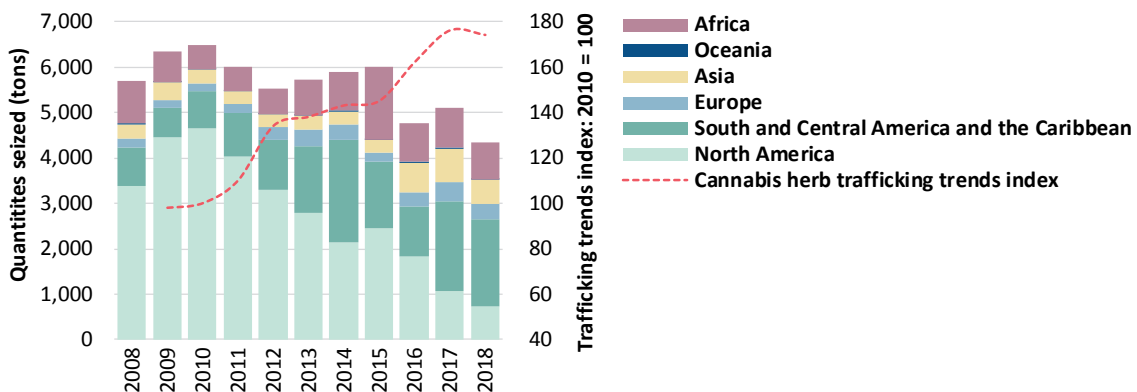
In Afghanistan, seizures of methamphetamine have steadily risen since 2014, when manufacturing seems to have started. But the amount seized in the first six months of 2019 – 657 kg – signals a huge leap on the previous year. The large seizures effected in other countries of methamphetamine thought to originate in Afghanistan also suggest that production in that country is rising fast.

Policy changes and changing trends

Cannabis use on the rise in most jurisdictions where non-medical use legalized

Canada, Uruguay and 11 jurisdictions in the United States allow the manufacture and sale of cannabis products for non-medical use. In most of those jurisdictions, cannabis use has risen since its legalization, although the same trend was observed in other jurisdictions where non-medical use of cannabis was not legalized. In Colorado and Washington, two of the first states of the United States to pass legislation, increases in non-medical use of cannabis among adults, especially past-month and daily or near-daily

Quantities of cannabis herb seized and reported trends in cannabis herb trafficking, 2008–2018



Source: UNODC, responses to the annual report questionnaire.

Note: The trafficking trends index is based on qualitative information on trends in cannabis herb 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 “strong increase”, 1 point for “some increase”, 0 points for “stable”, -1 point for “some decline”, -2 points for “strong decline”).

use, have outstripped the national average since 2012.

All indicators show cannabis use has risen in Uruguay since 2011 – past-month use has nearly doubled. This suggests the main increase has been of regular and frequent use of the drug. Short-term data from Canada also suggest an increase in use coinciding with the expansion of legal markets from 2018 to 2019. However, 40 per cent of users still relied on illegal sources for some of their cannabis products in 2019.

Legalization behind the global slump in cannabis herb seizures?

Global seizures of cannabis herb fell to their lowest level in two decades in 2018 – a slump driven by declines in North America, where seizures have fallen by 84 per cent in the last 10 years. By contrast, seizures almost doubled in the rest of the world over the same period. The pattern of seizures suggests policies aimed at liberalizing cannabis markets have played a key role in the decline.

Regulating new psychoactive substances appears to have a containment effect

The impact of regulating NPS at the national level remains difficult to assess. Some countries with different regulatory systems for NPS have shown

different prevalence levels of NPS use. In other countries, NPS use has declined after national legislation was adopted.

Disadvantaged face harm from legal and illicit drug markets

Pharmaceutical opioids for pain management and palliative care are available mostly in high-income countries

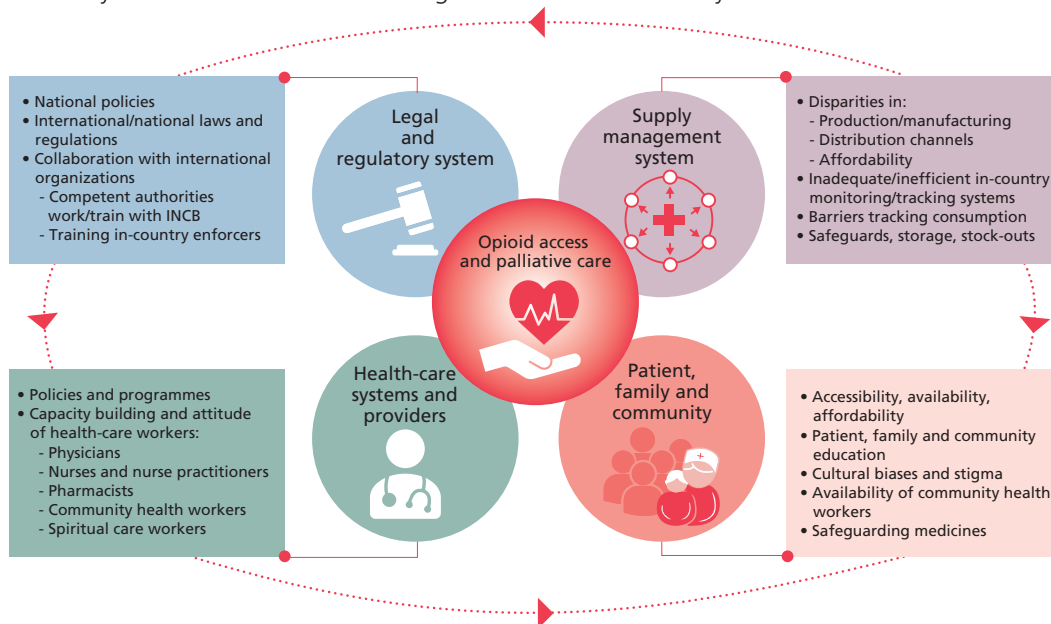
Medicines for pain relief are unequally distributed across regions. More than 90 per cent of all pharmaceutical opioids available for medical consumption were in high-income countries in 2018. Some 50 per cent were in North America, 40 per cent in Europe, and a further 2 per cent in Oceania. Those countries are home to about 12 per cent of the global population. Low- and middle-income countries, which are home to 88 per cent of the global population, are estimated to consume less than 10 per cent of pharmaceutical opioids.

Barriers to access pharmaceutical opioids are related to a number of factors, including legislation, culture, health systems and prescribing practices.

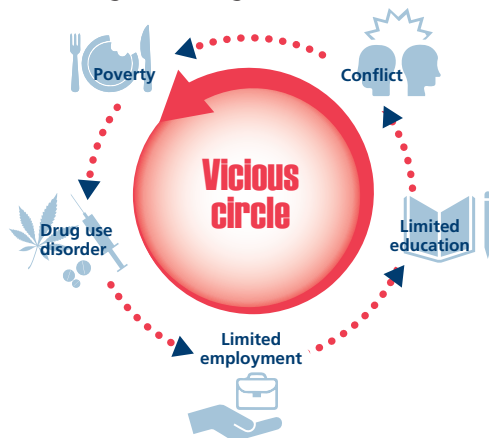
Poorer people face a greater risk of drug use disorders

Some 35.6 million people suffered from drug use disorders in 2018. Poverty, limited education and social marginalization may increase the risk of drug

Systems and influences affecting access to and availability of controlled medicines



Vicious cycle between socioeconomic disadvantage and drug use disorders



use disorders and exacerbate the consequences. This is borne out by studies in high-income countries, where an individual's adverse socioeconomic trajectory – not just their status at a single point in time – is also associated with risk of drug use disorders.

Drug use disorders also fuel a vicious cycle of disadvantage by entrenching socioeconomic disadvantage and further increasing the risks of unemployment, poverty and homelessness. These outcomes may also be associated with stigmatizing attitudes and with consequences within the criminal justice system. Women, ethnic minorities and immigrants, sexually diverse groups, people displaced due to armed conflicts or disasters and those in rural settings may also be disproportionately affected by drug use disorders or face problems in getting treatment services.

For people with drugs use disorders, the availability of and access to drug treatment services remains limited at the global level – only one in eight receives drug treatment each year. And, while one in three drug users is a woman, women continue to account for only one in five people in treatment for drug use disorders.

Over the past decade, the impact of harmful drug use on wider society has increased, according to the DALY metric, which estimates the number of healthy years of life lost to disability and premature deaths. The global number of DALYs attributed to drug use rose by 17 per cent between 2007 and 2018. The increase was particularly steep for DALYs associated with liver cancer resulting from untreated

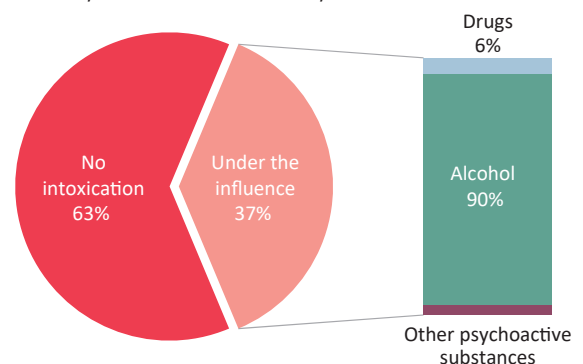
hepatitis C, common among injecting drug users – they increased by 40 per cent.

The relationship between drugs and violence is complex

It is difficult to pin down all the causal relationships between the use of psychoactive substances and violence. The limited data at the global level show that intoxication may be a significant factor in homicide. However, alcohol seems to play a larger role in violence than do drugs. And while drug use can contribute to crime, this association can in some instances be partly explained by mediating factors such as socioeconomic disadvantage and other types of adversity resulting from individual risks, family circumstances and peer influences.

The association between drug trafficking and violence is multifaceted. Large-scale organized crime activities including international drug trafficking can take place without outbursts of violence when stable criminal structures are in place. In the short run, the presence and level of violence is dependent not so much on the quantities trafficked as on certain changes that produce instability in the balance of power between organized crime groups, such as changes in the size of illicit markets, the death or incarceration of high-profile criminals and law enforcement measures that weaken one group relative to another.

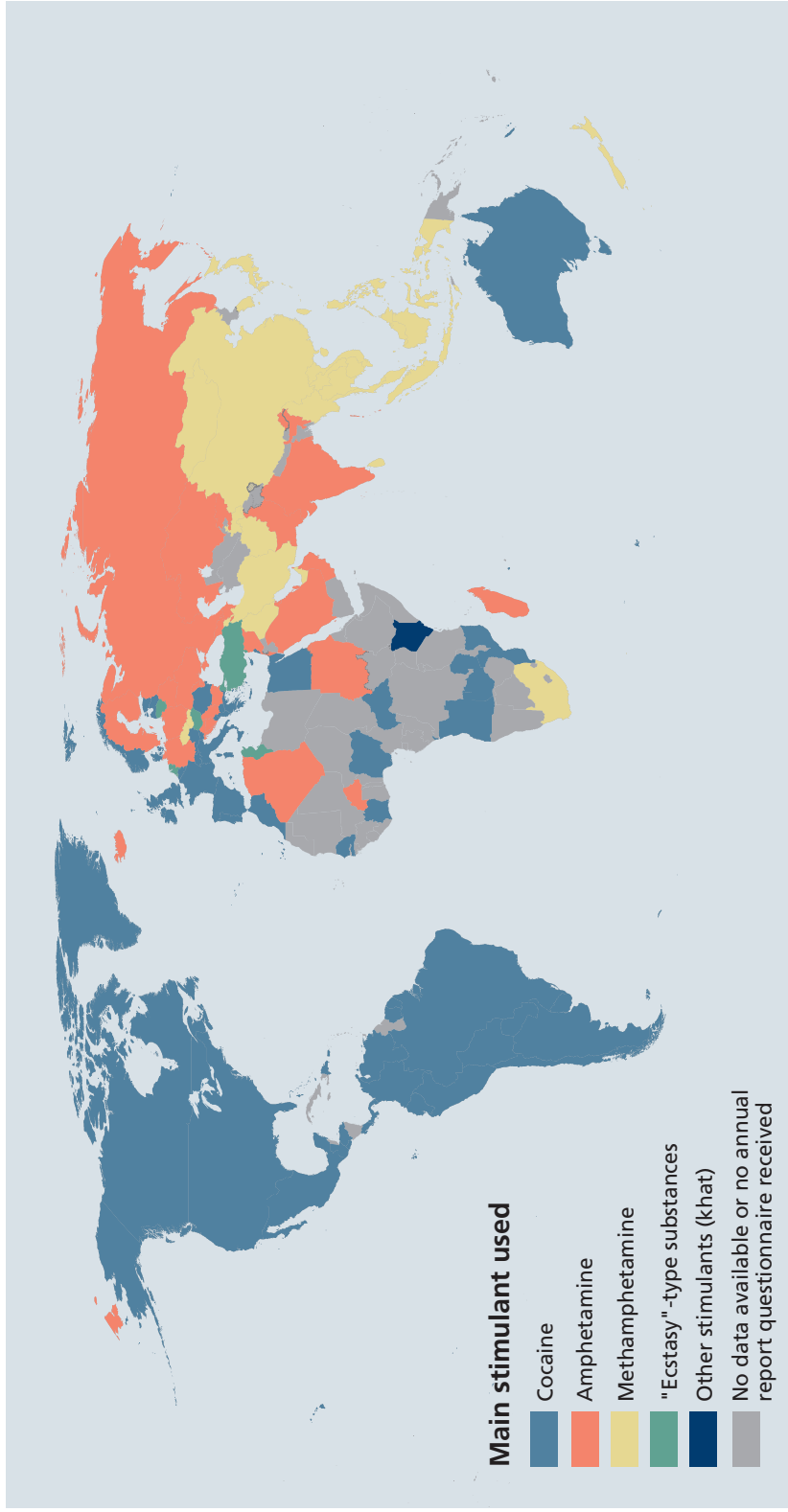
Influence of psychoactive substances among perpetrators of homicides, latest available data, 2012–2015



Source: UNODC, homicide statistics.

Note: Based on data from 17 countries that provided sufficiently detailed breakdowns of perpetrators of homicides. For each country, only the most recent data, up to 2015, were considered. The breakdown into cases of "under the influence" versus "no intoxication" has been adjusted to take into account cases where the intoxication status was unknown. The breakdown into three kinds of intoxication adjusts for cases in which multiple substance were involved.

Main stimulant drug used, 2018 or latest available data



Source: UNODC, responses to the annual report questionnaire.

Note: Information is based primarily on the reported prevalence of stimulant drugs (cocaine, amphetamine, methamphetamine and "ecstasy") and, when that was not available, on the ranking or data on treatment of stimulant drug use reported in the annual report questionnaire.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dashed lines represent undetermined boundaries. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

LATEST TRENDS

Drug use

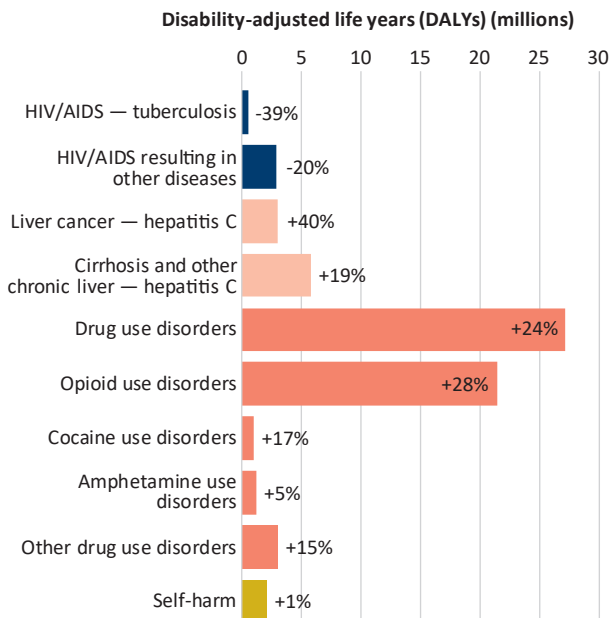
Cannabis the most used substance, opioids the most harmful

An estimated 192 million people used cannabis in 2018, making it the most used drug globally. In comparison, 58 million people used opioids in 2018. But that lower number of users belies the harm associated with opioids. This group of substances accounted for 66 per cent of the estimated 167,000 deaths related to drug use disorders in 2017 and 50 per cent of the 42 millions years (or 21 million years) lost due to disability or early death, attributed to drug use.

Non-medical use of synthetic opioids fuels public health crises

In West, Central and North Africa, the opioid crisis is fuelled by tramadol; in North America, by fentanyl. Although those subregions have little in

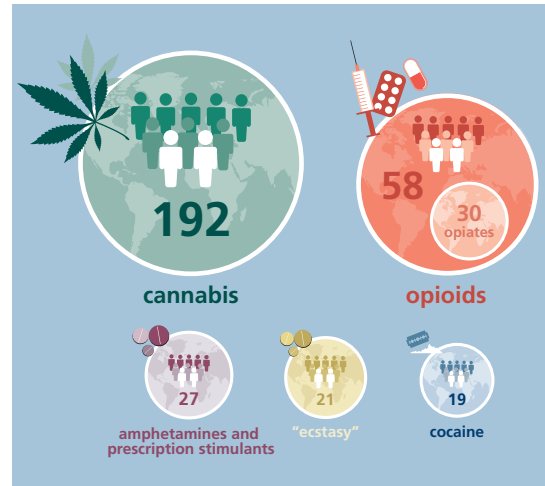
DALYs in 2017, and changes over the period 2008–2017



Source: Institute for Health Metrics and Evaluation, "Global Burden of Disease Study 2017 (GBD 2017) Data Resources: GBD Results Tools", 2018.

Note: DALYs for drug use disorders include all drugs.

Number of past-year users in millions, 2018



common in terms of economics, demographics or general patterns of drug use, both are struggling with an opioid crisis fuelled by substances that are easy to access and cheap to produce.

In North America, the use of synthetic opioids such as fentanyl has fuelled two decades of increases in opioid overdose deaths. In 2018, fentanyls were implicated in two thirds of the 67,367 overdose deaths registered in the United States. Canada, too, has reported similar findings, though with lower numbers. The overdose deaths attributed to fentanyls are partly driven by the unpredictability of their potency as found in illicit drug markets.

In West, Central and North Africa, the market for non-medical use of tramadol has grown considerably. An increasing number of people with tramadol use disorders are entering treatment in the region. Quantities of tramadol seized increased markedly to a peak of over 125 tons intercepted globally in 2017. However, global seizures fell to 32 tons in 2018, when a new law regulating tramadol was adopted in India.

Ease of manufacturing and low production costs helped to seed both crises, as did the context of an absence of international regulations on tramadol and many fentanyl analogues or their precursors. Both crises were inflamed by the availability of the substances on pharmaceutical and illicit markets – making it more difficult to detect and prevent their misuse.

Stimulant use on the increase

The stimulant scene is dominated by cocaine and methamphetamine, and use of both substances is rising in their main markets.

Some 19 million people used cocaine in 2018, fuelled by the drug's popularity in North America and Western Europe. Roughly 27 million people used amphetamines that same year, methamphetamine being the most used ATS in South-East Asia. Use of methamphetamine in these two subregions has been expanding for two decades, according to most available indicators.

Cocaine and methamphetamine can coexist in some markets by acting as substitutes for each other, so that use of one drug rises when the other goes down, or by feeding the same market with parallel increases and declines.

COVID-19 increases risks for people who inject drugs

Some 11.3 million people are estimated to have injected drugs in 2018, a practice that accounts for roughly 10 per cent of HIV infections worldwide. More than 1 million people who inject drugs are living with HIV and 5.5 million are living with hepatitis C. Of the roughly 585,000 deaths attributed to drug use in 2017, half were due to liver diseases caused by hepatitis C, which continues to mostly go untreated among people who inject drugs.

Opioid shortages caused by COVID-19 restrictions could lead to users substituting with more readily available substances such as alcohol or benzodiazepines, or to mixing with synthetic drugs. More harmful patterns of use may emerge as some users switch to injecting, or to more frequent injecting.

The financial downturn and social distancing rules could also have a double impact on people who inject drugs. In addition to being more vulnerable to COVID-19 infection and complications from the disease because they have compromised immune systems, they are also likely to face problems in accessing treatment and other services from under-pressure health providers.

COVID-19 measures could lead to a fall in the use of some drugs

Restrictions on movement and gatherings, as well as social distancing measures put in place to halt the spread of COVID-19, may lead to an overall decrease in consumption, although it may be short-lived as restrictions are lifted. This is particularly likely with drugs that are mostly consumed in bars and clubs or at music festivals. Drug supply shortages have already been reported in some countries, leading to an increase in prices.

Supply chains

Supply of plant-based drugs still at a high level despite some decreases

The area under opium poppy cultivation shrank for a second year in a row in 2019, led by declines in Afghanistan and Myanmar. But that figure remains substantially higher than a decade ago. The quantities of opiates seized in 2018 also fell markedly from the previous year, but it was still the third highest total ever reported. Almost 80 per cent of those seizures worldwide took place in Asia, where more than 90 per cent of the world's supply of illicit opium is produced.

Coca bush cultivation continues at a historically very high level. The area under coca cultivation remained stable from 2017 to 2018, even showing small declines in Bolivia (Plurinational State of) and Colombia. However, estimated global manufacture of cocaine once more reached an all-time high, and global seizures increased marginally, to the largest quantity ever reported.

Markets for amphetamine-type stimulants show signs of continued expansion

Unlike with plant-based drugs such as cocaine or heroin, it is not possible to use rigorous methods to estimate the extent of ATS manufacture. However, a number of indicators suggest that the global market of such substances, especially methamphetamine, is expanding.

Quantities of seized methamphetamine, the ATS with the largest market globally, reached a new record high, at 228 ton-equivalents, in 2018. There

are signs of a marked expansion in the trafficking of the drug in its main subregional markets of North America and South-East Asia. While supply in China has markedly decreased in recent years, prices, which have now reached their lowest level in a decade, and purity suggest an abundant supply of the drug, in both its crystalline and tablet forms in South-East Asia.

Traffickers show resilience by changing routes and production practices

Heroin, cocaine and methamphetamine traffickers have varied routes and continue to develop new trading patterns. For example, the manufacture of methamphetamine was traditionally carried out in small-scale laboratories in the United States to serve the domestic market. But this kind of production seems now to be dwarfed by industrial-size laboratories in Mexico. The methamphetamine seized in the United States over the past few years is increasingly imported, with the trade controlled by Mexican cartels.

Meanwhile, heroin trafficking through Central Asia destined for the Russian Federation appears to have lost importance over the past decade, although recent large seizures suggest that the region may be emerging as a transit area to Western and Central Europe. Once accounting for 10 per cent of global seizures, the so-called northern route made up just 1 per cent in 2018.

The world's single largest heroin trafficking route continues to be the Balkan route, which takes heroin from Afghanistan to markets in Western and Central Europe via Iran (the Islamic Republic of), Turkey and the Balkans. This route accounted for 58 per cent of the heroin seizures made outside Afghanistan in 2018.

Cocaine smugglers, too, are diversifying routes. The Bolivarian Republic of Venezuela was once a major departure point but declined in importance as a result of political volatility. Brazil remains a major transit country and may even have to play an increasing role, and Uruguay appears to be growing in importance. In late 2019, the authorities of Uruguay seized more than 9 tons of cocaine destined for West Africa in two separate shipments.

Restrictions put in place to tackle COVID-19 may already be affecting all these trafficking routes. For example, a recent uptick in opiate seizures in the Indian Ocean may indicate that traffickers are increasingly looking to maritime routes via Africa to circumvent controls along the Balkan route.

Drug supply on the darknet suffered massive disruptions

Several major darknet markets have closed since mid-2017, either as a result of law enforcement action or being shut down as part of an exit scam. This has led to a temporary decline in drug transactions over the darknet. However, 2020 has seen an increase in people buying drugs over the darknet.

Trafficking activities on the darknet may increase while COVID-19-related restrictions are in place, in particular purchases by end users for whom it is difficult to approach street dealers. There are indications that activity on some European darknet drug markets increased during the first quarter of 2020. This was mostly driven by retail sales of cannabis.

RESPONSE TO THE DRUG PROBLEM STILL INADEQUATE

First data on drug treatment coverage (Sustainable Development Goal target 3.5.1) show low provision of treatment services in many countries

The provision of treatment interventions for drug use disorders varies widely, according to early data on 30 countries from all world regions. Coverage varies greatly depending on drug type and the country – in 2015–2018, from less than 1 per cent to 86 per cent of people with drug use disorders were in treatment for that disorder.

While it remains challenging to determine whether general progress towards achieving the target has been made, drug treatment coverage remains very low in many countries. And lockdown measures during the COVID-19 pandemic may have reduced even further the access to drug treatment for many.

Little understanding of the impact of alternative development projects

Well-designed alternative development interventions can help to address illicit crop cultivation. Some interventions have ultimately led to a sustainable reduction of cultivation in targeted regions through integrated rural development. However, there is little sound evidence from robust impact assessments to evaluate the effectiveness of alternative development projects.

Between 605,000 and 970,000 households worldwide cultivate illicit crops, according to data from

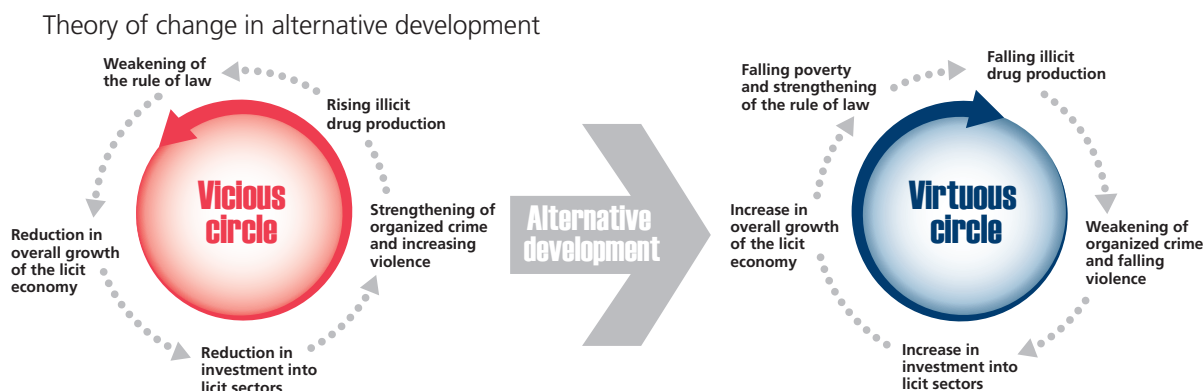
2017–2018. It is challenging to assess how many of those households are reached by alternative development. Not all households in regions targeted by alternative development projects cultivate illicit crops, and very few projects maintain continuous tracking of active participants. The best information corresponds to only the number of targeted beneficiaries, including households cultivating and not cultivating illicit crops, estimated at 550,000.

Global spending on alternative development projects increased slightly from 2013 to 2017, according to a study by UNODC, although the number of projects being implemented remained fairly constant. This pattern was largely due to Colombia, which more than doubled its annual budget from \$75 million in 2013 to \$153 million in 2017 – more than half of the global total for that year.

Budgets and spending on drug control are in long-term decline

Commitments related to drug control fell from 3 per cent of all development assistance pledged by Governments in 2000 to 0.02 per cent in 2017. The amount of money spent on drug control also fell – from 1.9 per cent of all development spending in 2003 to 0.04 per cent in 2017.

Without more detailed information, it is difficult to judge to what extent the massive declines reported actually reflect real declines in funds provided for drug control. Falls in spending and budgeting may reflect changes in accounting practices. For example, some Member States may simply use other budget lines to provide development assistance.



Source: *World Drug Report 2015* (United Nations publication, Sales No. E.15.XI.6).

Fewer countries taking part in joint drug operations

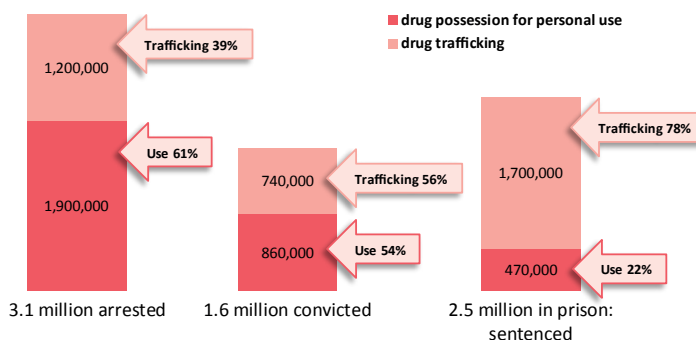
The involvement of law enforcement in joint drug operations between 2010 and 2018 appears to have declined slightly, from 68 countries in 2010/11 to 57 in 2017/18. Budgetary problems following the 2008 financial crisis may have played a role, forcing some Member States to cut back on commitments.

Beyond the financial aspect, Member States have also reported other challenges with international cooperation. These include technical problems such as a lack of agreements to enable operational cooperation and more practical issues such as an inability to identify appropriate counterparts, and language problems.

Cannabis remains the main drug dealt with by the criminal justice system

Cannabis is the drug that most brings people into contact with the criminal justice system, accounting for more than half of all drug law offences cases, based on reports from a total of 69 countries over 2014–2018.

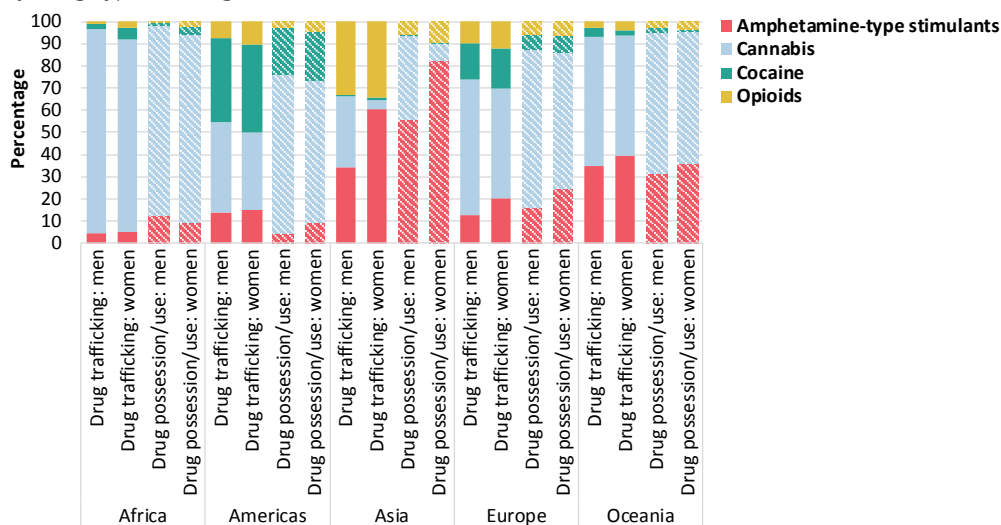
Estimated number of people in the criminal justice system for drug offences



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (various years, latest data available).

The predominance of cannabis-related cases in the statistics reflects the drug's large global market. ATS were the next biggest drug category (responsible for 19 per cent of cases), followed by cocaine (11 per cent) and opioids (7 per cent). Almost 90 per cent of suspects were men.

Distribution of men and women brought into contact with the criminal justice system for drug law offences, by drug type and region, 2014–2018



Source: UNODC, responses to the annual report questionnaire.

Note: The data presented in this graph are based on the percentage of men and women brought into contact with the criminal justice system by drug type, for possession for personal use or trafficking over the period 2014–2018. During that period, a total of 69 countries – 14 in Africa, 18 in the Americas, 14 in Asia, 21 in Europe and 2 in Oceania (Australia and New Zealand) – reported data on the number of people brought into contact with the criminal justice system. In Africa and Asia, more countries reported on the number of people brought into contact with the criminal justice system for possession of drugs than for drug trafficking. In the remaining regions, the same number of countries reported for either type of offence. The data were not weighted by the population of the region.

IMPACT OF COVID-19

COVID-19 AND THE DRUG SUPPLY CHAIN: FROM PRODUCTION AND TRAFFICKING TO USE

The coronavirus disease (COVID-19) crisis is taking its toll on the global economy, public health and our way of life. The virus has now infected more than 6 million people worldwide, killed 350,000 and led Governments to take drastic measures to limit the spread of COVID-19. Roughly half of the global population is living under mobility restrictions, international border crossings have been closed, and economic activity has declined drastically, as many countries have opted for the closure of non-essential businesses.

Drug trafficking relies heavily on legal trade to camouflage its activities and on individuals being able to distribute drugs to consumers. The measures implemented by Governments to counter the COVID-19 pandemic have thus inevitably affected all aspects of the illegal drug markets, from the production and trafficking of drugs to their consumption.

Sources

The ongoing dynamics in the impact of the COVID-19 pandemic on the illicit drug markets summarized in this chapter are based on the most recent data from government authorities, open sources, including the media, and the network of UNODC field offices.

Unless otherwise specified, this summary is based on detailed analysis included in: UNODC, *Research Brief: COVID-19 and the Drug Supply Chain: from Production and Trafficking to Use* (Vienna, May 2020).

Having said that, the impact of those measures varies both in terms of the different business models used in the distribution of each type of drug and the approaches used by different countries to address the pandemic. These range from the closure of international border crossings, while allowing domestic travel, to moderate to strict shelter-in-place orders, or a complete lockdown of all activities, including suspension of services other than for emergencies. The impact on actual drug production can vary greatly depending on the substance and the geographical location of its production.

Measures implemented to prevent the spread of COVID-19 are having a mixed impact on the drug supply chain

The impact of the measures implemented to address the COVID-19 pandemic appears to have been most homogenous to date at the very end of the drug supply chain, in the destination markets. Many countries in all regions have reported an overall shortage of numerous types of drugs at the retail level, as well as increases in prices and reductions in purity, and that consequently drug users have been switching substances (for example, from heroin to synthetic opioids) and/or increasingly accessing drug treatment. Some countries in the Balkans and the Middle East, where measures have not been so strict during daytime, have, however, reported less disruption.

The overall impact on bulk supply is reportedly more heterogeneous, varying according to the specific drug and country. Increased controls resulting from the implementation of measures to fight the spread of COVID-19 have had double-edged consequences on large-scale drug supply. Some countries, such as Italy, the Niger and countries in Central Asia, have experienced a sharp decrease in drug seizures. There have also been reports of organized criminal groups involved in drug trafficking diverting their attention from their usual illicit activities to emerging crime opportunities linked to the COVID-19 pandemic, for example, cybercrime and

trafficking in falsified medicines in the Balkan countries.

On the other hand, other countries, including the Islamic Republic of Iran and Morocco, have reported large drug seizures, indicating that large-scale drug trafficking is still taking place, and some countries have reported an increase in interdiction resulting from increased controls. An example of an increase in drug enforcement activities is seen in the United Kingdom of Great Britain and Northern Ireland, where increased interdiction of “county lines” activities, a trafficking modus operandi particular to that country in which young disadvantaged people are exploited, has been reported. Fortuitous drug interceptions in countries such as Egypt have also resulted in mid-scale drug seizures made during street controls, and reports from Nigeria indicate continued drug trafficking, with a possible increase in the use of postal services.

Drug production

Restrictions resulting from the lockdown could hinder the production and sale of opiates in major producing countries

As the key months for the opium harvest in Afghanistan are March to June, the 2020 opium harvest took place during the COVID-19 crisis. At the beginning of the harvest, a shortage of poppy lancers was observed in the western and southern provinces of the country, mainly due to the closure of a border crossing with Pakistan. However, women in poppy-growing households appeared to be increasingly engaged in the poppy-lancing process, as did people who lost their jobs due to the COVID-19 crisis. It appears that the shortage of lancers was eventually overcome, with most recent reports pointing to the harvest being largely uninterrupted.

The decline in international trade resulting from the pandemic could also lead to a shortage in the supply of acetic anhydride, a precursor vital to the manufacture of heroin, which is not produced in Afghanistan. Such a shortage could lead to a reduction in the manufacturing of heroin or push it outside the country or even the region.

In Myanmar, there are indications that the 2020 opium harvest, which was concluded before the

onset of the pandemic, faces a shortage of buyers possibly because of the related restrictions of movement. There are no indications to date that the measures to control the spread of COVID-19 have had an impact on opium production in Mexico.

Measures are impeding cocaine production in the short term, but a resurgence is likely in the event of an economic crisis

Reports from Colombia indicate that law enforcement pressure has increased during the pandemic and that the coca bush eradication campaign is continuing as planned. Cocaine manufacture appears to be being impeded, as producers, especially in eastern Colombia, are suffering a shortage of gasoline, which was previously smuggled from the Bolivarian Republic of Venezuela and is essential in cocaine manufacture.

In the Plurinational State of Bolivia, political turbulence in late 2019 and the recent challenges related to the spread of COVID-19 appear to be limiting the ability of State authorities to control coca bush cultivation, which could lead to an increase in its cultivation. In Peru, a drop in the price of cocaine is indicative of a reduction in trafficking opportunities and may discourage coca bush cultivation in the short term. However, the looming economic crisis may lead more farmers to increase or take up coca cultivation in all the major cocaine-producing countries.

Reduced trade is limiting the availability of precursors for synthetic drugs in some regions

Synthetic drugs can be produced in virtually every country. The COVID-19 measures could have an effect on synthetic drug production if they lead to a reduction in the availability of precursor substances that are either diverted from the legal trade or produced illicitly.

Where precursor chemicals are supplied from within a region and trafficking has not been impeded (for example, in South-East Asia), the production of synthetic drugs is only marginally affected by the restrictions stemming from the measures to control the spread of COVID-19. Also, where there is domestic manufacture using domestic precursors,

as is the case with mephedrone and other popular synthetic drugs in the Russian Federation, no major impact on the domestic drug market has been visible.

The large-scale illicit production of synthetic drugs using precursors imported from other regions is more likely to be affected. Indeed, there are reports that the reduction in trade from South-East Asia has limited the supply of chemical precursors in Mexico, where it seems to have disrupted the manufacture of methamphetamine and fentanyl, as well as in Lebanon and the Syrian Arab Republic, where it is affecting the manufacture of amphetamine-type stimulants, of “captagon” in particular. In Czechia, the closing of the international borders has led to a reduction in the availability of precursors, and a shortage of methamphetamine is expected.

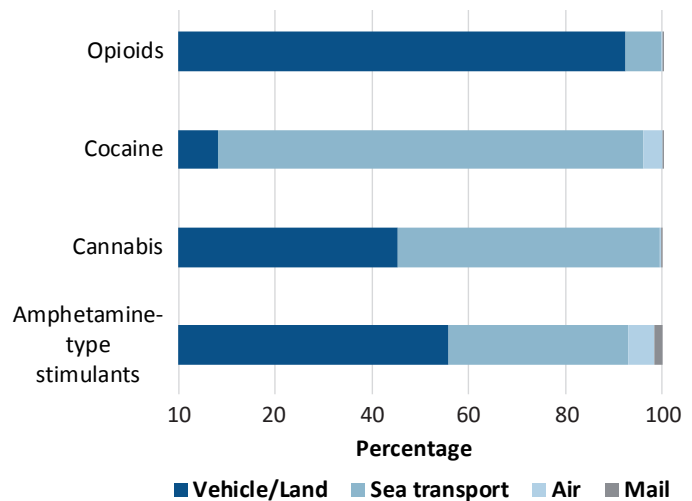
Drug trafficking

Drug trafficking by air is likely to be completely disrupted by the restrictions imposed on air travel

The trafficking of different drugs has been impacted to varying degrees by the restrictions of movement and the closure of borders to prevent the spread of COVID-19, depending on how those drugs were trafficked before the pandemic. Heroin is mostly trafficked by land, often together with legal cargo, whereas cocaine is mostly trafficked by sea, sometimes using non-commercial craft such as yachts and specialized boats. Synthetic drugs tend to be trafficked by air, which is carried out by air couriers using body packs or concealing drugs in their personal luggage.

Given the almost universal restrictions imposed on air travel, the biggest impact on drug trafficking can thus be expected in countries where a large proportion of drugs is trafficked by air. Indeed, the supply of drugs trafficked by air may be completely disrupted. This is likely to have a particularly drastic effect on the trafficking of synthetic drugs, not least methamphetamine, to countries in South-East Asia, such as Japan and the Republic of Korea, and in Oceania, such as Australia, as well as on the cocaine trafficking that relied on commercial flights prior to the pandemic.

Modes of transportation used in significant drug seizures, by substance, January 2017–April 2020



Source: UNODC, Drugs Monitoring Platform.

Signs of increased use of maritime routes to traffic heroin to Europe

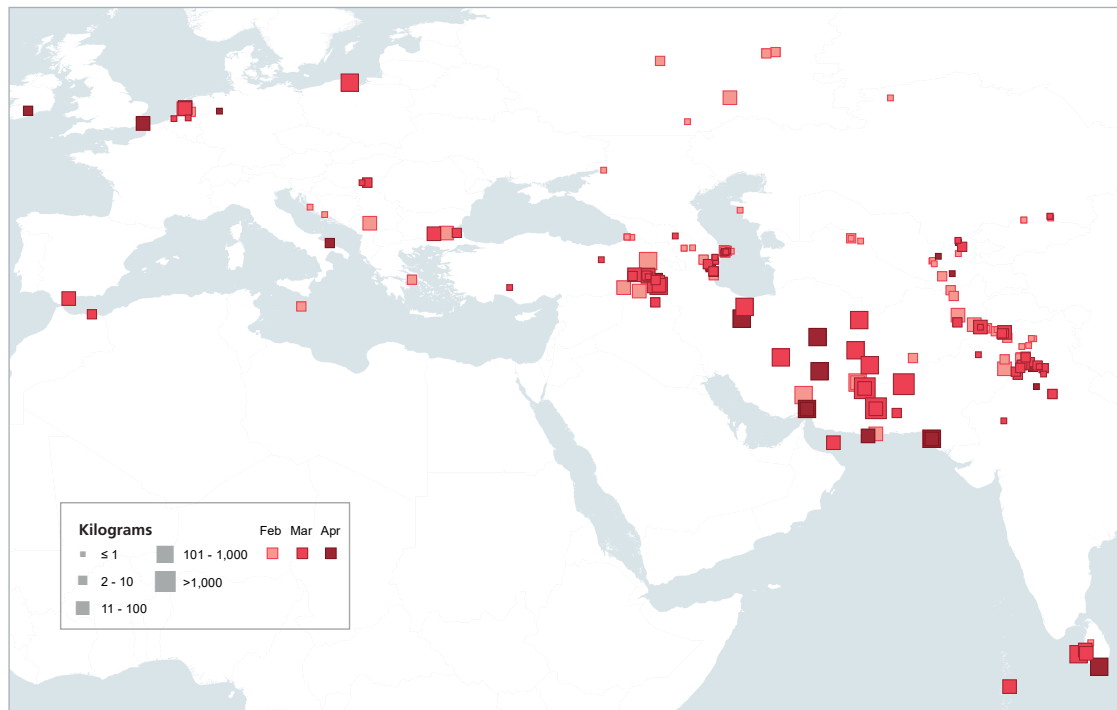
Reports from the main heroin trafficking routes indicate that the COVID-19 measures may have increased the risk of interception when the drug is trafficked by land as such shipments may now be controlled more frequently than those trafficked by other modes of transport. Recent significant seizures of opiates in the Islamic Republic of Iran have been attributed to those measures. The Central Asian Regional Information and Coordination Centre (CARICC), estimates that heroin trafficking overland may have become riskier in Central Asia.

A recent uptick in heroin seizures in the Indian Ocean could be interpreted as an indication of an increase in the use of maritime routes for trafficking heroin to Europe along the “southern route”. If confirmed, the shift to the southern route would indicate a change in the strategy of drug trafficking organizations as a result of the COVID-19 measures.

Border measures appear to be hindering trafficking in opiates

Reports from the Americas point to increased control at borders, which is making the trafficking of heroin from Mexico to the United States of America more difficult than before the onset of the pandemic.

Significant opiate seizures, February–April 2020



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.

Similar reports have come from Myanmar, which supplies East and South-East Asia with heroin: a sudden drop in opium prices suggests that buyers are no longer able to reach producing areas in order to purchase opium or heroin. This situation could, however, also be linked to major ongoing counter-narcotics operations.

Large shipments of cocaine are still being trafficked but by alternative means

There are indications that the reduction in air traffic to Europe resulting from the COVID-19 measures may already have led to an increase in direct cocaine shipments by sea cargo from South America to Europe. Similarly, reports from Colombia indicate an increase in maritime drug trafficking and a decrease in cocaine trafficking by land. Relatively recent large seizures of cocaine made in European ports demonstrate that the trafficking of large shipments of cocaine is still ongoing.

Indications of a reduction in the flow of cocaine is not yet affecting seizures in destination markets

Cocaine continues to be seized in large quantities in Europe and in Latin America, which not only indicates that drug trafficking is ongoing but also that law enforcement is continuing to intercept such shipments. There are, however, indications of a reduction in the flow of cocaine from source countries to destination countries. In Peru, falling cocaine prices and difficulties in trafficking cocaine abroad have been reported, which could lead to an overall reduction in cocaine trafficking in the near future.

COVID-19 measures are likely to lead to the stockpiling of drugs

It is likely that, as a reaction to a reduction in opportunities for drug traffickers to distribute drugs in local markets owing to the lockdown, actors along the drug supply chains are stockpiling drugs. The

decrease in prices reported by mostly drug-producing countries may be an indicator of such a development. Increasing stockpiles may lead to an oversupply of drugs once restrictions are lifted, which could result in an increase in the availability of low-cost, high-purity drugs and could lead to an increase in the risk of drug overdoses.

Indications the lockdown is increasing demand for cannabis

Continued large-scale seizures of cannabis products in the Middle East and North Africa suggest that cannabis resin trafficking to Europe is not being disrupted by the restrictions related to the COVID-19 pandemic. There are indications that the lockdown measures in Europe may lead to an increase in demand for cannabis products, which could intensify drug trafficking activities from North Africa to Europe in the future.

Local nature of cannabis implies trafficking will remain unaffected

In general, trafficking in cannabis may not be affected in the same way as trafficking in heroin or cocaine, given that cannabis production often takes place near consumer markets and traffickers are thus less reliant on long, transregional shipments of large quantities of the drug.

Lockdown restrictions seem to have resulted in increasing cannabis sales over the darknet

Restrictions to freedom of movement resulting from lockdown measures, in particular of access to street dealers by end users, may have led to an increase in drug trafficking activities over the darknet and drug shipments by mail in some places. Although the international postal supply chain has also been disrupted, there are indications that activity on three European darknet drug markets increased during the first quarter of 2020. This was mostly driven by sales of cannabis, retail purchases of which clearly increased, while purchases of larger quantities seem to have decreased.¹

Enforcement of COVID-19 measures may play into the hands of drug traffickers

The response of Member States to countering drug trafficking may also, to some degree, be affected by the COVID-19 crisis. In countries with limited law enforcement capacity, enforcing measures to counter the spread of COVID-19 may divert resources away from counter-narcotics efforts, making drug trafficking and production less risky for organized criminal groups and providing a conducive environment for illicit activities. Moreover, there are indications that drug trafficking groups are adapting their strategies in order to continue their operations and that some have started to exploit the situation so as to enhance their image among the population by providing services, in particular to the vulnerable.

Drug use

Drug shortages have been reported and could have negative health consequences for people with drug use disorders

Many countries have reported drug shortages at the retail level, with reports of heroin shortages in Europe, South-West Asia and North America in particular. Drug supply shortages can go together with an overall decrease in consumption (for example, of drugs that are mostly consumed in recreational settings such as bars and clubs) but may also, especially in the case of heroin, lead to the consumption of harmful domestically produced substances, as well as more harmful patterns of drug use by people with drug use disorders. In terms of alternatives, some countries in Europe have warned that heroin users may switch to substances such as fentanyl and its derivatives. An increase in the use of pharmaceutical products such as benzodiazepines and buprenorphine has also been reported, to the extent that their price has doubled in some areas.

Harmful patterns deriving from drug shortages include an increase in injecting drug use and the sharing of injecting equipment and other drug paraphernalia, all of which carry the risk of spreading blood-borne diseases, such as HIV/AIDS and hepatitis C, as well as COVID-19. Risks resulting

1 EMCDDA, *Special Report: COVID-19 and Drugs – Drug Supply Via Darknet Markets* (Lisbon, May 2020).

from drug overdose may also increase among people who inject drugs and who are infected with COVID-19.

Some countries have reported that the activities of organizations providing support to people who use drugs have been severely affected. In response to a reduction in the accessibility of treatment service provision during the lockdown, some countries have increased low-threshold services and reduced barriers for obtaining opiate-substitution medication; for example, allowing pharmacies to dispense methadone, as in the United Kingdom, or allowing take-home medications instead of daily supervised consumption at a health facility. Other countries, however, have reported difficulties in maintaining services for drug users.

Drug use disorders and regular drug use can lead to complications and mortality if users become infected with COVID-19

People with drug use disorders are particularly vulnerable to comorbidities that can lead to a poor outcome if they become infected with COVID-19. The same is true for anyone who uses drugs regularly. People who use opioids have a high risk of comorbidities such as chronic obstructive pulmonary disease, whereas stimulant users are particularly susceptible to inflammation of and damage to the lung tissue. Users of both drug types may already have a compromised immune system and an increased risk of cardiovascular diseases. These underlying conditions can put people who use drugs regularly at a high risk of complications and mortality if they become infected with COVID-19.²

Economic difficulties caused by COVID-19 could change drug consumption for the worse

In the long run, the economic downturn caused by the COVID-19 crisis has the potential to lead to a lasting transformation of the drug markets. The economic difficulties caused by the COVID-19 crisis may affect people who are already in a position of socioeconomic disadvantage harder than others. This could lead to an increase in the number of people resorting to illicit activities linked to drugs in order to make a living (production, transport, etc.) and/or being recruited into drug trafficking organizations.

On the basis of the experiences of the economic crisis of 2008, it is fair to assume that the economic downturn may lead to reductions in drug-related budgets among Member States, an overall increase in drug use, with a shift towards cheaper drugs, and a shift in patterns of use towards injecting drugs and to substances with an increased risk of harm due to a greater frequency of injections.

2 John Marsden and others, "Mitigating and learning from the impact of COVID-19 infection on addictive disorders", *Addiction*, vol. 115, No. 6 (June 2020), pp. 1007-1010.

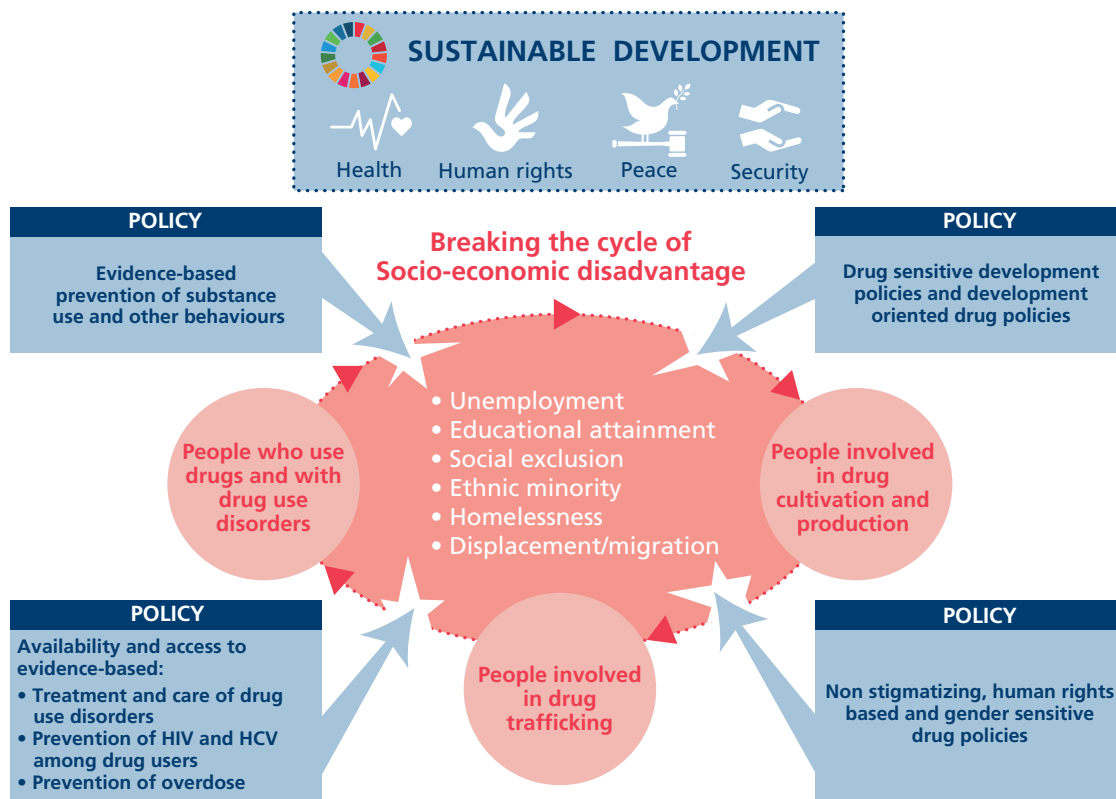
POLICY IMPLICATIONS

Addressing the global drug problem requires drug policy implemented in tandem with broader agendas for sustainable development, security and human rights

The findings of the present edition of the *World Drug Report* highlight the interlinkage between the drug problem, sustainable development, security and respect for human rights. The ongoing expansion of drug markets is driven by a multiplicity of factors such as urbanization, population changes including the growth of young populations, and socioeconomic disadvantage, all linked to the broader development context of nations.

The socioeconomic conditions of individuals, communities and States are closely correlated with the

drug problem. Drug use initiation is more widespread in the richer sectors of societies than in others, but the burden of health consequences of drug use, drug use disorders, the impact of drug trafficking and organized crime groups and the production and manufacture of illicit drugs more greatly affect individuals and communities with lower socioeconomic status. Poor socioeconomic conditions contribute to the factors associated with an increase in the risk of drug use disorders. This in turn worsens socioeconomic conditions, which has an impact on individuals' academic, employment and income prospects as well as on their family and the larger community. Breaking the cycle of drugs, marginalization and poor socioeconomic prospects requires programmes that link drug-related interventions – effective, science-based drug use prevention and treatment, as well as policies and programmes that prevent individual and community involvement in



drug trafficking and production – with development efforts in order to improve public health, increase economic development and public security, and reduce socioeconomic inequalities.

The economic downturn caused by the COVID-19 crisis has the potential to worsen levels of drug production, trafficking and use. The crisis may exacerbate the socioeconomic situation of vulnerable groups, who in turn may increasingly resort to illicit activities as a coping mechanism to compensate for the loss of licit income and employment. Once restrictions related to COVID-19 are lifted, economic shocks may also prompt an increase in drug consumption, as observed in the past. Pairing drug-related programmes with the development interventions that Governments are launching to contain the negative socioeconomic consequences of the crisis can help prevent a possible further increase in the number of people with substance use disorders linked to the effects of the COVID-19 pandemic.

Several segments of the population, for example, women, ethnic minorities and immigrants, sexually diverse groups, people displaced by armed conflicts or natural disasters and people in rural settings, are exposed to stigma, discrimination and exclusion from mainstream opportunities. Some of these groups have higher levels of drug use disorders than other groups and also often face additional barriers in accessing the health-care and social services they may require to address their drug use. While one in three drug users is a woman, women continue to account for only one in five people in treatment for drug use disorders.

In order to be inclusive, interventions to address drug use and its consequences need to be respectful of the fundamental rights of every individual. Key to ensuring equal access is the removal of the stigma that continues to affect people who use drugs.

Mainstream evidence-based prevention of drug use and treatment of drug use disorders and the delivery of services aimed at reducing the associated harm in community settings are required

There is overwhelming evidence that the cost of providing evidence-based treatment for drug use disorders is much lower than the cost of untreated drug dependence. Scientific evidence-based treatment of drug use disorders not only helps reduce drug-related harm but also improves the health, well-being and recovery of people with drug use disorders while at the same time reducing drug-related crime and increasing public safety and positive community outcomes, for example, by reducing homelessness and unemployment. Filling the large gap in the provision of evidence-based drug treatment services requires its provision within the public health-care system and special consideration of the specific needs of certain population groups, such as those with comorbid health conditions, children and adolescents, women, including those who are pregnant, and people of a different sexual orientation and gender identity. People who are homeless, socially marginalized, living in poverty, with limited education, people living in remote and rural areas, ethnic minorities, refugees and migrants, sex workers and people in contact with the criminal justice system also require special considerations in the delivery of drug treatment and care services.

The treatment gap can be reduced only through political will and financial investment. At a time of imminent global economic crisis, resulting from the COVID-19 pandemic, it is more important than ever that scarce public resources are devoted to effective responses and to avoid interventions with no scientific basis or that evidence has shown to be largely ineffective. For example, media campaigns, due to their high visibility, are often the only type of intervention chosen by policymakers for delivery. Yet scientific evidence has shown that generic public awareness campaigns have no or only limited effectiveness in preventing drug use or halting the progression towards harmful drug use. Therefore, investing in such interventions is likely to result in

limited resources not reaching where they are needed most. National commitments to the following measures can help reduce drug use and its health impact as well as rationalize existing scarce resources:

1. Scale up interventions in preventing substance use and progression to substance use disorders that target specific population groups, contribute to the overall positive engagement of young people and their families, schools and community and create all-inclusive and safe community neighbourhoods. Such interventions prevent not only substance use but also other behaviours such as delinquency and violence among adolescents and young people, as well as domestic violence against children.
2. Scale up scientific evidence-based interventions for the treatment of drug use disorders that take a multifactorial approach, are integrated within the overall health-care delivery system of each country, are affordable, attractive, available and accessible in both urban and rural settings, are an alternative to punishment and/or prison, are available to people in need, are based on principles of human rights and ethics, and address the varied needs of people with drug use disorders. Treatment services for those in rural settings and remote areas could be offered through mobile services as well as through the use of web-based and telecommunication facilities (telemedicine).
3. Scale up the provision of the comprehensive package of nine interventions for the prevention and treatment of HIV, hepatitis C and other infections among people who use or inject drugs, which is based on the principles of equality, comprehensiveness, accessibility and sustainability, and which encompasses universal access to services.
4. Scale up overdose prevention interventions, in particular in the case of opioids by promoting access to naloxone and the training of potential first responders in overdose management. Considering that opioids contribute to a major proportion of disability-adjusted life years (DALYs) attributed to drug use disorders, prevention of opioid overdose can reverse the heavy burden of opioid use and premature death attributed to opioids.

Stigma associated with drug use and drug use disorders also needs to be addressed by promoting the understanding that the initiation of drug use and the development of drug use disorders are influenced by factors that are often beyond the control of an individual. The interplay between a number of protective and risk factors at different levels, including individual, parental, family and school and among peers, as well as the influence of the physical and socioeconomic environment, can render a person vulnerable to initiating and developing substance use disorders. Similarly, promoting an understanding that drug use disorder is a complex, multifaceted and relapsing chronic condition that requires continuing care and interventions drawn from many disciplines can help reduce or remove the stigma associated with drug use.

The disparity in the access to and availability of controlled substances for pain management and palliative care needs to be addressed

The increased burden on public health caused by the non-medical use of pharmaceuticals, which has emerged in some regions, calls for national policies that strike the right balance so as to provide access to medications, for instance to manage pain or for palliative care, while avoiding the development of a market for the non-medical use of such medications.

Such policies would find the right balance of the following elements:

- Prescribing practices for the medical use of opioids, including the use of opioids for long-term non-cancer pain management
- Preventing aggressive advertising and promotion by the private sector that may lead to irrational prescribing practices and use of pain medications
- The expansion of professional development programmes on controlled medicines
- The regulation of parallel or illicit opioid markets

- Prevention programmes that explain to the most-at-risk population groups the harms resulting from the non-medical use of pharmaceutical products

Ensuring the availability of and access to controlled substances for medical use remains an unattended objective of the international drug conventions and of the international commitments that have followed. There remains a major disparity in access to pain medications; for example, in 2018, 87 per cent of the global amount of morphine available for medical consumption was consumed in high-income countries, which are home to 12 per cent of the global population.

While some progress has been made, there is much more to be done to address the legislative, administrative, financial and cultural barriers that prevent access to pain medications. Steps that countries can make to address this challenge include legislative and policy changes, training and capacity-building for health-care professionals, increasing the range and number of health-care providers who are allowed to prescribe and dispense controlled substances, and improving national supply management systems.

Enhancing collaboration between Governments, United Nations entities, non-governmental organizations and academia would be an important step towards true progress in making essential controlled substances available and accessible to those who need them. Indeed, it is in a collaborative spirit and with collective commitment that real progress can be made in reducing unnecessary human suffering and increasing quality of life across countries, cultures and the world as a whole.

Alternative development initiatives need to avoid generalizations if they are to enhance farmers' livelihoods and reductions in illicit crop cultivation areas

“One-size-fits-all” alternative development projects are not fully effective: not only do they not fit all different communities, but they likely do not even fit all within a single community. In general, building resilience against engaging in illicit crop

cultivation requires interventions that strengthen both the existing capacity among farmers who are not engaged in illicit cultivation to remain on an illicit crop-free path and the transformative capacity enabling farmers who illicitly cultivate crops to move from those crops to an illicit crop-free path. Efforts also need to take into consideration resilience at the community and territorial levels by addressing issues related to social capital, public services, security and governance.

In order to address one of the factors that drives farmers to illicit crop cultivation – namely, their exposure to risks and shocks (e.g., the frequency and severity of droughts, health problems in their household) – alternative development programmes can address the current and potential ability of such farmers to manage risks and shocks (e.g., through income diversification, access to credit, savings and social protection). The COVID-19 crisis may represent an economic shock to rural communities, and to nearby urban communities, and more households may resort to illicit drug cultivation as a coping strategy. In the next few months, it will be critical for Governments to monitor for this possible scenario and support vulnerable communities in addressing the socioeconomic aspects of the COVID-19 crisis through licit alternatives.

Understanding complex interactions in illicit crop cultivation is vital to the design of successful drug-control policies. More research is needed, in particular to improve understanding of why households may decide to choose illicit crop cultivation in a given year and over different periods of time.

The distinctive needs of women have to be addressed if the particular vulnerability of those in contact with the criminal justice system for drug-related offences is to be reduced

The vast majority of people who are sentenced for drug-related offences are men, but a larger proportion of women are sentenced for drug-related offences. In other words, when women are brought into contact with the criminal justice system, it is often for drug-related offences. Moreover, as the criminal justice system is predominantly designed

to deal with male offenders, it is often ill-equipped to address women's particular backgrounds (for example, care-providing responsibilities, a history of violence or specific mental health-care needs), and women may be placed in a situation of vulnerability and face gender-based stereotypes, stigma and social exclusion. Women also face more challenges in accessing justice than do men: they encounter difficulties in understanding and navigating the criminal justice system due to language barriers, illiteracy or insufficient knowledge of their rights, as well as cultural barriers within communities. Women often lack the financial resources to afford legal advice or post bail after arrest or do not have access to available resources. They are also at a higher risk of discrimination from criminal justice officials and abandonment by their families because of harmful gender stereotypes.

In order to reduce the particular vulnerability of women in the justice system, it is important that sentencing for drug-related offences is matched with gender-sensitive alternatives to conviction or punishment in appropriate cases, in line with the United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (the Bangkok Rules), and includes the treatment of drug use and other co-occurring disorders, if required. Women prisoners typically have requirements that are very different from those of men. The recognition of women's needs should therefore be reflected in the management ethos of prisons that house female inmates, and the management style, assessment and classification, the programmes offered and health care be adapted accordingly.

Furthermore, the flexibility inherent in the international drug control conventions should, to the maximum extent possible, be used to offer, to individuals (men, women and children) with drug use disorders who come into contact with the criminal justice system for minor offences, the possibility of treatment as an alternative to conviction or punishment.

The cannabis market needs to be monitored closely

It will take long-term monitoring of public health, safety and criminal justice indicators to understand

the impact of policies that allow the non-medical use of cannabis. However, there are some concerns arising from the increasing proliferation of cannabis products – vapes, concentrates and edibles with a high THC content – and from the fact that the cannabis products currently available are often more harmful than the cannabis herb and resin available a couple of decades ago.

The current public discourse around cannabis tends to conflate the non-medical use of cannabis products containing high levels of THC (vapes and concentrates) with medical use of preparation such as dronabinol and nabiximols containing THC and CBD for treating and managing health conditions, including chronic pain, multiple sclerosis and spasticity symptoms, as well as sleep disturbances associated with fibromyalgia and chronic pain. Personal testimonies on the use of cannabis products to self-medicate and alleviate health conditions cannot be heeded in lieu of rigorous clinical trials on the effectiveness of cannabis products in treating certain health conditions. Moreover, CBD, a cannabinoid that is not a psychoactive agent and is often promoted as a health and wellness product, should not be confused with THC, a very different and psychoactive cannabinoid, or with cannabis per se, which contains many different compounds. Policy, legislation and public debate would do well to address these very different issues with greater clarity.

Another area of concern in the cannabis debate is the growing influence of and investment by large corporations, especially the alcohol and tobacco industry, which is investing in the cannabis industry in North America. Such developments raise some concerns that, as the market for the non-medical use of cannabis is expanding rapidly, revenue and profits are likely to dictate the course of the non-medical cannabis industry rather than public health considerations. These concerns are especially pertinent for jurisdictions where the non-medical use of cannabis has been legalized.

Enhanced understanding of international cooperation is necessary to address the transnational nature of the drug problem

The drug problem is not restricted to just one country but, rather, affects most countries in an intertwined manner. National-level responses to the drug problem are necessary but are by themselves insufficient. Tackling drug trafficking remains an international responsibility. Despite the appearance of non-organic psychoactive substances, most of the demand for trafficked substances continues to be in countries other than those where drugs are produced, and most drug-related income is generated in destination countries. As such, tackling drug trafficking remains a shared responsibility that requires a concerted international effort in countries of supply, transit and destination.

In the current global context, the drug problem has never been more international in nature. Dismantling transnational networks is possible only through multi-country efforts. Moreover, an isolated success in reducing the drug problem in one country may aggravate it in other countries, resulting in no net gain at the global level (known as displacement or the balloon effect).

One of the key approaches to addressing the transnational nature of the drug problem has been international cooperation, the core strategy of the international drug conventions and the international commitments that followed. The spirit of international cooperation is to improve the coordination of policies and actions and to assist countries with limited resources and capacities in undertaking the necessary interventions. It can take many forms, including intergovernmental cooperation frameworks and mechanisms, the development of standards and guidelines that promote best practices in the fields of drug demand reduction, drug supply reduction and capacity-building initiatives, in order to strengthen the ability of countries to counter the drug problem.

Despite the fact that international cooperation is the foundation of the international drug framework, its effectiveness is barely measured at the global level.

When States parties to the international conventions are asked to assess international cooperation, the answers have remained constant despite an evolving international drug market. This suggests that there is a need to develop better tools to monitor progress over time in international cooperation, allowing an improved assessment of the positive lessons learned and the eventual barriers that may limit effective cooperation.

The only solid indicator currently available to determine trends in international cooperation – international aid provided specifically for drug control compared with the overall funding allocated to development assistance – shows a marked decline over the past decade. While overall development assistance at the global level has increased over time, drug control efforts have not followed that trend. This indicator by itself suggests a need to move from rhetoric to practice, with donors being prompted to add investment efforts stimulating cooperation with other countries in drug-related matters.

The COVID-19 crisis has not eased the current situation. Mitigating the potentially harmful effects of the COVID-19 pandemic on drug markets and on the ability of countries to control drug production, trafficking and use requires adaptive and rapid responses by the international community. Constant or declining cross-border cooperation is not what is currently warranted.

Further research is needed to improve understanding of the complexities of drug markets, including on the impact of COVID-19

Many of the current instruments for monitoring drug issues at the national and international levels are showing their age as they were not designed to capture the new complexity of the global drug market. They tend to be focused on limited aspects of drug use and supply that underestimate the magnitude of the interlinkages between the markets of established drugs and of the non-medical use of pharmaceuticals and other psychoactive substances. At its sixty-third session, the Commission on Narcotics Drugs endorsed the revised and improved annual report questionnaire, which attempts to

capture the new complexities of the drug market through the reporting of different indicators.

Improving the quality and coverage of data on indicators of drug use and its health consequences, in addition to the drug supply indicators, will strengthen the analysis and evidence presented in future editions of the *World Drug Report* and better inform the global policy debate. This requires promoting cooperation among different international and regional stakeholders on data collection, reporting and research. It also requires promoting initiatives for building capacities in Member States to improve the quality and coverage of national data and to conduct operational research on drug markets. The strong political will of Member States to report all available information transparently to UNODC will also be key in improving the coverage of global analysis.

There are many areas of research that, if improved, would dramatically expand global understanding of different aspects of the drug problem, including the following:

- Development and implementation of innovative and cost-effective methods for estimating drug use, drug use disorders, the health consequences of drug use, and treatment coverage. Currently, some countries base these estimates on administrative data (the number of people registered) or on the mapping of “hot spots” and do not take into account the hidden and much larger population of people using or injecting drugs. The use of a more innovative methodology would help overcome this reporting bias.
- Behavioural insights in relationship to the use of illicit drugs, which would support the design and deployment of interventions that address specific contextual and population needs without necessarily requiring massive human and financial resources.
- Use of the Sustainable Development Goals framework to support the monitoring of alternative development programmes. That framework can help in identifying larger and more persistent gaps and inequalities that need to be prioritized in alternative development projects or programmes. Alternative development projects themselves would benefit from a more comparable and structured recording of project characteristics, such as targeted beneficiaries, as well as of the socioeconomic impacts of the interventions. Better data sets on alternative development projects could help to create a solid evidence basis for value-for-money analysis.
- Expansion of research on socioeconomic inequalities and drug use and drug use disorders in low- and middle-income countries: the existing body of literature on this topic is based on the situation in developed countries. Also, there is a need to acknowledge and research the existence of a continuum of socioeconomic risk of drug use disorders at the population level, as well as to examine the combination of multiple sources of social risk (gender, socioeconomic position, immigrant status) in low- and middle-income countries, especially in countries undergoing rapid economic and social change.
- Expansion of the scope of research in drug cultivation jurisdictions, in order to go beyond monitoring the extent of and trends in illicit crop cultivation and develop an integrated understanding of market dynamics and alternative development factors.
- Development of comparable and comprehensive monitoring systems in jurisdictions with legislation allowing the non-medical use of cannabis. More regular and consistent information on different cannabis products and their potency, health effects and use, including for medical purposes, would support policymakers, pharmaceutical companies and potential users in assessing the public health impact of such legislation.
- Better collection and reporting (including information-sharing at the national and transnational levels) of indicators that describe the dynamics of drug markets, such as prices, purity and consumption patterns of drugs, and other indicators that help understanding of the *modi operandi* of organized crime groups, drug traffickers and their trafficking routes, including, in particular, the

complexity and variability of the spectrum of drug-trafficking modalities. The dynamics of the recent opioid crisis in North America, for example, have highlighted the need to monitor both the sophisticated trafficking of large shipments in containers and the smuggling of small packages containing fentanyl analogues through the postal system. Similarly, the increasing use of social media platforms for the promotion and delivery of drugs to users in perceived safety and anonymity is another aspect that needs more regular monitoring.

- Development of multi-method assessments of the illicit trade in drug precursor chemicals, including information on trafficking routes, organized crime groups and *modi operandi* at the subregional and local levels in target regions.

The evidence collected so far suggests that the COVID-19 pandemic and the measures to contain it are affecting the drug supply chain, from production and trafficking to consumption, to varying degrees. Close monitoring of the supply chain and of drug use patterns and their consequences is paramount in assessing whether the observed changes are only temporary or if drug markets will undergo a lasting transformation. Close monitoring is also required to close gaps in the understanding of the dynamics of drug markets, in particular in Africa, where information on drug trafficking and drug consumption remains scarce.

Further information is also needed to improve understanding of how the impact of the COVID-19 pandemic on drug production and drug trafficking may affect terrorist organizations, which benefit financially from facilitating trafficking in drugs and other illicit commodities.

TABLE 1 Annual prevalence of the use of cannabis, opioids and opiates, by region and globally, 2018

Region or subregion	Cannabis						Opioids (opiates and pharmaceutical opioids)						Opiates					
	Number (thousands)			Prevalence (percentage)			Number (thousands)			Prevalence (percentage)			Number (thousands)			Prevalence (percentage)		
	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper
Africa	45,010	26,720	60,600	6.32	3.75	8.51	7,440	6,190	11,800	1.04	0.87	1.66	3,490	1,410	7,690	0.49	0.20	1.08
East Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Africa	7,450	6,200	7,500	5.08	4.23	5.11	1,550	1,040	2,060	1.06	0.71	1.40	1,550	1,040	2,060	1.06	0.71	1.40
Southern Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West and Central Africa	25,630	14,070	29,380	9.27	5.09	10.63	-	-	-	-	-	-	500	140	950	0.18	0.05	0.34
Americas	58,880	57,900	61,290	8.80	8.65	9.16	12,470	10,990	15,210	1.86	1.64	2.27	2,530	1,840	3,260	0.38	0.27	0.49
Caribbean	960	500	2,650	3.39	1.77	9.38	-	-	-	-	-	-	-	-	-	-	-	-
Central America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North America	46,990	46,820	47,160	14.56	14.51	14.62	11,760	10,670	12,600	3.64	3.31	3.90	2,270	1,680	2,790	0.70	0.52	0.87
South America	10,030	9,750	10,460	3.49	3.39	3.64	530	240	2,200	0.19	0.08	0.76	210	130	300	0.07	0.04	0.10
Asia	56,340	19,200	93,950	1.86	0.63	3.10	33,550	13,620	44,670	1.11	0.45	1.47	21,290	8,890	29,210	0.70	0.29	0.96
Central Asia and Transcaucasia	1,510	450	2,480	2.58	0.77	4.24	570	500	650	0.97	0.85	1.12	570	490	650	0.97	0.83	1.11
East and South-East Asia	14,740	3,940	23,180	0.91	0.24	1.43	3,320	2,250	4,080	0.21	0.14	0.25	3,320	2,250	4,080	0.21	0.14	0.25
South-West Asia/ Near and Middle East	10,690	7,480	13,250	3.38	2.37	4.19	8,380	7,080	10,030	2.65	2.24	3.17	5,590	4,020	7,890	1.77	1.27	2.50
South Asia	29,410	7,330	55,040	2.82	0.70	5.27	21,280	3,800	29,910	2.04	0.36	2.86	11,820	2,140	16,590	1.13	0.21	1.59
Europe	29,400	27,990	31,300	5.39	5.13	5.74	3,730	3,450	4,020	0.68	0.63	0.74	3,050	2,880	3,240	0.56	0.53	0.59
Eastern and South-Eastern Europe	4,600	3,330	6,360	2.04	1.47	2.81	1,790	1,710	1,880	0.79	0.76	0.83	1,490	1,410	1,570	0.66	0.62	0.69
Western and Central Europe	24,800	24,660	24,940	7.76	7.72	7.80	1,930	1,740	2,140	0.60	0.54	0.67	1,560	1,470	1,670	0.49	0.46	0.52
Oceania	2,810	2,770	2,880	10.57	10.42	10.83	660	580	740	2.47	2.17	2.78	40	40	70	0.16	0.14	0.27
Australia and New Zealand	2,050	2,050	2,050	10.64	10.64	10.64	-	-	-	-	-	-	36	36	42	0.18	0.18	0.22
Melanesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Micronesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polynesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLOBAL ESTIMATE	192,440	134,580	250,010	3.86	2.70	5.01	57,850	34,820	76,430	1.16	0.70	1.53	30,410	15,050	43,460	0.61	0.30	0.87

TABLE 2 Annual prevalence of the use of cocaine,^a amphetamines^b and “ecstasy”, by region and globally, 2018

Region or subregion	Cocaine ^a						Amphetamines ^b and pharmaceutical stimulants						“Ecstasy”					
	Number (thousands)			Prevalence (percentage)			Number (thousands)			Prevalence (percentage)			Number (thousands)			Prevalence (percentage)		
	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper	Best estimate	Lower	Upper
Africa	1,900	510	4,140	0.27	0.07	0.58	2,930	690	5,810	0.41	0.10	0.82	1,840	100	8,030	0.26	0.01	1.13
East Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Africa	399	305	474	0.27	0.21	0.32	-	-	-	-	-	-	-	-	-	-	-	-
Southern Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West and Central Africa	418	69	937	0.15	0.02	0.34	1,000	50	1,810	0.36	0.02	0.66	-	-	-	-	-	-
Americas	9,990	9,240	10,680	1.49	1.38	1.60	8,710	8,190	9,460	1.30	1.22	1.41	3,550	3,440	3,680	0.53	0.51	0.55
Caribbean	180	80	320	0.63	0.29	1.15	260	10	700	0.90	0.05	2.48	60	30	100	0.23	0.10	0.36
Central America	210	110	320	0.66	0.34	1.02	310	190	440	0.98	0.61	1.41	50	20	100	0.17	0.07	0.33
North America	6,860	6,720	7,000	2.13	2.08	2.17	7,380	7,330	7,420	2.29	2.27	2.30	2,880	2,880	2,880	0.89	0.89	0.89
South America	2,750	2,330	3,040	0.96	0.81	1.06	770	650	900	0.27	0.23	0.31	560	520	600	0.19	0.18	0.21
Asia	1,820	1,160	2,620	0.06	0.04	0.09	12,670	11,430	13,690	0.42	0.38	0.45	11,370	1,890	20,860	0.37	0.06	0.69
Central Asia and Transcaucasia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East and South-East Asia	580	90	1,080	0.04	0.01	0.07	9,940	9,100	10,570	0.62	0.56	0.65	4,940	1,240	8,640	0.31	0.08	0.53
South-West Asia/Near and Middle East	160	30	440	0.05	0.01	0.14	640	350	920	0.17	0.11	0.29	2,130	400	3,850	0.67	0.13	1.22
South Asia	1,040	1,040	1,040	0.10	0.10	0.10	1,880	1,880	1,880	0.18	0.18	0.18	-	-	-	-	-	-
Europe	4,870	4,670	5,070	0.89	0.86	0.93	2,550	2,230	2,870	0.47	0.41	0.53	3,330	2,780	4,510	0.61	0.51	0.83
Eastern and South-Eastern Europe	510	330	690	0.22	0.14	0.31	-	-	-	-	-	-	660	200	1,730	0.29	0.09	0.77
Western and Central Europe	4,360	4,350	4,380	1.36	1.36	1.37	2,010	1,880	2,130	0.63	0.59	0.67	2,670	2,580	2,770	0.84	0.81	0.87
Oceania	440	410	440	1.64	1.56	1.67	360	310	380	1.35	1.16	1.41	440	410	460	1.67	1.55	1.71
Australia and New Zealand	420	410	430	2.20	2.15	2.23	260	250	270	1.34	1.30	1.38	420	410	430	2.17	2.12	2.23
Melanesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Micronesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polynesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLOBAL ESTIMATE	19,020	16,000	22,950	0.38	0.32	0.46	27,220	22,850	32,220	0.55	0.46	0.65	20,540	8,620	37,530	0.41	0.17	0.75

Source: UNODC estimates based on annual report questionnaire data and other official sources.

^a Cocaine includes cocaine salt, “crack” cocaine and other types such as coca paste, cocaine base, “basuco”, “paco” and “merla”.^b Amphetamines include both amphetamine and methamphetamine.

TABLE 3 Estimated number and prevalence (percentage) of people who inject drugs and those living with HIV among this group, by region, 2018

Region or subregion	People who inject drugs						HIV among people who inject drugs						
	Estimated number			Prevalence (%)			Data coverage of population aged 15-64			Estimated number		Prevalence (%) Best estimate	Data coverage of estimated number of people who inject drugs
	Low	Best	High	Low	Best	High	Low	Best	High				
Africa	560,000	930,000	2,700,000	0.08	0.13	0.38	68%	48,000	105,000	514,000	11.3	83%	
East Africa	80,000	270,000	1,650,000	0.05	0.15	0.88	59%	10,000	47,000	342,000	17.4	88%	
West and Central Africa	270,000	340,000	500,000	0.10	0.12	0.18	77%	13,000	16,000	29,000	4.7	89%	
Southern Africa	90,000	140,000	170,000	0.09	0.14	0.17	63%	19,000	30,000	60,000	21.4	59%	
North Africa	110,000	170,000	380,000	0.08	0.12	0.26	66%	6,000	12,000	84,000	6.7	84%	
America	1,910,000	2,380,000	2,970,000	0.28	0.36	0.44	87%	111,000	176,000	272,000	7.4	93%	
North America	1,560,000	1,800,000	2,030,000	0.48	0.56	0.63	100%	93,000	124,000	159,000	6.9	100%	
Caribbean	40,000	100,000	220,000	0.15	0.34	0.78	31%	4,000	14,000	27,000	14.0	32%	
South America	290,000	470,000	690,000	0.10	0.16	0.24	82%	13,000	38,000	84,000	8.1	83%	
Central America	10,000	20,000	30,000	0.04	0.06	0.09	58%	300	600	1,400	3.4	33%	
Asia	3,900,000	5,220,000	6,630,000	0.13	0.17	0.22	95%	384,000	604,000	866,000	11.6	98%	
Central Asia and Transcaucasia	350,000	370,000	400,000	0.59	0.63	0.68	94%	23,000	26,000	31,000	7.0	94%	
East and South-East Asia	1,980,000	3,040,000	4,060,000	0.12	0.19	0.25	95%	137,000	284,000	460,000	9.3	99%	
South-West Asia	610,000	780,000	950,000	0.30	0.38	0.46	100%	165,000	229,000	297,000	29.5	100%	
Near and Middle East	40,000	90,000	260,000	0.03	0.08	0.23	42%	1,800	3,300	10,300	3.8	56%	
South Asia	930,000	950,000	960,000	0.09	0.09	0.09	100%	57,000	62,000	67,000	6.5	100%	
Europe	2,400,000	2,630,000	2,900,000	0.44	0.48	0.53	90%	508,000	530,000	568,000	20.2	100%	
Eastern Europe	1,700,000	1,730,000	1,750,000	1.24	1.26	1.27	100%	427,000	435,000	443,000	25.2	100%	
South-Eastern Europe	80,000	100,000	140,000	0.09	0.11	0.16	100%	2,800	3,900	6,000	4.0	100%	
Western and Central Europe	620,000	800,000	1,010,000	0.19	0.25	0.32	83%	78,000	91,000	119,000	11.4	100%	
Oceania	100,000	100,000	110,000	0.37	0.38	0.41	73%	1,300	1,600	1,900	1.6	73%	
Global	8,860,000	11,260,000	15,310,000	0.18	0.23	0.31	90%	1,050,000	1,420,000	2,220,000	12.59	96%	

Source: Responses to the annual report questionnaire; progress reports of the Joint United Nations Programme on HIV/AIDS (UNAIDS) on the global AIDS response (various years); the former Reference Group to the United Nations on HIV and Injecting Drug Use; published peer-reviewed articles; and government reports.

Note: Prevalence of people who inject drugs is the percentage of the population aged 15-64 years.

TABLE 4 Illicit cultivation of opium poppy, 2008–2019 (hectares)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
SOUTH-WEST ASIA												
Afghanistan (best estimate)	157,000	123,000	123,000	131,000	154,000	209,000	224,000	183,000	201,000	328,000	263,000	163,000
lower bound ^a		102,000	104,000	109,000	125,000	173,000	196,000	163,000	182,000	301,000	242,000	149,000
upper bound ^a		137,000	145,000	155,000	189,000	238,000	247,000	202,000	221,000	355,000	283,000	178,000
SOUTH-EAST ASIA												
Lao People's Democratic Republic (best estimate) ^{b, i}	1,600	1,900	3,000	4,100	6,800	3,900	6,200	5,700	5,395	5,327	4,925	..
lower bound ^a	710	1,100	1,900	2,500	3,100	1,900	3,500	3,900				
upper bound ^a	2,700	2,700	4,000	6,000	11,500	5,800	9,000	7,600				
Myanmar (best estimate) ^{b, c}	28,500	31,700	38,100	43,600	51,000	57,800	57,600	55,500	..	41,000	37,300	33,100
lower bound ^a	17,900	20,500	17,300	29,700	38,249	45,710	41,400	42,800		30,200	29,700	25,800
upper bound ^a	37,000	42,800	58,100	59,600	64,357	69,918	87,300	69,600		51,900	47,200	42,800
SOUTH AND CENTRAL AMERICA												
Colombia (best estimate)	394	356	341	338	313	298	387	595	462	282	..	..
Mexico (best estimate) ^{d, f, h}	15,000	19,500	14,000	12,000	10,500	11,000	17,000	26,100	25,200	30,600	28,000	..
lower bound ^a								21,800	20,400	22,800	21,200	
upper bound ^a								30,400	30,000	38,400	34,800	

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
OTHER												
Other countries e	10,509	9,479	12,221	16,390	12,282	13,293	11,585	8,549	62,439	8,792	11,815	44,745
TOTAL (best estimate)	213,003	185,935	190,662	207,428	234,895	295,291	316,772	279,444	294,496	414,001	345,045	240,845
lower bound	152,935	149,762	149,928	169,928	189,444	245,201	269,872	240,644	257,996	368,401	309,641	212,741 g
upper bound	211,835	211,835	233,662	249,328	287,952	338,309	372,272	318,744	333,396	459,701	381,748	272,348 g
TOTAL (best estimate, rounded)	213,000	185,900	190,700	207,400	234,900	295,300	316,800	279,400	294,500	414,000	345,000	240,800 g

Sources: Afghanistan: Until 2018, Afghanistan Opium Surveys were conducted by the Ministry of Counter-Narcotics (MCN) of Afghanistan and the United Nations Office on Drugs and Crime (UNODC). Data for 2019 was obtained from the UNODC Illicit Crop Monitoring Programme.
Lao People's Democratic Republic: Up till 2015, national illicit crop monitoring system supported by the United Nations Office on Drugs and Crime (UNODC). Data from 2016 onwards from Lao National Commission for Drug Control and Supervision.

Myanmar: national illicit crop monitoring system supported by the United Nations Office on Drugs and Crime (UNODC).

Colombia: Government of Colombia.
Mexico: up to 2014, estimates derived from surveys by the Government of the United States of America (international narcotics control strategy reports); for 2015 onwards, joint Mexico/UNODC project entitled "Monitoring of the illicit cultivation on Mexican territory".

Note: Figures in *italics* are preliminary and may be revised when updated information becomes available. Two dots indicate that data were unavailable. Information on estimation methodologies and definitions can be found in the online methodology section of the World Drug Report 2020.

a) Boundaries of the statistically derived confidence interval.

b) May include areas that were eradicated after the date of the area survey.

c) Estimates for 2014, 2015, 2018 included area estimates for *Kayah and Chin states*. In the absence of information on *Kayah and Chin*, the 2019 national area estimate uses latest available cultivation estimates (2018) for *Chin and Kayah states*. National estimates for 2014, 2015, 2018 and 2019 are therefore not directly comparable with other years.

d) Up to 2014, the estimates for Mexico are sourced from the Department of State of the United States. The Government of Mexico does not validate the estimates provided by the United States as they are not part of its official figures and it does not have information on the methodology used to calculate them.

e) Includes other countries with evidence of cultivation or production of opium poppy (average of less than 10 tons of opium per year since 2015) and estimates for countries with indirect evidence of illicit cultivation (eradication of opium poppy) but no direct measurement. See table "Cultivation of opium poppy and production of opium in other countries, and eradication of opium poppy, 2009-2019".

In addition, for 2016, 2018 and 2019 best estimates for countries for which data are not available (Myanmar for 2016, Colombia for 2018 and 2019 and Lao People's Democratic Republic, Mexico for 2019) are included in this category.

Starting in 2008, a new methodology was introduced to estimate opium poppy cultivation and opium/heroin production in countries with no data on illicit cultivation of opium poppy. A detailed description of the estimation methodology is available in the online methodology section of the World Drug Report 2020.

f) The figures for 2015, as published in the World Drug Report 2016 (United Nations publication, Sales No. E.16.XI.7), have been revised owing to a statistical adjustment processed by UNODC. The 2015 figures refer to the period July 2014-June 2015 and are not comparable with subsequent years, due to the updates in the methodology implemented from the 2015-2016 period onwards.

g) Preliminary estimates for 2019; they may change as more country estimates become available.

h) The figures for 2016, 2017 and 2018 are based on the estimation periods July 2015 - June 2016, July 2016-June 2017 and July 2017-June 2018 respectively.

i) Data from 2016 onwards are not comparable to prior years.

TABLE 5 Potential production of oven-dry opium, 2008–2019 (tons)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
SOUTH-WEST ASIA												
Afghanistan (best estimate) j	5,900	4,000	3,600	5,800	3,700	5,500	6,400	3,300	4,800	9,000	6,400	6,400
lower bound a			3,000	4,800	2,800	4,500	5,100	2,700	4,000	8,000	5,600	5,600
upper bound a			4,200	6,800	4,200	6,500	7,800	3,900	5,600	10,000	7,200	7,100
SOUTH-EAST ASIA												
Lao People's Democratic Republic (best estimate) b, f	10	11	18	25	41	23	92	..	..	..	..	..
lower bound g	4	7	11	15	18	11	51	84				
upper bound g	16	16	24	36	69	35	133	176				
Myanmar (best estimate) b, h	410	330	580	610	690	870	670 ^h	647	..	550	520	508
lower bound		213	350	420	520	630	481	500		395	410	380
upper bound		445	820	830	870	1,100	916	820		706	664	672
SOUTH AND CENTRAL AMERICA												
Colombia (best estimate)	10	9	8	8	8	11	12	17	13	7	..	..
Mexico (best estimate) c, e, i	325	425	300	250	220	225	360	419	404	492	450	..
lower bound a								265	251	288	267	
upper bound a								572	557	695	633	
OTHER												
Other countries (best estimate) d	187	178	224	290	172	182	201	147	840	221	249	698

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL (best estimate)	6,841	4,953	4,730	6,983	4,831	6,810	7,735	4,659	6,058	10,270	7,618	7,606
lower bound		3,894	3,738	5,783	3,738	5,558	6,205	3,713	4,958	8,912	6,525	6,495
upper bound		5,576	8,214	8,052	5,539	8,052	9,423	5,632	7,184	11,629	8,745	8,653
TOTAL best estimate (rounded)	6,840	4,950	4,730	6,980	4,830	6,810	7,740	4,660	6,060	10,270	7,620	7,610

Sources: Afghanistan: Until 2018, Afghanistan Opium Surveys were conducted by the Ministry of Counter-Narcotics (MCN) of Afghanistan and the United Nations Office on Drugs and Crime (UNODC). Data for 2019 was obtained from the UNODC Illicit Crop Monitoring Programme.

Lao People's Democratic Republic and Myanmar: national illicit crop monitoring system supported by the United Nations Office on Drugs and Crime (UNODC).

Colombia: National illicit crop monitoring system supported by UNODC. Since 2008, production was calculated based on updated regional yield figures and conversion ratios from the Department of State and the Drug Enforcement Administration of the United States of America.

Mexico: Up till 2014, estimates derived from surveys by the United States Government; from 2015 onwards national illicit crop monitoring system supported by UNODC.

Note: Figures in italics are preliminary and may be revised when updated information becomes available. Two dots indicate that data were unavailable. Information on estimation methodologies and definitions can be found in the online methodology section of the World Drug Report 2020.

a) Bound of the statistically derived confidence interval.

b) Based on cultivation figures which may include areas eradicated after the date of the area survey.

c) Up to 2014, the estimates are sourced from the Department of State of the United States. The Government of Mexico does not validate the estimates provided by the United States as they are not part of its official figures and it does not have information on the methodology used to calculate them.

d) Includes other countries with evidence of cultivation or production of opium poppy (average of less than 10 tons of opium per year since 2015) and estimates for countries with indirect evidence of illicit cultivation (eradication of opium poppy) but no direct measurement. See table "Cultivation of opium poppy and production of opium in other countries, and eradication of opium poppy, 2009–2019".

In addition, for 2016–2019 best estimates for countries for which data are not available (Myanmar for 2016 and Mexico for 2018 and 2019, and Lao People's Democratic Republic for 2016–2019, and Colombia for 2018 and 2019) are included in this category.

Starting in 2008, a new methodology was introduced to estimate opium poppy cultivation and opium/heroin production in countries with no data on illicit cultivation of opium poppy. These estimates are higher than the previous figures but have a similar order of magnitude. A detailed description of the estimation methodology is available in the online methodology section of the World Drug Report 2020.

e) The figures from 2015 on have been updated with newly available data. The joint Mexico/UNODC project "Monitoring of the illicit cultivation on Mexican territory" collected yield data for the first time in the 2017/2018 period. The production figures presented are based on: (1) annual estimates of area under cultivation, established by the joint project of the Government of Mexico and UNODC; (2) yield data collected in an initial survey in the 2017/2018 period. UNODC and Mexico are jointly working on continuously expanding the scope and quality of yield data collected. For methodological reasons, the figures shown for 2015–2018 are not comparable with the figures over the period 1998–2014.

f) Owing to the late timing of the monitoring activities in 2013, the survey may not have captured illicit cultivation in this year in its entirety.

g) Bound of the statistically derived confidence interval, with the exception of 2015. The figures for 2015 represent independently derived upper and lower estimates; the midpoint was used for the calculation of the global total.

h) Estimates for 2014, 2015, 2018 include estimates for Kayah and Chin states. In the absence of information on Kayah and Chin, the 2019 national potential production estimate uses latest available (2018) cultivation estimates for Kayah and Chin states and the 2019 weighted national average yield (15.4 kg/ha). National estimates for 2014, 2015, 2018 and 2019 are therefore not directly comparable with other years.

i) The figures for 2015, 2016, 2017, and 2018 are based on the estimation periods July 2014–June 2015, July 2015–June 2016, July 2016–June 2017 and July 2017–June 2018 respectively.

j) Data on the potential opium production for 2019 was obtained from the UNODC Illicit Crop Monitoring Programme. The same methodology was used as in previous years for yield measurement and estimation of potential opium production. These results were not validated by the Government of Afghanistan and are not recognized by the Government as its official estimate.

TABLE 6 Global manufacture of heroin from global illicit opium production, 2008–2019 (tons)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total potential opium production	6,841	4,953	4,730	6,983	4,831	6,810	7,735	4,659	6,058	10,270	7,618	7,606
Potential opium not processed into heroin	2,360	1,680	1,728	3,400	1,850	2,600	2,450	1,360	2,510	1,100–1,400	1,225–1,525	1,180–1,480
Potential opium processed into heroin	4,481	3,273	3,002	3,583	2,981	4,210	5,285	3,299	3,548	8,870–9,170	6,093–6,393	6,126–6,426
Total potential heroin manufacture	600	427	383	467	377	555	544	319	376	677–1,027	468–718	472–722

Notes: The calculation shows the potential amount of heroin that could have been manufactured out of the opium produced in a given year; it does not take into account changes in opium inventories, which may add to or reduce the amount of heroin entering the market in that year. Afghanistan and Myanmar are the only countries for which the proportion of potential opium production not converted into heroin within the country is estimated. For Myanmar, these estimates were available only for 2018 and 2019. For all other countries, for the purposes of this table, it is assumed that all opium produced is converted into heroin.

The amount of heroin produced from Afghan opium is calculated using two parameters that may change: (a) the amounts of opium consumed as raw opium in the region; and (b) the conversion ratio into heroin. The first parameter's estimate is based on consumption data in Afghanistan and neighbouring countries. For the second parameter, from 2005 to 2013, a conversion ratio of opium to morphine/heroin of 7:1 was used, based on interviews conducted with Afghan morphine/heroin "cooks", on an actual heroin production exercise conducted by two (illiterate) Afghan heroin "cooks", documented by the German Bundeskriminalamt in Afghanistan in 2003 (published in *Bulletin on Narcotics*, vol. LVII, Nos. 1 and 2, 2005, pp. 11–31), and United Nations Office on Drugs and Crime (UNODC) studies on the morphine content of Afghan opium (12.3 per cent over the period 2010–2012, down from 15 per cent over the period 2000–2003). Starting from 2014, a different approach to the conversion was adopted, reflecting updated information on morphine content and a different method for taking purity into account. The revised approach uses a ratio of 18.5 (range: 17.5–19.6) kg of opium for 1 kg of 100 per cent pure heroin base (see *Afghanistan Opium Survey 2014*, UNODC, November 2014). In addition, the conversion into export-quality heroin assumes purity to be between 50 and 70 per cent. For more details, see "Afghanistan Opium Survey 2017 – Challenges to sustainable development, peace and security" (UNODC, May 2018).

The amount of heroin produced in Myanmar in 2018 and 2019 was calculated by subtracting the estimated unprocessed opium for consumption from the total opium production and using a conversion factor of 10:1. The unprocessed opium in Myanmar was based on the total unprocessed opium in East Asia and the relative cultivation levels of Lao PDR and Myanmar (see *Transnational Organized Crime in East Asia and the Pacific – A Threat Assessment*, UNODC, 2013 and *Transnational Organized Crime in Southeast Asia: Evolution, Growth and Impact 2019*, UNODC, 2019). For further information, please refer to the Methodology chapter (section 4.3) of the *Myanmar Opium Survey 2018* (UNODC, January 2019) and the *Myanmar Opium Survey 2019* (UNODC, February 2020).

For countries other than Afghanistan, a "traditional" conversion ratio of opium to heroin of 10:1 is used. The ratios will be adjusted when improved information becomes available. Figures in italics are preliminary and may be revised when updated information becomes available.

TABLE 7 Global illicit cultivation of coca bush, 2008–2018 (hectares)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bolivia (Plurinational State of)	30,500	30,900	31,000	27,200	25,300	23,000	20,400	20,200	23,100	24,500	23,100
Colombia ^a	81,000	73,000	62,000	64,000	48,000	48,000	69,000	96,000	146,000	171,000	169,000
Peru ^b	56,100	59,900	61,200	64,400							
Peru ^c				62,500	60,400	49,800	42,900	40,300	43,900	49,900	..
Total	167,600	163,800	154,200	155,600^d	133,700	120,800	132,300	156,500	213,000	245,400	..

Sources: Plurinational State of Bolivia: national illicit crop monitoring system supported by the United Nations Office on Drugs and Crime (UNODC). Colombia: national illicit crop monitoring system supported by UNODC. Peru: national illicit crop monitoring system supported by UNODC.

Note: Different area concepts and their effect on comparability were presented in the *World Drug Report 2012* (United Nations publication, Sales No. E.12.XI.1) (p. 41–42). Efforts to improve the comparability of estimates between countries continue: since 2011 the net area under coca bush cultivation on the reference date of 31 December was estimated for Peru, in addition to Colombia. The estimate presented for the Plurinational State of Bolivia represents the area under coca cultivation as interpreted on satellite imagery.

a) Net area on 31 December.

b) Figures represent the area under coca cultivation as interpreted on satellite imagery (without deductions for subsequent eradication).

c) Net area on 31 December, deducting fields eradicated after satellite imagery was taken.

d) The global coca cultivation figure was calculated with the "area as interpreted on satellite imagery" for Peru in 2011.

TABLE 8 Reported eradication of coca bush, 2008–2018

	Method of eradication	Unit	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bolivia (Plurinational State of)	manual	hectare	5,484	6,341	8,200	10,509	11,044	11,407	11,144	11,020	6,577	7,237	11,174
Colombia	manual	hectare	96,003	60,565	43,804	35,201	30,456	22,121	11,703	13,473	17,642	52,001	59,978
	spraying	hectare	133,496	104,772	101,940	103,302	100,549	47,052	55,532	37,199	0	0	0
Peru	manual	hectare	10,143	10,025	12,033	10,290	14,171	23,785	31,205	35,868	30,150	23,025	25,107
Ecuador	manual	hectare	12	6	3	14	..	..	..	..	..	..	..
	manual	plants	152,000	57,765	3,870	55,030	122,656	41,996	15,874	45,266	20,896	10,100	3,818

Note: The totals for Bolivia (Plurinational State of) and Peru include voluntary and forced eradication. Reported eradication refers to the sum of all areas eradicated in a year, including repeated eradication of the same fields. Two dots indicate that data are not available.

TABLE 9 Potential manufacture of 100 per cent pure cocaine, 2008–2018 (tons)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bolivia (Plurinational State of) ^a	157	..	..	..	..	..	..	..	..	..	..
Colombia ^{b, c, d}	471	488	424	384	333	290	368	499	810	1,058	1,120
Peru ^a	515	..	..	..	..	..	..	..	..	..	..
Total^{b, c, d}	1,143	1,188	1,134	1,090	997	902	869	977	1,335	1,647	1,723

Sources: Plurinational State of Bolivia: calculations based on coca leaf yield surveys by the United Nations Office on Drugs and Crime (UNODC) (Yungas de La Paz) and scientific studies by the Drug Enforcement Administration of the United States of America (Chapare). Colombia: UNODC/Government of Colombia. Peru: calculations based on coca leaf to cocaine conversion ratio from scientific studies by the Drug Enforcement Administration.

Notes: Figures in italics are subject to revision. Two dots indicate that data are not available. Information on estimation methodologies and definitions can be found in the online methodology section of the World Drug Report 2020.

- a) Owing to a lack of updated conversion factors in Bolivia (Plurinational State of) and Peru, no final estimates of the level of cocaine production can be provided. Detailed information on the ongoing revision of conversion ratios and cocaine laboratory efficiency is available in the World Drug Report 2010 (United Nations publication, Sales No. E.10.XI.1.3), p. 249.
- b) Values for Colombia for 2014–17 have been revised, using an improved methodology, to take into account the participation of new actors in the processing chain from coca leaf to cocaine. The same methodology was used for 2018. Thus, the values for 2014–18, and hence the global total for the same years, may not be directly comparable to earlier years.
- c) Conversion of areas under coca cultivation into coca leaf and then into cocaine hydrochloride, taking yields, amounts of coca leaf used for licit purposes and cocaine laboratory efficiency into account. Current global aggregates are based on "new" conversion ratios representing the most recent data available to UNODC. See World Drug Report 2010 (United Nations publication, Sales No. E.10.XI.1.3, p. 249) for a discussion of "new" and "old" conversion factors and detailed information on the ongoing revision of conversion ratios and cocaine laboratory efficiency.
- d) With respect to data published in the World Drug Report 2016 (United Nations publication, Sales No. E.16.XI.7), the following amendments have been made:
- (i) the figure for Colombia relative to 2008 has been revised in order to ensure a consistent implementation of revisions to the methodology, affecting the way coca production is calculated, for the entire time series 2005–2015 (for details, see Colombia Coca Cultivation Survey Report 2014 (UNODC, 2015) and Colombia Survey of territories affected by illicit crops 2015, Annex 3 (UNODC 2016));
- (ii) totals for 2009–2012 have been revised to rectify minor inaccuracies in data processing.

TABLE 10 Cannabis cultivation, production and eradication, latest year available from the period 2012–2017

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2012	Afghanistan	resin	outdoors	10,000			1,400		
2016	Albania	herb	outdoors					2,536,288	5,205
2017	Albania	herb	indoors					7,766	
2017	Albania	herb	outdoors					66,927	500
2017	Albania	herb	outdoors					33,177	379
2018	Albania	herb	indoors					2,716	
2014	Algeria	resin	outdoors					2,522	
2016	Armenia	herb	outdoors	0.50 a	0.50	0.00		757	20
2017	Armenia	herb	outdoors	0.50 a	0.50	0.00		2,547	21
2018	Armenia	herb	indoors					1,025	36
2016	Australia	herb	indoors					31,266	408
2016	Australia	herb	outdoors					22,257	1,021
2017	Australia	herb	indoors					78,310	433
2017	Australia	herb	outdoors	1.00 a	1.00	0.00		31,431	948
2018	Australia	herb	indoors					38,492	542
2018	Australia	herb	outdoors	0.80	0.80	0.00		19,981	1,120
2015	Austria	herb	outdoors	3.00 a	3.00	0.00			
2013	Azerbaijan	herb	outdoors	23.95 a	23.95	0.00	263.96	8,469	151
2014	Azerbaijan	herb	outdoors	17.50 a	17.50	0.00		14,889	195
2017	Azerbaijan	herb	outdoors	0.25 a		0.25		336,791	
2015	Bahamas	herb	outdoors					17,270	
2012	Bangladesh	herb	outdoors					39,848	
2013	Bangladesh	herb	outdoors					35,012	
2014	Bangladesh	herb	outdoors					35,988	
2015	Bangladesh	herb	outdoors					39,967	
2016	Bangladesh	herb	outdoors					47,104	
2017	Bangladesh	herb	outdoors					69,989	
2016	Belarus	herb	indoors						28
2016	Belarus	herb	outdoors		123.80				1,945
2017	Belarus	herb	indoors						32
2017	Belarus	herb	outdoors		125.90				2,283
2018	Belarus	herb	indoors						42
2018	Belarus	herb	outdoors		106.30				2,469

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2015	Belgium	herb	indoors					345,518	1,164
2015	Belgium	herb	outdoors					4,885	93
2017	Belgium	herb	indoors					415,728	1,175
2017	Belgium	herb	outdoors					848	59
2018	Belgium	herb	indoors					421,326	944
2018	Belgium	herb	outdoors					935	62
2015	Belize	herb	outdoors					50,897	
2017	Bhutan	herb	outdoors	1.00 ^a	1.00	0.00		100,000	12
2016	Bolivia (Plurinational State of)	herb	outdoors		14.60				35
2017	Bolivia (Plurinational State of)	herb	outdoors		14.00				52
2018	Bolivia (Plurinational State of)	herb	outdoors		13.36				52
2016	Bosnia and Herzegovina	herb	indoors		39.00				
2016	Bosnia and Herzegovina	herb	outdoors		1,680.00				
2017	Bosnia and Herzegovina	herb	indoors					1	1
2017	Bosnia and Herzegovina	herb	outdoors	0.02 ^a	0.02	0.00		539	53
2018	Bosnia and Herzegovina	herb	indoors	0.02	0.02	0.00			6
2018	Bosnia and Herzegovina	herb	outdoors	0.02	0.02	0.00		1,580	12
2014	Brazil	herb	outdoors		44.01			1,364,316	
2017	Brazil	herb	outdoors		117.51			1,910,451	604
2018	Brazil	herb	outdoors		68.31			968,145	
2015	Bulgaria	herb	indoors					323	
2015	Bulgaria	herb	outdoors				37.77	9,488	
2017	Central African Republic	herb	outdoors	130.00	60.00	55	10.00	250,000	22
2016	Chile	herb	indoors					26,988	2,740
2016	Chile	herb	outdoors					58,950	264
2017	Chile	herb	indoors					50,414	2,408
2017	Chile	herb	outdoors					194,694	202
2018	Chile	herb	indoors					66,007	2,357
2018	Chile	herb	outdoors					183,185	318
2016	China	herb	outdoors		9.80			1,390,000	
2018	China	herb	outdoors					710	
2016	Colombia	herb	outdoors		135.00				
2017	Colombia	herb	outdoors		173.71				

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2018	Colombia	herb	outdoors		59.66				
2016	Costa Rica	herb	indoors				678.00	5	
2016	Costa Rica	herb	outdoors		17.59		2,122.244	201	
2017	Costa Rica	herb	indoors					2	
2017	Costa Rica	herb	outdoors			14.30		215	
2018	Costa Rica	herb	indoors					4	
2018	Costa Rica	herb	outdoors	11.41	11.41		1,346.273	208	
2016	Côte d'Ivoire	herb	outdoors				5		
2017	Côte d'Ivoire	herb	outdoors		0.25				1
2018	Côte d'Ivoire	herb	outdoors				104	1	
2016	Czechia	herb	indoors				53,549	229	
2016	Czechia	herb	outdoors				4,111		
2017	Czechia	herb	indoors				50,925	305	
2017	Czechia	herb	outdoors				3,467		
2018	Czechia	herb	outdoors				6,581		
2015	Denmark	herb	indoors/ outdoors				14,560	97	
2016	Denmark	herb	indoors/ outdoors				13,217	105	
2017	Denmark	herb	indoors/ outdoors				34,801	65	
2014	Dominican Republic	herb	outdoors	6.00 ^a	6.00	0.00	0.21	111	8
2016	Ecuador	herb	outdoors				224	34	
2017	Ecuador	herb	outdoors				397	10	
2018	Ecuador	herb	indoors				127	30	
2018	Ecuador	herb	outdoors				13,891	4	
2015	Egypt	herb/resin	outdoors		140.00				
2017	Egypt	herb/resin	outdoors		126.00				
2018	Eswatini	herb	outdoors	1,500.00	1,069.50	430.50	3,000,000	210	
2017	Georgia	herb	indoors		0.01		186	91	
2017	Georgia	herb	outdoors	0.02 ^a	0.02	0.00	93	19	
2016	El Salvador	herb	outdoors			1.00	227	25	
2014	France	herb	outdoors				158,592	837	
2018	France	herb	outdoors				138,561		
2017	Georgia	herb	indoors		0.01		186	91	

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicat- ed (ha)	Harvestable area (ha)	Production (tons)	Plants eradicat- ed	Sites eradicat- ed
2017	Georgia	herb	outdoors	0.02	0.02	0.00		93	19
2018	Georgia	herb	indoors		0.05			927	443
2018	Georgia	herb	outdoors	0.10	0.10	0.00		406	98
2015	Germany	herb	indoors					135,925	786
2015	Germany	herb	outdoors					9,136	127
2017	Germany	herb	indoors					85,226	573
2017	Germany	herb	outdoors						95
2016	Greece	herb	indoors					16,554	
2016	Greece	herb	outdoors					39,151	
2017	Greece	herb	indoors					19,498	
2017	Greece	herb	outdoors					27,409	
2018	Greece	herb	indoors					6,913	
2018	Greece	herb	outdoors					43,684	
2016	Guatemala	herb	outdoors		9.00			3,138,298	427
2017	Guatemala	herb	outdoors	3.50 a	3.81		1.61	6,033,345	150
2018	Guatemala	herb	outdoors	129.00	129.00	0.00		5,189,422	368
2015	Guyana	herb	outdoors	20.00	9.40	10.60	1,000.00	419,700	19
2016	Honduras	herb	indoors					7	2
2016	Honduras	herb	outdoors					24,253	19
2017	Honduras	herb	outdoors	59.58 a	59.59	0.00			
2018	Honduras	herb	outdoors					720,426	67
2016	China, Hong Kong SAR	herb	indoors					329	1
2016	Hungary	herb	indoors					5,000	3
2016	Hungary	herb	outdoors					2,000	20
2013	Iceland	herb	indoors					6,652	323
2016	India	herb	outdoors		3,414.74				
2017	India	herb	outdoors		3,445.90			6,687,376	
2018	India	herb	outdoors		3,430.12				
2016	Indonesia	herb	outdoors	482.00 a	482.00	0.00			
2017	Indonesia	herb	outdoors	89.00 a	89.00	0.00		738,020	14
2018	Indonesia	herb	outdoors	76.23	76.23	0.00		1,455,390	13
2018	Iran (Islamic Republic of)	herb	indoors		0.04				
2016	Ireland	herb	indoors					7,273	

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2017	Ireland	herb	indoors					9,046	50
2018	Ireland	herb	indoors					7,186	
2014	Italy	herb	indoors					51,534	639
2014	Italy	herb	outdoors					70,125	1,134
2017	Italy	herb	indoors					56,125	1,161
2017	Italy	herb	outdoors					209,510	401
2012	Jamaica	herb	outdoors					456	382
2016	Kazakhstan	herb	outdoors	18.00 ^a	18.00	0.00		170,000	202
2017	Kazakhstan	herb	outdoors	12.30 ^a	12.30	0.00		930,774	91
2016	Kenya	herb	outdoors	12.00				8,747	46
2017	Kenya	herb	outdoors		0.10			4,662	
2018	Kenya	herb	outdoors		0.10			517	
2015	Kyrgyzstan	herb	outdoors	5,014.00		5,014.00			
2018	Kyrgyzstan	herb	outdoors	1,276.37	457.69	818.68		49,942	12
2016	Latvia	herb	indoors					557	35
2016	Latvia	herb	outdoors					78	6
2017	Latvia	herb	indoors					798	34
2017	Latvia	herb	outdoors					66	15
2018	Latvia	herb	indoors					152	17
2018	Latvia	herb	outdoors					1,152	34
2015	Lebanon	herb	outdoors	3,500.00		3,500.00			
2017	Lebanon	Kif	outdoors	40,772.00					
2018	Lebanon	herb	outdoors	4,205.70		4,205.70			
2016	Lithuania	herb	indoors						4
2017	Lithuania	herb	indoors						8
2017	Lithuania	herb	outdoors						7
2018	Lithuania	herb	indoors						3
2015	Madagascar	herb	outdoors		11.00			21,325	
2017	Madagascar	herb	outdoors		9.00			57,708	
2013	Malta	herb	indoors					27	
2016	Mexico	herb	outdoors		5,478.42		6,574.1		38,432
2017	Mexico	herb	outdoors		4,193.34		5,032.0		34,523
2018	Mexico	herb	outdoors		2,263.71		2,716.47		28,873
2013	Mongolia	herb	outdoors	15,000.00	4,000.00	11,000.00		4,000	4,000

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2018	Mongolia	herb	outdoors	15,000.00	173.00	14,827.00			33
2016	Morocco	herb	outdoors				35,652.83		
2016	Morocco	plant	outdoors	47,000.00	395.00	46,605.00			
2016	Morocco	resin	outdoors				713.00		
2017	Morocco	herb	outdoors				35,702.90		
2017	Morocco	plant	outdoors	47,500.00	523.00	46,977.00			
2017	Morocco	resin	outdoors				714.06		
2018	Morocco	herb	outdoors				23,699.80		
2018	Morocco	plant	outdoors	47,500.00		47,500.00			
2018	Morocco	resin	outdoors				423.58		
2014	Myanmar	herb	outdoors	15.00	10.00	5.00			3
2018	Nepal	herb	outdoors	235.87	235.87	0.00	5,000.00	2,358,700	335
2016	Netherlands	herb	indoors					994,068	5,856
2017	Netherlands	herb	indoors					883,163	5,538
2018	Netherlands	herb	indoors					516,418	3,482
2018	Netherlands	herb	outdoors						431
2016	New Zealand	herb	indoors					18,903	607
2016	New Zealand	herb	outdoors					104,725	
2017	New Zealand	herb	indoors					19,992	
2017	New Zealand	herb	outdoors					19,559	
2018	New Zealand	herb	indoors					19,313	
2018	New Zealand	herb	outdoors					22,660	
2014	Nicaragua	herb	outdoors		0.30		1,507.00	3,014	30
2016	Nicaragua	herb	outdoors					275,000	
2017	Nicaragua	herb	outdoors					994,787	
2016	Nigeria	herb	outdoors		718.78				65
2017	Nigeria	herb	outdoors		317.12				
2018	Nigeria	herb	outdoors		3,660.64				
2015	Norway	herb	indoors		0.04			4,000	30
2017	North Macedonia	herb	indoors					168	
2017	North Macedonia	herb	outdoors					220	
2018	North Macedonia	herb	outdoors	2.51			0.00404	2,264	4,527
2016	Oman	herb	outdoors	0.50	0.50	0.00		5	3

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2013	Panama	herb	indoors	0.50	0.50	0.00		37	2
2013	Panama	herb	outdoors	10.50	10.50	0.00		78,633	2
2016	Paraguay	herb	outdoors				1,298.50		
2016	Paraguay	plant	outdoors	1,298.50	1,298.50	0.00		5,656,266	4
2016	Paraguay	resin	outdoors				1.15		
2017	Paraguay	plant	outdoors		1,462.00			36,550,000	
2016	Peru	herb	outdoors		87.83			1,429,749	
2017	Peru	herb	outdoors		61.30			4,671,387	47
2018	Peru	herb	outdoors		91.80			1,716,751	46
2016	Philippines	herb	outdoors		8.67			24,635,153	337
2017	Philippines	herb	outdoors		4.82			221,035	27
2018	Philippines	herb	outdoors		12.39			869,682	186
2016	Poland	herb	indoors					146,755	1,403
2016	Poland	herb	indoors/ outdoors					4,585	219
2017	Poland	herb	indoors					448	10
2017	Poland	herb	indoors/ outdoors						54
2018	Poland	herb	indoors/ outdoors					118,382	1,274
2017	Portugal	herb	indoors/ outdoors					22,910	158
2018	Portugal	herb	indoors/ outdoors					8,706	139
2013	Republic of Korea	herb	outdoors					8,072	
2014	Republic of Moldova	herb	outdoors	100.00	59.00	41.00	10,000.00	200,548	
2017	Republic of Moldova	herb	outdoors	0.15	2.57			257,236	
2018	Republic of Moldova	herb	outdoors		0.71			86,926	61
2014	Republic of Moldova	herb	indoors		41.00				
2016	Romania	herb	indoors					1,433	41
2016	Romania	herb	outdoors		6.99				42

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2017	Romania	herb	indoors					1,875	46
2017	Romania	herb	outdoors		1.90			4,905	32
2018	Romania	herb	indoors					3,903	39
2018	Romania	herb	outdoors		0.11			1,882	98
2016	Russian Federation	herb	indoors		0.66				788
2016	Russian Federation	herb	outdoors	7.61	7.61	0.00	68.64		1,143
2017	Russian Federation	herb	indoors		0.87				1,990
2017	Russian Federation	herb	outdoors	159.00	159.00	0.00	30.07		5,379
2018	Russian Federation	herb	indoors		1.87				
2018	Russian Federation	herb	outdoors	9.34	7.47	1.87			16,212
2015	Serbia	herb	outdoors				0.05		
2013	Sierra Leone	herb	outdoors	190.00		190.00		190	3
2016	Slovakia	herb	indoors					385	
2017	Slovakia	herb	outdoors	2.00	2.00	0.00		2,299	31
2014	Slovenia	herb	indoors					9,223	118
2014	Slovenia	herb	outdoors					1,844	
2017	Slovenia	herb	indoors					10,259	78
2015	Spain	herb	indoors					244,772	108
2015	Spain	herb	outdoors					135,074	44
2014	Sudan	herb	outdoors	8.00	8.00	0.00	345.00		
2017	Sudan	herb	outdoors	1,250.00	1,250.00	0.00	205.00		100
2018	Sudan	herb	outdoors	7,744.00	1,452.00	6,292.00	774,400.00	1,500,000	3
2014	Sweden	herb	indoors					10,000	56
2015	Sweden	herb	outdoors				182.00		
2017	Sweden	herb	indoors					5,100	44
2018	Sweden	herb	indoors					1,642	
2016	Switzerland	herb	indoors					11,386	83
2017	Switzerland	herb	indoors					71,750	

Year	Country / Territory	Product	Outdoors/ indoors	Area cultivated (ha)	Area eradicated (ha)	Harvestable area (ha)	Production (tons)	Plants eradicated	Sites eradicated
2012	Tajikistan	herb	outdoors					2,180,121	
2016	Thailand	herb	outdoors	1.00	1.00	0.00	7.50		1
2015	Trinidad and Tobago	herb	outdoors		0.31			375,925	58
2012	Uganda	herb	outdoors	150.00	88.00	62.00			5
2016	Ukraine	herb	outdoors	91.00	91.00	0.00			
2017	Ukraine	herb	outdoors		166.90			483,000	
2016	United States of America	herb	indoors					406,125	1,865
2016	United States of America	herb	outdoors					4,940,596	5,513
2017	United States of America	herb	indoors					303,654	1,399
2017	United States of America	herb	outdoors					3,078,418	4,062
2018	United States of America	herb	indoors					596,149	1,618
2018	United States of America	herb	outdoors					2,221,837	3,847
2016	Uruguay	herb	indoors					661	
2017	Uruguay	herb	indoors					1,926	
2016	Uzbekistan	herb	outdoors	0.20	0.20	0.00			586
2017	Uzbekistan	herb	outdoors	0.20	0.20	0.00			618
2018	Uzbekistan	herb	indoors	0.13	0.13	0.00			519
2015	Viet Nam	herb	outdoors		1.00				
2018	Venezuela	herb	outdoors					13,891	4

GLOSSARY

amphetamine-type stimulants — a group of substances composed of synthetic stimulants controlled under the Convention on Psychotropic Substances of 1971 and from the group of substances called amphetamines, which includes amphetamine, methamphetamine, methcathinone and the “ecstasy”-group substances (3,4-methylenedioxy-methamphetamine (MDMA) and its analogues).

amphetamines — a group of amphetamine-type stimulants that includes amphetamine and methamphetamine.

annual prevalence — the total number of people of a given age range who have used a given drug at least once in the past year, divided by the number of people of the given age range, and expressed as a percentage.

coca paste (or coca base) — an extract of the leaves of the coca bush. Purification of coca paste yields cocaine (base and hydrochloride).

“crack” cocaine — cocaine base obtained from cocaine hydrochloride through conversion processes to make it suitable for smoking.

cocaine salt — cocaine hydrochloride.

drug use — use of controlled psychoactive substances for non-medical and non-scientific purposes, unless otherwise specified.

fentanyls - fentanyl and its analogues.

new psychoactive substances — substances of abuse, either in a pure form or a preparation, that are not controlled under the Single Convention on Narcotic Drugs of 1961 or the 1971 Convention, but that may pose a public health threat. In this context, the term “new” does not necessarily refer to new inventions but to substances that have recently become available.

opiates — a subset of opioids comprising the various products derived from the opium poppy plant, including opium, morphine and heroin.

opioids — a generic term that refers both to opiates and their synthetic analogues (mainly prescription or pharmaceutical opioids) and compounds synthesized in the body.

problem drug users — people who engage in the high-risk consumption of drugs. For example, people who inject drugs, people who use drugs on a daily basis and/or people diagnosed with drug use disorders (harmful use or drug dependence), based on clinical criteria as contained in the *Diagnostic and Statistical Manual of Mental Disorders* (fifth edition) of the American Psychiatric Association, or the *International Classification of Diseases and Related Health Problems* (tenth revision) of WHO.

people who suffer from drug use disorders/people with drug use disorders — a subset of people who use drugs. Harmful use of substances and dependence are features of drug use disorders. People with drug use disorders need treatment, health and social care and rehabilitation.

harmful use of substances — defined in the *International Statistical Classification of Diseases and Related Health Problems* (tenth revision) as a pattern of use that causes damage to physical or mental health.

dependence — defined in the *International Statistical Classification of Diseases and Related Health Problems* (tenth revision) as a cluster of physiological, behavioural and cognitive phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.

substance or drug use disorders — referred to in the *Diagnostic and Statistical Manual of Mental Disorders* (fifth edition) as patterns of symptoms resulting from the repeated use of a substance despite experiencing problems or impairment in daily life as a result of using substances. Depending on the number of symptoms identified, substance use disorder may be mild, moderate or severe.

prevention of drug use and treatment of drug use disorders — the aim of “prevention of drug use” is to prevent or delay the initiation of drug use, as well as the transition to drug use disorders. Once a person develops a drug use disorder, treatment, care and rehabilitation are needed.

REGIONAL GROUPINGS

The *World Drug Report* uses a number of regional and subregional designations. These are not official designations, and are defined as follows:

- East Africa: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, Uganda, United Republic of Tanzania and Mayotte
- North Africa: Algeria, Egypt, Libya, Morocco, Sudan and Tunisia
- Southern Africa: Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe and Reunion
- West and Central Africa: Benin, Burkina Faso, Cabo Verde, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, Togo and Saint Helena
- Caribbean: Antigua and Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, Anguilla, Aruba, Bonaire, Netherlands, British Virgin Islands, Cayman Islands, Curaçao, Guadeloupe, Martinique, Montserrat, Puerto Rico, Saba, Netherlands, Sint Eustatius, Netherlands, Sint Maarten, Turks and Caicos Islands and United States Virgin Islands
- Central America: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama
- North America: Canada, Mexico and United States of America, Bermuda, Greenland and Saint-Pierre and Miquelon
- South America: Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela (Bolivarian Republic of), Falkland Islands (Malvinas) and French Guiana
- Central Asia and Transcaucasia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
- East and South-East Asia: Brunei Darussalam, Cambodia, China, Democratic People's Republic

of Korea, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste, Viet Nam, Hong Kong, China, Macao, China, and Taiwan Province of China

- South-West Asia: Afghanistan, Iran (Islamic Republic of) and Pakistan
- Near and Middle East: Bahrain, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, United Arab Emirates and Yemen
- South Asia: Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka
- Eastern Europe: Belarus, Republic of Moldova, Russian Federation and Ukraine
- South-Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, North Macedonia, Romania, Serbia, Turkey and Kosovo¹
- Western and Central Europe: Andorra, Austria, Belgium, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, Faroe Islands, Gibraltar and Holy See

Oceania (comprised of four sub-regions):

- Australia and New Zealand: Australia and New Zealand
- Polynesia: Cook Islands, Niue, Samoa, Tonga, Tuvalu, French Polynesia, Tokelau and Wallis and Futuna Islands
- Melanesia: Fiji, Papua New Guinea, Solomon Islands, Vanuatu and New Caledonia
- Micronesia: Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Palau, Guam and Northern Mariana Islands

¹ All references to Kosovo in the *World Drug Report* should be understood to be in compliance with Security Council resolution 1244 (1999).



UNODC

United Nations Office on Drugs and Crime



Vienna International Centre, PO Box 500, 1400 Vienna, Austria
Tel: +(43) (1) 26060-0, Fax: +(43) (1) 26060-5866, www.unodc.org

Presented in six separate booklets, the *World Drug Report 2020* provides a wealth of information and analysis to support the international community in implementing operational recommendations on a number of commitments made by Member States, including the recommendations contained in the outcome document of the special session of the General Assembly on the world drug problem, held in 2016.

Booklet 1 provides a summary of the five subsequent booklets by reviewing their key findings and highlighting their policy implications. Booklet 2 focuses on drug demand and contains a global overview of the extent of and trends in drug use, including drug use disorders, and its health consequences. Booklet 3 deals with drug supply and presents the latest estimates and trends regarding the production of and trafficking in opiates, cocaine, amphetamine-type stimulants and cannabis. Booklet 4 addresses a number of cross-cutting issues, including the macrodynamics that are driving the expansion and increasing complexity of the drug markets, and describes some of the rapidly evolving drug-related concerns: the latest, multifaceted global opioid crisis; rapid market changes; the market for new psychoactive substances; the use of the darknet for supplying drugs; and developments in jurisdictions that have measures allowing the non-medical use of cannabis. Booklet 5 looks at the association between socioeconomic characteristics and drug use disorders, including at the macro-, community and individual levels, with a special focus on population subgroups that may be impacted differently by drug use and drug use disorders. Finally, booklet 6 addresses a number of other drug policy issues that all form part of the international debate on the drug problem but on which in-depth evidence is scarce, including access to controlled medicines, international cooperation on drug matters, alternative development in drug cultivation areas, and the nexus between drugs and crime.

As in previous years, the *World Drug Report 2020* is aimed at improving the understanding of the world drug problem and contributing to fostering greater international cooperation in order to counter its impact on health, governance and security.

The accompanying statistical annex is published on the UNODC website:
wdr.unodc.org



ISBN 978-92-1-148345-1



9 789211 483451