4. The ATS market

4.1 Introduction

The term amphetamine-type stimulants (ATS) refers to a group of synthetic substances comprised of amphetamines-group substances (primarily amphetamine, methamphetamine and methcathinone) and ecstasy-group substances (MDMA and its analogues).

ATS are available in diverse forms and purities. Methamphetamine or amphetamine can be in powder, tablet, paste or crystalline form while ‘ecstasy’ is usually available in tablet or powder form.

4.2 Consumption

For the past two decades, the use of amphetamine type stimulants (ATS) has been one of the most significant drug problems worldwide. This section describes the trends in the use of amphetamines-group and ecstasy-group substances in the different regions.

Amphetamines-group substances

In 2009, UNODC estimates that, with an annual prevalence ranging between 0.3% and 1.3%, between 13.7 and 56.4 million people aged 15-64 globally had used amphetamines-group substances at least once in the past year. While these numbers reflect a slight increase over estimates for previous years, they do not essentially indicate a significant difference in the prevalence of amphetamines-group substances.

The type of amphetamines-group substances used in different regions varies considerably. In East and South-East Asia, methamphetamine is the primary substance consumed within this group, while in the Near and Middle East, the use of tablets sold as Captagon is reportedly more common. In Europe, amphetamine is the main substance used within this group with the exception of Czech Republic and Slovakia, where methamphetamine has traditionally been the predominant amphetamines-group substance used.

In North America as well as Australia and New Zealand, the use of prescription stimulants\(^1\) is as common as methamphetamine. In South America and the Caribbean, prescription stimulants are more commonly used. In Africa, especially in West, Central and East Africa and some parts of Southern Africa, the use of amphetamines-groups substances may comprise use of prescription stimulants. In South Africa, methamphetamine and methcathinone are the most commonly used ATS.

In 2009, out of the 69 Member States that reported expert perception on amphetamines-group use trends through the Annual Reports Questionnaire, an equal number of countries perceived increasing and stable trends in the use of ATS over the past year. In Asia, however - particularly in South and South-East Asia - the majority of countries reported a perceived increase in the use of ATS in their countries.

Trends over the past 12 years in the perceived increase in use of ATS as reported by Member States indicate that since 2001, the rate of increase has been much higher and more substantial in the developing (non-OECD) countries than in the developed (OECD) countries. In developing countries and especially emerging econo-
In developed countries, there is an expanding middle class with more disposable income. The association in developed countries of synthetic drugs, especially stimulants, with modernization and affluent lifestyles, combined with increasing demands for higher performance and the availability and reported common use of stimulants in recreational and entertainment settings, may be contributing to an increase in the use of stimulants in developing countries where young people within the growing middle class may want to emulate these lifestyles.

<table>
<thead>
<tr>
<th>Region/subregion (amphetamines-group)</th>
<th>Estimated number of users annually (lower)</th>
<th>Estimated number of users annually (upper)</th>
<th>Percent of population age 15-64 (lower)</th>
<th>Percent of population age 15-64 (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Africa</td>
<td>1,180,000</td>
<td>8,150,000</td>
<td>0.2</td>
<td>1.4</td>
</tr>
<tr>
<td>North Africa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Africa</td>
<td>280,000</td>
<td>780,000</td>
<td>0.4</td>
<td>1.0</td>
</tr>
<tr>
<td>West and Central Africa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caribbean</td>
<td>5,170,000</td>
<td>6,210,000</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Central America</td>
<td>30,000</td>
<td>530,000</td>
<td>0.1</td>
<td>1.9</td>
</tr>
<tr>
<td>North America</td>
<td>320,000</td>
<td>320,000</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>South America</td>
<td>3,460,000</td>
<td>3,460,000</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>South America</td>
<td>1,340,000</td>
<td>1,890,000</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Asia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>4,330,000</td>
<td>38,230,000</td>
<td>0.2</td>
<td>1.4</td>
</tr>
<tr>
<td>East/South-East Asia</td>
<td>3,480,000</td>
<td>20,870,000</td>
<td>0.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Near and Middle East</td>
<td>460,000</td>
<td>4,330,000</td>
<td>0.2</td>
<td>1.7</td>
</tr>
<tr>
<td>South Asia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East/South-East Europe</td>
<td>2,540,000</td>
<td>3,180,000</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>West/Central Europe</td>
<td>510,000</td>
<td>1,050,000</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>South America</td>
<td>2,030,000</td>
<td>2,120,000</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Oceania</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>13,690,000</td>
<td>56,410,000</td>
<td>0.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Table 30: Annual prevalence and estimated number of amphetamines-group substances users, by region, subregion and globally, 2009

![Fig. 91: Range of estimated number of amphetamines-group substance users by region](source: UNODC)

![Fig. 92: Range annual prevalence of amphetamines-group substance users by region](source: UNODC)
Use of main types of amphetamine-group substances

* Identifies increases/decreases ranging from either some to strong, unweighted by population.

1.5% of the population aged 15-64 in 2009. The non-prescription stimulants of amphetamines-group substances was reported as

In the United States of America, the annual prevalence of amphetamines-group substance use (1.1% in the previous year, this region has probably the third highest prevalence of amphetamines-group substances reported in United States and North America: Increased use of amphetamines-group substances reported in United States and Mexico; decrease reported in Canada

Table 31: Expert perceptions of trends in amphetamines-group substance use, 2009

Source: UNODC ARQ.

<table>
<thead>
<tr>
<th>Region</th>
<th>Member States providing perception data</th>
<th>Member States perception response rate</th>
<th>Use problem increased*</th>
<th>Use problem stable</th>
<th>Use problem increased*</th>
<th>Use problem stable</th>
<th>Use problem increased*</th>
<th>Use problem stable</th>
<th>Percent use problem decreased*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>5</td>
<td>9%</td>
<td>40%</td>
<td>2</td>
<td>40%</td>
<td>2</td>
<td>1</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>11</td>
<td>31%</td>
<td>36%</td>
<td>6</td>
<td>55%</td>
<td>6</td>
<td>1</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>24</td>
<td>53%</td>
<td>58%</td>
<td>5</td>
<td>21%</td>
<td>5</td>
<td>2</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>28</td>
<td>62%</td>
<td>36%</td>
<td>16</td>
<td>57%</td>
<td>2</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oceania</td>
<td>1</td>
<td>7%</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>69</td>
<td>36%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>9</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Identifies increases/decreases ranging from either some to strong, unweighted by population.

North America: Increased use of amphetamines-group substances reported in United States and Mexico; decrease reported in Canada

With an estimated 3.5 million people who had used amphetamines-group substances at least once in the previous year, this region has probably the third highest prevalence of amphetamines-group substance use (1.1% of the population aged 15-64) globally.

In the United States of America, the annual prevalence of amphetamines-group substances was reported as 1.5% of the population aged 15-64 in 2009. The non-medical use of prescription stimulants is higher in the United States compared to the use of methamphetamine, whose annual prevalence reached 0.6% of the population aged 15-64. Between 2002 and 2006, there was a steady increase in the use of amphetamines and methamphetamine among the population 12 years or older, followed by a decrease between 2007 and 2008. In 2009, the annual prevalence showed an increase, but at levels below the ones observed between 2002 and 2006.

The number of people aged 12 years or older who had initiated drug use with methamphetamine was 154,000.
in 2009 in the United States. While this estimate was significantly higher than the estimate in 2008 (95,000), it is still substantially lower than the estimate for 2002 (299,000), and far lower than the reported initiates for most other illicit drugs (except for PCP). In line with the annual prevalence, the number and proportion of people who had reported non-medical use of stimulants in the past 30 days (prior to the survey) increased significantly from 904,000 (0.4%) in 2008 to 1.3 million (0.5%) in 2009. This increase in the prevalence of stimulants use is attributed in part to an increase in the number of methamphetamine users.3

The recent increase in stimulant and notably in methamphetamine use among the general US population was not reflected in prevalence data for high school students for 2009. Among secondary school students in the United States, there has been a declining trend in the annual prevalence of amphetamine and methamphetamine use between 2002 and 2008, and stable trends in

2 Substance Abuse and Mental Health Services Administration, Results from the 2009 National Survey on Drug Use and Health: Volume 1. Summary of National Findings, Rockville, Maryland, USA, 2010.
3 Ibid.
The ATS market

In 2010, annual prevalence of amphetamines use rose among 10th and 12th graders while it continued to decline among 8th graders. Use of methamphetamine, in contrast, increased among 8th graders, remained stable among 10th graders but declined among 12th graders in 2010. Despite some increases in amphetamines use and a stable level of methamphetamine use among US high school students in 2010, the overall level in 2010 remained substantially lower than over the 2002–2006 period.

In contrast to an overall rising trend of ATS use in the United States, the annual prevalence of ATS use among the general population in Canada (0.7%) was significantly lower in 2009 than in 2008 (1.5%). The annual prevalence of both amphetamine and methamphetamine was substantially lower in 2009 than a year earlier (0.5% and 0.1% compared to 1.3% and 0.2% respectively).

In Mexico, while there has been no update in the annual prevalence of amphetamines-group substance use since the last household survey in 2008, the expert perception in 2009 indicates stable trends for amphetamines use but a great increase in the use of methamphetamine over the past year. In 2009, among school students aged 12-19 in Mexico, the reported lifetime prevalence of amphetamine and methamphetamine use was 1.9% and 0.7% respectively. In previous years, however, the lifetime prevalence among youth aged 12-17 was reported as 0.07% for amphetamine and 0.35% for methamphetamine.

Amphetamines-group substance use in South America appears to remain stable

There is no updated information on the prevalence of amphetamines-group substance use in South America. Existing information shows that the annual prevalence

---


5 UNODC ARQ.

6 The information on annual prevalence in the ARQ for Mexico in 2008 was based on the national survey conducted among the general population aged 12-65 with the breakdown of the estimates among the ages 12-17 years.
of amphetamines-group substance use in South America remains close to the world average, with estimates ranging between 0.5% and 0.7% of the population aged 15-64 or between 1.34 and 1.89 million people in that age group who had used these substances in the previous year. Compared to 2008, most of the countries reporting from the region perceive trends of amphetamine and methamphetamine use as being stable in 2009. Brazil, the Bolivarian Republic of Venezuela and Argentina remain countries with a high prevalence and absolute number of users of amphetamine and methamphetamine in South America.

In a national survey conducted among university students in Brazil in 2009, the annual prevalence of amphetamines use among the students was reported as 10.5%. The annual prevalence was higher among female students (14.1%) than male students (5.5%), and was also higher among the older students, that is, those who were 35 years or older (18.6%), followed by students aged between 25-34 years (13.7%). The use of amphetamine-like substances is reportedly more common among women due to their anorexic effects and a prevalent culture to use medications for weight loss purposes.

Although there are no recent updates on the prevalence of amphetamine and methamphetamine in Central America, as a region, it has a high prevalence of amphetamines-group substance use (1.3% of the adult population), with El Salvador (3.3%), Belize (1.4%) and Panama (1.2%) as the three countries with high annual prevalence among the general population. A large proportion of the ATS use in these countries is related to the use of prescription stimulants.

While most countries in Europe show stabilizing trends in the use of amphetamines-group substances, high levels of injecting amphetamines use are reported by a few

In 2009, more than half of European countries reported stable trends of ATS use in their countries. The countries that reported data show a mixed trend from previous years. The annual prevalence of amphetamines-group substance use in Europe is estimated between 0.5% and 0.6%, which corresponds to an estimated 2.6 to 3.3 million people who had used these substances in the past year. Like in other regions, the majority of amphetamine users fall within the 15-34 years age group, with a much higher estimated annual prevalence of 1.2%.

The amphetamines-group substance prevalence is, overall, higher in West and Central Europe than in East and South-East Europe. In most parts of Europe, amphetamine is the more commonly used substance within this group, while the use of methamphetamine remains limited and has historically been highest in the Czech Republic and Slovakia. In 2009 and 2010, countries that reported new data on ATS prevalence include Cyprus, Germany, Spain, Sweden and the United Kingdom (England and Wales). Except for Germany and Sweden, many of these countries are showing stabilizing or decreasing trends in the use of amphetamines-group substances.


The annual prevalence in 2009 (0.7%) over the previous estimates in 2006 (0.5%), the estimate remains at lower levels than shown for 2003 (0.9%).

Within West and Central Europe, the Czech Republic, Denmark, the United Kingdom, Norway and Estonia remain the countries with the highest annual prevalence rates, while in South-East Europe, Bosnia and Herzegovina and Bulgaria have high annual prevalence of amphetamines use.

In most West and Central European countries, problem amphetamines use represents a small fraction of overall problem drug use, except for the Czech Republic and some of the Nordic countries. Those who report amphetamine as their primary substance account for less than 5% of drug users in treatment, on average, in Europe. High levels of injecting use are reported from the Czech Republic, Estonia, Latvia, Lithuania, Sweden and Finland, ranging from 57% to 82% among amphetamines users.9

Mixed trends on use of amphetamines-group substances in Africa

The annual prevalence of amphetamines-group substances in Africa is estimated between 0.2% and 1.4% (between 1.2 and 8 million people), reflecting the fact that for most parts of Africa, there is either limited or no recent or reliable data available on the prevalence or trends of amphetamines-group substance use, resulting in a wide range and uncertainty of the estimates. The only valid estimates that can be derived in the region are for Southern Africa where the annual prevalence is estimated between 0.4% and 1% of the population aged 15-64.

Among the limited number of countries that have reported expert opinion on trends in the use of amphetamines-group substances in Africa, nearly half of the countries report that the trend has increased while a similar proportion report stable trends over the past year. In most parts of Africa, prescription amphetamines comprise the primary substances used within this group.

South Africa is one country in the region from which there is more consistent and recent information available on drug use trends. Such data – based on treatment demand - showed a strong increase in the importance of amphetamines until the second half of 2006, followed by a stabilization or small downward trend since. The importance of amphetamines increased again temporarily in the first half of 2009, before falling back in the second half of the year to the levels reported in 2008.

The past 3 months prevalence of amphetamines-group substances in South Africa was reported at 0.7% in 2008 for the population aged 15 and above. Based on this information, the annual prevalence of amphetamines-group substance use was estimated by UNODC at between 0.7% to 1.4% of the adult population (aged 15-64) in South Africa.

In contrast to the patterns in other parts of Africa, methamphetamine and methcathinone are the main substances used within the amphetamines-group substances.

---

In South Africa, methamphetamine or 'tik' as it is locally known, remained the primary substance of use for which people were seeking treatment, mainly in Cape Town. In other parts of the country, the proportion has remained very low. For the other countries in Africa, for which information on treatment demand is available, amphetamine-group substances as the primary substance of abuse among persons treated in the region averaged around 5% of all treatment demand. This ranges from 30% of all treatment admissions reported in Niger to around 2% in Nigeria.

Increasing trends of amphetamine-group substances use in Asia with injecting methamphetamine and its associated negative health consequences reported as an increasing problem in East and South-East Asia

The annual prevalence of amphetamines-group substance use in Asia ranges between 0.2%-1.4% or from 4 to 38 million people aged 15-64 who are estimated to have used these substances in the past year. The wide range and uncertainty in the estimates derive from missing information on the extent and pattern of use from large countries in Asia, particularly China and India. Due to a lack of recent or reliable estimates from many countries in the region, estimates cannot be calculated for the subregions of Central and South Asia.

Nevertheless, among the Asian countries reporting through the ARQ, experts in more than half of the countries, namely in East and South-East Asia, perceived an increase in the use of amphetamines-group substances, compared to less than a quarter of countries in which experts perceived the problem to have stabilized or decreased over the past year. Outside East and South-East Asia, Armenia, Georgia, Jordan, Pakistan and Qatar are five countries that have reported a perceived increase in the use of amphetamine-type stimulants over the past years.

In East and South-East Asia, the annual prevalence of amphetamines-group substances ranges between 0.2%-1.4% of the adult population aged 15-64. Methamphetamine, both in pill and crystalline forms, is the main substance used within this group. The Philippines (2.1%), Thailand (1.4%) and the Lao People’s Democratic Republic (1.4%) are the countries in the subregion with prevalence of methamphetamine use higher than the global average.

On average, the countries in South-East Asia in 2009 reported a 250% increase in the number of methamphetamine-related arrests since 2004. The highest increase reported was from Lao People’s Democratic Republic, whereas Japan has reported a decline in methamphetamine-related arrests.

In East and South-East Asia, the annual prevalence of amphetamines-group substances ranges between 0.2%-1.4% of the adult population aged 15-64. Methamphetamine, both in pill and crystalline forms, is the main substance used within this group. The Philippines (2.1%), Thailand (1.4%) and the Lao People’s Democratic Republic (1.4%) are the countries in the subregion with prevalence of methamphetamine use higher than the global average.

On average, the countries in South-East Asia in 2009 reported a 250% increase in the number of methamphetamine-related arrests since 2004. The highest increase reported was from Lao People’s Democratic Republic, whereas Japan has reported a decline in methamphetamine-related arrests.


11 The countries and areas reporting increases in ATS use in 2009 include China (and Macao, China), Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar and Viet Nam. On the other hand, Hong Kong China, Kazakhstan, the Republic of Korea and Lebanon have reported decreasing use of ATS.

12 In East and South-East Asia, most of the information on amphetamines-group substances is available through the UNODC SMART programme that assists the countries in the region to monitor drug trends with a particular focus on use of amphetamine-type stimulants.

13 UNODC Patterns and Trends of Amphetamine-Type Stimulants and
The treatment demand for methamphetamine in East and South-East Asia has also increased considerably over the last decade. It rose from on average a quarter of all treatment demand in 1998 to nearly half of all treatment admissions in 2009. The treatment demand for methamphetamine in 2009, or the latest year for which data is available, varied considerably across the countries and areas, ranging from nearly the entire treatment demand for methamphetamine use in Brunei Darussalam, the Republic of Korea and the Lao People’s Democratic Republic to only 9% in Indonesia and Hong Kong, China.

Heroin and methamphetamine are the two common substances being injected in East and South-East Asia, with increasing trends reported of injecting methamphetamine in the subregion. In Thailand, injecting is the second most common method for using crystalline methamphetamine and the third most common method for abuse of methamphetamine pills. In 2009, Indonesia reported an increasing trend in injecting heroin and crystalline methamphetamine, while Malaysia reported injecting of crystalline methamphetamine for the first time in 2009. As a consequence, many countries in East and South-East Asia also have concentrated HIV epidemics that are in large part driven by sharing of contaminated needles and syringes among the injecting drug users.

Infection with the hepatitis C virus (HCV), another major health consequence of injecting, is also reportedly high in the countries of East and South-East Asia. Among the countries and areas that reported prevalence of HCV among injecting drug users, this ranged between 50% in Macao, China to over 80% in Indonesia, Myanmar and Hong Kong, China.

Other Drugs, Asia and Pacific; Global SMART Programme, 2010.
14 Pills are crushed, dissolved and injected.
15 UNODC, Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs, Asia and Pacific, Global SMART Programme, 2010.
16 UNODC ARQ.
Prevalence of amphetamines-group substances remains highest in Oceania but with declining trends in Australia and New Zealand

Oceania as a region reportedly has the highest prevalence rate of amphetamines-group substances, ranging between 2% to 2.8% of the population aged 15-64. Marshall Islands, Australia and New Zealand, with annual prevalence rates of 2.7%, 2.7% and 2.1% respectively, remain the countries with the highest prevalence rates. The Pacific island states and territories in the region with available data report high prevalence rates of amphetamines-group substances.

The annual prevalence of meth/amphetamine use among the population aged 14 and above in Australia declined from 3.4% in 2001 to 2.3% in 2007. Although there is no updated information on annual prevalence of amphetamines use among the general population since 2007, available information points to a continuing decline in the trends of amphetamines use reported through different indicators.

Among Australian students aged 12-17 there has been a significant decline in both the lifetime and past month prevalence of amphetamines use from 2002 to 2005 and further to 2008. The lifetime prevalence among the students had declined to 3.7% in 2008 from the 6.6% reported in 2002.

The monitoring among detainees who were tested for drug use in Australia in 2008 revealed that 22% of detainees tested positive for methamphetamine use, down from 27% in 2007. This proportion was lower than at any point in time since 2000.

Among the injecting drug users who were interviewed as part of the Illicit Drug Reporting System (IDRS), the...
The proportion of injecting drug users who had used any form of methamphetamine in the preceding six months declined each year between 2006 and 2010, and in 2010 reached its lowest level since 2003. The proportion of injectors who had used methamphetamine in the preceding six months dropped from 79% in 2006 to 74% in 2007 and continued to decline to 67% in 2009 and 60% in 2010.20

The prevalence of Hepatitis C among injecting drug users has remained stable at 61-62% over the period 2005-2008 in Australia, and is lower among those who reported using methamphetamine compared to those who reported heroin as the last drug injected. The HIV prevalence has also remained low at 1.5% among injecting drug users, but the prevalence is higher among drug users reporting methamphetamine as the last drug injected compared to those who reported last injecting heroin.21

The prevalence of amphetamines-group substances in New Zealand is among the highest in the world, where 2.1% of the population aged 16-64 had used amphetamine in the past year (2007/2008). Methamphetamine is also injected. About 0.5% of the population had used prescription stimulants for recreational purposes in the past year.22 As part of the drug use monitoring among arrestees in New Zealand (NZ-ADAM), amphetamines were reported as the second most common drug (10%) after cannabis, followed by methamphetamine (9%) among those tested for drug use in 2008.23

In contrast to Australia, methamphetamine use figures seem to be still rising in New Zealand. Among frequent injecting drug users the proportion of those who injected methamphetamine increased from 40% in 2006 to 50% in 2009. Frequent methamphetamine users, that is, those who had used the drug in the past 6 months, interviewed as part of Illicit Drug Monitoring System in New Zealand in 2009, were more likely to have injected methamphetamine in 2009 than in 2008 (35% vs. 23%).24

---


Map 26: Use of amphetamines, 2009 (or latest year available)

% of population aged 15-64

- >1
- 0.6 - 1.0
- 0.4 - 0.5
- 0.2 - 0.3
- <0.1
- No data provided
- Data older than 2005

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

Map 27: Ranking of amphetamines in order of prevalence, 2009 (or latest year available back to 2005)

Ranking (1=most prevalent drug)

- 1
- 2
- 3
- 4 - 6
- 7
- No data provided
- Ranking older than 2009

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dotted line represents approximately the area 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.
Map 28: Expert perception of trend changes in the use of amphetamines, 2009 (or latest year available back to 2005)

Map 29: Expert perception of trend changes in the use of methamphetamine, 2009 (or latest year available back to 2005)
Ecstasy-group substances

Ecstasy-group substances include primarily MDMA and its analogues,25 whose use is often associated with recreational settings such as night clubs and raves frequented by young people. Prevalence of ‘ecstasy’ use is thus particularly high among younger age cohorts and it often correlates with the number of raves and similar type of dance events taking place. Young people using ‘ecstasy’ may not necessarily be experimenters or regular users of other illicit substances, but being in the general environment of illicit drug use exposes them to increasing levels of opportunity and a greater chance to experiment with other illicit substances as well. While in developed countries, all sectors of society are affected by ‘ecstasy’ use, such use is still a phenomenon of the middle and upper classes in developing countries.

In 2009, UNODC estimates the global annual prevalence of ‘ecstasy’ use as between 0.2%-0.6% of the population aged 15-64, corresponding to between 11 and 28 million people who had used ‘ecstasy’ at least once in the previous year. As very little information was available, the estimated annual prevalence for ‘ecstasy’ use appears to have remained at around the same level as in the previous year (2008).

At the global level, most (47%) of the countries responding through the ARQ in 2010 perceived ‘ecstasy’ use to be stable in their countries. In the Americas (83%) and Europe (54%), the majority of the countries reported stable trends for 2009. Similarly, in Africa, the region with the fewest respondents on this question (reflecting low response rates as well as a low spread of ‘ecstasy’ use), the majority of countries (67%) also reported stable trends. The only region where most (47%) of the countries reported decreasing trends in ‘ecstasy’ use was Asia.

There are indications that the stabilization or decline of ‘ecstasy’ use has been linked to reductions in the manufacture of ‘ecstasy’ which, in turn, appears to have been a consequence of some progress made in the control of precursor chemicals. Wherever the supply situation improved however, or where the perceptions of the harmfulness of ‘ecstasy’ declined, demand increased immediately, clearly showing that far more still needs to be done with regard to effective prevention.

North America: signs of increased ‘ecstasy’ use in the United States, decline noted in Canada

The annual prevalence of ‘ecstasy’ use in North America is estimated at 1.1% or around 3.2 million people aged 15-64 who had used ecstasy-group substances in the previous year. Within the region, the United States of

---

25 Reports have shown that unbeknown to many ecstasy users what is sold to them as ecstasy (MDMA) is often a combination of many psychoactive substances, such as methamphetamine and ketamine. *Amphetamines and Ecstasy, 2008 Global ATS Assessment* (United Nations publications, Sales No. E.08.XI.12)
America has the highest prevalence rate of 1.4% of ‘ecstasy’ use among the general population.

Around 1.1 million people initiated their drug use with ‘ecstasy’ in the United States in 2009, signalling a significant increase over the previous year (894,000 people in 2008). Most (66.3%) of the ‘ecstasy’ users who had initiated in 2009 were aged 18 years or older, with an average age of 20.2 among those using ‘ecstasy’ for the first time in 2009.26

Since the decline in prevalence of ‘ecstasy’ use in 2002, the trends remained stable between 2003 and 2008, but began to register an increase in 2009.

A similar trend was observed among secondary school students, where the annual prevalence of ‘ecstasy’ use among students in the 8th, 10th and 12th grades, after having remained stable between 2003 and 2008, registered a clear increase over the 2008-2010 period, notably among the younger age groups, the 8th and 10th...
US data among high school students did not indicate any increase in the availability of ‘ecstasy.’ The increase of ‘ecstasy’ use went, however, hand in hand with reduced risk perceptions of the harmfulness of using the substance.

By contrast, in Canada, ‘ecstasy’ use declined in 2009 compared to the previous year. The annual prevalence of ‘ecstasy’ use among the population aged 15-64 was reported at 1.1% in 2009, down from 1.7% in 2008. The annual prevalence among young people, aged 15-19, was 3% in 2009.

For Mexico there are no recent quantitative estimates on ‘ecstasy’ use. Expert perceptions indicate an increasing ‘ecstasy’ use trend in the country.

In Central and South America, ‘ecstasy’ use remains low in the general population but higher among youth.

There is no update on ‘ecstasy’ use in Central and South America. Available information suggests, however, that the annual prevalence among the general population remains much lower in these subregions than the world average, ranging between 0.1% in Chile and 0.5% in Argentina. El Salvador, Peru and Trinidad and Tobago reported a perceived increase in ‘ecstasy’ use over the past year. As in other countries, information on ‘ecstasy’


28 UNODC ARQ.

29 For prevalence among youth, Canada reported only the annual prevalence among young people in 2008 as 6.2% among young people aged 12-17; while in 2009, the annual prevalence was reported at 4.5% and last year prevalence at 3% among those aged 15-19.

30 Andrade, A.G., Duarte, P. and Oliveira, L.G., I Levantamento Nacio-
The ATS market

'Ecstasy' use is reported to be stabilizing in Europe, but use patterns are becoming more polarized among club-goers and the general population.

The annual prevalence of 'ecstasy' use in Europe is estimated at 0.7% of the adult population. Between 3.7 and 4 million people aged 15-64 years used 'ecstasy' in the past year in Europe. The 'ecstasy' use prevalence rate is still higher in West and Central Europe (0.8%) than in East and South-East Europe (0.6%).

Most of the countries in Europe are now reporting stabilizing trends of 'ecstasy' use. Updated or new estimates for 'ecstasy' use were available from some countries in Europe, including Belgium, Cyprus, Germany, Spain, Sweden and the United Kingdom (England and Wales, and Scotland). Many of these countries have reported a decline in the annual prevalence in their current surveys compared to previous years. This is in line with reports of manufacturing difficulties in a number of European countries in recent years, and thus the use of various other substances than MDMA in 'ecstasy' tablets. The Czech Republic, Latvia, Slovakia and the United Kingdom remain countries with high 'ecstasy' use prevalence rates in the general population.

Like in other parts of the world, most of the 'ecstasy' users are young people aged 15-34. The EMCDDA in its annual report for 2010 mentions that practically all of the estimated 2.5 million 'ecstasy' users who had used 'ecstasy' in the past year were between 15 and 34 years old.

Targeted surveys in nightlife settings in European countries suggest that the prevalence and patterns of stimulants and 'ecstasy' use, together with alcohol, remains high. Some studies even suggest that drug use patterns among club-goers are becoming increasingly 'polarized,' that is, showing ever higher prevalence rates, in sharp contrast to the situation among the general population.31

Lack of information from Africa makes it difficult to determine any trends in 'ecstasy' use in the region.

Based on very limited country information, the annual prevalence of 'ecstasy' use – based on UNODC's estimates – was as follows: 1.6% in Spain in 2008, 1.3% in Spain in 2009, 1.5% in Spain in 2010, 1.5% in Spain in 2011, 1.7% in Spain in 2012, 1.8% in Spain in 2013, 1.9% in Spain in 2014, 2.0% in Spain in 2015, 2.1% in Spain in 2016, 2.2% in Spain in 2017, 2.3% in Spain in 2018, 2.4% in Spain in 2019.
standard model - is estimated between 0.1% and 0.3% in Africa. The actual figures are probably closer to the lower end of the range or perhaps even below that range, as 'ecstasy' use in Africa is still primarily a phenomenon of youth from the upper classes and/or concentrations in some tourist resorts where the prime target group is foreigners from overseas. The wide range in the estimates is due to missing data or information on 'ecstasy' use from most of the region. Only three countries in Africa - Algeria, Morocco and South Africa - reported expert opinions on 'ecstasy' use trends through the ARQ in 2009. While Morocco reported an increase in 'ecstasy' use, Algeria and South Africa reported stabilizing trends for 2009.

Mixed trends on 'ecstasy' use reported from Asia

In 2009, nearly half (47%) of the Asian countries reporting expert opinion on 'ecstasy' use through the ARQ considered its trends to be decreasing, while one third of the countries reported increasing trends in the past year. The annual prevalence of 'ecstasy' use in Asia is estimated between 0.1% and 0.6% of the population aged 15-64, or some 2.4 to 17 million people who could have used 'ecstasy' at least once in the past year. The wide range in the estimates reflects the uncertainty due to lack of information on 'ecstasy' use for most parts of Asia.

'Ecstasy' use in New Zealand and Australia remains high

Oceania (primarily Australia and New Zealand) has the highest prevalence of 'ecstasy' use in the world, with annual prevalence ranging from 3.6% to 4% of the adult population. This corresponds to between 850,000 and 920,000 people who had used 'ecstasy' at least once in the preceding year.

The annual prevalence of 'ecstasy' use among the population aged 16-64 in New Zealand ranged from 2% to 3%, or an estimated 67,000 people which reported having used 'ecstasy' in the previous year (2007/2008). The highest prevalence, like in other countries, was reported among the 18-24 year age group: higher among men than women (annual prevalence of 8.9% among men and 4.9% among women in this age group). Most of the 'ecstasy' users in New Zealand were reported to have used it with alcohol (78.9%), cannabis (42.8%) and benzylpiperazine (BZP) party pills32 (13.5%).33

In Australia, 'ecstasy' use was estimated at around 4.2% of the population aged 15-64 in 2007. Since then, there has been no update on drug use prevalence in Australia. However, in 2010, a survey carried out among 974 athletes indicated that one quarter had been offered or had the opportunity to use 'ecstasy' in the past 12 months. This was a higher proportion than for cannabis (22%) and cocaine (17%). Past year 'ecstasy' use was reported by 3.2% of the sample.34

Table 34: Asia: countries and areas reporting expert perception in 'ecstasy' use in 2009

<table>
<thead>
<tr>
<th>Decrease</th>
<th>Stable</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Korea</td>
<td>Armenia</td>
</tr>
<tr>
<td></td>
<td>(Republic of)</td>
<td></td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>Kuwait</td>
<td>Georgia</td>
</tr>
<tr>
<td>Macao, China</td>
<td>Malaysia</td>
<td>Israel</td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td>Lebanon</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td>Pakistan</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td></td>
<td>Viet Nam</td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: UNODC ARQ.
Map 31: Use of ‘ecstasy’ in 2009 (or latest year available back to 2005)

% of population aged 15-64

- >1.0
- 0.6 - 1.0
- 0.4 - 0.5
- 0.2 - 0.3
- <0.1
- No data provided
- Data older than 2005

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

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.

Map 32: Expert perception of trend changes in the use of ‘ecstasy’, 2009 (or latest year available back to 2005)

Trend

- Large Increase
- Some Increase
- No great change
- Some Decrease
- Large Decrease
- No data provided
- Data older than 2009

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

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.
4.3 Manufacture

Unlike the illicit cultivation of coca plant and opium poppy which is constrained to specific locations, the manufacture of ATS is not geographically limited. ATS laboratories tend to be located close to the illicit markets for these drugs. Precursors and other chemicals used in the illicit manufacture of ATS are frequently trafficked across regions.

Over the past two decades, there has been a spread in ATS manufacture, with more than 60 Member States having reported ATS manufacturing activity to date. Manufacture has been reported from all regions of the world. Since 2000, significant ATS manufacture has been reported to UNODC in a number of small clandestine laboratories, as well as in larger-scale operations, from Australia, Belgium, Bulgaria, Canada, China,35 the Czech Republic, Germany, Indonesia, Malaysia, Mexico, Republic of Moldova, Myanmar, the Netherlands, New Zealand, the Philippines, Poland, the Russian Federation, Slovakia, South Africa and the United States of America.

The global number of ATS laboratories continues to increase

In 2009, the seizure of some 10,600 ATS-related laboratories was reported to UNODC through the Annual Reports Questionnaire, which represents an increase of 26% from the 8,400 laboratories reported in 2008, though still down from the peak of 19,800 reported in 2004.36 The overall trend reflects seizures reported from the United States which continues to dismantle the vast majority of all illicit ATS laboratories worldwide. Small methamphetamine labs are the typical pattern in the United States.

Methamphetamine is still, by far, the most widely manufactured amphetamine-type stimulant worldwide. Amphetamine and ‘ecstasy’ manufacture operations tend to be fewer in number but more sophisticated, as they require more specialized equipment, precursor chemicals and greater skill levels.

Map 33: Member States reporting ATS-related manufacture* since 1990

35 Includes all provinces and Special Administrative Regions.

36 As there is no standardized definition of a clandestine laboratory, figures reflect any stage of a seized laboratory operation reported to UNODC, such as a location containing laboratory equipment and chemicals in preparation for manufacturing, a location where synthesis or tableting are/were occurring and toxic dumpsites where chemicals and equipment are illicitly discarded.
In 2009, the global number of methamphetamine laboratories increased significantly, by 22%, to almost 10,200, up from 8,300 in 2008. The numbers of reported methamphetamine laboratories have continued to increase since 2007, but are still significantly lower than their peak in 2004. While the overall number of dismantled methamphetamine laboratories increased at the global level in 2009, the increase was largely concentrated in the United States. The number of dismantled (and reported) laboratories outside the United States declined in 2009 from a year earlier, but was still at the second highest level so far.

**Significant manufacturing locations**

Methamphetamine is manufactured in all North American countries. Over the last decade - and notably in 2009 - Mexico has become an important manufacturing location. In 2009, Mexico reported the dismantling of 191 laboratories, up from 21 in 2008. The upward trend in manufacturing appears to have continued in 2010, with 63 laboratories dismantled up to May 2010. While the number of laboratories seized in Mexico is still substantially lower than in the United States, the Mexican operations tend to manufacture large quantities of end products, whereas many laboratories in the United States appear to be manufacturing the substance on a far smaller scale. There are also increasing incidents of methamphetamine-related manufacturing occurring throughout Central and South America. In 2010, for instance, authorities in Nicaragua dismantled a large clandestine methamphetamine laboratory.

Another important region in terms of illicit methamphetamine manufacture is East and South-East Asia, where a significant number of clandestine methamphetamine laboratories have been dismantled over the past several years. Previously, illicit ATS manufacturing laboratories were primarily large industrial-scale operations. In recent years, however, several countries reported seizures of a significant number of smaller laboratories, a trend that continued in 2009.

China reported the seizure of 391 clandestine synthetic drug laboratories and storage facilities in 2009. Most of these were in Guangdong, Sichuan and Hubei provinces and were primarily manufacturing crystalline methamphetamine and ketamine. In 2008, a total of 244 unspecified laboratories were dismantled in China. ATS manufacture is becoming increasingly diversified in China with different stages of manufacturing being divided across provinces.

Indonesia seized 35 clandestine synthetic drug-manufacturing laboratories in 2009, the highest figure reported to date. These included 25 large-scale and 10 small-scale laboratories.

Clandestine ATS manufacture in Hong Kong, China has been dominated by tableting and repackaging operations. In 2009, two small-scale manufacturing facilities for crystalline methamphetamine were reported in Hong Kong, China.

Over the past five years, Malaysia has become a significant methamphetamine manufacturing location. In

---


38 For East and South-East Asia, most ATS data is available through the UNODC Global Synthetics Monitoring: Analyses, Reporting and Trends (SMART) Programme, which assists countries in the region in the monitoring of drug trends, with a particular focus on ATS.

In the Philippines, illicit manufacture of crystalline methamphetamine was first reported in 1996, and in 1997, the first industrial-scale clandestine manufacturing facility was reported. The manufacture of crystalline methamphetamine continues in the Philippines, with 9 manufacturing laboratories detected in 2009. Clandestine methamphetamine manufacturing laboratories have been seized across the country in recent years and have been located in both rural and urban areas. The laboratories have also shifted from large and medium-sized facilities in previous years to smaller ‘kitchen type’ facilities in 2009. In 2009, most of the seized clandestine laboratories were again located in urban areas.

Myanmar main source of methamphetamine pills in South-East Asia

Myanmar is the primary source of the region’s methamphetamine in pill form. Reported seizures of clandestine manufacturing laboratories in Myanmar in previous years have mainly consisted of tableting operations. This is inconsistent, however, with the vast number of pills seized throughout the region. Extensive forensic profiling of methamphetamine seized in Thailand suggests that there are likely 12 large-scale methamphetamine manufacturing operations in the ‘Golden Triangle’ region. While there have been no facilities seized for crystalline methamphetamine manufacture, authorities in both Myanmar and Thailand confirm that manufacture occurs in Myanmar and has been the source of most crystalline methamphetamine seized in the northern part of Thailand in the past few years.

In Japan, the illicit manufacture of ATS is rare. In June 2010, however, police arrested two nationals of the Islamic Republic of Iran on suspicion of manufacturing methamphetamine. This was the first such incident in the country since 1995.

Australia and New Zealand report methamphetamine manufacture; little data from the Pacific Island states and territories

In Oceania, ATS manufacture has been reported from Australia and New Zealand. Australia reported the dismantling of 316 ATS manufacturing laboratories in 2009. Most of the laboratories were identified as manufacturing methamphetamine and amphetamine. New Zealand reported that a total of 135 laboratories were dismantled in 2009, primarily for methamphetamine. Further increases in the number of laboratories might be recorded in 2010 due to the increased efforts of the Government of New Zealand to tackle methamphetamine.

Little data is available from the Pacific Island states and territories, which remain vulnerable to illicit manufacture of amphetamine-type stimulants, given the fact that several of the countries are not parties to the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.
Level of methamphetamine manufacture in Europe comparatively low

Compared to most other regions of the world, illicit manufacture of methamphetamine in Europe is fairly low. Until recently, methamphetamine manufacture was largely confined to the Czech Republic, where some 300-400 mostly small-scale manufacturing sites are being dismantled every year. These are so-called kitchen laboratories, which typically manufacture a few grams of drugs at a time. Seizures of methamphetamine manufacturing facilities were also reported to Europol in neighbouring countries such as Slovakia, Germany, Poland and Austria. The second hub of methamphetamine supply is centred around the Baltic countries, particularly Lithuania and Estonia.\textsuperscript{45}

Methamphetamine manufacture is rarely reported from Africa, except for South Africa and Egypt. In 2009, 10 methamphetamine laboratory incidents were reported from South Africa, compared to 20 such incidents reported for 2008.

The global number of dismantled amphetamine laboratories remains stable

In 2009, 44 amphetamine laboratories were reported, remaining essentially stable compared to 2008. Most of these laboratories continue to be reported in Europe, particularly West, Central and East Europe.

According to the European Monitoring Centre on Drugs and Drug Addiction, most amphetamine seized in Europe is manufactured, in order of importance, in the Netherlands, Poland and Belgium, and to a lesser extent in Estonia, Lithuania and the United Kingdom. In 2007, 29 sites involved in the production, tableting or storage of amphetamine were discovered in the European Union and reported to Europol.

The relatively low number of amphetamine laboratories reported is inconsistent with the high number of global amphetamine seizures which have continued to rise over the past two years.

Increase in seizures of precursors for methamphetamine and amphetamine manufacture

Ephedrine and pseudoephedrine are the main precursors for methamphetamine and both substances are controlled in Table I of the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. Seizures of these precursors can provide some indications about manufacturing trends. In 2009, 41.9 mt of ephedrine and 7.2 mt of pseudoephedrine were seized, compared to 18.2 mt of ephedrine and 5.1 mt of pseudoephedrine in 2008.\textsuperscript{46} Recently, there has been a shift from bulk substances to pharmaceutical preparations used in the illicit manufacture of methamphetamine.

\textsuperscript{45} EMCDDA, \textit{Amphetamine and methamphetamine use in Europe}, Lisbon, November 2010.

\textsuperscript{46} International Narcotics Control Board, \textit{Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances}, E/INCB/2010/4, March 2011.
**Traffickers adopt alternative strategies to evade stricter control measures**

As awareness, restrictions and enforcement against illicit ATS manufacture increases, manufacturing operations tend to move to more vulnerable countries. When controls over precursors were strengthened in the United States, manufacture shifted to Mexico. As Mexico has responded with strong counter-methamphetamine initiatives, manufacturing activities are increasingly reported from countries in Central and South America.

Traffickers also resort to substitute chemicals. As Governments have restricted the availability of ephedrine and pseudoephedrine, some traffickers could turn to other chemicals such as norephedrine which can replace these two chemicals with only slight modifications to the illicit manufacturing process. Traffickers have also attempted to divert the ephedra plant - a natural source of ephedrine - for illicit ATS manufacture. In addition, there have been reports that traffickers transform existing precursors into new uncontrolled chemicals, which are subsequently converted back to the original precursor chemical once in the final destination country.

A precursor chemical commonly used in the illicit manufacture of methamphetamine and amphetamine is 1-phenyl-2-propanone (P-2-P). The diversion of this chemical may be fuelling the market for amphetamine in the Near and Middle East, where amphetamine is often sold as Captagon on illicit markets. In 2009 and 2010, Jordan reported the world's highest annual legitimate requirement of P-2-P to the International Narcotics Control Board, accounting for half of the global total. The high legitimate need is based on the purported formulation of P-2-P into cleaning and disinfection products. The volume represents a significant risk of diversion into illicit manufacture, however, particularly as P-2-P is not an essential ingredient in the formulation of cleaning and disinfection products and alternative chemicals exist.

**Number of reported ecstasy-group laboratories remains essentially stable**

In 2009, 52 ecstasy-group laboratories were reported, compared to 53 in 2008. The highest number of dismantled laboratories was reported from Asia and Oceania, namely Indonesia (18) and Australia (19). This might indicate that Indonesia has replaced Europe as the main source for 'ecstasy' used in South-East Asia.

In the past, ecstasy-group substances used to be manufactured predominantly in West Europe. Manufacture peaked in 2000, when 50 laboratories were reported as having been dismantled in Europe. Since that time, however, manufacture of ecstasy-group substances has shifted away from the region to a number of other markets around the world. Large-scale manufacturing operations are more frequently being dismantled in East and South-East Asia, the Americas and Oceania. In 2008, only four laboratories were reported from Europe; for
2009, there was only one reported to have been seized in Belgium.

**Shift in ecstasy manufacture**

Manufacture of ecstasy increasingly takes place in regions other than Europe, such as East and South-East Asia, North America, Oceania and Latin America. Illicit manufacture of ecstasy has been reported in Argentina, Belize, Brazil, Guatemala, Mexico and Suriname. In Brazil, a small-scale laboratory was seized in 2008 and another, more commercial-size operation in 2009, which included the seizure of 20,000 tablets.  

Precursors for ecstasy-group substances include safrole (including in the form of safrole-rich oils), isosafrole, piperonal, and 3,4—MDP-2-P, which are all controlled in Table 1 of the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. Reported global seizures of these precursors have strongly declined, reflecting the declining availability of ecstasy in Europe, one of the main markets for the substance.

However, in January 2010, authorities in Australia uncovered the country’s first clandestine laboratory for the domestic extraction and processing of safrrole-rich oil for the manufacture of ‘ecstasy’.

**Significant increase in other synthetic drug manufacture incidents**

For the first time, the number of other synthetic drug manufacture incidents reported to UNODC through the ARQ has surpassed those of ‘ecstasy’. This is due to a significant number of incidents relating to unspecified ATS precursors reported from the United States. Such cases also appear to occur in other parts of the world.

**Table 35: Other synthetic drug manufacture incidents, 1999-2009**

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATS precursors</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>22</td>
<td>1</td>
<td>3</td>
<td>40</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Gamma-Hydroxybutyric acid (GHB)</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>9</td>
<td>21</td>
<td>17</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Ketamine</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>44</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lysergic acid diethylamide (LSD)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Methaqualone</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>15</td>
<td>16</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Phencyclidine (PCP)</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>16</td>
<td>0</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2</td>
<td>12</td>
<td>10</td>
<td>21</td>
<td>55</td>
<td>33</td>
<td>25</td>
<td>41</td>
<td>59</td>
<td>33</td>
<td>61</td>
</tr>
</tbody>
</table>
The number of GHB laboratory incidents decreased from 12 in 2008 to 9 in 2009. No ketamine laboratory was reported through the ARQ. As ketamine is not under international control, however, the extent of manufacture is probably underreported. Government sources in China indicate that ketamine laboratories are regularly dismantled in that country.

Seizures of precursors used in the illicit manufacture of ATS

Chemical precursors are necessary for the synthesis of amphetamine-type stimulants, and many of the chemicals are controlled internationally through the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. Their seizures are reported to the International Narcotics Control Board and can provide some indications about trends in illicit manufacture.

Seizures in 2009 included:

**Amphetamines-group**
- Methamphetamine: 41,931 kg of ephedrine and 7,241 kg of pseudoephedrine, sufficient to manufacture 32.7 mt of methamphetamine.
- Amphetamine: 4,885 litres of phenyl-2-propoanone (P-2-P), sufficient for 2.4 mt of amphetamine or methamphetamine.
- 195 kg of norephedrine, sufficient to manufacture 130 kg of amphetamine.

**Ecstasy-group**
- 40 litres of 3,4-MDP-2-P, enough to manufacture 33 kg of MDMA;
- 1048 l of safrole oil, sufficient to manufacture 222 kg of MDMA;
- 4.3 mt of piperonal which could be converted into 1.6 mt of MDMA; and
- 5 l of isosafrole, which could be used in the manufacture of 2.36 kg of MDMA.

The low amounts of precursor chemicals seized are inconsistent with the size of the consuming market, suggesting that much of the trafficking of precursors needed for ATS manufacture goes undetected. Criminal organizations adopt several strategies to avoid control by trafficking precursors through new locations, such as Africa, by relocating manufacturing operations to new countries and by changing precursor chemicals.

Seizure data for precursors can only provide a partial picture of precursor availability. Diversions and stopped shipments are not included in the traditional seizure statistics, neither are domestic diversions followed by onward smuggling.

These figures largely represent raw chemical seizures and in some cases pharmaceutical preparations, and thus are not representative of all precursors seized.

Map 35: Notable locations of manufacture and main trafficking routes of ATS
4.4 Trafficking

Global ATS seizures

In 2009, global seizures of ATS rose significantly (by 16%), slightly exceeding the high level of 2007 (following a dip of 9% in 2008). The increase was driven by the quantities of seized methamphetamine, which rose markedly to 31 mt (from 22 mt in 2008) and amphetamine, which rose more moderately (33 mt, up from 30 mt in 2008). Seizures of ecstasy amounted to 5.4 mt, remaining below the reduced level of 2008. The increases in methamphetamine and amphetamine were also partly offset by a drop in seizures of non-specified amphetamines, so that total ATS seizures in 2009 amounted to 71 mt. Due to the paucity of data from some countries, the decline in non-specified amphetamines is not statistically significant, and the total for amphetamine, methamphetamine and ecstasy rose by 22% in 2009.

Seizures of amphetamine-type stimulants are reported by weight (in kg), by volume (in litres, usually when the seized drugs are in liquid form) and by number of tablets, doses or 'units'. Although UNODC maintains and publishes records to reflect - as closely as possible - seizure quantities as reported by countries, it is often useful to aggregate data of different types to compare over time or across countries and regions. For the purposes of this aggregation, conversion factors are used to convert the quantities into 'kilogram equivalents.' The aggregate statistics used in this report depend on the conversion factors used, and the impact of these conversion factors can be especially pronounced in the case of amphetamine-type stimulants, as a significant share of seizures of these drug types are quantified by number of tablets. In previous editions of the World Drug Report the conversion factors used were intended to reflect the amount of psychoactive ingredient in the seized tablets. In order to enhance the comparability with seizures reported by weight, which are quantified by bulk weight and can only be adjusted for purity in a minority of cases where the availability of data allows, UNODC has revised the conversion factors used for amphetamine-type stimulants to reflect the bulk weight of the seized tablets. The new factors are based on forensic studies and range between 90 mg and 300 mg per tablet, depending on the region as well as the drug type. These factors are subject to revision as the available information improves; details can be found in the methodology section.

Although trafficking in and consumption of amphetamine-type stimulants has come to affect all regions of the world, different types of ATS prevail in different regions. In past years, seizures of ATS in Europe have been dominated by ecstasy and amphetamine; however, ecstasy seizures in Europe fell sharply between 2007 and
2009, while methamphetamine seizures reached a record level by European standards in 2009. Ecstasy accounted for only 10% of ATS seizures in Europe in 2009, compared with 6% for methamphetamine. In North America, seizures continue to be dominated by methamphetamine and 'ecstasy'. In relative terms, seizures of 'ecstasy' remained important also in Central and South America and the Caribbean, although the majority of reported ATS seizures in this region consisted of amphetamine in 2009. The market in Oceania remained diversified among the various types of amphetamine-type stimulants. In the Near and Middle East/South-West Asia, seizures of amphetamine-type stimulants are mainly in the form of Captagon, believed to contain amphetamine as the main psychoactive ingredient. Methamphetamine seizures have been reported from Nigeria and South Africa. For 2009, however, only South Africa reported seizures of methamphetamine, out of a total of four African countries reporting any ATS seizures in the ARQ. Approximately one half of the ATS seized in Africa referred to amphetamine. The paucity of the data thus does not allow for a reliable characterization for the continent as a whole.
North America: Increase in the supply of methamphetamine

In 2009, North America accounted for 44% of global seizures of methamphetamine, due to continued high seizures in the United States (7.5 mt, compared with 7.4 mt in 2008) as well as a sharp increase in methamphetamine seizures in Mexico, which reached a comparable level (6.1 mt, up from 341 kg in 2008). This was in sharp contrast to prior years; over the period 2001-2008, annual seizures in the United States ranged between 5 and 21 times the level in Mexico.

Methamphetamine in the United States’ consumer market continued to be supplied by manufacture of methamphetamine in Mexico as well as the United States. Following a substantial decline in 2007, the availability of methamphetamine in the United States appears to have rebounded. According to the United States Department of Justice, methamphetamine availability in the United States seems to be directly related to methamphetamine production trends in Mexico. The decline in availability in 2007, possibly triggered by more stringent import restrictions of methamphetamine precursors in Mexico, was reflected in reduced seizures and

increased prices, and may have led to an increase in manufacture of methamphetamine in the United States. The number of methamphetamine laboratories detected in the United States rose from 3,049 in 2007 to 3,873 in 2008 and 5,286 in 2009. The increase was mainly attributable to the number of small-scale laboratories. Moreover, some Mexican drug trafficking organizations shifted their production operations from Mexico to the United States, particularly to California.

Since 2007, manufacture of methamphetamine in Mexico appears to have grown significantly. Mexico reported 191 methamphetamine laboratories in 2009, up from 21 in 2008. In 2009, the laboratories were discovered in the central Pacific region (in particular, the states of Michoacan, Jalisco and Sinaloa). Between 2007 and 2009, seizures of methamphetamine by United States authorities along the border with Mexico increased by at least 87%, as the partial total for 2009 amounted to 3,478 kg (compared with 1,860 kg in 2007). The increased availability in the United States is also visible in price and purity data. Between the fourth quarter of 2007 and the fourth quarter of 2009, the average price per pure gram of methamphetamine followed a generally decreasing trend, falling from US$284 to US$119, while the average purity followed a distinct increasing trend, rising from 39% to 72%. The rising purity and falling price are, however, also due to a less potent product being manufactured – a racemic ‘d/l methamphetamine’. The loss in potency of this inferior product can, however, be compensated by higher purity levels – and this is currently happening. It appears that the reduced availability of ephedrine and pseudoephedrine (which would be required for the manufacture of the more potent ‘d-methamphetamine’) in Mexico had led to an increased use of alternative methods for the manufacture of methamphetamine. Such techniques either synthesize these chemicals from others more easily available or bypass their use entirely, employing for example the 1-phenyl-2-propanone (P-2-P) method, or its pre-precursor, phenylacetic acid (PAA). The product obtained from the use of PAA or P-2-P is a less potent racemic ‘d/l methamphetamine’, unless an additional purification step is added on to obtain again the traditional ‘d-methamphetamine.’ Mexico made large seizures of phenylacetic acid (31 mt in 2009), which can be used to obtain P-2-P, as well as other closely related chemicals, including some which are not under international control (such as esters of phenylacetic acid in 2008 and phenylacetyl amide in 2009). In 2010 and 2011, Mexican authorities continued to make seizures of esters of phenylacetic acid.

Increasing seizures of MDMA in the United States and Canada

For the second year in a row, North America accounted for more than half of global ‘ecstasy’ seizures in 2009. The United States alone accounted for 63% of the global total. Contrary to the trend in global seizures, which essentially remained at the significantly reduced level of 2008, in 2009, seizures in North America sustained the increased levels of 2007 and 2008. According to the United States Department of Justice, the resurgence of MDMA availability in the United States was fuelled by the manufacture of MDMA in Canada and subsequent smuggling into the United States across the northern border. MDMA seizures at the northern border more than doubled between 2007 and 2008.

Canada reported 23 methamphetamine laboratories and 12 MDMA laboratories in 2009. Although ‘ecstasy’ seizures in Canada fell for the second year in a row – from 1 mt in 2007 to 715 kg in 2008 and 405 kg in 2009 – Canada reported an increased amount of powder MDMA shipments destined for foreign countries and an apparent expansion of international consumer markets for Canadian-produced MDMA. Destinations for MDMA shipments seized in or en route from Canada included the Philippines, Malaysia, Taiwan Province of China, Mexico and Jamaica. While cross-border methamphetamine trafficking between Canada and the United States continued to be limited in comparison with cross-border MDMA trafficking, a slight increase was registered in the number of methamphetamine shipments intercepted in both directions.

Central America, South America and the Caribbean

In this region, seizures of amphetamine-type stimulants are limited. In recent years however, illicit manufacture of amphetamine-type stimulants has emerged in several countries with little or no previous history of reported manufacture.

(amphetamine) in two operations in the outskirts of Buenos Aires. Although manufacture in Argentina cannot be ruled out, it is likely that the large quantity of precursor chemical was intended for other destinations, possibly Mexico.\(^{55}\)

In 2010, Brazil seized 2,740 ‘ecstasy’ tablets and 5,910 units of methamphetamine.\(^{56}\) Brazilian authorities seized one ‘ecstasy’ laboratory in 2008\(^{57}\) in the state of Paraná, and, according to preliminary data, one ‘ecstasy’ laboratory, again in Paraná, as well as one methamphetamine laboratory in the state of Santa Catarina, in 2009.\(^{58}\) Chile seized one laboratory manufacturing mescaline\(^{59}\) in 2009. Seizures and investigations by Chilean authorities also point to trafficking of ephedrine from Chile to Mexico.\(^{60}\) Colombia seized 126,573 ATS tablets in 2009, including 23,477 ‘ecstasy’ tablets.\(^{61}\)

In the Dominican Republic – for years an important trans-shipment location of ecstasy – seizures of ‘ecstasy’ tablets fell from 20,861 units in 2007 to 17,885 in 2008\(^{62}\) and 10,166 in 2009. In August 2009, authorities in the Dominican Republic intercepted more than 409,000 pseudoephedrine tablets in a shipment en route to Guatemala and originating in Bangladesh.\(^{63}\)

Guatemala reported the seizure of one ATS laboratory in 2008 and three in 2009, as well as the seizure of 12 mt of pseudoephedrine in 2009. In 2008, Honduran authorities discovered some establishments used for extracting pseudoephedrine. In Nicaragua, police discovered a laboratory manufacturing illicit synthetic drugs in February 2010, and seized a small quantity of amphetamine. This represented the third reported ATS laboratory in Nicaragua.\(^{64}\)

\(^{55}\) UNODC, Global SMART Update, Volume 2, October 2009.

\(^{56}\) Brazil Federal Police.


\(^{58}\) UNODC, Global SMART Update, Volume 2, October 2009.

\(^{59}\) Although mescaline is not classified as an amphetamine-type stimulant, it is a psychotropic substance and a hallucinogen.

\(^{60}\) UNODC, Global Smart Update, Volume 2, October 2009.

\(^{61}\) Observatorio de Drogas de Colombia.

\(^{62}\) In addition, in 2008, 49 grams of ‘ecstasy’ were seized in the Dominican Republic.

\(^{63}\) UNODC, Global Smart Update, Volume 2, October 2009.

\(^{64}\) UNODC, Global Smart Update, Volume 3, March 2010.
In 2009, small quantities of amphetamine-type stimulants were also seized in Costa Rica (methamphetamine and 'ecstasy'), Chile (amphetamine and 'ecstasy') Cuba (methamphetamine and unspecified ATS), the Bahamas ('ecstasy') and El Salvador (amphetamine).

Near and Middle East/South-West Asia: Rise in amphetamine seizures

Countries in the Near and Middle East/South-West Asia continued to be affected by trafficking of Captagon on a large scale. The content of tablets bearing the Captagon logo is not always clear, but the main psychoactive ingredient in such tablets is now amphetamine (rather than fenetylline, the active ingredient in the licit pharmaceutical preparation some 15 years ago). Caffeine is also frequently found in such tablets.

Seizures of amphetamine in the Near and Middle East/South-West Asia increased steadily between 2000 and 2007, appeared to stabilize in 2008, amounting to 19.6 mt, and resumed the increasing trend in 2009, reaching 24.8 tons. The long-term growth in seizures in this region was driven mainly by seizures in Saudi Arabia, which rose consistently over the period 2000-2007, reaching 13.9 mt in 2007. Seizures in this country have remained stable since then, amounting to 12.8 mt in 2008 and 13.4 mt in 2009. Saudi Arabia has a significant consumer market for Captagon tablets. In January 2010, eight million Captagon pills were confiscated in a single seizure in Saudi Arabia. The traffickers were believed to have ties to an amphetamine manufacturing and distribution ring that was broken in Turkey a few months earlier. Turkey is believed to be mainly a transit country for Captagon, and a gateway for illicit trafficking from South-East Europe to the Middle East.

Replies to the Annual Reports Questionnaire from the Near and Middle East identified Saudi Arabia as a major destination for amphetamine (specifically Captagon) trafficked on their territory. It also appeared that Egypt had become a point of departure foramphetamine shipments. In a single seizure at Dhuba seaport, Saudi Arabian Customs seized over 1.3 million tablets that were concealed on board a vessel that had arrived from Egypt.


Turkey reported seizures of 2.8 million Captagon tablets in 2009, in addition to 479 kg of amphetamine, of which 473 kg were seized at a Captagon laboratory.

65 Data relative to the period 2002-2007 and 2009 were sourced from the World Customs Organization and ICPO/INTERPOL.

66 World Customs Organization.


68 World Customs Organization, Customs and Drugs Report 2009, June 2010.

69 Turkey also confirmed that, in 2009, Captagon tablets contained amphetamine rather than fenetylline.

70 Ministry of Interior, Turkish National Police, Department of Anti-Smuggling and Organized Crime. Turkish Report on Drugs and
discovered in Istanbul in September 2009. According to Turkish authorities, such establishments, which are discovered sporadically, carry out the conversion into tablet form, rather than the chemical process whereby amphetamine is manufactured from other substances. In 2010 seizures of Captagon tablets fell to 1.1 million.

Increased seizures of methamphetamine in the Islamic Republic of Iran

Starting in 2005, the Islamic Republic of Iran has seized increasing quantities of methamphetamine. In the first nine months of 2010, the country seized 883 kg of methamphetamine, up from 571 kg in 2009. The results of research in the country, as reported by the Drug Control Headquarters, indicate that the use of methamphetamine has increased. The Islamic Republic of Iran reported that, in 2009, methamphetamine trafficked on its territory originated in North-West Asia, South-East Asia and northern and western Europe, with 1% manufactured domestically. It also reported the detection of six 'kitchen' laboratories manufacturing methamphetamine. In 2009, the Islamic Republic of Iran registered legitimate requirements of 55 mt of the precursor pseudoepehedrine, the fourth largest level worldwide for that year.

According to Thai authorities, there was an emergent trend of Iranian nationals trafficking methamphetamine into the region. This pattern was also observed in Japan, where Iranian nationals accounted for one fifth of arrests of non-resident foreigners related to methamphetamine. In two incidents in July 2009 and February 2010, a total of five Iranian nationals were arrested in Malaysia for attempting to traffic a total of 75 kg of methamphetamine on flights from the United Arab Emirates. In August 2010, police in Sri Lanka arrested three Iranian nationals, confiscating 16 kg of methamphetamine. Turkey, which registered methamphetamine seizures for the first time in 2009, also reported that methamphetamine was smuggled overland from the Islamic Republic of Iran into Turkey and then trafficked by air to countries in East and South-East Asia such as Indonesia, Japan, Malaysia and the Republic of Korea. Indonesia also mentioned the Islamic Republic of Iran as a source country for methamphetamine in 2009, and Turkey as a transit country. Trafficking of methamphetamine from the Islamic Republic of Iran via Turkey was also confirmed by Philippine authorities.

Asia-Pacific: Increased seizures of methamphetamine

The Asia-Pacific region – notably the area encompassing Cambodia, the Lao People's Democratic Republic, Myanmar, Thailand, Viet Nam and bordering provinces of south China - continued to be affected by manufacture, trafficking and consumption of methamphetamine on a large scale. In 2009, seizures in East and South-East Asia rose by more than one third, from 11.6 mt in 2008 to 15.8 mt, mainly due to the quantities seized in Myanmar. In relative terms, Thailand recently also registered significant increases. The largest seizures in the Asia-Pacific region continued to be made by China, while East and South-East Asia as a whole continued to account for approximately one half of global seizures of methamphetamine. Moreover, there were signs of diversification in trafficking routes, with methamphetamine reaching the region from Africa and the Islamic Republic of Iran.

In China, aggregate seizures of methamphetamine were remarkably stable over the period 2005-2009, ranging between 6.1 mt and 6.8 mt (6.6 mt in 2009). According to Chinese authorities, there was an increase in trafficking of amphetamine-type stimulants from neighbouring countries (referred to as the 'Golden Triangle') into Yunnan province. Methamphetamine seizures in this province rose from 2.2 mt in 2008 to 3.2 mt in 2009. There was also an increase in the domestic manufacture of illicit drugs, with the number of dismantled clandestine laboratories rising from 244 in 2008 to 391 in 2009. Manufacture occurred in particular in the provinces of Guangdong, Sichuan and Hubei, and the substances involved were mainly amphetamine-type stimulants and ketamine.


71 Ibid.
72 Ministry of Interior, Turkish National Police, Department of Anti-Smuggling and Organized Crime, Turkish Report on Drugs and Organized Crime 2010.
73 Drug Control Headquarters, Islamic Republic of Iran, Drug Control in 2010, Annual Report.
76 Office of the Narcotics Control Board of Thailand, presentation at the Twentieth Anti-Drug Liaison Officials’ Meeting for International Cooperation (ADLOMICO), October 2010, Seoul, Republic of Korea.
79 UNODC, Global SMART Update, Volume 4, October 2010.
In 2009, a notable increase in methamphetamine seizures was registered in Myanmar, where annual seizures of methamphetamine averaged 528 kg over the period 2003-2008 and rose to 3.4 mt in 2009. This increase was concurrent with a similar increase in heroin seizures in the same country and may reflect a strengthened presence of law enforcement agencies in parts of Myanmar.

Thailand continues to constitute a major market for methamphetamine, and there were signs that trafficking methamphetamine was on the rise. According to data collated by the Drug Abuse Information Network for Asia and the Pacific, seizures of methamphetamine tablets rose from 14 million in 2007 to 22 million in 2008 and 27 million in 2009, while seizures of crystalline methamphetamine increased from 47 kg in 2007 and 53 kg in 2008 to 209 kg in 2009.82 According to Thai authorities,83 manufacture of illicit substances was very limited in Thailand, and methamphetamine was trafficked into Thailand from neighbouring countries. Thailand was also being used by traffickers as a transit point for methamphetamine intended for other markets.

Large quantities of methamphetamine were seized in the Philippines in 2008 and 2009. The Philippines also dismantled 10 methamphetamine laboratories in 2008 (including four ‘kitchen’ laboratories) and nine in 2009 (including eight ‘kitchen’ laboratories), and further reported an increase of 36% in the average price of methamphetamine hydrochloride in 2009, as compared to that in 2008, suggesting an increased demand for the substance.

Methamphetamine seizures in Malaysia amounted to 1.1 mt in 2008 and 1.2 mt in 2009.84 These levels are significantly higher than those registered prior to 2008. In a single seizure in May 2009, Malaysian police seized 978 kg of high purity crystalline methamphetamine in the city of Johor Bahru.85

Methamphetamine seizures in Indonesia, in contrast, fell to the lowest level since 2004. Indonesia also reported the seizure of five ‘kitchen’ methamphetamine laboratories in 2008 and 17 in 2009.

The general declining trend in ecstasy seizures prevalent worldwide since 2007 (with the exception of North America) was also to be seen in several countries in the Asia-Pacific region. By 2009, ecstasy seizures in China, Indonesia, Japan, Malaysia and Thailand had fallen significantly by comparison with the level in 2007. However, Indonesia reported that nine ‘kitchen’ laboratories manufacturing ecstasy were seized in 2008 and 18 in 2009.

Oceania continued to be affected by trafficking of amphetamine, methamphetamine and ecstasy, with no single type dominating the market. In 2009, Australia seized 56 kg of amphetamine, 150 kg of methamphetamine and 59 kg of ecstasy. The number of laboratories dismantled in Australia rose significantly, from 11 ATS laboratories in 2007-2008 to 316 in 2008-09, of which 19 were manufacturing primarily MDMA and the rest were manufacturing amphetamine or methamphetamine. New Zealand also seized smaller quantities of amphetamine, methamphetamine and ecstasy; however, all 135 seized laboratories reported by New Zealand were manufacturing methamphetamine.

Africa: Few countries report seizures

The variety of substances, combinations of substances, precursor chemicals and chemical processes for manufacturing ATS hinders the collection of good quality data, in particular the proper identification and classification of seized controlled substances, especially in countries lacking laboratory services for forensic purposes, and this is an issue of concern especially in Africa. The vast majority represent seizures whose precise nature is unknown. Several African countries appear to be affected by trafficking in, and consumption of, diverted or counterfeit prescription drugs containing controlled substances whose nature is not always clear, possibly

82 In its reply to the Annual Reports Questionnaire for 2009, Thailand reported seizures of 2.4 mt of methamphetamine pills and 210 kg of crystalline methamphetamine.

83 Office of the Narcotics Control Board of Thailand, presentation at the Twentieth Anti-Drug Liaison Officials’ Meeting for International Cooperation (ADLOMICO), October 2010, Seoul, Republic of Korea.

84 Data collated by DAINAP.

including amphetamine-type stimulants as well as sedatives and tranquillisers.

Nigeria reported seizures of 712 kg of psychotropic substances in 2009, up from 530 kg of psychotropic substances in 2008. Burkina Faso reported seizures of 3,403 kg of ‘médicaments de la rue’ in 2008. Morocco reported seizures of 48,293 units of psychotropic substances in 2008, rising to 61,254 in 2009 and 105,940 in 2010.86 South Africa reported aggregate seizures of 48 kg of amphetamine-type stimulants in 2009, including 37 kg of methamphetamine. Algeria reported aggregate seizures of 90,630 tablets of sedatives and tranquillisers in 2009. Côte d’Ivoire seized 43 kg of amphetamine in 2008, as well as 17,155 amphetamine tablets (in addition to seizures of clonazepam and diazepam tablets).87 In 2009, seizures of amphetamine in Côte d’Ivoire fell to 1,200 tablets. The World Customs Organization also reported that Sudanese officials foiled an attempt to smuggle 18.3 kg of stimulant tablets at Khartoum airport.

Every year from 2000 to 2009, Egyptian authorities seized small quantities of ‘ecstasy tablets’. Seizures exceeded 10,000 tablets in 2006, but had fallen to 203 tablets by 2008 to 76 tablets in 2009. In April 2010,88 one methamphetamine laboratory was seized in Egypt.

According to South African authorities, amphetamine-type stimulants, in particular methamphetamine and club drugs such as ecstasy and cathinone, continued to be used in South Africa.89 These drugs, with the exception of ecstasy, were manufactured locally in clandestine laboratories, while ecstasy was mainly smuggled in from Europe by air freight and parcel post. Over the period 1 April 2008 to 31 March 2009, 20 clandestine laboratories manufacturing methamphetamine were dismantled,90 while 10 methamphetamine laboratories and six cathinone laboratories were dismantled during 2009. South Africa also reported that an increase of methamphetamine trafficking allowed for a decrease in prices.

Methamphetamine trafficking from Africa to Japan

One emerging trend identified by Japanese authorities91 was that of methamphetamine trafficking from Africa to Japan. The proportion of methamphetamine seized in Japan that was sourced from Africa increased from 7.4% in 2009 to 36% in the first half of 2010. The West and Central African countries of Benin, Nigeria, Cameroon and Senegal were prominent among the source countries in Africa. It is unclear whether West Africa, already a hub for cocaine trafficking, was beginning to see the emergence of local ATS manufacture, or is simply serving as a transit point for methamphetamine manufactured elsewhere, possibly in South Africa. Nevertheless, this trend, together with reports from other countries in the region, suggests that African trafficking syndicates active in the Asia-Pacific region may be expanding their activities to include trafficking of methamphetamine in addition to heroin and cocaine.

Countries in West Africa, which have assumed an important role in the trafficking of cocaine, are also vulnerable to a potentially increased role in the trafficking or manufacture of other drugs, including amphetamine-type stimulants. In July 2009, large quantities of chemicals and equipment that could be used in the manufacture of illicit drugs were discovered in multiple facilities in Guinea. Among the seized materials were more than 5,000 litres of sassafras oil and 80 litres of

---

86 Official communication from the Government of Morocco. The replies to the Annual Reports Questionnaire for the year 2009 and 2010 from the Kingdom of Morocco were not available at the time of preparation of the present report.
87 Country report by Côte d’Ivoire to the Nineteenth Meeting of Heads of National Drug Law Enforcement Agencies, Africa. The replies to the ARQ for 2008 from Côte d’Ivoire were not available at the time of preparation of the present report.
88 UNODC, Global SMART Update Volume 4.
91 Japan Customs Intelligence and Targeting Centre, presentation at the Twentieth Anti-Drug Liaison Officials’ Meeting for International Cooperation (ADLOMICO), October 2010, Seoul, Republic of Korea.
3,4-MDP-2-P, which can be used to manufacture MDMA. In a separate single seizure, also in July 2009, Nigerian officials seized 10 kg of crystalline methamphetamine and 10 kg of amphetamine along with 57 kg of the precursor chemical ephedrine. The seizure was made at the departure concourse of a flight en route to South Africa.92 (The methamphetamine seizures were, however, not reported separately in the ARQ but included in the broad category of psychotropic substances seizures). In 2010, Nigeria seized 75 kg of methamphetamine: over the nine-month period May 2010 – January 2011, 11 out of 150 seizures made by authorities at Murtala Muhammed International Airport involved methamphetamine, intended predominantly for the Asia-Pacific region.93

Europe: Amphetamine seizures appear to recede

Europe, notably West and Central Europe, continues to be an important market for amphetamine, in terms of both manufacture and consumption. Amphetamine seizures in West and Central Europe reached a record level (8.2 mt) in 2007, and essentially sustained this level in 2008 (7.9 mt). In 2007 and 2008, the Netherlands, the United Kingdom and Germany collectively accounted for more than 70% of annual amphetamine seizures in West and Central Europe, and in 2009 the United Kingdom and Germany accounted for the largest and second largest seizure levels in Europe, respectively. Seizure data from the Netherlands for 2009 were not available; however, a comparison of seizure totals for 2008 and 2009 excluding the Netherlands indicates a decline of 20%.

A sharp drop in seizures in the United Kingdom, from the high level of 2008, was partly offset by increased seizures in France, while seizures in Germany continued the gradually increasing trend that can be traced back to 2002. Among all countries worldwide, the Netherlands continued to be the most frequently mentioned country of origin for amphetamine as well as ‘ecstasy’. Poland continued to be the second most frequently mentioned country of origin for amphetamine: Poland dismantled eight amphetamine laboratories in 2009, and identified Germany, Scandinavia and the United Kingdom as the main destinations for amphetamine manufactured in Poland.

Ecstasy seizures continue to decline

Seizures of ecstasy in Europe have declined sharply, standing at 1.8 mt in 2008 – approximately one third the prior levels – and appearing to decline by a further 59% in 2009 (excluding seizures in the Netherlands). The decreases were prevalent throughout Europe but were more pronounced in some countries than others; due to recent decreases in countries which historically accounted for a dominant portion of European ‘ecstasy’ seizures (notably the United Kingdom and, up till 2008, the Netherlands), in 2009 the largest ‘ecstasy’ seizures reported by European countries were made in Turkey (432,513 tablets) and Spain (404,334 tablets), while Poland registered seizures comparable with the quantities seized in the United Kingdom (6% of the European total). Poland assessed that some of the ‘ecstasy’ on its territory originated in Poland itself, as well as the Netherlands. According to Colombian authorities,94 a

---

92 UNODC, Global SMART Update, Volume 2, October 2009.
93 National Drug Law Enforcement Agency of Nigeria.
94 Dirección Nacional de Estupefacientes, Ministerio del Interior y de Justicia, Colombia.
shipment of 15 million ‘ecstasy’ tablets seized in Poland and intended for Colombia suggested that Colombian syndicates were accepting payment for cocaine in the form of ‘ecstasy’ tablets manufactured in Europe. Similar arrangements were also reported from other European countries in the past.

**Methamphetamine emerging in Europe**

While the European ATS market has in the past been dominated by amphetamine and ‘ecstasy’, recent years have seen the emergence of methamphetamine manufacture, trafficking and consumption in parts of Europe. Between 2004 and 2009, there was a five-fold increase of methamphetamine seizures in West and Central Europe, driven mainly by seizures in Norway, Sweden and Lithuania. Over the period 2002-2009, Lithuania and the Netherlands were the European countries most frequently mentioned as a country of origin for methamphetamine, followed by Poland, the Czech Republic and Slovakia. Lithuania assessed that methamphetamine on its territory originated entirely in Lithuania itself in 2009, while the percentage of domestic manufacture was estimated at 98% by Slovakia and 95% by the Czech Republic. The Czech Republic reported seizures of a large number of methamphetamine laboratories (342); one methamphetamine laboratory was also dismantled in Lithuania and an unspecified number in Slovakia.
4.5 Emerging trends

Market expansion for ATS markets in East and South-East Asia

Established markets for amphetamine-type stimulants in East and South-East Asia have seen an expansion over the past year. Expert perceptions confirm that ATS - notably methamphetamine - play a significant role in the region. ATS may even have overtaken the use of plant-based drugs in some countries over the past few years. Methamphetamine in pill form has been reported as the primary drug of use in the Lao People’s Democratic Republic and Thailand, while methamphetamine in crystalline form has been reported as the primary drug of use in Brunei Darussalam, Cambodia, Japan, the Republic of Korea and the Philippines. Methamphetamine in pill and crystalline form ranked as the second most commonly used drug type in China, with ‘ecstasy’ ranking third. In Indonesia, crystalline methamphetamine and ‘ecstasy’ ranked as the second and third most commonly used drugs, respectively. Crystalline methamphetamine ranked as the third most commonly used drug in Malaysia and Singapore.

Over the past few years, several expanding markets have emerged in the region. For example, the market for methamphetamine in Viet Nam has grown as the country becomes an attractive target for traffickers due to its large, increasingly affluent and urban population. The use of crystalline methamphetamine, in particular, has increased among young people in major cities and seizures of methamphetamine pills have increased significantly over the past three years. Viet Nam also reports the existence of drug storage points along the northern border with the Lao People’s Democratic Republic.

In Indonesia, crystalline methamphetamine use has been increasing each year since 2003 according to experts, and the drug now ranks as the second most commonly used drug, after having ranked fifth in 2005. Over the past five years, Indonesia - hitherto primarily a transit country for methamphetamine - has become a manufacturing centre for crystalline methamphetamine. Malaysia is a key transit country for crystalline methamphetamine trafficking in the region and in recent years has seen seizures of several small and large-scale manufacturing laboratories, echoing the same pattern as some other countries.

Another trend is the increasing trafficking and use of ketamine which is often sold in the traditional ATS markets of South-East Asia. In 2009, 6.9 mt of ketamine was seized in East and South-East Asia. Almost 90% of this was seized in China, which, along with India, is one of the major source countries for ketamine in the region. Ketamine seizure figures are almost certainly under-reported, particularly in Asia. Ketamine is not under international control and only some countries in the region have imposed restrictions on its availability. Use is reportedly increasing in several countries and areas, and in Hong Kong, China, it was the main drug of use, with 2009 seizures reaching five times their 2007 level. One reason for its growing popularity is that ketamine is cheaper than other drugs such as MDMA and its licit use makes it widely available for diversion for illicit purposes in many countries in the region.

Ketamine is also frequently trafficked in South Asia, particularly from India. Seizures of ketamine in India have increased from 60 kg in 2005 to more than 1 mt in 2009. Ketamine has been trafficked to countries in East and South-East Asia as well as to North America (notably Canada) and some European countries (notably the United Kingdom and the Netherlands).

The emergence of analogue substances in established ATS markets

The appearance of several new unregulated synthetic compounds in established ATS markets, particularly in...
Europe, the United States, Canada, Australia and New Zealand, has been an important trend observed over the past years. Many of these substances are marketed as ‘legal highs’ and substitute for illicit stimulant drugs such as cocaine or ecstasy.

In Europe, the emergence of these substances coincided with the gradual disappearance of ecstasy from the illicit drugs market. Seizures of ecstasy precursors have continually declined over the past five years. Seizures of the main ecstasy precursor 3,4-MDP-2-P (also known as piperonyl methyl ketone) steeply declined after 2004. The slow and steady disappearance of MDMA from the illicit market coincided with a decline in laboratory activity. In 2009, only one ecstasy-related laboratory incident was reported in Europe.

At the same time, other synthetic substances, notably piperazines, have been sold as ‘ecstasy’ to meet the demand from the illicit market. Manufacturers and traffickers have started to exploit the lack of national and international control over piperazines and other new synthetic substances. Piperazines are not under international control although many countries have introduced national controls over BZP and taken other action to prevent their sale and distribution.

As a result, other substances have emerged, notably mephedrone. Mephedrone, 4-methylmethcathinone (4-MMC), first appeared on the illicit market around 2007. The substance has no medical use in either humans or animals and has been associated with a number of fatalities in European countries. In December 2010, mephedrone was banned in the countries of the European Union. But it is still available in illicit drug markets and has also appeared on markets in developed countries outside Europe, including the United States and Australia.

Methamphetamine trafficking from Africa

Africa poses one of the greatest emerging threats with regard to trafficking of amphetamine-type stimulants. Trafficking of methamphetamine from Africa was reported first at the end of 2008 and reports of such trafficking have continued since. West Africa, in particular, is emerging as a source of methamphetamine for illicit markets in East Asia, with couriers transiting Europe, western Asia or East Africa. Few countries in the region have the capacity and governance structures to address the problem.

Methamphetamine manufacture is not entirely new to Africa. South Africa has had increasing reports since 2004 and Egypt reported a case as recently as April 2010. There are also indications that ATS manufacture could occur in West Africa. In July 2009, equipment that could be used in ATS manufacture was discovered in Guinea. In June 2010, the United States Government indicted members of a large international cocaine trafficking organization for, inter alia, the intent to establish large-scale manufacture of crystalline methamphetamine in Liberia.

Precursor chemicals are frequently trans-shipped through the region. The International Narcotics Control Board (INCB) identified Africa as the region with the greatest number of diversions or attempted diversions of ATS precursor chemicals in 2008. Countries import precursors in considerable excess of legitimate annual needs and are targets for organized crime. For example, a single shipment to Uganda of 300 kg of pseudoephedrine was seized upon arrival in 2008. At the same time, the INCB notes that precursor trafficking patterns in Africa stand in sharp contrast to the low number of seizures made by Governments in the region. Only two cases were reported in 2009: 1.25 mt of ephedrine to the Central African Republic and 1 mt of pseudoephedrine to Kenya, both of which can be used in the manufacture of methamphetamine.

The World Customs Organization (WCO) noted a small number of methamphetamine trafficking cases from Africa (southern) to East Asia in mid-2008 with no prior cases reported. The year 2009 saw both the number of seizures and their quantities originating from Africa more than triple. This trend appears to be growing and spreading. Cases of methamphetamine trafficking have emerged from various West African nations. Trafficking of methamphetamine originating in or transiting through Benin, Cameroon, Côte d’Ivoire, Ghana, and

Map 37: Trafficking routes of methamphetamine in Africa

Source: Global SMART Update Vol 4, October 2010
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Lines represent origin and intended destination, not necessarily exact route, and include completed or stopped trafficking attempts. Modes of transport include by air, sea, overland, or any combination thereof.
Guinea, Senegal and in particular Nigeria have all been reported since 2009.

The most common destinations for methamphetamine have been outside the region, primarily Japan, followed by the Republic of Korea, with new reports from Malaysia and Thailand. Cases are typically multi-kilo and transported via air passengers hidden in luggage or by body concealment resembling methods employed by West African syndicates for other drugs. Couriers transit via Gulf countries, East African as well as European countries. Significantly larger shipments have also been reported. For example, in May 2010, Nigerian authorities stopped two separate cargo shipments totalling 63 kg of methamphetamine and amphetamine to Japan and South Africa. In July 2009, 10 kg of crystalline methamphetamine, 10 kg of amphetamine and 57 kg of ephedrine were seized in Nigeria en route to South Africa.

The infrastructure established by transnational cocaine and heroin traffickers in West Africa is readily adaptable to accommodate the flexibility of ATS manufacture. While the capacity to report on the situation in the region remains limited, initial indications suggest that the products are a threat for lucrative markets around the world. This raises the need for a truly global effort to address the synthetic drugs problem.

ATS in South Asia

Located at the crossroads of drug supply between the sources in South-East and South-West Asia, South Asia has traditionally been affected by illicit manufacture, trafficking and use of drugs, mostly opiates. Over the past few years, however, South Asia has emerged as a source for amphetamine-type stimulants (ATS) and the precursors needed to manufacture them.

The geographical proximity to East and South-East Asian source countries of illicit methamphetamine is one of several factors which makes South Asia a vulnerable target for illicit manufacture of amphetamine-type stimulants. The first clandestine ATS manufacture operation was detected in India in May 2003. Since then, several additional facilities have been uncovered. In August 2010, a methamphetamine laboratory was discovered in India. However, attempts at illicit ATS manufacture are not limited to India, they have also been reported from Bangladesh and Sri Lanka. In Sri Lanka, for example, a large-scale methamphetamine laboratory was dismantled in May 2008.

In addition, South Asia has become one of the main regions used by drug traffickers to obtain ephedrine and pseudoephedrine for the illicit manufacture of methamphetamine. India is one of the world’s largest manufacturers of precursor chemicals and Bangladesh also has a growing chemical industry. Despite efforts to control precursor chemicals, both countries have been identified in a number of cases as the source of diverted precursor chemicals for a range of drugs, including methamphetamine. Several significant seizures of pseudoephedrine in Central America and the Caribbean (such as the Dominican Republic, Guatemala and Honduras) are believed to have originated in Bangladesh. Many countries in Central America and the Caribbean are vulnerable as destinations for these shipments. Africa also remains at risk at being used by traffickers to obtain precursor chemicals.

Amphetamine, methamphetamine and ecstasy have been regularly seized in South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years. Methamphetamine pills originating from Myanmar are trafficked into South Asia over the past five years.
Fig. 137: Global seizures of amphetamines\(^{(a)}\), 2001-2009

**SEIZURES OF AMPHETAMINES-GROUP SUBSTANCES as % of world total and in kg equivalents\(^{(a)}\) - HIGHEST RANKING COUNTRIES - 2009**

<table>
<thead>
<tr>
<th>Country</th>
<th>% of World Total</th>
<th>KG Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia (21%)</td>
<td></td>
<td>13,554</td>
</tr>
<tr>
<td>United States of America (12%)</td>
<td></td>
<td>7,664</td>
</tr>
<tr>
<td>China (10%)</td>
<td></td>
<td>6,623</td>
</tr>
<tr>
<td>Mexico (9%)</td>
<td></td>
<td>6,078</td>
</tr>
<tr>
<td>Jordan (8%)</td>
<td></td>
<td>4,940</td>
</tr>
<tr>
<td>Syrian Arab Republic (6%)</td>
<td></td>
<td>3,795</td>
</tr>
<tr>
<td>Myanmar (5%)</td>
<td></td>
<td>3,396</td>
</tr>
<tr>
<td>Thailand (4%)</td>
<td></td>
<td>2,627</td>
</tr>
<tr>
<td>United Kingdom (3%)</td>
<td></td>
<td>1,713</td>
</tr>
<tr>
<td>Iran (Islamic Republic of) (2%)</td>
<td></td>
<td>1,462</td>
</tr>
<tr>
<td>Germany (2%)</td>
<td></td>
<td>1,383</td>
</tr>
<tr>
<td>Turkey (2%)</td>
<td></td>
<td>1,322</td>
</tr>
<tr>
<td>Malaysia (2%)</td>
<td></td>
<td>1,169</td>
</tr>
<tr>
<td>Netherlands (2%)</td>
<td></td>
<td>1,157</td>
</tr>
<tr>
<td>Philippines (2%)</td>
<td></td>
<td>981</td>
</tr>
<tr>
<td>Yemen (1%)</td>
<td></td>
<td>854</td>
</tr>
<tr>
<td>Qatar (1%)</td>
<td></td>
<td>759</td>
</tr>
<tr>
<td>France (0.9%)</td>
<td></td>
<td>565</td>
</tr>
<tr>
<td>Sweden (0.8%)</td>
<td></td>
<td>505</td>
</tr>
<tr>
<td>Norway (0.7%)</td>
<td></td>
<td>447</td>
</tr>
<tr>
<td>Poland (0.7%)</td>
<td></td>
<td>428</td>
</tr>
<tr>
<td>Japan (0.6%)</td>
<td></td>
<td>368</td>
</tr>
<tr>
<td>Russian Federation (0.4%)</td>
<td></td>
<td>280</td>
</tr>
<tr>
<td>Bulgaria (0.4%)</td>
<td></td>
<td>253</td>
</tr>
</tbody>
</table>

\(^{(a)}\) This quantity reflects the bulk weight of seizures, with no adjustment for purity. Seizures of amphetamines-group substances reported in tablets or similar units are converted using assumed bulk tablet weights between 90mg and 300 mg, depending on the region and specific drug type, and based on information currently available to UNODC. This differs from the approach adopted in earlier editions of the World Drug Report.

---

**SEIZURES OF AMPHETAMINE-GROUP SUBSTANCES as % of world total and in kg equivalents\(^{(a)}\) - BY REGION - 2009**

<table>
<thead>
<tr>
<th>Region</th>
<th>% of World Total</th>
<th>KG Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near and Middle East/South-West Asia (39%)</td>
<td></td>
<td>25,560</td>
</tr>
<tr>
<td>East and South-East Asia (25%)</td>
<td></td>
<td>15,985</td>
</tr>
<tr>
<td>North America (21%)</td>
<td></td>
<td>13,876</td>
</tr>
<tr>
<td>West &amp; Central Europe (11%)</td>
<td></td>
<td>7,132</td>
</tr>
<tr>
<td>South-East Europe (9%)</td>
<td></td>
<td>1,643</td>
</tr>
<tr>
<td>East Europe (0.5%)</td>
<td></td>
<td>301</td>
</tr>
<tr>
<td>Oceania (0.4%)</td>
<td></td>
<td>253</td>
</tr>
<tr>
<td>Caribbean (0.2%)</td>
<td></td>
<td>102</td>
</tr>
<tr>
<td>Southern Africa (0.2%)</td>
<td></td>
<td>98</td>
</tr>
<tr>
<td>Central America (0.09%)</td>
<td></td>
<td>56</td>
</tr>
<tr>
<td>South Asia (0.07%)</td>
<td></td>
<td>46</td>
</tr>
</tbody>
</table>

\(^{(a)}\) This quantity reflects the bulk weight of seizures, with no adjustment for purity. Seizures of amphetamines-group substances reported in tablets or similar units are converted using assumed bulk tablet weights between 90mg and 300 mg, depending on the region and specific drug type, and based on information currently available to UNODC. This differs from the approach adopted in earlier editions of the World Drug Report.

---

\(^{(b)}\) Data for the United Kingdom for 2009 are based on incomplete data for some jurisdictions for the financial year 2009/10, and adjusted for the missing jurisdictions using the latest available complete distribution (relative to the financial year 2006/07).

\(^{(c)}\) Data relative to 2008. Data for 2009 from the Netherlands were not available.
Fig. 138: Interception of amphetamines-group substances, 2001-2009

AMPHETAMINES-GROUP SUBSTANCES INTERCEPTED - WORLD: 2001-2009

AMPHETAMINES-GROUP SUBSTANCES INTERCEPTED - ASIA: 2001-2009

AMPHETAMINES-GROUP SUBSTANCES INTERCEPTED - AMERICAS: 2001-2009

AMPHETAMINES-GROUP SUBSTANCES INTERCEPTED - EUROPE: 2001-2009

AMPHETAMINES-GROUP SUBSTANCES INTERCEPTED - AFRICA: 2001-2009

AMPHETAMINES-GROUP SUBSTANCES INTERCEPTED - OCEANIA: 2001-2009
**Fig. 139: Global seizures of ‘ecstasy’-group substances, 2001-2009**

<table>
<thead>
<tr>
<th>Year</th>
<th>Kilogram equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>10,895</td>
</tr>
<tr>
<td>2002</td>
<td>13,049</td>
</tr>
<tr>
<td>2003</td>
<td>9,410</td>
</tr>
<tr>
<td>2004</td>
<td>12,727</td>
</tr>
<tr>
<td>2005</td>
<td>9,729</td>
</tr>
<tr>
<td>2006</td>
<td>9,776</td>
</tr>
<tr>
<td>2007</td>
<td>16,595</td>
</tr>
<tr>
<td>2008</td>
<td>5,991</td>
</tr>
<tr>
<td>2009</td>
<td>5,435</td>
</tr>
</tbody>
</table>

This quantity reflects the bulk weight of ecstasy seizures, with no adjustment for purity. Seizures of ecstasy reported in tablets or similar units are converted using assumed bulk tablet weights between 200mg and 300mg, depending on the region and based on information currently available to UNODC. This differs from the approach adopted in earlier editions of the World Drug Report.

**SEIZURES OF ECSTASY-GROUP SUBSTANCES as % of world total and in kg equivalents (a) - HIGHEST RANKING COUNTRIES - 2009**

- United States of America (63%)
- Netherlands (8%)
- Canada (7%)
- China (6%)
- Turkey (2%)
- Spain (2%)
- Indonesia (2%)
- United Kingdom (1%)
- Australia (1%)
- Poland (1%)
- Argentina (0.7%)
- France (0.5%)
- Japan (0.5%)
- Bulgaria (0.5%)
- Malaysia (0.4%)
- Italy (0.4%)
- Lithuania (0.3%)
- Thailand (0.3%)
- Denmark (0.2%)
- Greece (0.2%)
- Ireland (0.2%)
- Belgium (0.2%)

**SEIZURES OF ECSTASY-GROUP SUBSTANCES as % of world total in kg equivalents (a) - BY REGION - 2009**

- North America (71%)
- West & Central Europe (15%)
- East and South-East Asia (9%)
- South-East Europe (3%)
- Oceania (1%)
- South America (0.95%)
- Near and Middle East / South-West Asia (0.17%)
- East Europe (0.14%)
- Caribbean (0.05%)
- Central America (0.002%)
- North Africa (0.0004%)
- South Asia (0.0004%)

(a) Includes substances believed to be ecstasy (e.g. MDMA, MDA, MDE) which may not have been confirmed by forensic testing.
(b) Data relative to 2008. Data for 2009 from the Netherlands were not available.
Fig. 140: Interception of ‘ecstasy’-group substances, 2001-2009

ECSTASY INTERCEPTED - WORLD: 2001-2009

ECSTASY INTERCEPTED - ASIA: 2001-2009

ECSTASY INTERCEPTED - AMERICAS: 2001-2009

ECSTASY INTERCEPTED - EUROPE: 2001-2009

ECSTASY INTERCEPTED - AFRICA: 2001-2009

ECSTASY INTERCEPTED - OCEANIA: 2001-2009
Map 38: Seizures of amphetamines-group substances, 2009 (countries and territories reporting seizures of more than 10 kg)*

* This quantity reflects the bulk weight of amphetamine group seizures, with no adjustment for purity. Seizures of amphetamines-group reported in tablets or similar units are converted using assumed bulk tablet weights between 90mg and 300mg, depending on the region and specific drug type and based on information currently available to UNODC. This differs from the approach adopted in earlier editions of the World Drug Report.

Source: UNODC Annual Reports Questionnaires data supplemented by other sources

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

Map 39: Seizures of ecstasy, 2009 (countries and territories reporting seizures of more than 10 kg)*

* This quantity reflects the bulk weight of ecstasy seizures, with no adjustment for purity. Seizures of ecstasy reported in tablets or similar units are converted using assumed bulk tablet weights between 200mg and 300mg, depending on the region and based on information currently available to UNODC. This differs from the approach adopted in earlier editions of the World Drug Report.

Source: UNODC Annual Reports Questionnaires data supplemented by other sources

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