Global trends in estimated number of drug users and people with drug user disorders, 2006-2015


Source: UNODC, responses to annual report questionnaire.
Note: Estimates are for adults (aged 15-64) who used drugs in the past year.

Source: UNODC, responses to the annual report questionnaire.
Note: Estimated percentage of adults (aged 15-64) who used drugs in the past year.
12 million people inject drugs

(a) Prevalence of injecting drug use

(b) Number of PWID and those among this group living with HIV

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

Notes: Unlabelled symbols are regional estimates. Subregions are denoted as follows: Europe — Western and Central (WC) and Eastern and South-Eastern (ESE); Asia — Central Asia and Transcaucasia (CAT), East and South-East (ESE), South-West (SW), Near and Middle-East (NME) and South (S); and the Americas — North America (N) and Latin America and the Caribbean (LAC). For Oceania, estimates are based on data from Australia and New Zealand only.

Part (a): Percentage of population aged 15-64 years who inject drugs.
Part (b): Number of PWID (outer circle) and number of PWID living with HIV (inner circle).
Hepatitis C accounts for a great harm

Burden of disease from hepatitis C and HIV from injecting drug use, 2013

12 million people inject drugs

1.6 million people who inject drugs are living with HIV

6.1 million are living with hepatitis C

1.3 million are living with both hepatitis C and HIV

Source: Degenhardt and others, "Estimating the burden of disease attributable to injecting drug use as a risk factor for HIV, hepatitis C, and hepatitis B.

Notes: DALYs comprise “healthy” years of life lost as a result of both premature death and years lived with disability.
Health related harm

Number of deaths and “healthy” years of life lost (DALYs) attributable to drug use, 2015

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of deaths (thousands) attributable to drug use, 2015</th>
<th>Percentage change from 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS—tuberculosis</td>
<td>-25.7</td>
<td></td>
</tr>
<tr>
<td>HIV/AIDS resulting in other diseases</td>
<td>-3.6</td>
<td></td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>-12.0</td>
<td></td>
</tr>
<tr>
<td>Liver cancer resulting from hepatitis C</td>
<td>39.0</td>
<td>27.5</td>
</tr>
<tr>
<td>Cirrhosis and other chronic liver diseases</td>
<td>19.0</td>
<td>12.1</td>
</tr>
<tr>
<td>resulting from hepatitis C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opioid use disorders</td>
<td>29.6</td>
<td></td>
</tr>
<tr>
<td>Cocaine use disorders</td>
<td>49.7</td>
<td></td>
</tr>
<tr>
<td>Amphetamine use disorders</td>
<td>67.5</td>
<td>40.1</td>
</tr>
<tr>
<td>Cannabis use disorders</td>
<td></td>
<td>5.3</td>
</tr>
<tr>
<td>Other drug use disorders</td>
<td>23.0</td>
<td>21.8</td>
</tr>
<tr>
<td>Self-harm</td>
<td>2.6</td>
<td>0.1</td>
</tr>
</tbody>
</table>


Notes: Error bars represent uncertainty intervals. Numbers given in charts are percentage changes from 2005.
Tuberculosis and drug use

High-risk factors for acquiring and progressing to active tuberculosis (TB) among people who use drugs

8% in people who inject drugs vs 0.2% in the general population

Frequent co-morbidity in drug users

More barriers to access prevention and treatment for TB
A minimum of 190,000 drug-related deaths
Mostly overdoses, mostly opioid-related

Regional variation in drug-related deaths, 2015

Heroin and synthetic opioids

The opioid market is becoming more diversified

Misuse of pharmaceutical drugs

Prescription forgery, diversion, illicit manufacture, counterfeit medicines

*Research opioids* on the market (NPS)

Number of samples submitted to and analysed by laboratories, by type of drug identified, United States
Global potential opium production and cocaine (100% pure) manufacture

Total area under opium poppy and coca bush cultivation

Sources: UNODC coca and opium surveys in various countries; responses to the annual report questionnaire; and United States, Department of State, International Narcotics Control Strategy Report, various years.

Cultivation and production
coca/cocaine, opium/heroin

Opium production
Cocaine manufacture (based on "old" conversion ratios)
Cocaine manufacture (based on "new" conversion ratios)
Opium production - trend

Sources: UNODC coca and opium surveys in various countries; responses to the annual report questionnaire; and United States, Department of State, International Narcotics Control Strategy Report, various years.
Opiates trafficking: new Caucasus branch

Main opiate trafficking flows, 2011-2015

Sources: UNODC elaboration, based on responses to annual report questionnaire and individual drug seizure database.

Notes: 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 are 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, and points of arrows indicate either the area of consumption or the one of next destination of trafficking. 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 Sudan and 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).
Most opiates trafficking along the Balkan route

Percentage distribution of quantities of heroin and morphine seized, by main trafficking route

Balkan route: Islamic Republic of Iran, South-Eastern Europe; southern route: South Asia, Gulf countries and other countries in the Near and Middle East, Africa; northern route: Central Asia and Transcaucasia, Eastern Europe.

Source: UNODC calculations, based on responses to the annual report questionnaire.
Cocaine trafficking: expanding eastwards

Main cocaine trafficking flows, 2011-2015

Source: UNODC elaboration, based on responses to annual report questionnaire and individual drug seizure database.

Notes: 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 are 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 area of last provenance, end points of arrows indicate either the area of consumption or the area of next destination of trafficking.

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Cocaine market in expansion in North America

Quantities of cocaine seized in North America and annual prevalence of cocaine use in the United States and Canada

Sources: Responses to the annual reports questionnaire data; the United States National Household Survey on Drug Use and Health; Quest Diagnostics, “Quest Diagnostics Drug Testing Index”, full year 2015 tables (September 2016), and previous years; the Canadian Tobacco, Alcohol and Drugs Survey (CTADS) 2015 and, for previous years, Health Canada, Canadian Alcohol and Drug Monitoring Surveys (CADUM).
Cocaine market: signs of expansion in Europe

Quantities of cocaine seized in Europe and annual prevalence of cocaine use in the European Union

Benzylecgonine (cocaine metabolite) found in wastewater per 1,000 inhabitants in Europe (based on data from 80 European cities)

Source: Calculations based on Sewage Analysis CORE Group Europe (SCORE).

Note: The wastewater analysis took place in 36 countries over the period 2011-2016. All city results have been weighted by the population served by the respective drug treatment plants. The analysis in each city was based on the amounts of benzylecgonine identified in wastewater over a seven-day period, which allowed for the calculation of a daily average of benzylecgonine per 1,000 inhabitants living in the area served by the respective wastewater treatment plant. For details of the calculation methods, see the online methodology section of the present report.

Sources: UNODC calculations based on responses to the UNODC annual report questionnaire; and EMCDDA, Statistical bulletin 2016 and previous years.
Cannabis herb dominates seizures

Global quantities of cannabis resin and herb seized

Source: UNODC, based on responses to the annual report questionnaire.
Cannabis use: diverging trends

Annual cannabis prevalence:
United States, European Union,
Australia, global level

Cannabis prevalence among
15-16 year-old, Europe

Sources: UNODC, responses to the annual report questionnaire; SAMHSA, EMCDDA and the Australian Institute of Health and Welfare.

Regulations of recreational cannabis use

Jurisdictions in the United States allowing recreational use, medical use of cannabis and with no access to cannabis, May 2017

Source: Based on information from the National Conference of State Legislatures (NCSL) as of 12 May 2017.

Notes: The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations.
Regulations of recreational cannabis use, US

Cannabis use patterns, risk perception, availability, medical cannabis

By 2007, 12 states had measures allowing medical cannabis use.

Cannabis use initiation in the past year

Cannabis use disorders in daily or near-daily users

Source: Elaborated from NSDUH presented in Rachel N. Lipari and others, “Risk and protective factors and estimates of substance use initiation: results from the 2015 National Survey on Drug Use and Health” (SAMHSA, October 2016).

Source: Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health, and earlier surveys and adapted from Compton and others, “Marijuana use and use disorders in adults in the USA, 2002-14: analysis of annual cross sectional surveys”, Lancet Psychiatry 2016; 3: 954-64. Note: Compton and others analysed the trends in cannabis use from 2002-2014.
Expanding market: Amphetamine-type stimulants (ATS)

- Total ATS seizures: highest ever
- Amphetamine and methamphetamine constitute considerable share of burden of disease, rank second only after opioids
- Users of amphetamines increased, reaching 37 million globally
- Methamphetamine seizures up, East and South-East Asia overtaking North America
- “Ecstasy” seizures stable but greater variety of products on the market
Methamphetamine: interregional trafficking flows

Expanding market in East/South-East Asia, Oceania, concerns about growing use in North America, South-West Asia and parts of Europe. Rising treatment demand in some regions.

Amphetamine: trafficking spreading beyond traditional regions

- Amphetamine seizures up in Middle East and Central America
- In the Near and Middle East, sold as “captagon” tablet
- Trafficking of amphetamine affecting more regions as transit or origin
- Central America emerging as origin of amphetamine

Amphetamine seized worldwide

[Graph showing the quantity of amphetamine seized worldwide from 2010 to 2015, with different regions highlighted in different colors.]

Expanding market: New psychoactive substances

- Between 2009-2016, 739 different NPS reported
- In 2015 alone, almost 500 NPS were on the market worldwide
- Core group of about 80 persistent NPS
- Innovation continues but at slower pace
- NPS with stimulant properties expand in number
- Recent emergence of NPS mimicking medicines (fentanyl analogues, benzodiazepine derivatives) with high potential to cause harm

UNODC, early warning advisory on new psychoactive substances.
Overall size of market for NPS still relatively small
Many NPS users unaware of content of NPS products and dosage of substances contained
Injecting use of NPS with stimulant effect among high-risk groups further aggravating health risks (e.g. HIV)
Easy availability and low price make them highly attractive for some groups
Identification of NPS in the laboratory still a challenge due to their high number

Source: UNODC, early warning advisory on new psychoactive substances. Based on the analysis of 717 NPS.
Note: The analysis of the pharmacological effects comprises NPS registered up to December 2016. Plant-based substances were excluded from the analysis as they usually contain a large number of different substances some of which may not have been known and whose effects and interactions are not fully understood.
Synthetic cannabinoids: not just a kind of cannabis

- Some synthetic cannabinoids are much more potent and toxic than THC
- Intoxications, including hospitalisations and fatalities, reported
- Many new substances in many different compositions
- In addition to herbal material also used as liquid, blotter, powder, tablet
- Problematic use in prisons and by vulnerable population groups (e.g. homeless)
- Use among some user groups declining (e.g. US 12 graders)


Note: Contains seizures in the form of herbal material, as well as powder and liquids.
Synthetic opioids (NPS)

- Mainly sold as or mixed with heroin or fake prescription medicines
- Highly potent, difficult to dose, difficult to detect
- Pose a threat to public health because of the variable quantity and potency (up to 10,000 times that of morphine)

Annual number of synthetic opioids (NPS) reported to UNODC, 2012-2016

Source: UNODC early warning advisory on new psychoactive substances. Includes only synthetic opioids reported as NPS (i.e., with no current approved medical use). Data for 2016 are preliminary.
Booklet 4: Conclusions and policy implications

• The synthetic drugs market has never been so complex and widely spread
• NPS proliferating at unprecedented rate: prioritization, early warning, and health responses are key
• Evolution of synthetic drugs requires improved forensic capacity and new approaches to data collection
Drugs and organized crime

Changing business models for drug trafficking and organized crime

Branching out to seize new crime opportunities

Continued importance of drugs

Structural transformations

Technological changes

European Union

drug trafficking over 35 per cent of all organized crime groups involved
organized property crime
excise fraud
smuggling of migrants
trafficking in human beings

Source: UNODC, adapted from Europol, SOCTA 2017.
Drugs on the darknet

Annual drug users obtaining drugs over the darknet in the past 12 months

Number of transactions and their market share on the darknet

Note: Based on annual information from more than 60,000 past-year drug users. In 2014, the question was asked specifically in relation to the Silk Road, the then dominant darknet market, as the survey was conducted just after the Silk Road’s closure. From 2015, the question was asked in relation to all darknet markets.

Source: Kruthof and others, Internet-facilitated Drugs Trade.
Drugs and illicit financial flows

Drugs account for between a fifth and a third of the income of transnational organized crime.

60-70% of global drug proceeds may be laundered.

A third of drug proceeds may result in illicit financial flows.

Measurement concepts

\[ \text{Net profit of drugs} = \text{gross profit} - \text{trafficking costs} \]

\[ \text{Profits available for laundering} = \text{net profit} - \text{living expenses of traffickers} \]

\[ \text{Gross profit of drugs} = \text{drug proceeds} - \text{cost of drugs} \]

= illicit financial flows related to drugs

* Transportation costs, intermediaries, bribes, etc.

** Living expenses, luxury goods, cars, etc.
Estimated drug expenditure by households in 21 European Union countries

Impact of drug proceeds and illicit financial flows may be small in the majority of countries but may be substantial for some drug producing developing countries.

Drug proceeds damage economies in the long term.

Source: EUROSTAT.
Corruption facilitates illicit drug markets, which fuel corruption

Corruption exist all along the drug supply chain

High-level vs low-level corruption

Corruption and violence
The Taliban involvement in the illicit drug (opiates) trade in Afghanistan is well documented

Also evidence of the involvement of the FARC in Colombia in the coca/cocaine illicit trade, before the Peace Agreement of 2016

But evidence implicating other groups is comparatively thin

Income from drugs is key for some groups

Only one revenue stream of many for most terrorist groups
Drugs and terrorism, insurgency

Entities placed under the consolidated UN Security Council Sanctions list
Insurgent groups and other non-State armed groups

Area under control of insurgent groups and area under opium poppy cultivation in Afghanistan, 2016

Taliban’s involvement in the drug trade

26-85% of area under opium poppy cultivation under some influence of Taliban

$150 million in tax income from the opiate trade (2016)

Half of Taliban’s income is generated from drugs
Data coverage

Wide range of UNODC and external sources used in the Report

Shortcomings in Member States reporting to UNODC (Africa, Oceania, Asia)

Proportion of Member States submitting data to UNODC on drug supply or drug demand via the Annual Report Questionnaire, by region, 1995-2015 (2-year moving average)
Thank you for listening

Vienna, 16 June 2017