UNODC
United Nations Office on Drugs and Crime

AMPHETAMINES AND ECSTASY

2011 Global ATS Assessment

Global SMART Programme

PREFACE

Three years after the last global assessment of Amphetamine-Type Stimulants (ATS), the manufacture and trafficking of these drugs remains a serious and constantly evolving challenge. The *2011 Global ATS Assessment* shines a powerful light on ATS helping governments to better understand this important phenomenon.

Once viewed as purely a cottage industry, ATS manufacture and trafficking has undergone its own industrial revolution. After cannabis, ATS are the second most widely used drugs across the globe outstripping the use of heroin or cocaine. ATS are now manufactured and marketed with organized crime groups involved throughout the production and supply chain.

Until recently, the ATS trade was sometimes ignored in favour of the traditional focus on heroin and cocaine. But there is growing recognition that the expansion of the ATS trade and its high profits threaten security, health and the welfare of populations across the globe.

While seizures of heroin, cocaine and cannabis remained largely stable between 2005 and 2009, ATS seizures, excluding ecstasy, showed a clear increase over the same period. In South-East Asia, for example, the number of methamphetamine pills seized grew significantly: from 32 million in 2008, to 93 million in 2009 and 133 million in 2010.

Injecting ATS use is also growing and increasing the risk of blood borne diseases such as HIV/AIDS. In Thailand, injecting is the second most common delivery system for ATS, while in New Zealand it is the most commonly injected drug. Injecting use is also now commonplace in some countries in Europe.

In addition to amphetamines and ecstasy, established ATS markets have seen the emergence of so-called analogue substances falling outside of international control. Substances such as mephedrone or methylenedioxypyrovalerone (MDPV) are sold as 'bath salts' or 'plant food' and act as substitutes for illicit stimulant drugs such as cocaine or ecstasy.

ATS are attractive to millions of drug users in all regions of the world because they are affordable, convenient to the user and often associated with a modern and dynamic lifestyle. Their risks are often underestimated in public perception.

In terms of the overall number of ATS users in the last twelve months, this appears to have stabilised, but there were increases in some parts of the world where there were few problems with ATS.

Such developments make ATS tidal by nature; rising and falling as demand increases and decreases around the globe. This also explains why the Assessment shows regions suffering high-tides or low-tides in ATS terms with the transition often occurring in extremely short periods of time. Most importantly, the flow of ATS trafficking exploits vulnerable states, often weakened by instability and insecurity.

ATS manufacture has also expanded into new regions and there has been a diversification of the drug's precursor chemicals and manufacturing methods. Additional countries in South-East Asia now report ATS manufacture, as well as the growth of interregional trafficking in countries with no previous history of the drug.

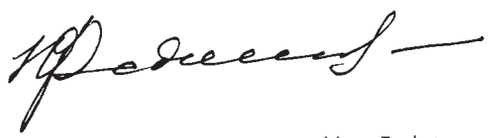
Methamphetamine may also be expanding into Europe with several countries reporting an increase in its use and production. Illicit laboratories have been seized in many European countries. There are also signs that the drug may be replacing amphetamine in some parts of Europe.

Once thought to be largely unaffected by the illicit manufacture and trafficking of ATS, West Africa has now been drawn into the trade's orbit. Methamphetamine manufacture has been reported from Nigeria. Since 2008, seizures in several East Asian countries —notably Japan and the Republic of Korea—appear to have their origin in West Africa. ATS manufacture is also increasingly reported from Central America and South America.

Data is fundamental to understanding the ebbs and flows of ATS. Using its Global Synthetics Monitoring: Analyses Reporting and Trends (SMART) programme, UNODC has a system for watching the drug's tidal movements in some regions of the world. Thanks to the programme, there is more knowledge and therefore a better understanding of the problem; in turn, this will assist Governments in the formulation of effective responses. However, gaps remain.

To deal with this challenge, UNODC is ensuring that the twin-related threats of drug trafficking and Transnational Organised Crime are mainstreamed throughout the United Nations system, mobilizing joint action and creating a vision for the effective delivery of solutions. These activities at the international level should also help stem the ATS tide.

Finally, I would like to thank the donors who supported this initiative and who made this Assessment possible. Further investment is necessary, if we are to build on this Assessment and gain a clearer appreciation of this global problem.



Yury Fedotov
Executive Director
United Nations Office on Drugs and Crime

EXECUTIVE SUMMARY

Amphetamine-type stimulants (ATS) are firmly established on global illicit drug markets and their use continues to exceed that of opiates or cocaine. While the number of people who have used ATS at least once in the last 12 months has stabilized at the global level, increases have occurred in parts of the world that previously had only very small ATS-related problems.

The widespread use of ATS is a result of their attractiveness to users: they seem to appeal to the needs of today's societies and have become part of what is perceived to be a modern and dynamic lifestyle; in some segments of society, they continue to be used frequently for occupational purposes. It is also a result of a market potential with continuously high profits and low risks that maintain their attractiveness to criminal groups around the world.

Since the last global ATS assessment was published in 2008,[1] there have been several new developments.

The report provides evidence for these developments since 2008, with a special focus on subregional patterns and trends, and highlights the challenges ahead.

EXPANSION OF ATS MANUFACTURE TO NEW REGIONS

ATS are attractive to clandestine operators because there are no geographical limitations to where they can be manufactured, there is a large variety of starting materials and manufacturing methods, and they offer considerable profits.

Amphetamines-group substances, (i.e. amphetamine and methamphetamine) account for most ATS manufactured worldwide, while the manufacture of ecstasy-group substances (i.e. MDMA, MDA, MDE) is significantly less widespread. On a global scale, after strong increases peaking in 2004, the number of illicit laboratories[2] declined until 2007 and increased in 2008 and 2009.

Over the past five years, ATS manufacture has spread to new regions which previously reported little or no manufacture. In South-East Asia, for example, Indonesia, Malaysia and, to a lesser extent, Cambodia used to be primarily transit countries for ATS but now report significant illicit ATS manufacture, primarily of methamphetamine and ecstasy. Indonesia has reported a considerable number of seizures of large sophisticated illicit laboratories manufacturing crystalline methamphetamine and ecstasy. In 2009, drug law enforcement authorities in Indonesia dismantled a total of 37 ATS manufacturing operations. The continuing high levels of ecstasy manufacture in Indonesia raise concern that the country could replace Europe as the source of MDMA in the region. Similar developments have occurred in Malaysia, which used to be a transit country for small amounts of crystalline methamphetamine, ecstasy and ketamine destined for Australia, China, Indonesia, Japan, Singapore and Thailand. In the meantime, Malaysia has become a significant methamphetamine manufacturing location and this demonstrates the speed with which shifts in patterns of clandestine manufacture, trafficking and use can occur. Since 2008, Malaysian authorities have reported the dismantling of more than 30 large and small-scale ATS manufacturing laboratories. In Cambodia, official reports of illicit ATS manufacture first emerged in 2007 when police dismantled a large-scale laboratory that was reported to have manufactured at least 1 mt of chloropseudoephedrine, an intermediate in the manufacture of methamphetamine. Illicit ATS manufacture in the country has since increased considerably. ATS manufacture or attempts to manufacture have also been reported from China (including Hong Kong SAR), Japan, Republic of Korea and Thailand.

Reports of ATS manufacture have also emerged from countries in Central America and South America. Six illicit ATS laboratories were reported seized in 2009. However, as ATS data from the region is in short supply, partly due to the traditional focus of drug control authorities on traditional drugs such as cocaine and cannabis, it is likely that the true situation is underreported. ATS manufacture has been reported from Argentina, Belize, Brazil, Guatemala, Nicaragua and Suriname.

1 Accessible at: http://www.unodc.org/documents/scientific/ATS/Global-ATS-Assessment-2008-Web.pdf

2 Includes laboratories of any size and state of operation, as well as waste dumpsites and chemical and glassware seizures ('warehouses').

Intrinsic characteristics of ATS contributing to their attractiveness vis-à-vis the traditional plant-based drugs heroin and cocaine:

On the demand side

- ATS are attractive because they are perceived as enhancing performance and communication and have come to embody a modern and fashionable lifestyle (the extent to which ATS are used for occupational or recreational purposes depends on the specific substance);
- ATS can be taken orally. In addition to being 'convenient' for the user, the use of pills also avoids injection or smoking and the dangers of social stigma associated with these administration routes;
- ATS are affordable (available on retail markets in single pill units);
- The recreational use of ATS is generally perceived as not being very harmful, and controllable; public health risks of ATS are frequently underestimated in public perception, as well as in the judicial and enforcement areas;

On the supply side

- ATS are attractive because of high profits: with little initial investment, hugely profitable quantities of drugs can be manufactured;
- ATS can be made readily from a variety of starting materials (precursors) using a variety of synthesis methods. When a traditional precursor becomes unavailable, the desired precursor may itself be synthesized from a pre-precursor chemical;
- ATS manufacture is not limited to certain geographic locations. It can take place anywhere, be easily camouflaged, and be relocated as enforcement pressure increases (e.g. makeshift laboratories set up to supply a single order and then dismantled to prevent detection);
- Because there are no geographical limitations, ATS laboratories can be located close to the areas of consumption, thus minimizing the risk of detection when trafficking end-products across international borders;
- Awareness of ATS end-products and/or their precursors is still limited in some parts of the world where other drugs prevail, thus minimizing the risk for illicit operators and trafficking groups;
- For operators of small-scale 'kitchen' laboratories (typically methamphetamine laboratories), ATS are attractive because manufacture does not usually require advanced knowledge of chemistry and can be accomplished by anyone from readily available chemicals.

(Information drawn partly from previous UNODC publications: *Understanding clandestine synthetic drugs (2001)* and *Ecstasy and amphetamines - Global survey 2003*)

For a long time, West Africa was one of the world's subregions which appeared to have been largely unaffected by the illicit manufacture, trafficking and use of ATS. However, since 2008, an increase in methamphetamine seizures in countries in East Asia (primarily Japan and Republic of Korea), has pointed to possible manufacture. In 2009, evidence of possible ATS manufacture was discovered in Guinea and in 2010, the United States Government indicted members of a large international cocaine trafficking organization, for, *inter alia*, the intent to establish an illicit laboratory in Liberia for large-scale manufacturing of methamphetamine. In June 2011, a methamphetamine laboratory was discovered in Nigeria, on the outskirts of Lagos. The laboratory had an estimated capacity of 160-200 kg of crystalline methamphetamine per week.

In the Near and Middle East/South-West Asia subregion, the Islamic Republic of Iran first reported illicit manufacture of methamphetamine in 2008. The substance is used locally but also subsequently trafficked mostly to markets in East and South-East Asia. Strong increases in amphetamine seizures, mostly in the form of *Captagon*,[3] in some countries, e.g. Jordan, the Syrian Arab Republic and the United Arab Emirates might also point to possible manufacturing activity in the region. Some law enforcement intelligence suggests that manufacture of amphetamine (*Captagon*) has shifted from South-East Europe to countries in the Near and Middle East. The decline in amphetamine seizures in Bulgaria and Turkey would support this development. Several countries in the region also have unusually high requirements for ATS precursors such as ephedrine, pseudoephedrine or P-2-P. However, aside from the Islamic Republic of Iran, no reports of illicit manufacture have been received from the region to date.

Due to stricter controls over precursor chemicals necessary to manufacture ATS (particularly ephedrine and pseudoephedrine in bulk form), traffickers have been seeking to obtain precursor chemicals in different physical forms to avoid detec-

3 Captagon was originally the trade name for fenetylline, a synthetic stimulant. Analysis of seized Captagon pills show that most contain amphetamine and other ingredients such as caffeine and theophylline.

tion. Ephedrine or pseudoephedrine are obtained in the form of pharmaceutical preparations (nasal decongestants) by diversion from local pharmacies and subsequently trafficked around the world. Traffickers have also resorted to alternative manufacturing methods, which typically involve either synthesizing necessary chemicals from others more easily available or bypassing their use entirely.

Ephedrine and pseudoephedrine used to be the preferred starting materials for the illicit manufacture of methamphetamine. However, with access to these substances curtailed by more effective controls, traffickers have resorted to using P-2-P as the starting material. In Australia, for example, an increase in the number of laboratories using P-2-P as a precursor in the synthesis of amphetamines was reported in 2009. Phenylacetic acid, an immediate precursor of P-2-P, has also been widely used but controls over the substance were strengthened in 2010.[4] In response, traffickers have been using the esters of phenylacetic acid which may be readily converted to phenylacetic acid. Methyl phenylacetate and ethyl phenylacetate have been seized in illicit ATS laboratories in Mexico. Another substitute substance, l-phenylacetylcarbinol (l-PAC), a precursor of ephedrine), was reported as having been found in illicit ATS manufacturing operations in Canada.

NEW ATS TRAFFICKING ROUTES IN ASIA

Over the last few years, the ATS market has moved from being a cottage-type industry (with many small-scale manufacturing operations) to more of a cocaine - or heroin -type market, characterized by a higher level of integration and involvement of organized crime groups that control the entire chain from the provision of precursors, to manufacture and trafficking of the end-product. Recent years have seen a greater diversification of ATS trafficking routes, particularly in South-East Asia, as well as the growth of inter-regional trafficking through countries previously not identified as being involved in ATS trafficking.

South-East Asia has experienced significant increases in the seizures of methamphetamine pills originating from Myanmar. The number of methamphetamine pills seized increased exponentially in 2009. More than 94 million pills were seized in the region in 2009, compared to 32 million pills in 2008. Seizures increased sharply again in 2010, reaching a total of over 133 million pills. Methamphetamine pills, which are manufactured in the Shan state of Myanmar, are trafficked along new routes to Thailand, China and Lao People's Democratic Republic. The Mekong River is now a key route, likely due to Thailand's stricter controls aimed at suppressing drug trafficking and preventing drug use. There are indications of new routes to the western part of Myanmar and also for onward trafficking to South Asia. Reports from India, Nepal and Bangladesh in 2010 and 2011 indicate that South Asia is also increasingly affected by the trafficking of methamphetamine pills.

Although most ATS are still manufactured within the regions in which they are used, there are indications of increasing inter-regional trafficking. North America (primarily Canada) and East and South-East Asia have emerged as sources of ATS for international markets. Since 2008, there has been an increase in methamphetamine trafficking cases to East Asia from West Africa. The number of seizures and quantities seized in East Asia found to have originated in West African countries such as Benin, Côte d'Ivoire, Cameroon, Ghana, Guinea, Senegal and Nigeria more than tripled in 2009. ATS, mostly methamphetamine, is trafficked by air from West Africa via couriers. Methamphetamine trafficked from the Islamic Republic of Iran to countries in Asia and Oceania (e.g. Azerbaijan, Japan, Malaysia, New Zealand, Thailand, Sri Lanka, Uzbekistan) is another development that has emerged since the publication of the 2008 Global ATS Assessment. Turkey reports that methamphetamine is smuggled from the Islamic Republic of Iran into Turkey, then trafficked by air to East and South-East Asia.

EMERGENCE OF METHAMPHETAMINE IN EUROPE

There are indications that methamphetamine markets may be expanding in Europe, as several countries have reported increased availability of the drug as well as an increase in use and more widespread reports of manufacture. Illicit methamphetamine laboratories have been seized for the first time in several European countries, including Austria, Belarus, Lithuania, Netherlands, Poland and Portugal. In Germany, more methamphetamine laboratories have been reported than amphetamine since 2008. Bulgaria reported the seizure of two mobile methamphetamine laboratories in 2010; the first such instance since 2001. In Europe, methamphetamine is primarily sold in the powder form.

There are signs that methamphetamine might be replacing amphetamine on the illicit market of some countries, for example, Sweden, Norway, Lithuania, Latvia and Estonia. Seizures of methamphetamine in Europe increased from 133 kg in 2005 to 697 kg in 2009, the latest year for which data are available.

4 In 8 March 2010, phenylacetic acid was transferred from Table II to Table I of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 – effective as of 17 January 2011 – in an attempt to prevent diversions of the substance into illicit ATS manufacture by increasing international controls and reporting. In April 2010, the Government of Mexico strengthened control of phenylacetic acid by transferring the substance and its salts and derivatives from Table II to Table I of the federal law on precursor control. Mexico also brought methylamine, hydriodic acid and red phosphorus under its national control. Those three substances are not under international control but are used in the illicit manufacture of ATS (INCB, 2011b).

INJECTING ATS USE IN SOME REGIONS

In absolute numbers, most ATS users continue to live in East and South-East Asia, the most populous subregion in the world. The injecting use of methamphetamine and its associated negative health consequences has been reported as a growing problem in East and South-East Asia. Lao People's Democratic Republic and Malaysia, for example, reported the injecting use of crystalline methamphetamine for the first time in 2008 and 2009, respectively. In Thailand, injecting is the second most common mode of administration for crystalline methamphetamine and the third most common mode of administration for methamphetamine pills. In New Zealand, methamphetamine is the most commonly injected drug and in Japan, injecting is the primary mode of administration for crystalline methamphetamine. High rates of amphetamines injection are also reported in the Czech Republic as well as Sweden, Estonia, Finland, Latvia, Lithuania, Georgia and Ukraine.

DECLINE AND POSSIBLE RESURGENCE OF ECSTASY AND EMERGENCE OF ANALOGUE SUBSTANCES IN ESTABLISHED ATS MARKETS

In 2008 and 2009, many European countries reported a declining availability of ecstasy, reflected by significant declines in ecstasy seizures as well as decreasing MDMA content detected through forensic analysis. In many cases, declines in supply and purity were accompanied by the emergence of analogue substances not under international control. These substances are marketed as so-called 'legal highs' and mimic the effects of taking illicit stimulant substances such as ecstasy or amphetamines. Widely used substances include BZP, mephedrone (4-methylmethcathinone (4-MMC)) and MDPV. The new unregulated synthetic compounds appeared first in established ATS markets, particularly in Europe, the United States, Canada, Australia and New Zealand but have meanwhile spread to other markets, e.g. Philippines.

Most recent reports point to the increasing purity of ecstasy and a possible resurgence of the drug on the illicit drug market. The Netherlands reported increasing purity of ecstasy in 2010, which was at 82%, compared to 70% in 2008 and 2009.

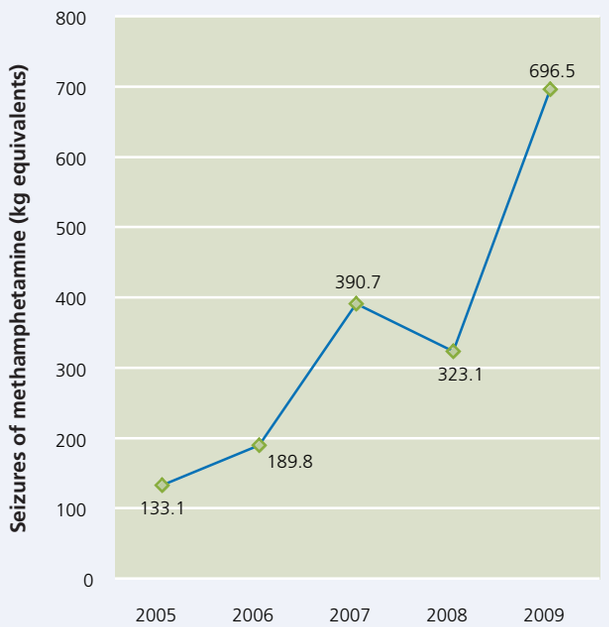
The resurgence of ecstasy could also have impacted on the availability of analogue substances such as mephedrone, which seemed to have disappeared from the illicit ecstasy market in the Netherlands during the first half of 2010. Ecstasy seizures

Greater Mekong Subregion: primary methamphetamine trafficking routes

Source: CCDAC, 2009
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

are at a five-year high in the USA, with a total of 3,411 kg reported seized in 2009, a 15% increase over 2008. Europol reports that it is likely that ecstasy manufacture and trafficking will begin to increase again in the coming years, which could affect the availability of unregulated substances on the ATS market.

Europe: seizures of methamphetamine 2005-2009



Source: UNODC ARQ/DELTA

DATA CONSTRAINTS

Analysing ATS markets and developing an evidence base upon which actions to counter the ATS problem can be built relies on accurate, comparable and timely data. UNODC analyses are based on data reported by Member States. However, there is irregular and/or incomplete reporting from several key regions, including South Asia, the Near and Middle East, parts of the Americas, Africa and most Pacific Island states and territories. As this report shows, these are often the very regions for which there are already indications of a future spread of the ATS problem.

Irregular or incomplete reporting from Member States is compounded by the varying quality of data provided. Specifically, and similar to other drugs, information about the extent of ATS use is the weakest indicator, as household and other surveys are lacking or are outdated in some countries in several of the most affected regions. Unfortunately, this happens to be the case in several populous countries (for example, China and India). The lack of systematic forensic information on the specific ATS substances, the actual precursors used and the size and capacity of clandestine laboratory operations is another limitation. Without these data, which provide critical evidence for both demand and supply side trends, specific regional shifts and emerging trends in ATS markets fail to be detected in a timely manner. Lack of these data, together with lack of price data, also affects estimates of wholesale and retail market values, mark-ups, and the profitability of the ATS market.

CONCLUSIONS

After cannabis, ATS are the second most widely used drugs. The number of ATS users has stabilized at high levels: UNODC estimates that the annual prevalence for amphetamines-group substances ranged between 0.3% and 1.3% in 2009, or some 14 to 57 million people aged 15-64. For the ecstasy group, global annual prevalence is estimated at between 0.2% and 0.6% of the population aged 15-64, or some 11 to 28 million past-year users. The scale of the problem is underreported, as some large countries such as China or India have never conducted a nationally representative survey to collect data on ATS use.

The report has shown that the ATS problem keeps spreading to new regions and countries not previously affected by the phenomenon. It is a dynamic problem characterized by rapid changes in regional trends in the levels of manufacture, trafficking and use. And it is a complex problem, with a great variety of substances sold in a number of different forms- as powders, pills or high purity crystals.

Due to the complexity and dynamic nature of the ATS phenomenon, the capacity to monitor the illicit manufacture, trafficking and use of ATS is a sizeable and often enormous challenge for many Governments. Attention to the ATS problem remains uneven across the world and there is a need to establish and further develop ways to assess the ATS situation in key regions. In the Near and Middle East, the region with the highest seizures of amphetamines, there is a strong need to broaden the information and knowledge base. Data on ATS use are almost non-existent and little is known about the origin of the pills which are seized in large quantities in most countries in the region. Africa, increasingly associated with trafficking of precursors and expanding ATS manufacturing capacity is another region which would benefit from investment into drug-related problems. Most Pacific Island States and territories lack infrastructure to collect and provide information on ATS yet are increasingly associated with trafficking of precursors and the transit of ATS.

The international community has recognized, most notably in the 1998 UNGASS *Action Plan on ATS* as well as in the 2008 Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy

to Counter the World Drug Problem, that ATS continue to pose a serious and constantly evolving challenge to international drug control efforts; a challenge which threatens the security, health and welfare of the population, especially youth, and has called on Member States to produce comprehensive national, regional and global responses.

To properly respond to the ATS problem, further investments in ATS information systems that provide accurate, timely and actionable information with detail at the subregional or national level, remain among the highest priorities for action.

Emerging ATS markets need to be monitored and addressed proactively before they are established and become a significant added burden to national health and justice systems. UNODC will continue to identify and communicate information on emerging trends to assist relevant Government authorities in their understanding of the ATS market.

Illicit ATS manufacture needs to be targeted at the origin by further increasing the effectiveness of precursor control. Such efforts should also include preventing the diversion of preparations containing ATS precursors and of derivatives specially designed to circumvent existing controls.

Finally, it is evident from this report that a worsening ATS problem is correlated with a lack of infrastructure and resources, and priority must therefore be given to those vulnerable countries and subregions where ATS are spreading most rapidly and where data are known to be lacking or insufficient.[5]

5 Vulnerability, in this regard, is a result of both limited awareness and lack of preparedness to address the ATS phenomenon adequately, and real limitations in human, financial and technological resources, i.e. the overburdening of national infrastructures and law enforcement, judicial, prison and health care resources.

EAST AND SOUTH-EAST ASIA

Regional Overview

East and South-East Asia, home to about a third of the global population, has one of the most established ATS markets in the world, primarily for methamphetamine. It is estimated that between 3.5 million to 20.9 million persons in the region have used ATS in the past year. All 11 countries covered in this chapter have reported ATS use, and in several of those, ATS have emerged as the primary drug threat in recent years, displacing traditionally used plant-based drugs such as heroin, opium and cannabis. The injecting use of methamphetamine and its associated negative health consequences is reported as a growing problem in the region.

Since 2006, the illicit manufacture of ATS has continued at high levels in the region. China, Myanmar and the Philippines remain the major manufacturing countries in East and South-East Asia. During the past five years significant numbers of illicit ATS manufacturing laboratories have also been reported from Indonesia, Malaysia and, to a lesser extent, Cambodia. Previously, these latter three countries had been primarily transit countries for ATS but have more recently also become key manufacturing centres. In addition, a small number of ATS-related laboratories and precursor chemical manufacturing sites have been reported from China, Hong Kong, China, Japan, Republic of Korea and Thailand. Overall, the number of illicit ATS laboratories dismantled between 2004 and 2009 increased significantly, from 13 to 458. The largest number of methamphetamine laboratories was reported in China, followed by Indonesia, Malaysia, Myanmar and the Philippines. Limited ecstasy manufacture takes place in the region, including in China, Indonesia and Malaysia.

Trafficking patterns in East and South-East Asia have also shifted during the past few years, particularly in the Greater Mekong subregion, which includes Cambodia, the Lao People's Democratic Republic, Myanmar, Thailand, Viet Nam and the bordering southern provinces of China. The 93.3 million methamphetamine pills seized in 2009 in China, Lao People's Democratic Republic, Myanmar and Thailand represent a three-fold increase in comparison with 2008 figures. In 2010, total seizures surpassed 133 million pills.

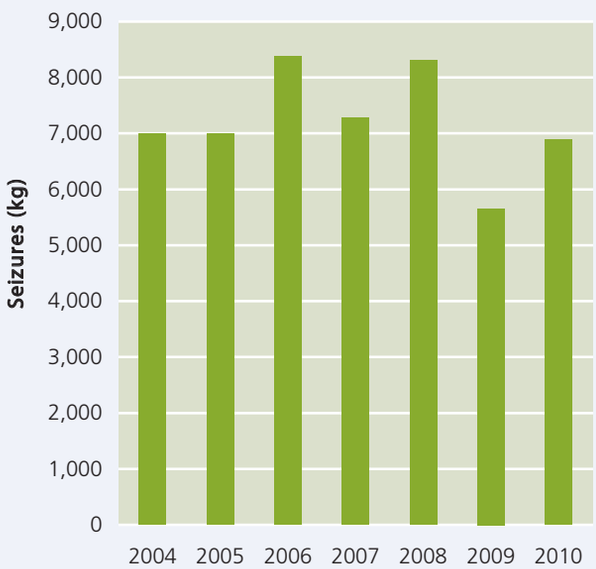
This increased trafficking of methamphetamine pills from Myanmar to markets in the region was reflected by the single seizure of nearly 22 million methamphetamine pills in February 2010 in Lao People's Democratic Republic, one of the largest seizures ever in the region. In addition, increasing amounts of chemicals and pharmaceutical preparations used for

East and South-East Asia: ATS laboratories, seizures, and annual prevalence rates (2004-2009)

MEASURE	DRUG GROUP	2005	2006	2007*	2008	2009
Laboratory (#)	Methamphetamine	49	66	98	11	16
	Other synthetic/combined stimulants	-	1	-	244	391
	Ecstasy-group substances	-	7	27	33	51
	Total	**49**	**77**	**125**	**288**	**458**
Seizures (kg)	Methamphetamine	12,171.9	12,118.4	10,867.3	11,578.6	15,810.4
	Amphetamine	5,262.2	76.5	128.6	72.2	-
	Non-specified amphetamines	1,388.9	2,339.1	687.4	1.7	175.0
	Ecstasy-group substances	1,137.8	449.1	1,725.0	814.3	496.5
	Total	**19,960.8**	**14,983.2**	**13,408.3**	**12,466.8**	**16,481.9**
Annual Prevalence (15-64)	*Amphetamines-group substances*	0.9%	0.9%	0.8%	0.8%	0.8%
	Ecstasy-group substances	0.1%	0.1%	0.3%	0.3%	0.3%

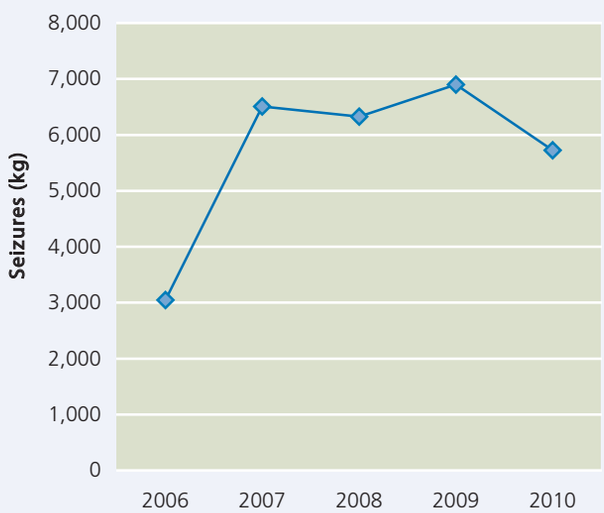
** From 2007 onwards, reported prevalence percentage is based on midpoint of range.*
- Not reported.
Source: UNODC ARQ/DELTA

Crystalline methamphetamine seizures in East and South-East Asia, 2004-2010



Source: DAINAP

Ketamine seizures in East and South-East Asia, 2006-2010



Source: DAINAP

Greater Mekong Subregion: primary methamphetamine trafficking routes

Source: CCDAC, 2009
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

the manufacture of methamphetamine are being diverted and trafficked through the Greater Mekong Subregion. Large volumes of pharmaceutical preparations containing ephedrine and pseudoephedrine have been reported in a number of countries in the region, most notably in Cambodia and Myanmar.

Since 2008, transnational organized criminal groups from the Islamic Republic of Iran and West Africa have been playing a greater role in ATS trafficking in East and South-East Asia. In 2009, 28 Iranians were arrested for attempting to smuggle methamphetamine in crystalline and liquid forms into Indonesia. Malaysia, the Philippines and Thailand have also reported increasing inflows of methamphetamine and other ATS into the country by Iranian drug trafficking organizations. Japan reported the arrest of more than 130 Iranians for methamphetamine-related offences over the past few years, including one case of suspected methamphetamine manufacture in June 2010. There are new indications that West African groups, which have hitherto trafficked primarily in cocaine and heroin, may be diversifying into the region's lucrative methamphetamine trade.

ATS use in East and South-East Asia continues to rise and by 2009 ATS ranked in the top three drugs of use in all countries in the region. Methamphetamine in pill form ranks as the top drug of use in the Lao People's Democratic Republic and Thailand, while methamphetamine in crystalline form ranks as the most commonly used drug in Brunei Darussalam, Cambodia, Japan, the Republic of Korea and the Philippines. The expansion of crystalline methamphetamine trafficking into the region has been accompanied by an upsurge in the use of the drug. Ecstasy use is reported in most countries, albeit at relatively low and declining levels.

This chapter focuses on the evolving ATS situation in East and South-East Asia since 2008. The coverage is divided into subregions, beginning with the Greater Mekong Subregion, followed by North-East Asia including Japan, the Republic of Korea and the Philippines, and the Southern Archipelago nations of Indonesia and Malaysia.

GREATER MEKONG SUBREGION

The Greater Mekong Subregion, which includes Cambodia, the Lao People's Democratic Republic, Myanmar, Thailand, Viet Nam and bordering provinces of southern China, continues to be heavily affected by the manufacture, trafficking and use of ATS, primarily methamphetamine, on a large scale. Whereas previously Myanmar, the bordering provinces of southern China and Thailand have been most impacted by ATS, the problem has also shifted over the past few years to Cambodia, the Lao People's Democratic Republic and Viet Nam. Emerging ATS trends include shifting patterns of drug trafficking routes throughout the region as well as increasing use of crystalline methamphetamine. While not yet widespread, the increasing injecting use of methamphetamine has been officially reported by Cambodia, the Lao People's Democratic Republic and Thailand. Meanwhile, legal and drug treatment systems continue to be dominated by methamphetamine cases.

Myanmar

Myanmar remains the major source of methamphetamine pills in the Greater Mekong Subregion. Most illicit methamphetamine manufacture takes place in the eastern part of Shan State. Forensic profiling of ATS in Thailand suggests there are at least 12 methamphetamine manufacturing sites in Myanmar. In addition, there are indications that at least 50 different organized criminal groups are involved in activities related to the trafficking of drugs from Myanmar.[1] The presence of different types of 'WY' methamphetamine pills in Kayah State and Kayin State, which are 30-50% cheaper in price compared to pills produced in Shan State, suggests possible local methamphetamine manufacture in those states.[2]

Methamphetamine pills manufactured in Shan State are trafficked along new trafficking routes that have emerged since 2003, directly to Thailand, China and the Lao People's Democratic Republic,[3] with the Mekong River now a key route.[4] There is also evidence of new trafficking routes to the western part of Myanmar and onward trafficking to South Asia.[5]

Between 1998 and 2010, only 39 manufacturing facilities were seized in Myanmar, mostly consisting of smaller tableting operations, with only two large-scale operations. This information is inconsistent with the vast number of pills seized

1 ONCB, 2009.

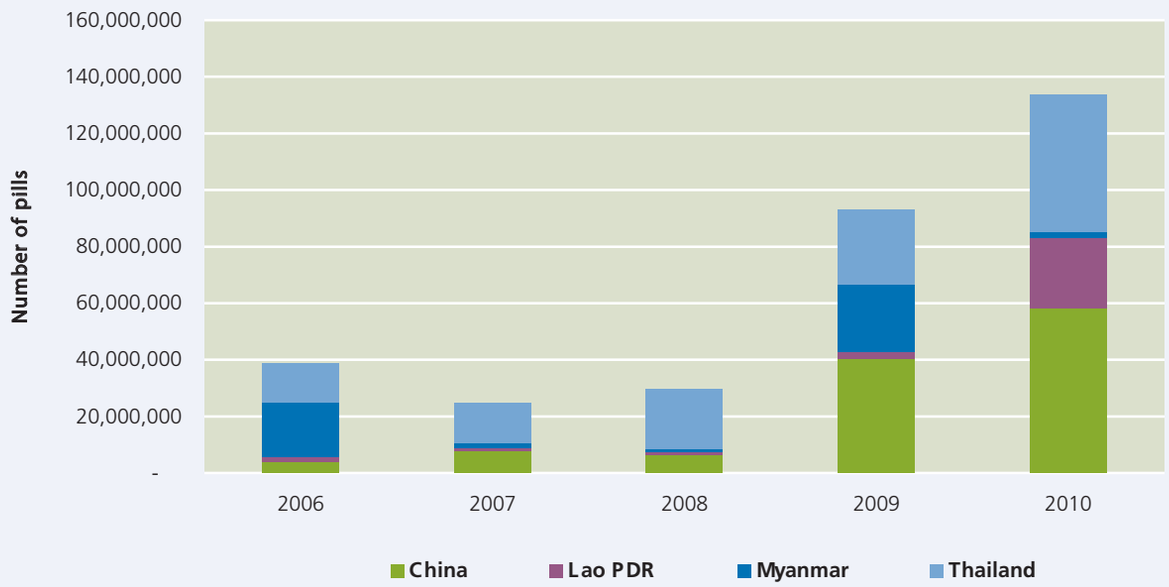
2 UNODC, 2010c.

3 ONCB, 2009.

4 This may be due to increased counter-narcotics efforts by the Government of Thailand, aimed at the suppression of drug trafficking and the prevention of drug use, which forced drug producers and traffickers to find new trafficking routes.

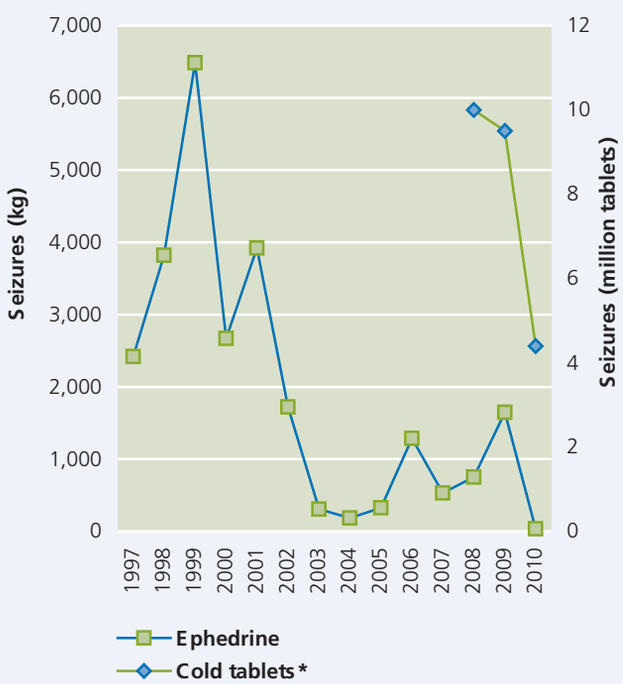
5 In 2009, a new trafficking route emerged, to Rakhine State from Yangon. Pills seized in Rakhine State in 2009 were likely for export rather than for local consumption (UNODC, 2010c).

Combined methamphetamine pill seizures in China, Lao People's Democratic Republic, Myanmar and Thailand



Source: DAINAP

Myanmar: seizures of ephedrine and pseudoephedrine, 1997-2010



*Cold tablets containing pseudoephedrine.
Source: CCDAC, 2009

Myanmar: domestic trafficking routes of methamphetamine pills

Source: CCDAC, 2009
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Myanmar: bottles of ephedrine-containing nasal drops seized in Special Region 1 (Kokang)

Source: CCDAC, 2009

throughout the region.[6] No reported crystalline methamphetamine manufacturing facilities have been seized in the country, but most crystalline methamphetamine seized in northern Thailand during the past three to four years originated from the Myanmar part of the Golden Triangle.[7]

Only two million methamphetamine pills were seized in 2010, compared to seizures of nearly 24 million pills in 2009. Seizures in 2008 and 2007 amounted to 1.1 million pills and 1.6 million pills, respectively.[8] The significant increase in 2009 was likely due to Government pressure on ceasefire groups, many of which manufacture ATS, to come under Government control. Although seizures of methamphetamine pills dropped sharply in 2010, seizures of crystalline methamphetamine during the year amounted to 226 kg, showing an upward trend for two successive years. The amount of crystalline methamphetamine seized in 2009 amounted to 124 kg compared with a total of only 20 kg seized between 2006 and 2008.[9]

Ephedrine and pseudoephedrine, the main methamphetamine precursors, are trafficked into the country from China, India and Thailand.[10] From 2003 to 2008, less than 1 mt of ephedrine was seized each year except for 2006 when 1.3 mt were seized. In 2009, ephedrine seizures jumped to 1.5 mt and then dropped again in 2010 to 34 kg.[11] At the same time, however, Myanmar has reported significant seizures of cold tablets containing pseudoephedrine, with 9.4 million such pills seized in 2009 and 4.5 million pills seized in 2010.[12] Increasing seizures of pharmaceutical preparations that contain ephedrine and pseudoephedrine may account for the low amount of bulk ephedrine seizures in recent years, as precursor traffickers have started to use different forms of precursor chemicals in order to avoid law enforcement detection and to circumvent strict international controls on precursor chemicals.

Most of the methamphetamine manufactured in Myanmar is trafficked to other countries, primarily in the Greater Mekong Subregion. However, domestic methamphetamine use is reportedly on the rise. Use of methamphetamine pills has increased every year since 2003.[13] Use has spread from the border areas near manufacturing centres to urban areas. There has been no reported domestic use of crystalline methamphetamine to date.[14]

Thailand

Thailand has one of the largest markets for methamphetamine in the region. While methamphetamine pill use remains the most common form of drug use in the country, the use of crystalline methamphetamine has become increasingly widespread.

Domestic manufacture of methamphetamine in Thailand is limited to small-scale manufacture. Over the past three years, law enforcement authorities have seized methamphetamine pill tableting operations located in the outskirts of Bangkok and in surrounding provinces as well as in the northern province of Chiang Rai, indicating that pill pressing operations are taking place in the area bordering Myanmar.[15] In July 2010, a Swedish national arrested in the eastern province of Rayong was charged with manufacturing crystalline methamphetamine in his home.[16]

Large quantities of cold tablets containing pseudoephedrine, sourced primarily from Thailand, Malaysia and the Republic of Korea, were seized in Thailand's border areas and at Suvarnnabhumi International Airport in 2009 and 2010.[17] Most

6 UNODC, 2010c.

7 This has been suggested by authorities from Myanmar and Thailand (ONCB, 2009).

8 UNODC, 2010c.

9 UNODC, 2010c.

10 ONCB, 2009 and CCDAC, 2010.

11 UNODC, 2010d. The increase in 2006 was due to greater law enforcement efforts (UNODC, 2008).

12 DAINAP; UNODC, 2010c.

13 UNODC, 2010d.

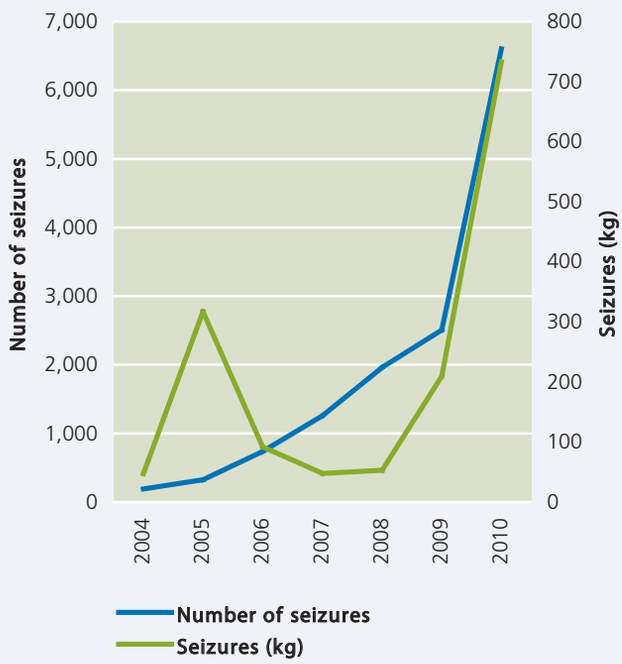
14 UNODC, 2010d.

15 ONCB, 2010a.

16 ONCB, 2011.

17 ONCB, 2010b.

Thailand: seizures of crystalline methamphetamine, 2004-2010



Source: DAINAP

of the tablets were believed to be destined for illicit ATS manufacturing facilities in Myanmar. Since 2008, approximately 35 million preparations and 192 kg of bulk pseudoephedrine have been seized in the country.[18] The increasing quantity of the seizures indicates traffickers are smuggling larger quantities of pharmaceutical preparations to production centres.

Although there is growing domestic methamphetamine manufacture in Thailand, the majority of the methamphetamine pills found in the country is sourced from Myanmar. Due to increased illicit manufacture in Myanmar, seizures of methamphetamine in both pill and crystalline forms in Thailand have increased each year since 2007. During that period, methamphetamine pill seizures rose from 14 million pills in 2007 to 22 million pills in 2008, 27 million pills in 2009 and nearly 50 million pills in 2010. At the same time, seizures of crystalline methamphetamine also increased dramatically, with 47 kg seized in 2007, 53 kg in 2008, 209 kg in 2009 and 773 kg in 2010.[19]

Most of the methamphetamine that enters Thailand is for domestic use but limited quantities are also transshipped to other markets, including Europe, North America[20] and the Middle East. Crystalline methamphetamine is trafficked into the country from Myanmar and Cambodia both for domestic use and for onward trafficking to Malaysia, the Philippines, Hong Kong, China and Japan.[21] As in several other countries in East and South-East Asia, increasing amounts of crystalline methamphetamine are trafficked into Thailand by couriers from the Islamic Republic of Iran. In 2009, eight Iranian drug traffickers were arrested with 27 kg of crystalline methamphetamine. From January to September 2010, 79 Iranian drug traffickers were arrested in Thailand with nearly 109 kg of the drug. Iranian couriers typically attempt to traffic methamphetamine in crystalline, liquid and powder form into the country via Suvarnnabhumi International Airport.[22]

Most ecstasy in Thailand is reportedly trafficked by air from the Netherlands.[23] In addition, criminal syndicates based in Malaysia and Singapore traffic ecstasy into Thailand by land and air.[24] Most ketamine is trafficked into Thailand across its borders with Cambodia and Malaysia. In 2010, police arrested seven Indian couriers and seized 150 kg of ketamine powder at Suvarnnabhumi International Airport.[25] Reported use of ecstasy and ketamine in Thailand, however, is declining.

The use of methamphetamine pills and crystalline methamphetamine has shown an upward trend since 2008. In 2010, more than 80% of all persons who received drug treatment in specialized treatment facilities and correctional institutions reported methamphetamine pills as the primary drug of use. Thailand is one of the few countries in the region that provides specialized treatment for ATS users.

18 ONCB, 2010b.
19 DAINAP; 2010, ONCB 2010b.
20 INCB, 2010a.
21 ONCB, 2010b.
22 ONCB, 2010b.
23 ONCB, 2010a.
24 ONCB, 2010b.
25 ONCB, 2010b.

Thailand: drug treatment admissions, 2010

DRUG TYPE	NEW ADMISSIONS			ALL ADMISSIONS		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Methamphetamine pills	73,530	6,940	80,470	89,822	8,225	98,047
Crystalline methamphetamine	939	691	1,630	1,214	805	2,019
Ecstasy-type (MDMA)	83	69	152	102	82	184
Cannabis	5,559	66	5,625	6,664	77	6,741
Cocaine	7	5	12	11	7	18
Heroin	500	18	518	1,276	62	1,338
Inhalants	3,064	88	3,152	4,037	115	4,152
Ketamine	3	5	8	6	5	11
Kratom	1,904	52	1,956	2,136	53	2,189
Opium	713	205	918	1,451	436	1,887
Total	**86,302**	**8,139**	**94,441**	**106,719**	**9,867**	**116,586**

Source: DAINAP

Thailand: drug treatment admissions, 2009

DRUG TYPE	NEW ADMISSIONS			ALL ADMISSIONS		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Methamphetamine pills	64,690	6,945	71,635	78,620	8,196	86,816
Crystalline methamphetamine	350	351	701	435	408	843
Ecstasy-type (MDMA)	155	96	251	181	103	284
Cannabis	6,610	89	6,699	7,794	104	7,898
Cocaine	10	2	12	15	4	19
Heroin	513	25	538	1,232	62	1,294
Inhalants	4,466	160	4,626	5,517	197	5,714
Ketamine	10	1	11	11	1	12
Kratom	1,385	35	1,420	1,527	34	1,561
Opium	795	261	1,056	1,482	485	1,967
Total	**78,984**	**7,965**	**86,949**	**96,814**	**9,594**	**106,408**

Source: DAINAP

Thailand: ATS and ketamine seizures, 2006-2010

DRUG TYPE (MEASUREMENT)	2006		2007		2008		2009		2010	
	No. of seizures	Quantity	No. of seizures	Quantity	No. of seizures	Quantity	No. of seizures	Quantity	No. of seizures	Quantity
Methamphetamine pills (pills)	36,252	13,820,000	73,014	14,340,000	113,877	22,115,911	105,916	26,640,206	125,195	48,587,522
Crystalline metham-phetamine (kg)	734	92.2	1,258	47.4	1,960	52.9	2,507	209	6,602	733.02
Ecstasy-type (MDMA) (pills)	300	26,656	295	315,444	460	486,533*	296	58,024	147	16,081
Ketamine (kg)	95	22.7	63	2.8	140	18.1	130	18.9	154	172.03

** 2008 pill seizures converted into kg equivalents at 1 pill = 300 mg.*
Source: DAINAP

Lao People's Democratic Republic

Drug control authorities in the Lao People's Democratic Republic have identified the rapid spread of ATS and other synthetic drugs as the country's primary drug threat. Lao People's Democratic Republic has not reported any illicit methamphetamine manufacture since 1998. Recent seizure data indicate that methamphetamine increasingly transits the country from Myanmar to Cambodia, Thailand and Viet Nam, particularly along the Mekong River and the country's rapidly improving road network.[26] In 2008, 157 seizures of methamphetamine (about 81% of all methamphetamine seizures) were made en route from the Lao People's Democratic Republic to Thailand.[27]

Prior to 2008, annual seizures of methamphetamine pills in the Lao People's Democratic Republic amounted to between 0.5 million and 2 million pills, except in 2005 when almost 4.7 million pills were seized. In line with the spike in methamphetamine pill seizures in other countries in the Greater Mekong Subregion, the Lao People's Democratic Republic reported a more than four-fold rise in pill seizures from 84 cases in 2007 to 194 cases in 2008 and 357 cases in 2009. In 2010, methamphetamine pill seizures increased significantly, due to a single seizure in February of 21.8 million pills believed to have originated from Myanmar, evidently en route to Thailand.[28] It was one of the largest methamphetamine pill seizures ever in the Greater Mekong Subregion. The total was nearly ten times higher than the 2.3 million methamphetamine pills seized in 2009.

In addition, there are indications that transnational organized drug trafficking groups are increasingly smuggling precursor chemicals used in the manufacture of ATS through the Lao People's Democratic Republic.[29] In August 2009, law enforcement authorities seized large quantities of cold remedies being trafficked to Myanmar from Viet Nam through Lao People's Democratic Republic, which were intended to provide pseudoephedrine for methamphetamine manufacture.

The spillover of methamphetamine from Myanmar has impacted drug use patterns in the Lao People's Democratic Republic which were previously dominated by opium use. In 2005, government authorities in the Lao People's Democratic Republic reported the escalation of methamphetamine use along trafficking routes adjacent to the Mekong River and identified methamphetamine pills as the primary drug of use in the country. In the same year, the Lao People's Democratic Republic recorded its first crystalline methamphetamine seizure, indicating that the supply of methamphetamine entering the country was diversifying. Injecting use of methamphetamine was reported for the first time in 2008.

ATS use is highest in urban areas and is increasing among young drug users. UNODC estimates that in 2008, an estimated 1.4% of the population aged 15-64 had used methamphetamine at least once in the previous year.[30] There is also increasing ATS use in some rural areas that formerly cultivated opium poppy.[31] Over the past five years, more than 80% of all drug-related arrests and the majority of drug treatment admissions have involved methamphetamine in pill form,[32] representing a considerable burden on the limited law enforcement, judicial, prison and health care resources of the Lao People's Democratic Republic.

Lao People's Democratic Republic: seizures of methamphetamine pills, 2006-2010

DRUG TYPE	MEASUREMENT	2006	2007	2008	2009	2010
Methamphetamine pills	No. of pills	1,755,989	1,272,815	1,227,205	2,335,330	24,530,177

Source: DAINAP

Number of patients at Somsanga Treatment and Rehabilitation Center, 2003-2009

DRUG TYPE	2003	2004	2005	2006	2007	2008	2009
Total no. of patients	1,714	2,658	1,376	1,177	1,894	1,682	1,964
Females	0	0	25	28	137	105	118

Source: LCDC, 2010b

26 LCDC, 2010a.
27 WCO, 2009.
28 LCDC, 2011.
29 INCB, 2011a.
30 UNODC, 2011a.
31 LCDC, 2010a.
32 DAINAP.

Cambodia

Cambodia has a significant and increasing problem with the illicit manufacture, trafficking and use of ATS. In addition, the country is being targeted by transnational drug trafficking organizations as a transit route for ATS and other drugs to other countries both in and outside the region.

Official reports of illicit ATS manufacture in Cambodia first emerged in 2007 when police dismantled a large-scale laboratory in Kompong Speu province that was reported to have manufactured at least 1 mt of chloropseudoephedrine, an intermediate in the manufacture of methamphetamine. Illicit ATS manufacture in the country has since increased considerably. In 2009, Cambodia reported the seizure of five laboratories and precursor manufacturing sites.[33]

Seizures of substantial quantities of precursor chemicals used for illicit ATS manufacture have also been reported in Cambodia in recent years. In 2009, Cambodian authorities seized 886 kg of preparations containing pseudoephedrine, 2,814 kg of ephedra grass, 13 kg of ephedra seeds as well as 1,373 kg of unknown liquids.[34] In the same year, Cambodia reported its first seizure of an extraction site for ephedrine, in the Kompong Cham province, which was utilizing ephedra grass suspected to have been trafficked from northern China.[35]

In August 2010, drug law enforcement authorities in Cambodia recorded the largest single seizure of smuggled pseudoephedrine to date in the country. About 12.9 million tablets were seized in Banteay Meanchey province near the Thai-Cambodia border. The seizure was carried out in cooperation with law enforcement officers from the Republic of Korea and Thailand.[36] Significant seizures of pseudoephedrine tablets were also reported in December 2010 in Phnom Penh.

Safrole-rich oils (SRO),[37] have various licit commercial uses in the perfume and pesticide industry, but can be diverted for the illicit manufacture of ecstasy. SRO continue to be illicitly harvested and sold, although at far lower levels than in previous years.

While there is some indication that the domestic manufacture of ATS is increasing, most ATS found in Cambodia is trafficked from neighbouring countries. Previously, ATS entered Cambodia primarily through its border with Thailand, whereas over the past few years most ATS seized in Cambodia have been smuggled across its border with the Lao People's Democratic Republic, in particular through the remote northern provinces along the Mekong River. A large amount of the ATS and other drugs trafficked into Cambodia is destined for illicit markets in other countries.[38] Some of the methamphetamine trafficked into the country is re-tableted and sold on the streets as low purity methamphetamine pills.[39]

Since 2007, methamphetamine pill seizures in the country have declined, which may be an indication of increased domestic illicit ATS manufacture and a reduced need for the trafficking of the drugs into the country. In 2010, methamphetamine pill seizures in Cambodia totaled 82,746, nearly 40% lower than the 2009 total and nearly 30% lower than the 2008 total. At the same time, however, the 10kg of crystalline methamphetamine seized in the country in 2010 is more than twice the amount seized in 2009 (4.6kg) and represents the highest amount seized in the country since 2007.

Although the domestic use of methamphetamine in Cambodia remains high, government experts have reported two successive years of declining use. In 2009, users of methamphetamine in both pill and crystalline form accounted for about 70% of all illicit drug users. Cambodian authorities report that use of crystalline methamphetamine has overtaken the use of methamphetamine pills.[40] Preliminary data reported by Cambodia in 2011, however, indicates a possible spike in methamphetamine pill seizures.

33 NACD, 2009.

34 NACD, 2010a.

35 NACD, 2009.

36 NACD, 2010b; UNODC, 2010b.

37 Safrole is a substance listed in Table 1 of the United Nations Convention Against Illicit Trafficking in Narcotic Drugs and Psychotropic Substances of 1988, as well as in Cambodia's Drug Law. The International Narcotics Control Board defines safrole-rich oils as being 'any mixtures or natural products containing safrole present in such a way that it can be used or recovered by readily applicable means' (INCB, 2009b).

38 NACD, 2011.

39 NACD, 2010c.

40 DAINAP.

Cambodia: seizures of selected drugs, 2005-2010

DRUG TYPE	MEASUREMENT	2005	2006	2007	2008	2009	2010
Methamphetamine pills	No. of pills	351,651	428,553	420,287	116,772	137,249	82,746
Crystalline methamphetamine	kg	2	16.2	6.75	1.9*	4.6	9.9
Ecstasy-type (MDMA)	No. of pills	–	–	300	33	3,352	1,056
Ketamine	kg	–	–	–	495**	1.14	0.001

** Plus 15 'small packs' undefined weight. ** Small bottles, undefined weight.*
Source: DAINAP

Viet Nam

Viet Nam is becoming the next big market for methamphetamine manufactured in the region, partly due to its large, increasingly affluent and urban population. The use of heroin and opium continue to dominate in the country. The use of methamphetamine pills and ecstasy has increased every year since 2003.[41] Crystalline methamphetamine use, which was first reported in Viet Nam in 2008,[42] has since risen significantly, especially among young persons in urban areas.[43]

Methamphetamine manufacture in Viet Nam appears minimal, with the first manufacturing laboratory reported dismantled in June 2005.[44] However, the full extent of ATS manufacture and the trading of precursor chemicals in Viet Nam is difficult to assess due to the limited information available. The large number of chemical wholesalers, suppliers and manufacturers in Viet Nam provides an increasing opportunity for the diversion of precursor chemicals into illicit ATS manufacture. Some of the pseudoephedrine seized in Australia in 2008-2009 was reportedly shipped from Viet Nam.[45]

Seizures of ATS are not uniformly reported in Viet Nam, but the limited data show that in the first six months of 2010, a total of 22 kg and more than 83,000 pills of methamphetamine pills were seized.[46] Most of the methamphetamine found in Viet Nam and smaller amounts of heroin are sourced from Myanmar and are trafficked into the country by land from Cambodia.[47]

During the past few years, an increasing amount of synthetic drugs as well as hallucinogens which are not controlled by the Government of Viet Nam have been seized by police in major provinces and cities. The use of TFMPP (Trifluoromethylpennylpiperazine), BZP and 'Sea Water' (Gamma Hydroxybutyric Acid, or GHB), widespread in entertainment venues, has been identified by Vietnamese authorities as a new trend and several reports state that these drugs are available for sale on the Internet.[48]

China

ATS use in China had become increasingly widespread by the end of the 1990s and by the early 2000s ATS use had overtaken opium as the second most commonly used drug in the country. Ketamine use has also become increasingly prevalent since it was first reported in 2004, as the country is a major producer of the substance. The lack of nationally representative drug use prevalence estimates, however, remains a major challenge to the adequate monitoring of ATS trends in the country.

Most of the methamphetamine used in China is manufactured domestically. However, compared to other countries in the Greater Mekong Subregion, China experienced a surge in methamphetamine pills trafficked into the country from Myanmar in 2009 and 2010,[49] a trend reflecting the substantial and increasing seizures of methamphetamine pills in Yunnan province bordering Myanmar.[50] In 2009, more than 40 million methamphetamine pills[51] were seized in China, which

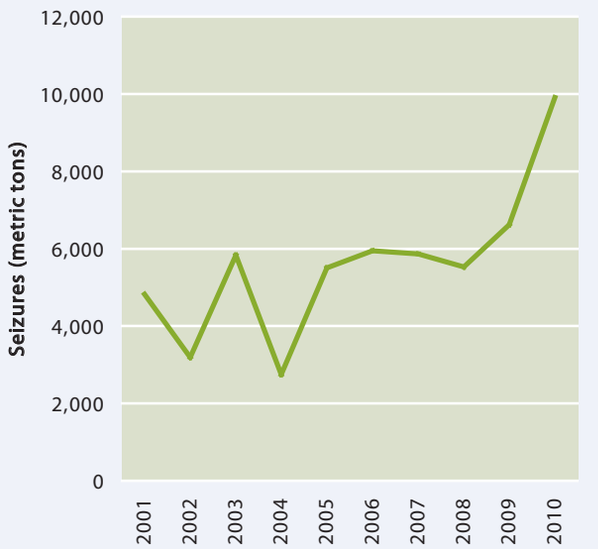
41 DAINAP.
42 DAINAP.
43 SODC, 2010a.
44 SODC, 2008.
45 INCB, 2011a.
46 DAINAP.
47 SODC, 2009.
48 SODC, 2010b.
49 NNCC, 2010a.
50 Methamphetamine seizures in the province rose from 2.2 mt in 2008 to 3.2 mt in 2009 and 4.6 mt in 2010 (NNCC, 2010b; NNCC, 2011a).
51 Figures for 'China' do not include additional significant seizures made in the Special Administrative Regions (SAR) of Hong Kong and Macao, and Taiwan Province.

accounted for roughly 40% of all the methamphetamine pills seized in the East and South-East Asia region during the year, as compared to only approximately 6 million pills seized in China in 2008. In 2010, the total number of methamphetamine pills seized amounted to over 58.4 million.

Despite the impact of the spillover of Myanmar-manufactured methamphetamine pills in 2009, aggregate seizures of methamphetamine (in both pill and crystalline forms) during the year (6.6 mt) remained within the range of the 6.1 mt and 6.8 mt seized each year during the 2005-2009 period. In 2010, aggregate seizures of methamphtamine increased to 9.9 mt, with large amounts seized in Yunnan province; a reflection of the diversification of ATS trafficking routes in the Greater Mekong Subregion.[52]

Seizures of illicit ATS manufacturing facilities in China have increased significantly since 2005 and a considerable number of ketamine manufacturing facilities have also been dismantled. China reports the highest seizures of ketamine in the world, having reported annual seizures of about 5.4 mt for the past four years. The 5.3 mt of ketamine seized in China in 2008 accounted for nearly two-thirds of the 8.2 mt seized globally during the year.[53]

China: ATS seizures, 2001-2010



Source: DAINAP

ATS manufacture in China is becoming more sophisticated and increasingly diversified with the synthesis of precursors and the different stages of manufacturing being divided across provinces, including Taiwan Province of China.[54] In 2010, a total of 378 illicit ATS manufacturing laboratories were detected[55] compared to 391 facilities in 2009[56] and 244 facilities in 2008.[57] Prior to 2006, most illicit ATS manufacturing activity in China occurred in the south-eastern provinces of Guangdong and Fujian. However, increased law enforcement efforts appear to have shifted some manufacture to central China. In 2009, most of the clandestine manufacturing laboratories seized were in Guangdong, Sichuan, Henan, Hunan and Hubei provinces and were manufacturing crystalline methamphetamine and ketamine.[58]

Significant seizures of precursor chemicals continued to be reported in China. In 2010, 234 such cases were reported, including the seizure of 869 mt of controlled precursor chemicals and 49 mt of uncontrolled chemicals. In 2009, China reported 1,366 violations of precursor chemical control and the seizure of approximately 3.2 mt of precursors, including the seizure of nearly 9 mt of hydroxylamine hydrochloride, a precursor used in the manufacture of ketamine.[59]

Hong Kong (Special Administrative Region of China)

Most clandestine ATS manufacture in Hong Kong, China has consisted of ecstasy-type tableting and repackaging operations.[60] However, Hong Kong police reported the seizure of two small-scale clandestine crystalline methamphetamine manufacturing facilities in 2009 and the dismantling of a larger crystalline methamphetamine manufacturing facility located in an industrial estate in 2010.[61]

Ecstasy use has declined in recent years, possibly due to the growing popularity of the significantly less expensive ketamine. Much of the ecstasy seized in Hong Kong, China contains substances other than MDMA, such as ketamine and methamphetamine and, more recently, trifluoromethylphenylpiperazine (TFMPP), which is currently not controlled in Hong Kong, China.[62]

52 NNCC, 2011b.
53 UNODC, 2010e.
54 NNCC, 2009.
55 NNCC, 2011b.
56 It has not been established whether all 391 illicit laboratories were related to ATS (NNCC, 2010b).
57 UNODC, 2010e.
58 NNCC, 2011a.
59 NNCC, 2010c.
60 HKNB, 2010.
61 HKNB, 2011.
62 HKNB, 2011.

Ketamine users account for nearly 38% of all drug users in Hong Kong, China. Among drug users below the age of 21 an estimated 84% have used ketamine.[63] Previously, most of the ketamine trafficked into Hong Kong, China was trafficked in small quantities across the land boundary with mainland China, by a large number of traffickers. By 2005, large, multi-kilo quantities of ketamine originating in India and transported into Hong Kong, China via South-East Asia were also detected. There are indications that criminal syndicates are increasingly procuring the precursor chemical hydroxylamine hydrochloride to manufacture ketamine in illicit laboratories rather than diverting the drug from the legitimate market.[64]

The use of methamphetamine, primarily in crystalline form, emerged in Hong Kong, China in the early 1990s, and has stabilized in recent years at about 10% of the drug user population and approximately 16-21% of reported drug users under the age of 21.[65] Seizures of crystalline methamphetamine have remained stable since 2007 at about 43 kg per year. Most of the crystalline methamphetamine trafficked into Hong Kong, China is trafficked from mainland China; some of it destined for overseas markets such as Australia.[66]

Taiwan Province of China

Taiwan Province of China is a source of methamphetamine manufacture and remains a source for pharmaceutical preparations containing pseudoephedrine that are destined for countries in Central America and Oceania.

In 2010, Taiwan Province of China reported its largest ever ketamine seizure of 850 kg which originated from mainland China, as well as an additional 480 kg of ketamine which was detected on board a fishing vessel. In November 2010, authorities seized 60 kg of amphetamine originating from mainland China with a street value of USD1.6 million at Taipei Port. During the year, authorities also reported the seizure of about 20 kg of pseudoephedrine pills and a manufacturing laboratory in Kaohsiung with a manufacturing capacity of approximately 1.5 mt of methamphetamine.[67]

Taiwan Province of China also seizes significant and increasing quantities of ketamine and methamphetamine that originate from mainland China. India also remains a source of diverted ketamine trafficked into Taiwan Province of China.

NORTH-EAST ASIA

The major drug control problem in North-East Asia continues to be the use of ATS, primarily crystalline methamphetamine. ATS manufacture remains limited in Japan and the Republic of Korea, although significant quantities of crystalline methamphetamine are manufactured in the Philippines.

Japan

In Japan, crystalline methamphetamine continues to be the main drug of use. The country first experienced widespread methamphetamine use in the 1950s, and again in the mid-1980s and late 1990s.[68] Manufacture of methamphetamine in Japan is extremely rare, but in June 2010, two Iranian nationals were arrested on suspicion of manufacturing methamphetamine in their home. In addition, Japan has reported several incidents involving the diversion of pharmaceuticals containing ATS precursor chemicals since 2003, with 66 such cases being reported in 2008. In 2010, authorities reported several incidents of domestic methamphetamine manufacture and seizures of liquid methamphetamine at various international airports in Japan,[69] pointing to the possible risk of expanding domestic illicit manufacture, especially as methamphetamine prices in the country are increasing.[70]

Traditionally, China has been the primary source of methamphetamine seized in Japan, but in recent years methamphetamine from other countries around the world has been trafficked into the country.[71] Much of the methamphetamine found in Japan is smuggled from overseas by international and Japanese drug trafficking organizations. More than half of the arrests related to methamphetamine during the past five years have involved local 'Boryokudan' ('Yakuza') organ-

63 HKSB, 2011.
64 HKNB, 2010.
65 HKNB, 2010.
66 HKNB, 2010.
67 INCSR, 2011.
68 JNPA, 2011.
69 INCSR, 2011.
70 JMHLW, 2009.
71 JNPA, 2010a; JNPA, 2010b.

Japan: ATS-related arrests, 2006-2010

DRUG TYPE	2006	2007	2008	2009	2010
Methamphetamine	11,606	12,009	11,025	11,655	11,999
Ecstasy-type (MDMA)	370	296	281	107	62

Source: JNPA, 2011

Japan: ATS seizures, 2006-2010

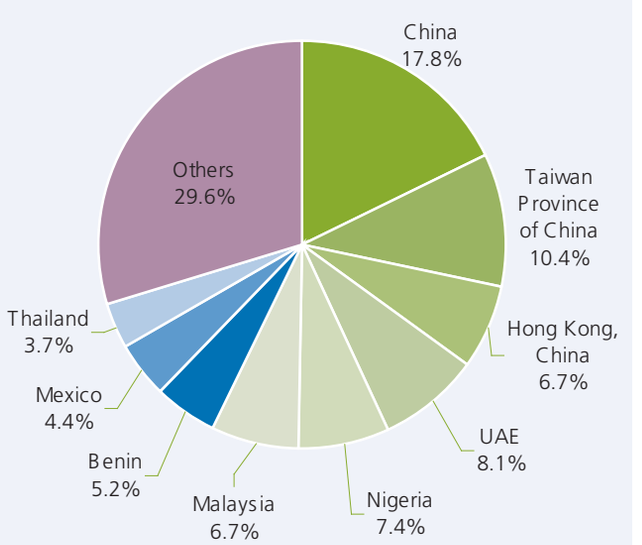
DRUG TYPE	MEASUREMENT	2006	2007	2008	2009	2010
Crystalline methamphetamine	Kg	126.8	339.3	397.5	356.3*	302.3
Ecstasy-type (MDMA) and other synthetic drugs	Pills	186,226	1,233,883	217,172	85,688	17,326

** UNODC, 2010d.*
Source: JNPA, 2011

ized crime members. As with many countries in Asia, many nationals from the Islamic Republic of Iran have been arrested in Japan in methamphetamine-related cases in the past few years, including 85 in 2009 and 50 in 2010.[72] Much of the methamphetamine trafficked into Japan consists of small packages carried by couriers who enter the country by air and sea. However, sophisticated trafficking networks are playing an increasing role in methamphetamine trafficking in Japan, which is reflected by the number of large seizures recorded in the country. Since 2008, Japan has reported an average of 352 kg of methamphetamine seized each year, slightly less than the amounts seized in the early part of the decade.[73]

Crystalline methamphetamine use in Japan has remained generally stable during most of the past decade. Injecting is the primary mode of administration for crystalline methamphetamine in the country. Methamphetamine pill use has not been reported in Japan. Use of ecstasy pills is more common but declining numbers of arrests and declining seizures of the drug over the past several years suggest that use has gone down.[74] During the past decade about 80% of all drug-related arrests in the country have involved methamphetamine. In addition, more than 50% of all drug-related treatment demand from clients in psychiatric treatment facilities was for ATS use (last reported in 2005).[75]

Sources of methamphetamine trafficking to Japan, 2010



Source: JNPA, 2011

Republic of Korea

Crystalline methamphetamine, commonly known locally as 'philopon' or 'hiroppon' in the Republic of Korea, remains the most commonly used drug and has accounted for about 60-70% of all drug-related arrests in the country since 2008. However, reported use and availability of the drug have since declined, which is also reflected by the continually declining seizures, from approximately 26 kg in 2008 to 11 kg in 2010, and steadily rising prices for the drug.[76] ATS users have accounted for more than 95% of all persons admitted to drug treatment in the country since 2008.

72 JNPA, 2011.
73 JNPA, 2011.
74 JNPA, 2010b.
75 JMHLW, 2007.
76 SPO, 2011.

Most of the crystalline methamphetamine found in the Republic of Korea has come from mainland China but increasing amounts of the drug are entering the country from Cambodia, Malaysia, South Africa and the Taiwan Province of China.[77] In recent years, several nationals of China and Thailand have been arrested in the Republic of Korea for trafficking methamphetamine.[78]

Limited illicit methamphetamine manufacture has been reported in the Republic of Korea since the late 1990s. However, in 2010 authorities reported the seizure of four small-scale 'kitchen-type' clandestine methamphetamine manufacturing operations.[79] In 2008 and 2009 there were no reported seizures of precursor chemicals in the Republic of Korea, although it has been indicated as one of the source countries for ephedrine trafficked to Australia.[80] In August 2010, approximately 12.8 million pharmaceutical preparations containing pseudoephedrine, originating from the Republic of Korea, were seized in Cambodia after having been trafficked across the land border with Thailand. However, it is unclear whether these products were intended for direct use or for use in illicit methamphetamine manufacture.[81]

Republic of Korea: ATS-related arrests, 2006-2010

DRUG TYPE	2006	2007	2008	2009	2010
ATS	6,006	8,521	7,457	7,965	6,771
Total	**7,709**	**10,649**	**9,898**	**11,875**	**9,732**

Source: SPO, 2011

Republic of Korea: ATS seizures, 2006-2010

DRUG TYPE	MEASUREMENT	2006	2007	2008	2009	2010
Crystalline methamphetamine	kg	21.5	23.7	25.5	15.2	11.8
Methamphetamine pills	No. of pills	0	196	151	1	5
Ecstasy -type (MDMA)	No. of pills	356	18,323	714	894	486

Source: SPO, 2011

Retail prices of crystalline methamphetamine in the Republic of Korea, 2006-2010

DRUG TYPE	MEASUREMENT	2006	2007	2008	2009	2010
Crystalline methamphetamine	Per gram	860	770	536	664	693

Source: SPO, 2011

Philippines

Crystalline methamphetamine ('shabu') has been the most commonly used drug in the Philippines for the past two decades and significant illicit methamphetamine manufacture and trafficking continue to occur. In 2009, crystalline methamphetamine users accounted for 62% of all drug users in the country and, since 2004, they have accounted for almost 63% of persons receiving drug treatment. Since 2008, about two-thirds of all drug-related arrests in the country have been related to crystalline methamphetamine. There is no reported use of methamphetamine pills in the Philippines.

In major cities the use of ecstasy is becoming increasingly popular among young nightclub goers. Ecstasy use, however, remains limited due to the high price and low availability. The use of synthetic substances, such as Benzylpiperazine (BZP), or 'mimic ecstasy', has also been noted.[82]

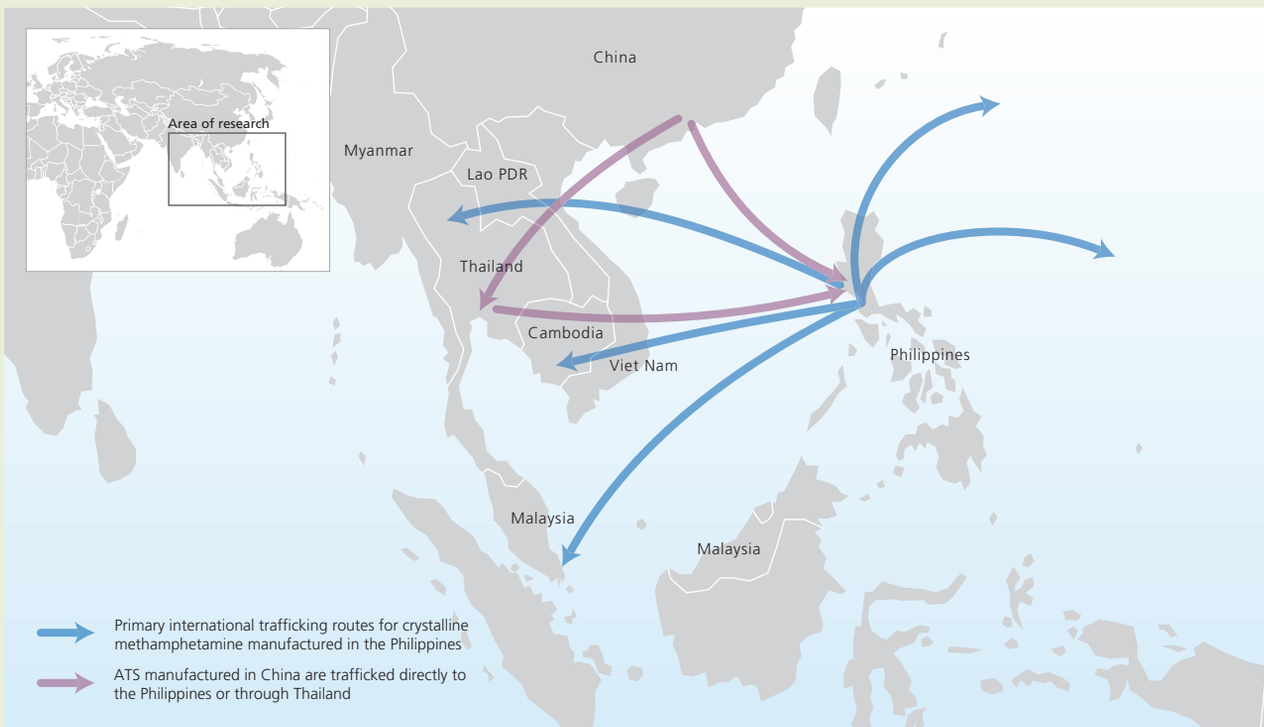
Profile of drug users in the Philippines, 2010

- poly-drug users
- more than six years duration of taking drugs
- 57.23% single
- 33.92% unemployed
- majority of the patients were only able to finish high school
- male to female ratio 9:1
- 20 to 29 years age bracket

Source: PDEA, 2011

77 SPO, 2010.
78 SPO, 2009.
79 SPO, 2011.
80 INCB, 2010a.
81 UNODC, 2010b.
82 PDEA, 2010.

Primary ATS trafficking routes for the Philippines

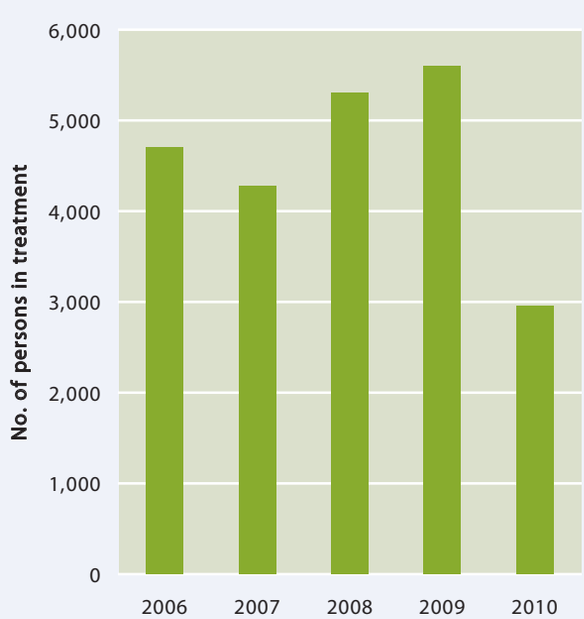


Source: PDEA, 2010
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Lines represent origin and intended destination, not necessarily the exact route used, and may include completed or stopped trafficking attempts.

Illicit crystalline methamphetamine manufacture in the Philippines was first reported in 1996, and in 1997, the first industrial-scale clandestine manufacturing facility was dismantled. From 2002 to 2010, a total of 72 clandestine crystalline methamphetamine laboratories were dismantled by drug law enforcement authorities.[83] Over the past few years, methamphetamine manufacture has shifted from large and medium-sized facilities to smaller 'kitchen type' laboratories in metropolitan areas and has been characterized by the manufacture of increasingly higher purity methamphetamine. Overall methamphetamine seizures have declined sharply in the Philippines since 2008, from 845 kg to 149 kg in 2009 and 64 kg in 2010.[84]

Domestically manufactured methamphetamine is also trafficked to countries in the region such as Cambodia, Indonesia and Thailand as well as to countries outside the region. The Philippines Drug Enforcement Agency reports that nine transnational criminal groups and 85 local groups are involved in drug manufacturing and trafficking in the country. [85] Methamphetamine is also trafficked into the country from China, primarily by maritime vessels.[86]

Philippines: rehabilitation centre admissions, 2006-2010



Source: PDEA, 2011

83 PDEA, 2011.
84 DAINAP.
85 PDEA, 2010.
86 PDEA, 2009.

SOUTHERN ARCHIPELAGO

As key transit countries for methamphetamine trafficking, both Indonesia and Malaysia have recently experienced increasing problems with the manufacture and use of ATS drugs, particularly methamphetamine in crystalline form.

Malaysia

Previously, Malaysia was a key transit country for small amounts of crystalline methamphetamine, ecstasy and ketamine en route to consumers in Australia, China, Indonesia, Japan, Singapore and Thailand, due to the high prices of these drugs in the aforementioned countries.[87] Over the past five years, Malaysia has also become a significant methamphetamine manufacturing location, demonstrating the speed with which shifts in patterns of clandestine manufacture, trafficking and use can occur.

Since 2008, authorities have reported the dismantling of more than 30 large and small-scale ATS manufacturing laboratories. In 2009, authorities seized 11 such facilities, primarily located in Kuala Lumpur and southern Malaysia, as well as a large quantity of precursor chemicals, including 80 kg of ephedrine and 80 kg of pseudoephedrine. In 2010, Malaysia reported the seizure of six large methamphetamine manufacturing laboratories, one large ecstasy manufacturing facility and one large ketamine producing operation.[88]

The country is also being targeted by Iranian drug trafficking organizations. In 2009 and 2010, more than 150 Iranian nationals were arrested for attempting to smuggle crystalline methamphetamine into Malaysia.[89] Myanmar is the primary source of methamphetamine pills trafficked into Malaysia and is also a source of some crystalline methamphetamine found in the country. Ecstasy is generally smuggled into the country from the Netherlands,[90] although seizures of the drug have declined sharply since 2008.

Ketamine is smuggled into Malaysia (mainly by Indian nationals) from Chennai, India, via air and sea routes.[91] Ketamine seizures doubled each year between 2007 and 2009, when nearly 1.1 mt of the substance were seized. In 2010, ketamine seizures dropped to 334 kg.

In 2008, crystalline methamphetamine seizures in Malaysia increased ten-fold from the previous year to 679 kg, and increased by another 70% in 2009 to 1,160 kg, due to a single seizure of 972 kg of crystalline methamphetamine in May 2009. Crystalline methamphetamine seizures dropped to 887 kg in 2010, but still represented the second highest seizure total ever reported in the country.

ATS use has increased considerably in Malaysia in the past few years. In 2010, an estimated 36% of all drug users in the country used ATS, compared with 18% in 2009 and 8% in 2008.[92] Injecting use of crystalline methamphetamine was reported for the first time in Malaysia in 2009.

Indonesia

Similar to Malaysia, Indonesia was formerly a transit country for ATS which has gone on to develop significant problems with ATS manufacture and use. By 2010, crystalline methamphetamine surpassed cannabis as the primary drug of use in the country.

For the past six years, Indonesia has reported a considerable number of seizures of large sophisticated illicit laboratories manufacturing crystalline methamphetamine and ecstasy. In 2009, drug law enforcement authorities in Indonesia dismantled a total of 37 ATS manufacturing operations, the highest figure reported to date. The seized facilities included 12 small-scale 'kitchen type' laboratories in private residences, suggesting that some ATS manufacturers are reducing the size of their facilities to avoid detection by the law.[93] Of the 26 illicit ATS manufacturing facilities dismantled in 2010, nine were small-scale crystalline methamphetamine manufacturing operations and 12 were ecstasy methamphetamine operations. An additional three ecstasy tableting facilities were also seized during the year.[94] The continuing high level of ecstasy manufacture in Indonesia raises concern that the country could replace Europe as the principal source of MDMA in the region.

87 RMP, 2010a.
88 DAINAP.
89 RMP, 2010b.
90 RMP, 2010a.
91 RMP, 2010a.
92 RMP, 2010c.
93 BNN, 2010.
94 DAINAP.

Although the illicit manufacture of large quantities of ATS has partially eliminated the need for the trafficking of ATS into the country, a significant amount of crystalline methamphetamine seized in Indonesia in 2009 was reported as having been smuggled into the country from the Islamic Republic of Iran by Iranian couriers, as well as from China. During the year, more than 25 Iranian couriers were arrested for methamphetamine smuggling at international airports in Indonesia. Authorities in Indonesia also report drug trafficking activity by West African criminal syndicates.[95]

ATS seizures in Indonesia have fluctuated in recent years but have shown an overall decreasing trend. Seizures of crystalline methamphetamine in 2008 totaled 710 kg but dropped to 238 kg in 2009 and 354 kg in 2010. Similarly, ecstasy seizures in 2009 and 2010 were approximately two-thirds below the amounts seized in 2007 and 2008 when over one million pills were seized in each year.

SOUTH ASIA

South Asia is located at the crossroads of drug supply between the sources in South-East Asia (formerly known as the 'Golden Triangle') and West Asia. Traditionally, the subregion has been affected by the illicit manufacture, trafficking and use of drugs, mostly opiates. Over the past few years, however, South Asia has become an area for illicit ATS manufacture and ATS trafficking. The fact that India has one of the largest chemical industries in the world and Bangladesh has a growing chemical industry has made South Asian countries increasingly vulnerable to potential exploitation by criminal organizations.

South Asia has witnessed several types of illicit ATS manufacture, ranging from small-scale 'kitchen-type' laboratories to larger scale manufacturing facilities. In addition, criminal organizations have engaged in the extraction of ephedrine or pseudoephedrine from pharmaceutical preparations or have developed new techniques for the illicit chemical synthesis of ephedrine. There has also been an increase of ketamine trafficking to neighbouring East and South-East Asia and outside Asia.

South Asia is also a transit region for the ATS trafficked from neighbouring South-East Asia. Trafficking of methamphetamine pills from Myanmar into India, Nepal and Bangladesh is on the rise.

India

India has one of the largest chemical industries in the world and is one of the major exporters of ephedrine and pseudoephedrine, the chemicals frequently used in the illicit manufacture of methamphetamine. The first known illicit ATS laboratory was detected and dismantled in Kolkata in May 2003. In 2004, a laboratory was seized in Hyderabad (south-eastern India), and another laboratory was seized in Gurgaon (northern India) in 2006. Several additional facilities or attempts to establish facilities for the illicit manufacture of ATS, mostly methamphetamine, were uncovered by law enforcement agencies between 2004 and 2010.

In 2007, an illicit laboratory for the manufacture of methamphetamine and the extraction of precursors from pharmaceutical preparations was discovered in Mumbai. This discovery highlights the fact that traffickers have resorted to diverting pharmaceutical preparations to circumvent stricter controls over precursor chemicals in bulk form. This trend has continued and India reported seizures of 1.2 mt of ephedrine preparations to the International Narcotics Control Board in 2009. In addition, criminal organizations have also started to manufacture precursor chemicals illicitly as indicated by the discovery of a clandestine ephedrine laboratory in the northwest of India in 2009.

In 2010, two clandestine methamphetamine laboratories and two ephedrine laboratories were discovered, and large quantities of methamphetamine and its precursors ephedrine and pseudoephedrine were seized on the premises.[96]

Traditionally, ATS precursors were trafficked from India to Myanmar, but recently, precursors from India in bulk or in the form of pharmaceutical preparations have been seized in various regions, particularly in Central America, North America and Africa. Along with China, India is the most frequently mentioned source country of seized illicit shipments of ephedrine and pseudoephedrine.

ATS are routinely seized in India. Seizures of methamphetamine and amphetamine pills are predominantly made in the northeast of the country bordering Myanmar, which is also the source of these products. Methamphetamine powder, on the other hand, is primarily manufactured in India.

India has also become a significant source for ketamine, a hallucinogenic substance not under international control. Ketamine is manufactured legally in India. In recent years, ketamine of Indian origin has been smuggled into countries in

95 BNN, 2009.

96 India, MOHA, 2011.

East and South-East Asia where, it is often sold as ecstasy or mixed with methamphetamine as an adulterant. Seizures of ketamine increased from 60 kg in 2005 to more than 1 mt in 2009.[97] Most seizures of ketamine have been made in the south of India.

The prevalence of use of amphetamine-type stimulants in a country home to a significant part of the world's population is not known. The last household survey on drug use was carried out in 2000-2001 but ATS-related specific questions were not included. Anecdotal reports, however, suggest that ATS use is on the rise.

Bangladesh

Bangladesh borders India, which is a significant manufacturer of ATS precursors and Myanmar, a major source of methamphetamine pills. In addition, Bangladesh has a fairly large and growing chemical and pharmaceutical industry and over the past few years has emerged as a source for ATS precursors, mainly in the form of pharmaceutical preparations, which have been trafficked to destinations in Central America and the Caribbean. Several large seizures of pseudoephedrine preparations were reported in 2009 from the Dominican Republic (409,200 pills), Guatemala (700,000 pills) and Honduras (over two million pills).

ATS use has reportedly become widespread in urban areas of Bangladesh, particularly in the capital Dhaka. Methamphetamine pills are the most commonly used synthetic drug and there are signs that use of methamphetamine pills is replacing the use of codeine-based cough syrups. No representative household drug use survey has been undertaken in Bangladesh.

Nepal

No illicit ATS manufacture has been reported from Nepal. A seizure of 800 grams of methamphetamine at Kathmandu international airport, involving an Iranian national was reported in 2008. This could suggest that Nepal may be increasingly used as a transit point for ATS trafficking to destinations in South and East Asia. There was also one arrest in 2009 and one in 2010 involving Iranian-manufactured crystalline methamphetamine. Nepal does not produce precursors, but the pharmaceutical industry is developing fast and the absence of legislative controls on precursor chemicals increases the country's vulnerability to traffickers.

CENTRAL ASIA AND COUNTRIES OF THE CAUCASUS

The amount of information available from the Central Asian countries of the Caucasus related to ATS is sparse, but Government reports suggest that ATS expansion may be occurring, albeit from very low levels. The subregion has experienced some small-scale illicit manufacture of methcathinone, which was made from the naturally occurring ephedra plant. Georgia reported its first methamphetamine seizure in 2006 (2.42 kg), while Kazakhstan reported a seizure of 3.6 kg of ecstasy in 2005 and, most recently, a small seizure (0.03 kg) of amphetamine in 2009. Armenia and Kyrgyzstan also reported small seizures (less than one kg) of methamphetamine in 2009.

A 2009 survey of adolescents carried out in Tbilisi, Georgia, reported a 2% lifetime prevalence of ATS and noted that ecstasy was the second most available drug to young people, after cannabis. Illicit manufacture of methamphetamine and methcathinone from over-the-counter preparations containing ephedrine, pseudoephedrine and phenylpropanolamine has been observed. Methamphetamine is injected. In 2008, an increase was noted in the number of patients attending addiction clinics whose principal drug was methamphetamine or methcathinone.[98]

97 Directorate of Revenue Intelligence and Narcotics Control Board, India.

98 Source: Javakhishvili, et al., 2011.

OCEANIA

Oceania could be characterized as a region of a large maritime area, with enormous differences in the size, population and capacity of countries. Around three quarters of people in the region live either in Australia or New Zealand. This means that whatever occurs in these ATS markets accounts for the overall regional trend. The interpretation of the ATS situation in the Pacific island states and territories remains difficult due to the lack of ATS data.

The region's proximity to Asia and its chemical industry has been widely abused by criminal groups to obtain the necessary precursors for the manufacture of ATS. For the last few years, the primary embarkation points for seized precursors have been China and Thailand.

Methamphetamine in this region is largely manufactured for domestic consumption. Trafficking of methamphetamine as a final product has decreased over the years. On the other hand, ecstasy is trafficked into the region from other countries such as Canada. Some ecstasy is still manufactured locally but the purity has dropped over the past few years due to the shortage of the necessary precursors. Other synthetic substances like mephedrone, BZP or 4-MEC are often used.

After a strong increase in the number of dismantled laboratories in 2005 and seizures in 2007, figures remained stable. However, 2009 data show a significant increase in the number of dismantled laboratories. The increase of dismantled laboratories does not correspond with the level of ATS seizures which has remained at relatively low levels since 2007.

Australia and New Zealand have been characterized by fairly high levels of ATS use. The following is a summary of the main trends over the 2005-2009/10 period in Australia and New Zealand, supplemented with available information about the ATS situation in Pacific Island states and territories.

Oceania: ATS laboratories, seizures, and annual prevalence rates (2005-2009)

MEASURE	DRUG GROUP	2005	2006	2007*	2008	2009
Laboratory (#)	Methamphetamine	204	211	190	393	134
	Amphetamine	-	-	-	-	-
	Other synthetic/combined stimulants	370	355	328	-	297
	Ecstasy-group substances	10	7	19	11	20
	Total	**584**	**573**	**537**	**404**	**451**
Seizure (kg)	Methamphetamine	131.7	216.4	173.7	47.5	170.8
	Amphetamine	167.1	30.1	23.17	1	57
	Non-specified amphetamines	39	1,506.3	0.9	263.7	25.4
	Ecstasy-group substances	1,446.7	540.5	4,665.6	58.4	63.5
	Total	**1,784.5**	**2,293.3**	**4,863.3**	**370.6**	**316.7**
Annual Prevalence (15-64)	Amphetamines-group substances	2.9%	2.1%	2.4%	2.4%	2.4%
	Ecstasy-group substances	2.9%	3.2%	3.8%	3.8%	3.8%

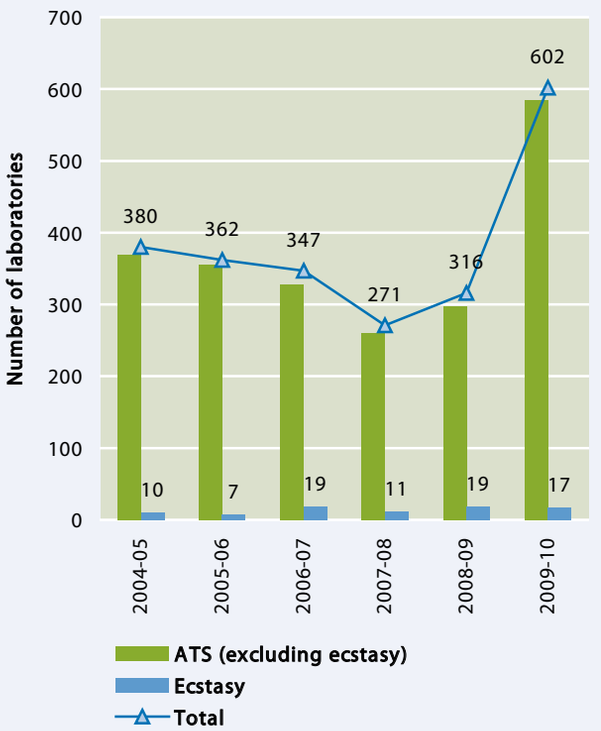
** From 2007 onwards, reported prevalence percentage is based on midpoint of range.*
- Not reported.
Source: UNODC ARQ/DELTA

Australia

The illicit ATS market in Australia consists of almost exclusively domestically manufactured methamphetamine and ecstasy, most of which is trafficked into Australia from overseas. Some amphetamine is also being manufactured.

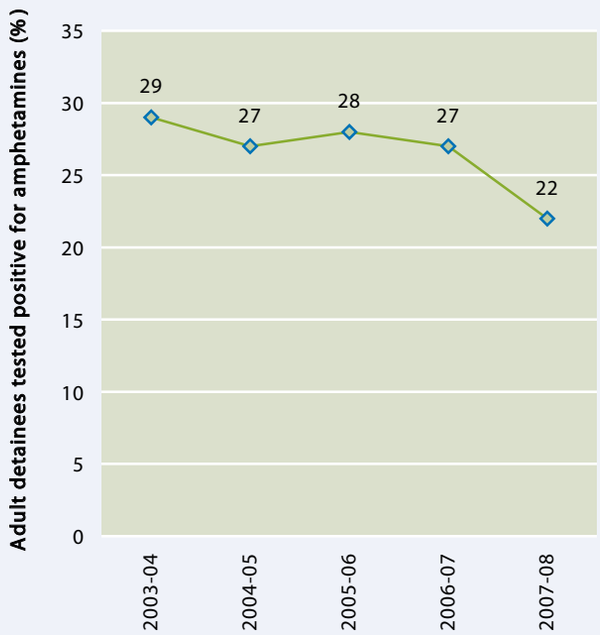
In 2009-2010, a total of 602 laboratories were seized in Australia, the highest number of seizures since 2004-2005, when 380 laboratories were reported dismantled. Most seized laboratories (251 out of 602) were reported from Queensland. Increases were also recorded in Victoria. While there were no detections in 2008-2009, in 2009-2010, 101 laboratories were seized.

Australia: number of dismantled ATS laboratories



Source: ACC, 2011
Note: Data are based on financial year (1 July-30 June).

Australia: adult detainees who tested positive for amphetamines (%), 2003-2008



Source: UNODC ARQ/DELTA
Note: Data are based on financial year (1 July-30 June).

The number of extraction laboratories for ephedrine and pseudoephedrine increased from 38 in 2008-2009 to 44 in 2009-2010.

The most common method of manufacture detected in ATS clandestine laboratories in Australia is the hypophosphorous method, followed by the Birch method, the red phosphorous method and the P-2-P method. With the exception of the P-2-P method, all other methods experienced a substantial increase. The number of seized laboratories using the red phosphorus method more than doubled, from 16 in 2008–09 to 51 in 2009–10.

The number of ecstasy laboratories decreased from 19 in 2008–09 to 17 in 2009–10. By far, the most laboratories are reported from New South Wales (12), followed by Queensland (3) and South Australia (2).

Australian law enforcement authorities also seized manufacturing equipment, notably pill presses. On 1 March 2010, a new regulation on the prohibition of importation of pill presses came into force and a total of 57 pill presses were seized in 2009–10, compared to 26 in 2008–09. Most pill presses were seized in New South Wales (30).

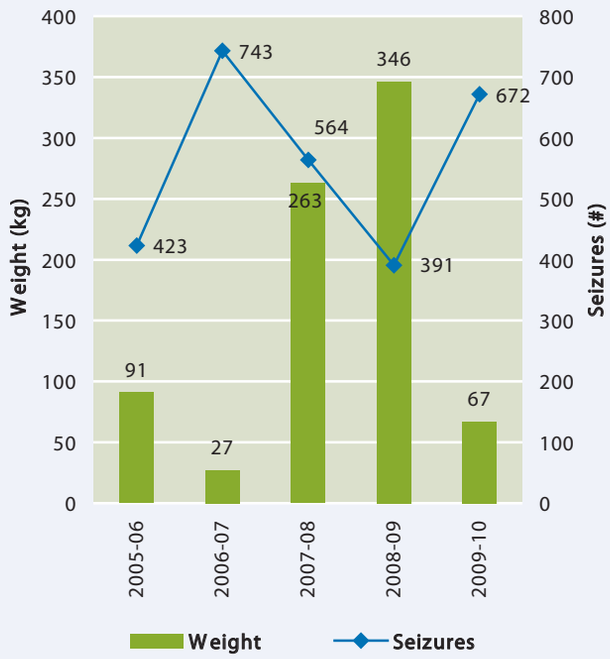
The number of ATS arrests decreased by 15% nationally, from 16,000 in 2008-09 to 14,000 in 2009–10 but still remain historically high. Compared to 2005–06, arrests are 40% higher. User offences accounted for 71% of the total ATS arrests in 2009–10. The percentage of detainees testing positive for amphetamines has been decreasing since 2006. In 2008, it was lower than at any point in time since 2000.

The number of ATS (excluding ecstasy) seizures increased by 71% in 2009–10, from 391 in 2008–09 to 672. The highest number of seizures reported in the last five years was 743 in 2006–07.

At 67kg, seizures of amphetamines declined significantly in 2009-2010, compared to 2008-2009 when 346 kg were seized. Of the 67 kg of total amphetamines seized, slightly more than half (35.8 kg) was in the form of crystalline meth-amphetamine. In 2009-2010, most of the seized amphetamines shipments came from Spain. South Africa was another important point of embarkation, accounting for 28% of seizures totalling more than 500 grams. China, including Hong Kong, was another embarkation point.

Ecstasy seizures have hit a five-year low in Australia, in terms of both seizures and weight. About 6 kg of ecstasy were detected at the Australian border in 2009-2010, half the amount seized in 2008-2009 (12 kg). It should be noted that all

Australia: ATS seizures (excluding ecstasy) by the Australian Customs Border and Protection Service, 2005-2010



Source: Australian Customs Border and Protection Service, 2010; Australian Customs Border and Protection Service, 2008
Note: Data are based on financial year (1 July-30 June).

Australia: total weight and number of seizures of crystalline methamphetamine detected by the Australian Customs Border and Protection Service, 2005-2010

Source: Australian Customs Border and Protection Service, 2010; Australian Customs Border and Protection Service, 2008
Note: Data are based on financial year (1 July-30 June).

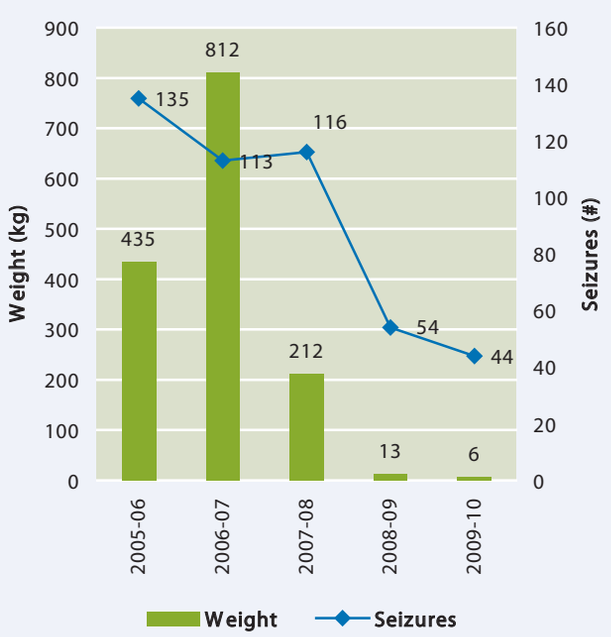
individual seizures of ecstasy made at the Australian border in 2009-2010 were below 1 kg. In terms of weight, parcel post accounted for about half of ecstasy seizures. Canada was a prominent embarkation country for ecstasy in terms of both weight and number.

Seizures of precursors (ephedrine, ephedra, P-2-P, phenylacetic Acid, phenylpropanolamine/norephedrine and pseudoephedrine) used in illicit ATS manufacture have shown a marked decline. In 2009-2010, only 562 kg were seized, compared to 2,097 kg in 2008-2009. During the last decade, 2008-2009 saw the highest amounts of precursors seized, with more than 50% of seizures being GHB precursors.

According to the National Drug Strategy Household Survey 2007, 20 to 29 year olds have consistently reported the highest proportion of amphetamine-group users in the population since 1998. Lifetime prevalence in this age group was 16% (470,000), last 12 months 7.3%, and 3.5% in the last month (2007 data).[1] Methamphetamine powder use in the age group of 14 years and older in the last 12 months decreased by 0.9% to 2.3% in 2007 compared to 3.2% in 2004. The use of ecstasy in the same age group in the last 12 months increased by 0.1% to 3.5% (608,400) and reached an all time high.

In a 2010 national study of regular drug users, the proportion of 80%, 78% and 82% respondents described meth-

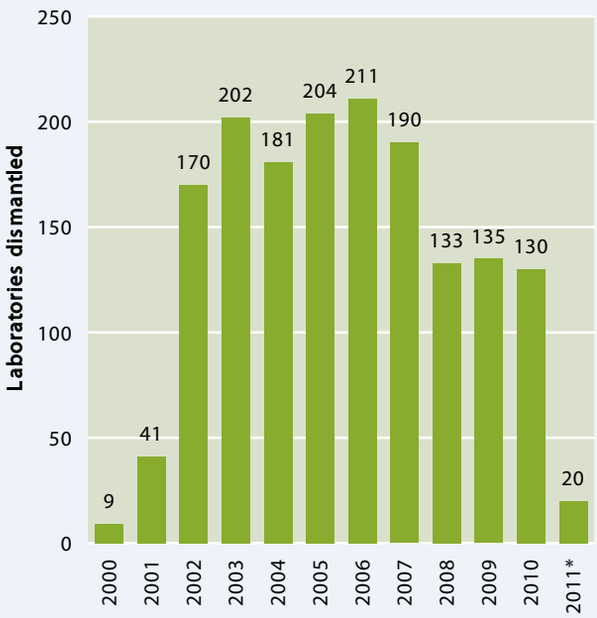
Australia: total weight and number of seizures of ecstasy detected by the Australian Customs Border and Protection Service, 2005-2010



Source: Australian Customs Border and Protection Service, 2010; Australian Customs Border and Protection Service, 2008
Note: Data are based on financial year (1 July-30 June).

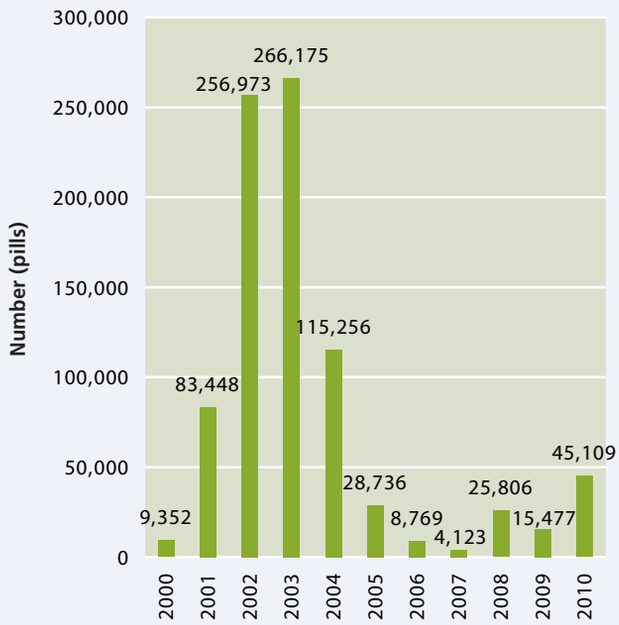
1 There is no updated information on the annual prevalence of amphetamines use among the general population since 2007.

New Zealand: dismantled ATS laboratories, 2000-2010



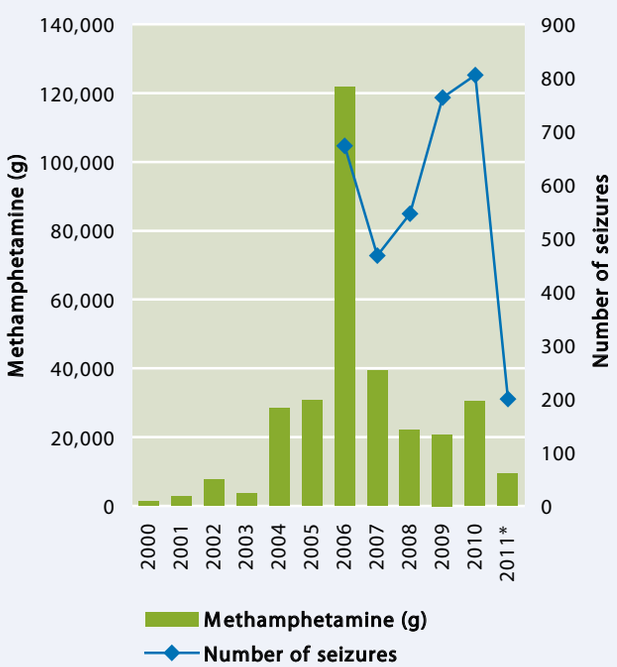
*2011 figures are for January to end March only.
Source: New Zealand, 2011

New Zealand: ecstasy pills seized, 2000-2010



Source: SHORE, 2010; UNODC ARQ/DELTA

New Zealand: methamphetamine seizures, 2000-2010



*2011 figures are for January to end March only.
Source: New Zealand, 2011

amphetamine powder (speed), base and ice as easy or very easy to obtain. Participants purchased all forms of methamphetamine from a variety of sources, most commonly through friends and known dealers.

The price[2] for a gram of all forms of methamphetamine in 2010 remained relatively stable compared to 2009. The average national price for speed and base increased from $250 to $300 and from $200 to $250 respectively. The price for crystalline methamphetamine remained stable compared to 2009 ($400).

During 2009–10, the median purity ranged from 4.4% in Tasmania to 17% in Western Australia. Western Australia has continuously recorded high purities in comparison to other jurisdictions over the past decade. The median purity of methamphetamine within Australia has been declining since 2006-07.

Ecstasy is considered as 'easy' or 'very easy' to obtain by 74% of regular ecstasy users. Significantly more participants in 2010 reported ecstasy to be difficult to very difficult to obtain compared to 2009 results (26% in 2010, 12% in 2009). Most jurisdictions reported the availability had remained stable.

The median price for a pill of ecstasy ranged from $23 in

2 A degree of caution should be exercised when considering these figures, as fewer than 10 participants in each jurisdiction reported recent purchase of different forms of methamphetamine.

South Australia to $35 in Western Australia. That is a slight increase compared to the price of $20 reported from most jurisdictions in 2009.

In 2009-10, the median purity of ecstasy-group substances ranged from 6.8% in South Australia to 23% in Western Australia. This is the greatest range recorded since 2000–01. All jurisdictions reported decreases in the median purity, apart from Western Australia which has remained relatively stable.

New Zealand

ATS manufacture in New Zealand is primarily related to methamphetamine (locally known as 'P') for domestic consumption. Methamphetamine is illegally manufactured mainly from imported pharmaceutical preparations containing ephedrine and pseudoephedrine (usually Contac NT from China). Domestic outlaw motorcycle gangs are heavily involved in the manufacture and distribution. There are also indicators of possible Vietnamese involvement in the manufacture of methamphetamine.

The number of dismantled clandestine ATS laboratories remains relatively stable. In 2010, 130 ATS laboratories were discovered. Most of these laboratories were manufacturing methamphetamine or were pseudoephedrine extraction laboratories. One 'combined ATS' laboratory was involved in the manufacture of methamphetamine and possibly ecstasy. This laboratory was allegedly established to meet local demand for ecstasy. The laboratory was using a pill press to produce ecstasy pills. There are currently no legislative or regulatory controls on the importation, possession, and use of pill presses in New Zealand.

All laboratories were using ephedrine or pseudoephedrine as the main precursor. The reported yield for both was 50%.

The majority of laboratories continue to be located on private premises on the Upper North Island. The shortage of ephedrine and pseudoephedrine has forced some manufacturers to extract ephedrine from the ephedra plant. A laboratory extracting ephedrine/pseudoephedrine from the ephedra plant was seized in July 2010.

For 2010, New Zealand reported seizures of 30.4 kg of methamphetamine, a 50% increase compared to 2009. More than half of this amount (19.5 kg) was seized at the border, mainly in the form of internal concealments and mail intercepts. Seizures of amphetamine remain relatively small. In 2010, only 0.5 kg of amphetamine were reported seized.

Primary embarkation points for detections of methamphetamine were Hong Kong, China, China, Indonesia and Australia. For amphetamine, the primary embarkation points were Thailand, China and the USA.

The median price for a gram of methamphetamine remains at the same level for the third year in a row (NZ$ 700). The mean price for a gram, however, has reportedly increased from NZ$ 738 to NZ$ 780 for a gram.[3]

The reported price for amphetamine powder was NZ$ 30 per point (0.1g) and for methamphetamine in powder/crystal form NZ$ 780 per gram.

The purity of methamphetamine in powder/crystal form remains stable at 74%. Methylsulfonylmethane (MSM)[4] is the usual diluent for methamphetamine in New Zealand.

Thirty-four % of frequent drug users reported that methamphetamine was 'very easy' to obtain whereas 2 % reported that it was very difficult.

In 2010, New Zealand authorities seized 45,109 ecstasy pills. That is an almost three-fold increase compared to 2009 when 15,477 pills were seized. The purity of the ecstasy pills remains low. The analyses in the majority of the cases identified the pills as containing either very little or no MDMA. Pills sold as ecstasy often contain substances like mephedrone, ketamine, 4-MEC, BZP, TFMPP, caffeine, Bk-MBDB (butylone), methenamine, methylone and cathinone.

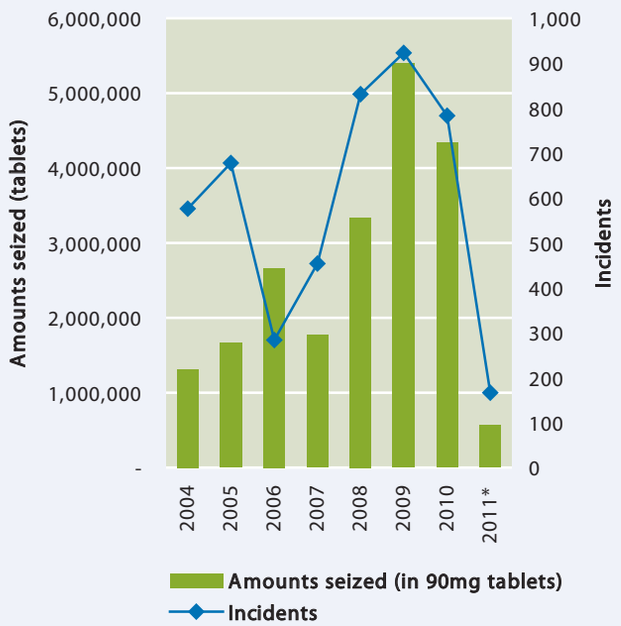
The price for one ecstasy pill ranges from NZ$ 40 to NZ$ 70 and remained stable compared to 2009. Frequent drug users reported the purity of ecstasy to be decreasing compared to 2006 and 2007. The availability of ecstasy was reported as being 'stable'/ 'more difficult' to obtain over the past six months in 2009.

The number of seizures of ephedrine and pseudoephedrine by New Zealand Customs has increased significantly since 2004. Seizures peaked in 2009, when almost 5.4 million pills (1,203 kg) were seized. In 2010, the number of seized precursors dropped by 20% to 4.3 (967 kg). Preliminary data for 2011 shows that seized quantities continue to decline in 2011. Asian organized crime groups are predominant in trafficking of ephedrine, pseudoephedrine, and methamphetamine.

3 SHORE, 2010.

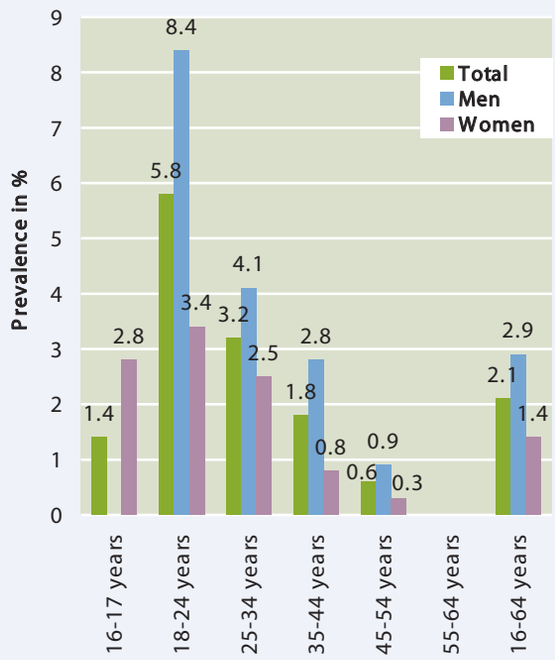
4 MSM is often sold as a dietary supplement.

New Zealand: border seizures of ephedrine and pseudoephedrine 2004-2010



*2011 figures are for January to end March only.
Source: New Zealand, 2011

New Zealand: annual prevalence rate of amphetamines among population aged 16-64, by age group and gender, 2007



Source: MoHNZ, 2010

Primary embarkation points for detections of ephedrine in 2010 were Thailand, United Arab Emirates and China. For pseudoephedrine the primary embarkation points were China, Hong Kong, China and the United Kingdom.

Seizures of methamphetamine at the border have increased considerably. In 2010, Customs seized 19.5 kg of methamphetamine which represents an 81% increase in seizures at the border compared with the previous year. Furthermore, in the first two months of 2011 alone, Customs seized another 6.1 kg of methamphetamine. Organized crime groups from the Islamic Republic of Iran and West Africa are involved in trafficking methamphetamine to New Zealand.

The lifetime amphetamines prevalence rate among the general population is 10.8%. Annual prevalence among the general population aged 16-64 years is 2.1%, one of the highest in the world. Men were significantly more likely to use all types of ATS than women. For both men and women, the prevalence of having ever used amphetamines peaked in the 18-24 years age group and decreased with increasing age thereafter.

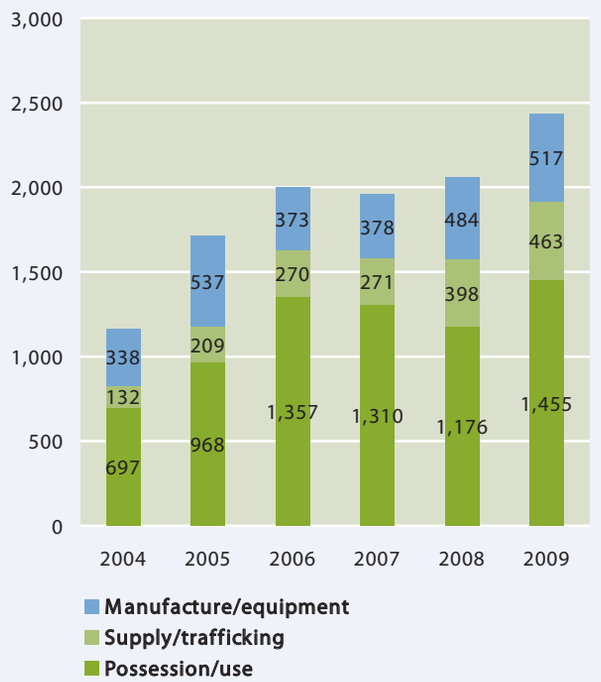
Methamphetamine-related convictions have been on the rise since 2004 when 1,167 people were convicted. In 2009, there were 2,435 convictions compared to 2,058 in 2008.

PACIFIC ISLAND STATES AND TERRITORIES

The Pacific Island region covers millions of square kilometers of ocean, strategically located between Asia, Australia and New Zealand. The countries and territories in the region are a mixture of independent states, associated states, integral parts of non-Pacific island countries and dependent states. Islands vary in terms of size and population, ranging from Papua New Guinea which has a population of about six million to Niue, with a population of less than 2,000.

The Pacific Islands are vulnerable due to their close proximity to major amphetamine-type stimulants (ATS) markets. There are millions of potential customers and the potential for spill-over effect exists. A similar spill-over effect has been observed in States and territories in the Caribbean which are used for the transshipment of cocaine from South America to North America or Europe. Good air and sea links to South-East Asia, long coastlines which are difficult to patrol, limited law enforcement capacity and a multitude of small islands increase the vulnerability. In addition, there is a growing risk of drug crimes from returning deportees with links to criminal organizations.

New Zealand: methamphetamine-related convictions, 2004-2009



Source: New Zealand, 2011

ATS awareness is low and very few drug monitoring systems exist in the region. Information related to ATS manufacture, trafficking and use in the Pacific Island States and territories is virtually non-existent. The very low rate of adherence to the United Nations drug control Conventions is an obstacle towards gaining an insight into drug-related issues. Only Fiji, Federated States of Micronesia and Tonga are parties to all treaties, making the Pacific the region with the lowest rate of treaty adherence. Of the 12 non-parties to the 1988 Convention, seven are located in Oceania. Most Pacific Island States and territories do not submit ARQs, none were submitted for 2009.

There have been reports of kitchen-scale methamphetamine laboratories seized in Guam and there are indicators that manufacture may be spreading to other islands. The most significant manufacturing case so far was reported in Fiji in 2004. It involved an industrial-scale methamphetamine laboratory. The laboratory was operated by Asian organized crime groups and purportedly contained 700 litres of liquid methamphetamine, 5 kg of finished crystalline methamphetamine and enough precursors, including thionyl chloride, on site for the manufacture of an additional 1 mt of methamphetamine. Production cycle estimates for this laboratory were between 500 and 1,000 kg of crystalline methamphetamine per week, making it one of the largest laboratories ever seized. There have been reports of ATS precursor seizures. The biggest seizure of ATS precursors was reported in 2002. Authorities of Papua New Guinea stopped a shipment containing ephedrine from India and pseudoephedrine from China and seized a total of 12 mt of precursor chemicals. There have been also reports of diversion of pharmaceutical preparations containing pseudoephedrine in Tonga, which were believed to be destined for New Zealand.

ATS, particularly methamphetamine, are seized throughout the region. In Tonga, 17.7 kg of methamphetamine believed to be destined for Australia were seized in 2009. Liquid methamphetamine was reported seized in French Polynesia (340 grams), five seizures of smaller quantities of methamphetamine were seized in the mail in Guam. In February 2011, 4 kg of a methamphetamine-cocaine mixture were found in a vehicle in Tonga. The United States Postal Inspection Service also reported that packages containing small amounts of methamphetamine had been sent through the postal system.

A recent ATS study of use among young people shows that the use rates in this region vary considerably, but most tend to be higher than those for Australia or New Zealand, with the highest in the Marshall Islands[5] (lifetime prevalence ATS: 15.4% men, 10.5% women) and Vanuatu[6] (lifetime prevalence ATS: 12.3% men, 3.4% women).[7] However, data are insufficient to establish any trends.

As countries often do not have the necessary legislation, infrastructure and enforcement capabilities in place to prevent, detect, seize or report the substances, the 'leakage' of substances into the domestic market might have significant consequences.

5 Youth Risk Behavior Surveillance System, School students sample 2007, (n=1522) (Howard at al., 2011).

6 Second Generation BSS 15–24, 2008, (n = 301) (Howard at al., 2011).

7 Howard at al., 2011.