

EXECUTIVE SUMMARY



W	O	R	L	D	2
	D	R	U	G	0
R	E	P	O	R	T
					3

© United Nations, June 2023. All rights reserved worldwide.
PRINT ISBN: 9789213000700
PDF ISBN: 9789210028233
United Nations publication, Sales No. E.23.XI.7

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:
UNODC, *World Drug Report 2023* (United Nations publication, 2023).

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:

Research and Trend Analysis Branch
United Nations Office on Drugs and Crime
PO Box 500
1400 Vienna
Austria
E-mail: wdr@un.org

Website: www.unodc.org/unodc/en/data-and-analysis/world-drug-report-2023.html

UNITED NATIONS OFFICE ON DRUGS AND CRIME
Vienna

World Drug Report 2023



UNITED NATIONS
New York, 2023

PREFACE

The *World Drug Report 2023* comes as countries are struggling at the halfway point to revive stalled progress towards achieving the Sustainable Development Goals (SDGs). Crises and conflict continue to inflict untold suffering and deprivation, with the number of people forcibly displaced globally hitting a new record high of 110 million. Peace, justice and human rights, which should be the birthright of all, remain out of reach for far too many.

The harms caused by drug trafficking and illicit drug economies are contributing to and compounding many of these threats, from instability and violence to environmental devastation. Illicit drug markets continue to expand in terms of harm as well as scope, from the growing cocaine supply and drug sales on social media platforms to the relentless spread of synthetic drugs – cheap and easy to manufacture anywhere in the world, and in the case of fentanyl, deadly in the smallest of doses.

Drug use disorders are harming health, including mental health, safety and well-being. Stigma and discrimination make it less likely that people who use drugs will get the help they need. Fewer than 20 per cent of people with drug use disorders are in treatment, and access is highly unequal. Women account for almost half the people who use amphetamine-type stimulants, but only 27 per cent of those receiving treatment. Controlled drugs needed for palliative care and pain relief, namely pharmaceutical opioids, are denied to those who desperately need them, with too little access in many

countries – mainly low- and middle-income countries, where some 86 per cent of the world's population lives.

Drug challenges pose difficult policy dilemmas that cannot be addressed by any one country or region alone. The United Nations Office on Drugs and Crime publishes the *World Drug Report* every year to provide a global perspective and overview of the world drug problem, offering impartial evidence with the aim of supporting dialogue and shared responses.

This edition of the *World Drug Report* highlights the growing complexity of evolving drug threats. A special chapter explores how illicit drug economies intersect with crimes that affect the environment and insecurity in the Amazon Basin, with impoverished rural populations and Indigenous groups paying the price. Other sections of the report explore urgent challenges, including drug use in humanitarian settings, drugs in conflict situations and the changing dynamics of synthetic drug markets. The report also delves into new clinical trials involving psychedelics, medical use of cannabis and innovations in drug treatment and other services.

World drug problems may be global, but they do not affect all the world equally. It is the vulnerable, the poor and the excluded who pay the highest price, in the global South and in underdeveloped and underserved communities in all our countries, cities and villages. They suffer from the violence and insecurity fuelled by drug trafficking, as well as from insufficient access to and availability of controlled medicines. They are more likely

to progress to drug use disorders and live with related diseases such as HIV, and are less likely to receive evidence-based treatment and services. Impoverished people with uncertain access to opportunities, resources and the rule of law are more easily entrapped in illicit drug crop cultivation, production and trafficking.

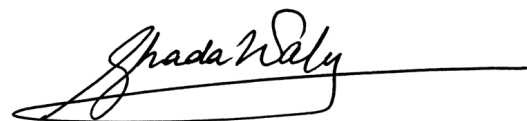
Breaking these vicious cycles requires transformative action to achieve the SDGs and integrated, comprehensive approaches to security to tackle drug threats as part of prevention, peacekeeping and peacebuilding.

Most of all, ending the exclusion compels us to expand the circle of care and compassion, to embrace the people being left behind and left out because of marginalization, discrimination and stigma.

Putting people first requires policymakers and service providers to actively protect the human rights of all by demolishing barriers to evidence-based, voluntary services across the continuum of care, dispelling gender, age and other biases and focusing on rehabilitation and reintegration instead of punishment.

Early prevention is crucial, and Governments must invest more in education to build resilience and give young people the information they need to make healthy, smart choices about their lives. Thoughtful regulation that prioritizes public health can help to ensure access and availability where needed, while keeping commercial pressures in check and reducing the risks of diversion and non-medical use.

Stigma and discrimination can be deadly, depriving people of the help they need and deserve and keeping problems in the dark until it is too late. Evidence can help shine a light on the challenges we can only face together, and it is with this in mind that I am proud to present to you the *World Drug Report 2023*. By increasing understanding of shared drug challenges, we can foster greater compassion and commitment to global action to protect lives.

A handwritten signature in black ink, reading "Ghada Waly". The signature is fluid and cursive, with a long horizontal line extending to the right from the end of the name.

Ghada Waly, Executive Director
United Nations Office on Drugs and Crime

Acknowledgements

The *World Drug Report 2023* 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

Research, analysis and drafting

Leonardo Correa
Hernan Epstein
Myfanwy Graham (University of Newcastle)
Rosalie Liccardo-Pacula (University of Southern California)
Robert Muggah
Kamran Niaz
Bryce Pardo
Thomas Pietschmann
Danica Thanki
Antoine Vella
Sonya Yee

Data management and estimate production

Diana Camerini
Sonia Arias Garcia (UNAIDS)
Lilian Ghandour
Natalia Ivanova
Virginia Macdonald (WHO)
Andrea Oterová
Umidjon Rakhmonberdiev
Ali Saadeddin
Keith Sabin (UNAIDS)
Markus Schwabe

Online platform development

Gerald Kandulu

Mapping

Daniel Assefa
Alice Bourdet
Coen Bussink
Francesca Massanello
Omar Pachón
Irina Tsoy
Lorenzo Vita
Viviana Viveros

Graphic design and production

Anja Korenblik
Suzanne Kunnen
Kristina Kuttinig
Lena Keck
Maria Moser

Internal coordination and research assistance

Harvir Kalirai

Editing

Jonathan Gibbons

Data support

Leila Ahmadi
Roberto Alvarez Teran
Sinisa Durkulic
Antonela Guberac
Rakhima Mansurova
Anton Radinov
Inshik Sim
Kavinadee
Suppamongtevasakul
Heloise Wiart

Administrative support

Andrada-Maria Filip
Iulia Lazar

Review and comments

The *World Drug Report 2023* benefited from the expertise of and invaluable contributions from UNODC colleagues in all divisions and from the INCB Secretariat.

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

Jonathan Caulkins	Afarin Rahimi-Movaghar
Paul Griffiths	Peter Reuter
Marya Hynes	Alison Ritter
Vicknasingam B. Kasinather	Francisco Thoumi
Charles Parry	

The production of the chapter “*The nexus between drugs, crimes that affect the environment and convergent crime in the Amazon Basin*” was made possible thanks to the generous financial contribution of France.

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.

For this edition of the *World Drug Report*, the Amazon Basin was defined as comprising the maximum area of the hydrographic basin, the Amazon biome and the administrative regions that are part of the Amazon, with boundaries provided by the Amazon Network of Georeferenced Socioenvironmental Information (RAISG).

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.

The term “seizures” is used in the *World Drug Report* to refer to quantities of drugs seized, unless otherwise specified.

All analysis contained in the *World Drug Report* is based on the official data submitted by Member States to UNODC through the annual report questionnaire, unless indicated otherwise. Sex-disaggregated analysis has been included wherever possible.

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
API	active pharmaceutical ingredients
CBD	cannabidiol
COVID-19	coronavirus disease
DALYs	disability-adjusted life years
DMT	dimethyltrptamine
GAP	good agricultural practices
GMP	good manufacturing practices
ha	hectares
HHC	hexahydrocannabinol
HIV	human immunodeficiency virus
LSD	lysergic acid diethylamide
NPS	new psychoactive substances
MDMA	3,4-methylenedioxymethamphetamine
NMDA	N-methyl-D-aspartate
P-2-P	1-phenyl-2-propanone
PCP	phencyclidine
PWID	people who inject drugs
THC	tetrahydrocannabinol
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNODC	United Nation Office on Drugs and Crime
WHO	World Health Organization

Annual Report Questionnaire Focal Points

The UNODC gratefully acknowledges the continuous efforts of the Annual Report Questionnaire Focal Points in the Member States to collate and report national data on drug demand and supply, which form the basis of the *World Drug Report*:

Andia Meksi (Albania), Ahcene Sahtout (Algeria), Djazia Dehimi (Algeria), Mohamed Oundi (Algeria), Olimpia Torres Barros (Andorra), John Swift (Antigua and Barbuda), Adrián Betti (Argentina), Andres Quintana (Argentina), Diego Ruiz (Argentina), Elisa Sproviero (Argentina), Davit Petrosyan (Armenia), Andrew Courir (Australia), Alyce Hall (Australia), Raphael Bayer (Austria), Wolfgang Pfneiszl (Austria), Said Asadli (Azerbaijan), Nihad Khalilov (Azerbaijan), Terrance Fountain (Bahamas), Galina Pyshnik (Belarus), Olegovich Pruchkovskiy (Belarus), Katia Huard (Belgium), Lies Gremeaux (Belgium), Nele Van Tomme (Belgium), Stéphanie Ovaere (Belgium), Gregoire Gansou (Benin), Judith Segnon - Agueh (Benin), Dawa Dawa (Bhutan), Sonam Tashi (Bhutan), Tsheringc Choden (Bhutan), Carla Choque Soto (Bolivia (Plurinational State of)), Dragan Vukadin (Bosnia and Herzegovina), Elis Viviane Hoffmann (Brazil), Livia Faria Lopes dos Santos Oliveira (Brazil), Rodrigo Bertoglio Cardoso (Brazil), Viviane Hoffmann (Brazil), Aimi Jamain (Brunei Darussalam), Hardiyamin Barudin (Brunei Darussalam), Radi Ignatov (Bulgaria), Slaveika Nikolova (Bulgaria), Soutongo Sita Sandrine (Burkina Faso), Amanda Pinke (Canada), Bobby Chauhan (Canada), Christina Arruda (Canada), Daniel Diaz (Chile), Emilse Pizarro (Chile), Jose Marin (Chile), Luis Medel Espinoza (Chile), Monserrat Aranda (Chile), Yan Zheng (China; China, Hong Kong SAR), Kitty Hon (China, Hong Kong SAR), Hon Wai (China, Macao SAR), Oscar Ricardo Santa Lopez (Colombia), Andrés Rodríguez Pérez (Costa Rica), Roger Badou N'Guessan (Côte d'Ivoire), Elise Yra Ouattara (Côte d'Ivoire), Soualiho Ouattara (Côte d'Ivoire), Lara Jezic (Croatia), Smilja Bagaric (Croatia), Gavriel Efstratiou (Cyprus), Ioanna Yiasemi (Cyprus), Nasia Fotsiou (Cyprus), Katerina Horackova (Czechia), Viktor Mravcik (Czechia), Lars Petersen (Denmark), Samanta Almeida (Ecuador), Ghada Younis (Egypt), Alma Cecilia Escobar de Mena (El Salvador), Carmen Morena Batres de Gracias (El Salvador), Heli Laarmann (Estonia), Katri Abel-Ollo (Estonia), Kristiin Mikko (Estonia), Jari Leskinen (Finland), Leena Kovanen (Finland), Marja-Liisa Helminen (Finland), Claire Jounet-Arenes (France), Joséphine Affres (France), Sara Antunes (France), Demba Jammeh (Gambia (the)), Saskia Jensen (Germany), Charles Oblitei Commey (Ghana), Godlove Vanden-Bossche (Ghana), Rosemond Agbefu (Ghana), Danae Manousaki (Greece), Elfetheria Kanavou (Greece), Gerasimos Papanastastos (Greece), Ioannis Marouskos (Greece), Ioulia Bafi (Greece), Manina Terzidou (Greece), Carlos Garcia Rubio (Guatemala), Thierno Bah (Guinea), Rachel Victoria Ulcena (Haiti), Jean Alain Bernadel (Haiti), Paola Cristina Girón Serrano (Honduras), Anna Péterfi (Hungary), Gergely Csaba Horvath (Hungary), Peter Foldi (Hungary), Gudbjorg Bergsdottir (Iceland), Agus Irianto (Indonesia), Aws Salh (Iraq), Imad Abdel Raziq Abdel Gani (Iraq), Stephen Murphy (Ireland), Eti Kahana (Israel), Andrea Zapparoli (Italy), Elisabetta Simeoni (Italy), Midori Oono (Japan), Jamil Alhabibeh (Jordan), Malak Al-mahirah (Jordan), Alma Agibayeva (Kazakhstan), Morris Kamenderi (Kenya), Stephen Kimani (Kenya), Akyl Amanov (Kyrgyzstan), Agnese Zile-Veisberga (Latvia), Diana Vanaga-Araja (Latvia), Ieva Pugule (Latvia), Zeinab Abbass (Lebanon), Murad al-Shtewi (Libya), Aušra Lazauskiene (Lithuania), Evelina Pridotkiene (Lithuania), Ruta Lazauskiene (Lithuania), Michel Goergen (Luxembourg), Nadine Berndt (Luxembourg), Rita Cardoso Seixas (Luxembourg), Nikmat Yusop (Malaysia), Abdelaye Keita (Mali), Souleymane Coulibaly (Mali), John Testa (Malta), Ainina Sogho (Mauritania), Corceal Sewraz (Mauritius), Martha Vazquez (Mexico), Valeria Solis (Mexico), Jasna Sekulic (Montenegro), Gordana Milutinovic (Montenegro), Ljiljana Golubovic (Montenegro), Nevena Markovic (Montenegro), Abdelhafid EL Maaroufi (Morocco), Abderrahim Matraoui (Morocco), Ayoub Aboujafer (Morocco), EL Maaroufi Abdelhafid (Morocco), Mustapha El alami El Fellousse (Morocco), Myint Aung (Myanmar), Zaw Lin Oo (Myanmar), Guus Cruts (Netherlands), Martijn Mulder (Netherlands), Sophie Harvey (New Zealand), Johannes Gaeseb (Namibia), Manuel Garcia Morales (Nicaragua), Abdoul Aziz Garba Yayé (Niger), Hamidou Amadou Insa (Niger), Ibiba Jane Odili (Nigeria), Ngozi Vivian Oguejiofor (Nigeria), Daniel Bergsvik (Norway), Ola Bilgrei (Norway), Mahmood Al Abri Sultante (Oman), Sayed Sijjeel Haider (Pakistan), Daysi Vargas (Panama), Rubielys Saladana (Panama), Tatiana Tesis (Panama), Crhistian Gomez (Paraguay), Juan Pablo Lopez (Paraguay), Laura Reinoso (Paraguay), Lillian Portillo (Paraguay), Mathías Jara (Paraguay), Sandra Morales (Peru), Corazon P. Mamigo (Philippines), Johanna Rosales (Philippines), Michael P. Miatar (Philippines), Rebecca F. Arambulo (Philippines), Yvonne B. San Pascual (Philippines), Lukasz Jedruszak (Poland), Ana Sofia Santos (Portugal), Elsa Maia (Portugal), Quatar ARQ (Qatar), Jongmoo Hong (Republic of Korea), Sang-yoon Hyun (Republic of Korea), Victor Tacu (Republic of Moldova), Ciprian Zetu (Romania), Oleg Lozhkin (Russian Federation), Saud Alsabhan (Saudi Arabia), Mamadou Nokho (Senegal), Dusan Ilic (Serbia), Sibylla Mederic (Seychelles), Evelyn Low (Singapore), Thamarachelvan Meyappan (Singapore), Yan Xiu Lim (Singapore), Eva Debnarová (Slovakia), Jože Hren (Slovenia), Bernard Mabeba (South Africa), Vathiswa Dlangamandla (South Africa), Elena Alvarez Martín (Spain), Thamara Darshana (Sri Lanka), Sabrina Rootaram (Suriname), Ellinor Lithner (Sweden), Helena Kramer (Sweden), Jennie Hagelin (Sweden), Joakim Strandberg (Sweden), Barbara Walther (Switzerland), Marc Wittwer (Switzerland), Hosam Azar (Syrian Arab Republic (the)), Saidzoda Firuz Mansur (Tajikistan), Prang-anong Saeng-arkass (Thailand), Mouzinho T. Correia (Timor-Leste), Abi Kemeya-Abalo (Togo), Awi Essossimna (Togo), Nadine Beeka (Trinidad and Tobago), Sheena Arneaud (Trinidad and Tobago), Murat Sarikamisli (Türkiye), Resul Olukman (Türkiye), Olena Pugach (Ukraine), Amal Ahmed Ali Alzeyoudi (United Arab Emirates), Alberto Oteo (United Kingdom of Great Britain and Northern Ireland), Kerry Eglinton (United Kingdom of Great Britain and Northern Ireland), Domician Mutayoba (United Republic of Tanzania (the)), Nicholas Wright (United States of America), Elisa Maria Cabrera (Uruguay), Khatam Djalalov (Uzbekistan), Alberto Alexander Matheus Melendez (Venezuela (Bolivarian Republic of)), Carlos Javier Capote (Venezuela (Bolivarian Republic of)), Elizabeth Pereira (Venezuela (Bolivarian Republic of)), Ronnet Chanda (Zambia), Anan Mohammad Hassan Theeb (State of Palestine), Mutaz Freidi (State of Palestine), Penny Garcia (Gibraltar), Rachel Netto (Gibraltar)

CONTENTS

INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE	12
ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT	26
ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS	40
SHIFTING POLICY AND RESEARCH	58

EXECUTIVE SUMMARY



INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE



KEY MESSAGE

One in every 17 people worldwide had used a drug in 2021, 23 per cent more than a decade earlier

FINDINGS

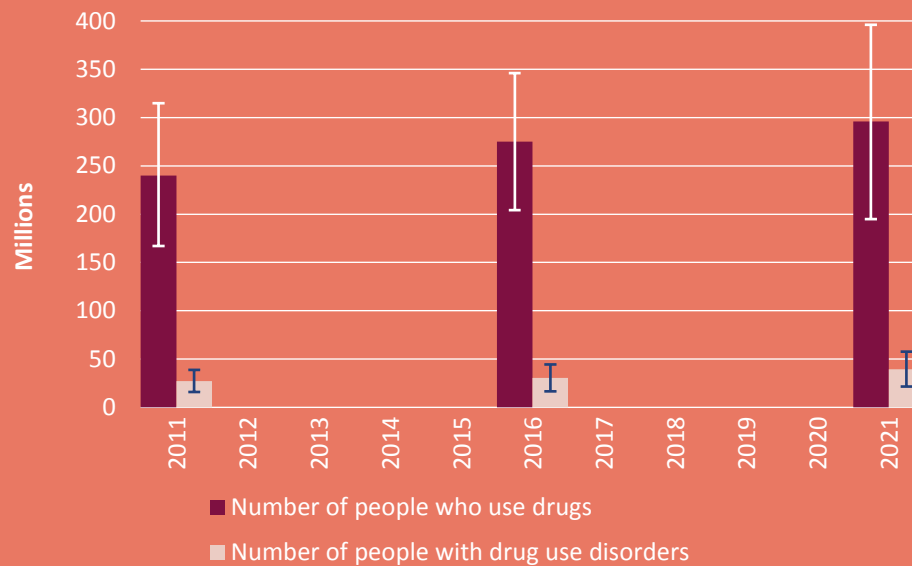
Drug use continues to be high worldwide. In 2021, 1 in every 17 people aged 15–64 in the world had used a drug in the past 12 months. The estimated number of users grew from 240 million in 2011 to 296 million in 2021 (5.8 per cent of the global population aged 15–64). This is a 23 per cent increase, partly due to population growth.

Cannabis continues to be the most used drug, with an estimated 219 million users (4.3 per cent of the global adult population) in 2021. Use of the drug is increasing and although globally cannabis users are mostly men (about 70 per cent), the gender divide is reducing in some subregions; women account for 42 per cent of cannabis users in North America.

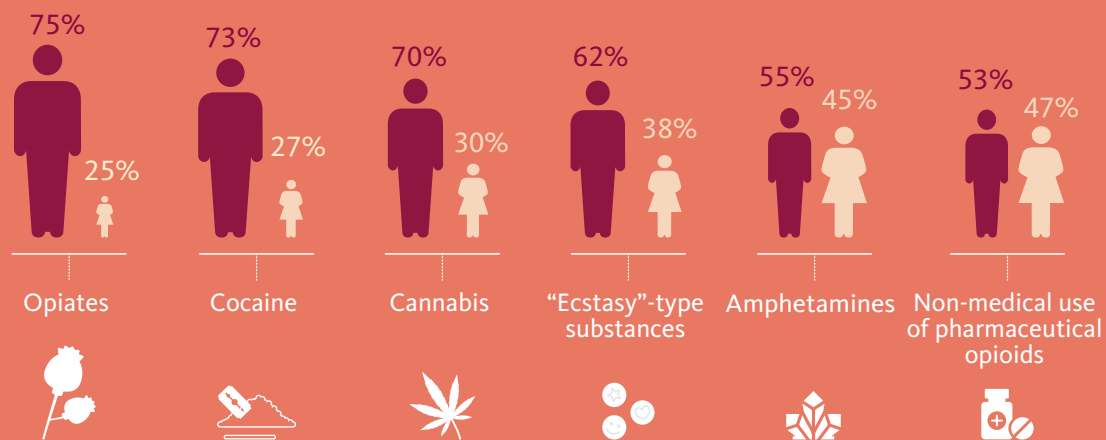
It is estimated that in 2021, 36 million people had used amphetamines, 22 million had used cocaine and 20 million had used “ecstasy”-type substances in the past year. The proportion of female users is higher in the case of amphetamine-type stimulants (45 per cent of users are women) and non-medical use of pharmaceuticals (between 45 and 49 per cent of users are women), whereas the highest share of men is found in users of opiates (75 per cent) and cocaine (73 per cent).

Opioids continue to be the group of substances with the highest contribution to severe drug-related harm, including fatal overdoses. An estimated 60 million people engaged in non-medical opioid use in 2021, 31.5 million of whom used opiates (mainly heroin).

GLOBAL NUMBER OF PEOPLE WHO USE DRUGS AND PEOPLE WITH DRUG USE DISORDERS, 2011–2021



USERS OF SELECTED DRUG GROUPS BY SEX



INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE



KEY MESSAGE

Opioids continue to be the main drug that impacts the global burden of disease whereas cannabis is reported by a large share of countries as the drug of most concern for drug use disorders

FINDINGS

Different drugs pose different burdens on health and health-care systems. Most drug use disorders are related to cannabis and opioids, which are also the drugs that lead most people to seek drug treatment, but opioids remain the most lethal drug.

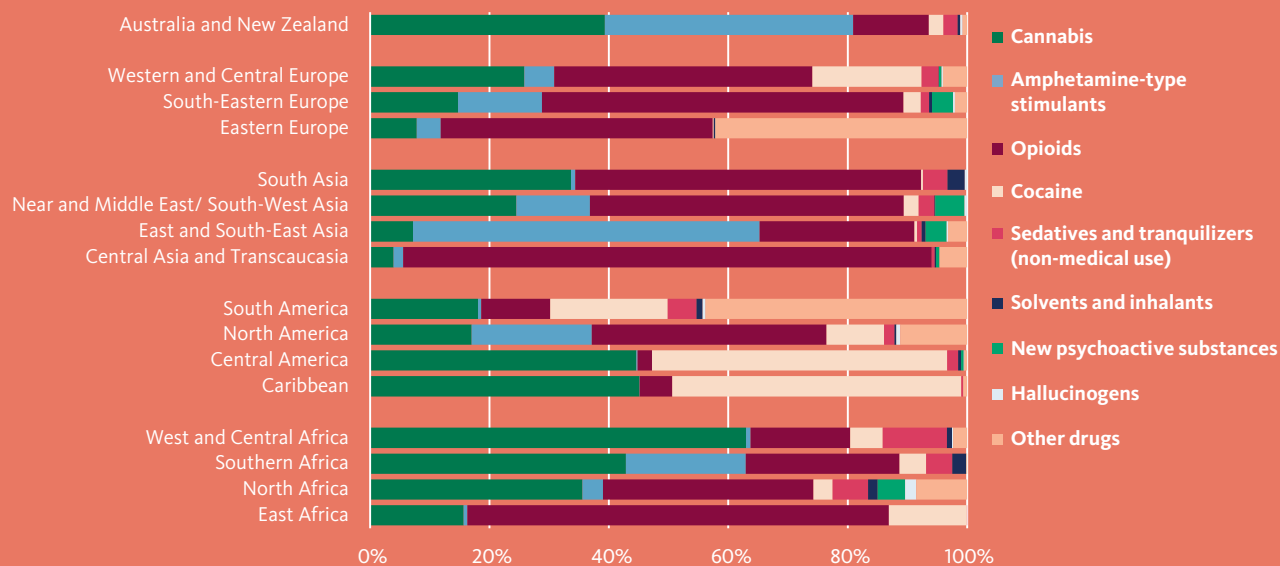
Among all countries that ranked the drugs leading to drug use disorders, the majority (46 per cent of countries) reported cannabis in first place, 31 per cent of countries reported opioids in first place, mainly heroin, whereas amphetamine-type stimulants, in particular methamphetamine, were reported in first place by 13 per cent of countries. The ranking in each country is determined mainly by two factors: prevalence of use and dependence potential.

There are clear regional differences in the primary drug reported by people entering drug treatment: in most of Europe and most of the subregions of Asia, opioids are the most frequent primary drug of people in drug treatment, whereas in Latin America it is cocaine, in parts of Africa it is cannabis, and in East and South-East Asia it is methamphetamine.

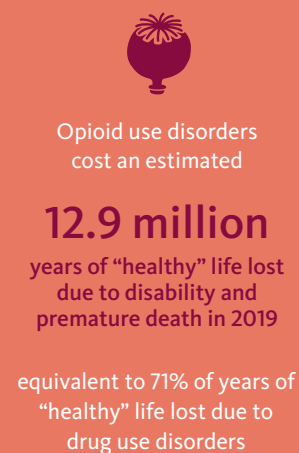
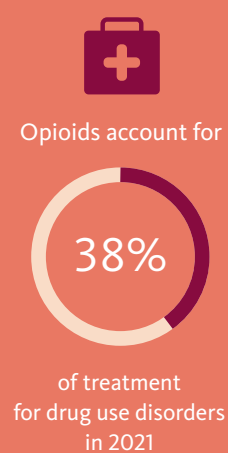
Opioids remain, however, the leading cause of deaths in fatal overdoses. Opioids accounted for nearly 70 per cent of the 128,000 deaths attributed to drug use disorders in 2019. Opioid use disorders also accounted for the majority (71 per cent of the 18 million healthy years of life lost owing to premature death and disability in 2019.



PRIMARY DRUG DISTRIBUTION OF PEOPLE IN DRUG TREATMENT, BY (SUB)REGION, AT GLOBAL LEVEL, 2021



GLOBAL HARM DUE TO OPIOID DISORDERS



INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE



KEY MESSAGE

New data put the global estimate of people who injected drugs in 2021 at 13.2 million, 18 per cent higher than in 2020

FINDINGS

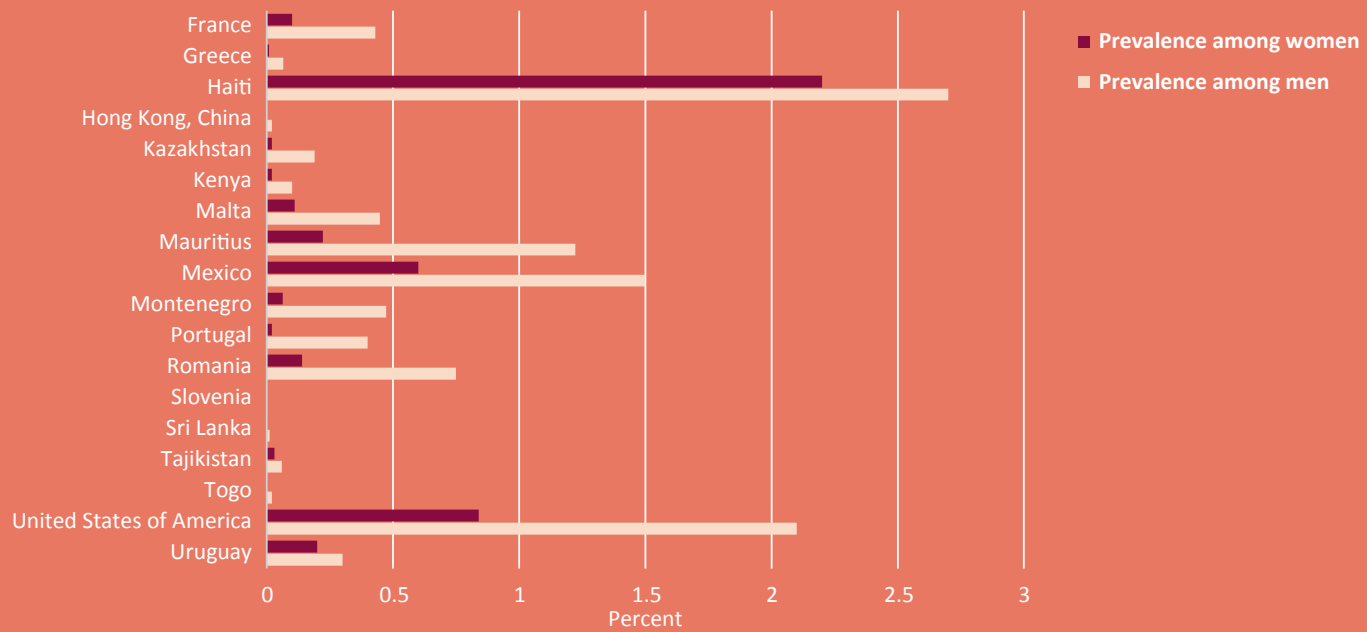
An estimated 13.2 million people were injecting drugs in 2021. This estimate is 18 per cent higher than in 2020 (11.2 million). This increase is due to newly available estimates in the United States of America and in some other countries. Eastern Europe (1.3 per cent of the adult population) and North America (1.0 per cent) remain the two subregions with the highest estimated prevalence of people who inject drugs, and, in absolute terms, North America now has the highest number of individuals that report injecting drugs, ahead of East and South-East Asia.

The risk of acquiring HIV is 35 times higher for those who inject drugs than for those who do not inject drugs. The joint UNODC, WHO, UNAIDS and World Bank global estimate for people who inject drugs living with HIV is nearly 12 per cent, so 1.6 million people (1 in every 8 people) injecting drugs is living with HIV. South-West Asia (29.3 per cent) and Eastern Europe (25.4 per cent) are the two subregions with the highest prevalence of HIV among people who inject drugs.

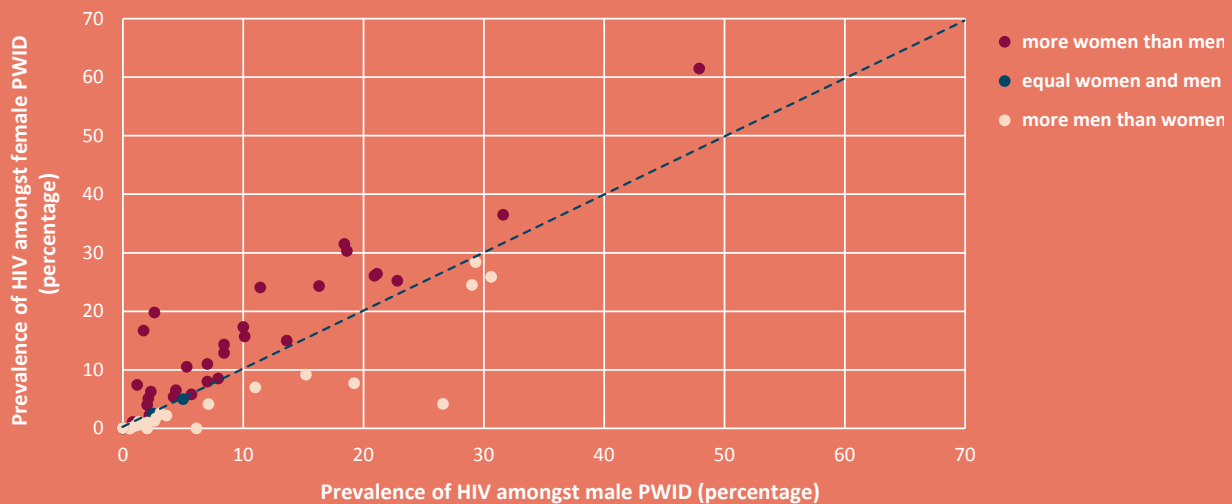
Injecting drug use continues to be an important facilitating driver of the global epidemic of hepatitis C, with WHO estimating that 23 per cent of new hepatitis C infections are attributable to unsafe drug injection. Based on the joint UNODC, WHO, UNAIDS and World Bank global estimates, every second person injecting drugs is living with hepatitis C (an estimated 6.6 million people). Overall, liver diseases attributed to hepatitis C account for more than half the deaths attributed to the use of drugs. In the decade 2010–2019 there was a 13 per cent increase in the number of healthy years of life lost due to disability and premature death caused by liver disease attributed to hepatitis C among people who use and inject drugs.

As is the case with the use of drugs, there are more men than women injecting drugs. Men are 5 times more likely than women to inject drugs (based on limited data from 18 countries), whereas women who inject drugs are 1.2 times more likely than men to be living with HIV (based on data from 58 countries). Women who inject drugs are likely to have a male intimate partner who initiated them into drug use; they are also likely to ask their male partner to inject them. As a result, women are more likely to be exposed to higher risk for sexual transmission of infections, also through sex work and their increased vulnerability to abuse from law enforcement officers and intimate partners, and to be the victim of physical assault or rape.

PREVALENCE OF PEOPLE WHO INJECT DRUGS BY SEX, 2021 OR LATEST DATA



PREVALENCE OF HIV AMONG PEOPLE WHO INJECT DRUGS BY SEX AND BY COUNTRY, 2021 OR LATEST DATA



INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE



KEY MESSAGE

Large inequalities remain in the availability of pharmaceutical opioids for medical consumption

FINDINGS

Large inequalities remain in the availability of internationally controlled opioids for medical consumption. Overall, there is a 40-fold difference in the availability of opioids per capita for pain management and palliative care between high-income and low- and middle-income countries. Some 86 per cent of the world's population live without adequate access to pharmaceutical opioids for pain relief and care.

Nevertheless, some progress has been made in recent years, showing some increases in availability in low- and middle-income countries. Overall progress was also made with regard to the availability of methadone and buprenorphine over the last two decades, two opioids which are used not only as analgesics but also as opioid agonist medication in the treatment of opioid use disorders.

Despite the positive developments there remains an extremely wide diversity in the availability of opioids for medical purposes worldwide. Although a number of countries in North America, Oceania and Western Europe continue to have high levels of availability, most other countries have extremely low levels of availability of opioids for medical purposes, notably countries in Africa and Asia.



AMOUNT OF OPIOIDS UNDER INTERNATIONAL CONTROL
(EXCLUDING PREPARATIONS) AVAILABLE FOR MEDICAL CONSUMPTION,
BY COUNTRY INCOME LEVEL GROUP, 2017 AND 2021



INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE



KEY MESSAGE

Barriers to treatment remain, especially for women

FINDINGS

An estimated 39.5 million people worldwide were suffering from drug use disorders in 2021, but only 1 in 5 people with drug use disorders received drug treatment. The Covid-19 pandemic has aggravated the treatment gap. Of the 46 countries regularly reporting to UNODC data on people in drug treatment, about 40 per cent registered a decline in the number of people in drug treatment during the COVID health emergency as compared to previous years. Data for 2021 show further declines.

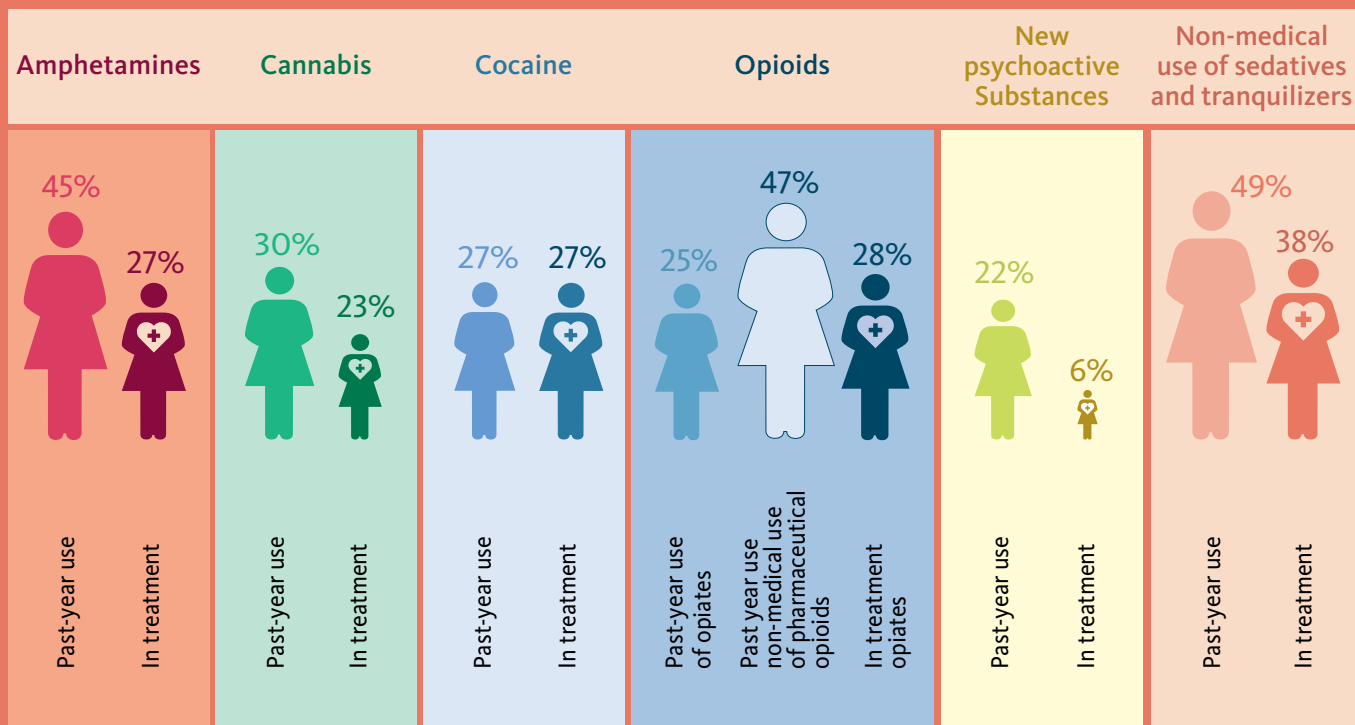
Barriers in accessing treatment are multiple but women are most affected.

Women who use drugs tend to progress to drug use disorders faster than men but they continue to be underrepresented in drug treatment. This gap is particularly high for women who use amphetamine-type stimulants. Almost 1 in 2 users of amphetamine-type stimulants is a woman but only 1 in 4 people in treatment is a woman.

In addition to the family expectations and responsibilities that they face, women may experience further barriers in accessing treatment that include increased fear of legal sanctions, increased social stigma, lack of childcare and fear of losing custody of children while in treatment. Women who use drugs and are also members of certain population groups, for example, trauma and violence survivors, people with comorbidities, sex workers, prisoners or members of ethnic minorities, face more severe vulnerabilities, including higher levels of stigma and discrimination.



PROPORTION OF WOMEN AMONG DRUG USERS AND
IN PEOPLE IN DRUG TREATMENT, 2021



INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE



KEY MESSAGE

Liver diseases attributed to hepatitis C are a main cause of drug-related deaths, whereas opioids account for most overdose deaths

FINDINGS

Deaths related to the use of drugs were estimated at about 500,000 in 2019, 17.5 per cent more than in 2009. Liver diseases attributed to hepatitis C are a major cause of drug-related deaths, accounting for more than half of the total number of deaths attributed to the use of drugs. Drug overdoses account for a quarter of drug-related deaths.

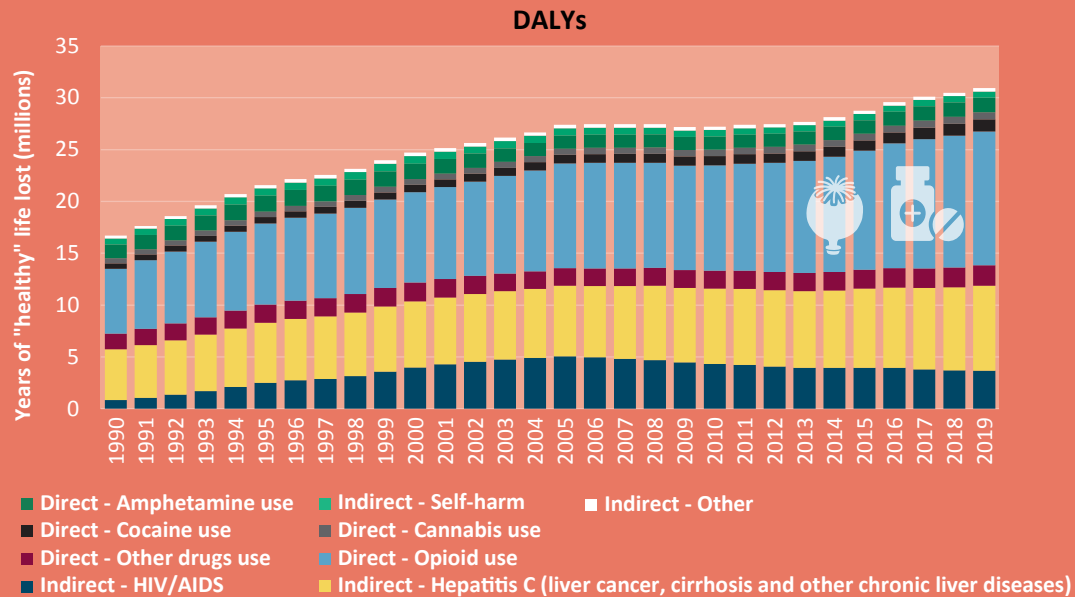
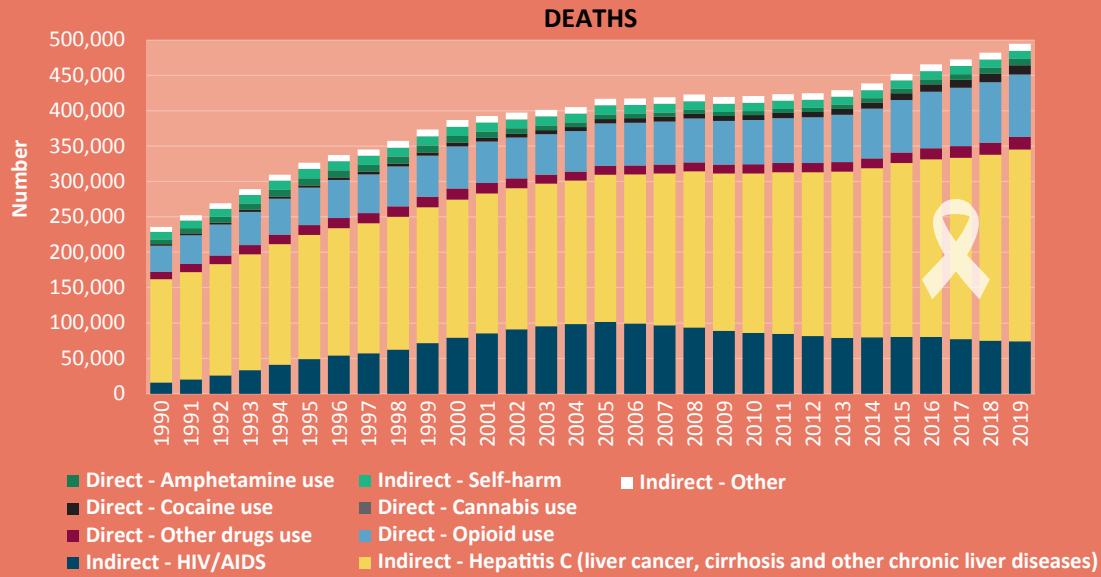
Opioids continue to account for the most severe drug-related harm, including fatal overdoses, when used non-medically. At the global level, two thirds of direct drug-related deaths are due to opioids, and in some subregions the proportion can be as high as three quarters of such deaths.

More men than women die of drug overdose but excess mortality risk in women who use drugs is typically higher than in men (mainly owing to lower mortality rates among women of corresponding age in the general population).

Fortunately, the past decade has seen a decline in deaths attributed to HIV/AIDS among people who use drugs.



DEATHS AND YEARS OF HEALTHY LIFE (DALYS) ATTRIBUTABLE TO THE USE OF DRUGS, 1990-2019



INEQUALITIES EXACERBATING HEALTH PROBLEMS ASSOCIATED WITH DRUG USE



KEY MESSAGE

Young people are more vulnerable to drug use than adults are

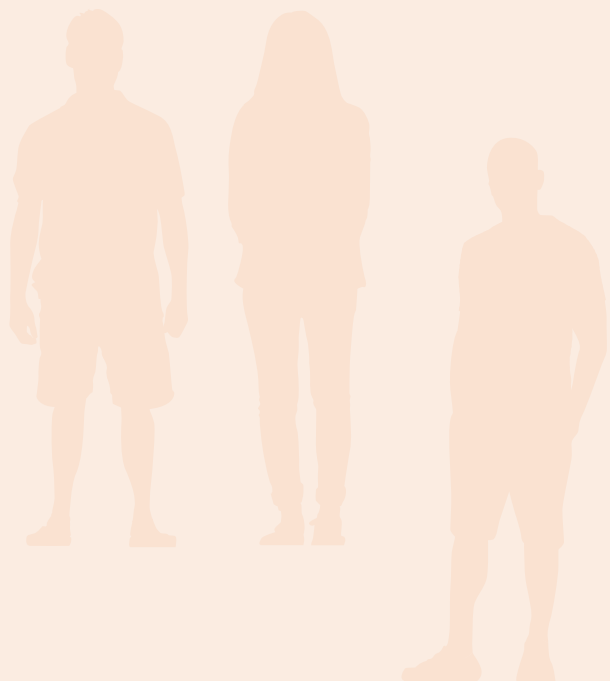
FINDINGS

In 2021, 5.3 per cent of 15–16-year-olds worldwide (13.5 million individuals) had used cannabis in the past year. The adolescent brain is still developing and drug use can have long-term negative effects. Early drug use initiation can lead to faster development of dependence than in adults and other problems in adulthood.

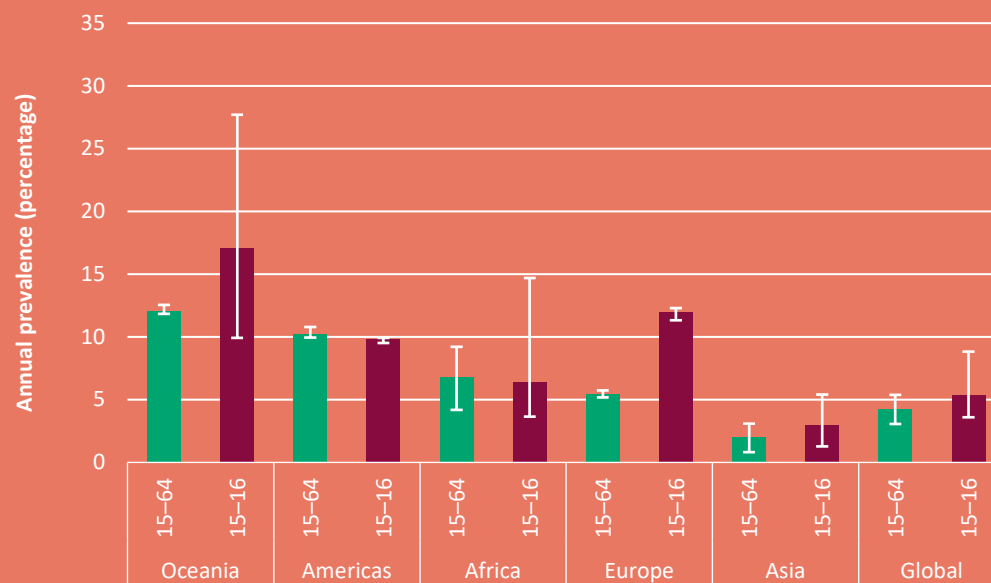
The use of cannabis among 15–16-year-olds varies by region, from less than 3 per cent in Asia to over 17 per cent in Oceania but in most regions the proportion of adolescents using the drug is higher than in the general population aged 15–64. Similar prevalence in the two age groups was only recorded in Africa, where the population is young, and in the Americas, where until recently use among adolescents was higher than that among the general population. Recent surveys during the coronavirus disease (COVID-19) pandemic from North America have recorded a significant decrease in cannabis use (and the use of some other drugs) among adolescents. This decline may, however, relate to changes in living conditions and drug-use patterns during the COVID-19 pandemic.

The use of new psychoactive substances is generally higher among school students than among the general population. In the long term, however, and where data are available (mainly in high income countries), they show that the use of new psychoactive substances other than ketamine appears to be stable or declining among young people.

In South America, more than half of those in drug treatment are under 25 years old and in Africa 70 per cent are under 35.



GLOBAL AND REGIONAL USE OF CANNABIS AMONG PEOPLE AGED 15-16,
AND AMONG THE GENERAL POPULATION AGED 15-64
(2021 OR MOST RECENT YEAR FOR WHICH DATA ARE AVAILABLE)



ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT



KEY MESSAGE

Drug production and trafficking are exacerbating an array of other criminal economies in the Amazon Basin that have a negative impact on the environment and on communities

FINDINGS

Parts of the Amazon Basin are at the intersection of multiple forms of organized crime that are accelerating environmental devastation, with severe implications for the security, health and well-being of the population across the region.

Drug cultivation, trafficking and crimes that affect the environment are surging in the Amazon Basin, due in part to an abundance of natural resources alongside a limited State presence, persistent corruption and structural factors related to informality, inequality and unemployment. Drug trafficking constitutes just one of the multiple illicit activities in which organized criminal groups are involved, together with land-grabbing, illegal logging, illegal mining, trafficking in wildlife and other crimes that affect the environment across the region. These organized criminal networks are not just exacerbating deforestation but are also accelerating convergent crime ranging from corruption, tax and financial crimes, to homicide, assault, sexual violence, exploitation of workers and minors, and the victimization of those defending the environment and Indigenous Peoples.

The direct impact of coca cultivation on deforestation is minimal but indirectly it can act as a catalyst for deforestation, although the deforestation observed in the Amazon Basin is largely driven by other factors. “Narco-deforestation” – the laundering of drug trafficking profits into land speculation, the agricultural sector, cattle ranching and related infrastructure – is posing a growing danger to the world’s largest rainforest.

Convergent crimes, such as protection and extortion rackets, money-laundering and corruption, have turned tri-border areas in the Amazon Basin into violent hotspots, with the presence of diverse organized criminal groups that are simultaneously engaged in cocaine production and trafficking, and natural resource exploitation.

Indigenous Peoples and other minorities are disproportionately affected by the criminal nexus in the Amazon Basin, as they suffer forcible displacement, mercury poisoning and other health-related impacts, as well as increased exposure to violence and victimization.

THE ILLICIT DRUG ECONOMY ACCELERATES OTHER
ILLEGAL MARKETS THAT ALSO HARM
THE ENVIRONMENT AND HUMAN RIGHTS



ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT



KEY MESSAGE

The world is currently experiencing a prolonged surge in both supply and demand of cocaine

FINDINGS

The world is currently experiencing a prolonged surge in both supply and demand of cocaine, which is now being felt across the globe and is likely to spur the development of new markets beyond the traditional confines.

The current global cocaine market is the outcome of a combination of demand- and supply-side factors. On the supply side, coca bush cultivation covered 315,500 ha in 2021, representing a marked increase from 2020, and total cocaine production reached 2,304 tons, which was the seventh consecutive year-on-year increase. Both are record highs. On the demand side, the population of cocaine users, estimated at 22 million in 2021, has been growing gradually but steadily, driven by global population growth and compounded by increasing prevalence rates in the last two decades (from 0.32 per cent of the general population in 2004 to 0.42 per cent in 2021).

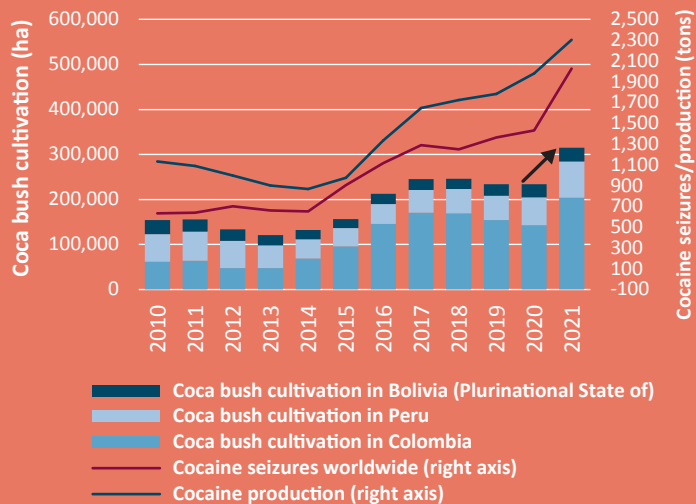
The criminal actors involved, including both groups at source and those orchestrating trafficking to destination markets, have diversified in line with the dynamics of competition, specialization and collaboration, ultimately leading to more efficient supply chains, in particular to Western and Central Europe, a region which in recent years afforded space for growth and strong incentives for traffickers. The developments in actors, routes and modalities allowed supply to readjust to demand, with a notable turning point around 2015, following declines between 2006 and 2014.

Cocaine seizures have also grown significantly, reaching 2,026 tons (unadjusted for purity) in 2021. In the long term, the growth in seizures has outpaced that in production, and therefore to a certain extent contained the net supply available for consumption.

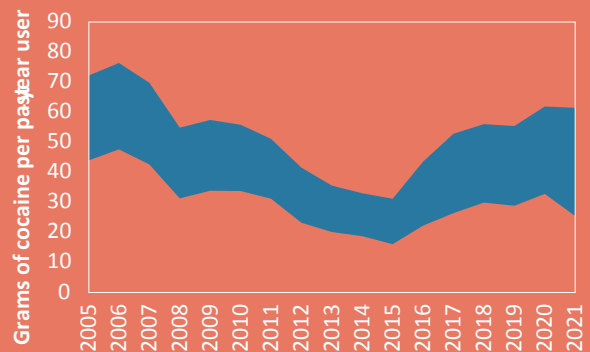
Although the global cocaine market continues to be concentrated in the Americas and in Western and Central Europe (with very high prevalence also in Australia), in relative terms it appears that the fastest growth, albeit building on very low initial levels, is occurring in developing markets found in Africa, Asia and South-Eastern Europe.



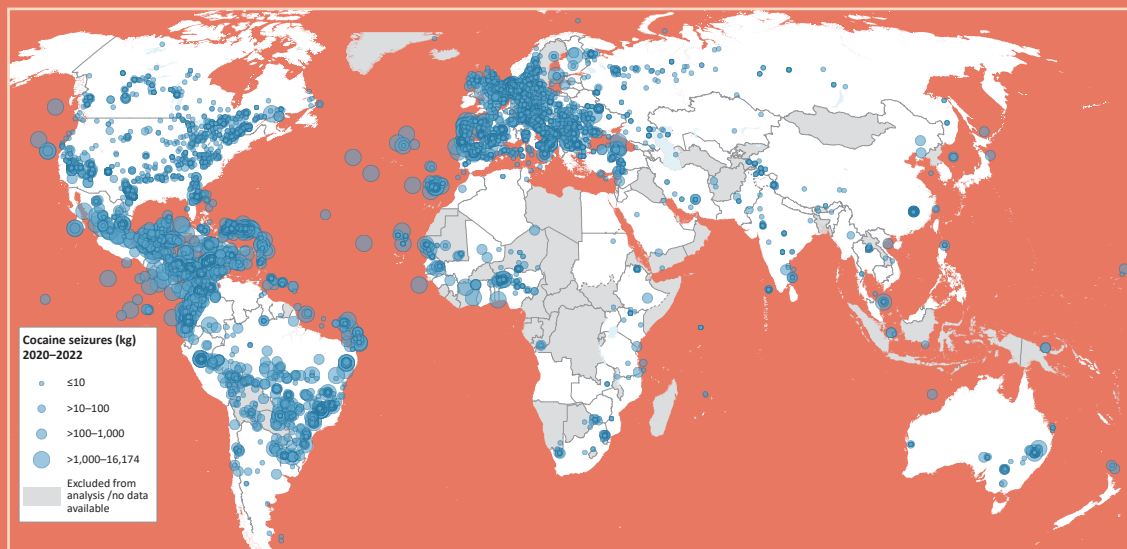
**GLOBAL CULTIVATION OF COCA BUSH,
COCAINE SEIZURES AND COCAINE PRODUCTION**
2010–2021



**ESTIMATED SUPPLY OF COCAINE AVAILABLE
FOR CONSUMPTION (NET OF SEIZURES, PURITY-ADJUSTED)**
PER PAST-YEAR COCAINE USER WORLDWIDE (RANGE), 2005–2021



SIGNIFICANT INDIVIDUAL COCAINE SEIZURES AT THE GLOBAL LEVEL, 2020–2022



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. 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.

ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT



KEY MESSAGE

Methamphetamine continues to expand beyond traditional markets

FINDINGS

Global methamphetamine manufacture, trafficking and use remains concentrated in East and South-East Asia and North America, with the two subregions accounting for almost 90 per cent of methamphetamine seized globally in the period 2017–2021.

Based on seizure data, trafficking in these traditional markets appears to have stabilized at a high level in 2021 but expanded elsewhere. An increasing number of countries in other subregions have been reporting seizures of the drug, with marked increases in recent years in quantities seized in South-West Asia and the Near and Middle East, South-East Africa, and West Africa.

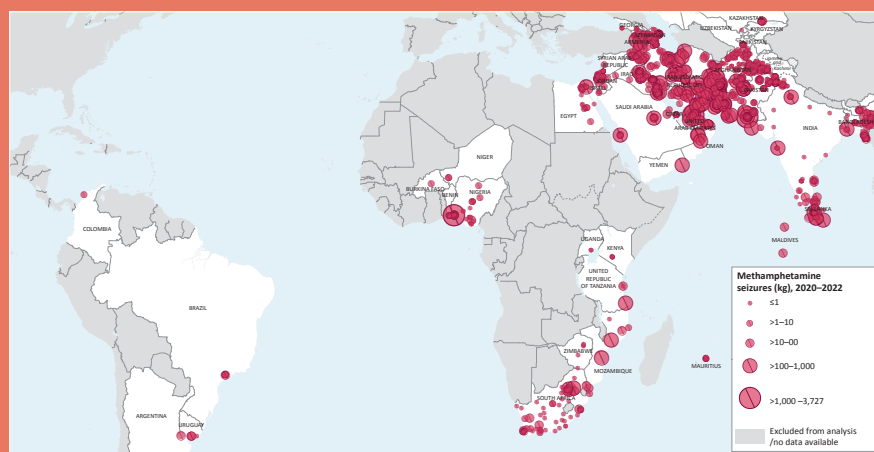
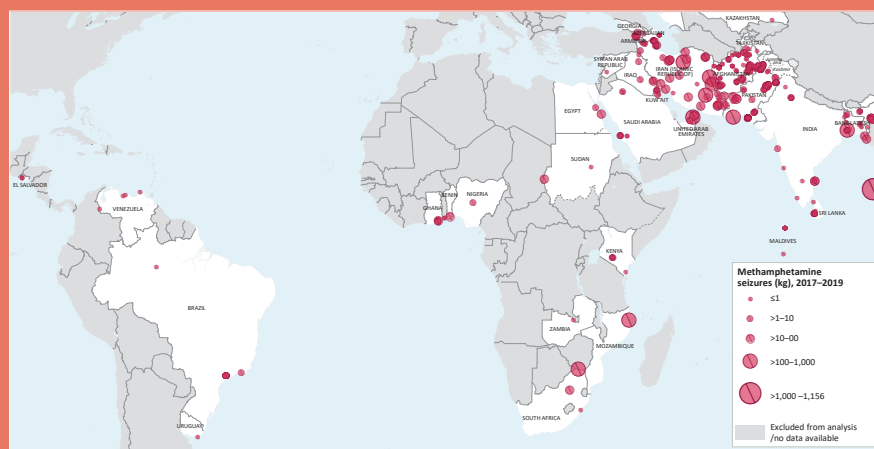
Manufacture of methamphetamine is no longer restricted to the established markets, with the detection of clandestine methamphetamine laboratories in South-West Asia, South Asia and Africa. There are increasing signs of large methamphetamine manufacture in Afghanistan and expanded trafficking through South Asia for markets in Oceania, Europe and elsewhere.

Precursors other than ephedrine and pseudoephedrine, which are typically used in the subregion for manufacturing methamphetamine, such as 1-phenyl-2-propanone (P-2-P) and its precursors, have been detected in South-East Asia, which is a possible sign that criminals are adapting to overcome controls on ephedrine and pseudoephedrine.

In recent years, consumption of methamphetamine increased in South-Eastern Europe, whereas data for Western and Central Europe suggest a stabilization in 2020 and 2021.



SIGNIFICANT INDIVIDUAL METHAMPHETAMINE SEIZURES IN NON-TRADITIONAL MARKETS, 2017–2022



The boundaries and names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. 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.

ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT



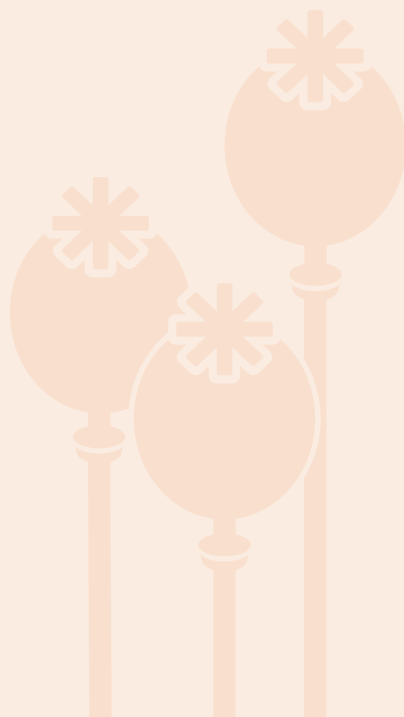
KEY MESSAGE

Although global opium poppy cultivation increased markedly in 2022, the drug ban in Afghanistan may reverse the trend for 2023

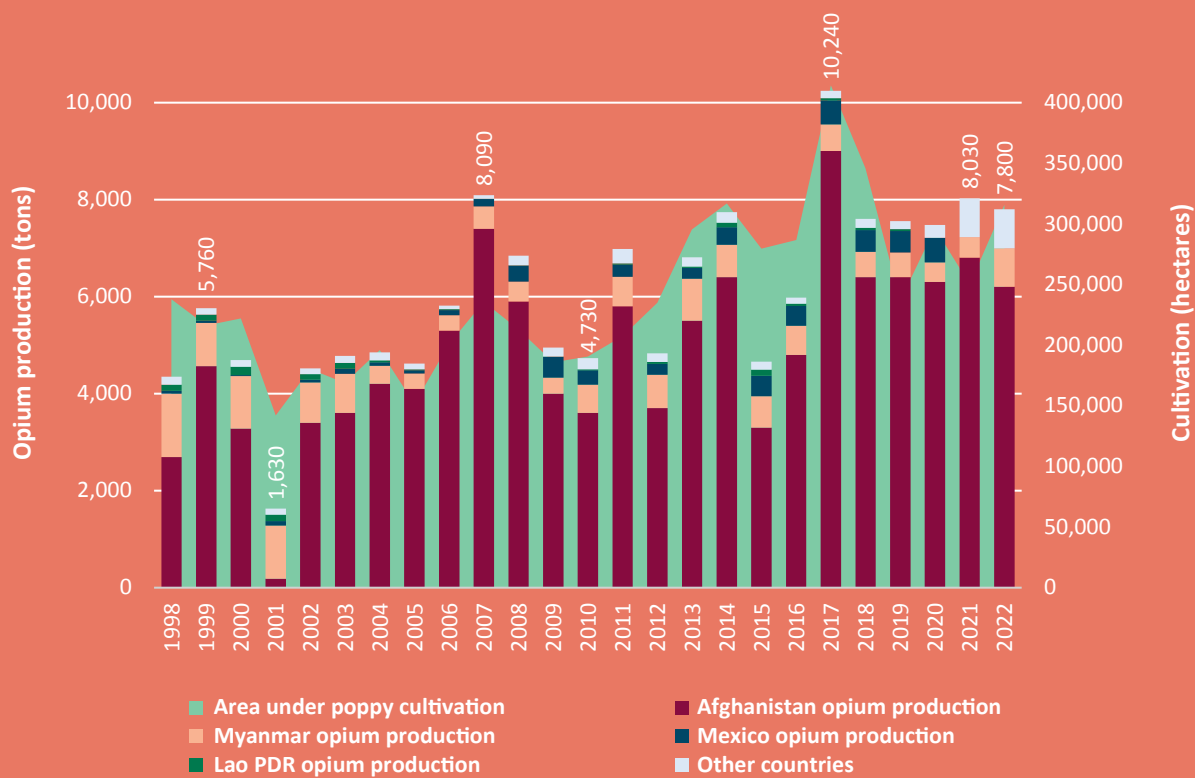
FINDINGS

The bulk of global illicit opium production continues to take place in a limited number of countries, notably in Afghanistan. In 2022, production in Afghanistan reached 6,200 tons, equivalent to 80 per cent of the estimated global production (7,800 tons), and was followed in volume by Myanmar (795 tons) and Mexico (504 tons – latest data available for 2019/2020).

Although the global area under opium poppy cultivation increased by more than 26 per cent from the previous year, primarily linked to increases reported from Afghanistan (32 per cent) and Myanmar (33 per cent), global opium production declined marginally (3 per cent) over the same period. This was due to less opium being produced in Afghanistan (10 per cent less) as a consequence of droughts in early 2022. The 2023 opium harvest in Afghanistan may see a drastic drop following the 2022 national drug ban, with possible global consequences. Early reports suggest reductions in poppy cultivation in Afghanistan. Time is needed to determine whether trends hold and the effect that may have on global heroin markets, especially those sourced by opium from Afghanistan.



GLOBAL ILLICIT OPIUM POPPY CULTIVATION AND PRODUCTION OF OPIUM, 1998–2022



ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT



KEY MESSAGE

Illegal production of drugs in Afghanistan continues to change, with illicit manufacture of methamphetamine increasing

FINDINGS

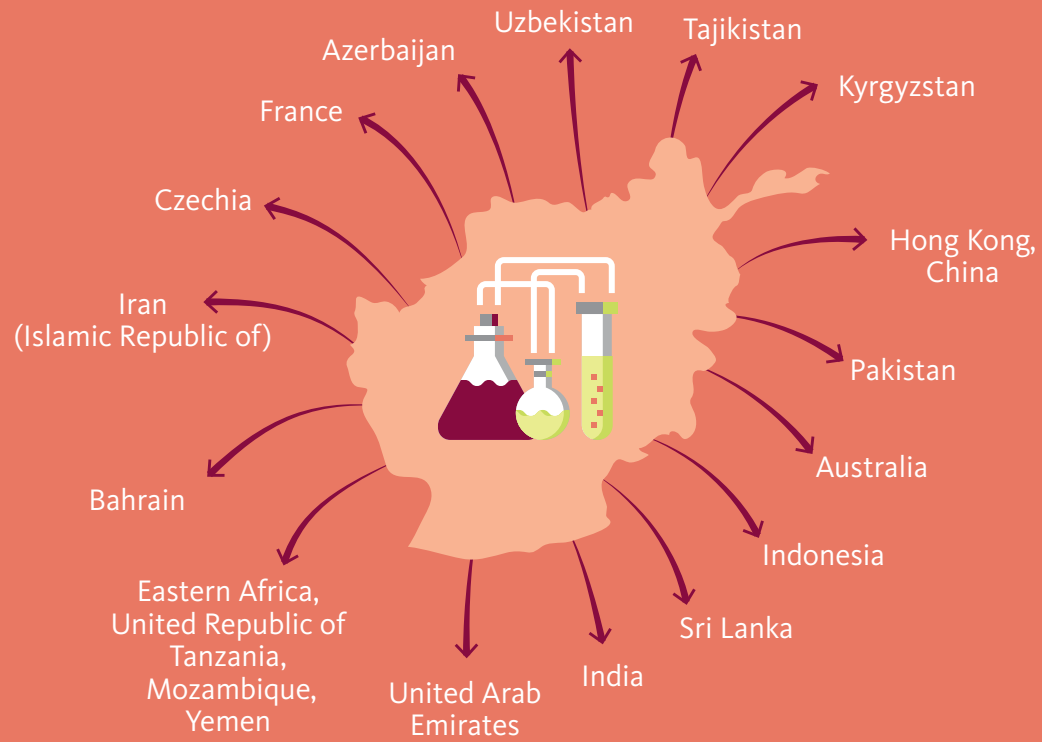
The recently announced ban on narcotic production in Afghanistan may be changing the drug supply in that country.

Continued reports and seizure events involving methamphetamine originating in Afghanistan suggest that the drug economy in that country is no longer exclusively dominated by illicit cultivation and trafficking of opiates. Questions remain regarding the linkages between illegal manufacture of heroin and of methamphetamine and whether the two markets will develop in parallel or whether one will substitute the other.

Ongoing changes in Afghanistan are likely to have far-reaching effects on global drug markets, as the country has remained a key source of heroin for world markets for decades. Sharp disruptions in the supply of poppy and heroin could have severe effects for those who use drugs, as well as for impoverished farmers who have come to rely on the illegal opiate economy.



DESTINATION OF METHAMPHETAMINE
ORIGINATING IN AFGHANISTAN, 2019–2022



ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT



KEY MESSAGE

A complex and dynamic relationship exists between drugs and conflict

FINDINGS

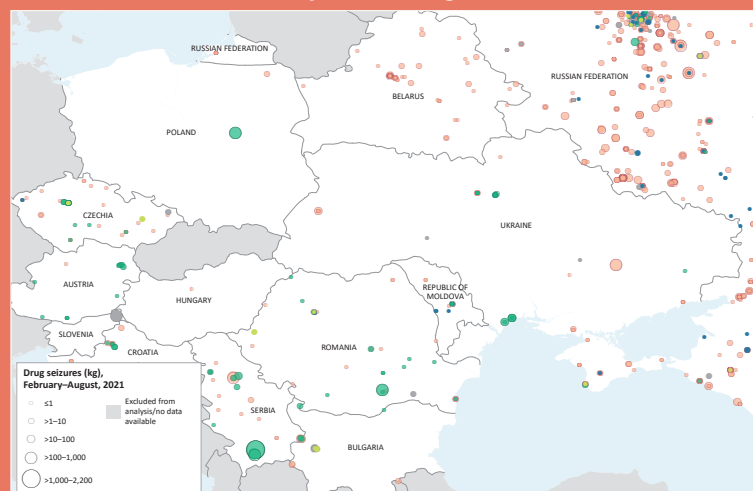
Illicit drug economies can flourish in situations of conflict and weak rule of law and can, in turn, prolong or fuel conflict. When conflicts have erupted in areas with sizeable drug production or trafficking activities, the parties to the conflict have exploited them, either through direct involvement or through the “taxation” of such activities. In some conflict areas, the drug economy and instability are linked through a vicious cycle in which weak rule of law facilitates the expansion of the drug economy, which can, in turn, provide financial resources for maintaining or expanding the conflict. Conflicts may, however, also disrupt traditional commercial trade and travel patterns, upsetting the illegal flow of drugs that are often concealed in legitimate channels.

The links between drugs and instability in Haiti and the Sahel are examples of drug markets that fuel and have been fuelled by the violence and the governance vacuum that characterize conflict situations. In Ukraine, the current armed conflict seems to have disrupted existing and emerging trafficking routes for heroin and cocaine but there are signs that it could also trigger an expansion of the manufacture of and trafficking in synthetic drugs, given the know-how that existed in the country before the conflict and the large markets for synthetic drugs developing in the region.

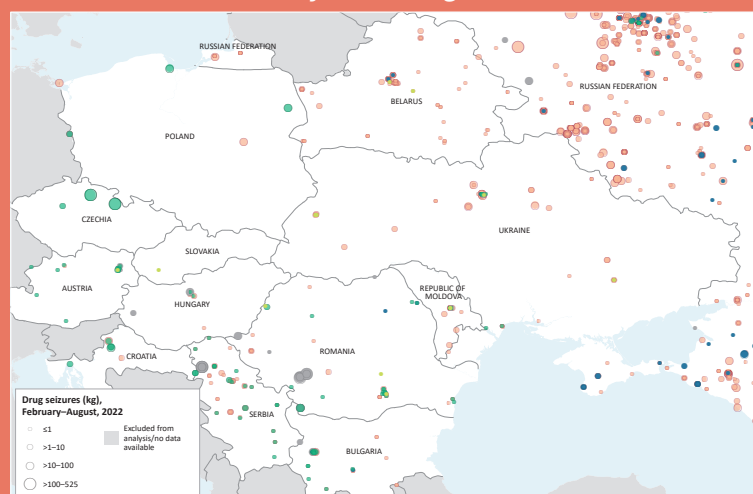


SIGNIFICANT INDIVIDUAL SEIZURES OF DRUGS OTHER THAN HEROIN IN UKRAINE AND ITS VICINITY, 2021–2022

February 2021–August 2021



February 2022–August 2022



● Cocaine-type ● Opioids excluding opiates ● Synthetic drugs and New Psychoactive Substances ● Hallucinogens ● Other drugs/substances

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

ILLICIT DRUG ECONOMIES, CONVERGING CRIMES AND CONFLICT



KEY MESSAGE

Forcibly displaced populations suffer an elevated vulnerability to mental health and substance use disorders

FINDINGS

Humanitarian emergencies lead to large numbers of people being forced to leave their home, or even country, and becoming displaced, either temporarily or for a protracted period. By mid-2022, the number of people who had been forcibly displaced worldwide had exceeded 100 million, which was more than double the nearly 43 million who were forcibly displaced a decade earlier.

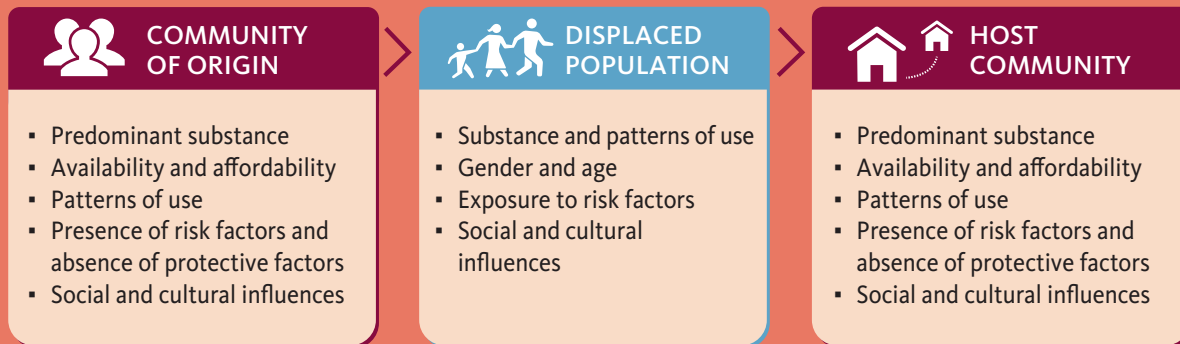
People who are forcibly displaced are among marginalized groups who suffer acute physical and psychological trauma, and elevated levels of socioeconomic vulnerability. As a result, they are likely to suffer elevated levels of social and mental health problems, as well as an increased vulnerability to substance use disorders. Anxiety, depression and post-traumatic stress disorder are common among displaced people.

Among displaced populations, the initiation of, or transition to, harmful use of substances is complex. The extent and pattern of substance use is not necessarily dissimilar from that of the general population, but it often needs to be addressed in the context of limited health infrastructures and constrained social and economic resources.

Availability and accessibility of mental health services, including drug treatment services, remain a challenge for displaced people, who may face stigma and discrimination when accessing local services.



FACTORS THAT INFLUENCE SUBSTANCE USE AND PATTERNS OF USE AMONG DISPLACED PEOPLE



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

New cannabis-related substances are appearing on the drugs market

FINDINGS

Cannabis continues to be the most used drug worldwide. Products for its non-medical use have diversified over the last two decades, in particular in geographical locations which have legalized cannabis supply for non-medical use.

Over the last few years, but mainly since 2020, there has been a new trend of synthesis of cannabinoids mainly from a non-psychoactive substance occurring in the cannabis plant, namely cannabidiol (CBD). These cannabinoids, possibly developed to evade drug laws, have been sold in various forms (mainly edibles, vaping cartridges and sprayed on low-tetrahydrocannabinol (THC) cannabis) for non-medical use. The most common are delta-8-THC and hexahydrocannabinol (HHC). Although these substances occur naturally in trace amounts and were first described in literature decades ago, their use in humans has not been studied. Early data suggest that their availability is growing fast; they are becoming popular in some locations in the United States (especially delta-8-THC) and in Western Europe (especially HHC). Delta-8-THC has already led to adverse effects requiring medical attention.

By 2011, a new strain of cannabis that was reported to be genetically modified and to contain high levels of THC had appeared in Colombia under the name of “creepy”, and has since appeared in other countries in South America under similar names. Data remain scarce, however, preventing full understanding of the THC content and harm that this type of cannabis product may pose to health.



HARM TO HEALTH RELATED TO *DELTA*-8-THC RECORDED IN THE UNITED STATES FROM 1 DECEMBER 2020 TO 28 FEBRUARY 2022

Food and Drug Administration

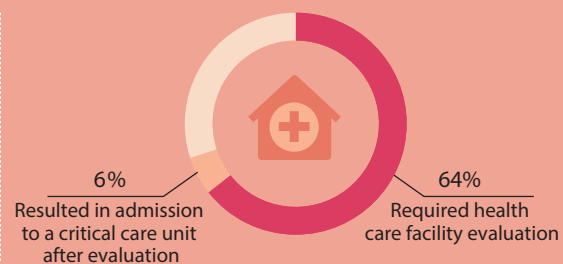
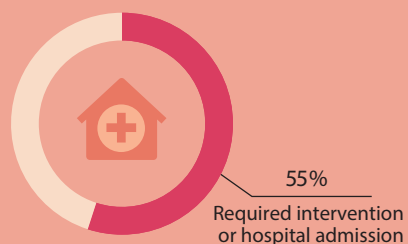
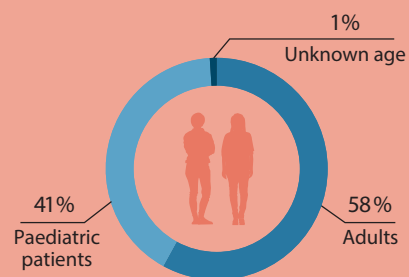
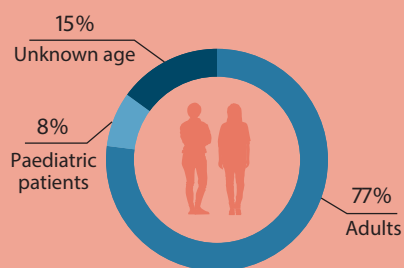
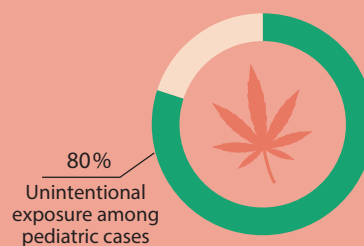
104 reports of adverse events

Most frequently:

- > Hallucinations
- > Vomiting
- > Tremors
- > Anxiety
- > Dizziness
- > Confusion
- > Loss of consciousness

National poison control centres

2,362 exposure cases



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

Synthetic drugs shifting drug markets and supply chains

FINDINGS

Without the need for plant-based inputs that require large tracts of land in territories with weak rule of law, synthetic drugs only require cheap chemical inputs that can be easily sourced. Illegal manufacture of synthetic drugs is expanding in low- and middle-income countries, including in countries with strong rule of law. A growing number of laboratories have been detected in Central Asia, South-East Asia, the Near and Middle East, Africa, Europe and North America, producing a range of stimulants, depressants and other novel dissociatives.

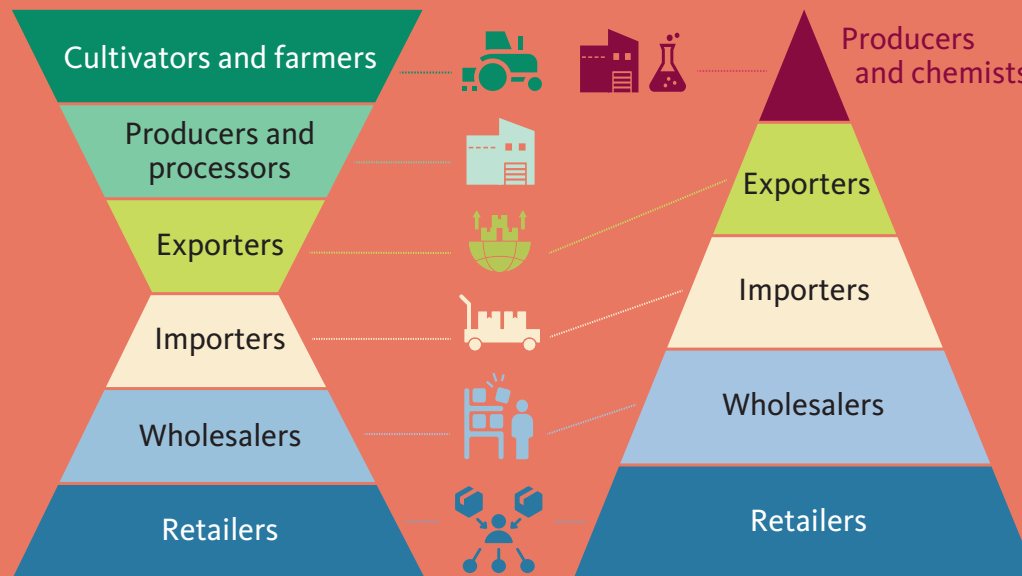
The expansion of means of communication to share and improve synthesis methods reduce barriers for criminals. Compared with plant-based drugs, the manufacture and trafficking of drugs of synthetic origin can alter the structure of the labour supply and shorten supply chains.

Synthetic drugs offer criminals several advantages, namely lower operational costs, fewer production impediments, and reduced risks of detection, interdiction and prosecution because they can be produced closer to destination. Supply reduction efforts may be increasingly challenged, as criminals employ new means of manufacture that are easier to conceal, use chemicals that fall outside of existing controls or access inputs within expanding chemical and pharmaceutical sectors where it becomes easier to conceal diversion. Synthesis of drugs offers additional flexibility in terms of having no fixed geography and much shorter production times. Interdiction of drugs may be less effective, as illegal manufacture can be relocated and product quickly replaced.

Consumers face growing challenges from synthetic drugs owing to the unknown pharmacology and harms of the drugs, lack of pharmacological treatments, therapies or antagonists, and an increasingly dangerous mix in retail markets, as shown by the growing numbers of tranquilizers, including novel benzodiazepines, found in the drug supply.



LABOUR SUPPLY FOR DRUGS
OF NATURAL AND SYNTHETIC ORIGIN



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

The opioid crisis in North America continues unabated, driven by unprecedented high number of drug overdose deaths

FINDINGS

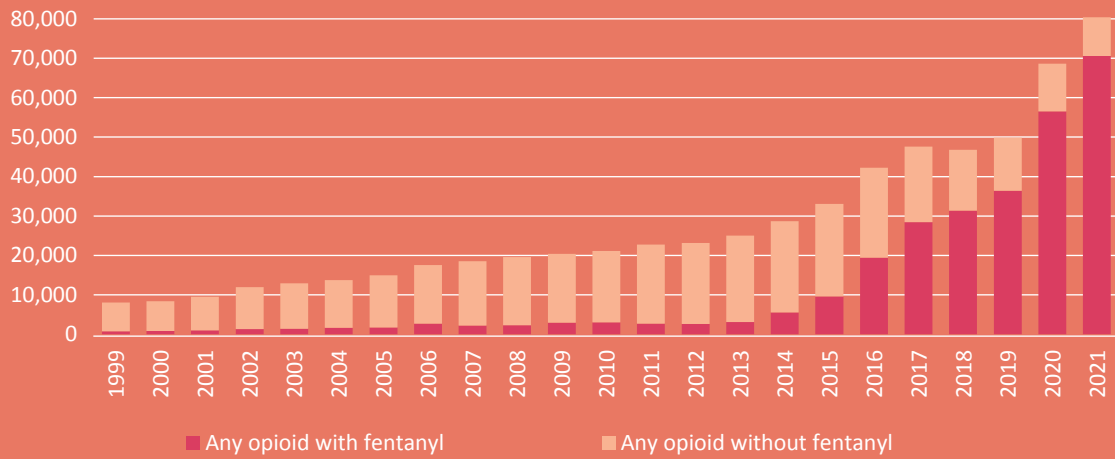
The opioid crisis in North America has not been associated with a sizeable increase in the number of opioid users but driven by overdose deaths, mainly attributed to the use of fentanyl.

In the United States in 2021, following a year-on-year trend of increase, there were more than 80,000 opioid overdose deaths. Most of those deaths, 70,000, were attributed to any pharmaceutical opioid with synthetic opioids (primarily fentanyl). Women constituted approximately 30 per cent of all those who died from an overdose and of those attributed to opioids in the United States.

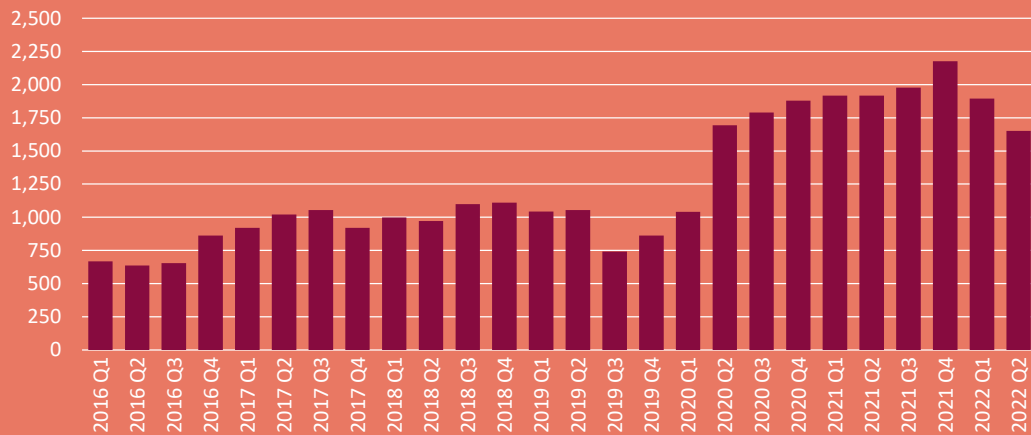
Canada has also been experiencing an increasing trend in drug overdose deaths related to the proliferation of synthetic opioids, mainly fentanyl. Fentanyl was found in 86 per cent of the samples from people who had died as a result of opioid overdose in the first half of 2021. In 2021 there were nearly 8,000 deaths in Canada that were attributed to opioids.



NUMBER OF OVERDOSE DEATHS INVOLVING OPIOIDS, UNITED STATES, 1999–2021



NUMBER OF OPIOID OVERDOSE DEATHS IN CANADA, BY QUARTER, 2016–2022



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

The other opioid crisis – the non-medical use of tramadol – continues to affect countries in parts of Africa and Asia

FINDINGS

Tramadol is a synthetic opioid used in pain management of moderate and severe pain, although it also has a mood enhancement effect. Administration of higher than therapeutic doses of tramadol leads to a similar dependence profile to that of morphine and other opioids.

Numerous countries in North, West and Central Africa, in the Near and Middle East and in South-West Asia have reported evidence of non-medical use of the drug. Significant misuse in some countries in other regions also occurs. The gender divide in the non-medical use of tramadol may be narrower than that for other drugs.

Although the drug can be diverted from the legal supply chain, seizures in the above-mentioned regions suggest that the tramadol used in the non-medical market is often a falsified product of higher dosage than the pharmaceutical product, sourced from abroad.

The problematic non-medical use of tramadol is visible in the high proportion of people entering drug treatment for tramadol use disorders in Egypt, Iraq, Nigeria and the United Arab Emirates. Significant numbers have also been reported in other countries, including Liberia, the Niger and Sierra Leone, indicating in some cases recent sharp increases in the demand for treatment for tramadol use disorders.



PEOPLE IN TREATMENT FOR TRAMADOL AND HEROIN USE DISORDERS IN THE COUNTRIES OF WEST AFRICA, 2016–2019



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

Ketamine could become a mainstream drug in some population groups

FINDINGS

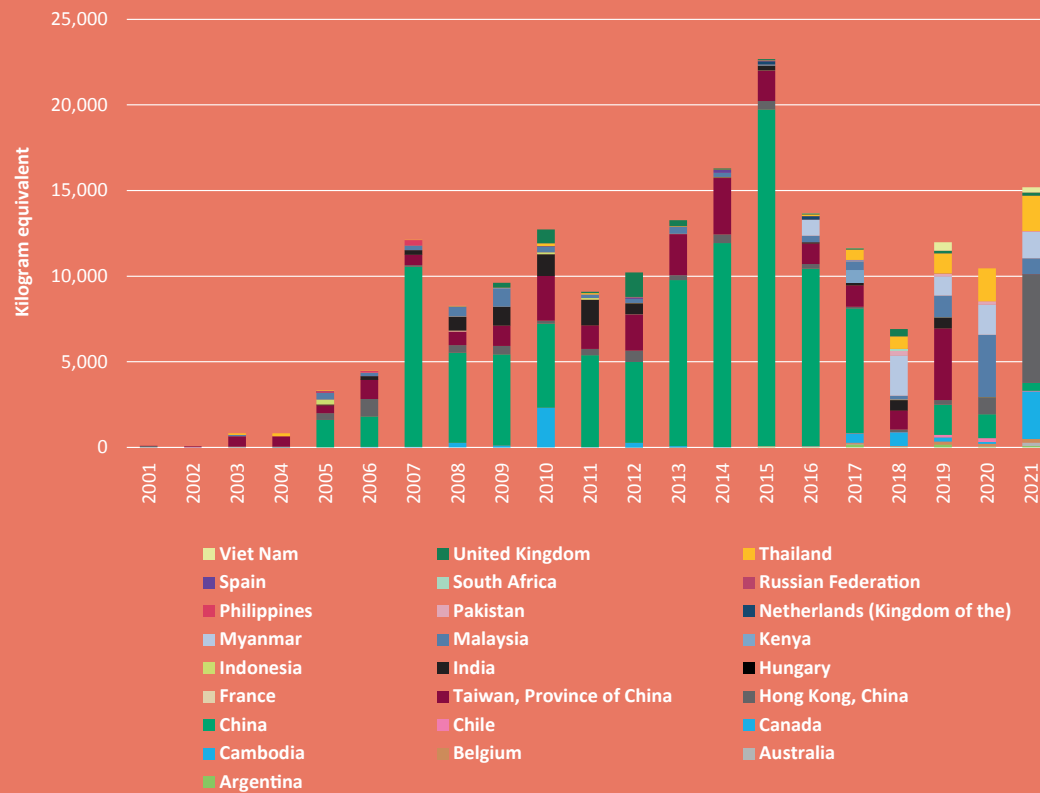
Non-medical use of ketamine (a dissociative anaesthetic not under international control but used in medicine) is not new and, at one point, it was one of the most used drugs in some countries in East and South-East Asia. Regulatory changes have contributed to decreases in non-medical use in the region, although East and South-East Asia remains the subregion most affected by the non-medical use of the drug.

Recently, illicit ketamine manufacture has diversified geographically and trafficking has spread beyond a handful of countries in East and South-East Asia. The non-medical use of the drug has also recently increased in parts of the world beyond the subregion to Western Europe, the Middle East and a few other countries in South Asia, North Africa and Oceania. Traffickers have begun exploring new ways to promote ketamine on the illicit market, with the appearance of ketamine-containing mixtures with other ingredients that are often unknown to users.

Owing to the relatively wide safety margin of the drug, the increased prevalence of non-medical use has – where such data are available – not translated into a dramatic increase in acute ketamine toxicity presentations, although ketamine-related deaths have been recorded. Chronic use is linked, however, with somatic and cognitive harms in users, and there is also evidence of the existence of ketamine use disorders but no specific treatment for such cases exists.



QUANTITIES OF KETAMINE SEIZED BY COUNTRIES, TERRITORIES OR GEOGRAPHICAL AREAS REPORTING TO UNODC, 2001–2021



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

The number of NPS on the market increased in 2021 after several years of stabilization

FINDINGS

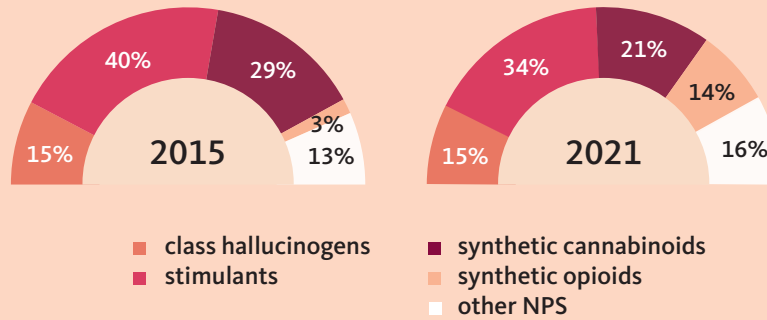
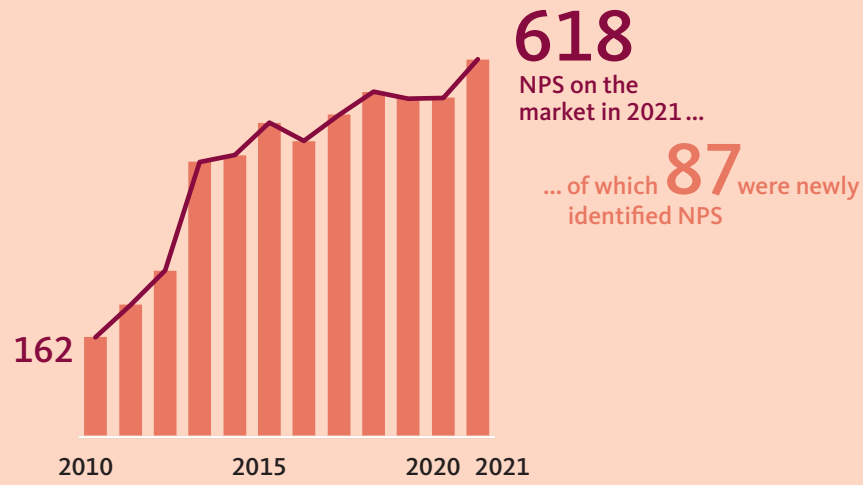
Traffickers continue to innovate and the range of drugs available on the market has started to expand again. After several years of stabilization, the number of new psychoactive substances on the global market increased in 2021. Of the 618 substances reported to be on the global market in 2021, 87 were newly identified. The number of opioid new psychoactive substances on the market has, however, stabilized, and the number of fentanyl analogues have even declined slightly, following year-on-year increases.

The cumulative number of new psychoactive substances identified over the last 15 years reached 1,165 substances in 2021 and, according to preliminary data, 1,184 substances in 2022.

The use of new psychoactive substances continues to be lower than that of traditional drugs but it can be high in niche markets of specific population groups, although data are largely available only in high-income countries. The use of new psychoactive substances has become significant in particular in Central Asia and Eastern Europe, as well as in some other regions.



NPS ON THE GLOBAL MARKET



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

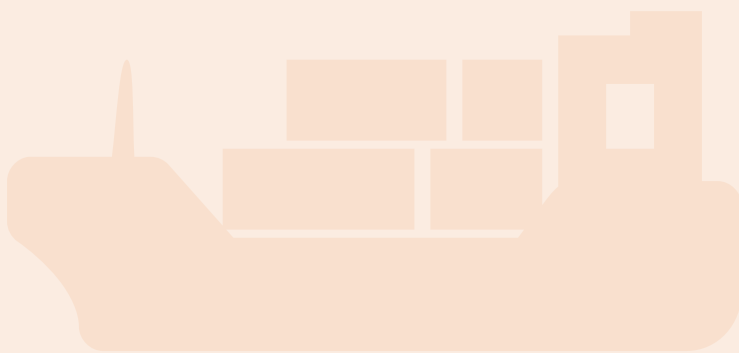
Trafficking in “captagon” continues to flourish in the Near and Middle East

FINDINGS

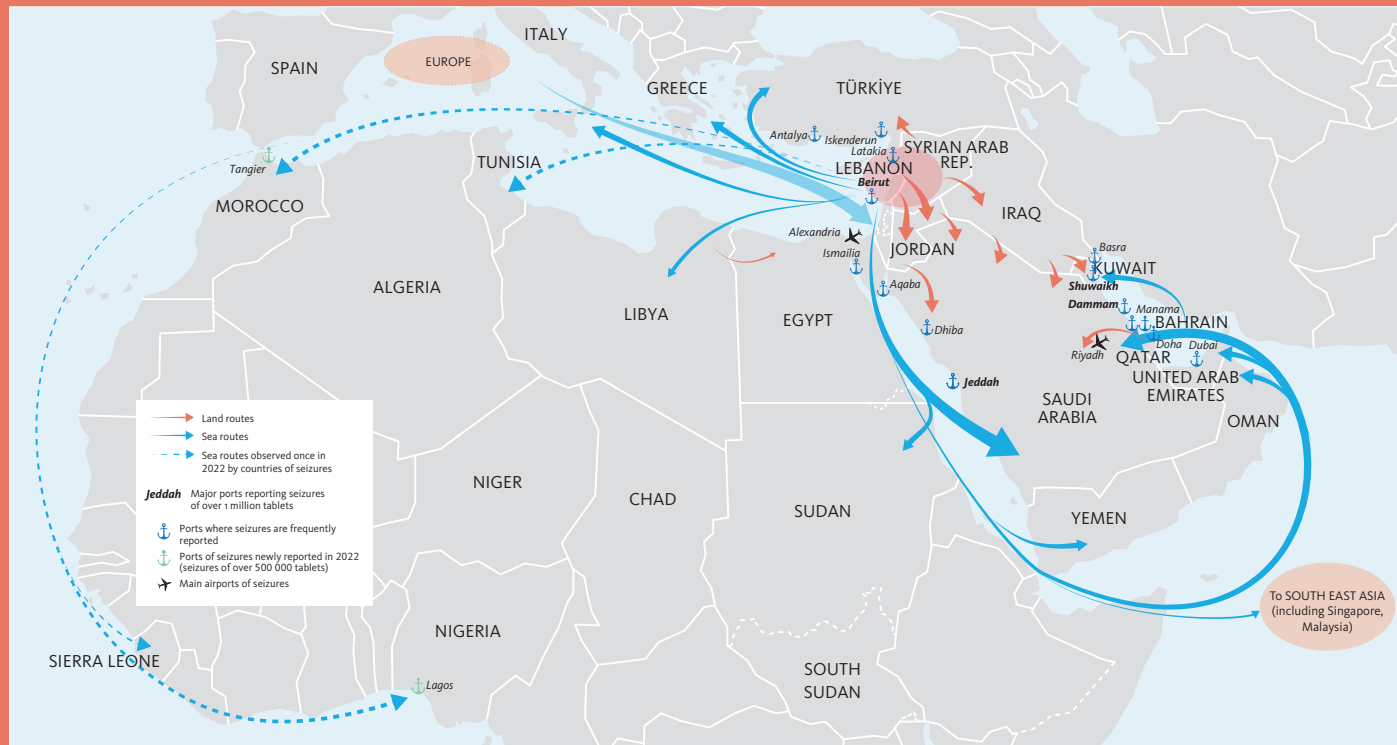
The market for “captagon”, an illicitly manufactured substance mostly containing various concentrations of amphetamine, continues to grow in the Near and Middle East. Assuming that all amphetamine seizures reported in the subregion are of “captagon”, seizures doubled from 2020, reaching a record high of 86 tons in 2021.

The main departing area for “captagon” shipments continues to be in the Levant (the Syrian Arab Republic and Lebanon), with destinations in the Gulf countries reached either directly by land or sea, or indirectly with shipments through other regions, such as Southern Europe. In addition, some seizures point to new destinations in North and West Africa, but more information is needed to understand whether these are new established routes.

In parallel to “captagon” trafficking, a methamphetamine market seems to be developing in the Near and Middle East, as shown by a rise in seizures of the drug.



MAIN TRAFFICKING ROUTES FOR COUNTERFEIT CAPTAGON, 2021–2022



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

New drug combinations are a growing challenge for monitoring and treating drug use

FINDINGS

The market for drugs is diversifying, and although new psychoactive substances continue to appear, new drug combinations, mostly mixtures of controlled drugs, which can also contain prescription medicines, veterinary medicines, alcohol, soft drinks, food colorants and aromas or even substances (such as volatiles, poisons or fuel) which are meant for industrial use, are increasingly being reported on the drug market in all regions. Although some of these mixtures have long traditions (such as nyaope in South Africa), others are relatively new, such as “tuci”, which seems to be spreading fast in South America and seems to have reached North American and European drug markets over the past few years. Similarly, “happy water” and “k-powdered milk” are new mixtures that have recently appeared in East and South-East Asia.

Although the reasons for the appearance of the drug mixtures can be multiple, they may be part of a marketing strategy to appeal to users. In other instances, suppliers may be mixing different compounds to create a novel or desired pharmacological effect, thereby misleading some users (for example, mixing tranquilizers with synthetic opioids to extend depressant effects).

Assessing the use of the substances contained in such mixtures is made harder by the fact that specific names can be used for different mixtures and that their content may vary across time and place. Users may be partially or fully unaware of the composition of the mixtures and the impact in terms of interventions can be serious, especially in emergency cases of acute toxicity. There is sometimes a risk of dangerous interaction with other substances, including medicines; and also, the greater the number of biologically active ingredients present in a person’s body, the higher the risk of overdose. Emerging drug mixtures make illegal markets for drugs even more harmful.

DRUG MARKETS ARE RAPIDLY DIVERSIFYING
WITH NEW DRUG COMBINATIONS



ILLEGAL DRUG SUPPLY INNOVATIONS AND SYNTHETIC DRUGS



KEY MESSAGE

Increased digital interconnectivity has brought about innovations in the ways that drugs are bought and sold, making supply chains shorter, reducing costs and increasing accessibility

FINDINGS

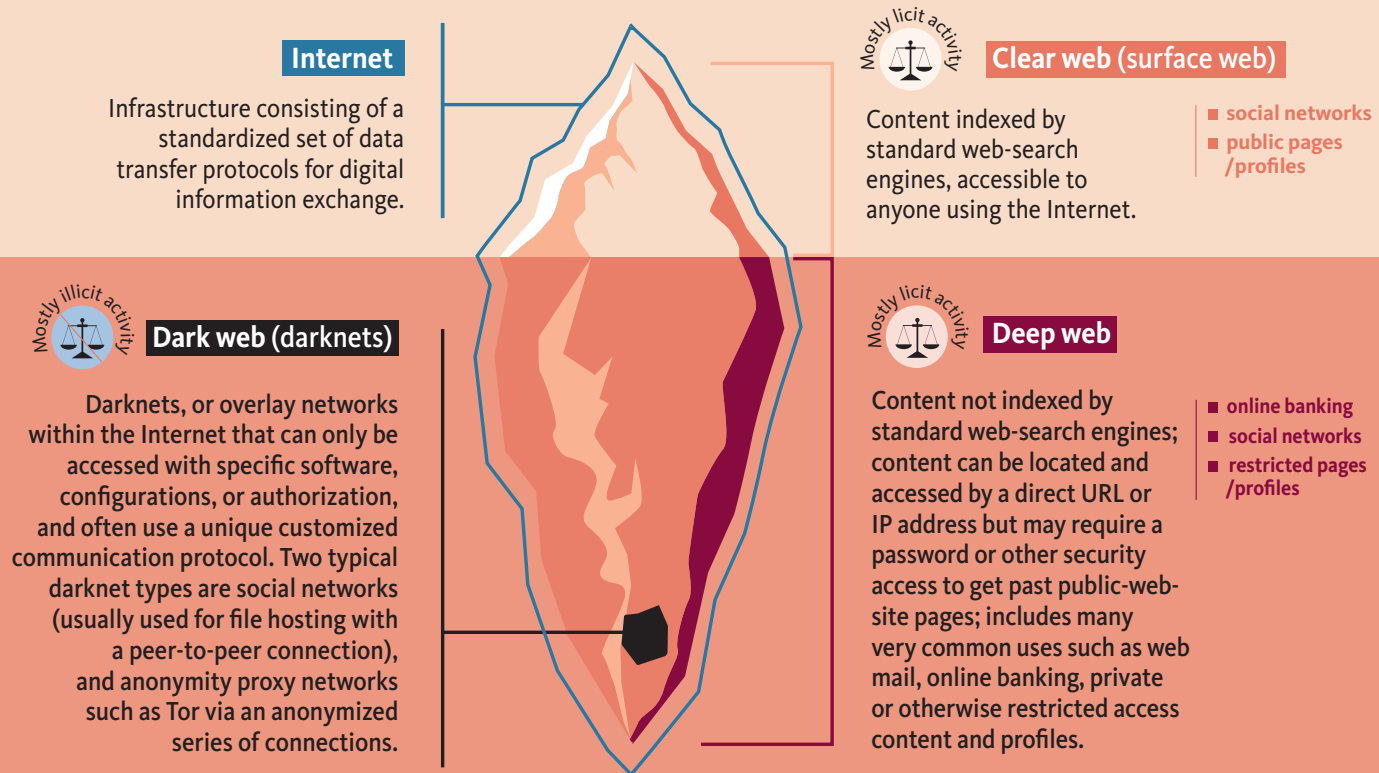
Growing use of the Internet and other digital means of communication, including darknet marketplaces catering for the illegal trade in drugs, social media platforms, and other encrypted communication applications, facilitate the drug trade in new ways.

Darknet marketplaces account for a very small share of all drug transactions, but their volatility in quickly entering and exiting online environments and the increasing size of average payments for a single transaction may indicate that such platforms are increasingly specialized and favoured by drug distributors. In contrast, social media platforms are growing in importance for facilitating low-level drug transactions, given their popularity and direct accessibility for buyers. Different online platforms appear to be used to facilitate transactions for different drugs. Among drugs that are bought through the Internet, new psychoactive substances appear to be accessed most on specialized Internet shops and the dark web, whereas cannabis and cocaine are more commonly bought and sold on social media platforms.

Apart from the variation in the quantity and type of drug transactions, different online platforms make the drug supply more varied in terms of user groups. Digital interconnectivity has risen globally and is changing the way people purchase and access drugs, as has happened for other commodities. It remains to be seen if this change will drastically affect drug use and trafficking patterns.



THE INTERNET: CLEAR WEB, DEEP WEB AND DARK WEB



SHIFTING POLICY AND RESEARCH



KEY MESSAGE

Service innovations during the COVID-19 pandemic have increased access to drug treatment for some population groups

FINDINGS

With the onset of the COVID-19 public health emergency and related measures, in particular social distancing, to curb the spread of the infection many drug services actively sought creative ways to maintain contact with their clients.

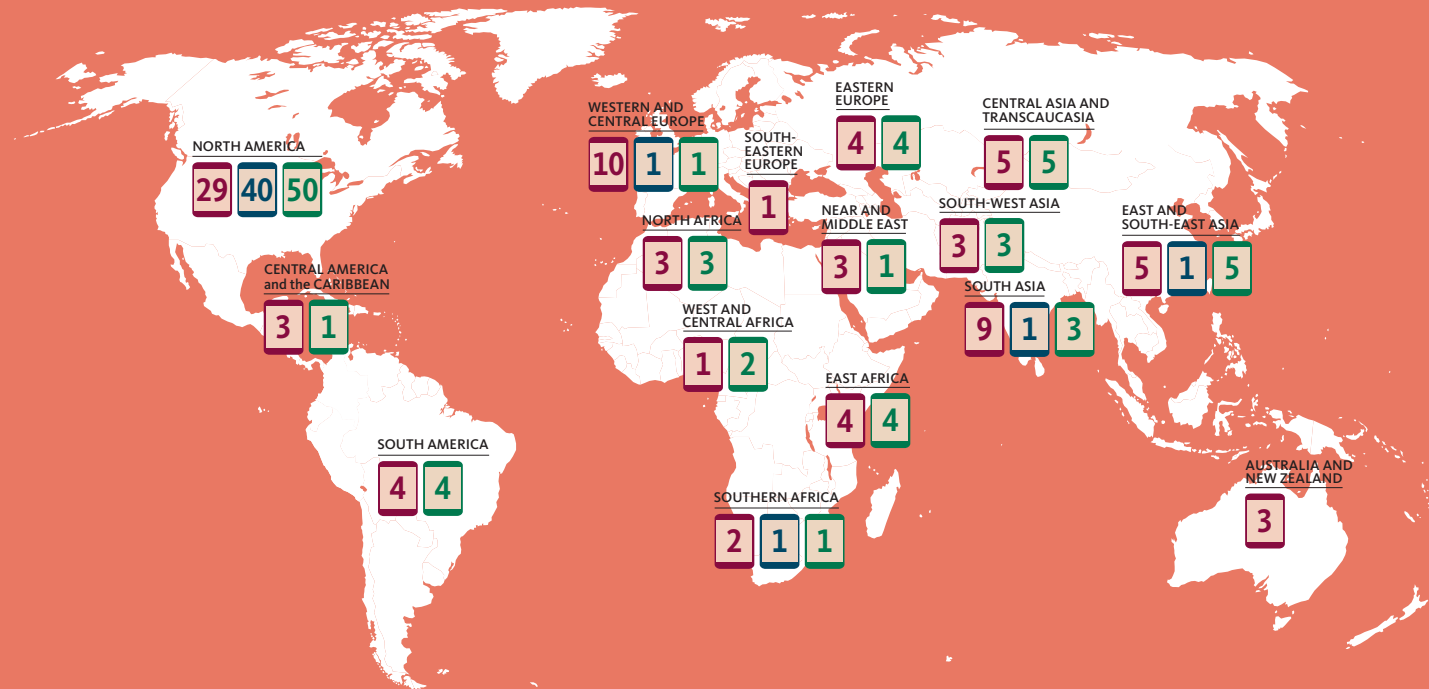
Innovations in drug service provision included the use of telehealth (for example, the use of telephone lines and online communication tools) and of various strategies to ensure access to medication and sterile injecting equipment (for example, increased number of take-home dosages, delivery of medication or sterile equipment), among others.

Studies evaluating the impact of such strategies are beginning to emerge, mostly in high-income countries, and so far, early results have been rather positive: patients are more likely to remain in treatment, the services cater to new clients, patients report greater levels of satisfaction, and programmes were able to save resources while overcoming traditional barriers to treatment such as childcare or work commitments, transportation challenges and even stigma.

Some challenges remain, however, including the difficulty of implementing telehealth in low-income countries and among certain vulnerable population groups (such as homeless people and people who inject drugs), the lack of personal contact and physical examination, and a likely limited increase in the diversion of certain medications.



STUDIES ON SERVICE INNOVATIONS DURING COVID-19



Number of studies or reports evaluating the outcomes of approaches to ensure continuous access to medication during COVID-19



Number of studies or reports evaluating the outcomes of telemedicine during COVID-19



Number of studies or reports on introduction of strategies to maintain care for people who use drugs implemented during the COVID-19 pandemic

SHIFTING POLICY AND RESEARCH



KEY MESSAGE

Regulation choices over medical cannabis vary and may lead to differing public health outcomes

FINDINGS

In recent decades, several political, legislative and judicial processes have advanced efforts to allow the use of the cannabis plant and its derivative products for medicinal purposes. The cannabis products that are currently being used medicinally can take various forms. Pharmaceutical preparations are typically regulated by long-existing frameworks that govern pharmaceutical products, whereas regulation of cannabis plant extracts and magistral preparations and other cannabis-based products only started relatively recently. As of 2020, 64 countries had provisions in their legislation to allow for the medical use of cannabinoid pharmaceutical preparations and/or cannabis-herb-based products. Among these, 34 allowed the medical use of cannabis-herb-based products.

Approaches to regulating medical cannabis differ widely between countries, leading to substantial variations in the products available, patient accessibility and supply mechanisms, with potentially varying impacts on the non-medical market for cannabis.

Some systems have restricted the use of cannabis-based products for medicinal use to standardized medical-grade formulations, whereas in other jurisdictions a wide variety of cannabis products are made available with little or no scrutiny or regulation of their composition or formulation.

Approaches to patient access vary from restricted access for only a few predetermined conditions to limited oversight for unspecified conditions.

The supply chain of medical cannabis may also vary, from centralized closed cultivation and production systems that follow quality standards, such as good manufacturing practices (GMP), good agricultural practices (GAP) and assurance of active pharmaceutical ingredients (API) on the one hand, and unlicensed and unregulated supply of non-standardized preparations that may not comply with quality standards on the other hand.

Medical cannabis markets that are minimally regulated and exposed to competing commercial interests are likely to give a degree of accessibility to the use of cannabis in general, including non-medical use; they have led to a shift in public opinion, encouraging voter initiatives for the legalization of non-medical use of cannabis in various jurisdictions in North America, and to an increase in the non-medical use of cannabis among adults.

In jurisdictions with competing commercial interests, there is also industry-led diversification of products, some of which may contain a specific cannabinoid, or a combination of either THC, CBD, or both, at levels that may not be medically required or safe for the conditions for which the products are advertised.

Regulatory approaches that ensure limited product availability, with proven safety and efficacy, can address legitimate medical needs by making available medical products for the conditions for which scientific evidence is available. Such approaches may also limit potential spillover into a non-medical or recreational use market.

APPROACHES TO MEDICAL CANNABIS VARY WIDELY
ACROSS COUNTRIES IN TERMS OF PRODUCTS AVAILABLE,
PATIENT ACCESSIBILITY AND SUPPLY MECHANISMS



SHIFTING POLICY AND RESEARCH



KEY MESSAGE

Developments in psychedelic policy and research raise new questions

Psychedelics being discussed in the current debate

- » Classic hallucinogens or psychedelics, such as lysergic acid diethylamide (LSD), psilocybin, dimethyltryptamine (DMT) and mescaline
- » Entactogens, such as 3,4-methylenedioxyamphetamine (MDMA)
- » Dissociative anaesthetics, such as phencyclidine (PCP) and ketamine

FINDINGS

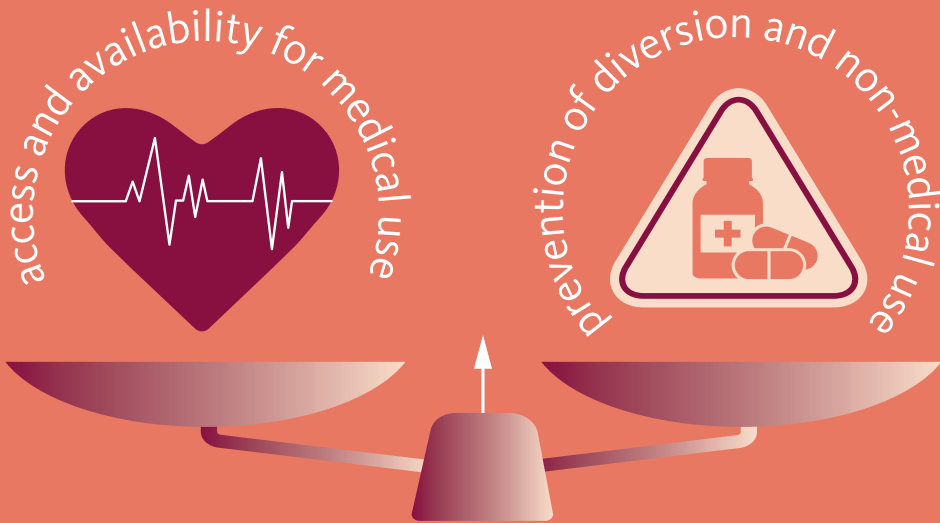
Psychedelics are currently used in various contexts: for medical use, in spiritual or traditional medicinal and wellness programmes, in unsupervised self-therapy and as recreational drugs.

The pace of the overall developments regarding research into the medical use of psychedelics, mainly in high-income countries, is unprecedented and is likely to have broad effects on treating a range of mental health conditions, depending on the ways that the regulatory landscape takes shape.

The regulatory landscape for psychedelics for medical use is evolving quickly in some jurisdictions, for instance in some states of the United States and Australia. The developments are happening faster than was the case for medical cannabis. Best practices, clinical guidelines and protocols for the medically supervised administration of psychedelics are yet to be developed. The risk is that the perception of psychedelics as remedies for mental health disorders (strongly advocated for by a growing number of advocacy groups and commercial interests) will move faster than scientific evidence is accumulated, opening up the market to unsupervised self-medication and recreational use before supervised therapeutic use is established. The requirement for supervised medical treatment to be coupled with psychotherapy, which is likely to require substantial resources, including trained professionals and infrastructure, poses the risk that such treatment may not be accessible to all. This may trigger the development of an underground and unsafe market for such therapies, with the inherent risks of misuse and abuse of an unregulated practice.

There is a growing commercial interest in capitalizing on the psychedelic developments. For example, market forecasts for the near future estimate that the market size of ketamine-assisted therapy will be worth over 1 billion dollars and that of MDMA-assisted therapy over 2 billion dollars in the United States. Such economic prospects could lead the industry to lobby for more loosely regulated market policies that maximize profits rather than safeguard public health interests.

BALANCING ACCESS AND SAFETY
WITH INTERNATIONALLY CONTROLLED DRUGS





GLOSSARY

amphetamine-type stimulants — a group of substances composed of synthetic stimulants controlled under the Convention on Psychotropic Substances of 1971, which includes amphetamine, methamphetamine, methcathinone and the “ecstasy”-group substances (3,4-methylenedioxymethamphetamine (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:

AFRICA

- › 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

AMERICAS

- › 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 (Kingdom of the)¹, British Virgin Islands, Cayman Islands, Curaçao, Guadeloupe, Martinique, Montserrat, Puerto Rico, Saba, Netherlands (Kingdom of the), Sint Eustatius, Netherlands (Kingdom of the), 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, 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) and Falkland Islands (Malvinas)

ASIA

- › 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, Syrian Arab Republic, United Arab Emirates, Yemen and State of Palestine
- › South Asia: Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka

EUROPE

- › Eastern Europe: Belarus, Republic of Moldova, Russian Federation and Ukraine
- › South-Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro,

¹ Since 3 March 2023, "Netherlands (Kingdom of the)" has replaced "Netherlands (the)" as the short name used in the United Nations.

North Macedonia, Romania, Serbia, Türkiye and Kosovo²

- › 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 (Kingdom of the), 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

- › 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

² References to Kosovo shall be understood to be in the context of 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



For the first time since its conception, this year the *World Drug Report* presents the latest global, regional and subregional estimates of and trends in drug demand and supply in a user-friendly, interactive online format. The new online segment is designed to both enhance and simplify access to the wealth of information provided in the report by presenting the data in the form of succinct key findings supported by interactive graphs, infographics and maps.

While Booklet 1 takes the form of an executive summary based on analysis of the key findings of the online segment and the thematic booklet 2, the Special points of interest offer a framework for the main takeaways and the conclusions and policy implications that can be drawn from them. In addition to providing an in-depth analysis of key developments and emerging trends in selected drug markets, including in countries currently experiencing conflict, booklet 2 focuses on contemporary issues related to drugs. The booklet opens with a look at the challenges posed to law enforcement by synthetic drugs, both in terms of their increasing potency, adaptability and ease of manufacture and their shorter supply chains, reduced risk and lower production costs compared with drugs of natural origin. Other law enforcement challenges are considered in the context of the increasing use of social media for buying and selling drugs online. Booklet 2 also examines approaches to regulating the medical cannabis market in different countries and assesses recent developments surrounding the therapeutic, spiritual and non-medical use of substances known as “psychedelics”. The remainder of the booklet focuses on issues related to drugs in specific contexts, including the Amazon Basin, where the convergence of drug crime and crimes that affect the environment poses a threat to natural and human ecosystems. The risk factors for and vulnerability to substance use disorders among forcibly displaced populations are also discussed in the booklet, and the interim outcomes of innovations and modifications of services for people who use drugs during the COVID-19 pandemic are summarized.

The *World Drug Report 2023* is aimed not only at fostering greater international cooperation to counter the impact of the world drug problem on health, governance and security, but also at assisting Member States in anticipating and addressing threats posed by drug markets and mitigating their consequences.

The *World Drug Report 2023* is published on the UNODC website:

<https://www.unodc.org/unodc/en/data-and-analysis/world-drug-report-2023.html>

The online segment is published on the UNODC website:

www.unodc.org/unodc/en/data-and-analysis/wdr-2023-online-segment.html



ISBN: 978-92-1-300070-0

