### 1.5 Amphetamine-type stimulants market

### 1.5.1 Summary Trend Overview

The overall stabilisation which was reported in the ATS market has continued into the 2006/2007 period. The stabilisation has occurred parallel to some developments which may give clues to its root causes. First, the precursor control programmes which have been increasingly put in place to control the main inputs to methamphetamine and ecstasy seem to be having an effect. The ephedrine and pseudo-ephedrine needed for methamphetamine manufacture and the P-2-P needed for the production of amphetamine, and the 3,4-MDP-2-P, piperonal and safrole needed for the production of ecstasy are more difficult to come by now than in the late 1990s and early 2000s when these markets were really expanding. Second, prevention programmes seem to be taking hold, and there appears to be more awareness of the risk associated with these drugs in their major markets. This likely has an impact on some consumers on its own, and on others when combined with less availability or higher prices.

In some regions, manufacturers are already circumventing controls by substituting controlled precursors with those outside international controls, such as pharmaceutical preparations, natural ephedra plant extracts, and uncontrolled chemicals. This type of innovation has precedent in illicit drug markets and the growing inter regional aspect of the ATS market (as opposed to intra regional) will make this type of substitution more viable. Trafficking routes continue to develop in places that lack the enforcement and forensics infrastructure to detect precursor trafficking. These new routes have a wide geographical spread and include even Africa and West Asia, South and Central America, often starting from East Asia, or South Asia.

Effective precursor control is changing the pattern of production as well. The contraction in US domestic manufacture, for example, is being offset by manufacture from Mexico and to some degree Canada. This type of development probably implies that larger and more organized international groups are becoming involved in the trade in some areas. Distribution networks are thought to be replacing independent dealers in some market areas.

ATS seizures increased over the past few years but remain below the level of their peak in 2000. In 2006 they increased again, but only marginally. A total of 99 countries and territories reported seizures of ATS to UNODC for 2006. While trafficking in ATS end-products remained primarily an *intra*-regional affair, there are growing indications that increased *inter*-regional cooperation and trafficking are occurring. Trafficking in ATS precursor chemicals continues to be predominantly *inter*-regional – with the majority of precursors trafficked out of South, East, and South-East Asia.

Consumption in this market has enjoyed a healthy period of overall stability with increases slowing in some of the main markets. Expansion has slowed in Europe and Asia and use has declined in North America, but consumption has increased in the Near and Middle East and in Africa. Other shifts may also be occurring. Tableted methamphetamine is increasingly identified in crystalline (crystal) methamphetamine markets in South East Asia and the substitution of licit ATS use for illicit ATS use has been identified in North America.

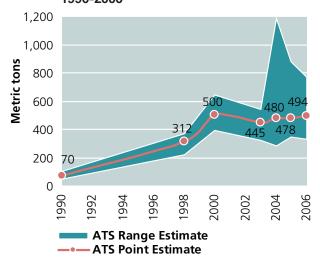
It is clear that some of the dynamics of this market are changing but difficult to say in which direction things are moving. Stability in the market could suggest greater innovation on the part of organized crime and, therefore, a more dynamic market overall. The increase of manufacture in 'super laboratories' and greater inter-regional trafficking could be part of this.

#### 1.5.2 Production

## Global ATS manufacture approximately 494 metric mt

UNODC conservatively estimates<sup>1</sup> that 2006 amphetamine-type stimulants (ATS) manufacture, worldwide, was between 330 mt to 770 mt, with a mid point estimate of approximately 494 mt. (Mid point estimates year to year are not comparable.)

Fig. 119: Manufacture point-estimates and ranges of amphetamine-type stimulants: 1990-2006



Sources: UNODC estimates based on UNODC, Annual Reports Questionnaire Data / DELTA; International Narcotics Control Board (INCB), Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, 2007 (March 2008); and World Customs Organization (WCO), Customs and Drugs Report 2006 (June 2007).

Manufacture of ATS can only be estimated indirectly. Estimates are based on three sub-components: Global seizures of ATS end-products (i.e., drug seizures), inclu. seizures of ATS drugs and estimated drugs seizures rates; ATS-related chemical precursor seizures, inclu. seizures of precursor chemicals, estimated seizure rates and estimated end product synthesis and; ATS consumption (i.e., prevalence rates), inclu. estimated users globally by drug type, amount typically used and seizures of ATS drugs. A methodology to arrive at such estimates was first developed in UNODC's report Ecstasy and Amphetamines - A Global Survey 2003. The current model assumes the following globally: the average seizure rates for either precursor chemicals or finished ATS product are estimated at 10%; the average consumer (i.e., from casual use to addict) of amphetamines group drugs (amphetamine or methamphetamine) uses 30 mg daily of active ingredient; and the average consumer of the ecstasy group (MDMA, MDA, MDEA/MDE) uses three times per week and consumes an average of 90 mg of active ingredient per episode. Note, the current manufacture model is not designed to account for States Members that do not report or under-report.

The ATS markets encompass two groups of substances: the 'amphetamines group' (amphetamine, methamphetamine, and non-specified amphetamine) and the 'ecstasy group' (MDMA, MDA, and MDE/MDEA).2 Of these, 79% of all ATS manufactured, or 392 mt, were from the amphetamines group of substances. Trends indicate that global manufacture may be increasing somewhat for the amphetamines group and decreasing for the ecstasy group. In 2004, the proportion of ATS related to amphetamines group was 75%. In 2006, it is estimated that methamphetamine accounted for 68% of the amphetamines group. This proportion has declined from 84% in 2003, the first year proportional estimates of the amphetamine group were made. The increase in global manufacture appears to be led by increased amphetamine manufacture for the Near and Middle East.

While manufacture estimates are provided in a trend graph, it is important to note that they are only comparable year-to-year in the broadest of sense. Previous manufacture data points represent the best available estimate at the time of past publication and are not revised annually. Thus, if recalculated today the manufacture point-estimate from the year 2000 would likely change. Given this caveat, only limited conclusions on the overall trend appear reasonable: 1) following a dramatic increase throughout the 1990s, it appears that ATS manufacturing estimates remain largely unchanged since 2000; 2) substantial regional shifts in ATS appear to be occurring globally; and 3) changes in drug manufacturing and trafficking techniques are making ATS estimates more challenging to develop.

### Clandestine ATS production is concentrated in North America, East & South-East Asia, Europe, Oceania and Southern Africa

ATS manufacture is regionally specific, related to both market demand and chemical availability. Methamphetamine manufacture is typically located throughout East and South-East Asia, North America, and Oceania, where its precursor chemicals are more readily available and demand is high. Amphetamine manufacture contin-

<sup>2</sup> Non-specified amphetamines are cases where States Members did not clearly identify of the substance seized. Additionally, a small amount of other synthetic stimulants are also included such as fenetylline, methylphenidate, phenmetrazine, methcathinone, amfepramone, pemoline, phentermine, 4-MTA, and 2C-B.

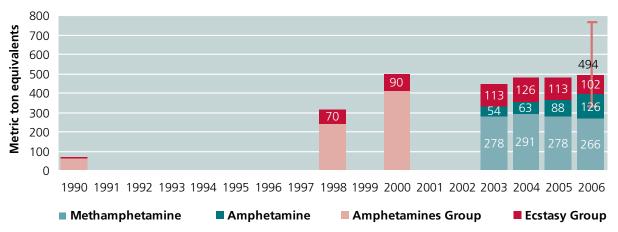
Table 10: Manufacture point-estimates and ranges of ATS, by group (in metric mt): 2006

Based on	'Amphetamines' Group (methamphetamine, amphetamine)		'Ecstasy' Grou MDA, and M		Amphetamine-Type Stimulant Total		
	Point-Estimate	Range	Point-Estimate	Range	Point-Estimate	Range	
Consumption	313	250 - 376	131	117 - 146	445	368 - 521	
Drug seizures	439	289 - 571	59	41 - 76	497	330 - 647	
Precursor seizures	423	282 - 605	116	77 - 166	539	359 - 770	
Overall Average	392	250 - 605	102	41 - 166	494	330 - 770	
Overall Average*	392	320 - 469*	102	87 - 120*	494	421 - 574*	

<sup>\*</sup>These narrower ranges are calculated on the basis of 'propagation of error' statistics.

Sources: UNODC estimates based on UNODC, Annual Reports Questionnaire Data / DELTA; International Narcotics Control Board (INCB), Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, 2007 (March 2008); and World Customs Organization (WCO), Customs and Drugs Report 2006 (June 2007).

Fig. 120: Manufacture estimates of amphetamine-type stimulants, by type: 1990-2006



Sources: UNODC estimates based on UNODC, Annual Reports Questionnaire Data / DELTA; INCB, *Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, 2007* (March 2008); WCO, *Customs and Drugs Report 2006* (June 2007); UNODC, *2007 World Drug Report* (and previous years); and UNODC, *Ecstasy and Amphetamines – Global Survey 2003* 

ues to take place largely in Europe.<sup>3</sup> While there is limited ecstasy manufacture in East and South-East Asia, it predominately occurs in North America, Western Europe and Oceania.

## Precursor chemical seizures and detections of small laboratories drop

Methamphetamine can be manufactured using a variety of licit precursor chemicals and simple processes. Manufacture takes place in industrial-sized mega and super-laboratories<sup>4</sup> and the more common small kitchen-laboratories. The unfortunate convenience of manufacture is such that nearly every ATS laboratory

detected worldwide produced methamphetamine, making methamphetamine the most widespread of all the ATS. The detection and dismantling of methamphetamine laboratories is a key strategy in the reduction of ATS manufacture. Following consistent increases in the number of globally detected ATS laboratories throughout the 1990s – peaking at a record high of 18,639 in 2004 – detections fell to 8,245 in 2006. While the number of clandestine laboratories detected worldwide has decreased dramatically, methamphetamine manufacture has not. Methamphetamine is increasingly manufactured in super or mega-laboratories.

In the absence of consistent forensic data on laboratory precursors, synthesis processes and production capacity (i.e., frequency of cycle, amount of output, and purity levels), ATS precursors seizures can provide some additional, albeit limited, information on manufacture

<sup>3</sup> The exception to this is methamphetamine production (Pervitine) located in the Czech Republic.

<sup>4</sup> The USA defines a mega-lab as the capability to produce 1,000 kg or more per production cycle; a super-lab is defined as the capability to produce 10 lbs (4.5 kg) or more per production cycle.

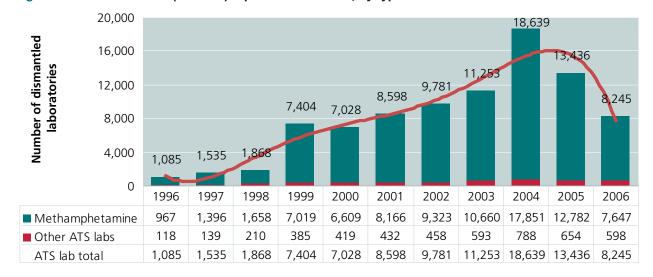


Fig. 121: ATS laboratories (all sizes) reported to UNODC, by type: 1996-2006

Source: UNODC, Annual Reports Questionnaire Data / DELTA.

trends. According to reports, ATS related precursor chemical seizures declined in 2006 to their lowest level in five years.<sup>5</sup> Expressed in ATS (drug weight equivalents), seizures were flat throughout the mid-1990's, but beginning in 2000 rose to 62 mt peaking in 2004 at a record high of 323 mt. In 2006, the amount (in drug weight equivalents) fell to 29 mt.

Global seizures of ATS precursors in 2006 included:

- 30.2 mt of ephedrine and 0.7 mt of pseudoephedrine, sufficient to manufacture some 20 mt of methamphetamine;
- 2,607 litres of P-2-P<sup>6</sup>, sufficient to manufacture 1.3 mt of amphetamines; as well as 1.1 mt of phenylacetic acid (a chemical precursor capable of producing P-2-P and thus a 'pre-precursor' for the manufacture of amphetamine and methamphetamine), sufficient to manufacture some 1.6 mt of amphetamine; in addition small quantities of norephedrine (6 kg) were seized which is also used to manufacture amphetamine;
- 8,816 litres of 3,4-MDP-2-P (also known as PMK), sufficient to manufacture 7.1 mt of ecstasy (MDMA);
- Precursor seizure source data come from the International Narcotics Control Board, 2007 Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, 2007 and prior years (New York, 2008) unless otherwise noted. Mexico did not submit their Form D precursor seizure data to INCB for publication in the 2007 precursor report, however this information was provided in the Annual Report Questionnaire (ARQ). These seizures were considerable and therefore included in all calculations based on precursors chemicals.
- 6 P-2-P (1-phenyl-2-propanone), also known as benzyl methyl ketone (BMK), is typically used for the manufacture of amphetamine but can be also used for the production of methamphetamine.

as well as small quantities of piperonal and safrole used in the manufacture of ecstasy.<sup>7</sup>

The decline of ATS precursor chemical seizures in 2006 was due to the fall in seizures of ephedrine (from 40.3 to 30.2 mt; a 25% decrease) and pseudoephedrine (from 0.8 to 0.7 mt; a 12% decrease). Decreases were also noted in ecstasy precursors 3,4-MDP-2-P (from 12,924 to 8,816 litres; a 32% decrease), piperonal (from 6.2 mt to just 107 grams) and safrole (from 5,707 to 39 litres). The pre-precursor phenylacetic acid also decreased from 47.7 mt to 1.1 mt.8

These declines are due in part to increased enforcement and changes in manufacture and trafficking. The combination of effective precursor controls throughout North America, the International Narcotics Control Board's (INCB) increasingly utilized precursor Pre-Export Notification (PEN) system, *Project PRISM*, and successes from *Operation Crystal Flow*, have all stemmed the flow of precursors. According to INCB reports, the 2007 *Operation Crystal Flow* alone identified 35 suspicious transactions and prevented the diversion of 52 mt of precursor chemicals (capable of producing approximately 48 mt of methamphetamine). <sup>10</sup> This is equiva-

- 7 Piperonal, safrole, oils rich in safrole, and isosafrole are all precursors for the production of 3,4-MDP-2-P and thus pre-precursors for the manufacture of ecstasy.
- 8 It should be noted that 2005 was an exceptional year for phenylacetic acid seizures. Excluding that year, there is an increasing trend in phenylacetic acid seizures.
- 9 Project PRISM (Precursors Required In Synthetic drug Manufacture) refers to the INCB sponsored multi-country task force investigating precursors diversion required in the synthetic drug manufacture.
- 10 Operation Crystal Flow, was a six-month operation in 2007 used to monitor consignments of ephedrine and pseudoephedrine shipped to countries in Africa, the Americas and West Asia. International Narcotics Control Board, Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, 2007 (March 2008).

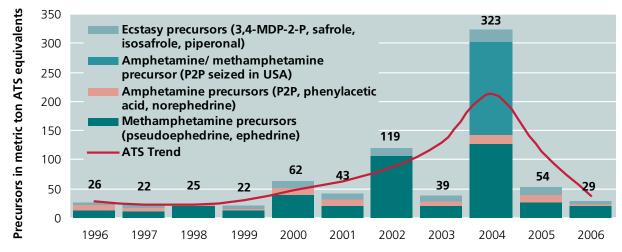


Fig. 122: Reported seizures of ATS precursors, expressed in metric ton ATS equivalents: 1996-2006

Source: UNODC calculations based on INCB data and conversion factors, INCB, *Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances*, 2007 (March 2008, and previous years) and UNODC, Annual Reports Questionnaire Data / DELTA.

lent to more than 20% of the current methamphetamine manufacture estimate.

#### Tactics in clandestine manufacture changing

Given the volume and availability of ATS worldwide, it is likely that the reported decreases in seized precursor chemicals reflect changes in manufacture methods and trafficking routes. There is growing evidence of manufacture involving precursors outside international controls such as pharmaceutical preparations, natural ephedra plant extracts, and currently unrestricted chemicals (e.g., benzaldehyde, N-acetyl-pseudoephedrine acetate, phenyl-acetylcarbinol, N-methyl-DL-alanine). <sup>11</sup> Several Western European countries reported multi-ton ephedra plant extract diversions and seizures in 2006. Germany alone reported an attempted 800 mt diversion. <sup>12</sup> Twenty-eight per cent of the 739 kg of pseudoephedrine seized was in the form of a pharmaceutical preparation. <sup>13</sup>

11 These chemicals are precursors and pre-precursors used in the creation of illicit ATS, for example: benzaldehyde can be used in the manufacture of either amphetamine or methamphetamine; N-Acetylpseudoephedrine acetate for methamphetamine; phenylacetylcarbinol is a precursor to the methamphetamine precursors ephedrine and pseudoephedrine and; and N-methyl-d,l-alanine for the creation of methamphetamine (albeit a less cost-effective process). UNODC, Annual Reports Questionnaire Data; International Narcotics Control Board, Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic, 2007 (March 2008); Drug Enforcement Administration, Office of Diversion Control at the 4<sup>th</sup> International Forum on the Control of Precursors for ATS, Tokyo Japan, February 2008; New Zealand National Drug Intelligence Bureau, 2006 Clandestine drug laboratory (clan lab) report, (April 2007).

13 Pharmaceutical preparations are drugs intended for human or veterinary use, presented in their finished dosage form (e.g., pills and tablets). Over-the-counter cold medicines in pill form or bulk precursors tableted into pill form would be classified as pharmaceutical

Trafficking routes continue to develop in places that lack the enforcement and forensics infrastructure to detect precursor trafficking. For example, according to recent reports, illicit shipments totalling over 120 mt of primarily pseudoephedrine (and some ephedrine) were identified as being either sent or smuggled through countries in Africa (Burundi, D.R. of Congo, Ethiopia, Ghana, Kenya, Nigeria, Somalia, Sudan, UR. of Tanzania and Zambia) and West Asia (I.R. of Iran), Iraq, Syrian Arab Republic, and the United Arab Emirates). 14 This amount alone would represent approximately 80 mt of methamphetamine, or one-third of current global production estimates.<sup>15</sup> Countries in South and Central America identified attempted diversions of significant amounts of pseudoephedrine in 2006, including, Bolivia, Chile, Colombia, Ecuador, Guyana, Peru, El Salvador, and Guatemala. 16 These diversions have recently been reported in the form of pharmaceutical preparations. An unconfirmed 2008 report identified a significant seizure, undertaken by Guatamalan authorities, of pharmaceutical preparations (i.e., pseudoephedrine tablets) in a maritime shipment from Hong Kong.<sup>17</sup> Modest amounts of ATS precursors also have been seized by Argentine and Costa Rican authorities. Most of these interceptions were likely destined for Mexican laboratories.

<sup>12</sup> International Narcotics Control Board, Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic, 2007 (March 2008).

preparations, and are often used in clandestine manufacture.

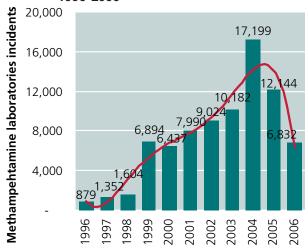
<sup>14</sup> International Narcotics Control Board, Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic, 2007 (March 2008), HONLEA 17<sup>th</sup>, Nairobi, Sept 2007.

<sup>15</sup> Ibid.

<sup>16</sup> International Narcotics Control Board, Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic, 2007 (March 2008).

<sup>17</sup> Agence France Presse, "Guatemala seizes illegal pseudoephedrine from Hong Kong", April 25, 2008.

Fig. 123: USA: Number of reported methamphetamine laboratory incidents (all sizes): 1996-2006



Source: UNODC, Annual Reports Questionnaire Data / DELTA

### Methamphetamine manufacture indicates global shifts

Comprehensively enacted precursor controls which, *inter alia*, reduced the availability of pseudoephedrine-based cold medicines, combined with sustained law enforcement pressure, have had a dramatic impact upon domestic manufacture of methamphetamine in the USA. After steady increases throughout the mid-1990s the number of clandestine laboratory incidents reportedly peaked at 17,199 in 2004. Since then the number of laboratories incidents has declined to the lowest levels since 2000 and preliminary data for 2007 suggest that this decline continued. 19

The number of detected methamphetamine laboratories in the USA remained high. In 2006, the 6,832 labratory incidents in the USA accounted for 88% of all dismantled methamphetamine laboratories worldwide.

#### Gaps in the domestic market are being filled

The contraction in US domestic manufacture is being offset by manufacture from Mexico and, to some degree, Canada. <sup>20</sup> Mexican drug organizations appear to be circumventing chemical restrictions in order to maintain significant methamphetamine manufacture. Similarly, distribution networks have replaced smaller independent dealers and are expanding in many the USA. Cana-

Fig. 124: North American (all sizes, excludes USA) methamphetamine laboratories reported: 1996-2006



Source: UNODC, Annual Reports Questionnaire Data / DELTA

da's methamphetamine manufacture and role as an exporter nation has been increasing over the last few years. There are indications that Canadian methamphetamine is intended for distribution in the UK, Australia, New Zealand, Japan, and the USA.<sup>21</sup>

While the number of laboratories seized in Mexico and Canada remains small compared to the USA, the laboratories seized tend to produce significant amounts of ATS end product. 15 of the 23 (65%) methamphetamine laboratories seized in Canada in 2006 were super laboratories with the capacity to produce nine or more kilograms of methamphetamine per production cycle. Only one reported laboratory seized was classified as a small kitchen lab.<sup>22</sup>

The number of methamphetamine laboratories dismantled by the Mexican authorities has increased over the last decade, with 24 reported in 2006.<sup>23</sup> However, recent reports indicate that production has expanded geographically, and is now found in the centre of the country where previously no production existed. Clandestine manufacture has been reported in nine of the country's 31 states.<sup>24</sup> The Mexican authorities have greatly reduced the amount of imports of methamphetamine precursors and have upgraded import control regulations in 2008. Mexico intends to eliminate the retail of products containing methamphetamine precursors in 2009. Despite

<sup>18</sup> Office of National Drug Control Policy, Drug Facts – Methamphetamine; www.whitehousedrugpolicy.gov/drugfact/methamphetamine/index.html

<sup>19</sup> Note, lab incidents are defined to include all counts of various types of laboratories (e.g., extraction, manufacturing, cutting, and packaging), chemical dumpsites, and drug processing chemical and glassware seizures. Source: Drug Enforcement Administration, www. usdoj.gov/dea/concern/map\_lab\_seizures.html

<sup>20</sup> National Drug Intelligence Center, National Methamphetamine Threat Assessment 2008 (Dec., 2007).

<sup>21</sup> ARQ; Royal Canadian Mounted Police (RCMP): Drug Situation Report 2006; National Drug Intelligence Center, National Drug Threat Assessment 2008, Nov., 2007.

<sup>22</sup> ARQ; National Drug Intelligence Center, National Methamphetamine Threat Assessment 2008, Dec., 2007.

<sup>23</sup> This also includes counts of combination laboratories which produce both methamphetamine and cocaine.

<sup>24</sup> Drug Enforcement Administration, Office of Diversion Control at the 4<sup>th</sup> International Forum on the Control of Precursors for ATS, Tokyo Japan, February 2008.

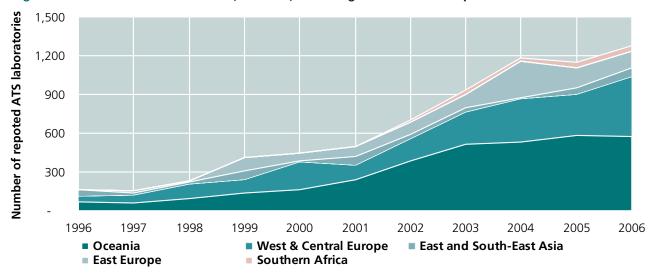


Fig. 125: Number of ATS laboratories, all sizes, excluding North America reported to UNODC: 1996-2006

Source: UNODC, Annual Reports Questionnaire Data / DELTA.

these commendable actions, reduced licit ephedrine and pseudoephedrine imports are being offset by criminal organizations' importation of derivatives of pseudoephedrine. Preliminary data suggest that precursor and clandestine laboratory seizures may have increased in 2007.<sup>25</sup>

## Methamphetamine manufacture grows in many other regions

In 1996, 163 ATS laboratories were dismantled or identified outside of North America. As of 2006, that number increased eight-fold to 1,301 laboratories. These are predominately methamphetamine laboratories. The strongest growth was seen in the Oceania, Europe (West, Central, and Eastern), East and South-East Asia, and the Southern Africa region.

## Methamphetamine manufacture in Europe is increasing

Europe reported the largest increase in methamphetamine laboratories outside of North America. In 2006, the majority of laboratories were discovered in a limited number of countries in West and Central Europe (421) and East Europe (56). These include laboratories in the Czech Republic (418), the Republic of Moldavia (56), Austria (2) and Lithuania (1). Since 2000, several other European countries have also reported lab seizures including Bulgaria, Germany, Slovakia, Ukraine, and the UK. <sup>26</sup>

In 2006, the Czech Republic reported 418 clandestine methamphetamine laboratory detections, a 60% increase over 2005.27 This is 88% of all the European methamphetamine laboratories reported to UNODC in 2006. Government reports identify methamphetamine exports to Germany, Slovakia, and Austria. To date, the reported laboratories seized in Europe are small kitchen laboratories, limiting overall manufacture and distribution of methamphetamine. However, it is likely that larger laboratories could exist. In 2006 EUROPOL reported increased exportation, transhipment and diversion of ephedrine and pseudoephedrine in the countries of the European Union. This included attempts to divert ephedrine supplies from Asia into the Netherlands (known only as a location for the manufacture of amphetamine, not methamphetamine). In addition attempts were made to tranship ephedrine from Asia, via the Democratic Republic of the Congo, into Belgium, probably for final shipment to Mexico.<sup>28</sup>

## Reports of methamphetamine manufacture in East and South-East Asia are increasing

Over the last decade, the dismantling of methamphetamine laboratories has been reported in Cambodia, China, Hong Kong (SAR of China), Indonesia, Malaysia, Myanmar, Taiwan (Province of China), Thailand, the Philippines, the Republic of Korea, and Viet Nam. In 2006, the total number of dismantled and reported methamphetamine laboratories in East and South-East Asia increased to 66, due to increased detection and reporting by Chinese authorities which accounted for 80% of all reported laboratories in the region.

<sup>25</sup> US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008).

<sup>26</sup> The Russian Federation has only reported the seizure of amphetamine laboratories to UNODC. It is possible that these laboratories could produce methamphetamine. Russia reports seizures of both ephedrine and pseudoephedrine which would point towards the production of methamphetamine (or methcathinone as known as

ephedrone).

<sup>27</sup> Known locally as Pervitin.

<sup>28</sup> EUROPOL, Production and Trafficking of Synthetic Drugs and Precursors, The Hague, 1 March 2007.

Fig. 126: Czech Republic: Number of methamphetamine laboratories reported to UNODC (all sizes): 1996-2006

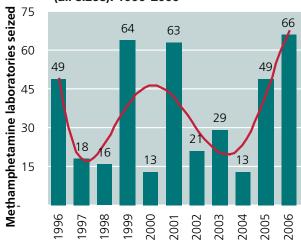


Source: UNODC, Annual Reports Questionnaire Data / DELTA.

Compared to other regions the number of East and South-East Asia laboratories seized is small, however the production facilities detected in the region are often of the super- and mega-lab variety.<sup>29</sup> For example, in 2006 and 2007 several methamphetamine mega-laboratories were reported in Indonesia, Malaysia, Cambodia, and the Philippines.<sup>30</sup> To date most mega-laboratories have been reported in East and South-East Asia. The Philippine authorities dismantled three clandestine mega-laboratories and one storage warehouse in 2006. In April 2007, police uncovered the first methamphetamine lab in Cambodia (Kampong Speu province) and seized nearly six mt of drug-related chemicals. and in 2006, authorities dismantled the largest clandestine methamphetamine laboratory ever uncovered in Malaysia.

The Chinese authorities reported the detection and dismantling of 53 methamphetamine producing laboratories in 2006, a 43% increase over 2005 reports (37).<sup>31</sup> Previously, the majority of the clandestine methamphetamine manufacture activity in China occurred in the south-eastern provinces of Fujian and Guangdong. However, controls in both provinces tightened which shifted production to central China, and more recently

Fig. 127: Number of East and South-East Asia methamphetamine laboratories (all sizes): 1996-2006



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

to the northeast provinces (Shenyang and Liaoning).<sup>32</sup>

Methamphetamine manufacture in Myanmar appears to be increasing. In 2006, eight clandestine methamphetamine laboratories were detected, the highest number reported to UNODC to date. As has been the case in the past, most manufacture is concentrated in the eastern and northern parts of the Shan State and the Waregion. This area borders China and Thailand and exports primarily to those countries. Smuggling tableted methamphetamine into China and Viet Nam through the Lao People's Democratic Republic and Cambodia remains a problem.

The Philippines remains a significant producer, transit country and consumer of crystal methamphetamine ('shabu'). In 2006, four clandestine laboratories were discovered along with three chemical warehouses. Preliminary reports for 2007, indicate the number of clandestine laboratories more than doubled with nine laboratories and 13 chemical warehouses discovered. According to reports, drug manufacture is handled by transnational organized crime syndicates working in concert with local drug groups.<sup>33</sup> In the Philippines, ephedrine is smuggled into the country by using mislabelled shipment documents. It is then synthesized using the thionyl chloride process. Labs have primarily been concentrated near the greater Metro Manila area, how-

<sup>29</sup> A mega-lab is defined as the capability to produce 1000 kg or more per production cycle; a super-lab is defined as the capability to produce 10 lbs (4.5 kg) or more per production cycle.

<sup>30</sup> International Narcotics Control Board, 2007 Annual Report (March 2008); US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008).

<sup>31</sup> China reported a total of 86 drug laboratories for 2006 in the Annual Report Questionnaire. However, it should be noted that these figures are considerably lower than those reported by China in their Country Report at the 31<sup>st</sup> meeting of Heads of National Drug Law Enforcement Agencies, Asia and the Pacific (HONLAP), Bangkok (November 2007), which cites 132 drug processing locations.

<sup>32</sup> US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008); Presentation by Mr. Zhao Wanpeng, Deputy Director of International Cooperation Division, Narcotics Control Bureau, Ministry of Public Security, People's Republic of China, "Measures Implemented in China for the prevention of Illicit Production of Synthetic Drugs and their Precursors", at Conference "Europe-Asia Cooperation on Synthetic Drugs and their Precursors", Paris, 6-7 March 2007.

<sup>33</sup> Philippines Country Report, presented by Mr. Romeo Cruz, Vice Chairman Dangerous Drug Board, at the 4<sup>th</sup> International Forum on the Control of Precursors for ATS, Tokyo Japan, February 2008.

ever increased law enforcement efforts have pushed production to other areas such as Southern Tagalog, the Bicol, and Mindanao region.<sup>34</sup>

### Sub-regional shifts may be signs of effective enforcement

Indonesia has been reporting increasing methamphetamine seizures for the past several years. Prior to 2005, the country reported only nominal seizures, since then however, significant seizures began appearing: 0.4 mt in 2005 and 1.3 mt in 2006. In 2006, a methamphetamine mega-lab of considerable size was reported to UNODC. Additionally, reports for 2007 suggest police seized four laboratories, two of which were crystal methamphetamine (*shabu*) laboratories located in industrial parks in Batam, Riau Islands province.<sup>35</sup> A preliminary report suggests that early 2008 seizures of methamphetamine may be in excess of 2006 totals.

Malaysia has also reported increasing ATS seizures since 2004. In 2006, Malaysia seized one of the largest clandestine methamphetamine mega-labs ever reported. This laboratory was located in Kulim, utilized the less common P-2-P precursor, and contained several hundred kilograms of finished and semi-processed methamphetamine.<sup>36</sup> In March 2008 another methamphetamine mega-lab was discovered by authorities in an industrial park in Senai Johor. Arrests included nationals from Canada, Mexico, and Singapore.<sup>37</sup> The combination of mega-laboratory reports and increased seizures mean that production could be intensifying further south in the region.

As law enforcement efforts increase in countries where methamphetamine manufacture is established, there is evidence that production is becoming more international. For example, India, one of the largest exporters of licit ephedrine and pseudoephedrine, discovered a clandestine methamphetamine related extraction laboratory in Mumbai in 2007.<sup>38</sup> Authorities seized 290 kg of pseudoephedrine destined for Australia and arrested five persons including two from Singapore and one Mexican national.<sup>39</sup> Previous manufacture attempts have been reported in Kolkata (2003), Hyderabad (2004), and

- 34 U.S. Department of State, 2008 International Narcotics Control Strategy Report, March 2007.
- 35 The Jakarta Post, 'Authorities promise more supervision of industrial zones', October 30, 2007.
- 36 UNODC, Patterns and Trends of Amphetamine-type Stimulants (ATS) and Other Drug of Abuse in East Asia and the Pacific 2006 (June 2007)
- 37 The Star (Malaysia), 'Mega drug lab busted', March 8, 2008; The Straits Times (Singapore), S'poreans nabbed in big drug busts in Malaysia, April 7, 2008.
- 38 United Nations Commodity Trade Statistics Database, 2006
- 39 India Country Report on Trends in Precursor Control, presented by Dr. Saji Mohan and Vinod Ratti, at the 4<sup>th</sup> International Forum on the Control of Precursors for ATS, Tokyo Japan, February 2008.

Gurgaon (2006).<sup>40</sup> Additionally, the Republic of Korea, a low-level consumer nation which last reported a methamphetamine laboratory to UNODC in 2001, discovered a mobile methamphetamine laboratory in 2007.<sup>41</sup>

As an additional way to determine the importance of countries as methamphetamine producers in South-East Asia, UNODC analyses the extent to which they were identified (mentioned) as the origin 'or source' of the seizure in information provided in the Annual Reports Questionnaire.<sup>42</sup> Over the 2002-2006 period, countries with the most mentions were China (38%), Philippines (21%), and Myanmar (21%), followed by Thailand (6.4%), Japan (4.3%) and Lao PDR (4.3%).<sup>43</sup>

### Oceania amphetamines laboratory seizures begin to stabilise

Amphetamines manufacture steadily increased over the last decade in the Oceania region, where Australia and New Zealand seized 377 and 211 laboratories respectively. In both countries almost all manufacture is methamphetamine-related. There have also been reports of methamphetamine manufacture in some of the island countries of the Oceania region, including Guam and Fiji. While most incidents appear isolated, several significant trafficking and manufacture cases from Fiji were reported between 2002 and 2004. With neither the necessary legislation nor the enforcement capabilities in place to prevent, detect, or seize precursor chemicals there is concern over the vulnerability of some island countries to illicit market expansion.

The stabilization of Australian domestic production is the result of a combination of factors including: aggressively pursuing the operators of clandestine methamphetamine laboratories, placing restrictions on over-the-counter sales of pharmaceuticals containing pseudoephedrine and monitoring such sales via *Project STOP*. *Project STOP* is a system which notifies pharma-

- 40 UNODC, Amphetamine-Type Stimulants (ATS): Trends in South and South West Asia (Presentation April 2007); UNODC, ATS Trafficking Route Information and Select Seizures and Production Facility Seizures in East Asia and the Pacific (February, 2007)
- 41 Current situation and recent trends about ATS in Korea (Republic), presentation by Jiyeon Kim, Narcotics Control Team, Korea Food and Drug Administration, at the 4<sup>th</sup> International Forum on the Control of Precursors for ATS, Tokyo Japan, February 2008.
- 42 Information based on 47 mention of the origin of domestic methamphetamines seized from 24 countries.
- 43 Mentions of Japan as a source country reflects the difficulty in identifying source countries and transit countries. Japan has reported no clandestine manufacture to UNODC.
- 44 Australian Attorney-General's Department: Australian Regional Situation Report 2005-06; New Zealand National Drug Intelligence Bureau, 2006 Clandestine Drug Laboratory (Clan Lab) Report, April 2007. Both sets of figures include methamphetamine-related extraction laboratories.
- 45 McCusker, R. (2006). Transnational crime in the Pacific Islands: real or apparent danger? Australian Institute of Criminology, #308, March 2006.

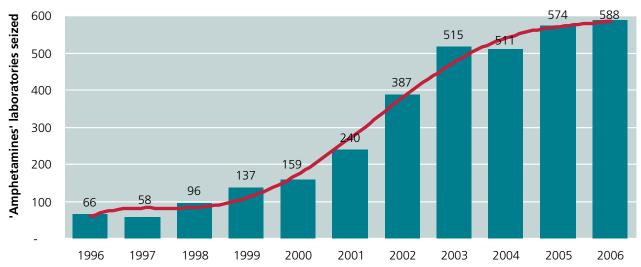


Fig. 128: Oceania: amphetamines laboratories reported to UNODC: 1996-2006

Source: UNODC, Annual Reports Questionnaire Data / DELTA.

cists as to whether a customer is eligible to purchase pseudoephedrine-based pharmaceuticals. Piloted in 2006, the Queensland based program, is believed to have partially contributed to a 23% decline in the number of clandestine laboratories discovered in that State. The program is being implemented nationally as part of the Government's strategy to reduce the diversion of precursor chemicals. Australian methamphetamine prices increased by an estimated 70% between 2000 and 2006. Tate-police reports indicate that purity levels rose by some 35% from 2000-2005, before falling in 2006. This is consistent with increased control activities initiated in 2006. Household survey data showing a corroborative pronounced decrease in methamphetamine use in 2007.

In 2004, the number of laboratories reported by New Zealand authorities increased to 182, by 2006 authorities reported 211. Evidence suggests that manufacture may be increasingly spreading to regions in the South Island and is managed and financed by organized crime networks.<sup>49</sup>

The manufacture methods used in the clandestine laboratories in Australia and New Zealand are broadly similar. For example, the majority of both Australian (82%) and New Zealand (77%) clandestine methamphetamine laboratories now use hypo-phosphorous synthesis with

pseudoephedrine as the predominate precursor. Operators of clandestine laboratories in both countries also show great flexibility in utilizing other methods such as red phosphorus (with iodine or hydriodic acid), lithium and anhydrous ammonia, ephedrine, natural ephedra extracts, and P-2-P.<sup>50</sup>

## Methamphetamine manufacture in southern Africa continues to grow

The number of dismantled clandestine methamphetamine laboratories in South Africa increased 55% from 2005 to 2006, with 17 reported to UNODC. There are no indications that South African methamphetamine (known locally at 'tik') is produced for export – manufacture growth appears to be for increasing domestic consumption. This is reflected in demand indicators for methamphetamine, notably in Cape Town, and more recently in the areas in Gauteng Province (Pretoria and Johannesburg). South Africa, is one of the world's largest importers of licit ephedrine and pseudoephedrine. In 2006, South Africa legally imported 7.2 mt of ephedrine and 9.7 mt of pseudoephedrine, of which 10 kg of ephedrine, and no pseudoephedrine, were reported seized.

<sup>46</sup> Australian Crime Commission (ACC), Illicit Drug Data Report 2005-2006, May 2007.

<sup>47</sup> Prices were weighted by reported methamphetamine seizures amounts between 2003 and 2006.

<sup>48</sup> Weighted by reported methamphetamine seizures between 2003 and 2006 period.

<sup>49</sup> New Zealand Police presentation at the global ISDMP experts's meeting, Tokyo Japan, February 2008; New Zealand National Drug Intelligence Bureau, 2006 Clandestine Drug Laboratory (Clan Lab) Report, April 2007

<sup>50</sup> P-2-P is typically used for the manufacture of amphetamine, but can be also used for the production of methamphetamine.

<sup>51</sup> International Narcotics Control Board, 2007 Annual Report (March 2008); US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008).

<sup>52</sup> United Nations Commodity Trade Statistics Database; International Narcotics Control Board, 2007 Annual Report (March 2008); International Narcotics Control Board, Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, 2007 (March 2008).

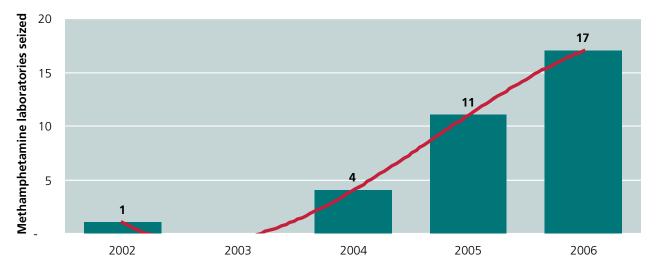


Fig. 129: South Africa: Methamphetamine laboratories reported to UNODC (all sizes): 2002-2006

Source: UNODC, Annual Reports Questionnaire Data / DELTA.

### Growth of amphetamine laboratories stabilized; but locations shifted

After a decade of steady increase, reported global amphetamine laboratory seizures have stabilized.<sup>53</sup> The number of dismantled amphetamine laboratories rose from 82 in 1996 to 649 in 2004 before settling at 513 in 2006.<sup>54</sup> Amphetamine-only laboratories were 156 while amphetamine and other ATS manufacture accounted for 357 (70%). Most illicit amphetamine manufacture continues to take place in Europe, where 79% of the 156 amphetamine laboratories dismantled in 2006 were found. Similarly, of the 26 countries reporting the dismantling of clandestine amphetamine producing laboratories over the 2000-2006 period, 19 (73%) were in Europe.

Between 1996-2006 there were 918 clandestine amphetamine laboratories reported in Europe. The largest numbers of dismantled laboratories were reported by the Russian Federation (526 or 57%), Poland (126 or 14%), the Netherlands (88), Germany (52), the UK (34), Bulgaria (19), and Belgium (17). For 2006, the largest number of laboratories in Europe were reported by the Russian Federation (79), followed by Poland (13), Turkey (12), and the Netherlands (8). The number of dismantled laboratories in Poland, Germany, and Belgium declined in 2006.

P-2-P is a precursor chemical used in the illicit manu-

facture of amphetamine and, to a lesser extent, methamphetamine. Europe as a whole accounts for about 92% of the 2,607 litres of seized P-2-P reported globally in 2006. Because P-2-P was seized primarily in Poland, Denmark, and the Russian Federation, it is likely that the precursor was associated with the production of amphetamine.

Turkey reported the discovery of 12 clandestine amphetamine (Captagon) laboratories in 2006, the largest seizure of laboratories the country has reported to UNODC.<sup>55</sup> The lab types included both manufacturing and tableting operations. At least two of the clandestine laboratories were located in industrial facilities in the southern city of Gaziantep, bordering Syria. In addition, the INCB reported that 197 litres of P-2-P were also seized there in 2006; the largest seizure of its kind by Turkey in recent years.<sup>56</sup> It could be that increased control in Bulgaria has led to a shift in production to Turkey.<sup>57</sup>

Outside of Europe, the largest numbers of dismantled amphetamine laboratories were reported by the USA (29) and India (3).<sup>58</sup> In previous years, amphetamine laboratories were also dismantled in Canada (22 in 2000), Indonesia (6 in 2003), Mexico (1 in 2003) and Chile (1 in 2002).

<sup>53</sup> These include amphetamine and non-specified amphetamine laboratories and laboratories that manufactured multiple products; the count excludes exclusive methamphetamine and ecstasy laboratories

<sup>54</sup> These figures include reports from countries which do not have the forensic capabilities to differentiate between various types of ATS laboratories, thus some laboratories may include methamphetamine, ecstasy or some other combination.

<sup>55</sup> A forensics analysis of the Captagon (originally fenetylline, reported more commonly today as amphetamine) analysis was not provide to UNODC, however some reports identified bulk amphetamine and tableted Captagon, therefore the assumption was a combination including amphetamine.

<sup>56</sup> International Narcotics Control Board, Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic, 2007 (March 2008).

<sup>57</sup> Annual Reports Questionnaire; EUROPOL, Amphetamine-type Stimulants in the European Union 1998 – 2007 (July 2007).

<sup>58</sup> Incomplete forensics information suggest that the Indian laboratories were possibly methamphetamine-related.

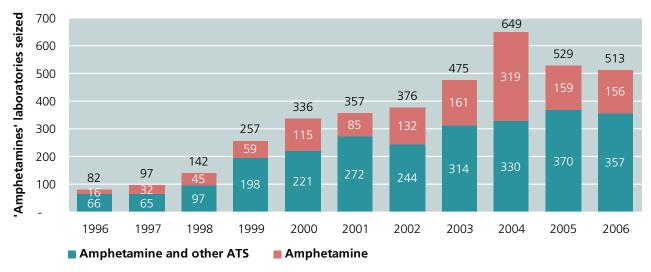


Fig. 130: Number of amphetamine laboratories worldwide, reported to UNODC (all sizes): 1996-2006

Source: UNODC, Annual Reports Questionnaire Data/DELTA.

As previously stated, proxy indicator of manufacture is the reported origin of amphetamine seizures as identified ("mentioned") by States Members. Europe as a whole accounts for nine of the top 10 counties of origin. <sup>59</sup> On this basis, the country receiving the most 'origin' mentions is the Netherlands (67 or 28% of such mentions), followed by Poland (41 or 17%), Belgium (24 or 10%), and the Baltic region (Lithuania, 7%, and Estonia, 5%). Comparing these results with those of previous years suggests that the importance of the Netherlands, Belgium and Germany as producers of amphetamine has been declining.

European amphetamine precursor seizures increased somewhat over 2005. During 2006, most P-2-P precursor seizures were reported in Poland (1,085 litres), Denmark (590 litres), the Russian Federation (402 litres), Turkey (197 litres), the Netherlands (174 litres), Finland (70 litres), Estonia (51 litres), Bulgaria (32 litres), and Lithuania (4 litres). Over the last five years the Netherlands reported the largest total P-2-P seizures in Europe; but like most ATS precursors, these seizures have been declining (from 18,238 litres in 2001 to 6,280 litres in 2004 and 174 litres in 2006). Europe as a whole accounted for 92% of global P-2-P seizures in 2006. No P-2-P was reported seized in Asia, a notable producer region.

Countries in the Near and Middle East and North Africa, while generally not producers of ATS, are greatly affected by its manufacture. Saudi Arabia and neighbouring countries are significant markets for the consumption of 'Captagon'. Illicit Captagon, which is

believed to be mainly amphetamine, is smuggled to the countries of the Near and Middle East usually via Turkey, Syria and Jordan.<sup>61</sup> Beginning in 2004, large quantities were reported seized by Saudi Arabia. The largest was 12.1 mt in 2006. This is equivalent to the sum of all UK seizures - the biggest amphetamine market in Europe - from 2000 to 2006. It is believed that much of the amphetamine is sourced from clandestine laboratories in Bulgaria and Turkey. Saudi Arabia also reported large methamphetamine seizures (216 kg). This is unprecedented for the region and could signal the development of new routes and destinations for this drug. Declining amounts of an amphetamine-type stimulant, locally known as 'Maxiton Forte' are found on the illicit drug market of Egypt. Maxiton Forte used to be a pharmaceutical preparation of dexamfetamine, which used to be produced in Europe (France). This production, however, has long been stopped. There are indications that Maxiton Forte today is actually methamphetamine, which is produced in clandestine laboratories but marketed under the name Maxiton Forte. Due inter alia to the lack of forensic reporting, it is not clear where this production is actually taking place, the manufacturing techniques and precursors used, or the purity of the end product.

### Global ecstasy manufacture is shifting as the importance of Europe as the main ecstasy manufacture area continues to decline

The number of dismantled and reported ecstasy producing laboratories in 2006 was 55 (in just six countries). This is a 10% decline over (upwardly revised)

<sup>59</sup> Information based on 237 mentions on the origin of domestic amphetamine seizures from 47 countries over the 2002-2006 period.

<sup>60</sup> Originally the trade name for fenetylline, a metabolic precursor for

amphetamine.

<sup>61</sup> Limited forensics reports do not allow for the identification of the specific substances in the Captagon.

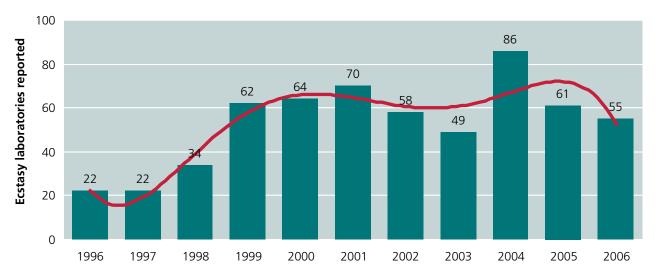


Fig. 131: Number of 'ecstasy group' laboratories worldwide, reported to UNODC (all sizes): 1996-2006

Source: UNODC, Annual Reports Questionnaire Data/DELTA.

2005 levels (61 laboratories). The largest numbers of dismantled ecstasy laboratories were reported from the USA (19) and Canada (16), followed by the Netherlands (8) and Australia (7). In addition, some ecstasy laboratories were dismantled in Germany, China and Hong Kong, SAR.

Between 1996 and 2006, 25 countries reported the dismantling of a total of 581 ecstasy laboratories to UNODC. The largest numbers of ecstasy laboratories were reported in the Netherlands (161), followed by the USA (139), Canada (104), Australia (41), Belgium (34), UK (18), and Germany (17). The number of laboratories discovered in the Netherlands and Belgium peaked in 2000 and has since declined; Germany's manufacture has been consistently low and the UK has not reported an ecstasy laboratory to UNODC since 2002. At the same time, detections in the USA, Canada and Australia have increased.

Beginning in 2003, laboratories were increasingly reported in North America (USA and Canada) and decreasingly in Europe (specifically the Netherlands and Belgium).<sup>62</sup> Progressively, more ecstasy is being produced in large scale laboratories for the domestic market within North America. Organized criminal groups, operating out of Canada, have become active in the manufacture of ecstasy and are supplying the USA and Australian markets. In 2006, all of the ecstasy laboratories identified in Canada were of the super-lab variety.<sup>63</sup>

Between 2002 and 2006, States Members reported that the origin of most ecstasy seizures was: the Netherlands (143 or 42%), Belgium (40 or 12%), Germany (19 or 6%), the UK (4% and Canada (11 or 3%), followed by Poland, Estonia, South Africa, Bulgaria and the USA. 64 Europe as a whole accounts for 84% of such mentions, however, as more than half of all countries reporting on the origin of ecstasy to UNODC were European (37 out 69) these figures have a bias. Countries outside Europe which were frequently mentioned as source countries for ecstasy manufacture include Canada, South Africa, USA, China as well as Hong Kong SAR of China.

Over the period of 2001 to 2005, European seizures of ecstasy precursors (expressed in potential MDMA manufacture equivalents) accounted for 60% of global ecstasy precursor seizures. In 2005, this proportion fell to 32% and, in 2006, Europe accounted for a mere 16%. North America accounted for 84% of the seizures of ecstasy precursors, almost entirely 3,4-MDP-2-P (PMK) seized in Canada. According to reports, all of the PMK seized in Canada has been sourced from China, typically via marine shipment. 65 This could be a further indication that the importance of Europe as an ecstasy production site is declining.

### ATS markets in Africa and South-America remain comparatively modest

While domestic production of ATS is very limited in South America, Africa (except South Africa), and Near

<sup>62</sup> A trend towards falling levels of ecstasy production in Europe has been also identified by EUROPOL. (See EUROPOL, Production and Trafficking of Synthetic Drugs and Precursors, The Hague, 1 March 2007.

<sup>63</sup> International Narcotics Control Board, 2007 Annual Report (March 2008); US Department of State, *International Narcotics Control Strat*egy Report (INCSR) 2008, Vol 1 (March 2008).

<sup>64</sup> Information based on 333 mentions on the origin of domestic ecstasy seizures from 69 countries over the 2002- 2006 period.

<sup>65</sup> Royal Canadian Mounted Police (RCMP): Drug Situation Report 2006; National Drug Intelligence Center, National Drug Threat Assessment 2008, Nov., 2007.

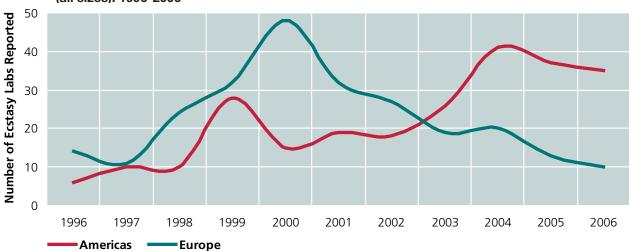


Fig. 132: Number of "ecstasy group" laboratories in the Americas and Europe, reported to UNODC (all sizes): 1996-2006

Source: UNODC, Annual Reports Questionnaire Data/DELTA.

and Middle East, drug use surveys conducted in South America and Africa suggest that consumption is far from negligible. The defined daily doses (per 1,000 inhabitants) for legally produced Schedule-IV stimulants in the Americas amounted to nearly 11 over the 2004-2006 period: up from around 7 over the 2000-2002 period, as compared to between 1 and 2 currently in Europe or Asia. In 2006, Argentina and Brazil had the first and third highest calculated rate of use of Schedule-IV stimulants: nearly 17 and 10 daily doses per 1,000, respectively.<sup>66</sup>

<sup>66</sup> International Narcotics Control Board, Psychotropic Substances 2007: Statistics for 2006, New York 2008.

### 1.5.3 Trafficking

#### Global ATS seizures increase

Seizures of amphetamine-type stimulant (ATS) increased again in 2006, reaching 47.6 mt, just short of their 2000 peak.<sup>1</sup> A total of 99 countries and territories reported seizures of ATS to UNODC in 2006, a number similar to reports received in 2000 (96), and much higher than in 1985 (40).

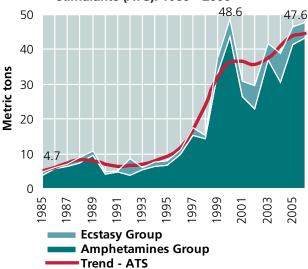
While trafficking in ATS end-products remains primarily *intra*-regional, there is greater evidence which suggests that increased *inter*-regional cooperation and trafficking are occurring.<sup>2</sup> Trafficking in ATS precursor chemicals continues to be predominantly *inter*-regional – with the majority of precursors trafficked out of East, and South Asia. Seizure data of ATS end-products provides interesting insights into the relative size and dynamics of the various sub-markets.<sup>3</sup>

### Amphetamines account for the majority of global ATS seizures

The amphetamines group constituted 91% of ATS seizures in 2006. The ecstasy group accounted for the remaining 9%.<sup>4</sup> For the first time since data were tracked, growth in amphetamine seizures outpaced that

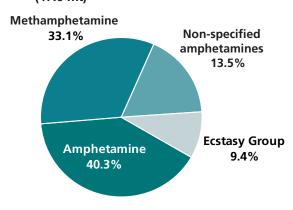
- Seizures reported in kilograms, litres and units are converted into kilogram equivalents: a unit (pill) of ecstasy was assumed to contain on average 100 mg of active ingredient (MDMA); a unit of amphetamine/ methamphetamine was assumed to contain 30 mg of active ingredient; a litre was assumed to equal a kilogram. Until 1999 'other hallucinogens' were included in data for ecstasy, but the proportion of 'ecstasy' in the total seems to have exceeded 90% in most years (2000-2006: 90%-95%).
- 2 International Narcotics Control Board, 2007 Annual Report (March 2008); US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008); Royal Canadian Mounted Police (RCMP): Drug Situation Report 2006.
- 3 Drug and precursor seizure data are subject to change for a variety of reasons, such as new or late data being added or revisions in data already provided by States Members. For example, new data related to drug seizures from Taiwan, Province of China, between 2000 and 2006 were added which have increased seizure totals several metric tons in a variety of drugs classes (i.e., ATS, cannabis, and heroin). Precursor seizure data sourced from INCB are also often updated in the following year (e.g., Mexico failed to provide any Form D seizure data for 2006 to INCB). Additionally, seizure data reported in what appeared to be thousands of litres of "Maxiton Forte" from Egypt, were in fact thousands of cubic centimetres, significantly reducing seizure totals between 2001 and 2006. All data reported in trafficking reflect the most up-to-date and accurate information available at printing.
- 4 The "ecstasy group" includes the substances MDMA, MDA and MDEA/MDE, although more than 90% is reported as MDMA.

Fig. 133: Seizure trend of amphetamine-type stimulants (ATS): 1985 - 2006



Source: UNODC, Annual Report Questionnaire Data/DELTA; and World Customs Organization (WCO), Customs and Drugs Report 2006 (June 2007).

Fig. 134: ATS seizures, by substance type: 2006 (47.6 mt)



Source: UNODC, Annual Report Questionnaire Data / DELTA

of methamphetamine. Of the 47.6 mt reported seized in 2006, amphetamine accounted for 40%, methamphetamine for 33%, and non-specified amphetamines for 14%.<sup>5</sup>

<sup>5</sup> The category of 'non-specified amphetamines' comprises stimulants where the authorities were unable to forensically identify and report specific substances composition such as. In addition Methcathinone (ephedrone), Captagon (originally fenetylline, today probably amphetamines) and Maxiton Forte (originally dexamfetamine, today probably methamphetamine) are included in this category.

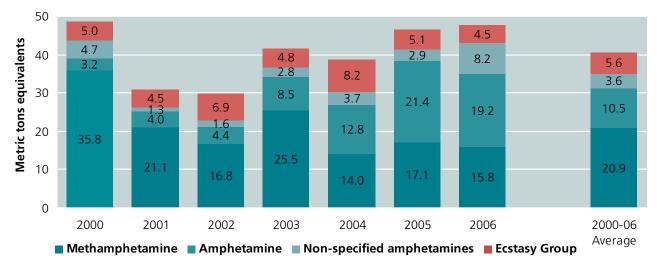


Fig. 135: Reported seizures of ATS, by substance type: 2000 - 2006

Source: UNODC, Annual Report Questionnaire Data/DELTA.

Between 2000 and 2006, the average amount of ATS seized annually was 41 mt, of this about half was methamphetamine. Since 2002, total reported seizures of ATS have been increasing. These increases in seizures (types/weight) are primarily a result of increases in reporting. Specifically, reports of large customs interceptions of amphetamine (termed "*Captagon*") made in the Near and Middle East since 2004.<sup>6</sup>

In 2006, the majority of ATS seizures worldwide occured primarily in four regions. Patterns were as follows:

- Near and Middle East (32%)
   primarily amphetamine;
- East and South-East Asia (26%)
  - primarily methamphetamine;
- North America (17%)
  - primarily methamphetamine and ecstasy; and
- West and Central Europe (16%)
  - primarily amphetamine and ecstasy.

Oceania and Southern Europe each reported 4% of the ATS seizure total. Three of the four regions above are also major manufacturing areas. The exception is the Near and Middle East where no clandestine manufacture has been reported to UNODC. The region is thought to be a transit point for where major diversions of precursors of amphetamine-type stimulants are occurring.<sup>7</sup>

The largest national ATS seizures in 2006 were reported from Saudi Arabia (26%), the USA (15%), China (13%), Myanmar (6%), the UK (5%), Oman and the Netherlands (4%), and Australia and Indonesia (3% each). In 2006, the World Customs Organization reported 12.1 mt of amphetamine (*Captagon*) seized in Saudi Arabia, including a single seizure (originating from Turkey) of more than two tons which was intercepted at the Jordanian and Saudi Arabian border. In addition, the first significant seizure of methamphetamine reported in the region to date, 216 kg of methamphetamine, was reported in Saudi Arabia. Oman reported more than two mt of non-specified amphetamines (*Captagon*) – the most significant seizure of amphetamines in this region, outside of Saudi Arabia.

The USA continues to report substantial seizures of methamphetamines originating from the US/Mexico border. China reported significant seizures of methamphetamine, and Myanmar reported more than 2.2 mt of non-specified amphetamines (most likely methamphetamines). The UK primarily reported amphetamine seizures, while the Netherlands reported a mix of amphetamine and ecstasy. Neither reported methamphetamine seizures.

#### Trafficking in methamphetamine

### Main methamphetamine markets remain East and South-East Asia and North America

While the amount of methamphetamine seized in 2006

<sup>6</sup> Captagon is typically recorded as a non-specified amphetamine since tablet content is changing and is rarely forensically reported. However, data provided in the World Customs Organization's, *Customs* and Drugs Report 2006 (June 2007), identified Captagon seized in Saudi Arabia as amphetamine.

<sup>7</sup> International Narcotics Control Board, 2007 Annual Report (March 2008)

<sup>8</sup> Data for the UK reported in the 2006 ARQ refers to the calendar year 2005.

World Customs Organization (WCO), Customs and Drugs Report 2006 (June 2007).

<sup>0</sup> Lacking forensic reports, the assumption regionally is methampheta-

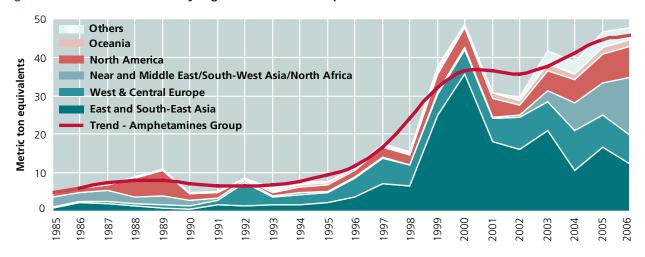
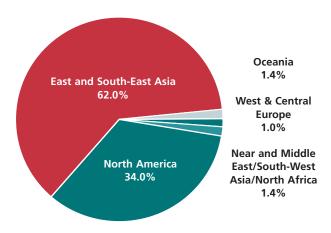


Fig. 136: Global ATS seizures by region in metric ton equivalents: 1985 - 2006

Source: UNODC, Annual Report Questionnaire Data/DELTA; World Customs Organization (WCO), Customs and Drugs Report 2006 (June 2007).

Fig. 137: Regional breakdown of methamphetamine seizures: 2006 (15.8 mt)



Source: UNODC, Annual Reports Questionnaire Data/DELTA

(15.8 mt) was roughly half that seized in 2000, the number of countries reporting seizures has increased over the same period by more than 50%, to 49 countries. This includes several countries not previously reporting methamphetamine seizures to UNODC such as Saudi Arabia, Georgia, and Niger. This appears to indicate that methamphetamine trafficking is expanding intra- as well as inter- regionally.

In 2006, 96% of methamphetamine seizures reported were dominated by East and South-East Asia and North America. In comparison to 2005, the regions of East and South-East Asia and North America reported 99% of the global seizures of methamphetamine. Proportionally low seizures were reported in Oceania and Europe in 2006, however, the weight/amount of seizures is getting

larger on average. Over the 2000-2006 period seizures in Oceania increased more than 20-fold and European seizures rose more than 6-fold.

Of the top 10 countries which reported seizures between 2000-2006, seven come from East and South-East Asia, two from North America, and one from Oceania. The largest methamphetamine seizures at the global level during this period were made by China, Thailand, USA, and Taiwan, Prov. of China. China's seizures range from 3 mt to 21 mt (the highest recorded seizure ever), but have more recently hovered around 6 mt. Thailand's seizures have been declining since their peak of 10 mt in 2000, due to an increase in law enforcement and other controls.<sup>11</sup>

Seizures in the USA peaked in 2005 and have declined following changes in legislation controlling precursor chemicals (specifically over-the-counter pharmaceutical preparations that contained pseudoephedrine). Methamphetamine seizures in Taiwan, Province of China, peaked at 4 mt in 2003, and have declined since. However, in 2005, more than 2.2 mt of semi-processed "amphetamine," possibly a methamphetamine intermediate, were reported seized in the country.<sup>12</sup>

Mexico and Myanmar, both major producer and trafficking countries for methamphetamines, consistently report seizure amounts of one mt or less. Indonesia, which reported nominal methamphetamine seizure until 2005 (0.4 mt), seized 1.3 mt in 2006. Preliminary reports suggest that significant amounts were also seized in early 2008.

<sup>11</sup> It is important to note that some countries (e.g., in South-East Asia) may inconsistently distinguish between methamphetamine pills, powder, and crystal forms. While chemically the same, some report totals as the same drug, while others do not.

<sup>12</sup> Forensics data were unavailable.

Country (Top 10)	2000	2001	2002	2003	2004	2005	2006	Total
China	20.9	4.8	3.2	5.8	2.7	6.8	6.1	50.3
Thailand	10.1	8.3	8.6	6.5	2.1	0.8	0.5	37.0
USA	0.0	2.9	1.1	3.9	3.1	5.1	4.5	20.6
Taiwan, Prov. of China	0.8	1.2	1.3	4.0	3.2	1.7	0.2	12.4
Philippines	1.0	1.7	0.9	3.1	0.8	0.1	0.8	8.4
Mexico	0.6	0.4	0.5	0.7	1.0	0.9	0.8	4.8
Myanmar	0.8	1.0	0.4	0.1	0.0	0.4	0.6	3.3
Japan	1.0	0.4	0.4	0.5	0.5	0.1	0.1	3.2
Indonesia	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.7
Australia	0.0	0.0	0.0	0.5	0.2	0.1	0.1	1.0
Subtotal	35.3	20.7	16.5	25.2	13.6	16.4	14.9	142.6

98.4%

98.6%

97.0%

Table 11: Top Countries (rank ordered) in methamphetamine seizures (in metric tons): 2000 - 2006

Source: UNODC, Annual Reports Questionnaire Data/DELTA

Percent of all seizures

The decline in the percentage of global seizures in the top 10 countries reflects the increasing spread of manufacture and trafficking. For example, in 2006 Saudi Arabia reported its first seizure of methamphetamine, at 216 kg, it was the largest in the region.

98.8%

98.2%

## Methamphetamine East and South-East Asia may be shifting

As more national and international controls are put in place – on precursor chemicals in particular - the market appears to be shifting gradually to areas where control regimes are weak, leading to an increase in both intra-, and inter-regional trafficking. There is increasing evidence to support that this may be occurring in Asia and between Asia, Oceania, North America and, to a lesser extent, Europe.

Important trafficking routes in Asia are:

- From Myanmar to China (Yunnan Province); trafficking along this route has increased. In 2006, the Chinese authorities reported some 55% of their total methamphetamine seizures as having taken place in Yunnan province (a transit point to the rest of the country and abroad);
- From China (Yunnan Province) to the Guangxi, Guangdong, Fujian provinces, and Hong Kong SAR of China for export to Taiwan, Province of China, Japan, Indonesia, and the Philippines;
- From Myanmar to Thailand, either directly or indirectly via Lao PDR or Cambodia. Although traditionally only 'yaba' (methamphetamine tablets) originated in Myanmar, over the last few years reports also show that there has been 'ice' (crystal methamphetamine) production originating in Myanmar;

Smaller amounts leave Myanmar for consumption in the north-eastern provinces of India and Bangladesh;

96.0%

94.6%

- Shipments from Myanmar via Thailand to Malaysia, Indonesia, Singapore and Brunei Darussalam;
- Lao PDR (Vientiane) is a significant transit point to Thailand via Nong Khai and to Bangkok; also to Lao PDR (Pakse) and expanding transit point to Cambodia via Stueng Treng and Presh Vihar on to Phnom Penh;
- Cambodia (Phnom Penh) is a staging point for transit to Poipet and on to Thailand (Bangkok); also to South Viet Nam (Ho Chi Minh);
- From China to Hong Kong SAR of China, the Philippines, Malaysia, Republic of Korea, Taiwan province of China and/or Japan;
- From Hong Kong SAR of China to Japan, Australia, New Zealand, Guam (USA), and Thailand;
- From the Philippines to the Republic of Korea, Malaysia, Brunei Darussalam, Taiwan province of China, Japan, Australia, New Zealand, the USA (including Guam) and Canada;
- From Thailand to Malaysia, Taiwan province of China, the Republic of Korea as well as to various other international markets;
- Ephedrine and pseudoephedrine from India to Canada and Myanmar; also to Malaysia possibly via Sri Lanka;
- Ephedrine and pseudoephedrine from West Asian countries (e.g., The Islamic Republic of Iran)

Fig. 138: US-Mexico border seizures of methamphetamine: 2001-2006



Source: US National Drug Intelligence Center, National Methamphetamine Threat Assessment 2008 (Dec. 2007)

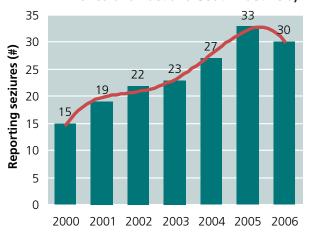
to Somalia and the Democratic Republic of the Congo and on to North America or Oceania.

In 2005, the authorities of the Republic of Korea reported that 70% of seized methamphetamine originated in China. By 2006 nearly all (99%) seized methamphetamine originated in China. 13

## In North America trafficking remains predominately intra regional

Most methamphetamine-related trafficking in North America takes place (i) within the USA, (ii) from Mexico to the USA, and to a lesser extent (iii) from Canada to the USA. While there is increasing smuggling of methamphetamine from Canada to the USA, the most significant problem remains the methamphetamine trafficked to the United States from Mexican super-labs. 14 According to the Mexican authorities, most of the methamphetamine produced in Mexico is for export to the USA. Between 2001 and 2006, the amounts of methamphetamine seized by the US authorities along the south-west border with Mexico increased from 1.3 tons to 2.8 tons. 15 This represented about 75% of all reported US seizures in 2006. This significant increase followed the tightening of precursor chemical control in Canada and in the USA. Organized criminal groups in Mexico have expanded their methamphetamine distribution networks and consolidated much of the previously independent metham-

Fig. 139: Countries reporting seizures of methamphetamine: 2000-2006 (excludes North America and East and South-East Asia)



Source: UNODC, Annual Reports Questionnaire data

phetamine traffickers in the Great Lakes, Pacific, Southeast, Southwest, and West Central Regions. They have also introduced highly addictive crystal methamphetamine into these markets.<sup>16</sup>

Preliminary reports for 2007 suggest substantial declines in seizures on the USA/Mexico boarder, consistent with increased control of the Mexican authorities on domestic production and trafficking of methamphetamine. Among other things, Mexico has drastically reduced the import of methamphetamine precursor chemicals and is moving to ban all preparations containing ephedrine and pseudoephedrine in 2009.<sup>17</sup>

### Inter-regional methamphetamine trafficking is reported from other regions

The number of countries reporting seizures of methamphetamine increased from 15 in 2000 to 30 in 2006, indicating that methamphetamine is spreading in geographical terms. While most of this expansion has occurred in Europe, several new counties reporting first-time methamphetamine seizures were identified. For instance, Saudi Arabia, Georgia, and Niger all reported seizures (some very large) for the first time in 2006. <sup>18</sup> According to the World Customs Organization, in 2006, there were two seizures totalling 216 kg of methamphetamine in Saudi Arabia. <sup>19</sup> This was the first significant seizure in the region. Neither source country or

<sup>13</sup> UNODC, Annual Reports Questionnaire.

<sup>14</sup> A 'super lab' is defined by the US authorities as a clandestine laboratory which can produce more than 10 pounds (i.e. more than 5 kg) of methamphetamine over a production cycle. US Department of State, *International Narcotics Control Strategy Report (INCSR) 2008*, Vol 1 (March 2008).

<sup>15</sup> National Drug Intelligence Center, National Methamphetamine Threat Assessment 2008 (Dec. 2007).

<sup>16</sup> National Drug Intelligence Center, 2008 National Drug Threat, October 2007.

<sup>17</sup> International Narcotics Control Board, 2007 Annual Report (March 2008); US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008).

<sup>18</sup> In 2005 Argentina, Dominican Republic, Portugal, and Ukraine reported first-time methamphetamine seizures to UNODC.

World Customs Organization, Customs and Drugs Report 2006 (June 2007)

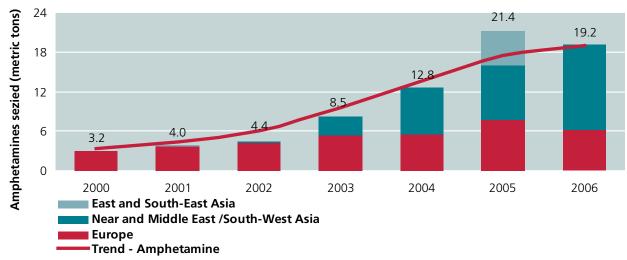


Fig. 140: Global amphetamine seizures: 2000-2006

Source: UNODC, Annual Reports Questionnaire Data; and World Customs Organization (WCO), *Customs and Drugs Report 2006* (June 2007).

specific forensics were reported.<sup>20</sup>

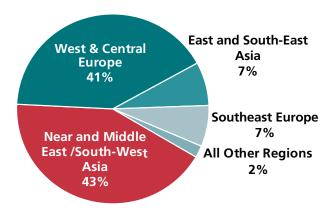
### Trafficking in amphetamine

Amphetamine trafficking continues to be concentrated in Europe – but seizures rise sharply in the Near and Middle Fast

In 2006, amphetamine seizures were 19.2 mt, with the Near and Middle East /South-West Asia accounting for the bulk (67%). Europe accounts for 32%, with Western and Central Europe at 27% and South-East Europe at 5%. Small amounts (0.6%) were also reported in South America, Oceania, and East and South-East Asia. Several new first-time reports of amphetamine seizures were received, including Iran (IR), and Nepal. Amphetamine seizures from 2000 to 2006 increased 500%, fuelled by the increase in the Near and Middle East/South-West Asia

Over the 2000-2006 period, some 57% of the global amphetamine seizures occurred in Europe, mainly in West and Central Europe (48%) and in Southeast Europe (8%). The Near and Middle East/South-West Asia region accounted for 33% although amounts in this area may be underreported.<sup>21</sup> East and South-East Asia accounted for 7% – all reported in 2005.<sup>22</sup>

Fig. 141: Distribution of amphetamine seizures, by region: 2000-2006 (10.5 mt avg. per year)



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

Amphetamine production and trafficking are concentrated in Europe, making Europe's amphetamine seizures a reasonable proxy for global amphetamine seizures. Amphetamine seizures increased between 1980 and 1997, before falling towards the end of the 1990s. Between 2000 and 2006, European amphetamine seizures more than doubled.

Between 2000 and 2006, the top 10 European countries which reported seized amphetamine accounted for 92% of all European seizures and 45% of global seizures. Since 2000, the UK has seized 12 mt of amphetamines or 1/3<sup>rd</sup> of the European total. The next largest seizures in Europe came from the Netherlands with 15%, followed closely by Bulgaria at 13% of all European seizures.

<sup>20</sup> Pakistan reported a 16 kg seizure in 2004.

<sup>21</sup> Significant seizure levels began in 2001. Due to a lack of forensics reporting, captagon seizures are typically recorded as *non-specified amphetamines*, unless specifically identified as amphetamines. In 2006, the World Customs Organization reported a 12.1 mt interception of captagon in Saudi Arabia, which the report identified as amphetamine.

<sup>22</sup> This region is not known for amphetamine production, and in 2005 China and Taiwan, Province of China, both reported large isolated seizures of amphetamines (5.2 mt total). Regional experts believe that these are likely methamphetamine which has been recorded as

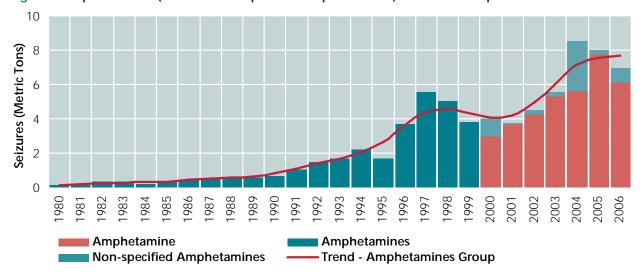
amphetamine due to a lack of forensics reporting. Thus, regional amounts of this specific substance may be overstated.

Table 12: Top European Countries (rank ordered) in amphetamine seizures (in metric tons): 2000-2006

Country (Top 10)	2000	2001	2002	2003	2004	2005	2006	Total
United Kingdom	1.77	1.72	1.41	1.65	1.39	2.04	2.04	12.01
Netherlands		0.58	0.48	0.88	0.59	2.03	0.63	5.19
Bulgaria	0.21	0.06	0.18	0.59	1.46	1.12	0.88	4.50
Germany	0.27	0.26	0.36	0.48	0.56	0.67	0.71	3.32
Sweden	0.10	0.25	0.33	0.33	0.44	0.42	0.42	2.28
Poland	0.14	0.19	0.16	0.19	0.24	0.46	0.33	1.72
Norway	0.09	0.09	0.21	0.22	0.23	0.12	0.32	1.28
Belgium	0.08	0.08	0.50	0.21		0.18	0.12	1.15
Finland	0.08	0.14	0.13	0.11	0.10	0.11	0.13	0.80
France		0.06	0.15	0.27	0.08	0.11	0.08	0.75
Subtotal	2.7	3.4	3.9	4.9	5.1	7.3	5.7	33.0
Percent of all seizures	86.7%	86.3%	88.6%	84.7%	82.5%	53.5%	82.1%	

Source: UNODC, Annual Reports Questionnaire Data/DELTA

Fig. 142: Amphetamines (includes non-specified amphetamines) seized in Europe: 1980-2006



Source: UNODC, Annual Reports Questionnaire Data.

Non-specified amphetamines in Europe are more likely to be amphetamine-based than methamphetamine-based.<sup>23</sup> Seizures have declined slightly since their 2004 peak, consistent with reports of shortages in Europe of P-2-P<sup>24</sup>, its main precursor. This decline may also reflect indications of amphetamine (Captagon) manufacture shifting towards the Near and Middle East, the largest consumer market for captagon. The discovery of several

labs in Turkey, some of which were on the border with Syria, could have necessitated a new source of supply.

One of the more interesting trends within Europe has been the continuing shift of production and trafficking in amphetamine to both the new-EU and non-EU States Members. In 1996, the EU-15 countries accounted for 97% of all European amphetamine seizures. <sup>25</sup> This declined to 65% in 2006. The data show similar declines when compared to the rest of the world, as greater amounts of amphetamines are seized in the Near and Middle East region.

<sup>23</sup> It is reasonable to assumed that the bulk of non-specified amphetamines in Europe were actually amphetamine, since little methamphetamine is reported in Europe save for the Czech Republic and it surrounds. Reported in metric tons from converted kilogram equivalents- assuming a dose/unit to be equivalent to 30 milligrams. Excludes ecstasy seizures.

<sup>24</sup> EUROPOL, Synthetic Drugs and Precursors, presentation given by the EUROPOL Drug Unit at the Europe-Asia Conference on Synthetic Drugs and their Precursors, Paris, 6-7 March 2007.

EU-15 refers to the 15 countries in the European Union before the expansion on 1 May 2004. These include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom.

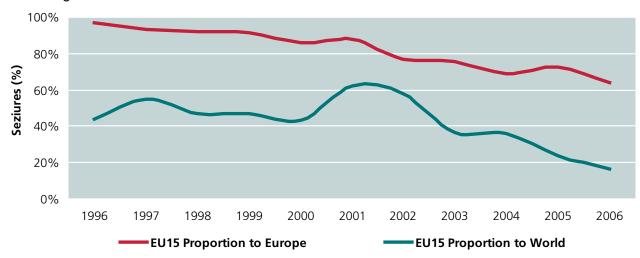


Fig. 143: Proportion of amphetamine seizures in EU-15 countries versus all European countries and global total: 1996 – 2006

Source: UNODC, Annual Reports Questionnaire Data.

#### Trafficking in the amphetamines group

### Overall amphetamines seizures remain concentrated in South-East Asia, North America and Europe

Many countries continue to have difficulties with forensic identification and reporting of seized substances. Therefore, it is helpful to examine synthetic stimulants within the broader amphetamines group (i.e., amphetamine, methamphetamine, and non-specified amphetamine). Within this context seizure statistics suggest that global trafficking in amphetamines increased strongly in the mid 1990s, peaking in 2000. Seizures have been climbing again since 2002, driven largely by reports from the Near and Middle East.

Global seizures increased again in 2006, almost reaching 2000 levels. Seizure data suggest that the dominance of the South East Asian market, historically the main amphetamines group market, may be in decline. In 2000, South-East Asia accounted for 81% of the 43.6 mt of amphetamines seized globally. By 2006, that amount dropped to 28% (12 mt), with rising seizures in the Near and Middle East (15 mt or 35%). North America accounted for (15%) and West and Central Europe (13%) of the 2006 total.

### With significant seizures reported in the Near and Middle East

The extremely large amount of seizures reported from the Near and Middle East region points to the need for further analysis on sources, forensic information and destinations. Saudi Arabia reported a seizure of 12.1 mt in 2006, equivalent to the sum of all UK seizures, the biggest amphetamine market in Europe, from 2000 to 2006. Amphetamine tablets for the Near and Middle East have typically been produced in Southeast Europe (Bulgaria and Turkey) and trafficked and marketed as *Captagon* to Near and Middle East countries. Saudi Arabia is the largest such market in the region. Captagon typically transits over land through Turkey, Syria, and Jordan before arriving in Saudi Arabia. <sup>26</sup> The growing seizure volume appears inconsistent given the small number of clandestine laboratories reported by authorities in Bulgaria (3) and Turkey (12) in 2006. Additionally, Oman reported seizing more than two mt of non-specified amphetamines (i.e., Captagon) destined for Saudi Arabia – the second most significant seizure of amphetamines in this region. The trafficking of large volumes of methamphetamines through the region to an as yet undetermined market is cause for concern.

<sup>26</sup> ARQ; World Customs Organization (WCO), *Customs and Drugs Report 2006* (June 2007). Additionally, there are reports of Saudi Arabia seizures originating from the United Arab Emirates and Lebanon

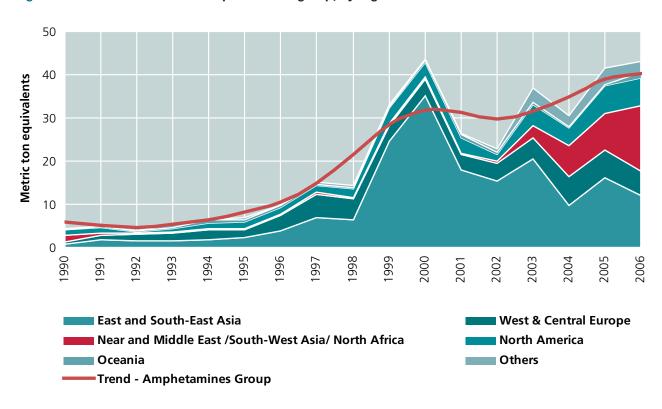


Fig. 144: Global seizures of the amphetamines group, by region: 1985 - 2006

Source: UNODC, Annual Report Questionnaire Data/DELTA; and World Customs Organization (WCO), Customs and Drugs Report 2006 (June 2007).

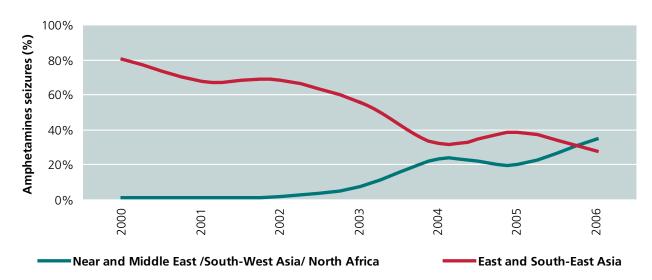


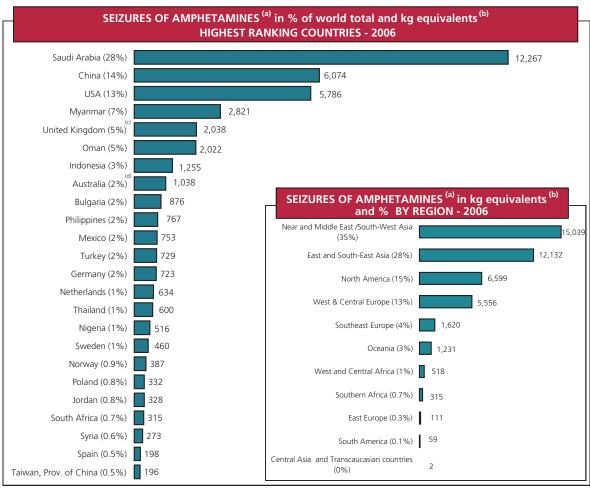
Fig. 145: Regional shifts in amphetamines group seizures: 2000 - 2006

Source: UNODC, Annual Report Questionnaire Data/DELTA; and World Customs Organization (WCO), Customs and Drugs Report 2006 (June 2007).

Metric ton equivalents <sup>(b)</sup> 

Fig. 146: Global seizures of amphetamines(a), 1996 - 2006

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Metric ton equivalents <sup>(e)</sup>	10	15	14	33	44	26	23	37	30	41	43



<sup>(</sup>a) Amphetamine, methamphetamine and related stimulants (excludes ecstasy group substances).

<sup>(a)</sup> Amphetamine, methamphetamine and related stimulants.

 $<sup>^{(</sup>b)}$  1 unit is assumed to be equal to 30 mg; 1 litre is assumed to be equal to 1 kg.

 $<sup>^{(</sup>b)}$  1 unit is assumed to be equal to 30 mg; 1 litre is assumed to be equal to 1 kg.

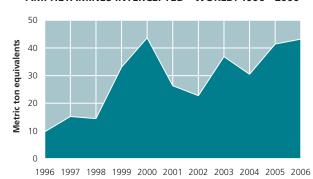
 $<sup>^{(</sup>c)}$  Data refer to 2005 England and Wales only.

<sup>(</sup>d) Total seizures reported by national as well as state & territory law enforcement agencies which may result in double counting.

<sup>(</sup>e) Total metric ton seizures between 2002 and 2005 were revised to reflect the addition of data from Taiwan, Province of China.

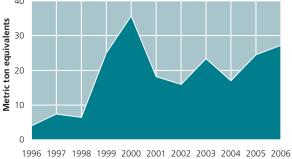
Fig. 147: Interception of amphetamines, 1995 - 2006



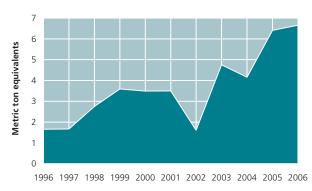


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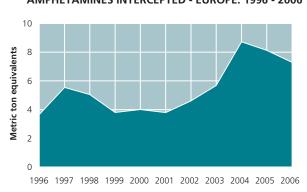
**AMPHETAMINES INTERCEPTED - ASIA: 1996 - 2006** 



#### **AMPHETAMINES INTERCEPTED - AMERICAS: 1996 - 2006**



#### **AMPHETAMINES INTERCEPTED - EUROPE: 1996 - 2006**



#### **AMPHETAMINES INTERCEPTED - AFRICA\*: 1996 - 2006**



Increase in 2001 due to huge seizures of Maxiton Forte in Egypt (reported in litres); conversion rate used: 1 litre = 1 kg

#### **AMPHETAMINES INTERCEPTED - OCEANIA: 1996 - 2006**



1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

Source: UNODC Annual Reports Questionnaires data/DELTA.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Stimulants seizures reported to UNODC (2001-2006) No stimulants seizures reported to UNODC (2001-2006) Other trafficking routes Main trafficking routes \* Seizures as reported (street purity); units converted into weight equivalents (30mg per unit) Decrease (>10%) Increase (>10%) Stable (+/- 10%) Volume in metric tons rends (2005 - 2006) Seizures in 2006

Map 20: Trafficking in amphetamines, 2006 (countries reporting seizures\* of more than 1 kg)

#### Trafficking in Ecstasy

### Ecstasy seizures continued to decline in 2006; regional shifts continue

In 2006, 4.5 mt of ecstasy were reported seized, which continues the declining trend begun in 2004.<sup>27</sup> This trend is also consistent with ecstasy manufacturing estimates which suggest a decline. The largest seizures over the 2000-2006 period were reported from the countries of West and Central Europe (51%), followed by North America (22%), the Oceania region (14%), and East and South-East Asia (8%). During this time a total of 39 mt of ecstasy were seized. The largest ecstasy seizures in 2006 were reported by the USA (26%), followed closely by the Netherlands (24%), then Australia (12%), Canada (8%), the UK (7%), Turkey (4%) and France (3%).<sup>28</sup>

Despite the dominance of West and Central Europe in the ecstasy trade, the general trend has been towards an increase in ecstasy production, trafficking and abuse outside this region. This is clearly reflected in seizure statistics. The share of West and Central Europe in global ecstasy seizures fell from 79% in 1995 to 43% in 2006. As the proportions in West and Central Europe declined, several other regions showed increases. For example, in 1995 North America accounted for 20% of ecstasy seizures, rising to 34% by 2006. Similarly, Oce-

ania's proportion increased from 1% to 12%, Southeast Europe and East and South-East Asian both went from negligible seizures to 6% and 3% of global totals, respectively. Additionally, the number of countries which reported seizures has more than doubled: 32 counties reported seizures in 1995, while in 2006 the number reached 78.

#### North America and Oceania gain in importance

Europe remains a main illicit manufacturing region for MDMA globally, with the Netherlands and Belgium the most commonly cited 'source' countries. However, as manufacture continues to shift and spread, the importance of these territories as source countries is declining. A shift in ecstasy labs has been identified since 2003, with an increase in North American labs (USA and Canada) and a decrease in European labs (principally the Netherlands and Belgium). In 2006, all of the ecstasy laboratories identified in Canada were of the super-lab variety.<sup>29</sup>

Ecstasy manufacture is becoming increasingly sophisticated, characterized by greater efficiency in manufacture, more specialized staff, and facilitators.<sup>30</sup> In Europe, ecstasy trafficking is conducted by many small trafficking groups of various nationalities. Ecstasy is typically sourced primarily in the Netherlands, Belgium before being trafficked to its final destination.<sup>31</sup>

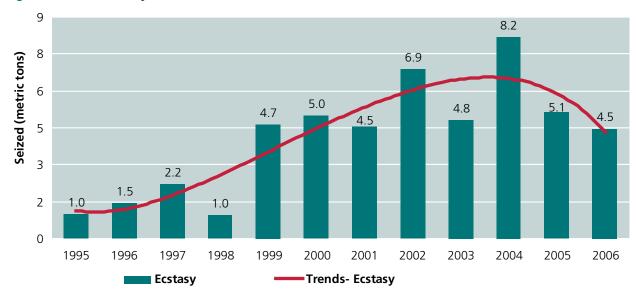


Fig. 148: Global ecstasy seizures: 1995 - 2006

Source: UNODC, Annual Reports Questionnaire Data / DELTA.

<sup>27</sup> A reported pill of ecstasy was assumed to contain on average 100 mg of MDMA.

<sup>28</sup> Data for the UK refer to 2004; 2004 data are used as proxy for 2005 seizures.

<sup>29</sup> US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008).

<sup>30</sup> EUROPOL, Synthetic Drugs and Precursors, presentation given by the EUROPOL Drug Unit to the Europe-Asia Conference, Paris, 6-7 March 2007.

<sup>31</sup> German Narcotica Drugs Annual Report 2007, Bundeskriminalamt, (Wiesbaden, 2008)

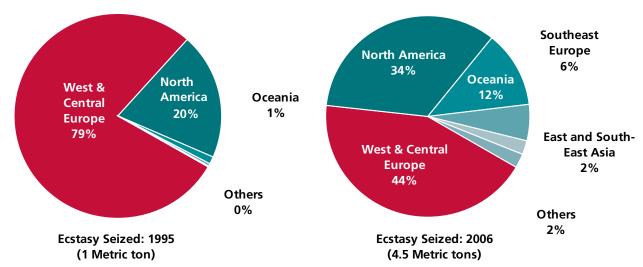


Fig. 149: Changes proportions of ecstasy seized, by region: 1995 and 2006

Source: UNODC, Annual Reports Questionnaire Data / DELTA.

Trafficking of ecstasy from Europe to North America and some other regions was controlled by criminal groups of Israeli origin.<sup>32</sup> However, the importance of these trafficking groups was significantly reduced by law enforcement in 2002. Canada-based Asian criminal organizations are now the principal suppliers to the US. Reports find that they have largely reconstituted the ecstasy market and have greatly increased manufacture in Canada and distribution operations in several US cities.33 This is reflected in US seizure statistics, which report declining ecstasy seizures along the east coast, and increasing seizures along the Canadian border. In 2005 the Canadian authorities reported that 85% of the ecstasy seized was domestically produced and 15% came from Europe. By 2006, they reported 99% domestically produced with only 1% being imported from Europe.

Reports from the Canadian authorities also find that only super-lab capacity ecstasy labs—termed 'economic-based' labs—are now found in Canada. 34 Controlled by sophisticated organized crime groups, end products from these labs have been trafficked as far as Australia and Colombia via air, postal, and marine routes. Many recent shipments were found to have included multiple drugs and precursors chemicals, such as ecstasy with marijuana, cocaine, and/or ephedrine to other countries.

## Oceania remains an important destination country for ecstasy

According to Australian authorities the main origin countries in 2005/06 for shipments of ecstasy to Australia were, in order of weight, Canada, Belgium, the UK and France. However, the largest ecstasy importation to Australia of 1.2 million Ecstasy tablets sourced in Canada, arrived via Hong Kong, SAR, which may indicate an increase in Asian organised crime connection.<sup>35</sup>

<sup>32</sup> US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008).

<sup>33</sup> US National Drug Intelligence Center, 2008 National Drug Threat Assessment, October 2007.

<sup>34</sup> Royal Canadian Mounted Police (RCMP): Drug Situation Report 2006

<sup>35</sup> Australian Crime Commission, Illicit Drug Data Report 2005/06, Canberra 2007.

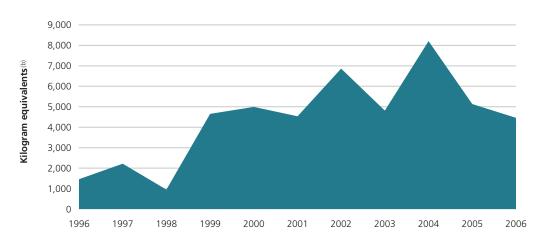
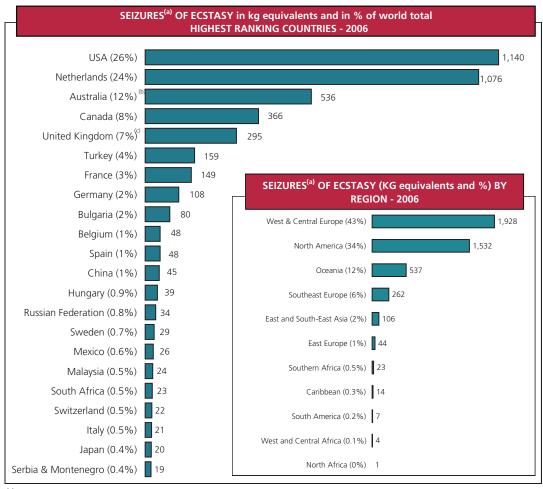


Fig. 150: Changes proportions of ecstasy seized, by region: 1995 and 2006

 $<sup>^{\</sup>mathrm{(b)}}$  1 unit is assumed to be equivalent to 100mg of MDMA.

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Kilogram equivalents	1,461	2,222	951	4,651	4,993	4,537	6,865	4,811	8,209	5,132	4,460



 $<sup>^{</sup>m (a)}$  Seizures as reported (street purity); units converted into weight equivalents (100mg / unit)

<sup>(</sup>a) Separate reporting of 'Ecstasy' seizures only started with the new ARQ. Before, Ecstasy seizures were included under the category of 'hallucinogens'. Trend data shown above refer to the broader category for 1996-1999 and for Ecstasy for 2000-2006. Over the 2000-2006 period, Ecstasy accounted for 93% of the broader category.

<sup>(</sup>b) Total seizures reported by national as well as state & territory law enforcement agencies which may result in double counting.

<sup>(</sup>c) Data refer to 2005 England and Wales only.

Source: UNODC Annual Reports Questionnaires data/DELTA.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. No ecstasy seizures reported to UNODC (2001-2006) Ecstasy seizures reported to UNODC (2001-2006) Other trafficking routes ■ Main trafficking routes Seizures as reported (street purity) Stable (+/-10%) Increase (>10%) Decrease (>10%) Volume in kilograms Trend (2005-2006) Seizures in 2006

Map 21: Trafficking in ecstasy, 2006 (countries reporting seizures\* of more than 1 kg)

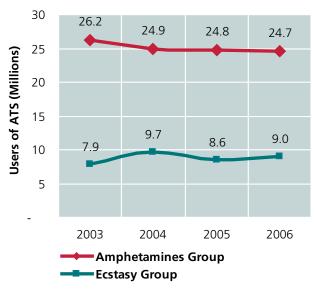
### 1.5.4 Consumption

## Amphetamines and related synthetic stimulants

### Amphetamines group users are three-times the number of ecstasy users

An estimated 24.7 million people in the world, equivalent to 0.6% of the population age 15-64 consumed amphetamines in 2006.¹ UNODC estimates ecstasy users to number approximately 9 million world-wide (0.2%), a third of the number of amphetamines group users.² Neither estimate has changed substantially compared to last year or the beginning of the new millennium. Together, these figures exceed use levels for cocaine and heroin, combined.

Fig. 151: Estimated number of amphetamine-type stimulant users: 2003-2006

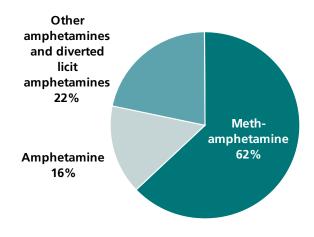


Source: UNODC estimate

## Methamphetamine consumption dominates ATS use<sup>3</sup> at the global level

UNODC conservatively estimates, that there are between 15 and 16 million methamphetamine users worldwide, a figure similar to that for heroin or cocaine at the global level. The number of amphetamine users is estimated to be lower, at around 4 million people. A further 5 million people are estimated to consume various diverted pharmaceutical preparations or other illegal synthetic stimulants (e.g., methcathinone).

Fig. 152: Users of 'amphetamines group' substances, by type (N = 24.7 million)



Source: UNODC estimate

Most countries do not differentiate in detail to what extent drug users are taking methamphetamine, amphetamine or other synthetic stimulant. However, member states have repeatedly reported distinct regional characteristics to UNODC which help to establish reasonable orders of magnitude at the regional level. For example, amphetamines group users in East and South-East Asia consume primarily methamphetamine; users in Europe take primarily amphetamine, with a few exceptions, notably the Czech Republic with consumes methamphetamine. National household surveys show that about half of the stimulant users in North America use methamphetamine. 'Captagon' use, which is widespread in the Near and Middle East, typically represents the use of amphetamine (often in combination with caffeine). Users of the amphetamines group in South Africa ('tik') and in North Africa ('Maxiton Forte'), in contrast, appear to use methamphetamine. In addition, information is available that in most parts of South America, Central America, the Caribbean as well as in Western, Central and Eastern Africa and in some parts of southern Africa and Asia, the amphetamines group consists primarily of various diverted pharmaceutical preparations.

The amphetamines group includes methamphetamine, amphetamine, and non-specified amphetamine (e.g., fenetylline, methylphenidate, phenmetrazine, methcathinone, amfepramone, pemoline, phentermine), but excludes ecstasy group drugs.

<sup>2</sup> Ecstasy group includes primarily MDMA, but also MDA, MDEA/ MDE. However, forensics has identified changes in the last several years suggesting that much of what consumers believe to be ecstasy containing MDMA is actually a variety of other substances such as methamphetamine, ketamine, and other often uncontrolled sub-

Table 13: Annual prevalence estimates of amphetamines use, by region: 2006

Region	Estimated number of users annually	In percent of population 15-64 years	Compared to Global Average
Europe	2,490,000	0.45	Below
West and Central Europe South-East Europe	1,950,000 180,000	0.61 0.21	Average Below
Eastern Europe	350,000	0.24	Below
Americas North America South Americas*	5,670,000 3,720,000 1,960,000	0.96 1.27 0.66	Above Above Above
Asia East and South East Asia All Other Asian Regions	13,750,000 13,230,000 520,000	0.53 0.90 0.05	Average Above Below
Oceania	470,000	2.14	Above
Africa	2,260,000	0.43	Below
Global	24,650,000	0.58	

<sup>\*</sup> Includes South and Central America and the Caribbean. "Above" global average is defined as greater than 10% and "below" is less than 10% of the global average.

Sources: UNODC, Annual Reports Questionnaire; Government reports; reports of regional bodies; and UNODC estimates.

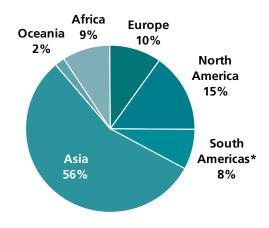
### South-East Asia continues to be the world's largest amphetamines market, followed by North America and Europe

Nearly 14 million people or 55% of the world's amphetamines users are estimated to live in Asia. Most of them are methamphetamine users in East and South-East Asia. Ninety seven per cent of all amphetamines used in Asia are consumed in the East and South-East sub-region. The total number of amphetamines users in North America is estimated at around 3.7 million people or 15% of global users. Europe accounts for 10% of all users or 2.7 million people. The number of amphetamines users in Africa is estimated at 2.3 million representing about 9% of global users. Reports from South America (including the Caribbean and Central America) indicate that there are an estimated 2 million people, equivalent to 8% the of global estimate. About 0.6 million people use amphetamines in the Oceania region (2% of the global total).

At the sub-regional level, the highest annual prevalence rates of amphetamines use are reported by the countries in the Oceania region (2.1%), followed by North America (1.3%), Central America (1.2%), the Caribbean (1%), East and South-East Asia (0.9%) and West and Central Europe (0.6%). The average annual prevalence rate in Africa is estimated at 0.4%.

The highest prevalence rates in the Oceania region are reported by Australia; in North America by the United States; and in Europe by the UK, Estonia and Latvia. In the East and South-East Asian region, the highest prevalence is reported by the Philippines and Thailand; in the Caribbean by the Dominican Republic; in Central

Fig. 153: Breakdown of amphetamines users, by region (N = 24.7 million)



<sup>\*</sup>Includes South and Central America, and the Caribbean.

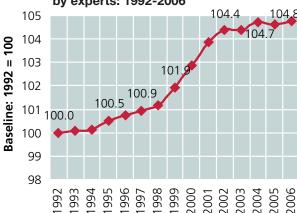
Sources: UNODC, Annual Reports Questionnaire; Govt. reports; reports of regional bodies; and UNODC estimates.

America by El Salvador; in South America by Brazil; and in Africa, by Nigeria (and some other West African countries), Egypt, and South Africa.

#### Amphetamines use is slowing globally

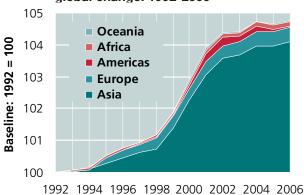
Both UNODC estimates of the total number of amphetamines users, and analysis of expert perceptions, suggest that following strong increases in the 1990s, the growth in amphetamines use is slowing. The increases of the 1990s were due to rapidly rising methamphetamine use in East and South-East Asia. Increases in Europe and in North America also contributed to the global rise of the 1990s.

Fig. 154: Amphetamines use trends as perceived by experts: 1992-2006



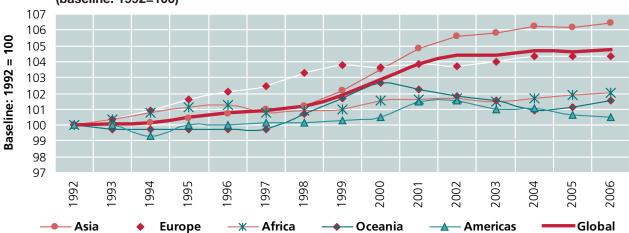
Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC's Drug Use Information Network for Asia and the Pacific (DAINAP), UNODC, Global Assessment Programme on Drug Use (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports and local studies.

Fig. 155: Amphetamines use trends as perceived by experts regional contribution to global change: 1992-2006



Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC's Drug Use Information Network for Asia and the Pacific (DAINAP), UNODC, Global Assessment Programme on Drug Use (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports and local studies.

Fig. 156: Amphetamines use trends as perceived by experts, changes in regions: 1992-2006 (baseline: 1992=100)



Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC's Drug Use Information Network for Asia and the Pacific (DAINAP), UNODC, Global Assessment Programme on Drug Use (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports and local studies.

Weighted growth rates of expert perceptions of use between 1992 and 2006 were highest in Asia and below average in all other regions.<sup>4</sup> In general growth of amphetamines consumption has slowed in Asia and Europe. Amphetamines use in Africa has been growing, but the overall increases over the 1992-2006 period have been clearly below the global average. The Americas appear to be experiencing some declines in recent years.

Thirty-five countries identified a stable trend, 31 reported an increase, and 10 saw a decrease.<sup>5</sup>

The increases noted by experts were sub regionally specific, with notable patterns. For example, the European States Members that identified worsening conditions were nearly all 'North Eastern' (Belarus, Estonia and Latvia) or 'South-Eastern' (Albania, Bulgaria, Czech Republic and Moldova) European countries. Most West and Central European counties noted stability, except Spain which reported some improvement. In the Americas, Mexico and the countries on Mexico's southern

<sup>4</sup> Trends as reported by national experts in response to UNODC's Annual Reports Questionnaire. Points allocated for trend data: 'strong increase' 2; 'some increase': 1; stable: 0; 'some decline' -1; 'strong decline' -2. Reported drug use trends were weighted by the proportion of amphetamines users in a country expressed as a percentage of global amphetamines use. If all countries had reported 'some increase', the global trend line would have increased by one point each year and would have reached 114 by 2006.

<sup>5</sup> Increases and decreases were coded from strong increase/decrease or some increase/decrease, and represent the unweighted number of member states responding.

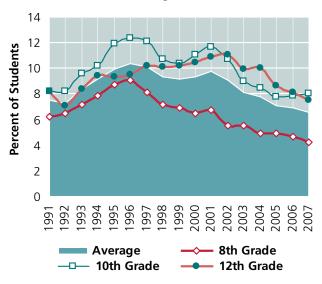
Table 14: Experts perceptions of changing regional amphetamines use, by region: 2006

Region	Member State Experts Responding	Use Problem Increased*	Percent Use Problem Increased	Use Prob- lem Stable	Percent Use Problem Stable	Use Problem Decreased*	Percent Use Problem Decreased
Europe	34	11	32%	22	65%	1	3%
Americas	14	6	43%	7	50%	1	7%
Asia	19	9	47%	2	11%	8	42%
Oceania	1	1	100%	0	0%	0	0%
Africa	8	4	50%	4	50%	0	0%
Global	76	31	41%	35	46%	10	13%

<sup>\*</sup>Identifies increases/decreases ranging from either some to strong, unweighted by user population.

Sources: UNODC, Annual Reports Questionnaire Data.

Fig. 157: USA: Annual prevalence of amphetamines use among students: 1991-2007



Source: NIDA, Monitoring the Future, Overview of Key Findings in 2007, Bethesda Maryland, April 2008.

boarder (Guatemala and El Salvador) indicated a worsening amphetamines use problem. In Asia, experts believe the problem is worsening in three distinct subregions: the countries located on India's east boarder (Nepal, Bangladesh, and China), China and it's regions in the southern coast (Hong Kong SAR and Macao SAR), and the Near East (Jordan, Syria, and Lebanon). However, experts in Asia also perceived an improvement in the amphetamines use problem in several of the island nations within the China Sea, including Japan, Philippines, Indonesia, and Malaysia.<sup>6</sup>

#### Methamphetamine use declines in North America

The downward trend of amphetamines use in North America continues, specifically among youth. The downward trend among US students started after 2001, with large declines in use by 10<sup>th</sup> and 12<sup>th</sup> graders. Lower levels of use were associated with reports of decreased availability and a greater perception of risk.

The decline was more pronounced for methamphetamine use among North American students. Between 1999 and 2007 methamphetamine use fell by 65% for students in the USA and 72% for students in Ontario, Canada. Continued risk awareness in combination with policies to reduce supply (e.g., improved precursor controls) have contributed to these declines.

While methamphetamine use remained relatively stable, overall stimulants use rose in the US in 2006. This could be related to methamphetamine users switching to stimulants with greater availability. Methamphetamine use continues to be most prevalent in the West of the country, with rates between two and five times higher than in other areas.<sup>7</sup>

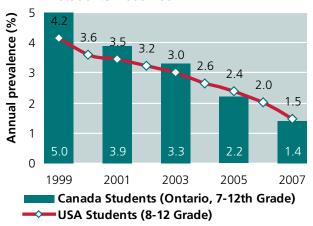
Another indication that stimulant substitution may be occurring in the USA can be seen in data from workplace drug testing, where the downward trend observed since mid-2005 began to change direction in 2007. Workplace drug testing results show methamphetamine on a consistent decline since its peak in 2004.

In North America, the declines in methamphetamine use reported from the USA and Canada have been partly offset by reports of rising use in Mexico, reflecting growing methamphetamine production in that country. Though the bulk of methamphetamine produced in Mexico is destined for the US market, small amounts

<sup>6</sup> It is important to note that some South-East Asian nations distinguish between methamphetamine pills, powder, and crystalline methamphetamine. In some countries one form of the drug may be decreasing as it is replaced with another form. For example, Thailand reported a decrease in the use of methamphetamine pills, while simultaneously identifying increased use of crystalline methamphetamine.

<sup>7</sup> SAMHSA (2007), National Survey on Drug Use and Health, 2006.

Fig. 158: USA and Canada (Ontario): Annual prevalence of methamphetamine use among students: 1999-2007



Sources: CAMH, *Drug Use among Ontario Students*, 1997-2007, Toronto (2007) and NIDA, Monitoring the Future, Overview of Key Findings in 2006, Bethesda Maryland (May 2007).

remaining in the country are sufficient to increase local availability. Additionally, Mexico, Guatemala and El Salvador indicated worsening amphetamines use problems.<sup>8</sup>

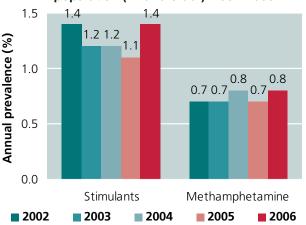
### Shifts in use seen in Europe

States Members experts in Europe percieved an overall stabilisation in the use of amphetamine. In 2006, 22 European countries reported a stabilization of amphetamine use, 11 reported an increase. The increases were concentrated in Northeast and Southeast Europe, while most of Western and Central Europe shows stable levels of use.<sup>9</sup>

Europe's largest amphetamine market, the United Kingdom, has shown the most significant downward trend. Annual prevalence of amphetamine use in England and Wales fell from 3.2% in 1996 to a plateau of 1.3% in 2007, a 60% decline in the overall number of users. Investments in prevention as well as measures to limit supply seem to have been partly responsible for the decline. According to a study on EU countries, UK spent twice the EU average on supply and demand interventions. <sup>10</sup>

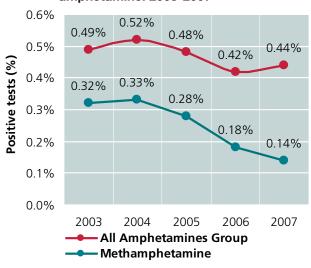
Sweden has also witnessed significant decreases in amphetamines use. Sweden's annual amphetamine prev-

Fig. 159: USA: Annual prevalence of stimulants and methamphetamine use among the population (12 and older): 2002-2006



Source: SAMHSA (2007), National Survey on Drug Use and Health, 2006

Fig. 160: USA: Positive workplace drug tests for amphetamine: 2003-2007



Source: Quest Diagnostics, Drug Testing Index (March 2008)

alence rates (0.2%) are half the European average (0.5%) and are now among the lowest in Europe.

#### Use is slowing in Asia

The proportion of Asian countries reporting an increase in methamphetamine use dropped from 54% to 47% in 2006 (19 countries responding), while the number of countries reporting decreases methamphetamine use rose from 19% to 42% in 2006. However, weighing country's expert perceptions by their estimated methamphetamine using population, shows a continuing net increase in use in the region.

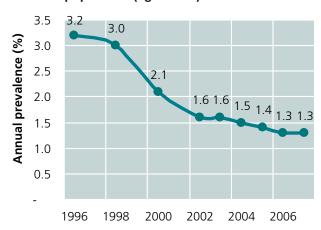
Increases in methamphetamine use are mainly reported by countries of South, East and South East Asia (Nepal,

<sup>8</sup> Annual report questionnaire (2006).

<sup>9</sup> Spain was the only country reporting any decline in amphetamines use in 2006.

<sup>10</sup> Drug related expenditure amounted to €68 in the UK or 0.35% of GDP, more than twice the EU average (0.15%). Higher levels have been only reported by the Netherlands (€139 per capita or 0.66% of GDP) and Sweden (€107 per capita or 0.47% of GDP. (See EMCDDA, Public Expenditure on Drugs in the European Union, 2000-2004).

Fig. 161: England and Wales: Annual prevalence of amphetamine use among the general population (age 16-59): 1996-2007



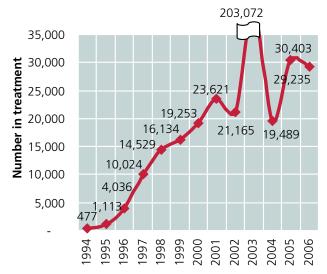
Source: Home Office, *Drug Misuse Declared: Findings from the 2006/07 British Crime Survey,* London (Oct. 2007).

Bangladesh, China, Hong Kong SAR, Macao SAR, and Myanmar). In contrast, the countries which account for the bulk of all methamphetamine use in Asia (Thailand, Malaysia, Philippines, and Indonesia) report a stabilization or decline.<sup>11</sup>

Japan continues to be Asia's most lucrative methamphetamine market. Following strong increases since the 1970s, all data for Japan suggest that methamphetamine use stabilized or even declined in recent years. Lifetime prevalence rate of methamphetamine was reported to have amounted to 0.4% of the population age 15 and above in 2003, falling to 0.3% by 2005. General stabilization was also seen in lifetime prevalence of methamphetamine use in the country's student population (age 13–15): 0.39% in 2000, 0.44% in 2002 and 0.4% in 2006.

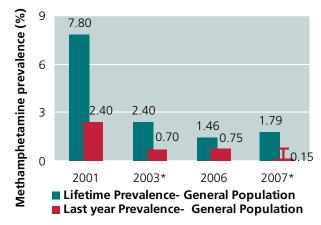
A continued decline in methamphetamine use ('yaba' or methamphetamine pills) was reported by the Thai authorities for the year 2006. Surveys conducted in

Fig. 162: Thailand: Methamphetamine-related admissions to treatment: 1994-2006



Sources: Office of the Narcotics Control Board, Thailand Narcotics Annual Report 2003, UNODC, Improving ATS Data and Information Systems Project (AD/RAS/01/F97), UNODC, Drug Use Information Network for Asia and the Pacific (DAINAP).

Fig. 163: Thailand: Prevalence of methamphetamine use: 2001-2007<sup>12</sup>



\*UNODC estimate for annual prevalence.

Sources: UNODC, Annual Reports Questionnaire Data; UNODC, Patterns and Trends of Amphetamine-type Stimulants (ATS) and Other Drug of Use in East Asia and the Pacific 2006 (June 2007) and prior years; and UNODC, Drug Use Information Network for Asia and the Pacific (DAINAP).

2003 and 2007 reported lower prevalence rates  $^{14}$  than previous surveys.  $^{15}$ 

- 14 It is possible that the government crack-down on the market in 2003 has led to a reduction in self-reporting behaviours among the general population. This in turn is lowering lifetime prevalence results. The more recently reported lifetime prevalence rates would be equivalent to 2 million less people reporting that they have ever tried methamphetamines than in 2001. These results illustrate that drug use self-report data continue to influenced by police operations in the 'war on drugs', thereby continuing to under-estimate the national prevalence of methamphetamine use in Thailand.
- 15 UNODC (Regional Centre for East Asia and the Pacific), Patterns and Trends of Amphetamine-type Stimulants (ATS) and Other Drugs of Use in East Asia and the Pacific 2006, (June 2007).

<sup>11</sup> Note, in Patterns and Trends of Amphetamine-type Stimulants (ATS) and Other Drugs of Use in East Asia and the Pacific 2006, (UNODC, Regional Centre for East Asia and the Pacific June 2007), Thailand reported a decreasing methamphetamine pill problem and an increasing crystalline methamphetamine problem. Differences are related to the clarity of the drug reporting question, the timing of data and differences in key experts who report. These differences in reporting are expected to be resolved in the future.

<sup>12</sup> The new household survey, conducted in 2007, reported an annual prevalence rate of a 0.145%; UNODC continues to report the prevalence rate at a conservative 0.75%.

<sup>13</sup> However, an increase in crystalline methamphetamine ('ice') was also noted. UNODC (Regional Centre for East Asia and the Pacific), Patterns and Trends of Amphetamine-type Stimulants (ATS) and Other Drugs of Use in East Asia and the Pacific 2006, (June 2007).

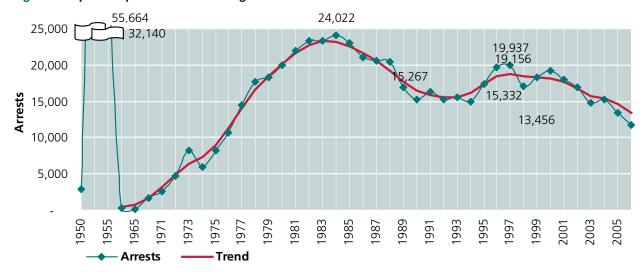


Fig. 164: Japan: Reported violations against stimulants law: 1950-2006

Sources: Ministry of Health and Social Welfare, National Police Agency of Japan and UNODC, Annual Reports Questionnaire Data.

Seizures of methamphetamine pills in Thailand point to an ongoing reduction of trafficking, and thus indirectly to an ongoing reduction of use. However, seizures of crystalline methamphetamine ('ice') are rising. Treatment demand appeared to be stabilizing in 2006.

In terms of sheer volume, China has one of the world's largest methamphetamine markets, although the methamphetamine prevalence rates are probably lower than in several of the other South-East Asian countries. <sup>16</sup> Reports in 2006 identified large increases in the use of methamphetamine pills and crystalline methamphetamine. China reports that, of registered drug users in 2004, 1.7% used ATS, while that number grew to 11.1% in 2007. <sup>17</sup> These rates are consistent with increases in reported clandestine methamphetamine laboratories and rising seizures in recent years.

The Philippines is a major manufacturing and trafficking location and continues to have the world's highest estimated annual methamphetamine prevalence rate (6%). Although relatively stable at high levels for the past several years, the Philippine authorities now report (expert perceptions) that methamphetamine use levels were on the decline in 2006.

In Indonesia, authorities reported a decline of methamphetamine use to UNODC in their reply to the Annual Reports Questionnaire for 2006. However, data for 2007 indicates that ATS use may be on the rise in the country. <sup>18</sup> This early indicator of increased use could be a sign of drug spill-over into the general community due to increasing manufacture and trafficking.

#### Ongoing decline in the Oceania region

Household surveys, conducted in Australia have shown a steady decline of methamphetamine use, from an annual prevalence rate of 3.7% in 1998, to 2.3% in 2007, a decrease of 32%.<sup>19</sup>

Data collected through the Drug Use Monitoring in Australia (DUMA) system suggests that the trend towards a modest decline of methamphetamine use also continued in subsequent years. DUMA regularly drugtests arrestees within 48 hours of custody in selected sites across the country. After a substantial increase throughout the late 1990s peaking in 2003 (28%) the proportion of those arrestees testing positive for methamphetamine, declined slightly to 24% in 2007. The decline has been substantial in Queensland the traditional location of most dismantled methamphetamine laboratories, followed by sites in Western Australia and Southern Australia. While overall methamphetamine use appears to have stabilized, some data point to an ongoing increase in the use of 'crystal ice' and increased injecting of methamphetamine.<sup>20</sup>

<sup>16</sup> To date, no national drug-related household survey has ever been undertaken in China.

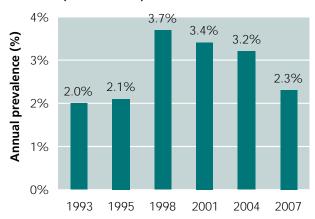
<sup>17</sup> Zhao Wanpeng, Deputy Director of International Cooperation Division, Narcotics Control Bureau, Ministry of Public Security, presentation entitled 'Drug data collection in China', 4th International Forum on the Control of Precursors for ATS, Tokyo Japan, February 2008.

<sup>18</sup> UNODC, Drug Use Information Network for Asia and the Pacific (DAINAP), 2007. Last updated April 28, 2008.

<sup>19</sup> Population age 14 and older. It must be noted though that a direct comparison of the 1998 and the 2001 household survey data in Australia could be - potentially - misleading as the underlying methodology for the surveys changed quite substantially during this period

<sup>20</sup> National Alcohol and Drugs Research Centre, University of New

Fig. 165: Australia: annual prevalence of amphetamines use among the population (14 and older): 1993-2007



Source: Australian Institute for Health and Welfare (AIHW), 2007 National Drug Strategy - Household Survey 2007, Canberra (April 2007).

The situation in New Zealand followed similar patterns. New Zealand household survey for the population aged 15-45 showed that annual prevalence of the amphetamines group peaked in 2001 at 5% of the population, but has since decreased to 3.4%. Crystalline methamphetamine peaked at the same time at 0.9%, but has remained relatively stable ever since.

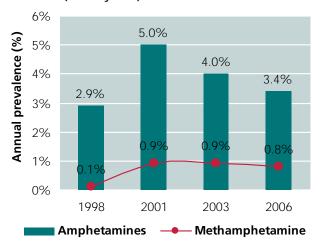
The New Zealand Arrestee Drug Use Monitoring (NZ-ADAM) program also tests people who have recently been arrested (for drug consumption) at several sites around the country. Reports from the program have identified that between 2005 and 2007 nationwide methamphetamine positive tests among arrestees declined slightly, from 12.4% to 11.7%. However, positive tests for amphetamine have increased dramatically from 2.7% to 13.5% during the same period. While the bulk of positive tests for either drug occur in the more populous North Island, lab and seizure evidence suggests that use may be spreading increasingly to the South Island.

#### Growth in use reported from southern Africa slows

Amphetamines use in Africa has been increasing slowly over the last few years. Much of this growth is fuelled by rapidly increasing methamphetamine use in South Africa. Accounting for less than 1% of all substance related treatment demand, until the end of 2002, treatment for methamphetamine as a proportion of total treatment in Cape Town<sup>21</sup> rose to 15% in 2004, 30% in 2005, before stabilising at 40% in 2006 and 41% in the

South Wales - Methamphetamine in Victoria 2004-2007: Forms & purity (April 2008).

Fig. 166: New Zealand: Annual prevalence of amphetamines use among the population (15-45 years): 1998-2006



Source: Centre for Social and Health Outcomes Research and Evaluation (SHORE), *Trends in drug use in the population in New Zealand: Findings from national household drug surveying in 1998, 2001, 2003 and 2006* (March 2007).

first six months of 2007.<sup>22</sup> While the rate of increase in Cape Town has slowed, evidence suggests that use is spreading to other areas. Increases in the proportion of treatment demand for methamphetamine have been reported in treatment centres in Pretoria, and are emerging in Durban.<sup>23</sup>

### Potential for increases in Near and Middle East and other regions

Limited information regarding ATS use is available on the Near and Middle East region, however recent reports suggest that use is increasing at a rapid pace. According to reports from the INCSR<sup>25</sup>, rising levels of use of an ATS marketed under the name *Captagon* have been reported in Saudi Arabia.<sup>24</sup> The report, citing news sources and Government officials, states that the number of drug addicts rose from 109,000 in 2002 to 150,000 in 2005, and between 2006 and 2007, drug use increased an additional 17%.<sup>25</sup> The most recent treatment data provided in the Annual Report Questionnaire identified ATS as the most common drug for treatment in the

<sup>21</sup> Atlantis and Wochester

<sup>22</sup> SACENDU, Monitoring Alcohol & Drug Use Trends in South Africa (2007)

<sup>23</sup> SACENDU (2007), Monitoring Alcohol & Drug Use Trends in South Africa. Research Brief Vol 10(2).

<sup>24</sup> A recent analysis of *Captagon* (originally fenetylline, reported more commonly today as amphetamine) analysis was not provide to UNODC, however data provided in the World Customs Organization's, *Customs and Drugs Report 2006* (June 2007), identified Captagon seized in Saudi Arabia as amphetamine.

<sup>25</sup> US Department of State, International Narcotics Control Strategy Report (INCSR) 2008, Vol 1 (March 2008).

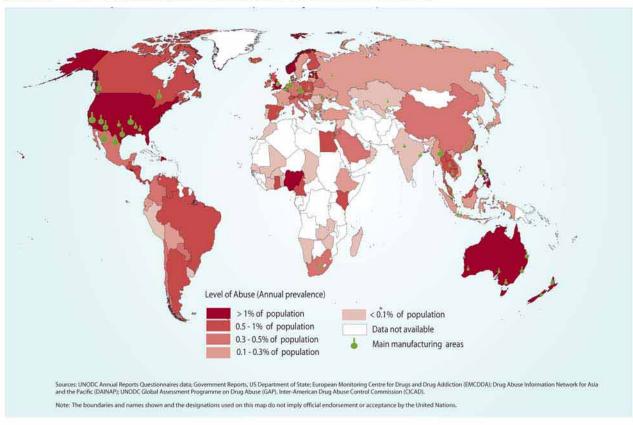
country. These reports of significant increases correlate with the dramatic increases in trafficking that have been reported over the last several years. For example, in 2000, 291 kg of ATS were seized – by 2006 that number increased to 12.3 metric tons. And, for the first time, in 2006 these seizures included reports of methamphetamine. Significant seizures (2 mt) were also reported by neighbouring Oman in 2006 and other counties in the region.<sup>26</sup>

#### Rising levels of ATS use in South America

Rising levels of ATS use have been reported from South America (Argentina, Peru), Central America (Guatemala, El Salvador), and the Caribbean (Dominican Republic). In these regions ATS originate mainly from licit channels. The defined daily doses per 1,000 inhabitants for legally produced Schedule-IV stimulants in the Americas amounted to nearly 11 over the 2004-2006 period, up from levels around 7 over the 2000-2002 period or rates between 1 and 2 currently in Europe or Asia. In 2006, Argentina, the United States, and Brazil led the world with the highest calculated rate of use of the Schedule-IV stimulants at nearly 17, 12, and 10 daily doses per 1,000, respectively.<sup>27</sup>

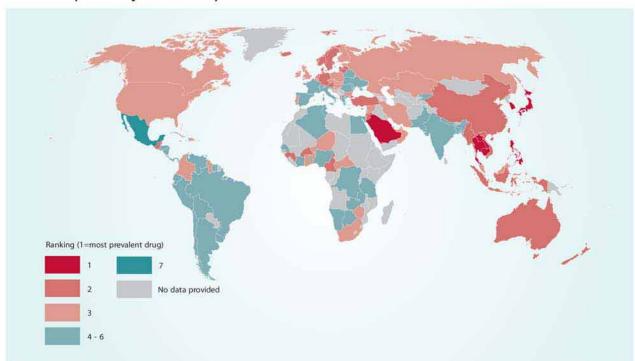
<sup>26</sup> In order of magnitude the following regional countries reported ATS seizures greater than 10 kg in 2006: Jordan (328 kg), Syria (273 kg), Lebanon (111 kg), Kuwait (17 kg), and Iran (16 kg). Other regional countries also reported ATS seizures (in amounts under 10 kg): Israel, United Arab Emirates, Pakistan, Bahrain, and Qatar.

<sup>27</sup> INCB, 2007 Psychotropic Substances, New York 2008.



Map 22: Use of amphetamines in 2006/2007 (or latest year available)

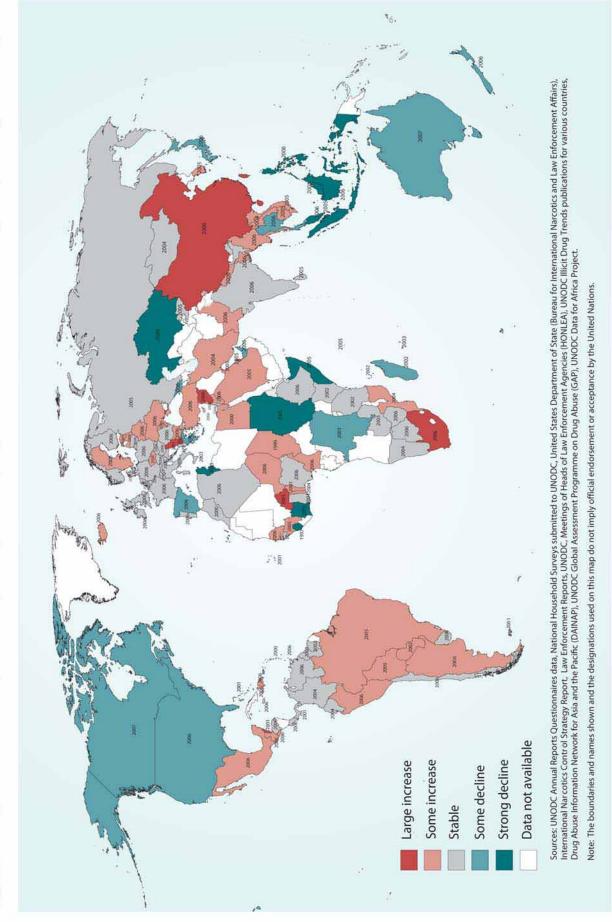
Map 23: Ranking of amphetamine-type stimulants in order of prevalence in 2006 (or latest year available)



Source: UNODC Annual Reports Questionnaires data/DELTA; Government Reports, US Department of State; European Monitoring Centre for Drugs and Drug Addiction (EMCDDA); Drug Abuse Information Network for Asia and the Pacific (DAINAP); UNODC Global Assessment Programme on Drug Abuse (GAP); Inter-American Drug Abuse Control Commission (CICAD); UNODC Rapid Assessment Studies, Council of Europe, ESPAD.

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

Changes in the use of "amphetamines" (methamphetamines, amphetamines and related substances), 2007 (or latest year available) Map 24:



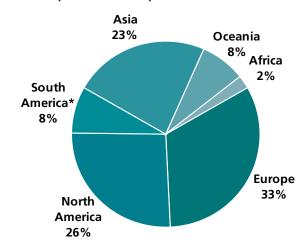
### **Ecstacy**

### Ecstasy use concentrated in Western Europe and North America

With year on year global prevalence unchanged, ecstasy use is estimated to affect approximately 9 million people or 0.2% of the population age 15-64.<sup>28</sup> There are about 3 million ecstasy users in Europe, accounting for a third of ecstasy users worldwide. About 90% of them are located in West and Central Europe. The annual prevalence rate of ecstasy use is estimated at 0.8% of the population in West and Central Europe, similar to the levels reported from North America (0.8%). Drug use trends of Western Europe are largely stable but continue growing in several East and South-East European countries. Ecstasy use levels in North America reflect some 2.4 Million users.

The annual ecstasy prevalence rates in the Oceania region (3.2%) have generally begun to stabilize. Regardless, these are still considerably higher than in any other region. Ecstasy prevalence in Asia remains low (0.1%). However, Asia, notably East and South-East Asia, have become growing ecstasy markets over the last few years. In addition, some countries in South America (Argentina, Chile, Peru)have reported rising levels of ecstasy use.

Fig. 167: Global distribution of ecstasy use: 2006 (9 million users)



Sources: Annual Reports Questionnaire data, Government reports, reports of regional bodies, UNODC estimates.

#### Global ecstasy consumption has stabilized

With the massive increases in the 1990s, ecstasy use peaked at an estimated 9.7 million users in 2004. Data now suggest that ecstasy use has stabilized at the global level over the last few years. Stabilization is mainly due to a significant decline reported over the last few years from North America.

Table 15: Annual prevalence of ecstasy use: 2006 (or latest year available)

Region	Estimated number of users annually	In percent of population 15-64 years	Compared to Global Average
Europe	2,945,000	0.54	Above
West and Central Europe	2,624,000	0.82	Above
South-East Europe	204,000	0.24	Above
Eastern Europe	117,000	0.08	Below
Americas	3,094,000	0.53	Above
North America	2,367,000	0.81	Above
South Americas*	727,000	0.25	Above
Asia	2,103,000	0.08	Below
East and South East Asia	1,981,000	0.13	Below
All Other Asian Regions	122,000	0.01	Below
Oceania	706,000	3.21	Above
Africa	199,000	0.04	Below
Global	9,047,000	0.21	

<sup>\*</sup>Includes South and Central America, and the Caribbean. "Above" global average is defined as greater than 10% and "below" is less than 10% of the global average.

Sources: Annual Reports Questionnaire data, various Government reports, reports of regional Bodies, UNODC estimates

<sup>28</sup> Caveat: what is often sold as ecstasy is actually a combination of many substances, including methamphetamine. ONDCP, *National Drug Control Strategy, 2008 Annual Report*; Japan Ministry of Health and Welfare, Kanto Ecstasy Project, *Ecstasy in Japan (2003-2006)*.

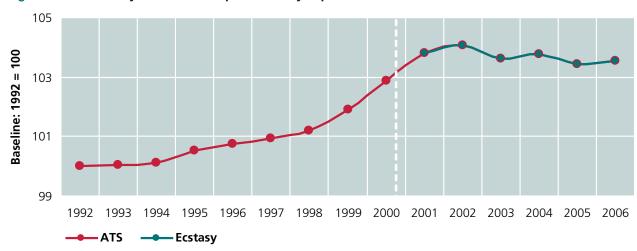


Fig. 168: ATS/Ecstasy use trends as perceived by experts<sup>29</sup>: 1992-2006

Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC's Drug Use Information Network for Asia and the Pacific (DAINAP), UNODC, Global Assessment Programme on Drug Use (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports and local studies.

Table 16: Experts perceptions of changing regional ecstasy use, by region: 2006

Region	Member State Experts Responding	Use Prob- lem Increased*	Percent Use Prob- lem Increased	Use Prob- lem Stable	Percent Use Prob- lem Stable	Use Prob- lem Decreased*	Percent Use Problem Decreased
Europe	27	7	26%	15	56%	5	19%
Americas	11	5	45%	6	55%	0	0%
Asia	13	4	31%	3	23%	6	46%
Oceania	1	0	0%	1	100%	0	0%
Africa	5	1	20%	4	80%	0	0%
Global	57	17	30%	29	51%	11	19%

<sup>\*</sup>Identifies increases/ decreases ranging from either some to strong, unweighted by user population.

Sources: UNODC, Annual Reports Questionnaire Data.

In 2006, 29 countries identified a stable ecstasy trend over 2005, 17 noted an increase, and 11 reported a decrease.<sup>30</sup>

The increases noted by experts were sub-regionally specific. For example, of the seven European States Mem-

bers that identified worsening conditions, five could be plotted in a trapezoid region from Albania, Bulgaria and the Republic of Moldova in the North, to Turkey and Cyprus in the South. All other Central and West European counties noted stability or decreases.<sup>31</sup> In the Americas, increases were specific only to South American countries: most increases were reported in the western and southern sub-regions of South American (i.e., Argentina, Chile, and Peru). However, experts reported no decreases in ecstasy use in the Americas for 2006. In Asia, 46% of the experts responding believe the ecstasy use problem has improved in the region along the China Sea. Improvements were noted by Japan, the Philippines, Hong Kong SAR, Indonesia, and Malaysia.<sup>32</sup>

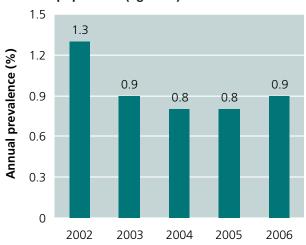
<sup>29</sup> Trends as reported by national experts in response to UNODC's Annual Reports Questionnaire. Points allocated for trend data: 'strong increase' 2; 'some increase': 1; stable: 0; 'some decline' -1; 'strong decline' -2. Reported drug use trends were weighted by the proportion of ecstasy users in a country expressed as a percentage of global amphetamine use. If all countries had reported 'some increase', the global trend line would have increased by one point each year and would have reached 113 by 2005. Ecstasy trend data were systematically collected only as of 2000. As there are indications from a number of countries that ecstasy trends in the 1990s showed similar growth rates as ATS in general, the latter trends are shown in the graph for the period 1992-1999 and are thus used as a proxy for the likely ecstasy trends.

<sup>30</sup> Increases and decreases were coded from strong increase/decrease or some increase/decrease, and represent the unweighted number of States Members responding.

<sup>31</sup> No regional patterns were identified with the European countries reporting use decreases.

<sup>32</sup> Note, in Patterns and Trends of Amphetamine-type Stimulants (ATS) and Other Drugs of Use in East Asia and the Pacific 2006, (UNODC, Regional Centre for East Asia and the Pacific June 2007), Japan

Fig. 169: USA: Ecstasy use among the general population (age 12+): 2002-2006



Source: SAMHSA, Office of Applied Studies, *National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.* 

Worsening use conditions were, however, reported for mainland China.

#### Youth drives consumption in North America

Although, according to household surveys, there has been a very slight increase in ecstasy use among the general population in 2006, long term trends are declining to stable in the USA. General population surveys in the USA found a decline in the use of ecstasy from 1.3% of the population (age 12 and above) in 2002 to 0.9% in 2006.

The annual prevalence of ecstasy use among high-school students of the province of Ontario, Canada, declined by around one third from 2001 and 2007. However, ecstasy use among USA high-school students in 2007 showed an increase in prevalence over 2005 estimates. The rates remain lower than the peak levels reported in 2001, and are still lower than in 1999.

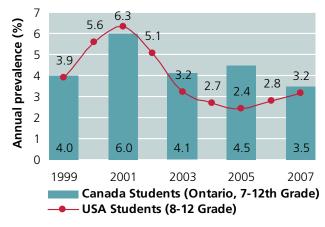
The increasing trend between 2005 and 2007 was driven in large part by increases in use amongst 10<sup>th</sup> and 12<sup>th</sup> grade students. Increased use in ecstasy among teens appears related to the declining perceptions of drug risk and attitudes of disapproval of its use, following many years in which the opposite trends were observed.

#### Possible shifts in use in Europe detected

European trends reflect an overall stabilization or decline in the traditional ecstasy markets of Western and Central Europe. The United Kingdom, for many year's

reported an increasing ecstasy use trends in 2006, counter to what is reported herein. Differences are related to timing of data and differences in key experts who report.

Fig. 170: USA and Canada (Ontario): Annual prevalence of ecstasy use among students: 1999-2007



Sources: CAMH, *Drug use among Ontario students, 1997-2007*, Toronto (2007) and NIDA, *Monitoring the future, overview of key findings in 2007*, Bethesda Maryland (April 2008).

Europe's largest ecstasy market, has seen notable decreases in the annual prevalence of the general population. As of 2007, England and Wales reported a decrease of 18% in prevalence from the peak in 2002.

Ecstasy rates are rising contrary to the stable trends in West and Central Europe, in South-East Europe as well in Eastern Europe (from far lower levels). With the exception of Croatia, all of the experts from the East and South-East European countries reporting to UNODC in

Fig. 171: England and Wales: Annual prevalence of ecstasy use: 1994-2007

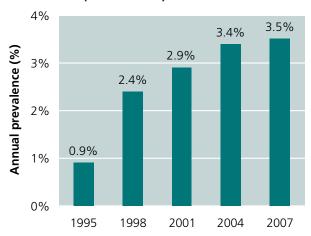


Source: Home Office, *Drug Misuse Declared: Findings from the* 2006/07 British Crime Survey, London (Oct. 2007).

2006, perceived rising levels of ecstasy use.

To declining use in Asia and Oceania stable

Fig. 172: Australia: Annual prevalence of ecstasy use (14 and older): 1995-2004



Source: Australian Institute for Health and Welfare (AIHW), 2007 National Drug Strategy - Household Survey 2007, Canberra (April 2007).

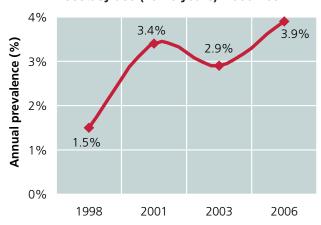
In 2006, six (46%) Asian countries reported a decline and an additional three reported a stabilization; just four reported an increase – including China. Only two years previously, 50% of Asian counties responding reported an increase and only two saw a decline in ecstasy use.

In Australia, ecstasy use rose only slightly in 2007, suggesting a stabilization following years of significant increases. According to household survey data, ecstasy use among the general population rose in Australia from 0.9% in 1995 to 3.4% in 2004 and only marginally to 3.5% in 2007.

Data collected through Australia's DUMA (Drug Use Monitoring in Australia) system, suggest that the upward trend stabilized in 2006.<sup>33</sup> The proportion of those arrested, testing positive for ecstasy in selected sites<sup>34</sup>, increased from 0.5% in 2000 to 2.5% in both 2005 and 2006.<sup>35</sup> This was generally in line with the household survey results.

New Zealand continues to show increased prevalence of ecstasy use among the general population. In 1998, household surveys found 1.5% annual prevalence of ecstasy. By 2006, the prevalence more than doubled to 3.9% for the general population aged 15-45 year old.

Fig. 173: New Zealand: Annual prevalence of ecstasy use (15-45 years): 1995-2004



Source: Centre for Social and Health Outcomes Research and Evaluation (SHORE), Trends in drug use in the population in New Zealand: Findings from national household drug surveying in 1998, 2001, 2003 and 2006 (March 2007).

#### Ecstasy use continues to increase in South America

Ecstasy use continued to increase in countries of Central America (Guatamala and El Salvador) and South America (Argentina, Chile, and Peru). Five countries in that region reported an increase, three saw a stabilization but not a single one reported a decline. Most of the ecstasy found in these markets continues to originate in Europe, though there have been reports of supply from Canada.

<sup>33</sup> This system foresees that arrestees in selected sites across the country are regularly tested (urine-analysis) for drug consumption within 48 hours after having entered custody.

<sup>34</sup> New South Wales (Bankstown and Parramatta); Queensland (South-port and Brisbane); South Australia (Elizabeth and Adelaide); Western Australia (Perth); Australia (unweighted average of results from all sites)

<sup>35</sup> Sources: Australian Institute of Criminology (AIC), Drug Use Monitoring in Australia (DUMA), 2006 Annual Report on Drug Use among Police Detainees, Canberra 2007, and preliminary DUMA data for 2007.

Sources: UNODC Annual Reports Questionnaires data; Government Reports, US Department of State; European Monitoring Centre for Drugs Addiction (EMCDDA); Drug Abuse Information Network for Asia and the Pacific (DAINAP); UNODC Global Assessment Programme on Drug Abuse (GAP), Inter-American Drug Abuse Control Commission (CICAD). Main manufacturing areas < 0.1% of population Data not available Level of abuse (Annual Prevalence) 0.1 - 0.3% of population 0.3 - 0.5% of population 0.5 - 1% of population > 1% of population

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

Use of ecstasy in 2006 (or latest year available)

Map 25:

Changes in the use of ecstasy (MDA, MDEA, MDMA), 2006 (or latest year available) Map 26:

