A. EXTENT OF DRUG USE:
GLOBAL OVERVIEW

Globally, it is estimated that in 2012, some 243 million people (range: 162 million–324 million) corresponding to some 5.2 per cent (range: 3.5–7.0 per cent) of the world population aged 15–64 had used an illicit drug — mainly a substance belonging to the cannabis, opioid, cocaine or amphetamine-type stimulant (ATS) group — at least once in the previous year. Although the extent of illicit drug use among men and women varies from country to country and in terms of the substances used, generally, men are two to three times more likely than women to have used an illicit substance.1 While there are varying regional trends in the extent of illicit drug use, overall global prevalence of drug use is considered to be stable. Similarly, the extent of problem drug use, by regular drug users and those with drug use disorders or dependence, also remains stable, at about 27 million people (range: 16 million–39 million).

With respect to the different groups of substances, there has been an increase in opioid and cannabis use since 2009, whereas the use of opiates, cocaine and ATS (excluding “ecstasy”) has either remained stable or followed a decreasing trend. However, not all countries conduct national surveys on drug use, and most countries that do so conduct them only periodically, once every three to five years.

### Fig. 1: Global trends in drug use, 2006-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of illicit drug users (millions)</th>
<th>Prevalence of illicit drug use (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>208</td>
<td>2%</td>
</tr>
<tr>
<td>2007</td>
<td>211</td>
<td>2%</td>
</tr>
<tr>
<td>2008</td>
<td>203</td>
<td>2%</td>
</tr>
<tr>
<td>2009</td>
<td>210</td>
<td>2%</td>
</tr>
<tr>
<td>2010</td>
<td>226</td>
<td>2%</td>
</tr>
<tr>
<td>2011</td>
<td>243</td>
<td>2%</td>
</tr>
<tr>
<td>2012</td>
<td>324</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Fig. 2: Trends in the prevalence of use of different drugs, 2009-2012

- Cannabis
- Opiates
- Cocaine
- Amphetamines
- “Ecstasy”
- Opioids

Source: Estimates based on the UNODC annual report questionnaire.

Therefore, rather than looking at the year-to-year change, it is more meaningful to take a longer-term perspective. Also, year-on-year changes in a country’s prevalence rate have only a slight impact on a region’s overall prevalence unless they occur in a country with a large population. For 2012 data, updated prevalence estimates are available for 33 countries, mostly countries of Western and Central Europe and North America, representing nearly 12 per

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1 This is based on the prevalence rates of any drug use among males and females reported to the United Nations Office on Drugs and Crime (UNODC) by Member States through the annual report questionnaire.
1. RECENT STATISTICS AND TREND ANALYSIS OF THE ILLICIT DRUG MARKET

RECENT STATISTICS AND TREND ANALYSIS OF THE ILLICIT DRUG MARKET

Nearly all drug use surveys indicate that men are more likely than women to use drugs such as opiates and cannabis. However, the gender gap shrinks when data on the misuse of pharmaceuticals are considered. In five recently surveyed countries (Australia, United States of America, Spain, Urban Afghanistan, and Pakistan), the illicit use of drugs is more common among men than women, but the non-medical use of pharmaceutical drugs is nearly equivalent, if not higher among women (see figure 3).

A third pattern is observed when a drug is gradually replacing or being substituted by another drug due to changes in price or availability or because the drug is in fashion. Common examples are heroin being substituted by oxycodone, desomorphine or other opioids, as observed in various regions, or "ecstasy" being substituted by mephedrone or some other new psychoactive substance.

Various studies have documented the extent of polydrug use. In a study conducted in 14 European countries in 2006, 60 per cent of cocaine users were polydrug users, of which 42 per cent used alcohol, 28 per cent used cannabis and 16 per cent used heroin. In another study, in the South-Eastern United States, 48.7 per cent of treatment admissions were for polydrug use, with alcohol, cocaine and cannabis being the most common substances. The main risks and consequences of polydrug use, for both recreational and high-risk drug users, continue to be the severe health consequences due to the increased toxicity, overdose and death. From a policy perspective, it is important to understand the patterns of polydrug use because such use invalidates the established profile and characterization of the user of a specific, single drug.

1 World Health Organization, Lexicon of Alcohol and Drug Terms (Geneva, 1994).
3 European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), "Polydrug use: patterns and responses", Selected issue 2009 (Lisbon, November 2009).
4 Ibid.

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### Table 1. Global estimates of users of different drugs, 2012

<table>
<thead>
<tr>
<th>Number of users (millions of users)</th>
<th>Prevalence (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best estimate</td>
<td>Low</td>
</tr>
<tr>
<td>Cannabis</td>
<td>177.63</td>
</tr>
<tr>
<td>Opioids</td>
<td>33.04</td>
</tr>
<tr>
<td>Opiates</td>
<td>16.37</td>
</tr>
<tr>
<td>Cocaine</td>
<td>17.24</td>
</tr>
<tr>
<td>ATS</td>
<td>34.40</td>
</tr>
<tr>
<td>&quot;Ecstasy&quot;</td>
<td>18.75</td>
</tr>
</tbody>
</table>

Source: Estimates based on the UNODC annual report questionnaire.
B. HEALTH AND SOCIAL IMPACT

Problematic drug use as reflected in the demand for treatment

The need for treatment for drug use disorders and dependence reflects a problematic level of consumption. Therefore, analysing drug types that contribute to the demand for treatment can provide information on the drugs that have the highest negative impact on health in each region. Treatment for cannabis use is very evident in Africa, throughout the Americas and in Oceania. Although the general public may perceive cannabis to be the least harmful illicit drug, between 2003 and 2012 the proportion of total treatment admissions for cannabis increased in Western and Central Europe (from 19 per cent to 25 per cent), Eastern and South-Eastern Europe (from 8 per cent to 15 per cent), Latin America and the Caribbean (from 24 per cent to 40 per cent) and Oceania (from 30 per cent to 46 per cent). Opioids dominate the demand for treatment in Eastern and South-Eastern Europe and Asia. Cocaine is a major contributor to the demand for treatment in the Americas, in particular in Latin America and the Caribbean. ATS use is responsible for sizeable proportions of treatment demand in Asia and Oceania.

Globally, it is estimated that approximately one in six problem drug users accesses treatment each year. However, there are large regional disparities, with approximately 1 in 18 problem drug users receiving treatment in Africa (primarily for cannabis use), compared with one in five problem drug users receiving treatment in Western and Central Europe, one in four in Oceania, and one in three in North America.

Drug-related deaths

Drug-related death is the most extreme form of harm that can result from drug use. The United Nations Office on Drugs and Crime (UNODC) estimates that there were 183,000 (range: 95,000-226,000) drug-related deaths in 2012, corresponding to a mortality rate of 40.0 (range: 20.8-49.3) deaths per million persons aged 15-64.

The current estimate of the total number of drug-related deaths is a downward revision from the value published in the World Drug Report 2013. However, this should not be interpreted as a decline in the global number of drug-related deaths. That revision was predominantly the result of the updated estimates from only a few countries (Iran (Islamic Republic of), Kazakhstan and Uzbekistan), which mostly affected the regional total for Asia and, consequently, the global number of drug-related deaths.

Drug overdose is the primary contributor to the global number of drug-related deaths, and opioids (heroin and the non-medical use of prescription opioids) are the main drug type implicated in those deaths. Risk factors for overdose include the availability and purity of opioids; reduced tolerance due to a recent period of abstinence such as due to treatment, incarceration or self-imposed abstinence; lack of treatment for opioid dependence; and polydrug use, especially involving benzodiazepines and the use of alcohol.

Deaths from opioid overdose are preventable not only by reducing opioid dependency or restricting supply but also by reversing the effects of opioids after an overdose has occurred. Naloxone, a pure opioid antagonist, is a medication recommended by the World Health Organization 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 or as drug-dependent based on clinical criteria contained in the International Classification of Diseases (10th revision) of the World Health Organization and the Diagnostic and Statistical Manual of Mental Disorders (4th ed.) of the American Psychiatric Association, or any similar criteria or definition that may be used.

The definition of drug-related deaths varies among Member States but includes all or some of the following: fatal drug overdoses, deaths due to HIV acquired through injecting drug use, suicide, and unintentional deaths and trauma, due to drug use.

Because of the very limited reporting of data from countries in Africa, an alternative source is used: Louisa Degenhardt and others, “Illicit drug use”, in Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors, vol. 1, M. Ezzati and others, eds. (Geneva, World Health Organization, 2004).

1. RECENT STATISTICS AND TREND ANALYSIS OF THE ILLICIT DRUG MARKET

(UNODC) that can be administered to immediately reverse the effects of an opioid overdose. It is highly effective and safe and has no significant side effects and no potential for misuse.6

A number of countries have implemented community-based programmes that make naloxone more readily available to appropriately trained opioid users, their peers and family members. In the United States, for example, there were 188 local opioid overdose prevention programmes distributing naloxone in 2010, and between 1996 and 2010, those programmes reported 10,171 opioid overdose reversals through use of naloxone.7

Preventing non-fatal overdose cases

A major health consequence of high-risk drug use — especially among regular opioid users and people who inject drugs — that remains largely underreported is the occurrence of non-fatal overdose cases.8 Various studies conducted among opioid users and people who inject drugs have reported that the large majority of opioid users had survived an overdose episode in their lifetime (ranging between 30 and 83 per cent, as reported in different opioid overdose prevention programs providing naloxone: United States, 2010”, Morbidity and Mortality Weekly Report, vol. 61, No. 6 (17 February 2012), pp. 101-105.

6 Ibid.

7 Centers for Disease Control and Prevention, “Community-based

Table 2. Estimated number of drug-related deaths and mortality rates per million persons aged 15-64 years, 2012

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of drug-related deaths</th>
<th>Mortality rate per million aged 15-64</th>
<th>% of population of countries where mortality data is available</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best estimate</td>
<td>Lower estimate</td>
<td>Upper estimate</td>
</tr>
<tr>
<td>Africa</td>
<td>36,800</td>
<td>17,500</td>
<td>56,200</td>
</tr>
<tr>
<td>North America</td>
<td>44,600</td>
<td>44,600</td>
<td>44,600</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>4,900</td>
<td>4,000</td>
<td>7,300</td>
</tr>
<tr>
<td>Asia</td>
<td>78,600</td>
<td>11,400</td>
<td>99,600</td>
</tr>
<tr>
<td>Western and Central Europe</td>
<td>7,500</td>
<td>7,500</td>
<td>7,500</td>
</tr>
<tr>
<td>Eastern and South-Eastern Europe</td>
<td>8,700</td>
<td>8,700</td>
<td>8,700</td>
</tr>
<tr>
<td>Oceania</td>
<td>1,900</td>
<td>1,600</td>
<td>1,900</td>
</tr>
<tr>
<td>Global</td>
<td>183,100</td>
<td>95,500</td>
<td>225,900</td>
</tr>
</tbody>
</table>


Note: Data for Africa have been adjusted to reflect the 2012 population. The wide range in the estimates for Asia reflects the low level of reporting from countries in the region. The best estimate for Asia is placed towards the upper end of the reported range because a small number of highly populated countries reported a relatively high mortality rate, which produces a high regional average.

Two dots (..) indicate insufficient data. Also see footnote 4.
studies). Additionally, it is estimated that in Europe, there are 20-25 non-fatal overdose cases to each drug-induced death. Non-fatal overdose can significantly contribute to morbidity, including cerebral hypoxia, pulmonary oedema, and cardiac arrhythmia, which may result in prolonged hospitalization, brain damage and disabilities.

Most overdose cases occur when substances — opioids, for example — are mixed with other sedating substances, particularly alcohol and benzodiazepines (see the box on poly-drug use). It may also occur when a person has had a short period of abstinence (e.g., after incarceration or having gone through a short-term episode of detoxification), resulting in lowered tolerance, and misjudges the dose.

People who inject drugs, health implications and prevention and treatment services

Unsafe injecting drug use can have very serious health implications due to the high risks of the transmission of blood-borne infections such as HIV, as well as hepatitis B and hepatitis C, contracted by sharing of contaminated injecting equipment. The Joint United Nations Programme on HIV/AIDS (UNAIDS) reports that the number of new cases of HIV among people who inject drugs (PWID) remains high, constituting up to 40 per cent of new infections in some countries and resulting in a major public health challenge. A recent study on the global burden of disease from drug dependence estimated that in 2010, 1,980,000 years of life were lost in conjunction with unsafe injecting drug use, through premature death as a consequence of HIV infection, and a further 494,000 years of life were lost worldwide due to hepatitis C infection.

Knowledge regarding the behaviour and health of people who use drugs, in particular among people who inject drugs, has expanded over the past decade. There has been a considerable effort over the past 10 years to conduct biological and behavioural surveillance studies specifically designed to measure hard-to-reach and hidden key populations (such as people who inject drugs) in order to estimate the size of those populations and the prevalence of infectious diseases, particularly HIV and hepatitis C, among them.

While the number of integrated biological and behavioural surveys carried out to date is not precisely known, it has been estimated that over the past 10 years (from 2003 to 2013) between 125 and 200 behavioural surveillance surveys and integrated biological and behavioural surveys (which include serological tests for HIV and, in some cases, for hepatitis C and syphilis) have been carried out in over 50 countries.

Current estimates are based on the information available on the prevalence of injecting drug use in 89 countries (compared with 83 countries in the World Drug Report 2013), representing 83 per cent of the global population aged 15-64, and the prevalence of HIV among people who inject drugs in 111 countries (compared with 106 countries in the World Drug Report 2013), representing 92 per cent of the estimated global number of people who inject drugs. This represents an improvement in data coverage compared with what was available previously at the time of the published estimates of the former Reference Group to the United Nations on HIV and Injecting Drug Use in 2008, for which the estimate of injecting drug use prevalence was based on data from 61 countries. The estimated prevalence of HIV among people who inject drugs was based on data from 84 countries.

In calculating the 2012 estimates, UNODC, UNAIDS, WHO and the World Bank joined forces and reached out to a broad group of experts from academia, regional, international and civil society organizations to ensure that the scientific approach to the methodology was used and to access the greatest number of data sets available worldwide on the subject. A combination of methodological differences and factors related to data quality makes it a challenging task to reliably assess global and regional change and trends in the epidemic of injecting drug use and HIV among people who inject drugs.

People who inject drugs

The joint UNODC/WHO/UNAIDS/World Bank global estimate for 2012 of the number of people who had recently injected drugs was 12.7 million (range: 8.9 million-22.4
1. RECENT STATISTICS AND TREND ANALYSIS OF THE ILLICIT DRUG MARKET

6 million), corresponding to a prevalence of 0.27 per cent (range: 0.19-0.48 per cent) of the population aged 15-64. There are, however, large regional variations in terms of data coverage and quality.

The current estimate represents a slight downward revision in the number of people who inject drugs worldwide but rather as a revision of the estimate, following the first joint UNODC/WHO/UNAIDS/World Bank data and methodology review and independent expert consultations conducted at the end of 2013. This led to an updating of national estimates on people who inject drugs for 23 countries, including highly populated countries such as China and Indonesia.

By far the highest prevalence of injecting drug use, with a rate 4.6 times the global average, is found in Eastern/South-Eastern Europe, where 1.26 per cent of the population aged 15-64 are estimated to have recently injected drugs. Within that subregion, notably high rates of injecting drug use are observed for the Russian Federation (2.29 per cent), the Republic of Moldova (1.23 per cent), Belarus (1.11 per cent) and Ukraine (0.88-1.22 per cent).

In terms of the actual numbers of people who inject drugs, three countries (Russian Federation, China and the United States) combined account for 46 per cent of the global total.

HIV among people who inject drugs

UNAIDS reports that for the 49 countries for which data are available, the prevalence of HIV among people who inject drugs is at least 22 times higher than among the general population and, in 11 countries, is at least 50 times higher.16

The joint UNODC/WHO/UNAIDS/World Bank global estimate for 2012 of the number of people who inject drugs living with HIV is 1.7 million (range: 0.9 million-4.8 million), corresponding to an average prevalence of HIV among people who inject drugs of 13.1 per cent.

There are great challenges in collecting data on people who inject drugs. They are often hard to reach and difficult to sample. Surveys among people who inject drugs might capture only people currently injecting drugs, and the global estimate of people who inject drugs living with HIV may not fully represent the number of people who have a lifetime history of injecting drug use and are living with HIV but who are not currently injecting drugs.

The current estimate of the prevalence of HIV among people who inject drugs has been revised upwards from the estimate in the World Drug Report 2013. However, since the estimated total number of people who inject drugs has been revised downward, the estimated global number of people who inject drugs living with HIV

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B. Health and social impact

remains essentially the same. Importantly, the new estimate reflects the results of the first joint UNODC/WHO/UNAIDS/World Bank data and methodology review and independent expert consultations conducted at the end of 2013, which led to updated national estimates for 36 countries, including the three countries with large populations (China, the Russian Federation and the United States).

Two regions stand out as having a very high prevalence of HIV among people who inject drugs. In South-West Asia, it is estimated that 28.8 per cent of people who inject drugs are living with HIV, predominantly reflecting the high prevalence of HIV among people who inject drugs in Pakistan. In Eastern/South-Eastern Europe, an estimated 23.0 per cent of people who inject drugs are thought to be living with HIV, primarily reflecting the high prevalence observed in both the Russian Federation (range: 18.4-30.7 per cent) and Ukraine (21.5 per cent).

In terms of the actual number of people who inject drugs living with HIV, four countries combined (China, Pakistan, the Russian Federation and the United States) account for 62 per cent of the global total.

An examination of the numbers of new cases of HIV diagnosed each year among people who inject drugs provides insight into changes in the epidemic over time and progress towards achieving the target set in the Political Declaration on HIV and AIDS adopted by the General Assembly in 2011 of reducing HIV transmission among people who inject drugs by 50 per cent by 2015. Although the changes in the numbers of newly diagnosed cases may reflect improved surveillance, they also reflect changes in the transmission of HIV within that most-at-risk group.

In several European countries with a high occurrence of newly diagnosed cases (incidence) of HIV among people who inject drugs, there was a noticeable peak in the number of new cases between 1999 and 2003, indicating that the epidemic in the region was greatest in those years and subsequently declined. That development is visible also in the sharp decline in the number of deaths from AIDS attributed to unsafe injecting drug use that occurred in later years in the western part of the WHO European region, with the number of deaths declining from 1,358 in 2006 to 179 in 2012. During that time period, the contribution of unsafe injecting drug use to total AIDS-related deaths in that region declined from 43 per cent to 25 per cent. The decline in newly diagnosed HIV cases and AIDS-related deaths among people who inject drugs is consistent with the scaling-up of the provision of harm reduction services, a decline in the prevalence of injecting

Table 4. Estimated number and prevalence (percentage) of HIV among people who inject drugs, 2012

<table>
<thead>
<tr>
<th>Region</th>
<th>Subregion</th>
<th>Estimated number</th>
<th>Prevalence Best estimate (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Best</td>
<td>High</td>
</tr>
<tr>
<td>Africa</td>
<td>24,000</td>
<td>123,000</td>
<td>2,006,000</td>
</tr>
<tr>
<td>America</td>
<td>197,000</td>
<td>267,000</td>
<td>421,000</td>
</tr>
<tr>
<td>North America</td>
<td>148,000</td>
<td>189,000</td>
<td>254,000</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>49,000</td>
<td>79,000</td>
<td>167,000</td>
</tr>
<tr>
<td>Asia</td>
<td>331,000</td>
<td>556,000</td>
<td>966,000</td>
</tr>
<tr>
<td>Central Asia and Transcaucasia</td>
<td>26,000</td>
<td>31,000</td>
<td>41,000</td>
</tr>
<tr>
<td>East and South-East Asia</td>
<td>196,000</td>
<td>312,000</td>
<td>596,000</td>
</tr>
<tr>
<td>South-West Asia</td>
<td>88,000</td>
<td>188,000</td>
<td>298,000</td>
</tr>
<tr>
<td>Near and Middle East</td>
<td>1,000</td>
<td>3,000</td>
<td>8,000</td>
</tr>
<tr>
<td>South Asia</td>
<td>20,000</td>
<td>21,000</td>
<td>22,000</td>
</tr>
<tr>
<td>Europe</td>
<td>364,000</td>
<td>719,000</td>
<td>1,434,000</td>
</tr>
<tr>
<td>Eastern and South-Eastern Europe</td>
<td>320,000</td>
<td>667,000</td>
<td>1,368,000</td>
</tr>
<tr>
<td>Western and Central Europe</td>
<td>44,000</td>
<td>52,000</td>
<td>66,000</td>
</tr>
<tr>
<td>Oceania</td>
<td>1,000</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Global</td>
<td>917,000</td>
<td>1,667,000</td>
<td>4,828,000</td>
</tr>
</tbody>
</table>

Source: UNODC 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, estimates based on UNODC data, and national government reports.

17 Political Declaration on HIV and AIDS: Intensifying Our Efforts to Eliminate HIV and AIDS (General Assembly resolution 65/277, annex).
18 Countries of Western and Central Europe and Eastern and South-Eastern Europe.
19 For the list of countries of the European region as defined by WHO for the purposes of its work, see www.euro.who.int/en/countries.
20 European Centre for Disease Prevention and Control/WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2012.
and a change in the behaviour of people who inject drugs, with less frequent injecting and safer injecting practices being observed in many Western European countries.\textsuperscript{21}

There are some exceptions to the general downward trend in the number of new HIV cases among people who inject drugs in Europe, which demonstrate how the situation with regard to the HIV epidemic can change very rapidly. Greece (Athens) and Romania recently experienced significant increases in HIV cases among people who inject drugs. Those outbreaks were related to the increased frequency of injecting associated with a changing pattern of injecting, from heroin to cocaine in Greece and to amphetamines in Romania, and an increase in the sharing of needles and syringes.\textsuperscript{22,23} The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) notes a temporal association between those outbreaks and the low levels of harm reduction services in Greece (compared with international standards) and Romania.\textsuperscript{24}

Eastern/South-Eastern Europe has very high prevalence rates and numbers of people who inject drugs and people who inject drugs and are also living with HIV, predominantly reflecting the situation in the Russian Federation and Ukraine. In those two countries, the number of people who inject drugs who are newly diagnosed with HIV each year continues to be higher than in other countries of the region. According to the Russian Federal Research and Methodological Centre for Prevention and Control of AIDS, the proportion of newly diagnosed cases of HIV attributed to injecting drug use was 58.7 per cent in 2009 and 57.0 per cent in 2013. In Ukraine, the number of newly diagnosed cases of HIV among people who inject drugs is levelling off at about 6,000–7,000 new cases annually. In Central Asia, a region with a high prevalence of injecting drug use, several countries with a high occurrence of newly diagnosed cases (incidence) of HIV among people who inject drugs have seen the incidence continue to rise over the past decade.\textsuperscript{25} Very high levels of risky injecting behaviour are reported in the region and, although some progress has been made in the scaling-up of HIV prevention, treatment and care services for people who inject drugs, many obstacles still remain.\textsuperscript{26}


22 EMCDDA, “HIV outbreak among injecting drug users in Greece” (Lisbon, November 2012).


24 EMCDDA and European Centre for Disease Prevention and Control, “Joint EMCDDA and ECDC rapid risk assessment. HIV in injecting drug users in the EU/EEA, following a reported increase of cases in Greece and Romania” (Lisbon, January 2012).

25 The initial peak in reported HIV incidence in Central Asia in the early 2000s is also in part related to the increase or initiation of HIV testing among people who inject drugs.

26 Claire Thorne and others, “Central Asia: hotspot in the worldwide HIV epidemic”, Lancet Infectious Diseases, vol. 10, No. 7 (July 2010).
South-West Asia has the highest prevalence of HIV among people who inject drugs, with Pakistan contributing the most to that prevalence rate, as that country has a large number of people who inject drugs and a very high prevalence of HIV among people who inject drugs (37 per cent). In Pakistan, a recent cohort study conducted in three drop-in centres in Karachi followed 636 HIV-negative people who injected drugs over a period of two years (between 2009 and 2011). Even though all of those participating in the study were attending basic risk reduction programmes, the HIV incidence rate among them was 12.4 per 100 person-years. At the end of the 24-month study period, 24.9 per cent of the participants were HIV-positive. The authors reported that underfunding compromised the quality and quantity of outreach services and the full implementation of harm reduction programmes. The greatest risk factor for HIV infection was found to be the sharing of syringes, for which the risk of infection was 2.3 times higher than for those who did not share injecting equipment. The authors concluded that the absence of opioid substitution therapy and inadequate needle and syringe programme coverage undermined the success of the HIV harm reduction programmes studied. Other countries of South-West Asia might have similarly high levels of HIV incidence among people who inject drugs, but there is a lack of available data.

**Table 5. Overview of the level of provision of harm reduction services**

<table>
<thead>
<tr>
<th>Classification of coverage targets</th>
<th>Countries reporting low, medium or high coverage (percentage)</th>
<th>Number of countries reporting</th>
<th>Global median value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Percentage of people who inject</td>
<td>31% 29% 40%</td>
<td>83</td>
<td>36%</td>
</tr>
<tr>
<td>drugs who were tested for HIV in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the last 12 months and who know</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of all people who inject</td>
<td>49% 25% 26%</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>drugs who were reached by a needle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and syringe programme over the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>last 12 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of needles-syringes</td>
<td>62% 20% 18%</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>distributed per person who injects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>drugs per year</td>
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<tr>
<td>Percentage of opioid-dependent</td>
<td>35% 32% 33%</td>
<td>79</td>
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<td>people who inject drugs on opioid</td>
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<td>substitution therapy</td>
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<tr>
<td>Percentage of all HIV positive</td>
<td>32% 31% 37%</td>
<td>74</td>
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<tr>
<td>people who inject drugs receiving</td>
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<td>antiretroviral therapy at a</td>
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<td>Source: UNODC annual report</td>
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<td>questionnaire, UNAIDS.</td>
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<td>Note: The table provides the</td>
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<td>classification and level of service</td>
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<td>provision for HIV testing and</td>
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<td>counselling, needle and syringe</td>
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<td>programmes, opioid substitution</td>
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<td>therapy and antiretroviral therapy</td>
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<td>among people who inject drugs and</td>
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<td>those among them living with HIV,</td>
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<td>according to the Technical Guide;</td>
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<td>the percentage of countries</td>
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<td>coverage for those services; and</td>
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<td>the global average level of service</td>
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<td>a Based predominantly on behavioural survey data.</td>
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Hepatitis among people who inject drugs

Hepatitis B and C can lead to liver disease such as cirrhosis, liver cancer and death. Hepatitis C is highly prevalent among people who inject drugs and is transmitted through the sharing of contaminated injecting equipment even more easily than is HIV. The first year of injecting is the time of greatest risk for hepatitis C infection from sharing needles and syringes. The joint UNODC/WHO/UNAIDS/World Bank global estimate for 2012 of the percentage of people who inject drugs who are living with hepatitis C is 52.0 per cent, corresponding to 6.6 million people aged 15-64. For 2012, the global estimate of the percentage of people who inject drugs living with hepatitis B is 6.7 per cent, corresponding to 850,000 people aged 15-64.

Coverage of services for the prevention and treatment of HIV among people who inject drugs

Addressing HIV among people who inject drugs is a major component of the global response to the spread of HIV. A comprehensive package of nine evidence-based interventions, as a component of what are also known as “harm reduction” services, for the prevention, treatment and care of HIV among people who inject drugs, as outlined in the

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1. RECENT STATISTICS AND TREND ANALYSIS OF THE ILLICIT DRUG MARKET

31 Community (the extent to which people who inject drugs
National estimates of the level of service coverage in the
therapy). 31

In order of priority, the four most important interventions
are needle and syringe programmes, opioid substitution
therapy, HIV testing and counselling, and antiretroviral
therapy. 31

National estimates of the level of service coverage in the
community (the extent to which people who inject drugs
actually receive the intervention) and the distribution of
needles and syringes are presented using a classification
of “low”, “medium” or “high” as defined according to
the targets set in the Technical Guide.

In most countries, the extent of services provided to people
who inject drugs falls below the lower-level targets
presented in the Technical Guide. However, global estimates
mask important regional variations.

The coverage of services is highest in Western and Central
Europe, with 50-60 per cent of reporting countries indicating
that a high proportion of people who inject drugs
are accessing needle and syringe programmes, opioid
substitution therapy, HIV testing and counselling and
antiretroviral therapy services. In Eastern/South-Eastern Europe,
despite the increase in service availability in some countries,
access to needle and syringe programmes in particular
remains low. In North America, none of the countries
report a high level of access of people who inject drugs
to any of the services, with needle and syringe programmes
consistently reaching only a low proportion of people
who inject drugs. In Latin America (no countries from the

Source: UNODC annual report questionnaire, UNAIDS and the former Reference Group to the United Nations on HIV and Injecting Drug Use.

Note: In reporting on the level of service coverage via the annual report questionnaire, Member States have the option of categorizing the level of
service coverage as “not applicable”. That response has been interpreted as meaning that there is no service coverage. For some countries the level of
service coverage for needle and syringe programmes is not known, but the service is known to exist in that country. However, the scale of provision of
needle and syringe programmes in those cases can vary substantially.

The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations. Dashed lines represent undetermined
boundaries. 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.

WHO, UNODC, UNAIDS Technical Guide 30 (referred to
hereafter as the Technical Guide) has been widely endorsed
by high-level political bodies including the General Assembly,
the Economic and Social Council, the Commission
on Narcotic Drugs and the Programme Coordinating
Board of UNAIDS. In addition, donor agencies, including
the Global Fund to Fight AIDS, Tuberculosis and Malaria
(GFATM) and the United States President’s Emergency
Plan for AIDS Relief (PEPFAR) have committed to using
that framework.

In order of priority, the four most important interventions
are needle and syringe programmes, opioid substitution
therapy, HIV testing and counselling, and antiretroviral
therapy. 31

National estimates of the level of service coverage in the
community (the extent to which people who inject drugs

31 Ibid.
Caribbean reported information), the two overall most important interventions (needle and syringe programmes and opioid substitution therapy) are generally reaching only low numbers of people who inject drugs. It should be noted that in Latin American countries, the prevalence of use of opiates is very low and therefore, in reporting by countries, opioid substitution therapy would not be indicated as relevant. Also six of the seven Latin American countries reporting through the annual report questionnaire indicated that needle and syringe programmes were “not applicable”, reflecting that the practice of injecting drugs is at a low level. In Central Asia and Transcaucasia, a region with a high prevalence of injecting drug use, only two countries indicate a high level of HIV testing and counselling, and access to needle and syringe programmes, and overall low levels of access to opioid substitution therapy. In East and South-East Asia, a region with a large number of people who inject drugs and, among them, a significant number of people living with HIV, 50 per cent of the countries reporting indicate a high level of HIV testing and counselling among people who inject drugs. However, needle and syringe programmes are not reaching many people who inject drugs in many countries in the region. South-West Asia has the highest prevalence of HIV among people who inject drugs, but no country in the region reported a high level of coverage for any of the services.

In the 16 countries32 that have the highest prevalence of people who inject drugs and the highest prevalence of HIV among people who inject drugs — which account for 45 per cent of the global number of people who inject drugs and 66 per cent of the global number of people who inject drugs living with HIV — a generally low level of service provision can be noted, particularly with regard to needle and syringe programmes and opioid substitution therapy.

Drug use among prisoners and implications for health

It is estimated that worldwide, on any single day, there are more than 10.2 million people held in prisons (including pretrial detention), with the numbers growing in every continent.33 However, prison population rates differ considerably from region to region and between different parts of the same continent.34 Many of those held are incarcerated for offences related to the use, possession or supply of drugs.

Drug use and injecting drug use are both highly prevalent among prison populations, often more so than among the general population. EMCDDA reports that the proportion of prisoners who had used an illicit substance during incarceration in individual countries in Europe (mostly Western and Central Europe) ranged from 4 to 56 per

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32 Belarus, Canada, Georgia, Indonesia, Kazakhstan, Latvia, Malaysia, Myanmar, Pakistan, Republic of Moldova, Russian Federation, Spain, Tajikistan, Thailand, Ukraine and United States. Other countries which have higher prevalence rates may not be included in this list due to lack of reporting of service provision data.


34 The World Prison Population List (10th ed.) indicates that the median prison population rate per 100,000 in Africa is 46; Southern African countries: 209; North American countries: United States: 716, Canada: 118; South American countries: 202; Caribbean countries: 376; South/Central Asian countries (mainly the Indian subcontinent): 62; East Asian countries: 160; Western European countries: 98; countries spanning Europe and Asia (e.g., Russian Federation and Turkey): 225; and Oceania: 151.
Global Burden of Disease Study 2010: Estimating the burden of disease from drug dependence

Illicit drug use can have a profoundly negative effect on a person’s health. It can lead to premature death, such as in the case of overdose, but can also severely curtail the quality of life through disability (any short-term or long-term health loss), such as from liver disease, or infection with HIV and hepatitis B and C as a result of sharing contaminated needles and syringes.\(^1\)

These effects can be quantified in an indicator called “disability-adjusted life year” (DALY), which encompasses both the years of potential life lost due to premature death (YLL) and the years of life lived with disability (YLD). A recent study published by Degenhardt and others (2013)\(^2\) produced global estimates of disability-adjusted life years for illicit drug dependence\(^3\), and drug use as a risk factor for other health outcomes (schizophrenia from cannabis use, hepatitis and HIV from injecting drug use, and drug dependence as a risk factor for suicide).

The findings of that study reveal that in 2010, drug dependence on illicit drugs was responsible for 3.6 million years of life lost through premature death and 16.4 million years of life lived with disability globally. Combined, this is equal to 20 million years of disability-adjusted life years (representing 0.8 per cent of global all-cause disability-adjusted life years), an increase from 13.1 million years estimated for 1990. Opioid dependence contributed most to the burden of disease, being responsible for 55 per cent of years of life lost due to premature death and 44 per cent of years of life lost through disability. The increase in the global burden of disease from cannabis, amphetamine and cocaine dependence between 1990 and 2010 is essentially attributable to population growth, but this is not the case for opioid dependence. The burden of disease from opioid dependence increased by 74 per cent between 1990 and 2010, with 42 per cent of that increase attributable to an increase in the prevalence of opioid dependence. According to UNODC data, the prevalence of opioid use has been increasing globally over the past five years as a consequence of the increased misuse of prescription opioids, whereas the prevalence of opiate (heroin and opium) use has been stable at the global level and declining in some regions such as Europe. A total of 43,000 deaths were attributed to opioid dependence in 2010, which suggests that life expectancy was typically cut short by 46 years in each of those cases of death. The global burden of disease attributed to cannabis dependency is higher than that for cocaine. Although cocaine use is associated with greater harm, the far higher number of cannabis-dependent users results in the greater global burden of disease overall. Broadly speaking, males contribute two thirds of the number of years of life lost and years lived with disability for all drug types. Disability-adjusted life years rose sharply between the ages of 15-24, reaching a peak in the relatively young 20-30 age group, consistently across all drug types. Illicit drug use was estimated to be the cause of 0.8 per cent of disability-adjusted life years worldwide in 2010 (ranking as the 19th leading risk factor). In comparison, tobacco smoking was the cause of an estimated 6.3 per cent of global disability-adjusted life years, and alcohol the cause of an estimated 3.9 per cent. However, for drug use, disability-adjusted life years reach a peak among users aged 20-30 years, and among that age group it contributes a higher proportion to the burden of disease.

The burden of disease from acquiring HIV through injecting drug use was estimated to be 2.1 million years in 2010, of which 2.0 million were from years of life lost through premature death. The burden of disease from hepatitis C acquired through injecting drug use is also high and was estimated to be responsible for 494,000 years of life lost in 2010 through premature death.

\(^1\) WHO, Neuroscience of psychoactive substance use and dependence (Geneva, 2004).
\(^2\) L. Degenhardt and others, “Global burden of disease attributable to illicit drug use and dependence: findings from the Global Burden of Disease Study 2010”.
\(^3\) Defined as the presence of three or more indicators of dependence for at least a month within the previous year. These indicators consist of a strong desire to take the substance, impaired control over use, a withdrawal syndrome on ceasing or reducing use, tolerance to the effects of the drug, the need for larger doses to achieve the desired psychological effect, a disproportionate amount of time spent by the user obtaining, using and recovering from drug use, and persistence of drug taking despite the problems that occur.

Several studies document that a very high percentage (56-90 per cent) of people who inject drugs report a history of imprisonment since starting injecting.\(^36\) An overview of HIV in prisons in all regions identified rates of infection many times higher than among the general popu-

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A study that compiled information on HIV prevalence in prisons for 75 low-income and middle-income countries found rates greater than 10 per cent in 20 of those countries. The situation is of particular concern in women’s prisons. Although there are fewer women in prison, both drug use and HIV infection are more prevalent among women in prison than among imprisoned men.

Although the availability of data is limited, there is a high level of illicit substance use in prisons, in particular the regular use of opioids. Injecting drugs is also a common practice. This is of concern because the prison environment is one in which there are limited prevention and treatment options for dealing with drug dependence and its associated health consequences.

The lack of access to and availability of health care, especially drug dependence treatment and HIV prevention and care services, in prisons is of major concern, since the prison population, at a minimum, should have access to these services to an extent equivalent to those available to the community outside.

C. REGIONAL TRENDS IN DRUG USE

Africa

Reliable and comprehensive information on the drug situation in Africa is not available. The limited data available suggest, however, that cannabis use, notably in West and Central Africa (about 12.4 per cent) is probably higher than the global average (3.8 per cent). The prevalence of use of other substances — except for cocaine, which remains at the global average — is low overall in Africa. A recent survey conducted in Cabo Verde in 2012 found...
that 7.6 per cent of the population had used an illicit substance at least once in their lifetime, 2.7 per cent had used an illicit substance in the past year and 1.6 per cent in the past 30 days. Cannabis was the most popular drug (2.4 per cent reporting use in the past year) followed by cocaine (0.2 per cent annual prevalence). The survey also reported common use of a “cocktail” containing crack cocaine and cannabis. ATS use, although at low levels (0.1 per cent lifetime prevalence), seems to be emerging.

In Nigeria, the expert perception is that there has been a large increase in the use of cannabis, with some increase in the use of ATS. According to the national survey on alcohol and drug use in Nigeria conducted in 2009, aside from alcohol, the non-medical use of tranquillizers had the highest annual prevalence (5.5 per cent) among the population aged 15-64 years. The misuse of prescription opioids was also reported to be high and more prevalent than the use of heroin (3.6 per cent annual prevalence of other opioids, and 2.2 per cent annual prevalence of heroin).

High levels of use of other substances were also reported, with annual prevalence as follows: cannabis, 2.6 per cent; amphetamine, 1 per cent; methamphetamine, 1.6 per cent; “ecstasy”, 1.7 per cent; cocaine, 1.6 per cent; and crack, 2 per cent. The prevalence in the last year of people injecting drugs was reported as 1.9 per cent.

In South Africa, expert perception is that there is some increase in the use of heroin and methamphetamine and some decrease in the use of crack cocaine (with use of other drugs being stable). Treatment facilities report that cannabis remains the most common illicit substance used, particularly among young people. Almost half of the admissions at specialist treatment centres were primarily related to cannabis use disorders. Polydrug use appears to be a common phenomenon among drug users in treatment.

**Americas**

With the exception of opiate use, use of all other groups of substances (cannabis, opioids, cocaine, ATS and “ecstasy”) remains at levels higher than the global average in the region.

**North America**

In the United States, past-year illicit drug use by persons aged 12 years or older reached the highest level in the past 10 years, increasing from 14.9 per cent in 2011 to 16.0 per cent in 2012. That overall increase in drug use, led mainly by the increase in cannabis use, is considered to be linked with lower risk perceptions of cannabis use, especially among young people. The use of cannabis rose from 11.5 per cent to 12.1 per cent and the non-medical use of psychotherapeutic drugs, particularly prescription opioids, rose from 5.7 per cent to 6.4 per cent after declining in 2011. In 2012, use of cocaine also increased slightly among the adult population but remained stable or declined among youth. In 2012, drug use was reported to be the highest among those in their late teens or twenties, while drug use among older adults, e.g., among those in their fifties, was also increasing, partly due to the ageing cohort of “baby boomers”, whose levels of drug use have been higher than those of previous cohorts.

However, past-year use of any illicit substance declined from 19.0 per cent in 2011 to 17.9 per cent in 2012 among the youth population aged 12-17 years, reaching the lowest level in the previous 10 years. From 2011 to 2012, past-year and past-month use of almost all drug types declined...
or remained stable among the 12-17 years age group.49

In the United States, the increasing non-medical use of pain relievers (prescription opioids) is also reflected in the continuing increase in the percentage of treatment admissions for opiates other than heroin,50 which now surpass treatment admissions for cocaine and methamphetamine.51 The number of deaths resulting from prescription painkiller overdose also continues to rise, especially among women.52 However, increases in heroin-related overdose deaths in the United States have also been reported (see “The interplay between illicit and pharmaceutical opioid use”). In addition, medical emergencies related to the non-medical use of pharmaceuticals increased 132 per cent over the period 2004-2011, with the number of medical emergencies involving opiates and/or opioids rising 183 per cent.53

In Canada, however, past-year use of cannabis in 2012 among the population aged 15 years or older remained unchanged from the previous year, while there was an increase in cannabis use among those aged 25 years or older: from 6.7 per cent in 2011 to 8.4 per cent in 2012. Past-year use of other illicit substances was estimated at about 1 per cent, and no changes were observed in the prevalence of those substances in the short term (2011-2012) or the long term (2004-2012).54

Latin America and the Caribbean

In South and Central America and the Caribbean, use of cocaine remains high, especially in South America, where cocaine use is currently at levels comparable to high-prevalence regions. With the exception of ATS, the use of other illicit substances remains low in the subregion.

According to a recent survey conducted among university students in the four Andean countries, the annual prevalence of cannabis use ranged between 15.2 per cent in Colombia and 3.6 per cent in the Plurinational State of Bolivia. Cocaine use was high in Colombia (2.2 per cent) compared with 1.1 per cent in Ecuador, 0.5 per cent in Peru, and 0.3 per cent in the Plurinational State of Bolivia. ATS prevalence was reported at 0.9 per cent in Colombia, 0.7 per cent in Ecuador and 0.5 per cent in Peru. Comparing the trends between 2009 and 2012, among students in the four countries there has been an overall increase in cannabis use (from 4.8 per cent in 2009 to 7.9 per cent in 2012), a small increase in the use of ATS and stable trends with regard to cocaine use. A major finding of the survey was the high prevalence of use of lysergic acid diethylamide (LSD) among university students, which increased from 0.2 per cent in 2009 to 0.95 per cent in 2012.55 LSD use was reported as being particularly high among students in Colombia.56

Asia

Reliable prevalence estimates are available for only a few countries in Asia. Those data suggest that consumption of illicit drugs is at levels similar to or below the global average. Tentative estimates suggest that cannabis is the most common illicit substance, with an annual prevalence of use of 1.9 per cent among those aged 15-64 years, followed by ATS (excluding “ecstasy”) at 0.7 per cent, “ecstasy” at 0.4 per cent, opiates at 0.35 per cent and cocaine at 0.05 per cent. As reported by experts, the use of methamphetamine continues to rise in most countries in East and South-East Asia, with accompanying seizures of methamphetamine in pill and crystalline forms reaching record levels in 2012. “Ecstasy” use seems to be staging a comeback, while use of new psychoactive substances is on the rise.57

In the absence of reliable survey data, national experts have indicated that in East and South-East Asia, the use of ATS has both increased and diversified. ATS have been ranked among the three drug types most used in countries in the subregion since 2009.

Methamphetamine pills are predominantly used in countries such as Cambodia, the Lao People’s Democratic Republic, Myanmar, Thailand and Viet Nam, whereas crystalline methamphetamine is the primary drug of concern in Brunei Darussalam, Cambodia, Indonesia, Japan, the Philippines and the Republic of Korea.58 There has also been a resurgence in the “ecstasy” market, with increased use in 2012 being reported by experts in a number of countries following a decline for several years.

49 Ibid., Detailed Tables, tables 7.5B and 7.6B.
50 The category ‘opiates other than heroin’ includes non-prescription methadone, buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, morphine, opium, oxycodone, pentazocine, propoxyphene, tramadol and any other drug with morphine-like effects.
52 Centers for Disease Control and Prevention, “Prescription painkiller overdoses: a growing epidemic, especially among women”, 3 July 2013.
56 The Colombian forensic experts of the Attorney General’s Office analysed samples of substances sold as LSD, following a reported increase in its use and unusual health effects reported by users. The results from samples obtained in three major cities of Colombia revealed that substances sold as LSD did not contain such substance but rather the synthetic phenethylamines 25B-NBOMe and 25C-NBOMe (reported in UNODC, Global SMART Update 2013, vol. 10, September 2013).
57 UNODC, Global SMART Update 2013, Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs: Challenges for Asia and the Pacific (Vienna, November 2013).
58 Ibid.
“Ecstasy” seizures more than tripled in 2012 compared with the previous year. The new psychoactive substances market is also growing rapidly in the subregion. Ketamine use has been long-standing in the region. Its use is considered to be stabilizing, while kratom continues to be used as a traditional stimulant in Malaysia, Myanmar and Thailand. The use of synthetic cannabinoids has also been reported in China, Indonesia, Japan, the Republic of Korea and Singapore.59

Experts from China report a stable situation with regard to the consumption of cannabis, cocaine, and tranquilizers and sedatives. However, the number of registered drug users continued to increase. Opioid use remains high in China, with 1.272 million opioid users registered by the end of 2012, compared with 1.18 million in 2011.60 The proportion of heroin users among registered drug users (59 per cent of users) decreased in 2012, as the number of registered synthetic drug users increased more than heroin users, especially because, as reported by the experts, there has been a large increase in the use of methamphetamine.61 Moreover, recent estimates of people who inject drugs — primarily heroin — are lower than previous estimates. The estimated prevalence of people who inject drugs in China, at 0.19 per cent in 2012, is less than the estimate of 0.25 per cent for 2005.62

Compared with East and South-East Asia, South-West and Central Asia are marked by high prevalence of opiate use, with an accompanying high prevalence of people who inject drugs and who are living with HIV: 28.8 per cent in South-West Asia and 7.7 per cent in Central Asia. The prevalence of opiate use in Afghanistan, Iran (Islamic Republic of) and Pakistan is among the highest globally (average of 1.5 per cent of the adult population in the three countries), whereas it is 0.8 per cent in Central Asia — twice the global average.

Europe

In Europe, cannabis is by far the most commonly consumed illicit substance, with an estimated 24 million past-year users (4.3 per cent of those aged 15-64), followed by cocaine with 3.7 million past-year users (0.7 per cent of those aged 15-64). The use of opioids and opiates is comparable to global average levels. ATS (excluding “ecstasy”) are consumed at a level little below the global average, but the use of “ecstasy” is higher, with an annual prevalence of 0.5 per cent compared with the global average of 0.4 per cent. Illicit drug consumption patterns are quite different between the two subregions in Europe. The use of cannabis and cocaine is much higher in Western and Central Europe, whereas the consumption of opioids and opiates is much higher in Eastern and South-Eastern Europe.

Western and Central Europe

In Western and Central Europe, although cannabis use remains high (5.7 per cent annual prevalence), there is evidence of trends of decreasing use, especially in countries with long and established cannabis use.63 The recent household surveys in Poland and Italy show substantially lower prevalence of cannabis use than previously reported, which can also be ascribed to methodological differences in those two most recent surveys.64 There is also an increasing diversity in the types of cannabis products available, especially high-potency herbal cannabis and the synthetic cannabis-like products that are emerging in the subregion.65

Cocaine consumption in Western and Central Europe remains high, at 1 per cent of the adult population. However, countries with high levels of use, e.g., Denmark, Italy, Spain and the United Kingdom of Great Britain and Northern Ireland, report a declining trend in cocaine use as well as in treatment demand.66

The past-year use of opioids, mainly heroin, is estimated as 0.4 per cent of the population aged 15-64. However, in Western and Central Europe, other opioids such as buprenorphine, fentanyl and methadone are available in the illicit markets, with reports that heroin has been

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59 Ibid.
60 China, National Narcotics Control Commission, Annual Report on Drug Control in China 2013 (Beijing, 2013).
61 UNODC, annual report questionnaire replies submitted by China for 2012.
64 Use of cannabis in Italy was reported as 14.6 per cent in 2009 and 4 per cent in 2011, while in Poland cannabis use was reported at 9.6 per cent in 2010 and 3.8 per cent in 2012.
66 Ibid.
replaced with fentanyl and buprenorphine in some countries. Overall, most countries in the subregion report declining trends in the use of heroin. The number of heroin users entering treatment for the first time has also been declining, resulting in an ageing cohort of heroin users currently in treatment. Injecting heroin, a common practice, has also been declining. Coupled with other interventions, this is likely to have contributed to the decline in the number of new HIV infections among heroin users who inject drugs.

Amphetamine and “ecstasy” remain the most commonly used synthetic stimulants in the subregion, with an annual prevalence of use of 0.6 per cent and 0.5 per cent of the adult population respectively. Injecting amphetamine continues to be seen as common among chronic drug-use populations. While amphetamine use has been stabilizing in parts of the subregion, there are concerns that it is being displaced by methamphetamine, given the increasing availability of methamphetamine in some markets.

Eastern and South-Eastern Europe

The main concern in Eastern and South-Eastern Europe is the high level of consumption of opioids, notably opiates, with annual prevalence rates of 1.2 per cent and 0.8 per cent, respectively. “Ecstasy” use is also above global average levels, with an annual prevalence of 0.6 per cent. The subregion is also marked by having one of the highest prevalence rates of people who inject drugs, as well as a high prevalence of people who inject drugs living with HIV. In two countries with high rates of opiate consumption, Belarus and Ukraine, experts perceive a significant increase in the use of opiates, with Belarus also reporting a significant increase in the use of opium. Heroin use is reported as stable in Ukraine, and there is an increase in the use of ATS in the country.

The Russian Federation has the highest prevalence of opiate use in the subregion. However, heroin use is reportedly being replaced by cheaper and more readily available prescription or over-the-counter preparations containing opioids. The use of ATS, synthetic opioids and synthetic cannabinoids is also perceived to be increasing, particularly among the youth population.

Oceania

Drug use information in Oceania is limited to Australia and New Zealand. No new data are available for 2012. The region has high levels of use of most substances: cannabis, 10.8 per cent; synthetic opioids, 3.0 per cent; cocaine, 1.5 per cent; ATS, 2.1 per cent; and “ecstasy”, 2.9 per cent.

In Australia, expert opinion points to an increase in the consumption of cannabis, cocaine, hallucinogens, and solvents and inhalants, but a decline in the use of “ecstasy”. There is a wide range of drug analogues and new psychoactive substances that are currently available in the Australian illicit drug market.

In New Zealand, experts have reported that there has been an increase in the use of heroin, pharmaceutical opioids, prescription stimulants and synthetic cannabinoids. There has also been a diversification of new drugs available in a wide variety of forms: a range of synthetic drugs sold under the broad product name “ecstasy”, a large number of new synthetic cannabinoid analogues and new analogues of existing controlled drugs and so-called “research chemicals”.

Drug use and the financial crisis in Europe

The global financial crisis had, and continues to have, significant effects on joblessness and income inequality, as well as physical and mental well-being. Although

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67 Ibid.
68 Ibid.
69 Ibid.

70 UNODC, annual report questionnaire, replies submitted by Belarus and Ukraine for 2012.
71 UNODC, annual report questionnaire, replies submitted by the Russian Federation for 2012.
72 Ibid.
73 UNODC, annual report questionnaire, replies submitted by Australia for 2012.
74 UNODC, annual report questionnaire, replies submitted by New Zealand.
The online marketplace for illicit drugs is becoming larger and more brazen, now capitalizing on technological advancements in private web transactions and virtual online currency to protect the identities of suppliers, consumers and website administrators. Buyers and sellers are connecting online via "dark net" sites and most often, traffic drugs directly through the postal service. UNODC global seizure data indicate that over the past decade, there was a 300 per cent increase in cannabis seizures obtained through the postal service between 2000 and 2011, the majority of which are coming from seizures reported from countries in Europe and the Americas.\(^2\)

The "dark net" cannot be accessed through traditional web searches; it requires logging in through a web proxy, such as to a Tor\(^3\) network, which connects to another location in the network, ensuring that the Internet Protocol (IP) address is not visible on either side of the transaction. These websites do not function as stores per se but work in a manner similar to eBay,\(^4\) where users and buyers can connect and are provided a venue to manage transactions and track fraudulent sales. Transactions are mostly conducted using the online peer-to-peer currency "bitcoin", which remains in escrow, until it is transferred to the seller once the product is satisfactorily delivered. At the time of this writing, 1 bitcoin was worth $625.

Several websites such as "Black Market Reloaded", "The Armory" and "The General Store", like the now defunct "Silk Road" website, sell a wide variety of products using this method. Despite the efforts to keep the site administrators, users and sellers unknown, 2013 saw the successful dismantling of several of these large-scale online drug trafficking operations, most notorious among them being the "Silk Road", which was seized by the Federal Bureau of Investigation of the United States, along with $28 million in bitcoins belonging to the administrator.\(^5\)

While "Silk Road" sold approximately 24,400 drug products, websites such as "The Armory" have taken over broader elements of weapons and ammunitions trafficking after they were no longer available on the "Silk Road".\(^6\) In a research paper on the user experience of the "Silk Road", an interviewee, after detailing his favourite purchases (good-quality cannabis, 3,4-methylenedioxyamphetamine (MDMA), and 2,5-dimethoxy-4-isopropylphenethylamine (2C-I)) stated that the "Silk Road" provided users with access to substances they otherwise would not have tried.\(^7\)

While there are no reliable statistics on how many people are buying drugs on the Internet, the variety available and purchased on the "dark net" appears to be diverse and growing. Because purchases and sales through the "dark net" pose unique challenges for law enforcement and presents a niche market for high-quality drugs and new psychoactive substances, if the past trend continues, it has the potential to become a popular mode of trafficking in controlled substances in years to come.

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1 The term "dark net" refers to a distribution network of users, obscured by encryption technology, and anonymized by hidden IP addresses. "Dark nets" are niches within the "deep web", which includes network connected sites that are not searchable by major search engines.
2 UNODC, individual drug seizure database.
3 "TOR" is the acronym for "The Onion Router" and works by encrypting communications to relay Internet traffic through multiple proxies worldwide to mask users’ locations and hide servers.
4 An online auction and shopping website in which people and businesses buy and sell a wide variety of goods and services worldwide.

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European economies are recovering,\(^79\) reductions in health services related to austerity measures have been observed, with 15 out of 19 countries in Europe reporting cuts to drug-related budgets ranging between 2 and 44 per cent.\(^80\)

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frequent injections (see: HIV among people who inject drugs). While surveys on the number of problem drug users in many of the hardest hit countries are not yet available, experts expect the number of dependent users to remain stable.  

Shifting trends in patterns of drug use

In some of the countries most affected by the financial crisis, demand for heroin declined, as users shifted to cheaper drugs. For example, between 2008 and 2009 in Milan, Italy, decreases in cocaine and heroin, which are more expensive, were observed, but increases in methamphetamine and cannabis, which are less expensive drugs, were noted. In Romania, among people who inject drugs, a shift was observed, with 97 per cent interviewed in 2009 reporting heroin as the main drug of injection and in 2012, most respondents (49.4 per cent) reportedly injecting ATS (mostly synthetic cathinones) and only 38.1 per cent injecting heroin. In Greece, increased injection of a cheap new stimulant-type drug called "sisa", has been reported. “Sisa” can be made in a kitchen from ephedrine, hydrochloric acid, ethanol and car battery fluid. Widespread polydrug use also facilitated those shifts.

Drug-related crime (drug law offences)

According to available information, during the period 2003-2012, both the number of persons arrested/suspected for possession for personal use and the number of users of illicit drugs increased: the former group by 31 per cent and the latter by approximately one fifth. Relative to the total population, the rate of persons arrested for or suspected of offences related to possession for personal use increased by 18 per cent, while the point estimate prevalence of drug users (as a percentage of the population in the 15-64 age bracket) has remained fairly stable.

The increases in drug-related crime were also apparent in offences for drug trafficking, while other kinds of crime declined. Although these indicators come with a large degree of uncertainty, they suggest that, over the period 2003-2012, the annual global proportion of drug users that was arrested for possession for personal use has fluctuated between 3 and 4 per cent. This suggests that the increase in crime rates for possession for personal use was due to the increase in the total number of drug users.

Comparing the relative importance of the various drugs

Comparison of growth in prevalence of illicit drug use and in per capita rate of persons recorded for personal drug use offences, 2003-2012

**Fig. 11.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of illicit drug use among the general population aged 15-64, best estimate (indexed relative to 2003, left axis)</th>
<th>Prevalence of illicit drug use among the general population aged 15-64, range (indexed relative to best estimate in 2003, left axis)</th>
<th>Percentage of users of illicit drugs recorded for personal use offences, best estimate (right axis)</th>
<th>Percentage of users of illicit drugs recorded for personal use offences, range (right axis)</th>
<th>Rate per capita of persons recorded for personal drug use offences (indexed relative to 2003, left axis, based on data for 45 countries)</th>
<th>Global population (indexed relative to 2003, left axis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
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<tr>
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<td>0.6</td>
<td>0.8</td>
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</tr>
<tr>
<td>2005</td>
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<td>1.0</td>
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</tr>
<tr>
<td>2006</td>
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<td>1.4</td>
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<tr>
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<td>1.4</td>
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<tr>
<td>2008</td>
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<tr>
<td>2009</td>
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<tr>
<td>2011</td>
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<td>2012</td>
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<td>2.2</td>
<td>2.4</td>
<td>2.6</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: UNODC estimates based on annual report questionnaire supplemented by other official sources.

85 Drug possession for personal consumption refers to drug offences related to the use or the possession of drugs for personal consumption (see art. 3, para. 2, of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988).
86 Drug trafficking refers to drug offences committed not in connection with the use or possession of drugs for personal consumption (see art. 3, para. 1, of the 1988 Convention).
1. RECENT STATISTICS AND TREND ANALYSIS OF THE ILLICIT DRUG MARKET

1. Recent Statistics and Trend Analysis of the Illicit Drug Market

20

Fig. 14. Share of the four major drug classes in drug offender records, by region and globally, 2012

Possession for personal use (27 countries)

Offender records * in given region (percentage)

Source: UNODC estimates based on annual report questionnaire.

a Since a given offender can be recorded in connection with different drugs, the percentage of records given does not necessarily coincide with the percentage of offenders. In addition, offenders recorded in connection with other substances are not included in the graph. Hence the total may not add up to 100 per cent.

b Average of the five regions, weighted by the estimated number of offenders (for all drug types) in each region.

to trafficking. In other regions, opioids or ATS take second place for possession related to personal use.

In Asia, illicit opioids offer some competition to cannabis as the most prominent drugs for possession related to personal use, and illicit ATS emerge as the most prominent for trafficking offences.

In Europe, illicit ATS ranked last among these four drug classes in terms of trafficking offences, despite being in second place (after cannabis) in terms of personal drug use offences.

An analysis of the gender make-up of persons recorded for drug-related offences indicates that the population apprehended for using controlled substances tends to be predominantly male, in keeping with the picture that emerges from drug use data. The same is true for trafficking. For all drug classes and with respect to both possession for personal use and trafficking offences (separately), less than

in records of drug-related crime, cannabis is clearly the most prominent drug in cases of possession for personal use, followed by ATS (see figure 14).

Asia and the Americas both exhibit features which distinguish them from the prevalent global trend. In the Americas, cocaine follows cannabis as the second most prominent drug with respect to possession related to personal use, and was almost at par with cannabis (in first place) with respect
one quarter of offenders were female. However, that proportion of female offenders varied significantly for the various drug classes, with the category of sedatives and tranquillizers standing out as the one with relatively high proportions of females, for both possession for personal use and trafficking offences. This conforms with drug use data for women.

The proportion of female offenders tended to be higher for trafficking offences than for possession related to personal use, but typically only marginally so, and still far below 50 per cent. Moreover, the relative importance (ranking) of each drug class, in terms of frequency of offending by females, was quite similar for trafficking and drug-use offences.

D. OPIATES: OVERVIEW

Cultivation and production

The global area under illicit opium poppy cultivation in 2013 was 296,720 hectares (ha), the highest level since 1998 when estimates became available. An increase in cultivation was seen in both Afghanistan and Myanmar. The main increase was observed in Afghanistan, where the area of opium poppy cultivation increased 36 per cent, from 154,000 ha in 2012 to 209,000 ha in 2013. The main area of cultivation in Afghanistan was in nine provinces in the southern and western part of the country, while the major increase was observed in Helmand and Kandahar. In Myanmar, the increase in the area of cultivation was not as pronounced as in Afghanistan.

In South-East Asia, the total area under cultivation in the Lao People’s Democratic Republic in 2013 was estimated as 3,900 ha (range: 1,900-5,800 ha). However, the 2013 estimates are not comparable with the estimates of 2012 due to the varying methodology in the use of high-resolution satellite images and time of conducting the helicopter survey. Myanmar continued the trend of increasing cultivation that began after 2006. (See tables in annex I for details on opium poppy cultivation and production in the different countries and regions).

The potential production of opium in 2013 is estimated at 6,883 tons, which is a return to the levels observed in 2011 and 2008. The opium production in Afghanistan accounts for 80 per cent of the global opium production (5,500 tons). The potential production of heroin (of unknown purity) has also increased to 560 tons, comparable to 2008 estimates of 600 tons (see figure 16).

Seizures

Globally, seizures of heroin and illicit morphine went down 19 per cent in 2012. The main declines in opiate seizures were reported in South-West Asia and Western and Central Europe, where seizures declined by 29 per cent and 19 per cent, respectively (from 117 tons in 2011 to 82 tons in 2012 in South-West Asia, and from 6 tons in 2011 to 4.85 tons in 2012 in Western and Central Europe). A substantial increase in heroin seizures, however, was reported in Eastern and South-Eastern Europe (15.98 tons in 2012 compared with 9.88 tons in 2011), mainly as a result of increased quantities reported seized in Turkey. Heroin seizures also increased substantially in Australia and New Zealand (1.09 tons in 2012 compared with 0.61 tons in 2011) and in South Asia (1.3 tons in 2012 compared with 0.723 tons reported in 2011). In North America, heroin seizures declined by 58 per cent in Mexico but increased

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88 UNODC, Southeast Asia Opium Survey 2013 (Bangkok, 2013).
89 Ibid.