1.3. CONSUMPTION

1.3.1. THE GEOGRAPHICAL SPREAD OF DRUG ABUSE

Drug abuse is a global phenomenon. There is hardly any country in which it does not take place. While the extent and characteristics of the problem obviously differ from country to country, abuse trends, especially among youth, show same signs of convergence over the last few decades.

According to replies to UNDCP’s Annual Reports Questionnaire at least 134 countries and territories were faced with a drug abuse problem (defined in the following section of this Chapter) in the 1990s. The overall number of countries in which drug abuse takes place is higher.

Figure 28 shows that the most frequently mentioned substances, reflecting the geographic spread of consumption, are still the plant-based drugs: cannabis (consumed in 96% of all countries reporting a drug abuse problem), the opiates (87%) and the cocaine-type substances (81%). They are followed by the synthetic drugs, i.e. by amphetamine-type stimulants (73%), benzodiazepines (69%) and various volatile substances or inhalants (69%) (Table 2 shows these data by region). Three quarters of all countries report abuse of heroin and two thirds abuse of cocaine. Both abuse of heroin and of cocaine are more widespread than abuse of their respective intermediate products – opium/ morphine or coca leaf/coca paste which are usually consumed close to the areas of production.

The most widely consumed drug is cannabis. It is used either in the form of cannabis herb (marijuana) or cannabis resin (hashish) in almost all countries across the globe.

By contrast, the abuse of the opiates is concentrated in Asia and Europe, and of cocaine in the Americas, and to a lesser extent in Europe. Abuse of synthetic drugs, notably amphi-
mine-type stimulants (ATS) and benzodiazepines, is concentrated in Europe. Within the group of ATS, amphetamine and methamphetamine are the most abused substances worldwide, followed by the ecstasy substances. While methamphetamine is the dominant ATS in North America and East and South-East Asia, amphetamine is the most widely abused ATS in Europe. Consumption of the various substances of the ecstasy group is concentrated in Europe, though spreading to other regions as well.

Barbiturates, which a couple of decades ago constituted a major problem, are now mentioned by less than half of all reporting countries, reflecting better controls to prevent diversion and a shift towards the use of the slightly less addictive benzodiazepines instead. Benzodiazepines and barbiturates – in contrast to cannabis, opiates or cocaine-type substances – are usually obtained from licit sources, either through over-prescriptions or direct purchase in pharmacies or parallel markets in countries lacking adequate control systems.

The overall ranking of drug abuse in geographical terms (except for benzodiazepines and inhalants), is very similar to the ranking of countries reporting seizures, indicating that countries with drug trafficking eventually face a drug abuse problem.

### 1.3.2. MAIN PROBLEM DRUGS

The definition of a problem drug relates to the extent to which use of a certain drug leads to treatment demand, emergency room visits

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Fig. 28: Countries and territories reporting an abuse problem in the 1990s – for most commonly mentioned substances as a percentage of all countries reporting on drug abuse (N=134)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis</td>
<td>96%</td>
</tr>
<tr>
<td>Opiates</td>
<td>87%</td>
</tr>
<tr>
<td>Heroin</td>
<td>76%</td>
</tr>
<tr>
<td>Morphine</td>
<td>52%</td>
</tr>
<tr>
<td>Opium</td>
<td>51%</td>
</tr>
<tr>
<td>Coca-type</td>
<td>81%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>64%</td>
</tr>
<tr>
<td>Coca paste</td>
<td>22%</td>
</tr>
<tr>
<td>ATS</td>
<td>73%</td>
</tr>
<tr>
<td>Amphetamine</td>
<td>50%</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>34%</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>24%</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>69%</td>
</tr>
<tr>
<td>Inhalants</td>
<td>69%</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>60%</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>46%</td>
</tr>
</tbody>
</table>

Number of countries and territories
Source: UNDCP, DELTA.

---

j) In order to establish a pattern, the relative proportions of treatment demand for each specific drug in each country or city for which data was available, were calculated. These proportions were subsequently averaged to arrive at a regional average, which is the basis for the present discussion on problem drugs.
(often due to overdose), drug related morbidity (including HIV/AIDS, hepatitis etc.), mortality and other drug-related social ills, such as drug-related crime and violence. The term problem drug does not relate to the size of the population consuming it. Cannabis, for example, is the most widely consumed illegal substance worldwide; it is not, however, the main problem drug in terms of the adverse health and social consequences described above. (There are indications that it does play a role as a ‘gateway drug’ to the use of other substances. Most cannabis users do not, and will not, move on to other drugs; but almost all available studies show that most users of other drugs, such as heroin or cocaine, have used cannabis at some earlier stage in their drug careers.) The main ‘problem drugs’ in the 1990s were the opiates, primarily heroin, and cocaine (see Map 8).

### EUROPE AND OCEANIA

**Opiates**

Opiates are the main problem drugs in Europe (both Western and Eastern), in most parts of Asia and Oceania notably Australia. On average, opiates account for three quarters of all treatment demand in both Europe and Asia and two thirds in Australia. They are also responsible for the large majority of drug-related mortality and morbidity cases.

**Amphetamine-type stimulants**

The overall proportion of methamphetamine abusers in treatment in Asia (12%) exceeds the proportion of ATS abusers in treatment in Europe (8%) and in North America (5%). Australia has a high share of treatment admissions (13%) for abuse of both amphetamine and methamphetamine.

Table 2. Spread of drug abuse – Regional concentration of countries and territories reporting drug abuse in the 1990s

<table>
<thead>
<tr>
<th>Regions</th>
<th>Global (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUROPE</td>
</tr>
<tr>
<td>Number of countries &amp; territories reporting drug abuse to UNDCP, of which</td>
<td>41</td>
</tr>
<tr>
<td>Cannabis</td>
<td>100%</td>
</tr>
<tr>
<td>Opiates</td>
<td></td>
</tr>
<tr>
<td>* Heroin</td>
<td>100%</td>
</tr>
<tr>
<td>* Morphine</td>
<td>88%</td>
</tr>
<tr>
<td>* Opium</td>
<td>59%</td>
</tr>
<tr>
<td>Amphetamine-type stimulants (ATS)</td>
<td></td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>76%</td>
</tr>
<tr>
<td>Inhalants</td>
<td></td>
</tr>
<tr>
<td>(volatile substances)</td>
<td>76%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>73%</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>51%</td>
</tr>
</tbody>
</table>

close to global average: black
above global average (> 10%): red
clearly below global average (< 30%): light blue

Source: UNDCP, DELTA (Replies to Annual Reports Questionnaires).
Map 8. Main problem drugs (as reflected in treatment demand) in the late 1990s

N. AMERICA*

* Unweighted average of treatment demand (1996-98) Canada, Mexico and the USA.
** The share of ATS in North America, excl. Mexico, is 7%; in the USA 9%.

S. AMERICA*

* Unweighted average of treatment demand in major towns of 21 countries of South America, Central America and the Caribbean in 1997/98.

AFRICA*


ASIA*

* Unweighted average of treatment demand in (major) towns of 27 Asian countries and territories in 1997/98.

EUROPE*

* Unweighted average of treatment demand in major towns of 30 European countries in 1997.

AUSTRALIA*

* National census of clients specialist drug treatment services in Australia in 1995.

Opiates
Cannabis
Amphetamine-type stimulants
Cocaine-type
Others

Sources: Asian Multicity Epidemiology Working Group; CCSA; CICAD; Council of Europe (Pompidou Group); EMCDDA; SACENDU; SAMHSA; UNDCP
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
In several countries of East Asia, notably Japan, the Philippines, and the Republic of Korea, methamphetamine is the main problem drug, accounting for 90% or more of treatment demand. Though opiates are the dominant problem drug in South-East Asia, rapidly rising levels of methamphetamine-related treatment cases have been reported from this subregion in recent years, particularly from Thailand, where methamphetamine users already exceed the number of heroin users.

In Europe, only the Czech Republic reports high levels of methamphetamine-related treatment, which accounts for almost half of all treatment cases in Prague. Relatively high amphetamine-related treatment demand has also reported from Finland and Sweden.

Cannabis
Nine per cent of treatment in Asia is related to cannabis, a similar percentage as in Europe, but less than in Australia (13%), the Americas (16%) or Africa (61%). The latter proportions reflect the strong demand for opiate treatment rather than low levels of cannabis abuse. High proportions for cannabis in treatment in Asia have been reported by the Maldives, the countries of central Asia, the Philippines, Nepal, South India; in Europe by Cyprus and within the EU by the Netherlands, notably the city of Amsterdam (21%) where cannabis consumption is de facto decriminalized.

Cocaine
Cocaine is hardly mentioned at all in the admission reports of Asian treatment centres and its spread appears to be limited in Europe. Only 3% of total treatment demand in Europe was related to cocaine abuse. Within Europe, treatment demand is below 1% in Eastern Europe, but above 5% in the countries of the European Union. In Amsterdam, cocaine accounts for 32% of all treatment demand, reflecting its geographic proximity to Rotterdam, one of the main entry points of cocaine to Europe.

AMERICAS
Cocainetype substances, i.e. cocaine hydrochloride, crack-cocaine, and related cocainetype products such as basuco (an intermediate product in the cocaine manufacturing process) are, the main problem drugs in the Americas. They are responsible for an average 61% of treatment demand and most drug-related crime and violence. The next most frequently mentioned substances in treatment centres are cannabis (16%) and inhalants (7%).

South America, including Central America and the Caribbean
The proportion of cocaine and related products is highest in the countries of South America where about two thirds of all treatment demand is cocaine-related. Most of the rest is accounted for by tranquilizers and inhalants, which make up the bulk of the relatively large category of ‘other drugs’, and by cannabis.

Cannabis abuse is spread all across the Americas, but its role as a problem drug is mainly concentrated in Central America and the Caribbean. Opiates, by contrast, are not very important as a problem drug in this region; they are not even mentioned in most treatment centres.

North America
In North America (Canada, Mexico, USA), cocaine is still the main problem drug, responsible for more than 40% of treatment cases on average. Though the USA now has the lowest proportion among all North American countries, in absolute terms the total number of people in treatment for cocaine abuse is still by far the highest worldwide. But the numbers are falling: 222,000 people were treated for cocaine abuse in 1997 (29% of all treatment cases, excluding alcohol), as compared to 267,000 persons (43% of treatment cases) in 1992. Three quarters of all cocaine abuse related treatment in the USA is linked to crack-cocaine (see Table 3).
Opiates account for slightly more than a quarter of all treatment demand in North America. This is a high proportion given the low levels of heroin use among the general population. The number of people in treatment for cocaine abuse, for example, was equivalent to 5% of the estimated number of annual cocaine users as revealed in the national household survey on drug abuse (or 12% for crack-cocaine users). The number of heroin treatment cases was equivalent to 36% of the number of annual heroin users. The corresponding proportions for amphetamine-type stimulants and cannabis were 4% and 1% respectively.

The overall proportion of cannabis in treatment demand is, nonetheless, fairly high in the USA (25% for the USA; 23% for North America as a whole). The high proportion is related to two important factors: the higher levels of THC in domestically grown cannabis in the USA and Canada, which has made cannabis consumption more risky; and the fact that in some circumstances cannabis users are required by law to seek treatment. The latter accounts for about half of all cannabis related treatment in the USA.99

### Table 3. Relative risks of drug abuse – as revealed in US data on substance abuse and treatment admissions (1997)

<table>
<thead>
<tr>
<th>Drug category</th>
<th>Estimated number of users according to national household survey (annual prevalence) 1997</th>
<th>Treatment admissions according to primary substance of abuse 1997</th>
<th>Annual treatment admissions per 1,000 users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin*</td>
<td>597,000</td>
<td>217,868</td>
<td>365</td>
</tr>
<tr>
<td>Crack-cocaine</td>
<td>1,375,000</td>
<td>163,211</td>
<td>119</td>
</tr>
<tr>
<td>Methamphetamine**</td>
<td>802,364</td>
<td>53,006</td>
<td>66</td>
</tr>
<tr>
<td>Cocaine (all)*</td>
<td>4,169,000</td>
<td>222,001</td>
<td>53</td>
</tr>
<tr>
<td>Amphetamine-type stimulants***</td>
<td>1,687,000</td>
<td>67,137</td>
<td>40</td>
</tr>
<tr>
<td>Cannabis</td>
<td>19,446,000</td>
<td>191,724</td>
<td>10</td>
</tr>
<tr>
<td>All drugs (incl. others)</td>
<td>24,189,000</td>
<td>764,142</td>
<td>32</td>
</tr>
</tbody>
</table>

** Memo:**

* Broad US estimates provided by ONDCP, which aim at including marginalized groups not living in households, saw the number of hardcore heroin users at 935,000 in 1997; this would lower the ratio to 233 treatment admissions per 1,000 heroin users; the comparable ONDCP’s estimate on the number of hard-core cocaine users was 3,503,000, equivalent to 63 treatment admissions per 1,000 cocaine users (‘hardcore’ being defined as weekly users). If hardcore and occasional users are taken together, the respective ratios of treatment admissions per 1,000 users would be 142 for heroin and 32 for cocaine.

** Estimate for annual prevalence based on available life-time prevalence data and relationship between life-time and annual prevalence for the broader group of ATS.

*** ATS excluding ecstasy.


Amphetamines, mostly in the form of methamphetamine (80% of all treatment for ATS is related...
to methamphetamine abuse) account for 9% of all treatment in the USA\textsuperscript{100} – i.e. a slightly higher proportion than ATS in Europe (8%), though if the unweighted average for the three North American countries is calculated, the proportion falls to 5%, due to the low level of methamphetamine-related treatment cases in Mexico.\textsuperscript{101}

**AFRICA**

Cannabis

Only in Africa and a few countries of Central America does cannabis appear as the main problem drug in treatment demand. However, even in these countries where treatment demand is high, cannabis-related mortality and crime are low. On average, some 60% of treatment demand in Africa in the late 1990s was related to long-term abuse of cannabis. This statement, however, needs to be qualified. Currently available data for many countries in Africa are not very robust. The number of people who have actually been treated in hospitals and specialized treatment facilities is very small. This is not necessarily a reflection of low levels of drug abuse but of a poor treatment infrastructure and, in many cases, the social stigma attached to the use of such facilities. People are often treated outside the formal system and consequently do not register in the data set.

Other drugs in Africa

Treatment data do show that various psychotropic substances (mostly in Western Africa) but also opiates and in more recent years cocaine, have made inroads into Africa, and their abuse is growing.

In Egypt, for instance, despite a tradition of cannabis consumption and abuse, with hashish having been the main problem drug until the 1970s, opiates emerged in the 1990s as the main problem drug (45% of all cases in treatment centres in 1999), followed by benzodiazepines (32%).\textsuperscript{102} Opiates are also showing up in treatment demand in several countries along the eastern coast of Africa, down to South Africa.

Cocaine abuse is manifested in treatment demand in Western Africa and increasingly in some of the countries of Southern Africa. In the Republic of South Africa it accounts for 15% of all treatment demand, as compared to 3% for abuse of opiates.\textsuperscript{103} The main problem drug combination in South Africa, however, is a mixture of methaqualone (known as Mandrax) and cannabis, which is also found in some of the other African countries along the Indian Ocean.\textsuperscript{104} In the horn of Africa, large-scale khat consumption is reflected in treatment demand.\textsuperscript{105}

1.3.3. TRENDS IN DRUG ABUSE

Once a drug abuse problem is identified, its development and dynamics have to be charted.\textsuperscript{k} Drug abuse continued spreading in the 1990s particularly in countries located along the main trafficking routes. The overall spread, however, was less dramatic than in the 1980s. In 1997/98 less than half the countries reporting on drug abuse trends saw an increase in drug abuse, a third saw a stabilization and more than a quarter experienced a decline.\textsuperscript{l} Among the countries reporting an increase, less than half experienced a strong increase (see Figure 29).

\textsuperscript{k} Trend data should ideally be based on sound epidemiological studies. International standard-setting for such work, however, has only developed gradually. In the 'Declaration on the guiding principles of drug demand reduction', passed at the Special Session of the General Assembly in June 1998, it was categorically established for the first time that programmes had to be based 'on a regular assessment of the nature and magnitude of drug use and abuse and drug-related problems in the population' and that this was 'imperative for the identification of any emerging trends' (see Chapter II in the present Report). Though a number of countries have started to develop comprehensive drug monitoring systems, most countries still lack them. In the absence of consistent and comprehensive epidemiological surveys, the available trend data reflect observations by professionals in treatment institutions or health authorities. While one cannot exclude bias in individual expert opinions, there is no evidence of any systematic bias.

\textsuperscript{l} In the UNDCP Annual Reports Questionnaire, countries note their perception of abuse trends for different drug categories. Assuming that in a particular country the abuse of some drugs increases, of others it remains stable, and of others it declines, the distribution would be equal 33.3% each for increase, stable and decline. Any deviation from this pattern is measured and reflected in these trend data.
Fig. 29: Drug abuse trends* in 1997/98: all drugs

- Large increase: 16%
- Some increase: 24%
- Stable: 33%
- Some decline: 18%
- Large decline: 9%

* Number of countries reporting increase/stable/decrease; N=96

Source: UNDCP, DELTA.

Fig. 30: Drug abuse trends* in 1992-98: all drugs

- 1992: Increase 46%, Stable 32%, Decrease 22%
- 1995: Increase 41%, Stable 32%, Decrease 27%
- 1998: Increase 41%, Stable 32%, Decrease 27%

* Countries and territories reporting increase/stable/decrease in drug abuse as a proportion of all countries and territories reporting trends.

Source: UNDCP, DELTA.

Fig. 31: Substance abuse trends*: selected drugs (1992/1998)

- Cannabis 1998: Increase 57%, Decrease 13%
- ATS 1998: Increase 49%, Decrease 14%
- Heroin 1998: Increase 47%, Decrease 13%
- Cocaine 1998: Increase 33%, Decrease 3%
- Benzodiazepines 1998: Increase 24%, Decrease 7%
- Opium 1998: Increase 16%, Decrease 11%
- Barbiturates 1998: Increase 4%, Decrease 3%

* Number of countries reporting increase or decrease in abuse of specific drugs as a percentage of all countries reporting (N=52 in 1992; N=70 in 1998).

Source: UNDCP, DELTA.
Drug abuse at the global level was still expanding in the early 1990s, but this expansion lost momentum in the second half of the decade. Between 1995 and 1998 the number of countries reporting an increase in drug abuse fell while the number of countries reporting a decline in drug abuse rose. The fact that some of the stabilization or decline in drug abuse was reported in the main consumer countries makes it unlikely that overall abuse, in terms of absolute numbers, is expanding even though it may continue spreading in geographic terms.

For all of the major drug types, the number of countries and territories reporting an increase in abuse continues to outnumber those reporting a decline (see Figure 30). The strongest overall spread of drug abuse in the 1990s was for the amphetamine-type stimulants (ATS) and cannabis (see Figure 31). The most ‘dynamic’ drugs were the ATS. The number of countries and territories reporting an increase in ATS abuse almost tripled between 1992 and 1998 (see Figure 31).

More than half of all countries reported increases in cannabis use in 1998. The ongoing spread of cannabis consumption is problematic for the medium term. In many countries, the level of cannabis consumption correlates positively with the level of consumption of major problem drugs. Thus, with cannabis consumption spreading, one might expect the consumption of problem drugs to escalate once a proportion of the cannabis users ‘advances’ to other drugs.

Increases in the abuse of other drugs, including heroin and cocaine, were by far less significant in the 1990s. While half of all countries in 1998 saw an increase in ATS, only one third reported an increase in cocaine abuse. Although there was a spread in cocaine abuse, the number of countries reporting an increase stagnated over the 1992-98 period. It is also interesting to note that throughout the 1990s more countries reported an increase in heroin than in cocaine abuse – which conforms to the production trends of opium and coca leaf.

Opiates
Abuse trend data for the opiates (heroin, morphine, opium) for the late 1990s (1998 or previous years) reveal the following patterns (see Map 9):

- an increase, in drug transit countries, notably Central Asia and East European countries along the Balkan route, Southern and Eastern Africa, and in some of the countries of Northern Africa; by contrast, there were signs of decline in some of the Western African countries, after having grown rapidly in previous years;
- a stabilization or decline in the main consumer markets of Western Europe (except for the UK, and – though starting from low levels – some Nordic countries), in some countries of central Europe, and in the USA, following a period of strong increases in previous years; increases in opiate abuse, however, continued in both Canada and Mexico;
- an increase in South America, particularly Colombia, linked to the increase in the domestic production of opium and heroin, some of its neighbouring countries (Venezuela and Ecuador), and Argentina; in Brazil, Bolivia and Paraguay, by contrast, opiate abuse remained stable;
- increases in practically all countries of Asia, with the exception of Myanmar, which reported a decline in 1998; and
- an increase in Australia.

Compared to the first half of the 1990s (1994 or previous years), the most striking features appear to be:

- declining levels of abuse in Western Europe;
- the apparent end of the ‘heroin chic’ in the USA, which had started in the first half of the decade and was related to the emergence of high quality heroin on the US market; and
- the increasing abuse problem in drug transit countries.

Cocaine-type drugs
Abuse trend data for cocaine in the late 1990s (1998 or previous years) reveal the following tendencies (see Map 10):

- an increase in drug transit countries, notably Central Asia and East European countries along the Balkan route, Southern and Eastern Africa, and in some of the countries of Northern Africa; by contrast, there were signs of decline in some of the Western African countries, after having grown rapidly in previous years;
- a stabilization or decline in the main consumer markets of Western Europe (except for the UK, and – though starting from low levels – some Nordic countries), in some countries of central Europe, and in the USA, following a period of strong increases in previous years; increases in opiate abuse, however, continued in both Canada and Mexico;
- an increase in South America, particularly Colombia, linked to the increase in the domestic production of opium and heroin, some of its neighbouring countries (Venezuela and Ecuador), and Argentina; in Brazil, Bolivia and Paraguay, by contrast, opiate abuse remained stable;
- increases in practically all countries of Asia, with the exception of Myanmar, which reported a decline in 1998; and
- an increase in Australia.

Compared to the first half of the 1990s (1994 or previous years), the most striking features appear to be:

- declining levels of abuse in Western Europe;
- the apparent end of the ‘heroin chic’ in the USA, which had started in the first half of the decade and was related to the emergence of high quality heroin on the US market; and
- the increasing abuse problem in drug transit countries.
Map 9. Changes in abuse of heroin and other opiates, 1994 (or latest year available)

Changes in abuse of heroin and other opiates, 1998 (or latest year available)

Sources: UNDCP Annual Reports Questionnaires data; Asian Multicity Epidemiology Workgroup; Bundeskriminalamt (BKA) and other Law Enforcement Reports; Comisión Interamericana para el Control del Abuso de Drogas (CICAD); Council of Europe (Pompidou Group); PHARE, Summary Reports on the Drug Situation in Central and Eastern European Countries; SACENDU (South African Community Epidemiology Network; United States Department of State, International Narcotics Control Strategy Report.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
• a decline in cocaine consumption in the USA, the world’s largest cocaine market;
• increases in cocaine consumption in South America, Central America, Europe (primarily Western Europe), Southern Africa and Australia; and
• very limited abuse in Asia.

Compared to the mid-1990s, the most striking features appear to be:

• the intensification of abuse throughout Latin America, Western Europe and Australia; and
• the emergence of a cocaine abuse problem in the countries of Southern Africa, after they became trafficking transit countries; Western Africa showed mixed results with cocaine abuse apparently shifting to countries where it did not exist before, and declining in others.

Cannabis
The following trends can be observed for cannabis abuse in the 1990s (see Map 11):

• stable consumption in North America, the world’s largest market for marijuana;
• decline in cannabis abuse in most Asian countries, except for Kazakhstan and a few countries in East and South-East Asia;
• increase in cannabis abuse in Europe, both Eastern and Western (except for a few countries, including the UK and Ireland, which already have the highest levels of cannabis consumption in Europe);
• increases in cannabis abuse in both South America and Central America;
• increases in several countries of Southern Africa, Central Africa, Northern and Western Africa;
• increases in most countries in the Oceania region.

The most striking changes compared to the mid-1990s were the decline in cannabis consumption in much of Asia, and the increase in Europe.

Amphetamine-type stimulants
Consumption of amphetamine-type stimulants (ATS) increased throughout the 1990s, notably in Europe (both amphetamine and ecstasy), and if methamphetamine is considered, in East and South-East Asia and North America. Though still most frequent in Europe, ‘ecstasy’ abuse has increased across all continents.

The years 1994 and 1998 have been chosen as the basis for comparison of drug abuse trends because the two years, on the whole, are typical years for the first and the second half of the decade, for opiates, cocaine and cannabis (see Maps 9, 10 and 11). They are, however, less representative, when it comes to consumption of amphetamine-type stimulants. The increase in ATS use was most pronounced after 1994 and prior to 1998. Almost all countries reported increases in ATS abuse over the 1995-97 period (see Map 12).

By 1998, a number of countries in Europe, North America and East and South-East Asia, including the USA, the UK, Spain and Japan, saw stabilization or decline in ATS abuse for the first time in years. Nonetheless, overall abuse continued increasing in the late 1990s, in South-East Asia (particularly Thailand), and some European countries, including the Nordic countries and countries such as France or Italy which had started out from lower levels.

A mixed picture emerges for countries in Latin America in the late 1990s. While Mexico, Colombia and Brazil reported rising ATS consumption, there was a decline in the south of the continent in Chile and Argentina. This is linked to better controls of licit ATS, which are still the main source of supply in this part of the world. However, there have been some signs that consumption could shift from ATS to cocaine as the latter becomes more easily available.

ATS abuse is fairly widespread in Africa, but, in contrast to other regions, there are no indications of an increase. ATS in Africa, like in South America, are still mostly licit medicines that
Map 10. Changes in abuse of cocaine, 1994 (or the previous year(s))

Changes in abuse of cocaine, 1998 (or latest year available)

Sources: UNDCP Annual Reports Questionnaires data; Asian Multicity Epidemiology Workgroup; Bundeskriminalamt (BKA) and other Law Enforcement Reports; Comisión Interamericana para el Control del Abuso de Drogas (CICAD); Council of Europe (Pompidou Group); PHARE, Summary Reports on the Drug Situation in Central and Eastern European Countries; SACENDU (South African Community Epidemiology Network; United States Department of State, International Narcotics Control Strategy Report.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Map 11. Changes in abuse of cannabis, 1994 (or the previous year(s))

Changes in abuse of cannabis, 1998 (or latest year available)

Sources: UNDCP Annual Reports Questionnaires data; Asian Multicity Epidemiology Workgroup; Bundeskriminalamt (BKA) and other Law Enforcement Reports; Comisión Interamericana para el Control del Abuso de Drogas (CICAD); Council of Europe (Pompidou Group); PHARE, Summary Reports on the Drug Situation in Central and Eastern European Countries; SACENDU (South African Community Epidemiology Network); United States Department of State, International Narcotics Control Strategy Report.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Map 12. Changes in abuse of amphetamine-type stimulants, 1994 (or the previous year(s))

Changes in abuse of amphetamine-type stimulants, 1998 (or latest year available)

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Sources: UNDCP Annual Reports Questionnaires data; Asian Multicity Epidemiology Workgroup; Bundeskriminalamt (BKA) and other Law Enforcement Reports; Comisión Interamericana para el Control del Abuso de Drogas (CICAD); Council of Europe (Pompidou Group); PHARE, Summary Reports on the Drug Situation in Central and Eastern European Countries; SACENDU (South African Community Epidemiology Network; United States Department of State, International Narcotics Control Strategy Report.

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have been diverted into illicit channels. Better controls of licit manufacture and trade at the global level limited diversion into illicit channels during the 1990s.

1.3.4. The Extent of Drug Abuse

Assessing the extent of drug abuse (the number of drug abusers) is a particularly difficult undertaking because it involves measuring the size of a hidden population. Margins of error are thus considerable, and tend to multiply as the scale of estimation is raised, from local to country, regional and global levels.

110 countries provided UNDCP with estimates on the level of drug abuse in the 1990s (79 countries in 1997/98). These estimates are very heterogeneous, in terms of quality and reliability. They are, in general, difficult to compare. Detailed information is available from countries in North America, a number of countries in Europe (mostly Western Europe), some countries in South and Central America, a few countries in the Oceania region, and a limited number of countries in Asia and in Africa. For several other countries, available qualitative information on the drug abuse situation allows for making some ‘guesstimates’. In the case of complete data gaps for individual countries, it was assumed that drug abuse was likely to be close to the respective subregional average, unless other available indicators suggested that abuse levels were likely to be above or below such average.

Even in cases where detailed information exists, there is considerable divergence in definitions used, as well as time and place of the studies in question: general population versus specific surveys of groups in terms of age, profession or special settings (such as hospitals and prisons); lifetime, annual or monthly prevalence; frequent use, problematic use, registered use etc.). All of this limits comparability. In order to reduce the error from simply adding up such diverse estimates, an attempt was made to ‘standardize’ the very heterogeneous data set as far as possible. Thus, all available estimates were transformed into one single indicator – annual prevalence among the general population aged 15 and above, using transformation ratios derived from analysis of the situation in neighbouring countries, and if such data were not available, on estimates from the USA, the most studied country with regard to drug abuse.

Comparability also suffers as the methodologies for estimation differ from country to country; moreover, the utility of particular methodological approaches differs from drug to drug. Indeed, the methodology chosen may have as much of an impact on final results as underlying differences in the drug problem. In order

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m) UNDCP, for instance, has undertaken a number of rapid assessment studies in developing countries. They usually do not provide precise quantitative information on the overall extent of the problem, but they describe the country-specific drug abuse problem rather well, and thus provide some basis for rough estimates cf. Bulletin on Narcotics, Special Issue on Rapid Assessment of Drug Abuse, Vol. 48, 1996.

n) Household surveys, for instance, have been shown to provide, in general, good results with regard to the overall level of drug abuse or the abuse level of a widely used substance such as cannabis, but less so for typical ‘problem drugs’ concentrated among marginalized sections of society. According to data of the US National Household Survey, for instance, 3.8 million people consumed cocaine in 1998 (annual prevalence), which is 1.7% of the population age 12 and above. However, once the drug taking habits of marginalized groups (homeless, people in prison, etc) have been properly taken into account, the US Office of National Drug Control Policy (ONDCP) estimated the total number of cocaine users at 6.5 million people or 3% of the population age 12 and above (3.3 million hardcore and 3.2 million occasional users), suggesting that by means of a household survey only some 60% of the total number of cocaine users could be identified. Differences were found to be even larger for heroin. While the US National Household Survey estimated the number of heroin users (annual prevalence) at 253,000 people in 1998 (0.1% of the population age 12 and above), ONDCP estimates – including marginalized groups – arrived at a number of 1.2 million people (of which 980,000 were hardcore users). In other words, only some 20% of the total number of heroin users could be identified by means of a household survey in 1998. (On average, the share fluctuated around 30% in the 1990s.) Similar differences are also found in Europe. In Germany for instance, the estimated number of problematic drug users (mostly opiate users) based on data of a national household survey, was only 20% to 30% of the estimates made by using various multiplier methods based on police and treatment data or combinations of capture-recapture estimates and multivariate indicator calculations. Even if household survey data are excluded, differences of scientifically valid estimates may still be significant. Estimates of problematic drug use for Italy, based on different data sets (police data, treatment data, HIV/AIDS data, death data) and multipliers can lead to results that may deviate by up to 100% from one another. In the UK, the highest estimate for problematic drug use (based on the use of multivariate indicators) deviated by as much as 300% from the lowest estimate (based on the mortality multiplier approach).
to minimize the potential error from the use of different methodological approaches, all available estimates for the same country were taken into consideration and – unless methodological considerations suggested a clear superiority of one method over another – the mean of the various estimates was calculated and used as UNDCP’s country estimate.

All of this – pooling of national results, standardization and extrapolation from sub-regional results in the case of data gaps – does not guarantee an accurate picture, but it should be sufficient to arrive at reasonable orders of magnitude about the likely extent of drug abuse. Based on such calculations, UNDCP estimates that in the late 1990s there were some 144 million people taking cannabis, some 29 million taking amphetamine-type stimulants, 14 million taking cocaine and 13.5 million taking opiates (of whom some 9 million were taking heroin.) The total number of drug users is estimated to be some 180 million people, equivalent to 3% of global population or 4.2% of the population age 15 and above. As drug users frequently take more than one substance, the total is not identical with the sum of the individual drug categories (see Table 4).

These estimates largely confirm previous ones of the abuse situation in the mid-1990s, published in the 1997 World Drug Report. Deviations from the previous aggregate estimates (such as for amphetamine-type stimulants and for opiates) are in many cases the result of improved data quality rather than of actual increases or decreases in the number of abusers, and thus direct comparisons should not be made. As far as comparison between the mid-1990s and the late 1990s is feasible, data largely confirm the abuse trends reported to UNDCP by Member States.

Most countries for which data were available showed minor increases in cannabis abuse. With regard to the amphetamine-type stimulants, prevalence data show strong increases in East and South-East Asia and Australia. In Europe the picture is mixed with some of the larger ATS markets showing signs of saturation and even decline while in many of the smaller markets (those of Eastern Europe) ATS abuse is still

| Table 4. Estimated number of drug abusers (annual prevalence) in the late 1990s – World |
|----------------------------------------|----------------|-----------------|---------------|--------------|--------------|--------------|
| I illicit drugs of which: Cannabis Amphetamine-type stimulants Opiates of which heroin |
| Global (million people) 180.0 144.1 28.7 14.0 13.5 9.2 |
| in % of global population 3.0% 2.4% 0.5% 0.2% 0.2% 0.15% |
| in % of global population age 15 and above 4.2% 3.4% 0.7% 0.3% 0.3% 0.22% |

* Amphetamines (methamphetamine and amphetamine) and substances of the ecstasy group.

Source: UNDCP, DELTA (including UNDCP estimates).

0) Users of amphetamines (methamphetamine, amphetamine) and of substances of the ecstasy group (MDMA, MDA, MDME etc.); in many countries ATS use is still a relatively recent phenomenon and there are indications of significant under-reporting. This bias has been partly offset by simply adding users of amphetamines and of ecstasy, even though there is some overlap between the two.
Map 13. Abuse and trafficking of cannabis

Level of abuse (annual prevalence)
- > 10% of population
- 5–10% of population
- 1–5% of population
- < 1% of population
- Abuse, extent unknown

Main cultivation areas
- Main trafficking routes (Cannabis herb)
- Main trafficking routes (Cannabis resin)

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Routes shown are not necessarily documented actual routes, but are rather general indications of the directions of illicit drug flows.
rising. By contrast, in the USA and a number of Latin American countries overall abuse of ATS appears to have declined even though there are indications that ecstasy use – as in many other parts of the world – is still on the rise. Data also point to an increase in the number of cocaine abusers in Latin America, Europe, Australia and Africa, going hand in hand with a stabilization in the USA; a stabilization/decline of heroin abuse in Western Europe, parallel with an increase in many other parts of the world, including countries neighbouring Afghanistan, those along the Balkan route, and – though starting from comparatively lower levels – North America and China.

The regional breakdown of prevalence estimates (see Map 13 and Table 5) shows that the highest rates for cannabis abuse are found in the Oceania region (with many countries reporting double digit figures), followed by the Americas (both North and South) and Africa, particularly Western and Southern Africa. Though growing in Eastern Europe cannabis abuse is still most widespread in Western Europe (5.5%). According to the 1998 British Crime Survey106 it appears to be particularly strong in the UK (9% of those aged 16-59 years), a similar level as in the USA (8.6% of those aged 12 years and above according to the 1998 US household survey).107 Comparatively low levels of cannabis use in Asia (2%) are mainly due to low levels reported from China and Japan. Nonetheless, more than a third of the world’s cannabis users are to be found in the highly populated Asia region, more than in the Americas or in Africa.

About 29 million people are estimated to be taking ATS, which is twice as many as those who were taking cocaine or opiates. The bulk of this

### Table 5. Estimated number of cannabis abusers (annual prevalence)

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of people (in million)</th>
<th>in % of population age 15 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceania</td>
<td>4.5</td>
<td>19.3</td>
</tr>
<tr>
<td>North America</td>
<td>22.2</td>
<td>7.2</td>
</tr>
<tr>
<td>South America</td>
<td>14.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Americas</td>
<td>36.9</td>
<td>6.3</td>
</tr>
<tr>
<td>Africa</td>
<td>27.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Western Europe</td>
<td>17.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>4.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Europe</td>
<td>22.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Asia</td>
<td>53.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Global</td>
<td>144.1</td>
<td>3.4</td>
</tr>
</tbody>
</table>

above global average*  
close to global average:  
below global average**

* at least double the global prevalence rate.  
** less than half the global prevalence rate.

Source: UNDCP, DELTA (including UNDCP estimates).

### Table 6. Estimated number of amphetamines abusers (annual prevalence)

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of people (in million)</th>
<th>in % of population age 15 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceania</td>
<td>0.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Western Europe</td>
<td>3.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Europe</td>
<td>4.1</td>
<td>0.7</td>
</tr>
<tr>
<td>North America</td>
<td>2.1</td>
<td>0.7</td>
</tr>
<tr>
<td>South America</td>
<td>2.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Americas</td>
<td>4.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Asia</td>
<td>12.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Africa</td>
<td>2.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Global</td>
<td>24.2</td>
<td>0.6</td>
</tr>
</tbody>
</table>

above global average*  
close to global average:  
below global average**

* at least double the global prevalence rate.  
** less than half the global prevalence rate.

Source: UNDCP, DELTA (including UNDCP estimates).
Map 14. Abuse and trafficking of amphetamine-type stimulants

Level of abuse (annual prevalence)

- > 1.5% of population
- > 1-1.5% of population
- > 0.5-1% of population
- > 0.1-0.5% of population
- > 0.1% of population

Main manufacturing areas
Main trafficking routes (amphetamines)
Main trafficking routes (ecstasy)

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Routes shown are not necessarily documented actual routes, but are rather general indications of the directions of illicit drug flows.
is amphetamine and methamphetamine, consumed by some 24 million people (0.6% the population aged 15 years and above) worldwide. ATS are the second most widely abused substance after cannabis, notably in Oceania, Europe, Africa and East and South-East Asia (see Map 14 and Table 6).

Overall inter-regional differences in the spread of ATS, except in Oceania, are minor, though intra-regional differences remain important. High levels of ATS abuse in the Oceania region are mainly found in Australia, which reported a prevalence rate for amphetamines of 3.6% in 1998. This is several times the global average and exceeds the figures reported from the UK (3% in 1998), Europe's largest market for ATS. Such high figures do point to high levels of consumption; but they may also have to do with the specific social and legal context in which studies take place. This results in the case of Australia (and some other countries with a long tradition of social research) in more readiness to admit to drug use, and thus far less under-reporting than in countries where drug users fear that such information could be used against them. Against this background, significantly lower methamphetamine abuse rates reported from East and South-East Asia do not necessarily mean that abuse levels are substantially lower. Even such conservative estimates suggest that about half of all users of amphetamines worldwide are already found in Asia, mostly in East and South-East Asia. In a number of these countries, including Japan, the Republic of Korea, Taiwan, Province of China, the Philippines and Thailand, use of methamphetamine already exceeds that of the opiates, the traditional substance of abuse in the region. In addition to the instrumental use of

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of people (in million)</th>
<th>in % of population age 15 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceania</td>
<td>0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Western Europe</td>
<td>2.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Europe</td>
<td>2.6</td>
<td>0.4</td>
</tr>
<tr>
<td>North America</td>
<td>1.2</td>
<td>0.4</td>
</tr>
<tr>
<td>South America</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Americas</td>
<td>1.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Africa</td>
<td>0.1</td>
<td>0.02</td>
</tr>
<tr>
<td>Asia</td>
<td>0.2</td>
<td>0.01</td>
</tr>
<tr>
<td>Global</td>
<td>4.5</td>
<td>0.1</td>
</tr>
</tbody>
</table>

above global average*
close to global average:
below global average**

* at least double the global prevalence rate.
** less than half the global prevalence rate.

Source: UNDCP, DELTA (including UNDCP estimates).
Map 15. Abuse and trafficking of cocaine and other coca related products.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
methamphetamine for truck drivers, fishermen, students, sex-workers and other groups in the entertainment industry, which has been known in the region for decades, large-scale recreational use among high-school and university students has started spreading.

In Western Europe, abuse of amphetamines is 0.8% of the population aged 15 years and above, which is a little more than in the Americas (0.7%). The UK, Spain, and in relative terms (i.e. compared to overall level of drug abuse) the Scandinavian countries, are faced with high levels of consumption of amphetamines, mostly amphetamine.111 In the USA, by contrast, lifetime prevalence data show that about half of ATS abuse is related to the more potent methamphetamine.112 The high levels of ATS abuse reported from South Americas is linked to the use of licit ATS anorectics,113 while ATS in North America, Western Europe and increasingly in Asia, are mostly illicitly manufactured substances. Use of ATS in Africa is found all across the continent though it is particularly concentrated in Western Africa, where these substances are frequently sold in parallel markets.114

The strongest growth in recent years, however, was in abuse of the ecstasy drugs, notably MDMA (ecstasy) itself, even though in a number of locations less than half of the pills sold under the name of ecstasy actually contained MDMA. UNDCP estimates that some 4.5 million people - mostly teenagers and young adults - took ecstasy in the late 1990s (see Table 7). In contrast to the wide regional spread of amphetamines, ecstasy is still concentrated in a few regions: Europe (mainly Western Europe), North America and Oceania (mainly Australia). Strong concentrations of ecstasy use are found in Australia

<table>
<thead>
<tr>
<th>Table 9. Estimated number of opiate abusers (annual prevalence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people</td>
</tr>
<tr>
<td>(in million)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Oceania</td>
</tr>
<tr>
<td>Western Europe</td>
</tr>
<tr>
<td>Eastern Europe</td>
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<tr>
<td>Europe</td>
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<tr>
<td>Asia</td>
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<tr>
<td>North America</td>
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<tr>
<td>South America</td>
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<tr>
<td>Americas</td>
</tr>
<tr>
<td>Africa</td>
</tr>
<tr>
<td>Global</td>
</tr>
</tbody>
</table>

above global average*
close to global average:
below global average**

* at least double the global prevalence rate.
** less than half the global prevalence rate.

Source: UNDCP, DELTA (including UNDCP estimates).

<table>
<thead>
<tr>
<th>Table 10. Estimated number of heroin abusers (annual prevalence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people</td>
</tr>
<tr>
<td>(in million)</td>
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<td>Oceania</td>
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<tr>
<td>Americas</td>
</tr>
<tr>
<td>Africa</td>
</tr>
<tr>
<td>Global</td>
</tr>
</tbody>
</table>

above global average*
close to global average:
below global average**

* at least double the global prevalence rate.
** less than half the global prevalence rate.

Source: UNDCP, DELTA (including UNDCP estimates).
Map 16. Abuse and trafficking of opiates (including heroin)

Level of abuse (annual prevalence)

- > 1% of population
- 0.5–1% of population
- 0.3–0.5% of population
- 0.1–0.3% of population
- < 0.1% of population

Main cultivation areas

Main trafficking routes

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Routes shown are not necessarily documented actual routes, but are rather general indications of the directions of illicit drug flows.
(annual prevalence of 2.4% in 1998, including other designer drugs, among the general population aged 14 years and above)\textsuperscript{115}, the UK (1%) and in Spain (0.9% in 1997)\textsuperscript{116}. In a few European countries, including Germany, the Netherlands and Switzerland, ecstasy is already the second most widely abused substance after cannabis. In line with the globalization of popular youth culture, ecstasy now seems to be spreading rapidly across the globe.

Some 14 million people are estimated to take cocaine worldwide (see Map 15 and Table 8). In the USA, the world's largest cocaine market, abuse declined strongly over the last decade. Household survey data show a decline in the annual prevalence rate from 5.1% of the population aged 12 years and above in 1985 to 2.1% in 1992, and 1.7% in 1998.\textsuperscript{117} Nonetheless, including marginalized groups not covered by a household survey, the prevalence rate is estimated by the authorities to be equivalent to 3% of the population age 15 and above, about ten times the global average. Even though prevalence rates are lower in Canada and Mexico, about half of the world's cocaine users are found in North America. The next largest markets are South America (1.1%), Oceania (0.9%; mainly Australia) and Western Europe (0.7%). Highest abuse levels within Europe are reported from Spain (1.6% in 1997),\textsuperscript{118} at least partly a consequence of strong links between Spain and countries in Latin America. Abuse levels in Eastern Europe, though rising, are still significantly lower (far less than 0.1%). Cocaine abuse in Africa is estimated at close to the global average, with a concentration in Western Africa (notably Nigeria) and in the south of the continent (Republic of South Africa). Given the lack of comprehensive national surveys, estimates for countries in Africa are, however, subject to far higher levels of potential error than data from other regions. Cocaine consumption in Asia is clearly below global average, and almost negligible from an international perspective. This is partly explained by the large-scale availability of cheap methamphetamine and other amphetamine-type stimulants.

About 13.5 million people or 0.3% of the global population aged 15 years and above are estimated to consume opiates; most of this is heroin consumption which amounts to some 9 million people (see Map 16 and Tables 9 and 10). Almost two thirds of all users of opiates are found in Asia; Europe accounts for some 20%. Oceania, Europe and Asia also have the highest per capita consumption of opiates – ranging from 0.4%-0.6% of the population aged 15 years and above, while abuse of opiates in the Americas (0.2%) and Africa (0.1%) is below the global average. In South America abuse of opiates is still at very low levels, though this could change if the current expansion of production in Colombia were to continue.

The highest levels of abuse in Asia – clearly exceeding 1% of the population aged 15 years and above – have been reported from the Lao PDR, Iran and Pakistan,\textsuperscript{119} i.e. either opium producing or transit countries for opiates. The largest number in absolute terms is found in India (though the prevalence of less than 0.5% of the population aged 15 years and above is smaller than in some of India’s neighbouring countries). The mean estimates for India converge towards a figure of around 3 million people,\textsuperscript{120} slightly more than the total estimate for Europe as a whole. Total estimates for Eastern Europe (close to 1.5 million) exceed those for Western Europe (1 to 1.5 million people; with an average of about 1.2 million) where abuse of opiates has stabilized or declined in recent years.

The highest levels of opiate abuse in Western Europe among the larger countries are still reported from Italy\textsuperscript{121} though these have been going down in the 1990s, and from the UK, one of a few countries in Western Europe where consumption, notably of smokeable heroin, is still on the rise. The largest market for opiates in Eastern Europe is the Russian Federation. Russian authorities estimate some 3 million drug abusers of which at least a third are addicted to opiates.\textsuperscript{122} All available indicators clearly show that abuse is rising fast in Russia.
Even though available estimates are not very precise, there is little doubt that opiate abuse in a number of countries of Eastern Europe, particularly those along transit corridors, has reached problematic proportions in recent years. One half of 1% of the population aged 15 years and above, on average, are estimated to consume opiates, often in the form of 'kompot' (in Russia, the Ukraine and Poland), a brew made out poppy straw that is injected. Heroin abuse is still below levels found in Western Europe, but is increasing rapidly.

There was also a general increase in the number of opiate abusers in North America in the 1990s: most of this is heroin related. Estimates provided by the US authorities suggest that there may have been almost one million hard-core heroin abusers in the late 1990s. Another major market for opiates, which has been growing in recent years, is China. Estimates provided by the authorities in China are still rather small, given the size of the country's population (0.06% of the population aged 15 years and above). However, the reported rise of addiction to opiate addiction in the 1990s has been strong (from 250,000 registered users in 1993/94 to some 600,000 registered users in 1998/99), and it is possible that the actual number could well be larger. Some 80% of opiate abuse is already linked to heroin.

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