World Drug Report 2018

Pre-briefing to the Member States

Vienna, 20 June 2018
Latest trends

Opium poppy cultivation and production of opium, 2006-2017

Global coca bush cultivation and cocaine manufacture, 2006–2016

Sources: UNODC, coca cultivation surveys in Bolivia (Plurinational State of), Colombia and Peru, 2014 and previous years.
Latest trends

**FIG. 8** Overdose deaths from selected drugs in the United States and British Columbia, Canada

Latest trends

Non-medical use of prescriptions

Fast emerging public health threats

North America
- fentanyl and its analogues

Africa and Near and Middle East
- tramadol

60 countries
- benzodiazepines
Latest trends

**FIG. 8** Overdose deaths from selected drugs in the United States and British Columbia, Canada

![Graph showing overdose deaths in the United States and British Columbia, Canada](image)

MAP 2 | Reported tramadol seizures (and/or misuse) and major tramadol trafficking/diversion flows, 2012–2016

Tramadol

Annual tramadol seizures
- < 1 kg
- > 1 - 10 kg
- > 10 - 100 kg
- > 100 - 1,000 kg
- > 1,000 - 10,000 kg
- > 10,000 kg

Reported seizures and/or misuse

- Reported trafficking flows of tramadol originating in India
- Reported trafficking flows of tramadol originating in China
- Reported trafficking flows of tramadol via transit countries


Notes: The boundaries shown 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).
Trends in global drug use

**FIG. 1** Global trends in estimated number of people who use drugs, 2006–2016

![Graph showing trends in drug use](image)

- **Number of people who use drugs (millions)**
  - 2006: 26.0
  - 2007: 28.0
  - 2008: 27.3
  - 2009: 27.1
  - 2010: 27.1
  - 2011: 27.3
  - 2012: 27.4
  - 2013: 27.2
  - 2014: 28.7
  - 2015: 29.5
  - 2016: 30.5

- **Number of people with drug use disorders**
  - 2006: 2.1
  - 2007: 2.1
  - 2008: 2.1
  - 2009: 2.1
  - 2010: 2.1
  - 2011: 2.1
  - 2012: 2.1
  - 2013: 2.1
  - 2014: 2.1
  - 2015: 2.1
  - 2016: 2.1

**Source:** UNODC, responses to the annual report questionnaire.

**Note:** Estimates are for adults (aged 15–64 years) who used drugs in the past year.

**FIG. 2** Global trends in the estimated annual prevalence of drug use and people with drug use problems, 2006–2016

![Graph showing drug use prevalence](image)

- **Annual prevalence among population aged 15–64 years (percentage)**
  - 2006: 4.9%
  - 2007: 4.9%
  - 2008: 4.9%
  - 2009: 4.9%
  - 2010: 5.0%
  - 2011: 5.2%
  - 2012: 5.2%
  - 2013: 5.2%
  - 2014: 5.3%
  - 2015: 5.3%
  - 2016: 5.6%

- **Prevalence of people who use drugs**
  - 2006: 0.6%
  - 2007: 0.6%
  - 2008: 0.6%
  - 2009: 0.6%
  - 2010: 0.6%
  - 2011: 0.6%
  - 2012: 0.6%
  - 2013: 0.6%
  - 2014: 0.6%
  - 2015: 0.6%
  - 2016: 0.6%

**Source:** UNODC, responses to the annual report questionnaire.

**Note:** Estimated percentage of adults (aged 15–64 years) who used drugs in the past year.
First Global estimate of cannabis use among students 15-16

Global annual prevalence of cannabis use among the general population, aged 15–64 years and among students aged 15–16 years, 2016

Sources: UNODC, annual report questionnaire data and other government reports.

Note: the estimate of cannabis use in the last year in young people aged 15–16 years is based on school surveys in most countries, hence the use of the term ‘students’.
Global deaths directly caused by the use of drugs have been increasing.


Source: UNODC, responses to the annual report questionnaire.
FIG. 13 | Global quantities of selected drugs seized, 2012–2016

Source: UNODC, responses to the annual report questionnaire.

Note: A rate of 10:1 was used to transform seizures of opium into seizures expressed in heroin equivalents.
FIG. 15  Changes in quantities of drugs seized and number of drug seizure cases from 2005–06 to 2015–16

Source: UNODC, responses to the annual report questionnaire
Note: Calculation based on data from 71 countries (index: 2005–2006 = 100).
FIG. 18 | Importance of drugs and drug-related chemicals for the darknet (based on listings on the main darknet markets)

- Pharmaceuticals: 5%
- Drug-related chemicals: 18%
- Illicit drugs: 77%
- Other: 62%

Other:
- Fraud and counterfeit: 44%
- Guides and tutorials: 30%
- Hacking and malware: 19%
- Firearms and explosives: 2%

Source: EMCDDA and Europol, Drugs and the darknet, November 2017, p. 15.

Note: Based on active listings data from AlphaBay, Dream Market, Hansa, TradeRoute and Valhalla darknet marketplaces, spanning from the launch of each marketplace to 21 August 2017 (or market closure).
Proportion of internet users reporting to an online survey who used drugs in the past year and who purchased drugs via the darknet, 2014 and 2018 (annual prevalence).


Note: The proportions shown here are based on convenience samples of people who volunteered to participate in these surveys. The total number of persons answering darknet market-related questions was 53,5572 in 2018, all of whom also reported their past-year drug use. For the following countries no data for 2014 or 2018 were available, so data from the closest year were used instead: Finland (2016 and 2018); Norway (2016 and 2017); Wales (2017); Scotland (2015 and 2018); Croatia (2017); Greece (2017); Poland (2015 and 2018); Italy (2015 and 2018); Portugal (2014 and 2017); Iceland (2017); Argentina (2017); Mexico (2014 and 2017).
Heroin trafficking flows

MAP 1 | Main heroin trafficking flows, 2012–2016

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

Notes: The size of the trafficking flow lines is based on the amount of heroin seized in a subregion and the number of mentions of countries from where the heroin has departed (including reports of "origin" and "transit") to a specific subregion over the period 2012–2016. A darker shade indicates that the country represents more than 50 per cent of heroin production in the region. The trafficking flows are determined on the basis of country of origin/destination, transit and destination of seized drugs as reported by Member States in the annual report questionnaire and individual drug seizure database; as such, they need to be considered as broadly indicative of existing trafficking routes while several secondary flows may not be reflected. Flow arrows represent the direction of trafficking; origins of the arrows indicate either the area of manufacture or the one of last provenance, end points of arrows indicate either the area of consumption or the one of next destination of trafficking.

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Heroin and morphine seizures

FIG. 5  Quantities of heroin and morphine seized, in kilograms, for selected regions: 2006–2016

Source: UNODC, responses to the annual report questionnaire; and other government sources.
FIG. 7

Estimated number of opiate users, trends in quantities of heroin seized and heroin and opium use perception indexes (2006 = 100)

Source: UNODC, elaboration based on annual report questionnaire data.
Opiate use trends in Eastern Europe
Cocaine trafficking

MAP 1 | Main cocaine trafficking flows, 2012–2016

Global cocaine trafficking flows are based on flows estimated on the basis of reported seizures, 2012–2016.

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

Notes: The size of the trafficking flow lines is based on the amount of cocaine seized in a subregion and the number of mentions of countries from where the cocaine has departed (including reports of origin* and transit*) to a specific subregion over the period 2012–2016. The trafficking flows are determined on the basis of country of origin (departure), transit, and destination of seized drugs as reported by Member States in the annual report questionnaire and individual drug seizure database; as such, they need to be considered as broadly indicative of existing trafficking routes while several secondary flows may not be reflected. Flow arrows represent the direction of trafficking; origins of the arrows indicate either the area of manufacture or the one of last provenance; end points of arrows indicate either the area of consumption or the one of next destination of trafficking.

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FIG. 4  Trends in the number of annual cocaine users and cocaine use perception index, 2006–2016

FIG. 3  Estimated annual prevalence rates of cocaine use among the population aged 15–64 years, 2016

Source: UNODC estimates based on annual report questionnaire data.

Note: For calculation methods and details, see the online methodology section of the present report.
Cannabis herb seizures

**FIG. 4**  Quantities of cannabis seized, by region, 2006-2016

(a) Cannabis herb

**FIG. 5**  Quantities of cannabis seized, by country, 2016

(a) Cannabis herb (tons)

- United States
- Mexico
- Paraguay
- Morocco
- India
- Brazil
- Egypt
- Colombia
- Myanmar
- Nigeria
- Argentina
- Other

Percentage of total cannabis herb seizures
**FIG. 4**
Quantities of cannabis seized, by region, 2006-2016

**(b) Cannabis resin**

- **Source:** UNODC, responses to the annual report questionnaire.

**FIG. 5**
Quantities of cannabis seized, by region and country (tons)

**(b) Cannabis resin (tons)**

- **Source:** UNODC, responses to the annual report questionnaire.
Cannabis use in different regions

FIG. 9 Annual cannabis use in the United States, the European Union, Australia and at the global level, 2006–2016

- United States: prevalence among the population aged 12 years and older
- European Union: prevalence among the population aged 15–64 years
- Australia: prevalence among the population aged 14 years and older
- Global: prevalence among the population age 15–64 years

Source: UNODC, responses to the annual report questionnaire, SAMHSA, EMCDDA and the Australian Institute of Health and Welfare.
Cannabis use and its health consequences in Colorado

FIG. 12  Health-care utilization related to cannabis use in Colorado

Source: Colorado Department of Public Health and Environment, (Denver, United States, 2017).

Note: The 2015 data on emergency department visits and hospitalizations that are publicly available are for the period January–September only.
FIG. 1 | Quantities of amphetamine-type stimulants seized worldwide, by type, 2012–2016


FIG. 2 | Quantities of methamphetamine seized worldwide, by subregion, 2012–2016

Methamphetamine trafficking

MAP 1 | Main methamphetamine trafficking flows, 2012–2016

Global methamphetamine trafficking flows by size of flows estimated on the basis of reported seizures, 2012–2016:

- **Principal flows**
- **Main markets**
- **Frequently mentioned countries of provenance as reported by countries where methamphetamine seizures took place**

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

Notes: The size of the trafficking flow lines is based on the amount of methamphetamine seized in a subregion and the number of mentions of countries from where the methamphetamine has departed (including reports of “origin” and “transit”) to a specific subregion over the period 2012-2016. The trafficking flows are determined on the basis of country of origin/departure, transit and destination of seized drugs as reported by Member States in the annual report questionnaire and individual drug seizure database as such, they need to be considered as broadly indicative of existing trafficking routes while several secondary flows may not be reflected. Flow arrows represent the direction of trafficking: origins of the arrows indicate either the area of manufacture or the one of last provenance, end points of arrows indicate either the area of consumption or the one of next destination of trafficking.

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New Psychoactive Substances

FIG. 4
Number of new psychoactive substances reported annually, 2009–2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>130</td>
</tr>
<tr>
<td>2010</td>
<td>163</td>
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<tr>
<td>2011</td>
<td>214</td>
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<td>2012</td>
<td>269</td>
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<tr>
<td>2013</td>
<td>450</td>
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<tr>
<td>2014</td>
<td>456</td>
</tr>
<tr>
<td>2015</td>
<td>503</td>
</tr>
<tr>
<td>2016</td>
<td>479</td>
</tr>
</tbody>
</table>

The market for NPS is in a constant state of flux.

479 different NPS on the market in 2016.

60 NPS have disappeared from the market since 2013.

Source: UNODC, early warning advisory on new psychoactive substances.
Seizures of New Psychoactive Substances

FIG. 6 | Annual quantities of new psychoactive substances seized globally, 2012 to 2016


Note: Figures include ketamine and plant-based NPS.
Drug use and age

**FIG. 5** Prevalence of drug use in Kenya, by age group and drug type, 2012

- **Percentage**
  - 15–17 years
  - 18–24 years
  - 25–35 years
  - 36 years and older

- **Drugs**:
  - Khat
  - Bhang
  - Cocaine
  - Heroin
  - Prescription drugs

Protective factors and risk factors for substance use

Protective factors:
- Caregiver involvement and monitoring
- Health and neurological development:
  - coping skills
  - emotional regulation
- Physical safety and social inclusion
- Safe neighbourhoods
- Quality school environment

Risk factors:
- Trauma and childhood adversity
  - child abuse and neglect
- Mental health problems
- Poverty
- Peer substance use and drug availability
- Negative school climate
- Sensation seeking

Positive physical, social and mental health
Substance use initiation
Harmful use of substances
Substance use disorders
Factors determining pathways to substance use

**FIG. 8** | Factors that determine different pathways to substance use and substances use disorders

Figure 8 shows the two main categories of factors conferring risk for substance use: genes and the environment. Genetic variants are like switches: they are either turned on or off, but their expression is influenced by experience (i.e., epigenetic modifications). Environmental factors are more like dials that are turned up or down, also depending on experience. Risk or adversity factors include child maltreatment, poverty, poorly equipped schools, dysfunctional families, discrimination and witnessing violence. Resiliency or protective factors include high-quality education, housing, health care, social attachments and parenting. The combination of switches and dials crosses a liability threshold that, when predominantly negative, primes the brain for substance use. The functional relationship between factors is not linear, nor is it static; it fluctuates throughout a lifespan. Some environmental influences confer resiliency and may attenuate the effects of genetic predispositions. Thus, psychosocial interventions and practices are of the utmost importance in determining final outcomes.
Cannabis use – consequences

The Negative Health Effects of Cannabis

**Short-Term Effects**
- In high doses: paranoia and psychosis
- Impaired short-term memory
- Impaired motor coordination
- Altered judgement, increased risk in sexual behaviour that causes transmission of STDS

**Long-Term/Heavy Use**
- Altered brain development
- Increased risk of chronic psychosis disorders (including schizophrenia)
- Cognitive impairment, with lower IQ among those who were frequent users during teen years
- Symptoms of chronic bronchitis
- STDs
- Less life satisfaction and achievement
- Poor educational outcome, with increased likelihood of dropping out of school

Spectrum of drug use in young people

Nightlife setting  Street children
Young people and the supply chain

Illicit crop cultivation and drug manufacture

Young people in the drug trafficking chain

Information on the involvement of young people in the drug supply chain is limited and, in most instances, is restricted to media reports. Consequently, media sources, in addition to other reports, have been used to highlight issues on young people in place of evidence purely from research.
Proportion arrested under age 18

**FIG. 10** Proportion of people arrested or cautioned for drug possession in 2015 who were under 18, selected countries

**FIG. 11** Proportion of people arrested or cautioned for serious drug offences in 2015 who were under 18, selected countries

Source: UNODC, responses to the annual report questionnaire.
Drugs and older people

FIG. 13 | Annual prevalence of cannabis use and changes in selected countries in Western Europe, by age group, selected years

Drug use prevalence – by gender

Annual prevalence of cannabis use and non-medical use of tranquillisers among those aged 15–64, selected countries in Europe, 2016 or latest year from 2011

United Kingdom (Scotland)
United Kingdom (England and Wales)
Sweden
Spain
Portugal
Poland
Norway
Netherlands
Lithuania
Latvia
Italy
Ireland
Hungary
Germany
Finland
Czechia
Cyprus
Austria
“telescoping”

More men than women initiate drug use but after initiation women move faster than men towards drug use disorders.
Drug related arrests and women

FIG. 10 Proportion of women among those brought in contact with the criminal justice system who are suspected of drug trafficking offences (2012–2016), by region, for any illicit drug

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

Note: Data from 88 countries.
A higher proportion of women than men are in prison for drug-related offences

714,000 female prisoners
35% drug offences

9,6 million male prisoners
19% drug offences

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