



Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs in East and South-East Asia (and neighbouring regions)

Global SMART Programme

Note: Although all efforts have been made to present the correct data and information, this document has not been professionally edited or proof-read. Should readers come across specific errors, please contact us and we will rectify the errors immediately.

### **Errata**

Chapter: Regional Overview – East and South-East Asia

p.22: "An increase in the use of nimetazepam, sometimes in combination with methamphetamine, has been reported in Brunei, Indonesia, Malaysia and Singapore...", corrected as - An increase in the use of nimetazepam, sometimes in combination with methamphetamine, has been reported in Brunei, Indonesia and Malaysia.

Chapter: Philippines

p.98, table 81: Crystalline methamphetamine – main route of administration, injected, corrected as - *smoked* 

Chapter: Singapore

p. 122, table 86: Heroin – mode of administration, injected, corrected as: *smoked*Buprenorphine – mode of administration, injected, corrected as: *injected* 

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# Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs in East and South-East Asia (and neighbouring regions) 2009

A Report from the Global SMART Programme

November 2009

United Nations Office on Drugs and Crime

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The core team that prepared this report comprised of Deepika Naruka, East Asia Regional SMART Coordinator, Johannes Lund, Primary Author and Analyst; Nicholas Kozel, Expert Reviewer; Tun Nay Soe, Information and Database Systems Specialist.

Expert review was provided by Dr. Justice Tettey, Chief, Laboratory and Scientific Section, UNODC; Dr. Barbara Remberg, Scientific Affairs Officer; Matthew Nice, ATS Expert and Jeremy Douglas, Former Global SMART Programme Manager (2008/9). The report benefited from the work and expertise of many other UNODC staff in Vienna and in the field offices around the world.

## **Foreword**

UNODC launched the Global Synthetics Monitoring: Analyses, Reporting and Trends (SMART) Programme in September 2008. The Programme seeks to enhance the capacity of Member States and authorities in priority regions, to generate, manage, analyse and report synthetic drug information, and to apply this scientific evidence-based knowledge to design the policies and programmes. The Global SMART Programme is being implemented in a gradual phased manner, with East Asia being the first focus priority region.

This annual report is the first regional situation assessment for East and South-East Asia put forward under the Global SMART Programme. It forms one of the first essential key steps, in providing consolidated up-to-date analysis, based on the information shared by the member countries. It is hoped that the information on drug trends presented in this report will make a practical contribution to addressing the significant threat posed by the illicit ATS manufacture, trafficking and use in the East and South-East Asia region, and place policy-makers in a better position to evaluate the drug situation, and to make informed decisions on intervention and prevention strategies.

This report provides an overview of the ATS situation in the region. It outlines several key issues and emerging threats throughout the region and their implications for the neighbouring regions. While the data presented point towards the increased efforts by the countries in the region to tackle the ATS problem, it also highlights the need for continued and joint efforts, both at the national as well as regional levels. It is hoped that this report and the forthcoming national and regional updates, will help in the better understanding of the ATS problem and in designing effective strategies to combat it.

## **Abbreviations**

ACCORD ASEAN and China Cooperative Operations in Response to Dangerous Drugs

ACC Australian Crime Commission

ACSAN Administrative Committee for Substance Abuse Research Network (Thailand)

ADK National Anti-Drugs Agency (Malaysia)

ADLOMICO Anti-Drug Liaison Officials' Meeting for International Cooperation

AIDS Acquired Immune-Deficiency Syndrome
AIHW Australian Institute of Health and Welfare

ANF Anti-Narcotics Force (Pakistan)

APAIC Asia Pacific Amphetamine Type Stimulants Information Centre

ARQ Annual Reports Questionnaire
ATS Amphetamine-type stimulants
AFP Australian Federal Police
BKN Narcotics Control Bureau (Brunei)

BMK Benzyl methyl ketone (P-2-P)
BNN National Narcotics Board (Indonesia)

BZP Benzylpiperazine

CCDAC Central Committee for Drug Abuse Control (Myanmar)

CNB Central Narcotics Bureau (Singapore)

CECVT Centre for Education, Correction and Vocational Training
DAINAP Drug Abuse Information Network for Asia and the Pacific

DDB Dangerous Drugs Board (Philippines)
DEA Drug Enforcement Administration (USA)
DNC Department of Narcotics Control (Bangladesh)

DUMA Drug Use Monitoring System

ESR Institute of Environmental Science and Research (New Zealand)

GMS Greater Mekong Subregion (comprises Cambodia, Lao PDR, Myanmar, Thailand,

Viet Nam and Yunnan and Guangxi provinces in China)

GHB Gamma-hydroxybutyate
GBL Gamma-butyrolacetone
HIV Human Immunodeficiency Virus

HONLEA Heads of National Drug Law Enforcement Agencies

IDU Injecting drug use IDUs Injecting drug users

IDRS Illicit Drug Reporting System (Australia)
IDMS Illicit Drug Monitoring System (New Zealand)
IESR Institute of Environmental Science and Research

IFS Institute of Forensic Science (Vietnam)
INCB International Narcotics Control Board

INCSR International Narcotics Control Strategy Report

INP Indonesian National Police

Interpol/ICPO International Criminal Police Organization KFDA Korean Food and Drug Administration

LSD Lysergic acid diethylamide

MBDB N-Methyl-1-(3,4-methylenedioxyphenyl)-2-butanamine

*m*CPP *m*-chlorophenylpiperazine

MDA 3,4-Methylenedioxyamphetamine (tenamfetamine)

MDE 3,4-Methylenedioxyethylamphetamine MDMA 3,4-Methylenedioxymethamphetamine

MSG Mono sodium glutamate

NACD National Authority for Combating Drugs (Cambodia)
NDARC National Drug and Alcohol Research Centre (Australia)
NDDCB National Dangerous Drugs Control Board (Sri Lanka)
NDIB National Drug Intelligence Bureau (New Zealand)
NDSHS National Drug Strategy Household Survey (Thailand)

NNB National Narcotics Board Indonesia

NNCC National Narcotics Control Commission (China)

NGO Non-governmental organization

OECD Organization for Economic Co-operation and Development

ONCB Office of the Narcotics Control Board (Thailand)

P-2-P 1-Phenyl-2-propanone (BMK)

PDARN Pacific Drug and Alcohol Research Network
PCDC Provincial Committee for Drug Control (Lao PDR)

PIFS Pacific Island Forum Secretariat

PMK 3,4-Methylenedioxyphenyl-2-propanone (3,4-MDP-2-P)

ROSA UNODC Regional Office for South Asia

SMART Global Synthetics Monitoring: Analyses, Reporting and Trends

SODC Standing Office on Drug Control (Viet Nam)
SPO Supreme Prosecutors Office (Korea)

SRO Safrole-rich oils

TFMPP 3-trifluoromethylphenyl-piperazine

UN United Nations

UNODC United Nations Office on Drugs and Crime

UNODC RC
UNODC Regional Centre for East Asia and the Pacific
4-Bromo-2,5-dimethoxyphenethylamine (Nexus)
4-Ethylthio-2,5-dimethoxyphenethylamine

## Notes to the reader

The following notes describe certain terms, references, and symbols used throughout this document.

ATS - Amphetamine-type stimulants (ATS) are a group of substances comprised of synthetic stimulants including amphetamine, methamphetamine, methcathinone, and ecstasy-group substances (e.g. MDMA and its analogues). In various sections of this report, amphetamine and methamphetamine are also referred to as amphetamines-group substances. In cases where countries report to UNODC without indicating the specific substance they are referring to, the term ATS is used. The reference 'ecstasy' is used in those cases where there is a likelihood of the tablets marketed as ecstasy, containing a variety of substances other than those usually associated with an ecstasy-group substance. The term 'party-pills' refers to drugs often found in the ecstasy market, but which do not contain MDMA (or its analogues) and which are not under international control, such as derivatives of piperazine class drugs (e.g. BZP).

ATS street names - Several of the most popular ATS street names are listed below:

- Crystalline methamphetamine: yaba or yama chakk (injectable) in Cambodia; bindu in China; shabu in Indonesia, Japan and the Philippines; anpon, philopoon (liquid) and speed in Japan; 'P' in New Zealand; bato, sha, and siopao in the Philippines; and ice in Australia, Cambodia, Japan, and Thailand.
- Methamphetamine pills: yama in Cambodia, Lao PDR, and Myanmar; yaba in Cambodia, Lao PDR, and Thailand; bingdu pian in China; and seik kwya say, and myin say in Myanmar.
- Ecstasy: thnam krovee kbai (shake-head drug) in Cambodia; yao tou ubin (head-shaking pill) in China; XTC in Indonesia; ya-E in Lao PDR and Thailand; X in Japan; yao tou ubin (head-shaking pill) in Myanmar; XTC and love drug in the Philippines; ya-love in Thailand; and shaking pill in Viet Nam.

**Data time-frame** - The data contained in the national reports section of this publication were obtained primarily through DAINAP. The national trend tables of drugs used in the past year are based on informed decisions by government experts ranking the drugs of highest use prevalence or of greatest national concern, the perceived trend in use of those drugs, and the perceived street availability of those drugs during 2008 or the latest year available.

**Symbols** - In the tables throughout this report in which a 'rank' is given, the numeration begins with 1 (one) which denotes the most common drug, and the highest number in the series represents the least common. In addition, arrows indicate an increase or decrease in the trend of use or availability of a specified drug during the previous year -  $(\uparrow)$  an increase,  $(\downarrow)$  a decrease, and  $(\leftrightarrow)$  a stable trend. The symbol, '•' indicates that the information is not available, not known, or was not reported.

Country names and geographical terms - The term 'region' unless specified, generally refers to the geographical area that includes the countries and territories in East and South-East Asia (Brunei Darussalam, Cambodia, China and Hong Kong SAR, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam). The Republic of Korea is denoted as Korea (ROK) as well as simply Korea. The Hong Kong Special Administrative Region of China is denoted as Hong Kong (SAR) or simply Hong Kong. Lao People's Democratic Republic is denoted as Lao PDR.

**Terms** - This report does not make a distinction between drug 'use', 'misuse' and 'abuse' and does not reflect any particular legal or scientific standpoint, however efforts have been made to use the term 'use' throughout the document.

# **Executive Summary**

This report presents the most current patterns and trends of amphetamine-type stimulants (ATS) and other drugs of use in East and South-East Asia and provides overviews for neighbouring South Asia and the Pacific Island states. The report is the first in a series prepared under the Global Synthetics Monitoring: Analysis, Reporting and Trends (SMART) Programme. The objective of the Global SMART Programme is to enhance the capacity of targeted Member States and relevant authorities to generate, manage, analyze, report and use synthetic drug information, in order to design effective, scientifically sound and evidence-based policies and programmes.

The East and South-East Asia region, home to about 28% of the human populace, is one of the fastest growing regions in the world. As a result of globalization, the countries in the region have also become more interdependent. As such the challenges within any sector - be it governance, development, infrastructure, trade and economy, environment, health or security - of a particular country, have a ripple effect across the region. One such issue and challenge is the threat posed by synthetic drugs.

In recent years, although the overall drug problem globally is being contained, there have been several regional shifts, in the production, trafficking as well as consumption patterns. More people use ATS than heroin and cocaine combined. The manufacture of ATS has been reported by nearly a third of all Member States around the world, and it is increasingly spreading throughout the developing world. There is no better example of this reality than the countries of East and South-East Asia, where the impact of ATS affects so many people.

The findings of the report are based on primary information submitted by the drug control agencies and designated institutions in Australia, Brunei Darussalam, Cambodia, China and Hong Kong (SAR), Indonesia, Republic of Korea, Japan, Lao PDR, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand and Viet Nam, via the on-line Drug Use Information Network for Asia and the Pacific (DAINAP). In addition to DAINAP, information for this report was also supplemented with official government documents such as the UNODC Annual Reports Questionnaire, and through secondary research.

Results outline several key issues and emerging threats throughout the region and implications for neighbouring regions. There are indications of increasing demand for methamphetamine in Thailand which will likely have wide implications for neighbouring countries, such as the likelihood of increased trafficking and risk of clandestine laboratory operations being established or increased in border areas of Lao PDR and Cambodia. Viet Nam may emerge as a vulnerable market as methamphetamine manufacturers seek to diversify away from their reliance on the Thai market. In addition, the changing political situation in Myanmar in 2009 might serve as a push factor for illicit drugs and relocation of clandestine manufacturing sites across its borders.

Although methamphetamine in pill form remains the dominant form of methamphetamine in the Greater Mekong Sub-region, the availability of crystalline methamphetamine with considerably higher purity is likely to expand with a subsequent increase in use, particularly that of injecting drug use.

The scale of ATS manufacturing in Indonesia is already large and the country may potentially displace Europe as a supply source for ecstasy in the region. Malaysia is at a high risk of becoming a major consumer market for ATS as large amounts are trafficked into the country in addition to large-scale domestic manufacturing.

Development is accelerating in the region leading to new infrastructure and trade initiatives. The resulting increased movement of persons, traffic and cargo, provide opportunities that can be exploited by traffickers unless adequate mechanisms and capacities are in place in terms of law enforcement and customs. Although countries in the region are already gearing up to tackle the emerging ATS situation, data indicate that more needs to be done in terms of consolidated responses from the security and health perspectives. Challenges in some countries remain in terms of disparate levels of analysis, data generation and forensics. Also, the health implications including the treatment facilities and challenges posed by associated dimensions such as injecting drug use and HIV/AIDS, need to be understood further. This is necessary for adequate responses to these issues, both in terms of the quality as well as the quantity.

The harvesting of trees for the extraction of safrole-rich oils has been illegal in Cambodia since 2005. Although there is currently no evidence that the seized safrole-rich oils produced in Cambodia are used to manufacture MDMA, significant seizures continue to be made and the likelihood of illicit use for exists. These large-scale operations have a huge environmental impact from deforestation and the chemical

pollution from their production.

Consolidated data on the ATS markets in South Asia and the smaller Pacific Island nations are limited, but increasingly suggest that ATS is spreading. South Asia is attractive to organized crime groups seeking to manufacture ATS due to the large precursor chemical industry and the potential market. The established presence of clandestine laboratories for synthetic drug manufacture risks a spill-over into the local market. There are already indications of methamphetamine use in the vulnerable Pacific Islands nations. Very few countries have adopted the frameworks for international drug control, and the absence of formal drug surveillance systems for monitoring illicit drug use and emerging drug trends, leads to very sporadic and limited data reporting - either nationally or regionally.

Based on data submitted for the year 2007 and 2008 the additional following observations are made in the report:

- The number of countries reporting methamphetamine in either pill or crystalline form as their primary drug of use, have remained largely the same over the past four years. However, methamphetamine has rapidly become more prominent in some countries which now rank it as the second most common drug.
- Not all countries reporting to DAINAP disaggregate treatment data according to drug type or demographics. But for those countries that do report, methamphetamine treatment admissions have risen from just over 26,000 in 2004 to nearly 50,000 admissions in 2007.
- In East and South-East Asia, methamphetamine pill seizures increased in 2008 over the previous year with slightly more than 31 million pills seized compared to just over 25 million pills in 2007. Crystalline methamphetamine seizures have increased, from 7.3 tons in 2007 to 8.3 tons in 2008.
- For most countries that disaggregate arrest data by drug type, methamphetamine related arrests have been on an increasing trend in East and South-East Asia over the past five years with the total number of arrests nearly two times as great in 2008 compared to four years earlier. The burden that methamphetamine use places on the justice system is considerable for many countries. In Brunei, Cambodia, Japan, Korea, Lao PDR, and Thailand, methamphetamine related arrests account for over three quarters of total drug arrests.
- Ecstasy is not reported as the most common form of drug use in any country in East and South-East Asia. It is the second most common drug of use in Australia, Indonesia and New Zealand. China reports ecstasy as the third most common drug, after heroin and methamphetamine. It is ranked as number four in Viet Nam, along with methamphetamine and ketamine. The bulk of the region's seizures of ecstasy in 2007 and 2008 have been made by six countries, Australia, China, Indonesia, Japan, Malaysia and Thailand.
- Forensic information suggests that drugs marketed as 'ecstasy' often contain substances other than MDMA, such as ketamine or methamphetamine.
- Ketamine was recorded as a drug of use by eight countries in East and South-East Asia. Ketamine seizures are now higher than annual regional heroin seizures in East and South-East Asia with 6.3 tons of ketamine seized in 2008 compared to 5.2 tons of heroin.
- An increasing number of clandestine synthetic drug manufacturing facilities have been dismantled in East and South-East Asia during the past five years and typically represent the larger, industrial-size operations. The largest number of reported ATS operations dismantled were in China, which reported 37 laboratories seized in 2005, 53 in 2006 and 75 in 2007. Although data were not disaggregated in 2008, a total of 244 clandestine operations were dismantled and it is likely that at least a half were related to ATS. Cambodia, Indonesia, Malaysia, Myanmar, and the Philippines also reported the dismantling of several clandestine ATS labs over the past two years.
- Seizures of methamphetamine manufacturing facilities in recent years in South Asia may indicate the intent by organized crime groups to utilize the region for manufacturing and trafficking.
- Heroin has been reported as the primary drug of use for the past five years in China, Malaysia, Myanmar, Singapore and Viet Nam. Of these, only Singapore and Viet Nam reported it to be on an increasing trend in 2008. Viet Nam also reported an increasing use trend between 2003 and 2006. Overall, the countries with a history of heroin use over the past decade, such as China and Malaysia have reported a declining

trend. In contrast, Singapore reported an increasing use trend for heroin for the past three years.

- China, Malaysia, Thailand and Viet Nam account for the vast majority of the regional heroin seizures. Hence, declining seizures over the past five years in those countries have reduced the regional total for East and South-East Asia significantly. Declining seizures are particularly evident for China which reported 10.8 tons seized in 2004 with progressively lower seizures in the ensuing years. In 2008, 4.3 tons of heroin were seized.
- All countries reported cannabis use. This was the primary drug of use in Australia, New Zealand, Indonesia and Thailand. Indonesia, Thailand and Viet Nam, have each reported large annual seizures of cannabis over the past two years. Cannabis related arrests increased more than three-fold from 2004 to 2008, in East and South-East Asia, to just under 27,000 in 2008.
- Recently there has been a notable presence of the benzodiazepine, nimetazepam, in some East and South-East Asian countries, and large seizures of the drug have been made in both Indonesia and Malaysia in recent years.
- Several countries list inhalant and solvent use as a serious problem, particularly among young drug users. This is a special concern in Cambodia where select surveys indicate high use levels among street children

## **Background**

Since the late 1990s, the use of amphetamine-type stimulants (ATS), such as methamphetamine and ecstasy, have been one of the most significant drug problems worldwide. The most recent global estimates of past year use of amphetamine-group substances exceeds that of heroin and cocaine users, combined, generating more than \$63 USD billion annually in illicit revenue (UNODC, 2008; UNODC 2009f). Unlike cocaine and heroin, ATS can be manufactured anywhere, and since 1990 more than 60 countries worldwide have reported at least some ATS-related manufacture. Because of cheap and easy ways to manufacture the drugs, more countries are added to the list each year. ATS in East and South-East Asia have become the leading drugs of use and concern, replacing heroin, cannabis and opium which until a decade ago were the drugs that dominated the regional illicit market.

The primary ATS of use in East and South-East Asia are methamphetamine and ecstasy. Methamphetamine is a white, odorless, bitter-tasting crystalline powder that dissolves easily in water or alcohol. It is available as a powder or in crystalline form and may be presented as a pill or tablet It can be ingested, smoked, snorted, sniffed and injected. Common street terms for methamphetamine include 'ice', 'crystal', 'crank', 'P' and 'glass'. In addition, 'shabu, 'yama', and 'yaba' are just a few of the common street names used in the East and South-East Asia region.

Ecstasy (MDMA) has the psychoactive action of both a stimulant and a hallucinogen and it is ingested almost exclusively in pill or tablet. Use of ecstasy originated among teens and young adults at raves or night-long dance parties in Europe. However, use of the drug has expanded in recent years to include varied social settings and diverse demographic subgroups throughout the world. Manufacture of this drug has also spread, moving from more traditional locations in Western Europe closer to often young and lucrative consumer markets across the world.

Risk and protective factors for initial and progressive use of drugs are influenced by a wide range of social and behavioral factors. The use of certain ATS and other drugs has been sufficiently prevalent among middle and upper class youths and young adults in bars and discos, such that the phrase 'club drugs' became a term of reference. Research has documented that the groups at particularly high risk are marginalized youth, especially the homeless. In addition, workers in low-paying, labour-intensive jobs and those whose wages depend on working long hours have greater vulnerability to drug abuse, as do sex workers, including bar and karaoke workers and hostesses.

## **Method**

United Nations Office on Drugs and Crime established the Global SMART Programme in September 2008, to assist participating countries in developing the capacity for drug use surveillance of synthetic drugs. This assistance involves knowledge transfer in understanding and implementation of information systems, and training in the collection, collation and communication of data on drug use patterns and trends. An end-point to the provision of individual country assistance in data development is the organization of the national information into a standardized reporting format for the region and the implementation of a regional drug use surveillance network among countries participating in the programme.

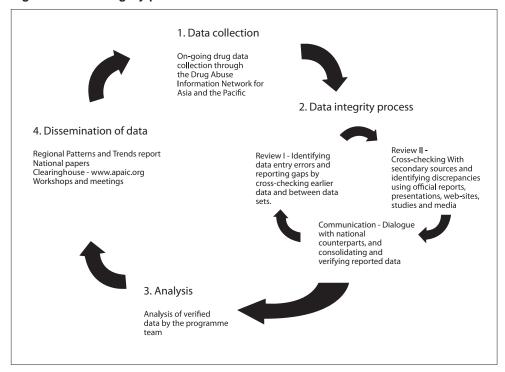
The Global SMART Programme builds on mechanisms and lessons learned from a previous project on Improving ATS Data and Information Systems, established in 2002 and implemented by the UNODC Regional Centre for East Asia and the Pacific. Through consensus among the participating Member States, a minimum data set—aligned with UNODC Annual Reports Questionnaire—was developed. Data collection focuses on national trends, treatment and health-related information, and law enforcement data and is uploaded by Member States into the data system Drug Abuse Information Network for Asia and the Pacific (DAINAP).

DAINAP, initiated in May 2005, is an internet-based drug use information system, integrating of the data collection efforts of two major UNODC-RC projects, i.e. Improving ATS Data and Information Systems, cited above, and the Regional Cooperative Mechanism to Monitor and Execute the ACCORD Plan of Action. DAINAP enhances both the timeliness and ease of data submission as well as improved efficiency and quality control of the information submitted. It has also provided a mechanism for communication among the national counterparts themselves.

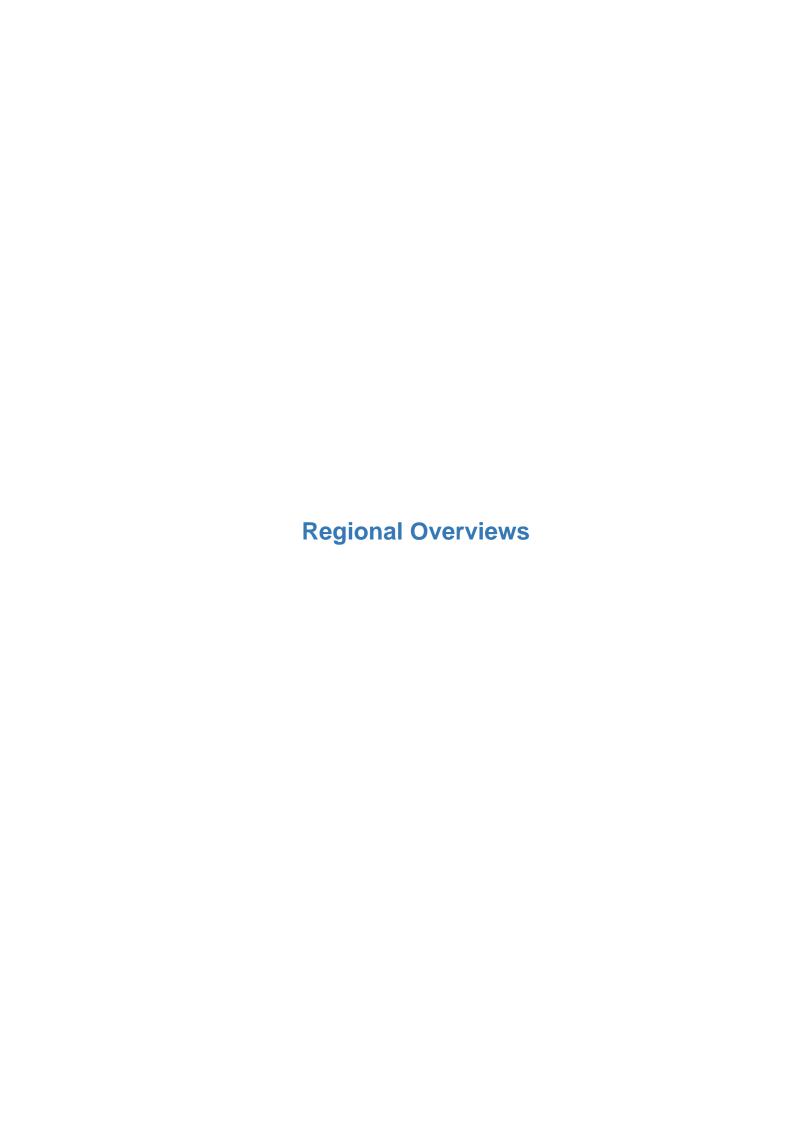
Key to the SMART Programme's success is the effort that has gone into developing and implementing

operational activities which ensure that the most accurate and up-to-date information is obtained from national data systems and to assist in the further development of those systems. The flow chart shown in Figure 1 outlines the data quality and integrity controls that have been implemented to achieve that objective.

Figure 1. Data integrity process



The capabilities of countries in the region to collect, compile, and disseminate accurate and timely data on the current drug use situation vary greatly. Some countries have sophisticated and well-funded data systems, research infrastructures, and survey programmes, while data collection activities in others are relatively basic due to various reasons including a lack of resources. The Global SMART Programme provides valuable assistance to a number of countries in the region in efforts to improve their data collection capabilities. In addition to oversight of the regional surveillance, another aim of the Global SMART Programme is the development and maintenance of a comprehensive clearinghouse of ATS information. A complete description of the background, activities, and objectives, as well as other clearinghouse information, can be viewed on the Asia and Pacific Amphetamine-Type Stimulants Information Centre (APAIC) website at: www.apaic.org.



# Regional trends in amphetamine-type stimulants (ATS) and other drugs in East and South-East Asia

### Methamphetamine

The number of countries reporting methamphetamine in either pill or high purity crystalline form as their primary drug of use has remained relatively constant during the past four years with methamphetamine in pill form being the dominant drug in Cambodia, Lao PDR, Myanmar and Thailand and methamphetamine in crystalline form being the primary drug of use in Brunei Darussalam, Republic of Korea, Japan and New Zealand. However, methamphetamine has rapidly become more prominent in other countries and is now the second most common drug of use in Indonesia. Indonesia ranked crystalline methamphetamine as the fourth drug of concern in 2006, after cannabis, heroin and ecstasy. In 2008 ranked it was ranked as the second most common drug and the use was reported to be on the increase.

In addition, China has ranked methamphetamine in both crystalline and pill form as the second major drug of use in 2008, following heroin, with an increasing use trend for both forms for all reporting years between 2003 and 2008. Viet Nam has also reported an increasing use trend for methamphetamine pills for all reporting years between 2003 and 2008 and reported crystalline methamphetamine use for the first time in 2008.

In contrast, Thailand reported a notable change in the rank of methamphetamine pills and crystalline methamphetamine following its latest household survey, published in 2007. Methamphetamine in pill form ranked as the most common drug of use in Thailand between 2004 and 2006 and crystalline methamphetamine was ranked third. In 2008, methamphetamine pills dropped to number three in rank, after cannabis and kratom, and methamphetamine in crystalline form was ranked number eight. However, use of methamphetamine in both pill and crystalline form, was reported to be on the increase in 2008.

Myanmar also reported an increase in use of methamphetamine pills, extending the increasing trend to a sixth year. Lao PDR reported its first stable use trend for methamphetamine pills in 2008, preceded by five years of increasing use trend. The trend in use of methamphetamine pills and crystalline methamphetamine in East and South-East Asian countries during 2007-2008 is shown in Figures 2 and 3.

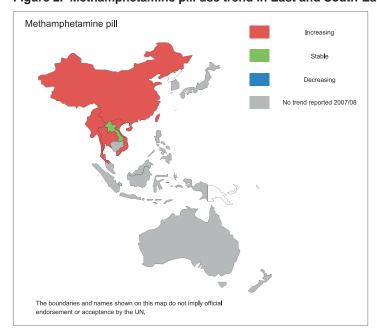
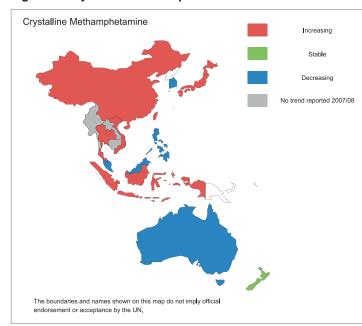


Figure 2. Methamphetamine pill use trend in East and South-East Asia, 2007/2008

Source: DAINAP

Figure 3. Crystalline methamphetamine use trend in East and South-East Asia, 2007/2008



rests account for over 75% of total arrests for drug law violations in 2008.

Methamphetamine related arrests have shown a sharp increase during the past several years in East and South-East Asia based on law enforcement data from countries in the region that disaggregate arrest data by drug type (Table 1 and Figure 4). The total number of methamphetamine related arrests more than doubled in 2008 compared to the number of arrests in 2004. However, the increase has been driven almost exclusively over the years by Thailand which accounted for more than 68% of arrests in 2004 and 86% in 2008.

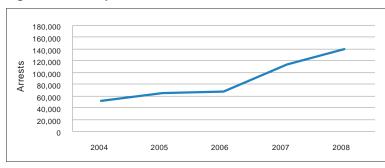
The burden that methamphetamine use places on the justice system is considerable for many countries. In Brunei Darussalam, Cambodia, Japan, Korea, Lao PDR and Thailand, methamphetamine related ar-

Table 1. Methamphetamine related arrests in East and South-East Asia, 2004-2008

		Number of methamphetamine arrests							
Country	2004	2005	2006	2007	2008				
Brunei Darussalam	250	359	407	174	500				
Cambodia	478	718	561	246	371				
China	•	•	•	•	•				
Hong Kong (SAR)	390	564	509	747	874				
Indonesia	3,065	9,004	8,589	11,731	8,683				
Japan	12,397	13,346	11,821	12,196	•				
Korea	•	•	•	8,521	7,457				
Lao PDR	102	402	479	147	344				
Malaysia	•	3,832	2,367	876	•				
Myanmar	955	1,171	1,071	745	943				
Philippines	•	•	•	•	•				
Singapore	156	190	153	234	345				
Thailand	39,001	56,520	61,816	80,723	120,776				
Viet Nam	•	•	•	•	•				
Total	56,794	86,106	87,773	116,340	140,293				

• = Not reported Source: DAINAP

Figure 4. Methamphetamine related arrests in East and South-East Asia, 2004-2008



Methamphetamine pill seizures increased in 2008 with over 31 million pills seized compared to slightly less than 25.5 million pills in 2007 (Table 2). Similar to drug related arrests, the higher seizure level is driven by Thailand which registered a sharp increase in pill seizures from 14.2 million in 2007 to 22.1 million in 2008 representing a 55.6%

increase. During the five year period 2004-2008, Thailand accounted for one-third to three-quarters of methamphetamine pill seizures among countries in the region that reported seizure data by drug type to the Drug Abuse Information Network for Asia and the Pacific (DAINAP). Along with Thailand, seizures of methamphetamine pills by law enforcement authorities in China also accounted for a substantial quantity with 7.6 million pills seized in 2007 and 6.3 million pills seized in 2008. This represented about 30% and 20% of the total seizures made in the region for 2007 and 2008 respectively and is considerably higher than the 4 million pills seized in China in 2006.

Viet Nam also reported an increase in methamphetamine pill seizures in 2008 with 850,000 pills seized. This includes an estimated 780,000 pills (weighing 54 kg) seized in a single case. Although reports included both number of pills and weight (kg) of methamphetamine seized. This, if converted uniformly into pill form, as reported in previous years, would result in total seizures that year amounting to almost a million pills, which is four times greater than the highest previous annual pill seizure in Viet Nam.

Crystalline methamphetamine seizures also increased in the region in 2008 to 8.3 tons compared to 7.3 tons the year before, indicating a 13.7% increase. This was slightly less than the 8.4 tons seized in 2006.

Over the five year period 2004-2008, China accounted for the bulk of the region's crystalline methamphetamine seizures. The reported seizure of 5.5 tons in 2008 represented about 66.5% of the total crystalline methamphetamine seizures in the region. Since 2005, seizures in China have measured between 5.5 and 6 tons annually.

The Philippines recorded the first annual increase in crystalline methampetamine seizures since 2005. A little over 850 kg was seized in 2008, up from 369 kg seized the year before, but down substantially from the 3.7 tons seized in 2004. Large seizures made by other countries included 710 kg by Indonesia and 679 kg (in addition to 356.9 kg of methamphetamine powder) by Malaysia. Japan reported a large-scale seizures in 2008, measuring 332 kg in one case.

The total seizures of methamphetamine in pill and crystalline form in the region among reporting countries for the years 2004-2008 are shown in Figures 5 and 6.

Table 2. Methamphetamine seizures in East and South-East Asia, 2004-2008

	Methamphetamine pills/ tablets (numbers)					ine pills/ tablets (numbers) Crystalline methamphetamine (kg)				
Country	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Brunei Dar- ussalam	0	0	157	0	0	0.5	0.7	0.4	0.3	0.4
Cambodia	860,996	351,651	428,553	420,287	116,772	0	2.0	16.2	6.8	1.9
China	•	•	4,021,492	7,620,322	6,255,658	2,746.0	5,500.0	5,946.0	5,863.0	5,523.0
Hong Kong (SAR)	•	•	•	•	•	15.7	228.1	6.7	40.8	45.8
Indonesia	•	255,016	466,907	•	•	28.4	367.6	1,241.2	492.9	709.9
Japan	•	•	•	•	•	411.3	123.0	144.0	359.0	399.0
Korea	•	18	0	196	151	•	19.3	21.5	23.7	25.6
Lao PDR	1,950,046	4,656,309	1,755,989	1,272,815	1,227,205	•	4.8	0	0	0

	Methamphetamine pills/ tablets (numbers)						Methamphetamine pills/ tablets (numbers)  Crystalline methamphetamine (kg)				
Country	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	
Malaysia	92,549	•	•	121,629	281,343	63.0	39.2	145.2	69.2	679**	
Myanmar	8,379,310	3,651,505	19,065,674	1,666,141	1,102,199	0.2	280.3	2.3	3.4	14.4	
Philippines	•	•	•	•	•	3,676.8	104.1	766.0	368.9	853.5	
Singapore	3,480	0	0	48	0	0.1	0.1	0.2	0.2	0.2	
Thailand	31,000,000	15,781,346	13,820,000	14,200,000	22,115,911	47.3	322.6	93.7	47.2	52.9	
Viet Nam	39,467	230,417	62,870	29,679	850,000*	•	•	•	0.7	•	
Total	42,325,848	24,926,262	39,621,642	25,331,117	31,949,239	6,989.3	6,991.8	8,383.4	7,276.0	8,305.5	

<sup>\*</sup>Reported as 60 kg plus 70,000 pills. \*\*679 liters liquid methamphetamine. 1 litre converted to 1 kg. In addition, 356.9 kg of methamphetamine powder were seized. ● = Not reported Source: DAINAP

Figure 5. Methamphetamine pill seizures in East and South-East Asia, 2004-2008

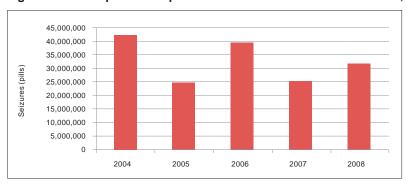
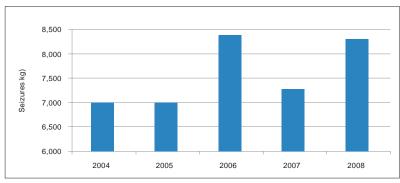
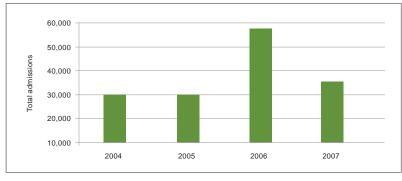


Figure 6. Crystalline methamphetamine seizures in East and South-East Asia, 2004-2008



Source: DAINAP

Figure 7. Methamphetamine treatment admissions in East and South-East Asia, 2004-2007



Source: DAINAP

Not all countries reporting to DAINAP disaggregate treatment data according to drug type. Consequently, treatment admission data may not be an exact reflection of the magnitude of methamphetamine or other ATS use in some countries. However, among countries that did share disaggregated data, there has been a noticeable increase in the number of treatment admissions for methamphetamine use over the 2004 to 2007 period (Figure 7). This has been driven primarily by increasing numbers of admissions in Thailand. Of concern is the fact that, some countries, such as Lao PDR, report having limited resources devoted to methamphetamine treatment, despite the increasing trend.

### **Ecstasy**

Forensic data suggests that much of the seized drugs marketed on the street as 'ecstasy' contain substances other than MDMA (3,4-methylenedioxymethamphetamine), such as ketamine or methamphetamine. Subsequently, caution should be used when assessing statistics related to ecstasy in countries which do not have ATS data and classification system or the appropriate laboratory and analytical facilities.

Ecstasy is not reported as the most common form of drug use in any country in East and South-East Asia. However, it is the second most common drug of use in Australia and, together with methamphetamine, the second most common drug of use in Indonesia. China reports ecstasy as the third most common drug of use, after heroin and methamphetamine, while it is ranked fourth in Viet Nam, along with methamphetamine and ketamine. Australia, China, Viet Nam and New Zealand have reported an increasing use trend in 2008 (Figure 8). In contrast, Korea, Malaysia and Thailand reported a declining use trend in 2007/2008

Ecstasy

Increasing

Stable

Decreasing

No trend reported 2007/08

The boundaries and names shown on this map do not imply official endorsement or acceptance by the UN.

Figure 8. Ecstasy use trend in East and South-East Asia, 2007/2008

Source: DAINAP

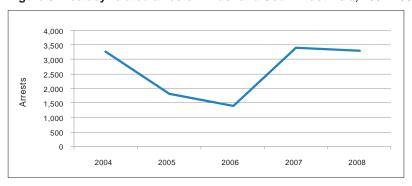
Slightly more than 2% of ATS related arrests in the region are related to ecstasy, totaling 3,282 arrests in 2008, down from the 3,431 arrests a year earlier. The majority of ecstasy related arrests in the region were made in Indonesia which reported 1,984 arrests, representing two-thirds of the total figures for 2008. The number of arrests by country and the regional trend for ecstasy arrests are shown in Table 3 and Figure 9 respectively.

Table 3. Ecstasy related arrests in East and South-East Asia, 2004-2008

		Number of ecstasy arrests								
Country	2004	2005	2006	2007	2008					
Brunei Darussalam	0	0	2	0	3					
Cambodia	0	1	0	1	7					
China	•	•	•	•	•					
Hong Kong (SAR)	468	284	283	224	315					
Indonesia	1,454	0	0	2,274	1,984					
Japan	450	403	359	259	281					
Korea	•	•	•	•	•					
Lao PDR	0	0	0	0	0					
Malaysia	•	395	210	93	•					
Myanmar	6	9	4	8	6					
Philippines	•	•	•	•	•					
Singapore	211	176	149	162	136					
Thailand	749	646	459	410	550					
Viet Nam	•	•	•	•	•					
Total	3,338	1,914	1,466	3,431	3,282					

• = Not reported Source: DAINAP

Figure 9. Ecstasy related arrests in East and South-East Asia, 2004-2008



Source: DAINAP

Table 4. Ecstasy pills seized in East and South-East Asia, 2004-2008

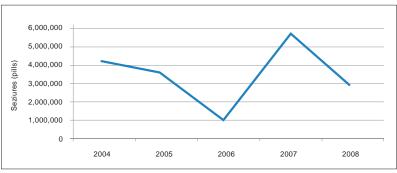
		Ecstasy seized (number of pills/ tablets)							
Country	2004	2005	2006	2007	2008				
Brunei Darussalam	0	0	50	0	2				
Cambodia	0	1,906	232	300	33				
China	3,000,000	2,342,397	454,145	2,219,353	1,077,552				
Hong Kong (SAR)	283,568	47,694	104,296	65,539	18,326				
Indonesia	251,072	•	•	1,247,302	1,045,105				
Japan	469,483	576,748	196,212	1,277,859	217,882				
Korea	•	10,744	356	18,323	714				
Lao PDR	•	•	•	•	•				
Malaysia	146,744	434,233	227,932	709,888*	109,444**				
Myanmar	5	5,807	54	2,690	108				

	Ecstasy seized (number of pills/ tablets)									
Country	2004	2004 2005 2006 2007 2008								
Philippines	103	111	83	13	513					
Singapore	1,235	610	1,240	2,128	735					
Thailand	123,174	33,929	26,656	113,735	486,553					
Viet Nam	•	•	•	•	19,000					
Total	4,275,384	3,454,179	1,011,256	5,657,150	2,975,967					

<sup>\*</sup>Reported as 167.55 kg plus 151,221 pills. \*\*Reported as 8.6 kg powder plus 80,778 pills. ● = Not reported Source: DAINAP

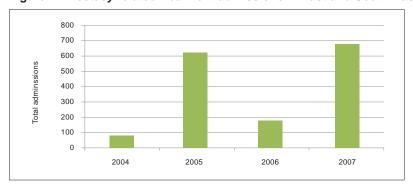
Ecstasy pill seizures have fluctuated in East and South-East Asia over the past five years. This is partly due to different classifications of seizures, between ecstasy and methamphetamine, as well as improved disaggregation of data between the various synthetic drugs. However, the bulk of the regional seizures in 2007 and 2008 were made by four countries - China, Indonesia, Japan and Thailand (Table 4 and Figure 10).

Figure 10. Ecstasy pill seizures in East and South-East Asia, 2004-2008



Source: DAINAP

Figure 11. Ecstasy related treatment admissions in East and South-East Asia, 2004-2007



Source: DAINAP

Treatment admissions for ecstasy are low compared to other major drugs. However, these almost tripled between 2004 and 2007 (Figure 11).

### **Ketamine**

Ketamine was reported as a drug of use by eight countries in East and South-East Asia. In China, where it is ranked fifth in terms of use, it has become increasingly prevalent and accounts for more than a third of all drug use registered as using 'new-type drugs', a category that also includes methamphetamine and ecstasy.

Brunei and Singapore ranked ketamine as fourth and fifth respectively in terms of use. Brunei reported an increasing use trend for ketamine in 2008, as did China, Malaysia, Thailand and Viet Nam. Viet Nam also reported use for the first time in 2008. Indonesia reported a stable ketamine use pattern and Singapore reported a decline in use in 2008 (Figure 12).

Ketamine

Increasing

Stable

Decreasing

No trend reported 2007/08

The boundaries and names shown on this map do not imply official endorsement or acceptance by the UN.

Figure 12. Ketamine use trend in East and South-East Asia, 2007/2008

Source: DAINAP

Table 5. Ketamine seized in East and South-East Asia, 2005-2008

	Ketamine seized (in kg)						
Country	2005	2006	2007	2008			
Brunei Darussalam	•	•	0	0			
Cambodia	•	•	•	•			
China	2,630.0	1,788.5	6,101.7	5,271.1			
Hong Kong (SAR)	296.1	1,006.0	96.4	434.9			
Indonesia	•	•	•	19.8			
Japan	•	•	•	•			
Korea	•	•	•	•			
Lao PDR	•	•	•	•			
Malaysia	409.8	109.5	267.9	553.1			
Myanmar	•	16.0	•	•			
Philippines	7.8	98.0	•	10.2			
Singapore	3.6	0.7	0.9	1.7			
Thailand	42.2	22.7	2.8	18.1			
Viet Nam	•	•	•	5.7			
Total	3,389.5	3,041.4	6,469.7	6,314.6			

• = Not reported Source: DAINAP

7,000 6,000 5,000 4,000 3,000 2,000 1,000 0 2005 2006 2007 2008

Figure 13. Ketamine seizures in East and South-East Asia, 2005-2008

Annual seizures of ketamine in the region have been stable at 6.3-6.5 tons between 2007 and 2008 as reported to DAINAP. These figures exceed the annual amount of heroin seized in East and South-East Asia in recent years. In addition, these seizures of ketamine in 2007-2008 are approximately twice the total amount seized in 2005-2006 (Figure 13). The bulk of the drug was seized in China with 6.1 and 5.3 tons seized in 2007 and 2008 respectively. Although Malaysia seized 553 kg in 2008 and recorded significant seizures between 2005 and 2007 (Table 5), the country has not reported any ketamine use trend for the 2007/08 period.

### Synthetic drug manufacture

An increasing number of clandestine synthetic drug manufacturing operations have been dismantled in East and South-East Asia over the past five years and often represent the larger industrial-scaled operations versus smaller 'kitchen-type' laboratories. The largest number of reported ATS operations have been in China which reported 37 laboratories seized in 2005, 53 in 2006, and 75 in 2007. A total of 244 clandestine laboratory operations were dismantled in 2008 and, although the drug being manufactured was not specified, it is likely that at least half were related to ATS. In 2008 a large-scale operation manufacturing crystalline methamphetamine was uncovered in China's Southern coastal province of Guangdong.

A second country that has uncovered large-scale ATS manufacture operations during the past four years is Indonesia which seized more than 21 ATS laboratories in 2008 and 16 'ecstasy' laboratories and 7 methamphetamine laboratories in 2007. Assuming these 'ecstasy' laboratories actually manufactured MDMA—as opposed to some other ATS—as was the case in an industrial scale operation in Indonesia in 2008, it is likely that the region's source of MDMA will shift from tablets currently trafficked into the region from Europe to those made within the East and South-East Asian region.

Significant operations were also reported in Malaysia with 12 laboratories in 2008 and the Philippines which reported 10 methamphetamine laboratories dismantled that same year.

Following several years of being exclusively a transit country for ATS, Cambodia reported tablet production operations in 2005 and its first large-scale laboratory seizure in 2007. The country has continued to report several clandestine laboratory seizures in 2009. In contrast, Lao PDR, also on a transit route for ATS from Myanmar to Thailand, has to date never reported any manufacture or tablet production operations.

China reported the dismantling of 44 clandestine laboratory operations involving ketamine in 2007 and this figure is expected to rise when data compilation for 2008 is complete. The Philippines dismantled 4 ketamine laboratory operations in 2005, but none has been uncovered since then (Table 6).

China and Myanmar are the only countries reporting seizures of heroin refining facilities.

Table 6. Clandestine laboratories dismantled in East and South-East Asia

		Methamphetamine					Ecstasy on-defined	ATS)
Country	2004	2005	2006	2007	2008	2006	2007	2008
Cambodia	•	1*	8***	2	•	•	•	•
China	•	37	53	75	•	•	•	244**
Hong Kong (SAR)	1	•	•	•	•	•	•	•
Indonesia	2	1	•	7	•	7	16	21**
Malaysia	1	•	1	•	•	•	9	12**
Myanmar	1	3	10*	5*	1*	•	•	•
Philippines	11	7	4	9	10	•	•	•
Thailand	2	•	•	•	•	•	•	•
Viet Nam	•	1*	•	•	•	•	•	•

<sup>\*</sup>Tabletting operation. \*\* Not specified by laboratory type, includes ketamine and non-synthetic drugs. \*\*\* Reported as producing "fake" methamphetamine.

Table 6. Cont. Clandestine laboratories dismantled in East and South-East Asia

			Ketamine				
Country	2004	2005	2006	2007	2008	2005	2007
Cambodia	•	•	•	•	•	•	•
China	•	•	•	8	•	•	44
Hong Kong (SAR)	•	•	•	•	•	•	•
Indonesia	•	•	•	•	•	•	•
Malaysia	•	•	•	•	•	•	•
Myanmar	2	4	10	8	5	•	•
Philippines	•	•	•	•	•	4	•
Thailand	•	•	•	•	•	•	•
Viet Nam	•	•	•	•	•	•	•

#### • = Not reported

In years where no clandestine labs were reported by any country, the respective column for that year has been deleted for layout purposes.

Source: DAINAP, NNCC, UNODC (2007), Patterns and Trends in Amphetamine-type Stimulants in East Asia and the Pacific

### **Opiates and opioids**

Overall, countries with a history of heroin use over the past decade, such as China, Malaysia and Myanmar, have reported stable or declining heroin use in recent years. Heroin has been reported as the primary drug of use for the past five years in China, Malaysia, and Viet Nam. Of these, only Viet Nam reported increasing use of heroin in 2008. Viet Nam also reported an increasing use trend between 2003 and 2006. Singapore reported an increase in heroin use for the third year in a row in 2008.

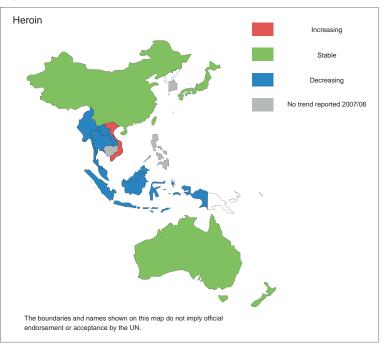
China reported stable use in 2008 which was preceded by two years of a declining trend. Malaysia did not report trend data for 2008, but reported a declining trend in 2006 and 2007. The trend in heroin use in both Myanmar and Thailand shows a decline for all but one year between 2003 and 2008.

Lao PDR ranked heroin as the fourth most common drug of use in 2008 and also reported a decreasing trend for that year. This was preceded by three years of an increasing heroin use trend in the country. In Indonesia, heroin declined in rank from being the second most common drug of use in 2006 to being ranked as the fourth with a decreasing trend in 2008.

Opium use is reported in China, Lao PDR, Malaysia, Myanmar, Thailand, Singapore and Viet Nam. No

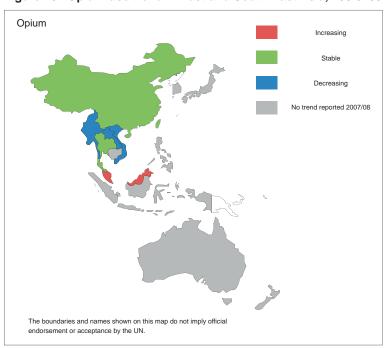
country reported an increasing trend in 2008. Lao PDR, Myanmar and Viet Nam record it as the second drug of use, reported decreasing use trends. Being the fourth most common drug of use in China, after heroin, methamphetamines and ecstasy, the current trend is reported as being stable. The regional trend for heroin and opium use is graphically displayed in Figures 14 and 15.

Figure 14. Heroin use trend in East and South-East Asia, 2007/2008



Source: DAINAP

Figure 15. Opium use trend in East and South-East Asia, 2007/2008



Source: DAINAP

For countries disaggregating data by drug type, the number of opiate related arrests has declined sharply in East and South-East Asia between 2005 and 2008 (Table 7). The most notable decline occurred in Malaysia with about two-thirds decrease in the number of opiate related arrests in 2007 compared to 2005.

Although not providing data disaggregated by drug type for 2008, total drug related arrests show a decline in Malaysia. Hence, the declining trend in opiate related arrests is unlikely to change, once disaggregated data become available.

In Thailand, opiate related arrests increased in 2008 to 1,479 compared to 1,278 in 2007, a 15.7% increase. However, this still represents less than two-thirds of heroin related arrests made in 2004.

Table 7. Opiate related arrests in East and South-East Asia, 2004-2008

	Number of arrests								
Country	2004	2005	2006	2007	2008				
Brunei Darussalam	0	0	1	0	0				
Cambodia	6	24	28	8	6				
China	•	•	•	•	•				
Hong Kong (SAR)	2,438	2,020	1,713	1,601	1,378				
Indonesia	1,927	3,121	2,610	3,561	1,813				
Japan	•	•	•	•	•				
Korea	•	•	•	958	1,396				
Lao PDR	10	60	0	36	45				
Malaysia	•	20,634	13,403	6,990	•				
Myanmar	2,403	2,712	2,078	2,015	2,059				
Philippines	•	•	•	•	•				
Singapore	171	99	130	840	1,050				
Thailand	1,771	1,176	1,195	1,278	1,479				
Viet Nam	•	•	•	•	•				
Total	8,726	29,846	21,158	17,287	9,226				

Note: Malaysia did not report disaggregated data in 2004 and 2008. ● = Not reported

Source: DAINAP

China accounts for the majority of the heroin seized in the region. A decline in quantities seized in China during the past five years has reduced the regional total for East and South-East Asia significantly. China reported seizures amounting to 10.8 tons of heroin in 2004 compared to 4.3 tons in 2008 (Table 8).

China also accounts for substantial seizures of opium annually and together with Myanmar accounted for seizing 94.8% of total regional seizures of opium in 2008. Overall, the trend in opium seizures has been relatively stable between 2004 and 2008 with the exception of a spike in 2006 which occurred in Myanmar (Table 8).

Table 8. Opiate related seizures in East and South-East Asia, 2004-2008

	Heroin (kg)					Opium (kg)				
Country	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Brunei Darus- salam	0	0	0.01	0	0	•	•	•	•	•
Cambodia	5.2	11.8	21.3	10.7	5.3	2.8	2.1	1.8	•	•
China	10,836.5	6,904.7	5,792.1	4,594.0	4,332.3	890.4	2,309.3	1,691.0	1,184.6	1,375.0
Hong Kong (SAR)	35.7	31.9	52.2	37.4	54.6	•	•	•	•	•
Indonesia	12.7	19.8	11.9	17.2	29.1	•	•	•	•	•
Japan	0.04	0	2.3	2.1	1.0	•	1.0	•	•	6.6
Korea	0	0.01	0.02	0	0	•	•	•	•	•
Lao PDR	48.6	40.4	9.2	23.8	17.5	1.2	56.8	1.2	14.2	11.8
Malaysia	221.0	252.3	155.7	243.3	297.1	101.0	3.9	0.5	7.4	13.9

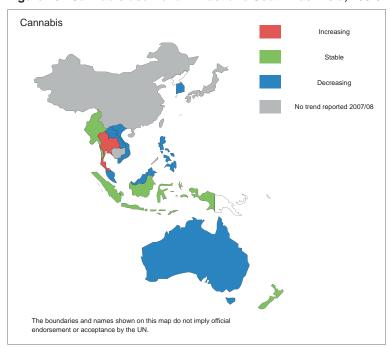
	Heroin (kg)				Opium (kg)					
Country	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Myanmar	973.5	811.7	192.4	68.4	88.2	606.9*	772.7*	2,321.0*	1,173.8*	1,463.4*
Philippines	•	•	•	•	0	9.0	•	•	2.5	•
Singapore	0.03	3.3	0.1	2.6	2.1	•	•	•	•	0.5
Thailand	789.0	948.6	92.5	292.6	199.8	1,595.0	102.6	767.5	139.7	111.3
Viet Nam	239.4	287.7	276.6	160.2	156.2	58.6	51.1	184.0	63.4	18.8
Total	13,161.7	9,312.2	6,606.3	5,452.4	5,182.4	3,264.9	3,299.5	4,967.1	2,585.6	3,001.3

<sup>\*</sup> Does not include low grade opium or opium oil. ● = Not reported Source: DAINAP

### **Cannabis**

All countries reporting to DAINAP cited cannabis as a drug of current use. Cannabis is reported as the primary drug in Indonesia and Thailand. However, only Brunei and Thailand reported an increase in use in 2008. China reported cannabis use in 2007 (ranked seven) and an increasing trend, but did not report any rank or trend in use for cannabis in 2008. All remaining countries, reported either a stable or declining use trend (Figure 16).

Figure 16. Cannabis use trend in East and South-East Asia, 2007/2008



Source: DAINAP

Table 9. Cannabis related arrests in East and South-East Asia, 2004-2008

	Number of arrests								
Country	2004 2005 2006 2007 2008								
Brunei Darussalam	12	23	31	27	28				
Cambodia	0	25	8	8	6				
China	•	•	•	•	•				
Hong Kong (SAR)	811	639	719	541	544				
Indonesia	3,282	7,818	12,865	18,142	11,581				

	Number of arrests							
Country	2004	2005	2006	2007	2008			
Japan	2,312	2,063	2,423	2,375	2,758			
Korea	•	•	•	1,170	1,045			
Lao PDR	4	0	0	2	26			
Malaysia	•	5,044	5,199	2,410	•			
Myanmar	295	275	232	•	240			
Philippines	•	•	•	•	•			
Singapore	153	150	158	148	88			
Thailand	8,441	7,546	10,549	9,833	11,679			
Viet Nam	•	•	•	•	•			
Total	15,310	23,583	32,184	34,873	27,995			

= Not reported Source: DAINAP

For countries disaggregating data by drug type, cannabis related arrests doubled in East and South-East Asia between 2004 and 2007 from slightly more than 15,000 arrests to over 34,000 arrests. This was primarily driven by an increase in cannabis related arrests in Indonesia and Thailand. Representing over 80% of total cannabis-related arrests in the region in 2008. Regional arrests declined to 27,995 in 2008. Again, these were influenced primarily by Indonesia which reported a sharp decline in arrests that year. Other countries in the region showed some fluctuation over the years, but the trend in arrests has been generally stable or on the decline (Table 9).

Indonesia reported, by far, the largest annual cannabis seizures in the region amounting to almost 220 tons during the five years period 2004-2008. However, it is uncertain how much, if any, of the reported seizures include raw plant material which would result in the amount being revised downward. Regardless, Indonesia, together with Thailand and Viet Nam, have registered some very large annual seizures of cannabis over the past two years. Thailand seized more than 15 tons in 2007 and 18.9 tons in 2008 and Viet Nam seized 8 tons of cannabis resin in 2007 and an additional 8.9 tons in 2008. The seizures of cannabis by country as shown in Table 10.

Table 10. Cannabis seizures in East and South-East Asia, 2004-2008

	Cannabis (herb and resin) (kg)							
Country	2004	2005	2006	2007	2008			
Brunei Darussalam	0.2	•	2.3	0.1	0.6			
Cambodia	•	103.0	•	10	5.0			
China	1,697.0	941.0	•	•	•			
Hong Kong (SAR)	182.7	417.0	152.5	467.3	257.4			
Indonesia	8,494.1	22,835.0	11,723.0	35,464.7	140,650.0			
Japan	970.1	•	332.5	560.5	415.7			
Korea	•	18.4	20.9	22.2	92.7			
Lao PDR	1,241.0	1.6	291.5	2,302.8	804.6			
Malaysia	1330.0	1,166.2	2,378.8	1,482.8	874.8			
Myanmar	142.5	453.1	72.9	104.3	170.2			
Philippines	836.2	4,433.8	11,150.5	1,207.7	3,725.0			
Singapore	1.0	0.7	1.5	2.9	1.1			
Thailand	9,907.0	13,343.8	11,875.3	15,384.6	18,891.6			
Viet Nam	1,021.3	3,368.5	645.0	8,000.0	8,928.8.0			
Total	25,823.1	47,082.1	38,646.7	65,009.9	174,688.2			

• = Not reported Source: DAINAP

Total treatment admissions for cannabis use in the region shows a relatively stable trend between 2004 and 2007 with about 35,000 to 40,000 individuals receiving treatment annually.

### Other drugs

Apart from ATS, cannabis, heroin, opium and ketamine, there are several other drugs that are used, although to a lesser extent throughout the region. Some drugs have emerged recently, while others have a long history of use in several countries.

Most notable during the past five years is the presence and, in some cases, a reported rise in use of the benzodiazepine, nimetazepam. An increase in the use of nimetazepam, sometimes in combination with methamphetamine, has been reported in Brunei, Indonesia and Malaysia.

Another drug of concern for some countries in mainland South-East Asia is Kratom, derived from the dried leaves of the indigenous tree, Mitragyna Speciosa. The use is particularly prevalent in Thailand and currently ranks as the second most common drug of use, after being ranked fourth and tenth in 2007 and 2006 respectively. It has become increasingly used, particularly in the southern part of the country, in a drug cocktail containing a combination of licit drugs and kratom leaves. It is also a drug of concern in Myanmar, but to a lesser extent.

Several countries list inhalant and solvent use as a major issue of concern, particularly among youth. This is particularly problematic in Cambodia where surveys indicate high levels of use among street children.

### Summary, emerging trends and concerns

Indications of increasing demand for methamphetamine in Thailand will likely have wide implications for neighbouring countries: Seizure, arrest and treatment admission data suggest that demand for methamphetamine is increasing in Thailand which already has a large established market. In addition, the political situation in Myanmar in 2009 is likely to serve as a push factor for illicit drugs and relocation of clandestine manufacturing sites across its borders. Lao PDR and Cambodia may experience increased trafficking and risk of clandestine laboratory operations being established in border areas. In Lao PDR, although seizures for pills remained stable at 1.3 million and 1.2 million respectively for 2007 and 2008, the number of cases more than doubled from 84 to 194 over the same period. Preliminary seizure data indicate large methamphetamine and heroin seizures in Myanmar in 2009.

Viet Nam is exposed as a major emerging market for methamphetamine: Viet Nam may be a potentially vulnerable market as methamphetamine manufacturers seek to diversify away from their reliance on the Thai market. Viet Nam is attractive to traffickers as the country has a large, increasingly affluent and urban population. According to Vietnamese drug control officials, ATS, particularly crystalline methamphetamine, is being trafficked in increased quantities, resulting in larger seizures. Officials also report drug storage points along the northern border with Lao PDR and collaboration between foreign and local traffickers. 2008 saw more than four times the previous record of annual ATS pills seized. According to preliminary data from the Viet Nam Standing Office on Drugs Control (SODC), large seizures continue in 2009.

Increase in market share of crystalline methamphetamine in the Greater Mekong Subregion (GMS): Although methamphetamine in pill form is the dominant form of methamphetamine in the GMS, greater availability of crystalline methamphetamine, which has considerably higher purity (generally >65% opposed to pills <30%), is likely to be established with a subsequent increase in use. Crystalline methamphetamine was reported as a drug of use for the first time in 2008 with an increasing trend in Viet Nam. It has also been reported in seizures in Cambodia every year since 2005 and may be implicated in recently dismantled clandestine laboratory operations. A survey of 2,084 street children in Phnom Penh conducted by the NGO Mith Samlanh, reported that among those who had used illicit drugs, 42.6% had used methamphetamine in crystalline form and 57.4% in the pill form. A needle syringe program managed by the same NGO and another NGO, Korsang, reported that about 18% of injecting drug users (IDUs) injected crystalline methamphetamine.

In Thailand, although the amount of seized crystalline methamphetamine has varied over the past five years, the number of related arrests and seizures has increased continuously between 2004 and 2008. The trend in crystalline methamphetamine use has been increasing for all but one year between 2004 and 2008.

and 2008.

Methamphetamine and ecstasy have surpassed heroin and are the second most common drugs of use in Indonesia: The methamphetamine and ecstasy market has expanded noticeably in Indonesia over the past three years. Crystalline methamphetamine and ecstasy moved up among drugs of concern in 2008, overtaking heroin and ranking second behind cannabis. Both ATS drugs were reported as having an increasing use trend in 2008. ATS seizures increased considerably beginning in 2004 through 2007, but declined sharply in 2008. However, they continue to remain at a high level, suggesting that international drug syndicates may be targeting Indonesia for ATS shipment and manufacture as reflected in a massive seizure of an estimated 600 kg of crystalline methamphetamine off West Java in 2008.

The scale of ATS manufacturing in Indonesia is large and the country may become the next major supply source for ecstasy in the region, potentially displacing Europe as a supply source: The number of clandestine ATS laboratories seized in Indonesia have also increased dramatically in recent years. In 2008, a total of 21 laboratories were uncovered, while 13 laboratories were dismantled within the first quarter of 2009. The seized laboratories continue to be of large industrial-scale size. In May 2009, an MDMA manufacturing plant was dismantled with approximately 10 tons of ecstasy precursors and reagents. The facility had an estimated production capacity of 100 kg of MDMA per production cycle.

In Malaysia, there is a high risk of ATS spilling over into the domestic market: Malaysia is at a high risk of becoming a major market for ATS as large amounts are trafficked into the country in addition to large-scale domestic manufacture. It is possible that Malaysia may be following the pattern observed in neighbouring Indonesia over the past three years in which large seizures and the uncovering of manufacturing operations of ATS were followed by increased use. Methamphetamine seizures in Malaysia are increasing. In 2008, very large seizures were made compared to the previous four years with 679 kg of liquid methamphetamine, 357 kg of methamphetamine powder and more than 280,000 methamphetamine pills seized. Large seizures continue with a massive seizure of almost a ton of crystalline methamphetamine occurring in May 2009. Twelve clandestine ATS laboratory operations were uncovered in 2008 compared to nine in the previous year.

**Increasing seizures of safrole-rich oils in Cambodia:** Since 2005, the harvesting of trees (*Dysoxylum loureiri*) for the extraction of safrole-rich oils has been illegal in Cambodia under the Forest Law, as the trees containing the oil are classified as a rare species. The oil has licit commercial value and is used in the perfume and pesticide industry. However, it can also be used as a precursor in the manufacture of ecstasy.

Although there has been no evidence to suggest that safrole-rich oils produced in Cambodia have been used to synthesize MDMA (ecstasy), several illegal safrole extraction operations have been uncovered and large volumes seized including 570 litres in 2006, 3,260 litres in 2007. Over fifty tons of safrole-rich oils were seized in 24 containers at Laem Chabang port in Thailand in October 2007, originating from Cambodia. The trend in illegal safrole extraction appears to be continuing in 2009 with large safrole-rich oil seizures reported in the first-half of the year. Large-scale safrole extraction operations have a huge environmental impact due to deforestation and the chemical pollution from their production.

(Note: For more detailed data related to this chapter, please see the 'Data Annex' section at the end of this document.)

# Regional trends in amphetamine-type stimulants (ATS) and other drugs in the Pacific Island States

The Pacific Island States consist of 24 countries and dependencies (excluding Australia and New Zealand) located in the Pacific Ocean between the continents of Asia to the West, Australia and New Zealand to the South, and the Americas to the East. This overview focuses on 12 of the Pacific Island States that are members of the Pacific Drug Academic Research Network (PDARN).

The 2007 population estimation for the Pacific Island States varied from more than 6 million inhabitants in Papua New Guinea to less than two thousand in Niue (UN Population Division, 2009). It is estimated that 59% of the region's population is between 15-64 years old, the ages most at risk from illicit drugs use (UNODC, 2009f).

In this region, the absence of formal surveillance systems, either nationally or regionally, for monitoring illicit drug use, emerging drug trends or the associated harms, makes accurate assessments difficult (Devaney, Reid, & Baldwin, 2006).

The main drugs of use in the Pacific Island States are licit drugs. Notably alcohol, both in commercial and home brewed form. In addition, traditional psychoactive substances, such as *kava*, are a public health problem in the Federated States of Micronesia, Tonga and Vanuatu (UNODC, 2007). The use of inhalants is of major concern in Fiji, particularly among youth. Of the illicit drugs, cannabis is the main drug of concern, which is cultivated in some countries, such as Fiji, Palau and the Solomon Islands.

Assessing the drug situation for the substances which are under international controls is a significant challenge, as many of the Pacific Island States have not adopted the three key international drug control instruments, namely the 1961 Single Convention on Narcotic Drugs, the 1971 Convention on Psychotropic Substances, and the 1988 Convention on the Illicit Traffic in Narcotic Drugs and Psychotropic Substances (UNODC, 2009f). Only 3 of the 12 Pacific Island States, i.e. Fiji, the Federated States of Micronesia and Tonga have ratified all three drug control conventions. Thus, the most fundamental framework of international drug control is absent throughout much of the region.

With the exception of Guam and the Commonwealth of Northern Mariana Islands which have established methamphetamine markets (UNODC, 2008), the evidence of ATS use has been limited, in part due to a lack of reporting capacity. In the Commonwealth of Northern Mariana Islands, use of methamphetamine is believed to be involved in most drug related crimes. There are emerging reports of methamphetamine use in the States and Territories of American Samoa, French Polynesia, Fiji, Palau, Papua New Guinea, Samoa and Vanuatu. Table 11 shows details concerning the drugs of concern in the 12 selected countries in the Pacific.

Table 11. Drug use concerns identified by Pacific Drug Academic Research Network, 2009\*

Drug type	Fiji	Marshall Islands	Federated States of Micronesia	Nauru	Niue	Palau
Amphet- amine- type Stimulants (ice, shabu, ecstasy)	Prevalent in night clubs, 2004 industrial- scale laboratory seizure and pre- cursor chemical seizures. 2008 reports use amongst adults in Nadi, and among local af- fluent people	Seizures reported	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	No reported seizures since 2006. Reported use of meth- amphetamine among youth, with fluctuating trend

<sup>&</sup>lt;sup>1</sup> With the exception of the Marshall Islands (2004) and Niue (2006-2007), no Pacific Island State covered in this chapter has returned an Annual Report Questionnaire (ARQ) to UNODC since 2000.

Drug type	Fiji	Marshall Islands	Federated States of Micronesia	Nauru	Niue	Palau
Cannabis	Common. Grown locally. Significant sei- zures. Minor export	Reported seizures. 2.7% women used marijuana be- fore pregnancy. Link to mental health problems	Limited use among youth, but limited cur- rent data	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Common. Lo- cally grown, and easily accessible with fluctuating use. Peaked in 2007 among students
Traditional psychoactive substances (including kavalactone containing substances, locally called kava, noni, yaquona, saku etc.)	Common. Limited estimates on consumption rate. Associated with decreased productivity. Recent increase in use among youth and women (traditionally used only by older men). Decrease in use among indigenous Fijian outpatients, but increase among other ethnic groups	Not identified as a drug of concern based on known use and seizures	Limited, but consumption in decline	Limited	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures
Inhalants (glue, gas, paint, petrol)	Serious concern. St. Giles hospital in Suva reports youth admitted for psychiatric symptoms. Burning and inhaling fumes of rubber shoes, computer cleaner and candy wrappers have been reported	Not identified as a drug of concern based on known use and seizures	Limited. Previous use problem in 1980s	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Prevalent, but declining trend
Heroin	Very limited use. Seizures in 2002 and 2008	Limited	Behavioral surveys report people hav- ing injected. Limited current data	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	1984-85 heroin 'outbreak'. Past behavioral surveillance surveys have reported injecting, identified HIV risk. Limited current data
Cocaine	Limited domestic use. Trafficking from South Ameri- can. Linked to older drug users and local affluent people. Sold in powder and capsules, wrapped in Cool Air gum wrap- pers	Seizures, in- cluding cocaine found 'washed up' along the coast	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures
Other drugs	LSD traces in seizures. Few cases of flunitrazepam (rohypnol) in- volved in rape	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures

<sup>\*</sup>Excludes alcohol. Note: The assessment matrix above is not a complete survey, but an identification exercise conducted whithin the framework of the Pacific Drug and Alcohol Ressearch Network.

Source: PDARN workshop, July 2009, Port Vila, Vanuatu

Table 11. Cont. Drug use concerns identified by Pacific Drug and Alcohol Research Network, 2009\*

Drug type	Papua New Guinea	Solomon Islands	Timor Leste	Tonga	Tuvalu	Vanuatu
Amphet- amine Type Stimulants (ice, shabu, ecstasy)	Limited report of local dealing in methamphet- amine	Assessed as likely being available, but lack of data	Anecdotal reports emerging of crystalline methamphetamine use linked to 2006 political situation Used by gang militia	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Limited meth- amphetamine use among affluent youth identified
Cannabis	Very common	Common among all age groups. High youth consumption rates, even reports of children as young as eight. Competitive smoking to get 'stoned' widely reported. Several seizures. Identified as growing problem	Common. Associated with youth gangs	Prevalent	Use among young men. Lack of data	Prevalent. increasing use
Traditional psychoactive substances ( kava noni, yaquona, saku etc.)	Available. Ex- tent of use not known	Not traditionally used. Reports of introduction by workers returning from overseas work,. People have begun to plant in Isobel Province and exporting to Kiribati, with local use emerging as an issue	Known use. Prevalence not clear	Common. Seen as superior alternative to alcohol	Prevalent. Imported kava consumed among youth, men and a few women	Prevalent
Inhalants (glue, gas, paint, petrol)	Limited. Reports of use of paint thinner and petrol	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Limited problem among students	Not identified as a drug of concern based on known use and seizures	Limited glue and petrol sniffing
Heroin	Not identified, but transit country for traf- ficking	Identified in 1990s, but not widespread. Not identified in recent times	Identified as a risk factor for HIV. No reported use in 2009	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Transit country for trafficking
Cocaine	Few reported cases in 2007	Limited avail- ability on the streets in pill form	Not identified as a drug of concern based on known use and seizures	Occasional reports of use since 1990s	Not identified as a drug of concern based on known use and seizures	Transit for traf- ficking. Limited local use. Sei- zures, but no report of use
Other drugs	Mix of cannabis, alcohol, "magic mushrooms" and angel trum- pets reported	Since 1990s some "magic mushrooms" and angel trum- pets use among youth	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Not identified as a drug of concern based on known use and seizures	Increased mixing of substances, such as magic mushrooms, bell flowers, Coleman light (spirit fuel), coconut pollen and fruit juices

<sup>\*</sup>Excludes alcohol. Note: The assessment matrix above is not a complete survey, but an identification exercise conducted within the framework of the Pacific Drug and Alcohol Network.

Source: PDARN workshop, July 2009, Port Vila, Vanuatu

The strategic geographical location of the Pacific Island States, in an area heavily traversed by international shipping, inevitably ties them into the broader regional illicit drug markets of East and South-East Asia, the Americas, as well as Australia and New Zealand. Figure 17 illustrates the interconnectedness, showing the large number of commercial shipping routes in Oceania between Asia and North America.

CHNA

SKOREA

TANNAN

North of Microsian

James Singapore

Patter Product States

County

Patter States of American Samoa

North States of Microsian Samoa

North Microsian Samoa

North Microsian Samoa

North States of Microsian Samoa

North Microsian Samoa

North States of Microsian Samoa

North Microsian Samoa

North States of Microsia

Figure 17. Commercial shipping routes in Oceania between Asia and North America

Source: Oceania Customs Organization.

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

The Pacific Island States face particular challenges in terms of law enforcement and security. In relation to illicit drug trafficking, there are eight notable vulnerabilities facing the Pacific Island States. These are:

- 1. The Pacific Island States are surrounded by major manufacturing areas and markets for ATS and other drugs;
- 2. The Pacific Ocean is being increasingly used as a transport link between Asia and North and South America;
- Most states have porous maritime borders, extensive coastlines, and large archipelagos within their borders:
- 4. Many of the States lack effective legislation against illicit drugs; only three Pacific Island States have ratified the three fundamental United Nations Conventions on illicit drug and precursor control;
- 5. Generally, the Pacific Island States have very limited law enforcement capacity;
- In some cases, the governments are weak and problems of corruption increase the threat from or ganized crime;
- Most States have limited knowledge in identifying synthetic drugs, specifically ATS, as well as their precursors; and
- 8. There is an absence of effective regional or national drug surveillance systems.

With the absence of effective national and regional drug data surveillance systems, new patterns and trends in drug use may emerge and become entrenched before effective demand reduction and treatment resources can be mobilized. Given the small size of many of the Pacific Island States, the risk of 'spill-over' of illicitly manufactured or trafficked substances into the domestic market can be rapid and new forms of drug use can become a major public health concern.

Given these vulnerabilities, there are several cases that point towards international syndicates already having identified this region as a convenient transit location or even a base for operations.

The most significant seizure occurred in Fiji in 2004, when an industrial scale methamphetamine labora-

tory was uncovered. Approximately 700 litres of liquid methamphetamine were seized together with 5 kg of crystalline methamphetamine and enough precursor chemicals to produce an additional ton of finished product (McCusker, 2006). The estimated production capacity of the laboratory was between 500 and 1,000 kg of crystalline methamphetamine per week, making it one of the largest laboratories seized in the Oceania region (Schloenhardt, 2007). The laboratory was operated by an Asian organized crime group and three Fijian and four Asian nationals were arrested.

The risk of illicit drug manufacture is not limited to large-scale criminal operations, such as the case in Fiji, but also to the numerous smaller-scale operations common in Australia and New Zealand. These 'kitchen-type' laboratories often operate in residential areas, where their toxic, highly flammable chemicals pose a threat to nearby residents and the environment. There are already several media reports that this type of operation is currently occurring in the Pacific. According to these reports, one lab was seized in Guam in 2006, five were seized in 2007, and two were seized in 2008.<sup>2</sup> In January 2008, four people were charged in Guam with attempting to manufacture methamphetamine. In April 2009, 15 people were arrested in French Polynesia, along with 342 grams of methamphetamine, in connection with methamphetamine<sup>3</sup> trafficking from Mexico where the liquid form of the drug was crystallized in a makeshift laboratory.<sup>4</sup>

There are strong indications that the strategic geographic location of the Pacific Island States is indeed being exploited and that several Island States are being used as transshipment points for ATS, other drugs and their precursor chemicals. In 2002, 74 kg of methamphetamine was found on a ship transiting Fiji with a final destination of Australia. Additionally, 2.5 kg of pseudoephedrine were seized en route between Fiji and Brisbane, Australia (McCusker, 2006). According to media reports, in 2007, 11 grams of a substance suspected to be methamphetamine was seized in Samoa, while in September 2009, authorities in Tonga seized significant quantities of methamphetamine in a raid of two homes in the capital Nuku'alofa, reportedly the largest seizure of its kind for the country.<sup>5</sup>

Several cases of cocaine trafficking have also been reported in recent years. In 2007, 2.3 kg of cocaine were detected in air freight between Central America and Papua New Guinea, 2.1 kg were seized at Fiji airport arriving from South America, and 0.3 kg of cocaine were smuggled in luggage between South America and Vanuatu. In the same year, 4.5 kg of cocaine was seized in French Polynesia (PIFS, 2009). Heroin seizures have fluctuated in the region. However, there have been indications of some countries being major transit countries for heroin. For example, in 2004, 112 kg of heroin were uncovered, having been buried on a beach in Vanuatu. Fiji has also seen a number of large seizures, including one involving 357 kg of heroin in 2007.

Cannabis is cultivated on a large scale in Fiji and Papua New Guinea. Although there has been evidence of some cannabis from Fiji being exported, most is believed to be destined for the domestic market (PIFS, 2009). Cannabis originating from Papua New Guinea has been seized in Australia (ACC, 2009). In Fiji, large seizures of cannabis plants were reported in 2009. In 2008, police in Fiji eradicated 15,000 cannabis plants in the area of Navosa. In the Solomon Islands, a total of 2,680 cannabis plants were uprooted by the police in 2008. In addition, 1,100 pieces of cannabis resin in the form of ready-for-consumption paper rolls were confiscated (Integrated Mental Health Services in Solomon Islands, 2009).

Precursor chemical trafficking also has become an emerging concern. As several countries tighten control of precursor chemicals, the Pacific is at risk of being increasingly targeted by organized crime groups. There are already indications of this occurring. Seizures of precursors, attempted diversions, and thefts have been reported by authorities in French Polynesia, Papua New Guinea, Samoa, Tonga, and Vanuatu. In 2002, 12 tons of methamphetamine precursors were prevented from being imported into Papua New Guinea. In this case, India was the source country for the ephedrine and China was the source country of the pseudoephedrine (Schloenhart, 2007). In 2008, an attempt to divert significant amounts of pseudoephedrine bound for Nauru were halted by authorities. Tonga has reported significant theft of pharmaceutical products containing pseudoephedrine, including 178,000 pills of the substance, that subsequently were trafficked to New Zealand (PDARN, 2008).

<sup>&</sup>lt;sup>2</sup> Saipan Tribune. Ice remains leading drug threat in Micronesia. August 7, 2008. www.saipantribune.com/newsstory. aspx?newsID=82314&cat=1

<sup>&</sup>lt;sup>3</sup> Pacific Daily News. A woman facing federal charges has signed a plea agreement. March 31, 2008. www.guampdn. com/apps/pbcs.dll/article?AID=/20080318/NEWS01/803180302/1002.

<sup>&</sup>lt;sup>4</sup> La Dépêche de Tahiti. 342 g d'ice pure saisis par la DSP. May 6, 2009. www.ladepeche.pf/fenua/faits-divers/4612-342-g-dice-pure-saisis-par-la-dsp.html

<sup>&</sup>lt;sup>5</sup> Matangi: Tonga online. Tonga police bust large shipment of drugs. September 22, 2009. http://www.matangitonga.to/article/tonganews/crime/20090922\_tonga\_drugs\_seized.shtml

# Summary, emerging trends and concerns

- Several major cases over the past five years indicate that manufacture of ATS, as well as trafficking in ATS and other drugs and precursor chemicalss, are real and current threats;
- The region is surrounded by major markets for ATS and other drugs. In combination with porous maritime borders and limited law enforcement capacity, it is highly likely that some States in the region will be targeted by illicit traffickers and manufacturers;
- Weak governments, limited experience in detecting and treating synthetic drug use, together with increasing transport links between Asia and the Americas, make the Pacific Island States vulnerable;
- The rapid corrupting influence that transnational organised crime can have on small states is also of particular concern, since lack of effective law enforcement may lead to the problem becoming entrenched;
- There are no formal drug surveillance systems, either nationally or regionally, in place for monitoring illicit drug use, emerging drug trends, or associated harms; and
- Emerging ATS issues combined with absent/weak data collection systems, and weak legislation in the region, are areas of concern.

# Regional trends in amphetamine-type stimulants (ATS) and other drugs in South Asia

The South Asian sub-region consists of Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka. For purposes of this overview, the focus is on those countries where there is the greatest risk of increasing ATS use, namely Bangladesh, India, and Sri Lanka. The size of these countries as well as the current assessment of the ATS problem are quite varied. However, there are indications across the sub-region of a spill-over of clandestine ATS manufacture, trafficking and ultimately use from the neighbouring East and South-East Asian region.

#### **Bangladesh**

There are no household survey estimates for ATS use in Bangladesh nor do monitoring systems identify and disaggregate data to include ATS. However, there were sporadic reports of increases in ATS trafficking and use in major cities in 2007, including reports of high purity crystalline methamphetamine (UNODC, 2008). There are also indications that precursor trafficking and manufacture of ATS may already be occurring.

The number of treatment admissions between 2000 and 2008 for seven major treatment centres in Bangladesh that participate in the Client Monitoring System has fallen steadily since 2001, when more than 24,000 patients were in treatment, to less than 4,000 in 2008. The most common drugs for which treatment was sought in 2007 (Table 12) were heroin, accounting for 67% of total admissions, followed by cannabis (15%). The existing client-based treatment monitoring system does not record data to include ATS.

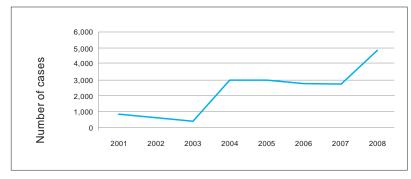
Table 12. Client Monitoring System: Distribution (%) of patients by primary drug in Bangladesh, 2004-2007

Drug type	2004	2005	2006	2007
Heroin	79.2	79.3	84.5	67.0
Cannabis	7.4	8.8	9.0	15.0
Buprenorphine and pethidine	4.0	3.6	1.6	5.6
Codeine (Phensedyl)	7.6	5.5	2.3	4.3

Source: Department of Narcotics Control (DNC), Bangladesh, September 2009

In contrast to the reduction in treatment admissions, the number of court cases involving illicit drugs reached an all-time high with 4,905 cases in 2008, representing more than a ten-fold increase compared to the 418 cases adjudicated in 2003 (Figure 18).

Figure 18. Number of drug-related cases disposed in courts in Bangladesh, 2001-2008



Source: Department of Narcotics Control (DNC), Bangladesh, September 2009

and buprenorphine have increased substantially between 2007 and 2008.

The reported illicit drug seizures in Bangladesh between 2006 and 2008 are summarized in Table 13. While no seizure of methamphetamine pills/tablets was reported in 2006, several thousand of pills/tables were seized in both 2007 and 2008. Heroin seizures have shown a generally increasing trend since 2003, while seizures of codeine

<sup>&</sup>lt;sup>1</sup> Central Treatment Center, Tejgaon; Dhaka Treatment Center; Chittagong Treatment Center; Rajshahi Treatment Center, Khulna and Central Jail Treatment Center-Jessore, Rajshahi and Comilla.

Table 13. Drugs seized in Bangladesh, 2006-2008

Drug type (measure)	2006	2007	2008
Methamphetamine pills/tablets (unit)	•	8,184	5,763
Heroin (kg)	16	21	29
Poppy plant (unit)	•	60,038	•
Poppy seed (kg)	•	20.0	•
Cannabis (kg)	1,344.9	1,768.2	2,301.8
Codeine (Phensedyl bottles)	46,995	28,241	53,239
Codeine (litres)	303	146	129
Pethidine/morphine (ampoule)	235	250	226
Buprenorphine (ampoule)	1,410	4,729	14,782
Unspecified tablets (unit)	491	73,947	554

#### • = Not reported

Source: Department of Narcotics Control (DNC), Bangladesh, September 2009

It has been suggested that methamphetamine pills are smuggled into the country via neighbouring Myanmar. In October 2007, the Bangladesh Rapid Action Battalion reportedly seized ATS-related chemical precursors and manufacturing equipment, as well as 130,000 methamphetamine tablets, and crystalline methamphetamine (UNODC, 2009). The seizure was made in an affluent neighbourhood of Dhaka and reportedly led to an additional seizure of 1.3 million methamphetamine tablets.

Bangladesh has also been identified as a source of pharmaceutical preparations containing pseudoephedrine. Information on some seizures made recently in Central American countries include:

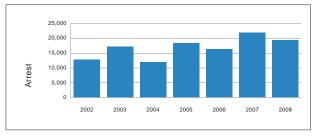
- 409,200 pseudoephedrine tablets seized by authorities from the Dominican Republic on 16 April 2009. The shipment, listed as vitamins made by a firm in Dhaka, Bangladesh, was bound for Guatemala.
- 2,088,310 tablets of pseudoephedrine seized by authorities from Honduras on 18 April 2009. The tablets came from Bangladesh and were addressed to a pharmacy in Tegucigalpa, Honduras.
- 55,100 tablets of pseudoephedrine seized at Tegucigalpa airport on 21 March 2009. The shipment originated from Bangladesh in a commercial flight from Panama. The tablets were in 36 boxes addressed to a laboratory located in the South of Tegucigalpa.

#### India

India is one of the largest exporters of methamphetamine precursors (ephedrine and pseudoephedrine), and the size of its chemical and pharmaceutical industry makes the country a target for international drug syndicates involved in illicit drug manufacture. Several domestic cases of methamphetamine manufacture have already been reported, leading to the possibility of ATS use spreading in the young, increasingly affluent urban population. However, there have never been any representative household surveys in India which assessed ATS use.

The number of drug-related arrests in India (Figure 19) has fluctuated over the period 2002-2008 and the highest reported arrests of 22,267 in 2007 coincided with increasing amounts of drug seizures in the country (Table 14).

Figure 19. Drug-related arrests in India, 2002-2008



India's primary illicit drug, cannabis herb (ganja) accounted for the vast majority of seizures in 2008 with more than 102 tons seized. In addition, over 4 tons of cannabis resin (hashish) was seized. The seizures of both forms of cannabis represented a decline over figures in 2007.

Source: Drug situation report and drug law enforcement statistics, March 2009, Narcotics Control Bureau, India

The volume of seizures of both opium and heroin declined in 2008. Opium seizures, in particular, showed a sharp decline from 2.7 tons seized in 2006 and 2.2 tons seized in 2007 to 1.2 tons seized in 2008. In contrast, morphine seizures increased from 43 kg in 2007 to 73 kg in 2008, representing an increase of 70%.

The seized quantities of the sedative, methaqualone, have fluctuated widely between 2002 and 2008, with 345 kg seized in 2003 and 7.5 tons seized in the prior year. In 2008, 2.4 tons were seized. Smaller seizures of cocaine have been reported between 2002 and 2008, ranging between 2 and 12 kg annually with the exception of 2006 during which 206 kg of cocaine were seized.

Ketamine seizures rose sharply between 2005 and 2008 in India where the cost per kg of the drug (US\$1,000-US\$2,000) represents a fraction of the international market price of US\$10,000-US\$15,000. Most of the drug is believed to be destined for East and South-East Asia and is often found in the ATS club drug market. In April 2008, Malaysian Customs seized 130 kg of ketamine believed to have originated from India (Table 14). In 2008, Hong Kong officials seized 307 kg of ketamine, together with 20 kg crystalline methamphetamine, originating from India (not listed in table). In response, restrictions on import and export of ketamine were introduced at the end of 2007, although the substance is not notified as a 'controlled substance' under the Narcotic Drugs and Psychotropic Substances Act of India.

Table 14. Drug seizures in India, 2002-2008

Drug type (mea- sure)	2002	2003	2004	2005	2006	2007	2008
Amphetamine (kg)	0	0	91	0	0	0	20
Ketamine (kg)*	•	•	•	70	379	372	789
Cannabis herb (kg)	88,491	79,653	144,055	153,660	143,545	107,881	102,053
Cannabis resin (kg)	3,010	3,013	4,599	3,965	3,657	5,181	4,045
Methaqualone (kg)	7,458	345	1,614	472	4,420	•	2,361
Opium (kg)	1,835	1,720	2,237	2,009	2,707	2,226	1,243
Heroin (kg)	879	991	1,162	981	1,044	1,186	999
Morphine (kg)	66	109	97	47	36	43	73
Cocaine (kg)	2	3	6	4	206	8	12

Data as of March 2009. ● = Not reported

Source: Drug situation report and drug law enforcement statistics, March 2009, Narcotics Control Bureau (provisional data for 2008); \*Presentation at the Anti-Drug Liaison Officials' Meeting for International Cooperation 2009, (Pandey, 2009).

Seizure data for ATS are only provided for amphetamine, with sporadic reports of seizures since 2002. No details of seizures for methamphetamine or ecstasy were provided. However, the reports of clandestine methamphetamine laboratories in recent years (Table 15) suggest that these drugs are also being seized. For example, the clandestine operation detected in Hyderabad in 2004 resulted in the seizure of 8 kg of methamphetamine, 90 kg of ecstasy and 12 gm of amphetamine. In addition, 1.6 tons of methaqualone, 590 liters of acetic acid, 2.7 tons of anthranilic acid, 1.8 ton of ortho-toluidine and 91.4 kg of piperonal, were seized. Three years later, a significant clandestine ATS operation was dismantled in Mumbai, involving the extraction of pseudoephedrine from pharmaceutical preparations. In total, 963 kg of a substance purported to be pseudoephedrine, 290 kg of pseudoephedrine, and 900 kg of crushed tablets containing pseudoephedrine were seized. A Mexican national, two Singaporeans, and two Indian nationals were arrested.

Table 15. Clandestine laboratory seizures in India, 2002-2008

Drug	2002	2003	2004	2005	2006	2007	2008
ATS	0	1	1	0	3*	1*	1*
Heroin	7	3	3	2	0	1	0
Morphine	1	2	0	1	3	0	0
Methaqualone	1	1	1	0	0	0	1

Source: Drug situation report and drug law enforcement statistics, March 2009, Narcotics Control Bureau \*Source: UNODC, Regional Office for South Asia (ROSA), 2008

As a result of India being one of the largest exporters of methamphetamine precursors, such as ephedrine and pseudoephedrine, its licit exports have been targeted by international drug syndicates involved in ATS manufacture. Approximately 1.3 tons of ephedrine was reported seized in 2008 with seizures varying widely between 2002 and 2008 (Table 16).

Table 16. Precursor seizures in India, 2002-2008

Precursor chemical	2002	2003	2004	2005	2006	2007	2008
Ephedrine (kg)	126	3,234	72	8	1,276	395	1,284

Source: Drug situation report and drug law enforcement statistics, March 2009, Narcotics Control Bureau

#### Sri Lanka

Sri Lanka has a long history of drug use. Traditionally, and similar to other countries in the region, the most common drugs are cannabis, opium and alcohol. However, in May 2008 the first industrial-size clandestine methamphetamine laboratory was uncovered in the city of Kosgama. The local manufacture of ATS creates an elevated risk of Sri Lanka developing a market for ATS. It is well documented that significant manufacture of ATS can spill-over into use among the domestic population.

Exhibit 1. Methamphetamine laboratory seizure, Kosgama, Sri Lanka, May 2008



Source: NDDCB, Sri Lanka

A range of chemicals were seized in the Kosgama incident. There is no manufacture of precursors in Sri Lanka, and the country imports the precursors which are needed for legitimate industrial and chemical usage. There is a need to be vigilant about diversion of precursor chemicals from the licit imports.

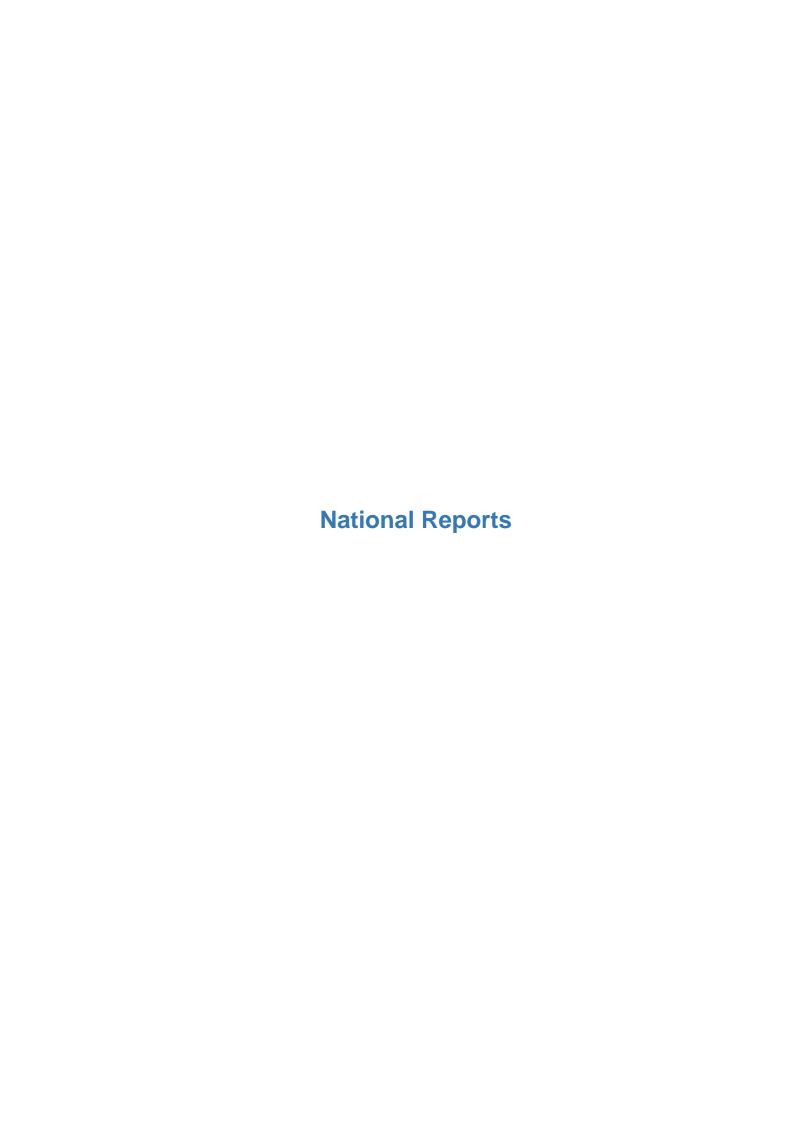
To-date, the most significant drug problem confronting Sri Lanka is the trafficking of heroin from India for local consumption. The most recent figures on drug use in Sri Lanka estimated that there were 45,000 regular users of heroin and about 600,000 users of cannabis. In addition, about 1% of the heroin users injected the drug (NDDCB, 2004). In 2007, it was reported that IDUs constituted only 1% (NDDCB, 2007) of all drug users. Nevertheless, a slight increase in the number of IDUs was noted in recent times.

There have been isolated reports of the use of cocaine and ecstasy by a few foreigners and affluent locals in Colombo, although the drugs are not readily available in the market.

#### Summary, emerging trends and concerns

- Data on ATS manufacture, trafficking and use in South Asia are limited.
- The main illicit drugs in South Asia are cannabis, opiates, and pharmaceutical preparations, including codeine-based cough syrups, buprenorphine and pethidine.
- The region is attractive to organized crime groups seeking to manufacture ATS, as a result of a large licit industry for production of ATS precursor chemicals. In addition, there is limited awareness of, and experience with ATS, and a potentially large market. The law enforcement effort focuses primarily on traditional drugs of trafficking and use, such as heroin, cannabis and pharmaceutical preparations.

- Countries in South Asia that do not have chemical or pharmaceutical industries, such as Bangladesh, nonetheless are vulnerable targets for clandestine ATS manufacture due to their location in the region of the world's largest producers of precursors, and their vicinity to East and South-East Asian source countries of illicit methamphetamine.
- Although limited in number, the seizure of methamphetamine manufacturing facilities in recent years may indicate the intent by organized crime groups to utilize the region for manufacturing and trafficking.
- The presence of illicit traffickers and clandestine synthetic drug manufacturers increases the risk of spill-over of illicit drugs into local market.
- There is a strong need to improve existing monitoring systems and actively monitor any possible emergence of new synthetic drugs in South Asia.



# **Australia**



#### Overview of drug use

The most commonly used illicit drug in Australia is cannabis, where a third of the general population has reported using the drug at least once. However, household surveys show that its use has been in decline since the late 1990s. The second most common drug type consumed are the ATS, led by ecstasy and followed by methamphetamine. Ecstasy use has steadily increased for the past several years and is now at the highest levels on record. The drug is supplied primarily through international importation, although a notable number of clandestine laboratories are annually dismantled. Clandestine methamphetamine manufacture is also commonplace with several hundreds of operations dismantled annually. Methamphetamine powder is the most common form reported. However, a market for high potency crystalline methamphetamine exists. While general population use is declining, problematic drug use appears to increase as illustrated in drug treatment admissions and arrest trends.

Although a smaller drug market exists for heroin, it accounts for a significant number of problematic users in treatment. Some of the heroin available is extracted domestically from pharmaceutical products, referred to as 'homebake'. Cocaine also holds a smaller market in the country but household surveys indicate that its popularity is increasing annually. This increase is also confirmed by law enforcement statistics such as arrests and drug seizures, which are both on the rise.

#### Patterns and trends of drug use

Cannabis remains the most common drug of use, but with a declining trend among the general population seen over the past decade (Table 17). Ecstasy is reported as the second most common drug of use in 2007 and has shown an increasing trend over the past decade. Ecstasy replaced methamphetamine as the second most prevalent drug of use in 2004. Among regular ecstasy users who are surveyed across Australia each year, the prevalence of recent methamphetamine use and, in particular, crystalline methamphetamine declined during the period 2003 to 2007 (Black et al., 2008). The prevalence of methamphetamine and amphetamine use among the general population have stabilized and then declined since 2001, although at a comparatively high level UNODC, 2008. Heroin use has remained largely stable over the past decade.

Table 17. Rank and trend of use of specific drugs in Australia, 1995-2007

Drug type	1995	1998	2001	2004	2007
Ecstasy	5	4	3	2	2
Methamphetamine	3	2	2	3	3
Ketamine	•	•	•	6	6
Heroin	6	6	6	7	6
Cannabis herb	1	1	1	1	1

• = Not reported

Source: NDARC, 2009 submission to UNODC for DAINAP. Data based on National Drug Strategy Household Survey

Table 18. trend in use of specific drugs in Australia, 1995-2007

Drug type	1995	1998	2001	2004	2007
Ecstasy	<b>↓</b>	<b>↑</b>	1	1	<b>↑</b>
Methamphetamine	$\leftrightarrow$	<b>↑</b>	<b>↓</b>	<b>↓</b>	<b>↓</b>
Ketamine	•	•	•	$\leftrightarrow$	$\leftrightarrow$
Heroin	<b>↑</b>	1	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
Cannabis herb	1	<b>↑</b>	<b>\</b>	<b>\</b>	<b>↓</b>

↑ = Increase, ↓ = Decrease, ↔ = Stable, • = Not reported

Source: NDARC, 2009 submission to UNODC for DAINAP. Data based on National Drug Strategy Household Survey

According to the National Drug Strategy Household Survey (NDSHS), a general population survey published in 2008, the past year use of cannabis among the general population showed a decline in recent years. There was a decrease from the 17.9% reporting use in the past year in 1999 to 9.1% reporting past year use in 2007. However, according to the survey the number of people reporting daily use increased. In addition, health indicators have indicated an increasing number of cannabis related hospital consultations during the period from 1993/4 to 2006/7 (NDARC, 2009). Hence, although the overall cannabis use decrease, the consumption among regular users has gone up.

Ecstasy use in Australia has shown an increasing use trend as reported in the past five NDSHS surveys with annual use increasing from 0.9% in 1995 to 3.5% in 2007, the highest levels ever recorded. The strong demand for ecstasy is also reflected in law enforcement statistics with one of the largest seizures in the world involving 4.4 tons occurring in 2007. Data collected through Australia's Drug Use Monitoring System (DUMA) support these increases with 3.6% of detainees testing positive in 2007 compared to 0.5% in 2000 (Adams et al., 2008). Although detainees self-disclose that they consumed what they believed to have been 'ecstasy', confirmatory urine analysis revealed in more than half of the cases a positive test for methamphetamine rather than ecstasy-group substances.

Methamphetamine use escalated dramatically in late 1990s and early 2000s, but the rate of use has shown a steady downward trend in recent years with past year prevalence declining from 3.7% in 1998 to 2.3% in 2007. At the same time, there have been increases in other indicators, such as hospital consultation for amphetamine related problems. Use of methamphetamine within the general population continues to be predominated by the powder form of methamphetamine, known on the street as 'speed'. Only about a quarter of the 2007 sample of methamphetamine users reported primary use of the crystal-line methamphetamine.

Although heroin represents a small proportion of illicit drug users with 0.2% reporting use during the past year in 2007, the drug accounts for a large number of treatment admissions and drug related deaths due to overdose. The NDARC in its annual survey through the Illicit Drug Reporting System (IDRS), notes that the prevalence of heroin use among regular injecting drug users who are surveyed across Australia each year has declined since a marked reduction in availability of the drug occurred in 2001. Other indicators, such as data collected by needle and syringe programmes, also suggest there were fewer new initiates to injecting drug use in Australia during the period 2003 to 2007.

An increase in cocaine use was reported among regular injecting drug users around the same time that the reduction in heroin availability occurred. This increase was particularly noted in Sydney, New South Wales. However, the increase was not sustained among this group and has since declined. Annual prevalence of cocaine use among the general population (for age 14 and above) has increased to 1.6% in 2007, the highest levels of report cocaine use on record. The upward trend was also reflected in drug testing of recent arrestees across Australia with the unweighted average of the results showing an increase in the number of people testing positive for cocaine from 0.5% in 2003 to 2.1% in 2007 (UNDOC, 2009f). In addition, Australian Customs Service data indicate an increase in the number of cocaine seizures detected at the border.

Methamphetamine use among regular injecting drug users declined during the period 2003 to 2008 and the use of crystalline methamphetamine, in particular, has stabilized or declined in most jurisdictions over the past few years. An exception is Sydney, New South Wales, where use of crystalline methamphetamine has increased over time and, in contrast to trends seen in the general population, the predominant form of methamphetamine used by regular injecting drug users in 2008 was crystalline methamphetamine.

Among regular ecstasy users, the use of ketamine has declined between 2003 and 2008. A similar trend is evident in gamma-hydroxybutyate (GHB) use among this group with the exception of Sydney, New South Wales, where gamma-butyrolacetone (GBL) use has remained relatively stable during this period (Table 19) (NDARC, 2009).

Table 19. Percent of lifetime and past year prevalence of drug use in population age 14 and older in Australia, 1995-2007

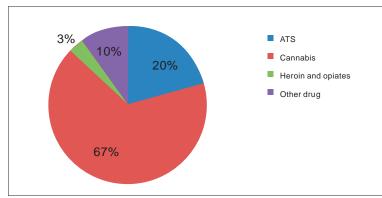
Drug type	Prevalence (%)	1995	1998	2001	2004	2007
Methamphetamine	Lifetime	5.7	8.8	8.9	9.1	6.3
Methamphetamine	Past year	2.1	3.7	3.4	3.2	2.3
Ecotocy	Lifetime	2.4	4.8	6.1	7.5	8.9
Ecstasy	Past year	0.9	2.4	2.9	3.4	3.5
Heroin	Lifetime	1.4	2.2	1.6	1.4	1.6
петопт	Past year	0.4	0.8	0.2	0.2	0.2
Cannabis	Lifetime	31.1	39.1	33.1	33.6	33.5
Carmabis	Past year	13.1	17.9	12.9	11.3	9.1
Cocaine	Lifetime	3.4	4.3	4.4	4.7	5.9
Cocame	Past year	1.0	1.4	1.3	1.0	1.6
Hallusinagana	Lifetime	7.0	9.9	7.6	7.5	6.7
Hallucinogens	Past year	1.8	3.0	1.1	0.7	0.6
Steroids	Lifetime	0.6	0.8	0.3	0.3	0.3
Sieroius	Past year	0.2	0.2	0.2	-	-
Any illicit drugs	Lifetime	39.3	46.0	37.7	38.1	38.1
Arry mich drugs	Past year	17.0	22.0	16.9	15.3	13.4

Source: National Drug Strategy Household Survey, AIHW, 2008

#### Arrest, seizure and price data

Cannabis was involved in the vast majority of drug related arrests in Australia, accounting for 67% of total arrests in the second half of 2007 and first half of 2008¹. ATS-related offences accounted for 20% of the drug-related arrests while heroin and opiates accounted for 3% of the arrests. Other drugs, including cocaine, hallucinogens and steroids, accounted for 10% (Figure 20). In terms of gender distribution, 80% of drug-related arrestees were male in 2008, except for steroids in which case 90% of the offenders were male. According to a DUMA study conducted among arrestees in 2007, approximately one quarter of all detainees who tested positive for an illicit drug tested positive for methamphetamine (Adams, et al., 2008).

Figure 20. Drug-related arrests in Australia by drug type, 2007/08



Source: NDARC, 2009 submission to UNODC RC

Seizures of ecstasy fluctuated between 800 kg and 1,500 kg during the period 2002/3 to 2005/6. However, in June 2007 authorities seized 4.4 metric tons of ecstasy tablets which equals the total global ecstasy seizures reported for 2006. The organized crime network that was operating spanned several continents, including Europe, North and Latin America, Africa, South and South-East Asia and the Middle East. A large-scale international cooperative

law enforcement operation involving 13 countries was required to conclude the investigation successfully. In addition to the ecstasy seized, 150 kg of cocaine was intercepted and 250 kg of pseudoephedrine was seized in India. A total of 31 persons were arrested. Figure 21 shows the impact of the huge seizure in 2006/07 on the six year trend line.

<sup>&</sup>lt;sup>1</sup> In Australia, the drug data reporting follows the fiscal calendar from July through June.

5,000 4,500 4,000 3,500 3,000 2,500 2,000 0 1,500 1,000 500 0 2002/03 2003/04 2004/05 2005/06 2006/07 2007/08

Figure 21. Ecstasy seized in Australia, 2002/03 to 2007/08

Source: NDARC, 2009 submission to UNODC RC

Table 20 shows seizures of select drugs in Australia during 2002/03 and 2007/08. The trend shows a decline in heroin seizures from 440.3 kg in 2002/03 to 68.5 kg in 2007/08, while cocaine seizures have increased considerably during the same period from 179.5 kg to 664.7 kg.

Table 20. Drug seizures in Australia, 2002-03 to 2007-08

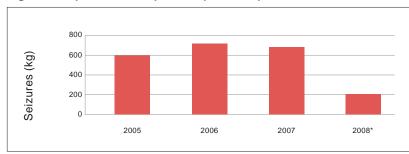
Drug type	Measure	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
ATS*	Number of cases	6,179	8,027	8,600	9,987	13,243	13,097
	Quantity (kg)	2,023.0	1,371.9	2,276.1	1,296.6	5,443.0	2,035.8
Cannabis	Number of cases	37,138	40,122	41,086	40,679	43,844	41,660
	Quantity (kg)	6,145.2	9,397.0	6,922.0	4,482.6	4,781.9	5,409.3
Heroin	Number of cases	1,542	1,677	1,554	1,298	1,476	1,411
	Quantity (kg)	440.3	100.7	194.3	29.5	86.2	68.5
Cocaine	Number of cases	624	839	676	697	1,184	1,271
	Quantity (kg)	179.5	119.7	191.8	46.1	646.6	664.7
Other opioids	Number of cases	106	92	92	114	148	178
	Quantity (kg)	99.0	8.8	17.0	5.3	6.6	12.4
Hallucinogens	Number of cases	51	58	52	69	105	126
	Quantity (kg)	3.5	7.2	12.7	2.9	2.7	6.9
Steroids	Number of cases	45	49	50	58	91	104
	Quantity (kg)	6.0	5.7	3.8	5.9	9.6	6.6
Other/ unknown	Number of cases	1,145	1,367	1,701	2,318	2,408	3,442
GIRIOWII	Quantity (kg)	122.9	185.1	4,044.8	622.4	792.6	270.9

Note: Data based on financial year from July of the prior year through June of the following year. Includes only those seizures for which a drug weight was recorded. Data reflect State and Territory police and Australian Federal Police seizures (AFP). Seizures made during joint operations between the AFP and State and Territory police may be duplicated in these statistics. \*ATS includes amphetamine, methamphetamine, and ecstasy seizures.

Source: Australian Crime Commission (2009). Illicit Drug Data Report 2007–08 (and previous years). Canberra, June 2009

Disaggregated data for precursor seizures are not available. However, ephedrine and pseudoephedrine are reported to be the major precursors detected at the Australian border. Figure 22 displays precursor seizures from 2005 through June 2008. In July 2008 Australian authorities seized an additional 850 kg of pseudoephedrine smuggled from Thailand inside a statue of an elephant, thus making 2008 potentially one of the biggest years for ephedrine and pseudoephedrine seizures (UNODC, 2009b).

Figure 22. Ephedrine and pseudoephedrine precursor seizures in Australia 2005-2008\*



Source: NDARC 2009 submission to UNODC RC.

\*2008 Includes data only through June

Data regarding the size or capacity of the clandestine laboratories that are dismantled are not provided in published reports. In terms of the number of laboratories seized, the annual totals for those manufacturing 'homebake' heroin during the period 2003/04 and 2007/08 were relatively low at between 5 to 10,

while those producing ecstasy fluctuated between 7 and 24 during the same period. However, ATS clandestine laboratory seizuresranged between 221 and 280 (Table 21). Unlike many labs seized in East and South-East Asia, the vast majority of clandestine labs in Australia are smaller-scale 'kitchen-labs.' However, the simple count of laboratories does not accurately convey the increasing sophistication of some of these operations. For example, in January 2008 a clandestine operation discovered in Adelaide uncovered a new approach to methamphetamine manufacture involving yeast fermentation with benzaldehyde to synthesize I-phenylacetylcarbinol (I-PAC), a precursor of ephedrine (Cox, Klass, Wei, and Koo, 2009).

Table 21. Clandestine laboratory seizures in Australia 2002/03-2006/07

Drug group	2002/03	2003/04	2004/05	2005/06	2006/07
ATS (non-descript)*	221	269	280	249	260
Ecstasy	24	10	7	19	11
'Homebake' Heroin	5	5	4	9	5

\*Note figures do not include additional cases of ATS-related manufacture, such as extraction laboratories, chemical/equipment storage operations, or laboratory waste locations.

Source: Australian Crime Commission (ACC) sited in NDARC, 2009 submission to UNODC RC.

Based on self-reporting through the Illicit Drug Reporting System (IDRS) survey, the purity of methamphetamine in both powder and crystalline form has remained stable in 2007/2008 compared to the previous year. Crystalline methamphetamine purity was generally reported as being high, while for the powder form was reported as being low, by majority of respondents (Stafford et al., 2008).

#### **Treatment data**

Table 22 shows the total number of drug treatment admissions in Australia between 2002/03 and 2006/07. Numerically, the majority of admissions were for cannabis use with annual admissions ranging between 27,000 and 36,000 during the period and accounting for between 40% and 50% of total treatment admissions. Although representing only a small number of the total illicit drug user population, treatment admissions for heroin use accounted for about a third of the total admissions in 2002/03, but declined to 22.7% in 2006/07. ATS treatment admissions surpassed those for heroin in 2006/07, accounting for 26.4% of all treatment admissions that year. Between 2002/03 and 2006/07, admissions for meth/amphetamine treatment increased 31% from 13,213 to 17,292, while ecstasy cases more than doubled from 416 to 1,010.

Table 22. Drug treatment admissions in Australia, by drug type, 2002/03 - 2006/07

Drug type	2002/03	2003/04	2004/05	2005/06	2006/07
Meth/ amphetamine	13,213	14,208	14,780	15,935	17,292
Ecstasy	416	508	580	897	1,010
Cannabis	27,106	28,427	31,044	35,636	31,980
Heroin	22,642	23,326	23,193	19,776	14,870
Cocaine	323	272	400	434	448

Source: NDARC, 2009 submission to UNODC RC

## HIV/AIDS and injecting drug use data

According to the 2007 National Drug Strategy Household Survey, it was estimated that 1.9% of the Australian population (age 14 or older) had ever injected drugs, representing about 3 million people, while 0.5%, representing 1 million people, were estimated to have injected drugs in the past year. This represents a slight increase over 2004 estimates (0.4%), but a significant decline over the last decade (0.8% reported in 1998). Of those reporting recent injecting drug use, 38% had reported sharing a needle or other injecting equipment, thereby substantially increasing the risks of the transmission of blood-borne diseases such as HIV and Hepatitis C.

According to the survey, the age group of 30–39, was most likely to have ever injected drugs. In 2007, respondents who had ever injected an illicit drug were asked to name the single drug they had recently injected. Among respondents, 37.9% reported to have injected heroin recently, while 67.7% of respondents reported recent injection of meth/amphetamine (AIHW, 2008). Reported use of pharmaceutical opioids as the last drug injected nearly doubled from 8% in 2004 to 15% in 2008 (Iversen, et al., 2009). The prevalence of HIV among IDUs in 2006 was estimated to be 1.5% (Lancet, 2008).

## Summary, emerging trends and concerns

- Annual prevalence of methamphetamine has declined in 2007 compared to 2004, while use of ecstasy has increased over the same period.
- Past year use of methamphetamine in the general population has declined, but arrests, seizures, and treatment admissions continued to increase.
- One of the largest single seizures of ecstasy in the world occurred in Australia in June 2007 with a seizure of 4.4 tons.
- Large quantities of ephedrine and pseudoephedrine precursor chemicals used to produce ATS continue to be detected at the border.
- The prevalence of injecting pharmaceutical opioids as the last drug injected has double since 2004.

# **Brunei Darussalam**



#### Overview of drug use

Drug use in Brunei Darussalam shifted in the last decade from cannabis and pharmaceutical drugs (prescription and non-prescription), such as codeine and diazepam, to methamphetamine, primarily in crystal form. The drug user population also shifted from one which primarily involved foreigners to Brunei nationals (UNODC, 2007). The change in pattern of use is clearly reflected in the recent treatment and law enforcement statistics, i.e. between 2003 and 2005 virtually all treatment clients in Brunei were admitted for methamphetamine use and more than 90% of drug seizures during that period involved methamphetamine.

Cannabis use continues to be a cause for concern in Brunei, but it has maintained a relatively stable trend as reflected in both seizure and arrest statistics over the past four years.

Use of nimetazepam, a benzodiazepine, has been reported in Brunei in the past. Although seizures have been relatively low, use of the drug has been considered problematic and it has been ranked as one of the top concerns.

Ketamine and ecstasy have been reported intermittently in Brunei since 2005. Forensic analysis of the seized drugs also identified a number of new drug combinations.

# Patterns and trends of drug use

The patterns of drug use in Brunei have remained largely stable since 2003 with crystalline methamphetamine as the leading drug during the six year period 2003-2008, followed by cannabis which has maintained the number two position during those years. Crystalline methamphetamine is cited as being highly available and relatively inexpensive. Nimetazepam and ketamine were ranked third and fourth in 2008.

Table 23. Rank of use of specific drugs in Brunei Darussalam, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Crystalline methamphetamine	1	1	1	1	1	1
Cannabis herb	•	2	2	2	2	2
Ecstasy	•	•	•	3	•	•
Nimetazepam	•	•	3	5	3	3
Ketamine	•	•	4	•	4	4

• = Not reported Source: DAINAP

Table 24. Trend in use of specific drugs in Brunei Darussalam, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Crystalline methamphetamine	$\downarrow$	$\downarrow$	<b>↑</b>	$\downarrow$	$\downarrow$	$\leftrightarrow$
Cannabis herb	•	<b>↓</b>	<b>↓</b>	1	<b>↓</b>	1
Ecstasy	•	•	•	1	•	•
Nimetazepam	•	•	1	<b>↓</b>	1	<b>↓</b>
Ketamine	•	•	<b>↑</b>	•	$\downarrow$	<b>↑</b>

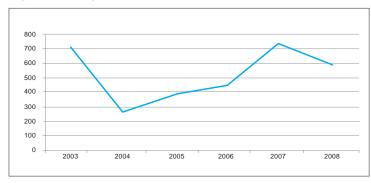
↑ = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported

Crystalline methamphetamine showed a stable trend in 2008 following two consecutive years of decrease. The trend in cannabis use has fluctuated with alternating increases and decreases during the past four years. There was an increasing trend reported in nimetazepam use in 2007, but a decrease in 2008, possibly due to a shift in market demand for this drug. On the other hand, ketamine was reported to be on the increase in 2008 compared to a decrease in the previous year. Ecstasy was only reported once during the period, ranking third in 2006 with an increasing trend.

There are no estimates for HIV/AIDS and prevalence of injecting drug use in Brunei, but the prevalence is likely low given that smoking is the primary route of administration of methamphetamine.

# Arrest, seizure and price data

Figure 23. Drug related arrests in Brunei Darussalam, 2003-2008



After three years of steady increase, 2008 saw a decrease in the number of drug related arrests to 591. Despite the decline, this was still more than twice the number of arrests made in 2004 (Figure 23). Approximately 85-95% of drug related arrests during the period 2003-2008 involved ATS, demonstrating the predominance of that drug category in law enforcement.

Source: DAINAP

In terms of nationality, there was a small increase in the number of arrests involving non-nationals in 2007 and 2008, accounting for 7% of total arrests compared to 5% and 4% in 2006 and 2005 respectively. Males continued to dominate drug related arrests, accounting for 85% of the arrests involving nationals in 2008.

Figure 24. Drug related arrests by drug type in Brunei Darussalam, 2008

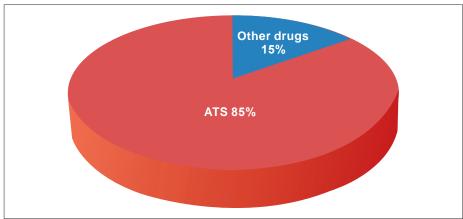


Table 25. Drug related arrests in Brunei Darussalam, 2008

_							
	Nati	onal	Non-national				
Drug type	Male	Female	Male	Female			
Crystalline methamphetamine	387	73	28	10			
Methamphetamine + ketamine	2	0	0	0			
MDMA + phenethylamine	2	0	0	0			
MDMA (ecstasy)	1	0	0	0			

	Nati	onal	Non-national		
Drug type	Male	Female	Male	Female	
Cannabis herb	22	4	2	0	
Ketamine	3	0	1	0	
Inhalants	28	0	0	0	
Codeine	1	0	0	0	
Nimetazepam	7	4	1	0	
Lorazepam	2	1	0	0	
No seizure or not specified	11	0	1	0	
Total for all drugs	466	82	33	10	

Source: DAINAP

There are no reports of illicit ATS manufacture in Brunei and there is no legitimate domestic precursor production. Crystalline methamphetamine, cannabis and nimetazepam are primarily trafficked into the country from neighboring Malaysia (Biro Kawalan Narkotik, 2008; Biro Kawalan Narkotik, 2009).

Crystalline methamphetamine dominates drug seizures, accounting for over 75% of the cases in general. This is followed by cannabis herb. The number of cases involving crystalline methamphetamine peaked in 2007 with 325 reported seizures, compared to 210 reported in 2006 and 287 cases in 2008. In terms of quantity, the amounts involved in individual seizures remain low with annual seizures of crystalline methamphetamine of less than one kilogram. A total of three ecstasy seizures were made in 2006 and 2008. Seized amounts remained small with 50 pills in 2006, and 2 pills and 3 grams of ecstasy powder in 2008. Similarly, seizures of nimetazepam and ketamine remained small and limited to less than 10 cases annually.

As in other countries in the region, inhalants are also seized but available information is unsystematic.

Table 26. Drug seizures in Brunei Darussalam, 2005-2008

	20	05	20	06	2007		20	08
Drug type	Number of sei- zures	Quantity	Number of sei- zures	Quantity	Number of sei- zures	Quantity	Number of sei- zures	Quantity
Crystalline methamphetamine	199	0.73 kg	210	0.43	325	0.245 kg	287	0.38 kg
Methamphetamine pills	0	0	1	157 pills	•	•	•	•
Methamphetamine powder	•	•	•	•	•	•	1	0.003 kg
Ecstasy	0	0	1	50 pills	•	•	2	2 pills and 0.003 kg
Heroin	0	0	2	0.01 kg	•	•	•	•
Cannabis herb	11	0.02 kg	12	2.31 kg	13	0.049 kg	15	0.61 kg
Nimetazepam	1	50 units	4	42 pills	2	100 cap- sules	7	70 pills
Ketamine	1	1 unit	0	0	2	9 pills and 0.005 kg	4	2 pills and 0.0014 kg
Ephedrine/ tripolidine	0	0	1	10 pills	•	•	•	•
Diphenhydramine	0	0	1	1.2 liters	•	•	•	•
Promethazine	0	0	1	0.3 liters	•	•	•	•
Inhalants	7	•	•	•	•	•	18	•
Dextromethorphan	•	•	•	•	2	1345 units	•	•

• = Not reported/ not-specified

The retail price reported to DAINAP of the three illicit drugs, i.e. cannabis herb, crystalline methamphetamine and nimetazepam, increased by a little over 10% in 2008 compared to the previous year (Table 27).

Table 27. Price of illicit drugs in Brunei Darussalam, 2007-2008

Drug type	2007 (price in USD)*	2008 (price in USD)*
Crystalline methamphetamine	446-476 per gram	510-549 per gram
Cannabis herb	62.5-66.67 per gram	71.43-77 per gram
Nimetazepam	3.13-3.33 per pill	3.57- 3.8 per pill

<sup>\*</sup>Not adjusted for currency fluctuations.

Source: DAINAP

#### Forensic data

Forensic analysis of 221 samples of crystalline methamphetamine reported through DAINAP showed a purity ranging between 70% and 79%. Although the numbers were low in 2007 and 2008, Brunei reported seizures of combinations of ATS not previously identified. These were all in pill form and included combinations, such as MDMA with phenethylamine, MDMA with ketamine, methamphetamine with ketamine. Two cases involving a combination of codeine, ephedrine and promethazine in liquid form also were reported in 2007.

#### **Treatment data**

In Brunei, counseling and medication for drug dependency are available through general health clinics and hospitals, as well as, religious centres and non-governmental organizations. Drug treatment within a specialized therapeutic community program and treatment services in prisons are also available.

Methamphetamine accounted for all treatment admissions in 2008 with a relatively stable number of approximately 50-60 individuals in treatment at any given time and around 30-35 new treatment admissions per year. In 2008, 50 individuals were in treatment, of which 36 were new admissions. 59 individuals were in treatment in 2007, of which 30 were new admissions.

The average age of individuals in treatment for methamphetamine use was 36 in 2008. This was slightly higher than the 30 - 31 years of age of admissions reported for 2004 and 2005. Of the 50 individuals admitted for treatment in 2008, 46 were male.

#### Summary, emerging trends and concerns

- In 2008, drug related arrests decreased in Brunei for the first time since 2005.
- The synthetic drug market in Brunei is diverse. It is dominated by crystalline methamphetamine, but there is also a range of new synthetic drugs, new forms or combinations seized in 2007 and 2008, notably dextromethorphan, methamphetamine powder, and the combinations of ketamine and MDMA, phenethylamine and MDMA, and codeine with ephedrine and promethazine.
- Pharmaceuticals, such as nimetazepam, are of additional concern to Brunei authorities.

# Cambodia



#### Overview of drug use

With relatively low levels of drug use until about a decade ago, most survey data now suggest increasing levels of use in Cambodia. Problematic drug use also appears to have increased substantially since the late 1990s, driven primarily by the emergence of different forms of methamphetamine. For example, the number of mental disorders due to psychoactive substance use rose from less than 50 in 1999 to over 350 in 2005 (UNODC, 2007) Over the same period, referrals of drug users to military-style drug treatment camps rose more than six-fold from less than 1,000 in 2000 to over 6,500 in 2006 (UNODC, 2008). Drugrelated arrests also increased rapidly with less than 100 arrests in 2000 peaking at over 700 in 2005. In addition, drug seizures increased over the same period from around 23,000 ATS pills seized in 1999 to over 400,000 in 2006 and 2007. At about the same time, high purity methamphetamine in crystal form began to be seized with increasing reports of injection drug use and HIV. Overall, the past decade saw a shift from inhalant to methamphetamine use.

Clandestine ATS manufacture, while virtually unheard of prior to 2006, is increasingly taking place, including some of the largest most sophisticated types of operations found in South-East Asia, such as the laboratory discovered in Kampong Speu province in April 2007. Additionally, significant amounts of safrole-rich oils are being illicitly harvested and sold, leading to the possibility of diversion into clandestine ecstasy manufacture, but most certainly destroying the natural environment from which they are taken.

## Patterns and trends of drug use

Cambodia did not report rank or trend in drug use information to DAINAP in 2007 and 2008 (Tables 28 and 29). However, the 2007 survey data from 24 Provincial Drug Control Committees (PDCC) in Cambodia of 5,797 drug users-primarily drug users who had come into contact with local authorities-provide some insight into current patterns and trends. Although not disaggregated between crystal and pill form, methamphetamine was the most common drug used, being cited by about 81% of illicit drug users. The remainder reported use of inhalants (glue and solvent) and heroin (3.7%, each), while 11.6% cited other types of drugs (NACD, 2008a).

Table 28. Rank of use of specific drugs in Cambodia, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine pills/ tablets	•	1	1	1	•	•
Crystalline methamphetamine	•	•	•	5	•	•
Ecstasy	•	6	5	6	•	•
Heroin	•	3	3	2	•	•
Cannabis herb	•	2	2	3	•	•

• = Not reported Source: DAINAP

Table 29. Trend in use of specific drugs in Cambodia, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine pills/ tablets	1	1	1	1	•	•
Crystalline methamphetamine	•	•	•	1	•	•
Ecstasy	1	1	1	$\leftrightarrow$	•	•
Heroin	1	1	1	1	•	•
Cannabis herb	1	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	•	•

Currently, the majority of drug users in Cambodia are characterized increasingly as young with about 80% being under 25 years of age, of which 16.9% are between 10 and 17 years (NACD, 2008a). In 2007, the NGO Mith Samlanh, conducted a survey of 2,089 street children of which 1,041 reported to have used at least one illicit drug (NACD, 2008a). This was an increase by 5% compared to the previous year with an 11.8% increase in the age bracket 12-18 years. In 2000, 12.2% of surveyed street children (who were active drug users) were using methamphetamine. In 2007, the figure had risen to 87.4%. Of the 1,041 street children and youth using illicit drugs in 2007, some of whom used multiple drugs, the drugs cited were methamphetamine pills (57.4%), crystalline methamphetamine (42.6%), inhalants (glue sniffing, 40.9%), heroin (13.4%), and ketamine (1.9%).

Inhalant use continues to be a major concern not only among street children but youth more generally. According to a government survey of 5,797 drug users who have come into contact with local authorities, 3.7% used solvents. In Kratie province, 95% were recorded as using solvents or glue and in Siem Reap 25.3% reported glue sniffing. (NACD, 2008a).

# Arrest, seizure and price data

Drug related arrests have increased since 2001, reaching a ten year peak in 2005 with 709 arrests. After two years of decline, arrests rose by a third in 2008 (394 arrests compared to 290 the previous year). The vast majority of drug related arrests involved methamphetamine (94%). The remaining 6% of drug related arrests were primarily for cannabis, heroin and ecstasy. In contrast to some neighbouring countries, a relatively high percentage of drug related arrests (14%) in Cambodia in 2008 involved non-nationals.

Of the ATS related arrests in 2007, 81% were attributed to methamphetamine pills, 17% to crystalline methamphetamine and 2% to methamphetamine powder (Figure 25). In 2008, 232 arrests involved methamphetamine in pill form (61%) and 139 methamphetamine in crystal form (37%), and 2% related to ecstasy. The arrest data support the select survey data reported by the NGOs which noted the increasing presence of methamphetamine in crystal form among the drug user community in Cambodia.

2007

Crystalline methamphetamine

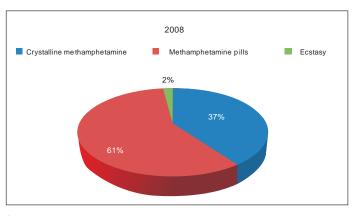
Methamphetamine pills

Ecstasy

2% \ \ \ < 1%

17%

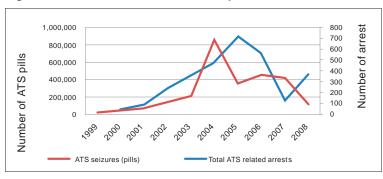
Figure 25. ATS-related arrests in Cambodia by drug type, 2007 and 2008



Source: DAINAP

Over the 1999-2006 period, ATS pill seizure data (primarily methamphetamine) showed a steadily increasing trend with a peak in 2004, and subsequently declining (Figure 26). With the exception of the 2004 peak, ATSrelated arrests mirror the increasing trend over that period. The strong decrease in arrests between 2005 and 2007 may be due to a shift in product from methamphetamine pill to crystal form. Unfamiliarity on the part of law enforcement with this new form may have resulted in fewer arrests. The increase in number of arrests together with declining seizures between 2007-08 may be due to a lower number of traffickers being arrested or to traffickers smuggling smaller amounts to reduce risk.

Figure 26. ATS related arrests and ATS pill seizures in Cambodia, 1999-2008



Source: NACD, Report on Illicit drug Data and Routine Surveillance Systems in Cambodia 2007; DAINAP (2007 and 2008)

Illicit drug seizures in Cambodia are dominated by methamphetamine pills. However, total seizures of methamphetamine pills declined for the second year in a row from 452,000 in 2006 and 420,287 in 2007 to 116,772 in 2008. Similarly, seizures of crystalline methamphetamine declined to less than 2 kg in 2008 from almost 16.2 kg in 2006 and just under 7 kg in 2007 (Table 30). Other drug seizures also declined in

2008, with 5.3 kg of heroin seized, compared to 12.4 kg in 2007. Heroin seizures in Cambodia peaked in 2003 with a little over 45 kg seized.

Table 30. Drug seizures in Cambodia, 2008

Drug type (measure)	Cases	Quantity
Cannabis herb (kg)	4	5
Heroin (kg)	4	5.3
Crystalline methamphetamine (kg)	65	1.9*
Methamphetamine (pills/ tablets)	119	116,772
Cocaine (kg)	1	0.2
Codeine (pills)	1	10,161
Ecstasy (pills)	3	33
Ketamine	1	495 small bottles
Undefined white powder	0	18

<sup>\*</sup> Plus 15 'small packs', undefined weight.

Source: DAINAP

Table 31. Select drug seizures in Cambodia, 2003-2008

Drug type (measure)	2003	2004	2005	2006	2007	2008
ATS pills	209,527	860,996	351,651	428,553	420,287	116,772
Crystalline methamphetamine (kg)			2.0	16.2	6.75	1.9*
Heroin (kg)	46.27	5.15	11.8	21.3**	10.7	5.3

<sup>\*</sup> Plus 15 'small packs', undefined weight.\*\*Plus 38 'small packs' undefined weight. Source: DAINAP

In terms of clandestine operations, only small tabletting facilities were uncovered in Cambodia prior to 2006. In 2006, eight manufacturing sites for 'fake' methamphetamine were uncovered, including a tabletting machine seized in Preah Vihear province, near the Thai border. In addition, various types of tablet punches and molds were seized, indicating a greater level of sophisticated than was previously seen in the country (NACD, 2008a).

Manufacture of ATS was reported for the first time in Cambodia in April 2007. One industrial- scale laboratory was uncovered at a cattle farm in Kampong Speu province. It was handling the first of a two-stage process to produce methamphetamine in which pseudoephedrine was mixed with thionyl chloride to produce the intermediate precursor chloropseudoephedrine. It was believed that the material was to be transported to a second more advanced processing facility nearby to produce methamphetamine in crystal form. The scale of the operation was large involving 600-750 kg of pseudoephedrine hydrochloride, 2,050 litres of thionyl chloride, four 200 litre drums of acetone, and 52 kg of purified chloropseudoephed-

rine being seized. It was estimated that over 4.7 million methamphetamine tablets of 30% purity could have been produced utilizing the precursors found at the site (NACD, 2008a). Eighteen people were arrested, including 14 nationals and 4 non-nationals (3 Chinese and 1 Thai).

In addition, two tabletting operations were also uncovered in 2007. In August, 5,770 kg of precursors and reagents, 14 punches, one high capacity rotary tabletting machine (capable of producing 10,000 tablets per hour) and 339 kg of 'white powder' were seized in Phnom Penh (NACD, 2008a). Also seized were 879 methamphetamine tablets, 249.6 grams of crystalline methamphetamine, 369 ecstasy pills, and 3.8 grams of ketamine. In May 2007, at a different location in Phnom Penh, six punches and eight bags of tablet dye and unspecified chemicals were seized.

ATS manufacture has likely continued in Cambodia with five seizures of laboratories and precursor manufacturing sites having taken place so far in 2009. In March 2009, tools, equipment and chemicals to produce unspecified precursors were uncovered in central Phnom Penh (Exhibit 2). In June 2009, a clandestine laboratory was discovered in the capital. It was seized together with pharmaceutical cold preparations containing pseudoephedrine (Exhibit 3). Also in June 2009, a small laboratory was discovered in the port city of Sihanoukville. The seizure included 57.2 kg of acetone, 0.5 kg ephedrine, 9 bottles of sulfuric acid, 24 bottles of hydrochloric acid, and 34.7 kg of sodium hydroxide.

Exhibit 2. Tools, equipment and chemicals to produce unspecified precursors were uncovered in central Phnom Penh. March 2009



Source: NACD

Exhibit 3. Clandestine laboratory seizure, using pharmaceutical cold preparations, seized in Phnom Penh, Cambodia, June 2009



Source: NACD

In March 2009, an extraction site for the precursor ephedrine, used in the manufacture of methamphetamine, was found in Kampong Cham province. It was utilizing *Ephedra* grass, with plants suspected to have been imported from northern China (NACD, 2009). This is the first time that the alleged extraction of ephedrine from natural *Ephedra* raw material has been reported.

Although there has been no evidence to suggest that safrole-rich oils (SRO) produced in Cambodia have been used to synthesize MDMA (ecstasy), illegal operations for the extraction of safrole<sup>1</sup> have been uncovered and large volumes been seized, including 570 liters in 2006 and 3,260 liters in 2007 (NACD, 2008a). The most significant seizure was 50.4 tons of SRO seized in 24 containers at Laem Chabang

<sup>&</sup>lt;sup>1</sup> Safrole is a substance listed under Table 1 of the 1998 Convention as well as in Cambodia's Drug Law. The International Narcotics Control Board defines safrole-rich oils (SRO) as being "any mixture or natural products containing safrole present in such a way that it can be recovered by applicable means".

port in Thailand in October 2007. It is believed that the oil originally came from Cambodia and that large amounts also are smuggled to neighbouring Viet Nam (INCB, 2008). In 2008, 35 tons of safrole-rich oils were seized in Cambodia (NACD, 2009). The oil has licit commercial value for use in the perfume and pesticide industry, but can also be used as a starting material for the manufacture of MDMA (ecstasy).

Cambodia is one of three countries in the region (the other two being China and Vietnam) that have established specific regulations for the control of the production of and trade in SRO, the harvesting of trees (*Dysoxylum loureiri Pierre*) for SRO extraction has been illegal under the Forest Law since 2005, on the grounds of the trees containing the oil being classified as rare species. Prohibition in Cambodia under the forest law is therefore not primarily driven by drug control considerations.

Exhibit 4. Safrole-extraction and smuggling in Cambodia, 2007



Source: NACD

No illicit drug price data was reported by Cambodia, for 2007 and 2008.

#### Forensic data

The Cambodian NACD forensic laboratory analyzed 151 methamphetamine pill samples in 2007. Of these, 96% were found positive for methamphetamine, and of these, the mean and median purity was 14.4% and 17%, respectively. 38 pills had a purity below 10% (NACD, 2008a). Of 49 crystalline methamphetamine samples tested in 2007, median purity was between 82% and 84%. Two samples of ecstasy were tested in 2007 with one having an MDMA purity of 33.9% and the other having 55.9%. 20 samples of seized heroin were tested in 2007 with five samples having a purity of 66 - 70% and another five between 76 - 80%. Four samples had purities higher than 80% and the remaining five samples had purities of less than 65%.

#### **Treatment data**

There are two main providers of treatment services in Cambodia. The first is modeled on a military-style camp environment and is operated by the government. These camps provide limited health and educational services and focus almost exclusively on exercise and discipline. Most camps are operated by the civilian or military police. The Ministry of Social Affairs and some provincial administrations also operate treatment programs. However, apart from the Orkas Knhom Centre, there are few qualified doctors, mental health staff or nurses available. No treatment centre provides formalized medical detoxification (NACD, 2008a). Table 32 below shows admissions to government operated education camps in 2006 and 2007 based on the Report on Illicit Drug Data and Routine Surveillance Systems (NACD, 2007).

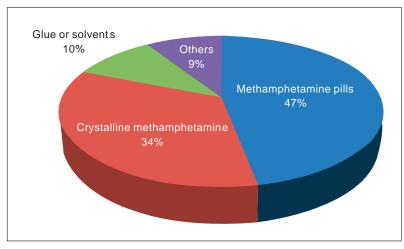
Table 32. Treatment admissions to rehabilitation and education camps in Cambodia

Province	Total admissions 2006	Total admissions 2007	Centre Name
Phnom Penh	163	567	Orkas Knhom and Chaum Chao
Banteay Meanchey	184	303	Chivit Thmey Phnom Bak and Military Police Rehabilitation Centre
Battambang	648	301	Borvel Rehabilitation Centre and Military Police Rehabilitation Centre
Kandal	0	245	Centre for Education, Correction and Vocational Training (CECVT)
Siem Reap	51	112	Police Rehabilitation Centre
Koh Kong	44	64	Chivit Thmey Smach Meanchey
Kampong Cham	0	16	Military Police Rehabilitation Centre
Kampong Thom	0	3	Referred to Banteay Meanchey Military Police Rehabilitation Centre
Prey Veng	0	1	Referred to Banteay Meanchey Military Police Rehabilitation Centre
Total admissions	1,090	1,612	

Source: NACD, Report on Illicit drug Data and Routine Surveillance Systems in Cambodia, 2007

Of the individuals entering the government-sponsored treatment and rehabilitation camps during the last six months of 2007, most were teens or young adults. In terms of age, 50.7% were between 19 and 25 years of age, 21.8% were between 16 and 18, and 8.2% were under 15. The remaining 18.2% were between 26 and 49 and one person was over 50 years of age. About half of those admitted were unemployed, 20.9% were students, 9.6% were laborers or drivers, 9.3% were street children, 5.9% were farmers, traders or government workers, and 0.3% were entertainment workers. Among treatment admissions, the 'preferred illicit drug' - the drug which most likely made treatment necessary, was predominately methamphetamine (81%), both in pill (47%) and in crystal form (34%). Glue or solvents accounted for an additional 10% (Figure 27).

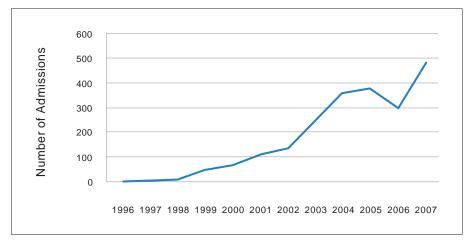
Figure 27. Government-sponsored treatment admissions by drugs, 2007



Trend data reported by the Ministry of Health show that the number of individuals admitted for mental disorders due to psychoactive substance use has increased since 1998, with an accelerated increase beginning in 2002. After leveling off in 2004 and 2005 and a slight decline in 2006, the number increased sharply in 2007.

Source: NACD, Report on Illicit drug Data and Routine Surveillance Systems in Cambodia, 2007

Figure 28. Admissions for mental disorders due to psychoactive substance use Cambodia, 1996-2007



Source: NACD, 2008

#### HIV/AIDS and injecting drug use data

Two local NGOs, Mith Samlanh and Korsang, provide services to illicit drug users in Phnom Penh and provide referrals to government-sponsored counseling and testing services. In 2007, a total of 1,427 individuals were referred. Of these, 780 were injection drug users (IDUs) and 77 were tested for HIV. Among the 77 tested, 35.1% were positive for the virus, a substantial increase over the 14% who tested positive the previous year. Among the 647 non-IDUs, an unspecified number were tested and 3.7% were positive for HIV, compared to 3.0% in 2006 (NACD, 2007).

# Summary, emerging trends and concerns

- Methamphetamine dominates illicit drug use in Cambodia as indicated by the following:
  - o It is the preferred illicit drug of 81% of those admitted to government-sponsored treatment centers in 2007:
  - o It accounted for 94% of drug related arrests in 2008.
- Methamphetamine in crystal form appears to have become established in the Cambodian market as indicated by the following:
  - o Seizures of crystalline methamphetamine have occurred every year since 2005;
  - Of drug related arrests in 2008 in Cambodia, 37% were related to crystalline methamphetamine compared to 17% the year before;
  - o Crystalline methamphetamine is the preferred illicit drug for 34% of admissions to government-sponsored treatment centers in Cambodia.
- Inhalant use continues to be a major health problem, primarily among youth.
- More than a third of IDUs that were tested for HIV were positive, more than doubling the rate from the previous year.
- Following seizure of the first clandestine laboratory in 2007, five ATS precursor and ATS manufacturing operations have been uncovered in 2009, likely indicating that Cambodia is becoming an attractive location for clandestine manufacture.
- Ephedrine extraction from Ephedra grass was uncovered for the first time in March 2009 in Kampong Cham province.

# China



# Overview of drug use

While the drug problem in China has long been dominated by opium and later heroin, by the end of the 1990s, methamphetamine and ecstasy began to appear increasingly in the Chinese illicit drug market. Initially, ecstasy gained popularity among the youth as a club drug around 1997 (UNODC, 2009c). However, by 2003, methamphetamine (in both pill and crystalline form) overtook opium as the second most common drug of use. By the following year, ecstasy also was ranked ahead of opium. Ketamine was reported as a drug of concern in 2004 with an increasing trend in use being reported in each subsequent year.

The first clandestine methamphetamine laboratory was seized in Fujian Province in 1997. Clandestine ATS laboratories have been seized ever since, some of industrial-scale capacity, and the country reports the greatest number of dismantled operations of any country in East Asia. Seizures of methamphetamine rose significantly starting the late 1990s, from less than 1.5 tons in 1997 to between 5 and 6 tons annually during the 2005-2008 period, with a peak of 21 tons in 2000 (UNODC, 2008).

## Patterns and trends of drug use

The rank of top illicit drugs in China remained consistent between 2006 and 2008 with heroin being the most prominent drug, followed by methamphetamine in both pill and crystal form, ecstasy and ketamine (Table 33).

Use of ATS and ketamine has been on the increase for all reporting years between 2003 and 2008. Over the same period, heroin and opium use showed fluctuations with a stable use trend reported for both drugs in 2008.

Table 33. Rank of use of specific drugs in China, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Heroin	•	1	1	1	•	1
Crystalline methamphetamine	•	4	4	2	•	2
Methamphetamine pill/ tablet	•	3	3	3	•	2
Ecstasy	•	2	2	4	•	3
Opium	3	5	5	6	•	4
Ketamine	•	6	6	5	•	5
Cannabis	•	•	7	7	•	•

= Not reported Source: DAINAP

Table 34. Trend in use of specific drugs in China, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine pill/ tablet	1	1	<b>↑</b>	1	•	<b>↑</b>
Crystalline methamphetamine	<b>↑*</b>	1	<b>↑</b>	1	•	<b>↑</b>
Ecstasy	1	1	<b>↑</b>	1	•	<b>↑</b>
Opium	1	$\downarrow$	•	$\leftrightarrow$	•	$\leftrightarrow$
Ketamine	•	<b>↑</b>	•	<b>↑</b>	•	<b>↑</b>
Heroin	1	$\downarrow$	<b>↑</b>	$\downarrow$	•	$\leftrightarrow$
Cannabis herb	•	•	$\leftrightarrow$	$\leftrightarrow$	•	•

↑ = Increase, ↓ = Decrease, ↔ = Stable, • = Not reported

Source: DAINAP. \* reported as 'methamphetamine', not disaggregated by drug type.

The number of registered drug users for 'new-type drugs' (Figure 29), which is predominately ATS, as well as ketamine, has increased dramatically in recent years, from 1.7% in 2004 to 11.1% in 2007 and 19% in 2008 (NNCC, 2008b and 2009). Crystalline methamphetamine accounted for 47% of 'new-type drug' users, 36%, ketamine, with another 17% of users of unspecified ATS. In some regions in North-East and South-East China, the problem of 'new-type drugs' is reported to be severe with the number of registered ATS users in those regions being higher than that of opiate users (NNCC, 2009a). This new trend notwithstanding, the number of heroin users accounted for 77.5% of total registered drug users nationwide in 2008 (NNCC, 2009).

2004 2007 2008

Figure 29. Percentage of registered users of 'new-type drugs' in China, 2004-2008

Source: NNCC (2008). Presentation Drug Data collection in China, Global IS-DMP meeting, Tokyo, Japan, February 2008 and NNCC (2009); Annual report on drug abuse control in China, 2008

#### Arrest, seizure and price data

China does not disaggregate their arrest data by drug type in reports submitted to DAINAP. The total number of drug related arrests in China has shown a relatively modest 15% increase over the 2003 to 2008 period with 63,700 arrests in 2003 compared to 73,360 arrests in 2008. About 84% of the arrestees were male.

Among ATS related cases (or investigations) between 2005 and 2008, the number of crystalline methamphetamine related cases increased 5-fold with 15,154 cases in 2008 compared to 3,007 in 2005 (Figure 30). While the number of heroin cases is still more than double that of ATS cases, it has been relatively stable around 30,000-35,000 cases annually over the period.

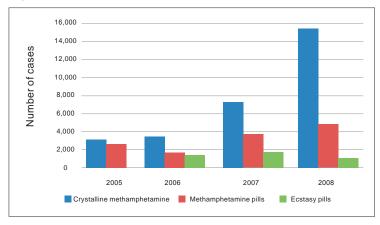


Figure 30. ATS related cases in China, 2005-2008

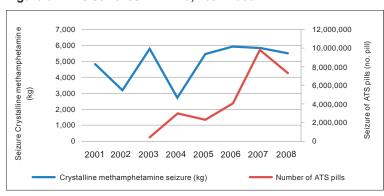
Table 35. Selected drug seizures in China, 2005-2008

	20	05	2006		2007		2008	
Drug type (measure)	Number of cases	Quantity (kg and pills)						
Crystalline methamphet- amine (kg)	3,007*	5,500.0*	3,884	5,946.0	6,877	5,863	15,154	5,523.32
Methamphetamine pills	2,342,397	2,330	1,636	4,021,492	3,422	7,620,322	4,122	6,255,658
Ecstasy pills	*	*	1,360	454,145	1,410	2,219,353	911	1,077,552
Ketamine (kg)	999	2,630.0	1,625	1,788.5	2,681	6,101.7	4,483	5,271.13
Heroin (kg)	33,262	6,905.0	32,024	5,792.1	37,242	4,593.9	31,765	4,332.32
Opium (kg)	696	2,309.8	580	1,691.1	533	1184.6	470	1,375.02
Cocaine (kg)	12	247.2	46	358.5	1	162**	1	530**

\*Prior to 2006, ecstasy was categorized by law enforcement officials as 'head shaking pills' which also included methamphetamine pills. \*\* Information from unconfirmed reports; not formally reported by NNCC. DEA Country office CHINA presentation, ADLOMICO, Busan, Korea, 2008. Only includes major seizures. Source: DAINAP

Illicit drug seizures in China are dominated by ATS seizures, while cases are still dominated by heroin (Table 35). Figure 31 shows the trend in total annual ATS seizures in China between 2001 and 2008. Between 2005 and 2008, crystalline methamphetamine seizures stabilized between 5.5 and 6 tons, while the number of ATS pills increased considerably during the same period. In contrast to ATS, seizures of heroin, the top ranked drug in China, have declined from 6.9 tons in 2005 to 4.3 tons in 2008.

Figure 31. ATS seizures in China, 2001-2008



Note that prior to 2003, China did not report ATS data disaggregated by form, e.g. pill or crystalline

Source: DAINAP (2003-2008) and NNCC data cited in UNODC (2008). Patterns and Trends in ATS and Other drugs of Abuse in East Asia and the Pacific 2007

There also appears to have been an increasing diversification of synthetic drugs (UN-ODC, 2009c). Several seizures of ATS pills have been reported to contain mixtures of MDMA, methamphetamine and ketamine, as well as other combinations. Recently, drugs marketed as 'happy water' were found to contain a mixed liquid of methamphetamine, amphetamine and ketamine, while another product, marketed as 'fairy water', contained a mixture of MDMA, nimetazepam and codeine (UNODC, 2009c). The diversification of synthetic

drugs both in terms of marketing, as well as new compositions, highlights the need for continuous monitoring of patterns and trends of use and comprehensive forensic analysis of the synthetic street drugs.

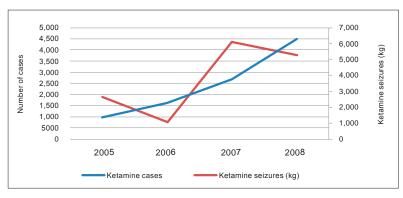
Table 36. Street names of select drugs in China

Street name	Composition
Kai xin fo (Angel dust)	phencyclidine
Fei zai / halcyon	crystalline methamphetamine
G shui	GHB (gamma-hydroxybutyric acid)
Hu yu yu	methaqualone and ephedrine mixture tablets
K fen (Mandarin Chinese); K chai (Cantonese Chinese)	ketamine
Kai xin fo	2C-B (4-bromo-2,5-dimethoxyphenethylamine)

Street name	Composition
Ma gu, Ma guo (Mandarin Chinese); Ma ku (Cantonese Chinese)	methamphetamine tablets
Shen xian shui	GHB mixed with MDMA and ketamine
Yao tou wan	ecstasy (MDMA)
Yi li mian	nimetazepam

Source: UNODC (2009c). Improving Understanding of the Synthetic Drug and Precursor Situation in China: Selected Cases in 2008 and the First Half of 2009, UNODC

Figure 32. Ketamine related cases and seizures in China, 2005-2008



Source: DAINAP

Ketamine is another drug that has seen a dramatic increase in both the number of cases and seizures over the past four years (Figure 32). As a result, the total quantity of ketamine seized in China in 2007 and 2008 was higher than the quantity of heroin seized. In 2008, cases involving large volumes of ketamine were reported to have taken place in Eastern, South-West and Central South China, namely in the

Provinces of Fujian, Zhejiang, Sichuan, Chongqing, and Guangdong, and in Hong Kong (SAR of China). Large seizures continued in 2009 with a massive seizure of 400 kg of ketamine and 2.2 tons of precursors in Dongguan, Guangdong Province in June.

China has reported a considerable increase in the number of clandestine laboratories seized over the past four years, some of which were of industrial scale. In 2005, 37 ATS labs were reportedly seized. The figure rose to 53 in 2006 and 130 in 2007, including 77 laboratories for ATS, 44 for ketamine, 8 for heroin and 1 for opium. In 2008, a total of 244 unspecified laboratories were dismantled. Although believed to be for ATS manufacture, no information was available by drug type (UNODC, 2008; UNODC, 2008a).

In 2008, one particularly large laboratory was seized in Guangdong (Exhibit 5), containing multiple large reactor vessels, wastewater and emission scrubbers, similar to operations dismantled in Malaysia and Indonesia in previous years. The plant covered 4,000 square meters and operated under the guise of a chemical and paint factory for which an application for a business licence had been submitted (NNCC, 2009a). The seizure also included 1,700 litres of liquid methamphetamine.

**Exhibit 5. Guangdong clandestine laboratory** 



Source: NNCC

Significant seizures of precursor chemicals also have been reported in China during the past two years. In 2008, 170 cases involving smuggling and illegal trade in precursors were reported in China. 288 individuals were arrested and 1,113 tons of precursors were seized (NNCC, 2009).

In April 2008, a large-scale pseudoephedrine smuggling operation was interrupted and two pseudoephedrine extraction laboratories were dismantled in Hunan. One Chinese and six Mexican nationals were arrested. In May 2009, 13.4 million tablets of pseudoephedrine hydrochloride were seized in Guangdong Province (UNODC, 2009c), and the dismantling of a ketamine laboratory in Sichuan Province resulted in an 8 ton seizure of the ketamine precursor, hydroxylamine hydrochloride, the largest seizure of that precursor in China.

ATS manufacture in China is becoming increasingly diversified with the synthesis of precursors and the different stages of manufacturing being divided across provinces (NNCC, 2009a).

A second trend identified by NNCC is the transnational character of drug manufacture and marketing. For example, a case in 2008 involved individuals from Malaysia, China and Hong Kong (SAR) collaborating in setting up a process to manufacture crystalline methamphetamine and heroin in Malaysia, while sourcing raw materials from China. A second recent example is a June 2009 case with a syndicate operation involving Chinese and Vietnamese nationals who trafficked ketamine, methamphetamine pills and heroin into China. The drugs were believed to have originated from a third country.

No illicit drug price data was reported by China for 2007 and 2008.

#### **Treatment data**

There are 540 government sponsored compulsory drug treatment centers and 168 labour correction drug treatment centers in China. In 2008, 264,000 individuals received compulsory treatment, labour re-education and compulsory seclusion in these facilities (NNCC, 2009). The majority of treatment admissions were for heroin use. The relapse rate of the heroin addicts following treatment was reported to be 54.8% in the month after being released (NNCC, 2008a). Officials note that more drug dependence treatment professionals as well as more knowledge on the issue is needed, for adequate treatment of ATS addiction. The Chinese Government also has been implementing a pilot program of methadone maintenance covering 300 methadone maintenance clinics and 70 special centers for drug rehabilitation.

#### HIV/AIDS and injecting drug use data

With the increase in drug use in the late-1980s, primarily involving heroin, China experienced an HIV epidemic driven by injection of illicit drugs. In 1989, Yunnan reported the first HIV infection among drug users. In 1995, Sichuan and Xinjiang Provinces reported several cases. This was followed by a rapid spread of HIV among IDUs in Yunnan, Xinjing and Sichuan Provinces. By 2003, all 31 provinces, municipalities and autonomous regions in mainland China had reported HIV/AIDS among drug users (NNCC, 2007). According to a 2008 report by NNCC, there were an estimated 517,900 injecting drug users in China. Of 50,000 new HIV cases reported in 2008, 29.2% were due to sharing injecting needles. However, drugrelated HIV infections decreased from 68.7% in 2001 to 33.2% in 2008. Most recently, the prevalence rate of HIV among IDUs is reported at 12% (NNCC, 2009).

#### Hong Kong (SAR of China)

Heroin continues to dominate illicit drug use in Hong Kong (SAR), comprising 53% of the drug user population in 2008, according to the drug registry (Hong Kong Narcotics Bureau, 2009). However, from a high of 74% in 2003, the number of heroin users as a percentage of total drug users has declined substantially in recent years. In 2008, ATS users accounted for more than 10% of those on the registry, while ketamine users comprised more than 30%.

Ecstasy is associated primarily with the entertainment and dance scene. Following steady increases through the mid- to late-1990s, ecstasy reached a peak of slightly more than 12% of the recorded drug user population in 2005. It has since declined to about 5% in 2008.

Table 37 contains the amounts of illicit drugs seized annually in Hong Kong (SAR) between 2003 and 2008. Seizures of all major illicit drugs show wide fluctuation during the period. For example, after a peak of 228 kg of seized crystalline methamphetamine in 2005, the amount seized in 2008 was just 20% of that seized three years earlier. Ecstasy pill seizures showed even greater fluctuation, with amounts seized in 2008 representing a 94% decrease from the peak in 2004. Ketamine seizures in 2008 were less than half of those in the peak year of 2006, but substantially higher than the other years over the period. In contrast, the quantity of heroin seized in 2008 was larger than any other annual amount recorded during the six year period.

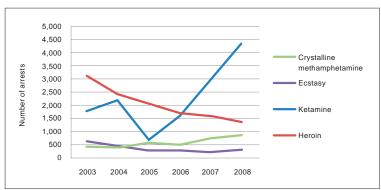
Table 37. Annual seizures of illicit drugs in Hong Kong (SAR), 2003 - 2008

Drug type (measure)	2003	2004	2005	2006	2007	2008
Crystalline methamphetamine (kg)	38.6	15.7	228.1	6.7	40.8	45.8
Ecstasy (pills/ tablets)	142,912	283,568	47,694	104,296	65,539	18,326
Ketamine (kg)	51.0	46.4	296.1	1,006.0	96.4	434.9
Heroin (kg)	42.2	35.7	31.9	52.2	37.4	54.6
Cannabis herb (kg)	233.0	154.9	404.8	149.6	435.5	244.5
Cannabis resin (kg)	15.3	27.8	12.2	2.9	31.8	12.9
Cocaine (kg)	6.6	55.5	11.6	14.9	197.1	69.2

Source: Hong Kong Narcotics Bureau (2009). Drug Situation Report, Hong Kong Special Administrative Region of the People's Republic of China, 2008

Trends in drug related arrests in Hong Kong (SAR) suggest a change in the drug market over the 2003-2008 period (Figure 33). Heroin arrests have shown a marked decline from 3,130 in 2003, representing 46% of the total arrests that year for drug law violations, to 1,378 arrests in 2008, representing 17% of the total. During the same period, arrests involving ketamine increased dramatically from 1,770 arrest in 2003 (25.9% of total arrests) to 4,360 arrests in 2008, representing more than half of total arrests in that year. Crystalline methamphetamine related arrests more than doubled during the 5 year period, from 418 to 874, while arrests for ecstasy declined by more than half. Cocaine arrests increased markedly from only 59 arrests in 2003 to 618 in 2008.

Figure 33. Drug related arrests in Hong Kong (SAR), 2003-2008



Source: Hong Kong Narcotics Bureau, 2009

Considering the regional context, seizures of ATS in Hong Kong (SAR) have been relatively modest. Clandestine ATS operations have been dominated tabletting and repackaging operations, with six ecstasy and two methamphetamine laboratories having been reported between 2001 and 2006 (UNODC, 2008). Similar diversification in synthetic drugs as noted for mainland China is also observed in Hong Kong (SAR).

#### Summary, emerging trends and concerns

- The trend in ATS and ketamine use is increasing, while heroin is declining as supported by the following indicators:
  - Annual seizures of methamphetamine have been higher than those for heroin since 2006 and ketamine seizures have been higher since 2007;
  - $\circ$  Annual heroin seizures have declined since 2004 in China, although there was an increase in Hong Kong (SAR);
  - o An increasing number of ATS labs have been seized since 2005, up from 37 labs in that year to 75 in 2007. In 2008, 244 labs were dismantled, a majority highly likely set up to produce ATS and ketamine.
  - o Seizures of clandestine ATS laboratories are no longer limited to the southeastern provinces of

Guangdong and Fujian, but increasingly also reported from Central China.

- Other trends include new drugs appearing or being identified:
  - o In 2008 19.1% of registered drug users were listed for 'new-type drugs', up from 1.1% in 2004;
- o New types of synthetic drugs are appearing in the Chinese market, including drugs marketed as 'happy water' which contain a liquid combination mixture of methamphetamine, amphetamine and ketamine and 'fairy water' containing MDMA, nimetazepam and codeine.
- Drug treatment for ATS and ketamine may not be keeping pace with their increased use as treatment data show a continued focus upon opiate-related problem drug users, even though registered drug users for ATS and ketamine have increased dramatically.
- The unavailability of prevalence estimates for China, potentially one of the largest ATS markets in the world, remains one of the biggest challenges to trend monitoring systems in the region and, in fact, globally.

# Indonesia



## Overview of drug use

Problematic drug use appears to have increased in Indonesia over the past decade. In particular, ATS has grown to become a major source of concern with crystalline methamphetamine and ecstasy now ranking as the second most used drugs, while heroin has dropped to number four, after benzodiazepines. The shift towards increasing ATS use is also reflected in law enforcement data, with increasing seizures of ATS and a large number of clandestine laboratory operations being dismantled, many of which have been of an industrial scale.

Lifetime prevalence of drug use was estimated at 6% in 2004. Among those who ever used drugs, use of ATS accounted for 21% (15% crystalline methamphetamine and 9% ecstasy). Cannabis use was reported by the majority of users (71%) while heroin use accounted for 5%. In addition, 1.1% of those who ever used drugs were described as 'regular' users, i.e. those who used drugs other than heroin and had never been in treatment and 0.5 % were referred to as 'hardcore' heroin addicts, of which 56 % were IDUs (NNB, 2005).

## Patterns and trends of drug use

Cannabis has remained the most commonly used illicit drug in Indonesia between 2003 and 2008 followed, in 2008, by crystalline methamphetamine and ecstasy (Table 38, 39 and 40).

For the years when a trend was reported, ecstasy and crystalline methamphetamine use showed an increasing trend. Ketamine was reported as a drug of concern for the first time in 2008, being ranked seventh, and showing a stable trend.

Table 38. Rank and trend of drugs of use in Indonesia, 2008

Drug type	Rank	Trend
Cannabis	1	$\leftrightarrow$
Crystalline methamphetamine	2	<b>↑</b>
Ecstasy	2	<b>↑</b>
Benzodiazepines	3	<b>↑</b>
Heroin	4	<b>↓</b>
Psilocybin	5	$\leftrightarrow$
Atropin	5	$\leftrightarrow$
Inhalants	6	$\leftrightarrow$
Ketamine	7	$\leftrightarrow$
Cocaine	8	<b>↓</b>

 $\uparrow$  = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported / no trend available

Source: DAINAP

Table 39. Rank of use of specific drugs in Indonesia, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Cannabis	1	1	1	1	•	1
Ecstasy	•	3	4	3	•	2
Crystalline methamphetamine	•	4	5	4	•	2
Heroin	•	7	6	2	•	4
Ketamine	•	•	•	•	•	7

•= Not reported Source: DAINAP

Table 40. Trend in use of specific drugs in Indonesia, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Ecstasy	<b>↑</b>	1	1	•	•	<b>↑</b>
Crystalline methamphetamine	<b>↑</b>	1	1	•	•	<b>↑</b>
Ketamine	•	•	•	•	•	$\leftrightarrow$
Heroin	1	1	1	•	•	<b>↓</b>
Cannabis herb	<b>↑</b>	1	1	•	•	$\leftrightarrow$

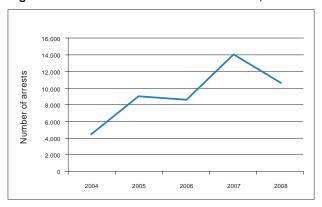
Source: DAINAP

Data from a national survey conducted in 2004 on a sample population of 13 million estimated lifetime prevalence of drug use at 6%. Among those who ever used drugs, use of ATS accounted for 21% (i.e. 15% crystalline methamphetamine and 9% ecstasy), cannabis use was reported by 71% of users while heroin use accounted for 5% (NNB, 2005). In the most recent household survey, it was estimated that 2% of the population between 10 - 64 years of age had used an illicit drug in the past month, representing between 2.6 and 3.3 million drug users (NNB, 2009). The increasing user population also is reflected in the increase in the number of drug related arrests over the past five years.

## Arrest, seizure and price data

ATS related arrests, which were primarily for crystalline methamphetamine, increased dramatically in Indonesia between 2004 and 2007, before decreasing in 2008 to the level of 2006 (Figure 34). In 2008, alcohol related arrests, which were included for the first time in arrest statistics reported to DAINAP, accounted for 37% of total drug related arrests. They were followed by arrests for cannabis and crystalline methamphetamine (29% and 21.4% respectively). Numerically, cannabis related arrests showed a six-fold increase between 2004 and 2007 from just over 3,000 arrests in 2004 to more than 18,000 in 2007, before declining in 2008 by 36.2% to 11,581 (Table 41). Heroin related arrests fluctuated over the past five years. The overwhelming majority of arrestees in Indonesia in 2008 were male Indonesian nationals.

Figure 34. ATS-related arrests in Indonesia, 2004-2008



Source: DAINAP

Table 41. Drug-related arrests in Indonesia, 2008

		National		Non-national			
Drug type	Male	Female	Total	Male	Female	Total	
Cannabis herb	11,298	255	11,553	24	3	27	
Crystalline methamphetamine	7,798	849	8,647	34	2	36	
Ecstasy	1,638	340	1,978	5	1	6	
Heroin	1,674	126	1,800	13	0	13	

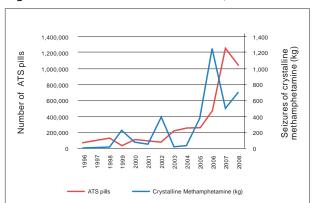
	National			I	Non-nationa	I
Drug type	Male	Female	Total	Male	Female	Total
Benzodiazepines	1,420	61	1,481	0	0	0
Cocaine	4	0	4	3	2	5
Herbal drugs	4	1	5	0	0	0
Codeine	2	0	2	0	0	0
Cannabis resin	0	0	0	1	0	1
Alcohol	13,904	1,109	15,013	0	0	0
Total*	37,742	2,741	40,483	80	8	88

Source: DAINAP. \*Refers to listed drug types only. Male and female may not add up as several entries were only disaggregated by drug type.

Annual heroin seizures have fluctuated in Indonesia between 2000 and 2008, but the overall trend is declining. Heroin seizures remain low compared to neighbouring countries with seizures of under 30 kg annually. By contrast, cannabis seizures rose dramatically to 140 tons in 2008, more than double the previous record seizure of over 60 tons in 2002.

Psychotropic pill seizures (which include benzodiazepines) increased sharply in 2008 with seizures nearly ten times the amount seized in 2006. This mirrors the high ranking of and increasing trend in use of benzodiazepines (Table 38). There is speculation that this increase is linked to the rise in methamphetamine use, as benzodiazepines, primarily nimetazepam, have been reported as being sold together with methamphetamine in neighboring Malaysia and Singapore.

Figure 35. ATS seizures in Indonesia, 1996-2008



Source: NNB, DAINAP

Table 42. Drug seizures in Indonesia, 2008

Drug type (measure)	Cases	Volume
Cannabis herb (kg)	8,459	140,650
Cannabis plants (number of plants)	•	720,774
Heroin (kg)	1,532	29.1
Cocaine (kg)	6	0.5
Crystalline methamphetamine (kg)	6,520	709.9
Ecstasy (pills/ tablets)	2,093	1,045,105
Ketamine (kg)	•	19.80
Benzodiazepines (pills/ tablets)	1167	6,485,245
Alcohol (litres)	7,090	433,043
Codeine (pills/ tablets)	2	9,722

• = Not reported Source: DAINAP

The number, as well as capacity of clandestine ATS laboratories seized in Indonesia has increased dramatically in recent years. In 2004, Indonesia seized nine ATS laboratories. In 2005, an industrial-scale laboratory was dismantled in Cikande which was one of the largest ATS laboratories ever seized in the world at that time. In 2006 and 2007 respectively, 16 and 23 ATS laboratories were seized, the latter including 16 ecstasy manufacturing facilities and four methamphetamine factories on Batam, Riau Islands Province, of which two were inside industrial zones. In 2008, 21 laboratories were uncovered, and during the first quarter of 2009, 13 laboratories were dismantled (NNB, 2009; UNODC, 2008).

Several of the facilities seized have had very large manufacturing capacity. In May 2009, a MDMA manufacturing facility was seized, together with roughly 10 tons of ecstasy precursors and reagents. The facility had an estimated production capacity of 100 kg of MDMA per production cycle.

In January 2009, a crystalline methamphetamine manufacturing facility located in a luxury house in Kauman subdistrict in Cengkareng Timur was seized, together with 30 kg of finished product. The raid was the result of a follow-up investigation of a drug syndicate with various operations in Jakarta, Surabaya, Medan, Jepara, Hong Kong and Bangkok.

According to the National Narcotics Board Indonesia (NNB), the main drug syndicates operating in Indonesia are transnational in character with East Asian-linked operational groups primarily involved in crystalline methamphetamine and ecstasy trafficking and manufacture. West African syndicates are primarily involved in heroin and cocaine trafficking, while domestic Indonesian syndicates dominate cannabis cultivation and trafficking.

Table 43 shows price ranges reported for 2008. No illicit drug prices were reported for 2007.

Table 43. Illicit drug prices in Indonesia, 2008

Drug type	Price range (US\$)	Unit
Crystalline methamphetamine	87 – 130	gram
Amphetamine	17	gram
Ecstasy	7-9	tablet
Norephedrine	217	kilogramme
Cannabis herb	174 – 217	kilogramme
Cannabis resin	6.5	gram
Heroin	61 – 87	gram
Morphine	26	gram
Cocaine (powder)	87	gram

Source: DAINAP

#### Treatment data

Complete treatment data were not reported for 2007 or 2008. However, based on 2006 data from 25 general hospitals, 17 rehabilitation centers, 11 prisons, 9 psychiatric hospitals, 6 health centers, 2 NGOs and 1 drug dependency hospital, about a third of all treatment admissions involved heroin (2,151 admissions of a total of 6,313). The second largest category of admissions was for multiple drug use (26.3%), followed by cannabis (14.3%). In 2006, only 9.2% were admitted for methamphetamine dependence.

Table 44. Total drug treatment admissions in Indonesia, 2006

Drug type	Number of admissions
Heroin	2,151
Multiple drugs	1,662
Cannabis	900
Methamphetamine/ ecstasy	580
Benzodiazepines	393

Drug type	Number of admissions
Alcohol	354
Sedatives	166
Cocaine	81
Inhalants	26
Total	6,313

Source: DAINAP

## HIV/AIDS and injecting drug use data

Indonesia did not report any primary HIV/AIDS and injecting drug use data to DAINAP in 2008. Prevalence of injecting drug use in the population aged between 15 and 64 years old has been estimated to be between 0.13% and 0.16% in Indonesia. Estimated HIV prevalence among people who inject drugs was estimated between 31.7% and 53.3% with a mid-range of 42.5% (Lancet, 2008).

## Summary, emerging trends and concern

- The methamphetamine and ecstasy market has expanded noticeably in Indonesia over the past three years. This is reflected in the following statistics:
  - Crystalline methamphetamine and ecstasy moved up among drugs of concern in 2008, overtaking heroin. In addition, ATS was reported as having an increasing use trend in 2008;
  - ATS seizures increased considerably beginning in 2004 through 2007. Despite a decline in 2008, they
    continue to remain at a high level, suggesting that international drug syndicates may be
    targeting Indonesia for ATS shipment and manufacture. This also may be reflected in a massive
    seizure of an estimated 600 kg of crystalline methamphetamine which occurred off West Java in
    2008:
  - The number of clandestine ATS laboratories seized in Indonesia have increased dramatically in recent years. In 2008, 21 laboratories were uncovered. But in the first quarter alone in 2009, 13 ATS laboratories were dismantled. The scale of seized laboratories continues to be large. An MDMA manufacturing facility seized in May 2009 had an estimated production capacity of 100 kg of MDMA per production cycle.
- The heroin market is likely stable or declining. This is reflected in the following statistics:
  - o Opiate related arrests increased between 2004 and 2007 and dropped sharply in 2008.
  - o Heroin declined to number four in rank of use in 2008 compared to being ranked second in 2006;
  - Heroin seizures are on a declining trend, remaining under 30 kg annually.
- Given the large-scale manufacturing facilities that have been seized in Indonesia over the past years, ATS trend monitoring systems in Indonesia would benefit from improved forensic information.

# **Japan**



# Overview of drug use

In recent years, the most common drugs of use in Japan were, crystalline methamphetamine, followed by solvents and inhalants. Cannabis ranked third, followed by ecstasy, cocaine and heroin. Methamphetamine use has shown a relatively stable trend in recent years, reflected in arrest and treatment statistics, while ecstasy use - based on both seizures and arrests - has been on an increasing trend over the past eight years.

Methamphetamine has historically been the dominant and most serious illicit drug used in Japan. However drug use levels are low by international comparison with lifetime prevalence for methamphetamine use estimated at 0.3% of the population (over the age of 15). Arrests for stimulant-related offences (which account for about 80% of drug-related crimes) have been on a slight downward trend with the number of arrests in 2008 recorded at 11,025. Although stimulant trends have been relatively stable over the past ten years, 2008 saw a reported increase in use and continues to be a serious national concern (UNODC, 2008).

Cannabis use is present in Japan and accounts for the second largest number of drug-related arrests after stimulants. The number of cannabis-related arrests in 2008 was 2,758, representing an increase over previous years. There were only 505 arrests for all other drugs combined (2008).

### Patterns and trends of drug use

The pattern of drug use in Japan shows that crystalline methamphetamine remains the number one drug of concern. However, for the first time since 2003, authorities noted an increasing trend in its use. While an increasing trend in ecstasy had been previously identified (2003-2006), its use has been stable in 2008.

Cannabis, the second most common drug of use for 2008, showed a declining trend in 2008 - the only decrease reported since 2003. Heroin remains the sixth most common drug of use and appears to have remained relatively stable between 2003 and 2008.

Table 45. Rank of use of specific illicit drugs in Japan, 2003-2008

Drug type	2003	2004	2005	2006	2007*	2008*
Crystalline methamphetamine	•	1	1	1	1	1
Ecstasy	•	4	4	4	4	4
Cannabis	•	3	3	3	3	2
Heroin	•	6	5	6	6	6

Source(s): UNODC, Patterns and Trends of Amphetamine-Type Stimulants (ATS) and Other Drugs of Abuse In East Asia and the Pacific 2006. \*UNODC, Annual Report Questionnaire

Table 46. Trend in use of specific illicit drugs in Japan, 2003-2008

Drug type	2003	2004	2005	2006	2007*	2008*
Crystalline methamphetamine	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	<b>↑</b>
Ecstasy	1	1	<b>↑</b>	1	$\downarrow$	$\leftrightarrow$
Cannabis	1	1	<b>↑</b>	1	$\leftrightarrow$	$\downarrow$
Heroin	$\downarrow$	$\downarrow$	$\leftrightarrow$	•	$\leftrightarrow$	$\leftrightarrow$

↑ = Increase, ↓ = Decrease, ↔ = Stable, • = Not reported / no trend available Source(s): UNODC, Patterns and Trends of Amphetamine-Type Stimulants (ATS) and Other Drugs of Abuse In East Asia and the Pacific 2006. \*UNODC, Annual Report Questionnaire

## Arrest, seizure and price data

Overall, arrests in Japan have been on a decline since 2000. The number of arrests for stimulant-related offences, primarily involving crystalline methamphetamine, have declined sharply since 2000, down by 42% by 2008 (Ministry of Health, Labour and Welfare, 2008; National Police Agency, 2009). According to the classification of those arrested for stimulant-related crimes by specific charge, 'use' and 'possession' account for more than 90% of arrestees in stimulant drug category.

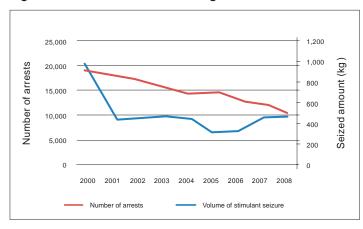
Cannabis-related arrests have more than doubled over the past nine years with 1,224 arrests being recorded in 2000 compared to 2,758 in 2008 (Table 47). While ecstasy-related arrests increased sharply during the early part of the decade, peaking in 2004 with 450 arrests, and generally declining ever since

Table 47. Drug related arrests in Japan, 2000-2008

Drug type	2000	2001	2002	2003	2004	2005	2006	2007	2008*
Stimulants	19,156	18,110	16,964	14,794	12,397	13,346	11,821	12,196	11,025
Ecstasy	83	113	138	272	450	403	359	259	281
Cannabis	1,224	1,525	1,873	2,173	2,312	2,063	2,423	2,375	2,758
Opium	67	49	55	55	68	13	27	47	14
Narcotics and psychotropics	171	158	189	258	185	•	104	228	125
Total	20,784	20,068	19,357	17,824	15,862	16,431	14,734	15,105	14,288

Note: Data obtained from the Ministry of Health, Labour and Welfare, the National Police Agency, Ministry of Finance, and the Japan Coast Guard; \*Drug Control in Japan 2009, Drugs and Firearms Division, National Police Agency Japan

Figure 36. Number of stimulant drug offenses and amount of drugs seized in Japan



Note: Data obtained from the Ministry of Health, Labour and Welfare, the National Police Agency, Ministry of Finance, and the Japan Coast Guard;

Seizures of methamphetamine are shown in Figure 58. With the exception of tonnage-level seizures reported in 1999 and 2000, seizures of methamphetamine have remained generally below 500 kg. The seizure volume for methamphetamine was 399 kg in 2008, considerably higher than the 123 kg seized in 2005 and the 144 kg in 2006. In 2008 the fourth largest sinale crystalline methamphetamine seizure in Japanese history was made. In November 2008, 332 kg of crystal methamphetamine hidden in 599 bags labelled as Chinese tea were seized from a Sierre Leone registered ship in Fukuoka prefecture. Indonesian and Japanese nationals were arrested.

The seizure volume of ecstasy increased since 2000 and peaked in 2007, reaching a record level with 1,278,354 tablets, before declining in 2008. In August 2008, the largest amount ever smuggled in baggage was seized in Japan and an Israeli national suspected of smuggling 90,000 MDMA pills from the Netherlands, was apprehended (Japanese Customs, 2008).

The seizure of cannabis herb fluctuates between 230 and 840 kg annually, while cannabis resin seizures in 2008 were at the lowest levels since 2000 (33.4 kg). Although the quantity of heroin seized has been quite small, 1.4 tons of the heroin precursor, acetic anhydride, was seized at Nagoya, Aichi Prefecture, in February 2009. A Pakistani national was charged with trying to export the chemical compound to Afghanistan without authorisation. Earlier, and in a likely related incident, 0.9 ton of acetic anhydride was seized at the port, also involving a Pakistani national.

Table 48. Drug seizures in Japan 2000-2008

Drug type (measure)	2000	2001	2002	2003	2004	2005	2006	2007	2008**
Methamphetamine (kg)	1,030.5	419.2	442.1	493.5	411.3	123	144	359	399*
Ecstasy (pills)*	78,006	112,006	190,280	393,757	469,483	576,748	196,212	1,277,859	217,882
Heroin (kg)	7	4.5	20.9	5.1	0.04	0	2.3	2.1	1
Opium (kg)	9	11.4	5.8	6.5	2	1	17.2	19.3	6.6
Cannabis herb (kg)	310.3	844	256.5	558.2	642.6	•	233.8	503.5	382.3
Methamphetamine (kg)	1,030.5	419.2	442.1	493.5	411.3	123	144	359	399*
Ecstasy (pills)*	78,006	112,006	190,280	393,757	469,483	576,748	196,212	1,277,859	217,882

<sup>\*</sup>Excludes 25,298 tablets.

Sources: Data obtained from the Ministry of Health, Labour and Welfare, the National Police Agency, Ministry of Finance, and the Japan Coast Guard. \*Reported in a category titled 'Synthetic Drugs including MDMA' \*\*2008 Annual Report Questionnaire

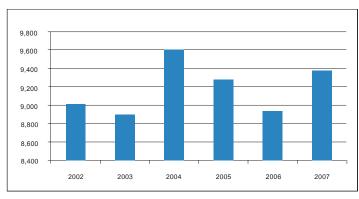
According to the National Police Agency, domestic crime syndicates are dominated by Japanese organized crime (known as the Boryokudan) - accounting for 53% of 'profit-oriented' methamphetamine arrests in 2008 - and Iranian drug trafficking organizations with 12%, a figure that has nearly doubled since 2004 (National Police Agency Japan, 2009).

A 2007 Government survey of people arrested by the Narcotics Control Departments across the country concerning illicit drug prices in Japan, showed some fluctuations in drug price, but showed generally ongoing high prices for crystalline methamphetamine (Ministry of Health, Labour and Welfare, 2008). The price for 1 gram peaked between July and December 2006 at 100,000 yen, dropping through the first half of 2007 to 80,000 yen, but still considerably higher than 2005 level of 55,000 yen per gram, making Japan one of the most lucrative methamphetamine markets in the world (UNODC, 2009).

#### **Treatment data**

Treatment data for 2008 were not available. In 2007, the number of cases related to drug use accepted by the health centers and mental health and welfare centers, was 9,386. While this was a slight 5% increase from the number reported in the previous year (8,942 cases in 2006), the overall trend is for around 9,000 cases per year.

Figure 37. Number of consultations at drug consultation facilities in health centers in Japan, 2002-2007



The estimate for prevalence of injecting drug use in the population between 15 and 64 years of age in Japan was 0.47%. Although HIV has been reported among injecting drug users, an estimate could not be made according to recent studies (Lancet, 2008).

Source: Ministry of Health, Labour and Welfare, 2008

### Summary, emerging trends and concerns

- Japan reported an increase in crystalline methamphetamine use for 2008.
- A relatively large seizure of crystalline methamphetamine (332 kg) occurred in November 2008.

- Japan has never reported a clandestine ATS laboratory.
- Continued high street prices make Japan an attractive destination market for methamphetamine. Involvement of organized crime may be reflected in an increase in methamphetamine related arrest statistics and further highlights the attractive market.
- There appears to be a diversification of the sourcing of methamphetamine for the Japanese market to include Canada and Malaysia.
- Domestic organized crime account for more than half of methamphetamine trafficking offenses, while Iranian nationals involved in methamphetamine trafficking are increasing.

# Republic of Korea



## Overview of drug use<sup>1</sup>

Locally manufactured methamphetamine emerged as one of most serious drug-related problems in the 1980s in Korea and coincided with a rapid increase in methamphetamine addiction. Strong anti-drug laws and a 'war on crime' declared by the Korean government in 1991 resulted in significant stemming of local manufacture as well as addiction rates over the following decade. In 2008, the number of drug-related arrests showed a 7% decline from the previous year.

However, crystalline methamphetamine, primarily manufactured outside the country, still remains the most commonly used substance in Korea, followed by cannabis. In 2008, methamphetamine accounted for around 75% of total drug related arrests and addiction to the drug accounted for 95% of admissions for drug treatment. The source countries of methamphetamine for the Korean market are diversifying from China to several other countries, including Malaysia, South Africa and Turkey.

Overall, relative to its population of over 47 million and the potential market that it provides, seizure levels in Korea remain modest compared to many other countries in the region.

## Patterns and trends of drug use

The rank of drugs of use in Korea has remained stable over the past year with crystalline methamphetamine being the leading illicit drug of concern, followed by cannabis and other narcotics. Trends in use show a decline for both crystalline methamphetamine (mainly administered by injection) and cannabis in 2008 compared to two years of increasing use in 2006 and 2007.

Table 49. Rank of methamphetamine and cannabis use in Korea, 2005-2008

Drug type	2005	2006	2007	2008
Crystalline methamphetamine	1	1	1	1
Cannabis	2	2	2	2

Source: SPO, 2009

Table 50. Trend in use of specific drugs in Korea, 2003-2008

Drug type	2005	2006	2007	2008
Crystalline methamphetamine	$\downarrow$	<b>↑</b>	<b>↑</b>	<b>↓</b>
Cannabis herb	1	1	1	<b>↓</b>

↑ = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported

Source: SPO, 2009

Injecting of methamphetamine has been reported, but no estimates are available (Lancet, 2008).

#### Arrest, seizure and price data

During 2008, the number of drug-related arrests numbered 9,898, indicating a 7% decline from the previous year (10,649 arrests). Korean law enforcement officials speculate that this might be attributed to strengthened counter-narcotics enforcement, particularly in preventing illicit drugs manufactured overseas from entering the country (SPO, 2009).

The share of total drug-related arrests due to narcotics increased to 14.2% in 2008 from 9% reported for the corresponding period of the previous year mainly as a result of concentrated efforts against ille-

<sup>&</sup>lt;sup>1</sup> All data and information, unless otherwise specified, was submitted by the narcotics division of the Korean Supreme Prosecutors' Office to UNODC in June 2009. However, Korea does not routinely submit data through the Drug Use Network for Asia and the Pacific (DAINAP), hence terminology may deviate from other country chapters.

gal opium poppy cultivation (SPO, 2009). The percent of arrests for psychotropic substances (including methamphetamine) and cannabis related violations accounted for 75.3% and 10.5%, respectively, a small decline from 80% and 11% in 2007.

Table 51. Drug-related arrests in Korea, 2007-2008

Drug type	2007	2008
Methamphetamine	8,521	7,457
Cannabis	1,170	1,045
Narcotics	958	1,396
Total	10,649	9,898

Source: SPO, 2009

According to recent patterns relating to methamphetamine seizures, Korean officials reported that more than 90% of seized methamphetamine was identified as coming from China (SPO, 2009). In 2007, 95% of total methamphetamine seizures were trafficked from China and the rest from South-East Asian countries, including the Philippines and Thailand. Since 2007, there has been a surge of methamphetamine departing from China by sea (Korean Customs, 2008).

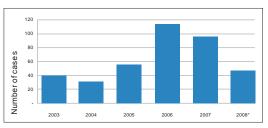
Table 52. Drug seizures in Korea, 2005-2008

Drug type (measure)	2005	2006	2007	2008
Crystalline methamphetamine (kg)	19.3	21.5	23.7	25.6
Methamphetamine (pills/ tablets)	18	0	196	151
MDMA (pills/ tablets)	10,744	356	18,323	714
Cannabis herb (kg)	18.4	20.9	22.2	92.7
Cannabis seed (kg)	20.8	62.2	10.7	61.2
Cannabis resin (kg)	1.5	0.2	0.8	2.0
Cocaine (kg)	0	4.8	0.08	8.9
Raw Opium (g)	11	98	137	195
Heroin (g)	9	18	0	0

Source: SPO, 2009

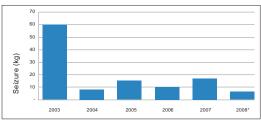
The number of methamphetamine cases detected by Korean customs between 2006 and 2008\* compared with figures from the period 2003 - 2005 showed a general increase (Figure 38). In contrast, the volume of seizures has remained stable or declined (Figure 39). This would suggest that traffickers may be seeking to reduce risk by lowering the trafficked volume with each attempt.

Figure 38. Number of methamphetamine cases detected by Korean Customs, 2003-2008\*



Source: Korean Customs (2008). \* 2008 covers January to July only.

Figure 39. Quantity of methamphetamine seized by Korean Customs, 2003-2008\*



Source: Korean Customs (2008)  $^{\star}$  2008 covers January to July only.

A new trend in 2008 indicates that the supply of methamphetamine entering Korea is diversifying. In 2008, 55% of methamphetamine seizures originated from China, 16% from Turkey, 14% from South Africa and 13% from Malaysia. The same trend applies to cannabis. South Africa, as well as, North America, Europe and South-East Asia have emerged as primary sources of supply for the Korean market (SPO, 2009). In 2008, the majority of cannabis resin (hashish) used in South Korea was mainly sourced from Thailand

and Iran. A majority of ecstasy used has been identified as coming from North America and Europe (UN-ODC, 2008).

There are only sporadic seizures of cocaine in Korea, but an increase was noted in 2008. About 8.9 kg of cocaine were smuggled from Brazil by West African traffickers recruiting Japanese couriers to transport it into Japan or other international markets via Korea in 2008. Although, few narcotic drugs originate in Korea, a growing concern among Korean officials is that the country may become a more popular transshipment location for drug trafficking as well as a destination market.

There were reports of some large-scale diversions of dual use precursor chemicals destined for Afghanistan being traced back to Korea (INCSR, 2009). Some significant precursor seizures occurred in 2008 in Korea, the country being both a destination and a source country. In July 2008, 25 kg of pseudoephedrine originating from China were seized in Korea. In May, a large seizure of 356 kg of pseudoephedrine was made, destined for Australia (Exhibit 6). There have been attempts to traffic significant amounts of the heroin precursor, acetic anhydride, from Korea to Iran (21 tons) and Pakistan (62 tons) (Korean Customs, 2008).

Exhibit 6. 356 kg of pseudoephedrine concealed as salt and destined for Australia, May 2008



Source: Korean Customs, 2008

Two cases of clandestine laboratory activity were detected in 2007. The first involved the manufacture of methamphetamine from ephedrine extracted from over-the counter cold medications. The finished product that was seized weighed 50 grams. The second involved a gamma hydroxybutyrate (GHB) manufacturing facility, disguised as a private business. Thirty-seven litres of finished GHB were seized (UNODC, 2009a).

#### **Forensic Data**

Drug signature analysis (impurity profiling) of methamphetamine (locally known as 'philophon') is routinely undertaken in the Supreme Prosecutors' Office (SPO) of Korea for cases involving more than 5 grams of methamphetamine. In 2008, the SPO confirmed 49 out of 50 samples being positive for methamphetamine. Among the 49 samples, 29 were found to have methamphetamine content of over 80%, while 17 samples showed methamphetamine content below 30%. Most low purity samples were found to contain additives, such as sucrose, monosodium glutamate (MSG) and alum. The remaining three samples were found to contain methamphetamine ranging from 30-60%.

#### **Treatment data**

The Korea Food and Drug Administration (KFDA) operates 24 treatment and rehabilitation centres across the country. The number of admissions to the drug use treatment facilities has doubled since 2003 with the preponderance of admissions over the years entering as a result of methamphetamine use, followed by cannabis, with several admissions for narcotics. There were 418 admissions in 2008 and 95% of these were for methamphetamine addiction.

Table 53. Admissions to drug use treatment in Korea, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine	140	178	359	420	461	396
Cannabis	58	24	24	19	12	21
Narcotics	4	5	4	3	4	1
Total	202	207	387	442	477	418

Source: SPO, 2009

# Summary, emerging trends and concerns

- In 2008, methamphetamine continued to be the leading illicit drug in Korea, accounting for around 75% of total drug related arrests.
- The source countries of methamphetamine for Korean market are diversifying from China to several other countries, including Malaysia, Turkey and South Africa.

# Lao PDR



## Overview of drug use

Drug use gained attention as a growing health problem in Lao PDR in the 1990s, which primarily involved inhalant (glue sniffing) and alcohol consumption among youth and opium smoking among the hill tribe communities (Lao PDR Ministry of Health, 1996), Beginning in the late-1990s, however, Lao PDR became a transit country for ATS and since that time has experienced serious drug problems related to use of methamphetamine, mainly in pill form.

A recent study estimates prevalence rates of current drug users were 0.3% for opium use, 0.6% for opiate use, 0.6% for ATS use, and 3% for cannabis use with the number of drug users above 15 years of age at 168,000 in 2006 (Doran, 2008; UNODC, 2008c). ATS prevalence is highest in urban and border provinces with an estimated 1.4% in Vientiane Province and between 1.1% to 1.5% in Luang Prabang, Lang Namtha, Bokeo, and Houanphanh (Doran, 2008).

The estimated opium addiction rates in communities growing opium poppy showed a steep decline in 2008 from an estimated 0.6% in 2007 to 0.2% in 2008 representing an estimated 12,680 addicts (UNODC, 2008b). High addiction rates remain concentrated in the Northern provinces of Phongsaly, Luangnamtha and Houaphanh estimated to be between 0.8% - 1.3%.

Drug-related arrests in Lao PDR are dominated by methamphetamine in pill form. Seizures of that drug remained level at 1.3 million and 1.2 million pills respectively for 2007 and 2008 while the number of cases more than doubled (from 84 to 194) over the same period. Seizures of other drugs fluctuated strongly.

## Patterns and trends of drug use

The rank in use of specific drugs has remained stable over the past five years with methamphetamine pills reported as the leading drug of use, followed by opium, cannabis and heroin. Cannabis overtook heroin as the third drug of use in 2008, but both drugs showed a declining trend. Cocaine was reported as a ranking drug of concern for the first time in 2008 and the trend in use is reported to be on the increase (Tables 54, 55 and 56).

Table 54. Rank and trend of drug use in Lao PDR, 2008

Drug type	Rank	Trend	Mode of administration
Methamphetamine (pills/tablets)	1	$\leftrightarrow$	smoked, ingested
Opium	2	$\downarrow$	smoked, ingested, injected
Cannabis	3	$\downarrow$	smoked
Heroin	4	<b>↓</b>	smoked, ingested
Cocaine	5	<b>↑</b>	•

↑ = Increase, ↓= Decrease, ↔ = Stable, •= Not reported / no trend available

Source: DAINAP

Table 55. Rank of use of specific drugs in Lao PDR, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine (pills/tablets)	•	2	1	1	1	1
Cannabis herb	•	2	2	4	4	3
Heroin	•	3	3	3	3	4

= Not reported Source: DAINAP

<sup>&</sup>lt;sup>1</sup>However, the study notes that, given the variable quality of data and the high number of people under the age of 15 years using ATS, 0.6% ATS prevalence is likely an underestimate.

Lao PDR reported the first stabilization of methamphetamine pill use in 2008 which had been preceded by five years of consecutive increases. At the same time, Lao PDR also reported methamphetamine being injected for the first time in 2008 (Table 71). This is a particular cause for concern given the dominance of methamphetamine use in the country. Opium also was reported as being injected for the first time in 2008. No reliable estimates are available concerning the prevalence of injecting drug use or HIV among the drug-using population in Lao PDR (Lancet, 2008).

Table 56. Trend in use of specific drugs in Lao PDR, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine (pills/tablets)	1	1	1	1	<b>↑</b>	$\leftrightarrow$
Cannabis herb	$\leftrightarrow$	$\downarrow$	$\leftrightarrow$	$\leftrightarrow$	1	<b>↓</b>
Heroin	$\leftrightarrow$	1	<b>↑</b>	<b>↑</b>	<b>↑</b>	1

 $\uparrow$  = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported Source: DAINAP

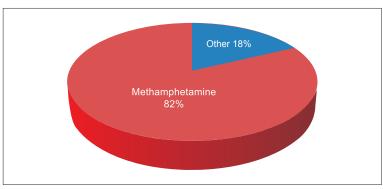
Special population studies conducted in Lao PDR have estimated very high prevalence rates among high-risk groups, 42% for unemployed youth, 34% for patrons of discotheques and clubs, and 14% for commercial sex workers (UNODC, 2002). A study in 2008 estimated that 300,000 youth aged 13-21 years used drugs with over 120,000 using inhalants and the remaining split evenly being methamphetamine pills and cannabis (Doran, 2008). The study suggested that, on average, almost 10% of youths in the school system are using drugs by the age of 16, while almost 25% are using drugs by the age of 21. The high estimate of inhalant use among youth is of particular concern given its severe negative health effects. No data exist on the extent of drug use in prisons, detention facilities, and among migrants.

## Arrest, seizure and price data

As depicted in Figure 40 and Table 41, drug-related arrests in Lao PDR are dominated by methamphetamine in pill form, with 82% of the 418 arrests attributed to that drug in 2008. However, this is a decrease from the previous two years with methamphetamine in pill form accounting for 94% of all drug-related arrests in 2007 and 2006. The decrease in percent can be attributed, in part, to a higher number of cannabis-related arrests in 2008 with 26 arrests compared to only 2 in 2007. But the overall pattern of arrests should be viewed in light of the strong fluctuation in the reported number of drug related arrests between 2006 and 2008, with 479, 147 and 418 arrests in 2006, 2007 and 2008.

Males represented 76.1% and Lao PDR nationals represented 94.3% of drug related arrests in 2008. In 2008, cocaine related arrests were reported for the first time involving 3 male non-nationals.

Figure 40. Drug related arrests in Lao PDR by drug type, 2008



Source: DAINAP

Lao PDR has not reported any clandestine methamphetamine manufacture since 1998, but seizures between half a million and two million methamphetamine pills have been recorded annually between 1997 and 2008 (Figure 41). A record number of almost 4.7 million pills was seized in 2005. This can be attributed to trafficking of methamphetamine from Myanmar to Thailand increasingly being diverted through the country, as Thai law enforcement efforts have been bolstered along the Northern Thai-Myanmar border (UNODC, 2008).

Table 57. Drug related arrests in Lao PDR, 2008

Drug turns	Nati	onal	Non-na	Total	
Drug type	Male	Female	Male	Female	IOIAI
Methamphetamine (pills/tablets)	250	77	12	5	344
Heroin	21	6	0	1	28
Opium	11	5	1	0	17
Cannabis	18	6	2	0	26
Cocaine	0	0	3	0	3
Total	300	94	18	6	418

Source: DAINAP

In 2007 and 2008 total seizures leveled out to between 1.2 and 1.3 million pills, but the number of cases rose sharply with smaller amounts trafficked by a larger number of traffickers ostensibly to reduce risk. This is reflected in the number of methamphetamine pill related cases more than doubling from 84 in 2007 to 194 in 2008.

Lao PDR reported seizure of 4.8 kg crystalline methamphetamine in 2005. However, there have been no reported seizures since then. Seizures of heroin have declined since 2005 with 17.5 kg seized in 2008 (Table 58).

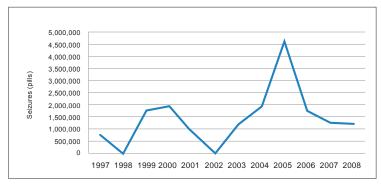
Complete treatment data were not reported for 2007 or 2008. However, based on 2006 data from 25 general hospitals, 17 rehabilitation centers, 11 prisons, 9 psychiatric hospitals, 6 health centers, 2 NGOs and 1 drug dependency hospital, about a third of all treatment admissions involved heroin (2,151 admissions of a total of 6,313). The second largest category of admissions was for multiple drug use (26.3%), followed by cannabis (14.3%). In 2006, only 9.2% were admitted for methamphetamine dependence.

Table 58. Drug seizures in Lao PDR, 2004 - 2008

Drug type (measure)	2004	2005	2006	2007	2008
Methamphetamine (pills/tablets)	1,950,046	4,656,309	1,755,989	1,272,815	1,227,205
Crystalline methamphetamine (kg)	0	4.8	0	0	0
Cannabis herb (kg)	1,241	1.6	291.5	2,302.8	804.6
Opium (kg)	1.2	56.8	1.2	14.17	11.8
Heroin (kg)	48.6	40.4	9.2	23.8	17.5
Cocaine (kg)	•	•	•	•	1.99

= Not reported Source: DAINAP

Figure 41. Methamphetamine pill seizures in Lao PDR, 1997-2008



Source: DAINAP, LCDC data cited in UNODC (2007). Patterns and Trends in ATS and Other Drugs of Abuse in East Asia and the Pacific 2006

Opium poppy cultivation increased slightly in 2008 with 1,600 hectares of cultivation compared to 1,500 hectare the previous year. Seizures of raw and prepared opium also declined from 14.7 kg in 2007 to 11.8 kg in 2008.

The success in eradicating opium and encouraging farmers to produce alternative crops have restricted opium supply and driven prices up. For example, the price of opium increased by 26% between 2007 and 2008 from US\$ 974 per kg to US\$ 1,227 per kg (UNODC, 2008b).

No price information for ATS was reported for 2008.

#### Treatment data

There are thought to be about 35,000 to 40,000 people addicted to ATS in Lao PDR (UNODC, 2008b). Although there are drug use treatment centers in Champasak, Savannaket, Udomsai, Sayaboury, Luang Prabang, and Bokeo Provinces, only the main ATS treatment centre, Sonsa Nga Treatment Center in Vientiane reports to DAINAP. Sonsa Nga Treatment Center reported 1,216 total admissions in 2008 of which 1,150 entered because of methamphetamine use. Since 2004, approximately 95% of treatment admissions were reported as methamphetamine users. The remaining admissions in 2008 were for alcohol, opium, inhalants, and heroin use.

Of those admitted for treatment at Sonsa Nga Treatment Center, the majority of patients were young. In 2007, 30% were between the ages of 20 and 24 and 24% were between 15 and 19 year of age (UNODC, 2007).

Since 2003, 22,555 opium addicts have been treated in Lao PDR. The relapse rate is estimated to be 34%. The number of current opium addicts is estimated to be 12,680 according the 2008 Opium Survey. This is a sharp reduction from the 20,160 reported in 2005 (UNODC, 2008b).

### Summary, emerging trends and concerns

- Although the domestic ATS market is small compared to larger neighboring countries, the close proximity of Lao PDR to manufacturing areas in Myanmar, China and more recently Cambodia, renders it vulnerable to the spillover of drugs. The continued dominance of methamphetamine, the primary drug of use, is reflected in arrest, treatment, and law enforcement statistics for 2008.
- Traffickers are seeking to reduce risk by smuggling smaller amounts of ATS: although seizures remained level at 1.3 million and 1.2 million pills respectively for 2007 and 2008, the number of cases more than doubled (from 84 to 194).
- Risk of increased opium cultivation: falling commodity prices in 2008, including crops used in alternative development programmes to reduce opium cultivation, coincided with a high price for opium. This increases the risk of farmers reverting to opium cultivation.
- Treatment for ATS is likely under-resourced with a low estimate of 35,000 to 40,000 individuals addicted to ATS.

<sup>&</sup>lt;sup>2</sup> Staff at Somsa Nga Treatment Centre, one of the main ATS treatment centres in Lao PDR, suggest that there could be between 40,000 to 60,000 ATS users (Doran, 2008).

# Malaysia



#### Overview of drug use

Over the past decade, the main problematic drugs in Malaysia have been heroin and morphine with the total estimate of the number of drug users varying between 350,000 and 500,000 (Devaney et al., 2005). For the past five years, cannabis, heroin and morphine, together, have accounted for the vast majority of treatment admissions and were the dominant drugs in law enforcement statistics.

Regarding ATS, Malaysian law enforcement authorities have seized considerable amounts of trafficked methamphetamine and ecstasy each year and have confiscated some of the largest clandestine ATS manufacturing facilities in the world. Nonetheless, the estimated annual prevalence of use for the amphetamine group of substances is 0.6%, considerably lower than the regional average estimate of 0.9% (UNODC, 2008).

While benzodiazepines have a decades-long history of use in Malaysia, one benzediazepine specifically, nimetazepam, which is also known by its trade name, Erimin-5<sup>1</sup>, has emerged as a drug of concern beginning in 2005. Its popularity is reflected in annual seizures which more than tripled in 2008 as compared to 2005. According to the National Anti-Drugs Agency Malaysia (ADK), nimetazepam is often sold together with methamphetamine (UNODC, 2009e).

Large ketamine seizures have occurred since 2005 with over 400 kg that year. In 2008, over 550 kg were seized, making ketamine use a growing concern.

## Patterns and trends of drug use

The ranking in drugs of use in Malaysia has been largely stable between 2004 and 2008 with a declining trend for all drugs with the exception of opium in 2007, the latest year for which trend data were reported. Heroin has been ranked number one for five consecutive years, but with a decreasing use trend in 2006 and 2007. Morphine was ranked second during the same period and also showed a decreasing trend, as did cannabis herb which was ranked third (Table 59).

Crystalline methamphetamine has ranked fourth since 2004, while ecstasy moved up from eighth in rank in 2005 to sixth in 2006. The ecstasy ranking remained stable through till 2008. Psychotropic pills was ranked fifth as in 2008 (Table 59 and 60). No data for methamphetamine pills or ketamine were reported during 2003-2008.

It should be noted that both rank and trend data reported to DAINAP are most likely based primarily on treatment admission data in Malaysia. As there are limited available resources for treatment of ATS, it also is likely that ATS use is underestimated (UNODC, 2009e).

Table 59. Latest reported rank and trend in drug use in Malaysia\*

Drug type	Rank (2008)	Trend (2007)
Heroin	1	<b>↓</b>
Morphine	2	<b>↓</b>
Cannabis herb	3	<b>↓</b>
Crystalline methamphetamine	4	<b>↓</b>
Psychotropic pills/tablets	5	<b>↓</b>
Ecstasy	6	<b>↓</b>
Amphetamine	7	<b>↓</b>
Codeine	8	<b>↓</b>
Opium	9	<b>↑</b>

<sup>&</sup>lt;sup>1</sup> Erimin-5 is a brand name of nimetazepam and available in 5 mg pill form. It is legally available as a pharmaceutical from Japan. However counterfeited products are also available. Some Erimin pills sold in the illicit Malaysian market have been confirmed as coming from Taiwan (UNODC, 2009e).

Drug type	Rank (2008)	Trend (2007)
Inhalants	10	<b>↓</b>

Source: DAINAP

Table 60. Rank of use of specific drugs in Malaysia, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Heroin	•	1	1	1	1	1
Cannabis	•	3	3	3	3	3
Ecstasy	•	8	8	6	6	6
Crystalline methamphetamine	•	4	4	4	4	4

Source: DAINAP

Table 61. Trend in use of specific drugs in Malaysia, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Crystalline methamphetamine	1	1	$\downarrow$	$\downarrow$	$\downarrow$	•
Ecstasy	$\downarrow$	$\downarrow$	1	$\downarrow$	$\downarrow$	•
Heroin	1	<b>↓</b>	1	$\downarrow$	$\downarrow$	•
Cannabis herb	1	1	$\downarrow$	$\downarrow$	<b>↓</b>	•

Source: DAINAP

# Arrest, seizure and price data

Total drug-related arrests in Malaysia declined from 32,808 in 2005 to 14,489 in 2007, a 55.8% decline. The declining trend continued in 2008 with a further decrease of 14.7% to 12,354 arrests (Note that for 2008 only the disaggregated number was reported).

Table 62. Drug related arrests in Malaysia

Drug type	2005	2006	2007	2008
Methamphetamine pills	0	126	•	•
Crystalline methamphetamine	3,832	2,241	876	•
Ecstasy	395	210	93	•
Amphetamine	382	171	49	•
Heroin	12,567	8,504	3,638	•
Opium	20	7	11	•
Morphine	8,047	4,892	3,341	•
Cannabis	5,044	5,199	2,410	•
Psychotropics	752	173	278	•
Inhalants	10	11	•	•
Codeine	0	175	•	•
Drug type not specified	1,759	367	3,793	•
Total	32,808	22,076	14,489	12,352

• = Not reported Source: DAINAP

<sup>\*</sup>The trend likely reflected by treatment admission data only (UNODC, 2009e). Senior law enforcement officials have confirmed increasing use in methamphetamine in 2008 (UNODC, 2009e)

Malaysian drug-related arrest data were not disaggregated by drug type for 2008. While drug type was delineated in 2007, there was a substantial percent for which the drug was not specified, comprising more than a quarter (26.2%) of all drug-related arrests. Among the drugs which were specified in 2007, arrests primarily involved heroin (25.1%), morphine (23.1%) and cannabis (16.6%). ATS-related offences in 2007 accounted for 7% of total drug related arrests (Table 62).

In terms of gender, the overwhelming majority (98%) of drug-related arrestees in Malaysia were male. Although drug-related arrests are not reported by nationality, several noteworthy cases involving non-nationals have been reported over the 2007 to 2009 period, both for trafficking and manufacturing of illicit drugs. Some prominent cases in 2007 and 2008 involved Chinese (including Hong Kong SAR), Canadian, Japanese, Taiwanese, Thai and Singaporean nationals (UNODC, 2008). In June 2009, Iranian nationals were arrested for the first time for trafficking crystalline methamphetamine into the country, arriving at Kuala Lumpur International Airport from Dubai with 20.4 kg of the drug hidden in suitcases.<sup>2</sup>

Seizures of methamphetamine and ecstasy have fluctuated over the 2004-2008 period, both in terms of amounts seized and relative share of the different forms (pills, powder, crystalline or liquid form). In 2008, 356.9 kg of methamphetamine powder were seized, in addition to 679 kg of liquid methamphetamine (at a conversion rate of one kg for one liter). This represents a sharp increase over previous years, with 69.2 kg and 145.2 kg of crystalline methamphetamine seized in 2007 and 2006, respectively. Methamphetamine pill seizures also increased from just over 120,000 seized in 2007 to more than 280,000 in 2008. No methamphetamine pill seizures were reported for 2005 or 2006.

Ecstasy seizures also fluctuated considerably from 80,778 pills and 8.6 kg seized in 2008, to 151,221 pills and 167.6 kg seized the previous year. In addition to seizures deriving from domestic manufacture, significant amounts of methamphetamine, primarily in crystal form, have also been trafficked into the country, with drugs originating from Myanmar in 2005, from Cambodia in 2006, and most recently, from Thailand (UNODC, 2008).

Seizures of benzodiazepines, other psychotropic pills and ketamine also fluctuated strongly between 2005 and 2008, with no clear trend. A record amount of over 1.5 million pills of benzodiazepines, primarily nimetazepam, was confiscated in 2008. Seizures of other psychotropic pills also showed strong fluctuation during that period with over 300,000 pills seized in 2008, although this was less than half the amount seized in 2005 (Figure 42). After a significant decline in 2006, ketamine seizures rose five-fold from 110 kg in that year to 553 kg in 2008.

Seizures of heroin increased from 243 kg in 2007 to 297 kg in 2008, a 22% increase, while cannabis seizures declined from nearly 2.4 tons in 2006 to less than 0.9 tons in 2008 (Table 63).

Table 63. Selected drug seizures in Malaysia 2005-2008

Drug type (measure)	2005	2006	2007	2008
Crystalline methamphetamine (kg)	39.2	145.2	69.2	679**
Methamphetamine powder (kg)	•	•	•	356.9
Methamphetamine pills/tablets	0	0	121,629	281,343
Amphetamine (kg)	•	2.0	•	•
Ecstasy (pills/tablets)	434,233	227,932	709,888	109,444
	(Reported as		(Reported as	(Reported as
	114,567 pills and		151,221 pills and	80,778 pills and
	95.9 kg)*		167.6 kg)*	8.6 kg)*
Heroin (kg)	252.3	155.7	243.3	297.1
Opium (kg)	3.9	0.5	7.4	13.9
Cannabis herb (kg)	1,166.2	2,378.8	1,482.6	874.8
Ketamine (kg)	409.8	109.5	267.9	553.1
Cocaine (kg)	11.1	0.01	10.12	7.1
Codeine (litres)	•	10,802	9,630	•

<sup>&</sup>lt;sup>2</sup> Cited in, 'Iranians nabbed with syabu worth RM5m', Sunday Daily, 8 June 2009. (Accessed at: http://www.thesundaily.com/article.cfm?id=34395; Date accessed: 18 June 2009)

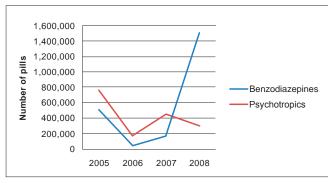
Drug type (measure)	2005	2006	2007	2008
Benzodiazepines (pills/tablets)	507,203	49,952	172,965	1,502,233
Psychotropics (pills/tablets)	763,526	173,003	455,407	306,611

#### = Not reported

\*Reported in combination of pills and kg. Converted at 1pill = 300 mg \*\*Seized as liquid methamphetamine, conversion rate at 1 litre = 1 kg

Source: DAINAP

Figure 42. Seizures of benzodiazepines and psychotropic pills/tablets in Malaysia, 2005-2008



Source: DAINAP

Malaysia has experienced a steady proliferation of clandestine manufacturing laboratories, beginning with a super-lab seized in Semenyih in 2004 and an industrial-scale ATS manufacturing plant seized in Kulim in 2006 which remains one of the largest labs seized in the world (UNODC, 2008). In 2008, police uncovered 12 laboratories, an increase over the nine uncovered in 2007. In the first three months of 2009, five clandestine manufacturing operations were seized (UNODC, 2009e).

Increasing law enforcement pressure in 2007 and 2008 have resulted in illicit drug manufacture being shifted geographically from the Klang Valley and Johor which was the focus of anti-trafficking operations. In addition, several laboratories of smaller scale have appeared, suggesting manufacturers are seeking ways to reduce risk.<sup>3</sup>

The retabletting in Malaysia of ecstasy pills originating from Europe has been reported. This involves pills being crushed into power form, mixed with caffeine and other adulterants, and re-pressed for sale at a lower concentration (UNODC, 2009e). Recently, a retabletting facility, set up in a condominium, was seized in Kuala Lumpur.

No illicit drug prices were reported by Malaysia in 2008. The prices for 2006 and 2007 were as depicted in Table 64.

Table 64. Illicit drug prices in Malaysia (US\$) 2006-2007

Drug type	Unit	2006	2007
Cannabis herb	per kg	653-686	692
Heroin (no.4)	per kg	48,887	49,350
Heroin base	per kg	23,125-24,301	•
Opium (prepared)	per kg	3,431 – 5,717	5,772
Cocaine (powder)	per kg	20,684 - 21,725	57,681
Crystalline methamphetamine	per kg	21,774 – 22,869	43,290
Methamphetamine (powder)	per kg	24,000	•
Methamphetamine (pills/tablets)	per pill	3.2	5.77
Ecstasy	per pill	21.80 - 24.00	14.33
Ketamine	per kg	9,525	10,101
Amphetamine	per litre	•	25.25
Codeine	per litre	95.3	25.25
Erimin-5	per pill	4.08	5.77

Source: DAINAP. Not adjusted for currency fluctuations. • = Not reported

<sup>&</sup>lt;sup>3</sup> 'Toppling drug lords proves a tough battle for Police', New Straits Times, 26 May 2009

#### Forensic data

No forensic data were reported for 2008. However, 7,603 samples of crystalline methamphetamine analyzed in 2006 in Malaysia showed a mean purity between 60 - 80%. Methamphetamine pill purity of 26 samples was between 20% and 30% which was also the MDMA concentration for over 60,000 sampled ecstasy pills. Heroin No. 3 showed a purity of less than 10%, while ketamine showed high purity of between 65%-85%.

#### **Treatment data**

Official data from the National Anti-Drug Information System showed a 61.2% decrease in the number of drug dependents referred by the court for mandatory treatment and rehabilitation during the past seven years, from nearly 32,000 in 2002 to just under 12,500 in 2008. Table 66 below reflects the numbers of drug depends registered by Government authorities, and shows the percentage fluctuations for the various type of drugs.

Table 65. Number drug dependents referred by the court for mandatory treatment and rehabilitation, 2002-2008

Year	New admissions		Repeat ac	Repeat admissions		
	Number	%	Number	%	Number	
2002	17,080	53.55	14,813	46.45	31,893	
2003	20,194	54.58	16,802	45.42	36,996	
2004	19,810	51.23	18,862	48.77	38,672	
2005	15,389	46.91	17,419	53.09	32,808	
2006	10,318	45.36	12,430	54.64	22,748	
2007	6,679	46.10	7,810	53.90	14,489	
2008	5,939	48.08	6,413	51.92	12,352	

Source: National anti-drugs agency Malaysia, 2009. ATS situation in Malaysia, presentation at the Global SMART programme workshop, Bangkok, Thailand, July 29-31, 2009

Table 66. Number of drug dependents registered by Government authorities, 2002-2008

Year	Heroin	Morphine	Opium	Cannabis	Crystalline metham- phetamine	ATS and psychotropic pills/tablets*	Others**
2002	12,266	9,076	20	6,867	2,083	1,257	324
2002	38.46%	28.46%	0.06%	21.53%	6.53%	3.94%	1.01%
2003	13,204	11,054	46	8,635	2,763	862	432
2003	35.69%	29.88%	0.12%	23.34%	7.47%	2.33%	1.17%
2004	12,796	12,172	27	6,723	5,893	579	482
2004	33.09%	31.47%	0.07%	17.38%	15.24%	1.50%	1.25%
2005	13,914	8,047	20	5,044	3,832	1,529	422
2005	42.41%	24.53%	0.06%	15.37%	11.68%	4.66%	1.29%
2006	7,963	5,889	7	5,275	2,411	1,075	191
2006	34.91%	25.82%	0.03%	23.12%	10.57%	4.71%	0.84%
2007	4,752	4,312	14	3,385	1,235	697	94
2007	32.80%	29.76%	0.10%	23.36%	8.52%	4.81%	0.65%
2009	4,974	3,640	9	1,726	1,443	489	71
2008	40.27%	29.47%	0.07%	13.97%	11.68%	3.96%	0.57%

<sup>\*</sup>Ecstasy, amphetamine and psychotropic pills \*\*includes codeine and inhalant.

Source: National anti-drugs agency Malaysia, 2009. ATS situation in Malaysia, presentation at the Global SMART programme workshop, Bangkok, Thailand, July 29-31, 2009

Information concerning the route of administration for drug dependents registered by government authorities in 2008, cited 5.1% as being injecting drug users. This is a significant increase over a 2002 estimate, which placed the prevalence of injecting drug use in the population between 15 and 64 years of age between 1.1% and 1.6%, and the number of HIV positive IDU at 10.3% (Lancet, 2008).

In 2008, the vast majority of users (76.3%) was reported to inhale fumes (known as 'chasing') or smoke (14.1%). Swallowing or drinking accounted for a little over 4% and less than 0.01% involved sniffing. While the primary route of administration for heroin, opium and methamphetamine in crystal form was smoking or 'chasing', all also reported injection as a route of administration, although not the primary route.

According to Malaysian officials, the availability of treatment resources for ATS is very limited. Hence, treatment data is not a reflection of the scale of dependence for ATS in Malaysia (UNODC, 2009e).

## Summary, emerging trends and concerns

- In Malaysia, arrest and treatment data, as well as reported trend data, showed a downward development over the past years.
- Seizures of most drugs showed strong fluctuations over the 2005-2008 period, although:
  - A record seizure of 1.5 million benzodiazepine pills, namely nimetazepam (Erimin-5) pills, was made in 2008.
  - o Ketamine seizures have increased from a little over 100 kg in 2006 to more than 550 kg in 2008.
  - o Methamphetamine seizures are increasing, with 679 kg of liquid methamphetamine, 357 kg of methamphetamine powder, and more than 280,000 methamphetamine pills seized in 2008.
  - Large seizures continue with a massive seizure of nearly one ton of crystalline methamphetamine occurring in May 2009.
- There is a high risk of ATS spilling over into the domestic market as large amounts are trafficked into the country as well as manufactured on a very large scale.
- ATS manufacturing operations in Malaysia are one of the world's largest in scale and highest in sophistication. Most recently, manufacturers appear to be shifting operations geographically from the Klang Valley and Johor which have been the focus of anti-trafficking operations. In addition, several labs of smaller scale have appeared, suggesting that manufacturers are seeking ways to the reduce risk of exposure.
- Given the low prevalence of ATS use and the reported downward trends for core law enforcement and drug use indicators, additional data are required to understand the ATS situation in Malaysia.

# **Myanmar**



## Overview of drug use

The main drugs of use in Myanmar during the past decade have been heroin which is primarily injected and opium which is primarily smoked. Prevalence estimates vary, but the number of opioid users are likely in the hundreds of thousands (UNODC, 2004).

Emerging in the mid-1990s, methamphetamine has become a prominent drug of concern. Since 2004, methamphetamine has ranked third in terms of use behind the two leading drugs. Since 2005, methamphetamine has accounted for about a quarter of all drug related arrests, while heroin and opium together have accounted for more than half.

A survey in 2005 conducted by the Central Committee for Drug Abuse Control (CCDAC) among high school students in the towns of Tamu, Muse, Tachilek, Myawaddy and Kawthaung indicates low lifetime prevalence rates for this sub-population of youth. With the exception of cough syrups, drug use prevalence was less than 2%. However, the survey points out that results may have been higher had the survey been expanded to include the significant number of youth who did not attend high school.

Illicit manufacture of methamphetamine, primarily in pill form (yaba), continues, particularly in the Shan, Wa, and Kokang autonomous region.

The political situation in Myanmar in 2009 is unsettled, with open hostilities between government and ethnic groups previously under cease fire agreement. This instability could affect the current illicit drug production and trafficking dynamics in the region. There is a likelihood that these changing conditions will serve as a push factor for increasing the trafficking of illicit drugs and could result in the relocation of clandestine manufacturing sites across the border. Also, the areas along the Lao PDR and Cambodia border could experience increased trafficking activity with the possibility that clandestine lab operations may be established in these areas.

## Patterns and trends of drug use

The ranking of the three leading drugs of use in Myanmar was the same in 2008 as the previous two years, with heroin ranked as the primary drug of choice, followed by opium and methamphetamine in pill form. Cannabis was ranked fourth in 2008, the same as the preceding year.

Unlike other drugs, only methamphetamine use has been reported increasing for the entire six year period from 2003-2008 (Tables 67, 68 and 69). Heroin use has been reported to be on a decreasing trend, while cannabis and opium have remained largely stable.

Table 67. Reported trend in drug use in Myanmar, 2008

Drug used in the past year	Rank	Drug use trend	Main route of administration
Heroin	1	<b>↓</b>	Injected
Opium	2	<b>↓</b>	Smoked
Methamphetamine pills/tablets	3	1	Smoked
Cannabis	4	$\leftrightarrow$	•

 $\uparrow$  = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported

Source: DAINAP

Table 68. Rank of use of specific drugs in Myanmar, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Heroin	•	2	2	1	1	1
Methamphetamine pills/tablets	•	3	3	3	3	3

Drug type	2003	2004	2005	2006	2007	2008
Cannabis	•	5	5	•	4	4

•= Not reported Source: DAINAP

Table 69. Trend in use of specific drugs in Myanmar, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Heroin	$\downarrow$	$\downarrow$	<b>↓</b>	$\downarrow$	$\leftrightarrow$	$\downarrow$
Methamphetamine (pills/tablets)	1	1	1	1	1	1
Cannabis	$\leftrightarrow$	$\leftrightarrow$	$\downarrow$	•	$\leftrightarrow$	$\leftrightarrow$

↑ = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported

Source: DAINAP

# Arrest, seizure and price data

The number of drug related arrests reported in Myanmar in 2008 is shown in Table 87. The number of arrests increased to 3,359 in 2008 compared to 3,074 in 2007. More than 80% of arrests were related to heroin, methamphetamine pills and opium. Heroin accounted for 31% of arrests, a decrease from 36% in 2007. Arrests related to methamphetamine pills increased from 24% in 2007 to 28% in 2008, while 23% of arrests were related to opium in 2008 compared to 22% in 2007 (Figure 43). In 2008, 20% of drug-related arrestees were female, the same proportion as the previous year (Table 70).

ATS-related arrests have largely mirrored the trend for heroin between 2003 and 2007 and a similar number of arrests were made for each of the two drugs in 2008. However, in 2008 heroin-related arrests declined, while ATS-related arrests increased (Figure 44).

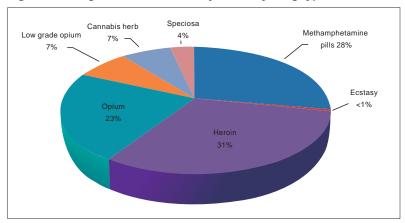
Table 70. Drug related arrests in Myanmar, 2008

	National and	Total	
Drug type	Male	Female	Iotai
Methamphetamine (pills/tablets)	721	212	933
Crystalline methamphetamine	7	2	9
Methamphetamine powder	1	0	1
Ecstasy	5	1	6
Heroin	820	220	1,040
Opium	612	148	760
Low grade opium	208	42	250
Cannabis herb	211	29	240
Speciosa	105	15	120
Total*	2,690	669	3,359

\* Relates to the listed drugs only

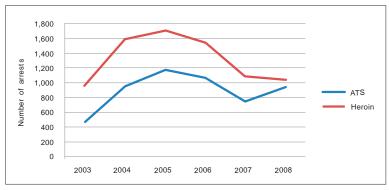
Source: DAINAP

Figure 43. Drug related arrests in Myanmar by drug type, 2008



Source: DAINAP

Figure 44. ATS and heroin related arrests in Myanmar, 2003-2008



Source: DAINAP

The quantity of methamphetamine pills seized in 2008 declined to 1.1 million pills compared to the 1.6 million the previous year. Both years showed a huge decline compared to the 19.1 million pills seized in 2006 (Table 71 and Figure 45). However, preliminary data suggest that seizures of methamphetamine pills are increasing in 2009 with over 4.5 million pills seized in the first two quarters. An estimated 2 million pills were seized in March in one case alone in Kengtung in Eastern Myanmar while on route to the border town of Tachilek (CCDAC, 2009).

It is uncertain whether the political situation in Myanmar in 2009 as reflected in conflict between the government and certain ethnic groups may serve as a catalyst for an increase in illicit trafficking. However, one indication that this may be the case is an increase in recent illicit drug seizures in Myanmar which is coinciding with increasing seizures in neighbouring countries.

NDIA

CHINA

BANGLADESH

Warigon

Varigon

THAILAND

Expanded trafficking routes (after 2003)

Emerging trafficking routes (before 2003)

Traditional trafficking routes (before 2003)

The boundaries and names shown on this map do not imply official endorsement or acceptance by the UN.

Figure 45. Primary methamphetamine trafficking routes in the Greater Mekong Subregion

Source: UNODC (2008), Amphetamines and Ecstasy - 2008 Global ATS Assessment and Office of the Narcotlcs Control Board (2009). ATS Situation of Thailand, Global SMART Programme Workshop presentation, Bangkok, Thailand, July 29-31. and CCDAC (2009) Country Presentation, 32nd Meeting of Heads of National Drug Law Enforcement Agencies, Asia and the Pacific, Bangkok, Thailand, 10-13 February 2009

Crystalline methamphetamine seizures increased in 2008 to 14.4 kg from 3.4 kg seized the in 2007. However, this amount is miniscule compared to 280.3 kg seized in 2005, 415 kg seized in 2002 and the peak seizure of 518 kg in 2001 (Figure 45).

The total amount of heroin seizures have fallen since 2004 and 2005 when 973.5 kg and 811.7 kg respectively were seized. In comparison, the quantities for the last two years were, 68.4 kg in 2007 and 88.2 kg in 2008. The declining trend changed, however, in July 2009 when a large seizure of 955 kg of high grade heroin, together with 340,000 methamphetamine pills, was made in Tachilek on the South-Eastern border of Myanmar, opposite Chaing Rai province in Thailand (CCDAC, 2009).

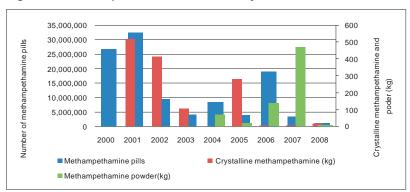
Opium seizures have fluctuated between 2003 and 2008. However, recently the quantity of high grade opium seizures increased by 24.6% in 2008 to 1,463 kg compared to 1,174 kg the year before. The decline in heroin seizures and increase in opium seizures may be attributed to a higher degree of intermediate levels of refined opium being seized.

Table 71. Illicit drug seizures in Myanmar, 2003-2008

Drug type (measure)	2003	2004	2005	2006	2007	2008
Methamphetamine (pills/ tablets)	4,000,000	8,379,310	3,651,505	19,065,674	1,666,141	1,102,199
Crystalline methamphetamine (kg)	102.0	0.2	280.3	2.3	3.4	14.4
Methamphetamine powder (kg)**	•	69.1	19.3	136.3	470.8	3.9
Ecstasy	•	5	5807	54	2690	108
Heroin (kg)	568.0	973.5	811.7	192.4	68.4	88.2
Opium, high grade (kg)	1,481.7	606.9	772.7	2,321.0	1,173.8	1,463.4
Opium, low grade (kg)	203.9	395.7	127.7	6,153.6	10,972.3	2,452.8
Opium oil (kg)	51.7	39.1	20.5	29.0	•	•
Cannabis (kg)	85.0	142.5	453.1*	72.9*	104.3	170.2
Benzodiazepine pills	•	•	173,782	235,612	•	•

<sup>\*</sup>Combined herb and resin. \*\* Primarily seized in intermidiate form, prior to being pressed as pills Source: DAINAP

Figure 46. Methamphetamine seizures in Myanmar, 2000-2008

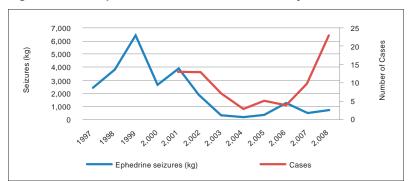


Source: CCDAC data cited in Patterns and Trends in ATS and Other Drugs of Abuse, 2007; DAINAP (2004-2008)

Few ATS laboratories are ever reported dismantled, a number which has been declining since the peak of 10 in 2006 (Figure 48). Ephedrine seizures have declined sharply since 2001, with the exception of 2006 in which 1,284 kg were seized. However, the number of cases involving ephedrine has increased from 4 in 2006 to 23 in 2008 (Figure 47).

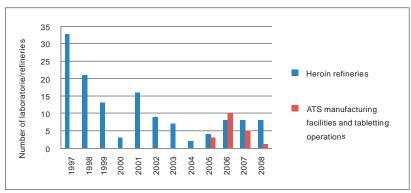
The number of heroin refineries seized has remained stable in 2006-2008 with 8 seized for each of the three years. During the same period, 16 ATS manufacturing facilities were dismantled (Figure 48). The total number of seizures of acetic anhydride have decreased since 2001 with a stable level of around 1,000 litres being seized annually since 2004.

Figure 47. Total ephedrine cases and seizures in Myanmar, 1997-2008



Source: CCDAC data cited in Patterns and Trends in ATS and Other Drugs of Abuse, 2007; DAINAP (2004-2008)

Figure 48. Total number of heroin refineries and ATS manufacturing facilities destroyed in Myanmar, 1997 -2008



Source: CCDAC data cited in Patterns and Trends in ATS and Other Drugs of Abuse, 2007; DAINAP (2004-2008)

#### **Treatment data**

Only data from Government-sponsored compulsory treatment centers are reported to DAINAP. Of these, the vast majority of drug treatment admissions in Myanmar in 2008 were for heroin and opium, account-

ing for 599 and 350 admissions, respectively, and representing 97.4% of total admissions. The proportion of heroin IDUs was reported as 72% of total heroin admissions and were not reported for any other illicit drug. Only 21 individuals were admitted for methamphetamine dependence (2%) and 4 were admitted for cannabis use. The average age has remained stable over the past three years at 25 years for heroin and methamphetamine and 29 years for opium.

The main route of administration for opium was smoking, but injection also was reported. Methamphetamine was primarily smoked and swallowed. The preponderance of treatment admissions in 2008 were male (Table 90).

Table 72. Drug treatment admissions in Myanmar, 2008

	New admissions							
Drug Type	Male	Female	Total	Average age	%IDUs			
Methamphetamine	20	0	20	25	•			
Heroin	425	6	431	25	70			
Opium	230	14	244	29	•			
Cannabis	2	0	2	32	•			

	Total admissions							
Drug Type	Male	Female	Total	Average age	%IDUs			
Methamphetamine	21	0	21	25	•			
Heroin	580	19	599	25	72			
Opium	330	20	350	29	•			
Cannabis	4	0	4	32	•			

Source: DAINAP

## HIV/AIDS and injecting drug use data

A recent estimate of injecting drug use prevalence in the population between 15-64 years of age in Myanmar was between 0.18% and 0.27% of the population, which represents about 60,000 to 90,000 individuals. The HIV prevalence among IDUs has been estimated to be very high at 42.6% (Lancet, 2008).

### Summary, emerging trends and concerns

- Methamphetamine ranks third in drugs of use, however increased use is indicated every year since
   2003
- Methamphetamine seizures declined by 34% in 2008 compared to the previous year, while heroin seizures increased by 29%. Preliminary data from the first two quarters of 2009 suggest that trafficking is increasing for both methamphetamine pills and heroin.
- The number of arrests for methamphetamine related violations is approaching that of heroin, the traditional leader, with 31% of arrests related to heroin in 2008 and 28% related to methamphetamine pills.

# **New Zealand**



## Overview of drug use<sup>1</sup>

Until the new millennium, New Zealand's drug markets were almost exclusively dominated by extensive domestic cannabis cultivation and use and to a lesser degree 'homebake' heroin, a street substance derived from pharmaceutical opioids. Cannabis remains the major substance of use in New Zealand's illicit drug market with continuing strong demand and a largely stable use trend. However, ATS arrived en force with the introduction of methamphetamine (known as 'P' for pure), primarily through increasing domestic manufacture beginning in the late 1990s.

As a measure of the continued impact of ATS, arrests for ATS violations increased 29% between 2004 and 2008 and since 2000, the number of clandestine ATS laboratory operations rose from less than 10 to a peak of 211 in 2006. Nearly one in 10 New Zealanders (aged 15-45) have used methamphetamine at least once. However, demand for the substance among the general population has declined since 2001 from 5% reporting past year use to 3.4% in 2006. Contrasting this was an increase in the use of drugs sold as 'ecstasy' which have increased to some of the highest levels recorded. In addition, the market for a group of synthetic substances called 'piperazines'<sup>2</sup>, which had emerged in New Zealand around 2000, is increasingly merging into the 'ecstasy' market, following their ban in 2008.

ATS related treatment admissions increased 68% from 466 in 2004 to 783 two years later. At the same time, there are indications that methamphetamine use among problematic users has increased along with increases in associated criminal behavior (Wilkins, et al., 2009).

There is a small and stable market for opiates in New Zealand with the main forms of opiates used on the streets of New Zealand being the result of domestic diversion of opiate-containing medicines, often converted to 'homebake' heroin (NDIB, 2008).

## Patterns and trends of drug use

According to the UNDDC Annual Reports Questionnaire (ARQ), the rank of illicit drugs has remained relatively stable in New Zealand over the past two years with cannabis being the most common drug of use, followed by ecstasy and methamphetamine (Table 73). However, while cannabis has shown a stable use trend since 2003, indicating a continuous strong demand, ecstasy was reported as increasing in 2007 and 2008, following two years of a stable use trend. Piperazines, ranked fifth, showed a decreasing trend. According to Government officials, the market for piperazines has merged with the 'ecstasy' market which appears to be the result of the expansion of supply and demand for 'ecstasy' (NDIB, 2008). While use of methamphetamine showed two years of declining trend in the general population, based on survey reports, intensity of use has increased among problematic methamphetamine users.

Opiates have been ranked fourth/fifth in New Zealand since 2003 in terms of use with a generally stable use trend for most years (Table 73). The hallucinogen LSD (lysergic acid diethylamide) ranked seventh among drugs of concern with stable trend in 2008.

There is a relatively small and narrow market for gamma-hydroxybutyrate (GHB) and gamma-butyrolactone (GBL) in New Zealand and this category of drug ranks ninth in terms of use, but with an increasing trend. The first trend data for GHB/GBL was reported in 2005 and the drugs have had a fluctuating trend in ensuing years.

The market for cocaine is marginal in New Zealand with the drug ranking tenth in terms of use with a stable trend in 2008. However, past year use of cocaine showed its highest levels ever recorded in 2006, with 1.1% of the general population reporting past year use (Table 76).

<sup>&</sup>lt;sup>1</sup> Data for this chapter, unless otherwise specified, was submitted by the New Zealand National Drug Intelligence Bureau to UNODC RC in June 2009. However, New Zealand does not routinely submit data through the online Drug Abuse Network for Asia and the Pacific, hence terminology may deviate from other country chapters.

<sup>&</sup>lt;sup>2</sup> This commonly included 1-benzylpiperazine (BZP), *m*-chlorophenylpiperazine (*m*CPP) and 3-trifluoromethylphenylpiperazine (TFMPP), substances which are not internationally controlled but banned in New Zealand since 2008. Combinations of piperazines mimic the effects of stimulants, hallucinogens, and MDMA.

Table 73. Reported rank and trend in drug use in New Zealand, 2008

Drug type	Rank	Drug use trend
Cannabis herb	1	$\leftrightarrow$
Ecstasy	2	<b>†</b>
Methamphetamine (powder/ crystalline)	3	$\leftrightarrow$
Opioids (Heroin, morphine and opiates)	4	$\leftrightarrow$
BZP (Benzylpiperazine)	5	<b>↓</b>
Sedatives/ Tranquillizers	6	$\leftrightarrow$
Hallucinogens (LSD)	7	$\leftrightarrow$
Inhalants	8	$\leftrightarrow$
GHB/GBL	9	<b>↑</b>
Cocaine	10	$\leftrightarrow$

• = Not reported

Source: UNODC Annual Reports Questionnaire

Table 74. Rank of use of specific drugs in New Zealand, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Cannabis herb	1	1	1	1	1	1
Ecstasy	3	3	4	4	2	2
Methamphetamine	2	2	3	3	3	3
BZP (Benzylpiperazine)	•	•	•	2	4	5
Opioids (Heroin, morphine and opiates)	4	4	5	5	5	4

• = Not reported

Source: UNODC Annual Reports Questionnaire

Table 75. Trend in use of specific drugs in New Zealand, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Cannabis herb	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
Ecstasy	<b>↑</b>	1	$\leftrightarrow$	$\leftrightarrow$	<b>↑</b>	<b>↑</b>
Methamphetamine	<b>↑</b>	1	1	1	$\leftrightarrow$	$\leftrightarrow$
BZP (Benzylpiperazine)	•	•	•	1	$\leftrightarrow$	$\downarrow$
Opioids (Heroin, morphine and opiates)	$\leftrightarrow$	1	1	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$

 $\uparrow$  = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported

Source: UNODC Annual Reports Questionnaire

According to the most recent data (2006), lifetime prevalence for methamphetamine among the 15-45 age group was almost 10% (Wilkins, et al., 2007). However, annual prevalence for the amphetamine-group substances among the general population has declined since 2001 from 5% to 3.4% in 2006 (Table 94). The exception is crystalline methamphetamine which has remained generally stable since 2003 with an annual prevalence of 0.8% reported in 2006 (Wilkins, et al., 2007).

Use of drugs sold as 'ecstasy' showed increases in the general population as prevalence rates, whether lifetime (8.0%) or past year use (3.9%), were the highest recorded (Wilkins et al., 2007). The market of the piperazine class of compounds was established in New Zealand around 2000. Studies reported extensive use of these drugs with annual prevalence estimated at 16.1% in the population between 13-45 years of age (2006) (Wilkins et al., 2007).

The user population for opiates tends to be older with a relatively limited number of new users. The main forms of opiates used on the streets of New Zealand are primarily the result of either domestic diversion or theft of opiate-containing medicines, typically morphine sulphate tablets, codeine-based medications, and methadone, a synthetic narcotic used in the treatment of heroin addiction. In addition to being used per se, morphine and codeine are also converted to 'homebake' heroin (NDIB, 2008).

Table 76. Prevalence in use of specific drugs in New Zealand (15-45 years), 1998-2006

Drug type	Prevalence (%)	1998	2001	2003	2006
	Lifetime	7.6	11.0	9.0	9.3
Methamphetamine (amphetamine)	Past year	2.9	5.0	4.0	3.4
Footooy	Lifetime	3.1	5.4	5.5	8.0
Ecstasy	Past year	1.5	3.4	2.9	3.9
Harris (harrahala)	Lifetime	1.2	1.5	1.2	1.0
Heroin (homebake)	Past year	0.6	0.6	0.3	0.2
Cannabis	Lifetime	50.4	52.1	53.8	44.1
Carriabis	Past year	19.9	20.3	20.4	17.9
Cocaine	Lifetime	3.7	3.3	3.1	4.5
Cocame	Past year	0.8	0.7	0.5	1.1
LSD	Lifetime	8.9	9.7	8.1	8.5
LSD	Past year	3.9	3.2	1.9	1.8
Party pills (BZP)	Lifetime	•	•	•	21.4
raity pills (DZF)	Past year	•	•	•	16.1

• = Not reported.

Source: Wilkins et al., 2007

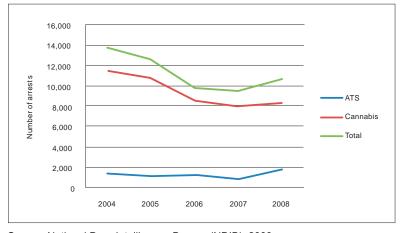
The estimated number of injecting drug users between 15 - 64 years of age in New Zealand was between 0.49% and 0.97% in the most recent estimate (Lancet, 2008). The estimated prevalence of HIV among injecting drug users was 1.6%.

### Arrest, seizure and price data

The total number of drug related arrests has declined by 22.6% during the 5-year period between 2004 and 2008 from 13,779 in 2004 to 10,669 in 2008. However, the overall trend for ATS related arrests has increased 29% from 1,403 arrests in 2004 to 1,814 arrest in 2008 (Figure 49).,The proportion of frequent methamphetamine users reporting they had committed a property crime in the past month increased from 15% in 2006 to 25% in 2008, indicating increased criminality among problematic users (Wilkins, et al., 2009). More than 80% of those arrested for drug-related offenses during the past five years were male.

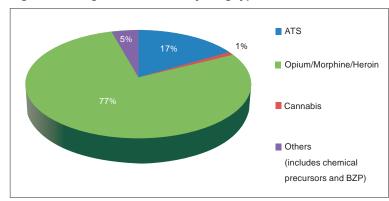
The vast majority of drug related arrests in New Zealand are related to cannabis, accounting for 77% of arrests in 2008 (Figure 50 and Table 77). This is followed by ATS with 17% and other drugs, including piperazines. Drug related arrests for opiates remain very low, accounting for just one percent.

Figure 49. Drug-related arrests in New Zealand, 2004-2008



Source: National Drug Intelligence Bureau (NDIB), 2009

Figure 50. Drug-related arrests by drug type in New Zealand, 2008



Source: National Drug Intelligence Bureau (NDIB), 2009

New Zealand NZ-ADAM program conducts urinalysis among recent arrestees at several jail sites around the country to test for the presence of illicit drugs. Results showed that methamphetamine positive tests among arrestees nationwide declined slightly from 12.4% to 11.7% between 2005 and 2007. However, positive tests for amphetamine increased from 2.7% to 13.5% during the same period.

Table 77. Drug-related arrests in New Zealand, 2004-2008

			Males					Total		
Drug type	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
ATS*	1,045	928	964	677	1,341	1,403	1,182	1,240	926	1,814
Cannabis	10,255	8,841	7,105	6,655	7,003	11,534	10,741	8,557	8,021	8,336
Hallucinogen (includes LSD)	30	122	•	43	94	35	153	•	55	106
Opium/ Mor- phine/ Heroin	81	59	4	32	63	112	80	6	42	83
Sedatives/ Tranquilizers (includes GHB/ GBL)	219	11	٠	•	27	239	17	•	•	36
Cocaine	23	19	17	11	8	25	21	22	13	12
Others (includes chemical precur- sors and BZP)	365	297	•	389	212	431	394	•	515	282
Total	12,028	10,277	8,090	7,807	8,748	13,779	12,588	9,825	9,572	10,669

<sup>\*</sup>Includes methamphetamine and MDMA

Source: National Drug Intelligence Bureau (NDIB), 2009

Table 78 shows illicit drug seizures in New Zealand between 2005 and 2008. During the 4-year period, cannabis seizures dominated with annual quantities seized measuring between 522 kg and 916 kg. In 2008, a significant increase in seizures of GHB/GBL occurred with 853 litres seized that year, four times higher than the previous record year (2006), due primarily to a single case of illicit importation of 800 litres of GBL. Methamphetamine seizures ranged between 24 kg and 122 kg during 2005-2008 with a spike to 122 kg in 2006.

The availability of MDMA appears to have declined in recent years. This is supported by larger amounts of 'fillers'/adulterants, primarily in the form of piperazines, found in tablets sold as 'ecstasy'. According to New Zealand authorities, MDMA seizures indicate that supply is being met from an increasing number of countries and regions which have developed MDMA manufacturing capacity in recent years (NDIB, 2008).

Table 78. Illicit drug seizures in New Zealand, 2005-2008

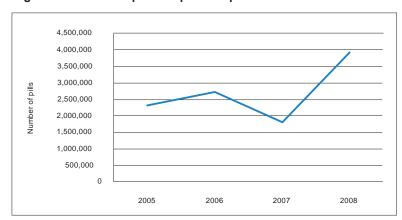
Drug type (measure)	2005	2006	2007	2008
Methamphetamine (kg)	30.7	121.9	39.3	24.0
Ecstasy pills/ tablets	28,736	8,769	4,123	25,806
Cannabis (plants)***	170,104	144,039	128,414	158,058
Cannabis (kg)**	776.7	751.9	521.6	916.3
LSD (number of tickets)	1,529	3,483	1,031	2,672
GHB / GBL (liters)	22.9	202.3	5.1	853.0
Heroin (ml)	54	11.5	•	42
Cocaine (kg)	14.111	32.954	0.025	0.751
Opium (poppies)	•	•	190*	•

Notes: • = not reported. \* Denotes 190 domestically cultivated opium poppies. \*\* Does not include cannabis oil, cannabis resin or cannabis seeds seized. \*\*\* Cannabis plants eradicated / seized.

Source: National Drug Intelligence Bureau, 2009

Methamphetamine manufacturing operations in New Zealand often rely upon pharmaceutical precursors, either diverted domestically or imported illegally. A significant amount of the precursor chemical, pseudoephedrine, is believed to be imported through Asian crime syndicates for use in clandestine ATS manufacture within the country (NDIB, 2008). The quantity of pseudoephedrine imported to New Zealand ranged between 1.5 and 3 million tablets annually between 2005 and 2007, but showed a sharp increase to almost 4 million tablets in 2008 (Figure 51).

Figure 51. Seized imports of pseudoephedrine tablets into New Zealand, 2005-2008



Source: National Drug Intelligence Bureau (NDIB), 200

The number of clandestine labs seized declined for a second year in a row from the peak of 211 in 2006 to 190 in 2007 and 133 in 2008. Most of these operations are for the manufacture of methamphetamine. However, in 2006 eight small scale operations involving morphine extraction from poppy seeds, available commercially and commonly referred to as 'poppy seed bakes', were uncovered. In 2007 and 2008, small operations converting morphine to 'homebake' heroin were also uncovered.

Results of purity tests conducted in May 2009, indicate only a slight decrease in overall methamphet-amine purity compared with previous years, with a mean purity of 64.2% (NDIB, 2009).

The Illicit Drug Monitoring System (IDMS) is an information program in New Zealand that annually interviews frequent drug users in Auckland, Wellington and Christchurch, to provide a snapshot of trends in illegal drug use and related harm. According to the IDMS, the median street prices of methamphetamine and cocaine have increased slightly since 2006 (Table 79), with crystalline methamphetamine commanding the highest street price, at NZD\$800 per gram. The increase in price as reported by users, combined with a possible slight decrease in purity, is suggestive of a possible tightening of the methamphetamine market

Table 79. Median drug street prices (NZD\$) reported by frequent users, 2006 to 2008

Drug	Measure (street)	2006	2007	2008
Methamphetamine (non-crystalline form)	Gram	600	600	700
Methamphetamine (crystalline)	Gram	-	700	800
'Ecstasy'	Tablet	60	60	60
Cannabis herb	1.5 grams	20	20	20
Heroin (homebake)	Millilitre	1	1	1
Cocaine	Gram	300	350	400

Source: Illicit Drug Monitoring System, 2008

#### **Treatment data**

Table 80 shows drug treatment admissions to publicly-funded hospitals in New Zealand between 2004 and 2008. Based on these data, the majority of clients have been admitted to treatment for cannabis use. This accounts for 2,000-2,200 admissions each year between 2004 and 2008 and represents more than half of the total admissions. Drug treatment admissions for ATS increased from 466 admissions in 2004 to a peak of 783 in 2006 followed by 739 and 610 admissions for the two subsequent years. In 2008, ATS admissions to publicly-funded hospitals accounted for 16.1% of total admissions, up from 12.6% in 2004.

Table 80. Drug treatment admissions in New Zealand, 2004-2008\*

Drug type	2004	2005	2006	2007	2008
ATS	466	564	783	739	610
Heroin, morphine and opiates	1,024	1,196	1,197	1,274	1,127
Cannabis	2,164	2,093	2,071	2,185	2,001
Cocaine	13	7	9	15	16
Hallucinogens	24	35	68	59	38
Total	3,691	3,895	4,128	4,272	3,792

<sup>\*</sup>Data is provisional only and relates to admissions to publicly funded hospitals. It does not include presentations to emergency departments for drug related conditions (i.e. those who are not actually admitted to hospital). The data does not include admissions to private hospitals or individuals referred/directed to publicly or privately funded drug treatment programs.

Source: National Drug Intelligence Bureau, (NDIB) 2008

## Summary, emerging trends and concerns

- Cannabis and ATS were the main drugs in New Zealand in 2008, as they have been for the past five years, although some decrease has occurred among the general population.
- Data suggest a possible tightening of the methamphetamine market as price has increased somewhat recently, while indicators of purity suggest a decline.
- ATS-related arrests have increased 29% between 2004 and 2008.
- Problematic methamphetamine users are reported to be increasingly involved in property crimes.
- MDMA is believed to be originating from a larger number of source countries and regions in recent years.
- Piperazines, such as benzylpiperazine (BZP), *m*-chlorophenylpiperazine (*m*CPP) and 3-trifluoromethylphenyl-piperazine (TFMPP), are used as substitutes or complements to ATS.
- Large-scale illicit importation of pseudoephedrine-based pharmaceutical preparations are increasing while domestic diversion of pseudoephedrine-based medicines from pharmacies continues to be a problem.
- A number of small clandestine ATS laboratories continue to operate in New Zealand, although data on precursor importation suggest that larger, more professionally concealed laboratories may also be operating.
- New Zealand's drug data monitoring system provides all core indicators that allow an accurate picture of the drug situation in the country.

## **Philippines**



## Overview of drug use

Since the late-1990s, methamphetamine in crystal form (locally known as 'shabu') has been the dominant drug of use in the Philippines, accounting for over 75% of clients in treatment (Balmes, 1999). The second most problematic drug for the Philippines is cannabis, which is cultivated, consumed, and trafficked in the country. Problematic use of other drugs, such as benzodiazepines, cough syrups, and nalbuphine hydrochloride - a synthetic opioid - also began to appear in treatment statistics, but remain at relatively low levels.

In addition to drug treatment admissions statistics, methamphetamine has also come to dominate law enforcement data over the past 6 years with a record seizure of 3.7 metric tons of crystalline methamphetamine in 2004. Seizures have since declined, but still measured more than 853 kg in 2008. Drug related arrests have also shown a decrease since their peak in 2003, and since 2006 have remained relatively stable

The most recent household survey (2007) found that past year use of methamphetamine in the general population (aged 15-64) declined to between 1.9-2.4% from a high of 6% in 2004 (UNODC, 2009f). While improvement was noted, methamphetamine use remains an issue of serious concern for the government.

#### Patterns and trends of drug use

The Philippines did not report trends for use and rank of drugs in the country to DAINAP for the years 2006 and 2007. However, the rank of the three most common drugs have remained the same in 2008 as compared to 2005, with crystalline methamphetamine being the most common, followed by cannabis and inhalants. In 2008, benzodiazepines were ranked as the fourth most common drug (Table 81). The trends for all four of the top drugs of concern were reported to be on the decline in terms of use. Nalbuphine hydrochloride was ranked fifth in 2008 with a reported increasing trend (Tables 81, 82 and 83).

Table 81. Reported trends in drug use in the Philippines, 2008

Drug type	Rank	Trend	Main route of administration
Crystalline methamphetamine	1	$\downarrow$	Smoked
Cannabis	2	$\downarrow$	Smoked
Inhalants	3	$\downarrow$	Smoked
Benzodiazepines	4	$\downarrow$	•
Nalbuphine hydrochloride	5	<b>↑</b>	•

↑ = Increase, ↓= Decrease, ↔ = Stable, •= Not reported

Source: DAINAP

Table 82. Rank of use of specific drugs in the Philippines, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Crystalline methamphetamine	•	1	1	•	•	1
Ecstasy	•	7	•	•	•	•
Cannabis	•	2	2	•	•	2
Inhalants	•	•	•	•	•	3
Benzodiazepines	•	•	•	•	•	4
Nalbuphine hydrochloride	•	•	•	•	•	5

•= Not reported Source: DAINAP

Table 83. Trend in use of specific drugs in the Philippines, 2003-2008

Drug	2003	2004	2005	2006	2007	2008
Crystalline methamphetamine	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	•	•	$\downarrow$
Ecstasy	$\leftrightarrow$	$\leftrightarrow$	•	•	•	•
Cannabis	•	2	2	•	•	2
Inhalants	•	•	•	•	•	3
Benzodiazepines	•	•	•	•	•	4
Nalbuphine hydrochloride	•	•	•	•	•	5

↑ = Increase,  $\downarrow$ = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported

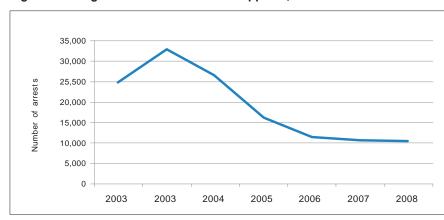
Source: DAINAP

Traditionally, the Philippines has had very low levels of intravenous drug use with most involving nalbuphine hydrochloride. As a result, the risk of HIV spread through that particular behavior is relatively low.

## Arrest, seizure and price data

Drug-related arrests have been on a decrease in the Philippines since 2003 when more than 30,000 arrests were reported. The trend leveled off between 2006 and 2008 with about 10,000 arrests reported annually (Figure 52). The Philippines do not disaggregate drug related arrest by drug type, nationality or gender in annual data reported to DAINAP.

Figure 52. Drug related arrests in the Philippines, 2002-2008



Source: Dangerous Drugs Board data cited in Patterns and Trends in ATS and Other Drugs of Abuse, 2007; DAINAP (2004-2008)

Table 84 shows illicit drug seizures in the Philippines between 2003 and 2008. The scale of methamphetamine seizures in 2007 and 2008 has declined compared to prior years. In 2003, 3.1 tons were seized, followed by 3.7 tons seized in 2004. There was a sharp decline in seizures in ensuing years. In 2008,

853.5 kg was reported seized, the major share of which resulted from a single seizure of 745 kg in Subic Bay Freeport, west of Manila in May 2008. The seizure was made as cargo was being unloaded from a Vietnamese registered vessel onto a truck (UNODC, 2009b).

Cannabis seizures are reported by Philippines in a number of specific categories. Cannabis herb seizures increased in 2008 to 3.7 tons, up from the 1.2 tons seized the year before, but were down sharply from the 11.1 tons seized in 2006. Confiscations and seizures of cannabis plants were up by almost 30% in 2008 compared to 2007, while there was more than an eleven-fold increase in seizures of cannabis seedlings between 2007 and 2008, suggesting the existence of large scale domestic plantations and nurseries.

Table 84. Drug related seizures in the Philippines, 2003-2008

Drug type (measure)	2003	2004	2005	2006	2007	2008
Crystalline methamphetamine (kg)	3,122.3	3,676.8	104.1	766.0	368.9	853.5
Ecstasy (pills/ tablets)	1,872	103	111	83	13	513
Cannabis herb (kg)	•	836	4,435	11,126	1,200	3,725
Cannabis resin (kg)	•	0.2	0.8	24.5	•	•

Drug type (measure)	2003	2004	2005	2006	2007	2008
Cocaine (kg)	135	2.4	0	0	0	0
Benzodiazepines (pills/ tablets)	•	7	34,998	1,432	1,376	3,926
Nubain (ampoules)	29	•	•	•	•	•
Ketamine (kg)	7,300 vials	•	7.8	98	•	10.2

Source: Dangerous Drugs Board data cited in Patterns and Trends in ATS and Other Drugs of Abuse, 2007; DAINAP (2004-2008)

The fluctuation in methamphetamine seizures has been accompanied by shifts in modus operandi of the clandestine manufacturers. Prior to 1997, most methamphetamine for the domestic market was smuggled into the country, but by 1999, increasing amounts of seized methamphetamine were manufactured domestically with operations uncovered at Calayan Island in the north and in Angeles City. By 2005, clandestine operations had moved into more urban areas, closer to consumers in and around Manila, however successful law enforcement efforts in 2006/07 shifted clandestine manufacturing to remote rural areas. The size, sophistication and concealment of clandestine operations throughout this period also improved. Several foreign nationals have been arrested in relation to recent clandestine laboratory operations (PDEA, 2008).

A number of clandestine laboratory operations have been dismantled in the Philippines during the past decade. One methamphetamine laboratory was dismantled in 1999, 3 in 2001, 4 in 2002 while 11 manufacture sites and 10 storage facilities were uncovered in 2003. The same number was dismantled in 2004. In 2005, 4 ketamine manufacture facilities, together with 7 methamphetamine sites and 5 storage locations, were dismantled. The indication in 2006 that illicit laboratory operations might be returning to the higher pre-2003 levels was confirmed in 2007 and 2008 with 9 and 10 methamphetamine manufacture facilities being uncovered, respectively.

Ephedrine precursor seizures in the Philippines peaked in 2003 and 2004 with over 5.5 tons seized each year. Although several clandestine methamphetamine laboratory operations have been uncovered between 2006 and 2008, reported ephedrine seizures have been low with 57 kg reported in 2007 and 53 kg in 2008. It is unclear why the overall quantity of ephedrine seized during the past two years has declined, while the number of seized methamphetamine production facilities have increased over the same period.

No illicit drug price or forensic data were reported by the Philippines for 2007 or 2008.

#### **Treatment data**

Treatment admissions in the Philippines have steadily declined since 2005. In 2008, 3,372 individuals were reported to have entered treatment for drug use. This was a 62% decline compared with those admitted to treatment in 2003. Of the total admissions to treatment in 2008, 78% were first-time admissions, 59.7% were for methamphetamine use and 37.5% were for cannabis. Most admitted (92.3%) were male. The decline in treatment admissions in recent years may be related to less self-reported use by the general population, however, it may also in part be a reflection of the impact of stringent accreditation and admission policies recently enacted by the Department of Health and by lack of public information about the advantages of rehabilitation and treatment.<sup>1</sup>

Table 85. Drug use treatment admissions in the Philippines, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine	6,195	4,887	4,778	3,256	2,562	2,014
Ecstasy	57	83	96	71	62	36
Heroin	10	18	11	7	•	•
Opium	10	18	6	5	•	•

<sup>&</sup>lt;sup>1</sup>Press release, February 24th, the Chairman of the Dangerous Drugs Board, Secretary Vicente Sotto 3rd "Briefing on the Drug Situation and Government Responses to the Drug Problem" Rotarians for a Drug-Free Philippines on February 24, 2009, at the Asian Institute of Management in Makati City.

Drug type	2003	2004	2005	2006	2007	2008
Cannabis	2,229	1,836	1,976	1,807	1,421	1,264
Cocaine	30	73	70	•	•	47
Ketamine	3	6	18	15	26	11
Nalbuphine hydrochloride	30	47	59	•	•	•
Cold preparations	155	214	149	•	•	•
Inhalants	144	190	283	•	216	•
Total	8,863	7,372	7,446	5,161	4,287	3,372

Source: DAINAP

## Summary, emerging trends and concerns

- The trend in methamphetamine use has declined since 2007. This follows a stable trend observed over the period 2003 to 2005.
- Crystalline methamphetamine seizures increased somewhat in 2008 on a single 745 kg interdiction which was likely to have been trafficked into the country.
- It is unclear if increased seizures of crystalline methamphetamine in 2008 are a reflection of increased manufacture for the domestic market or if it is intended for export, as the domestic use trend is reported to be declining.
- An increase in the number of clandestine methamphetamine laboratories dismantled was recorded in 2007 and 2008 following declining numbers in 2005 and 2006.
- Since 2006, clandestine laboratory operations have relocated from urban areas to well-concealed areas in rural areas, likely in response to successful law enforcement operations.
- Treatment admissions in 2008 have declined to less than half of the number of admissions in 2005, but may only in part be a reflection of decreased use.
- Current illicit drug price and forensic data were not reported for 2007 or 2008.
- Compared to neighbouring countries of similar size and with comparable methamphetamine use problems, ATS treatment is possibly under-resourced in the Philippines.

# **Singapore**



## Overview of drug use

Over the past five years, Singapore has experienced fluctuations in drug use patterns as reflected in arrests, seizures and treatment data. Prior to 2004, heroin was the leading drug of use, followed by ketamine and methamphetamine. However in 2004, the use of ketamine, as well as inhalants and methamphetamine, surpassed heroin, which dropped to fifth in terms of drug use ranking. In 2005, nimetazepam, a benzodiazepine-related substance sold under the brand name *Erimin* emerged as the most commonly used illicit substance. Nimetazepam has been a controlled substance in Singapore since 1992 and there are reports of its availability on the streets in combination with methamphetamine (UNODC, 2007). In 2006, buprenorphine, a narcotic analgesic used in some countries to treat opium dependence, became the most commonly used illicit drug and continued that ranking in 2007 with nimetazepam falling to sixth in rank. Buprenorphine was classified as a Class A controlled drug on 14 August 2006. In 2008, the use of buprenorphine appears to have declined with more than a 50% decrease in arrests compared to the previous year.

In contrast, heroin related arrests increased dramatically between 2005 and 2007 with an eight-fold increase between 2005 and 2007 and a further increase of 25% in 2008. In addition, treatment admissions for heroin increased five-fold between 2004 and 2008.

#### Patterns and trends of drug use

Data from Singapore highlight the rapid shifts in drug use patterns. In 2008, heroin emerged as the leading drug of use for the first time since 2003, after being ranked behind nimetazepam and buprenorphine between 2000 and 2007. Use of heroin was reported to be on the increase in 2008, while both buprenorphine and nimetazepam use showed decreasing trends.

In 2008, the use of crystalline methamphetamine increased for the second successive year while the use of ketamine decreased for a fifth consecutive year. Inhalant use was ranked second in 2008, although the trend is reported as decreasing (Table 86, 87 and 88). Preliminary data for the first half of 2009 suggest that the inhalant use situation has stabilized and is no longer declining (CNB, 2009).

Table 86. Rank and trend in drug use in Singapore, 2008

Drug used in the past year	Rank	Trend	Mode of administration
Heroin	1	<b>†</b>	Smoked
Inhalants	2	<b>↓</b>	Snorted
Buprenorphine	3	<b>↓</b>	Injected
Crystalline methamphetamine	4	<b>↑</b>	Smoked
Ketamine	5	<b>↓</b>	Smoked
Nimetazepam	6	<b>↓</b>	Smoked
Ecstasy	7	<b>↓</b>	Ingested
Cannabis	8	<u> </u>	Smoked
Opium	9	$\leftrightarrow$	Smoked

↑ = Increase, ↓= Decrease, ↔ = Stable, •= Not reported / no trend available Source: DAINAP

Table 87. Rank of use of specific drugs in Singapore, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine (pills/tablets)	3	•	•	•	•	•
Ecstasy	6	6	6	7	8	7
Crystalline methamphetamine	1	3	3	4	4	4
Ketamine	2	1	2	2	5	5

Drug type	2003	2004	2005	2006	2007	2008
Heroin	1	5	7	6	2	1
Cannabis herb	4	4	5	5	7	8

•= Not reported / no trend available

Source: DAINAP

Table 88. Trend in use of specific drugs in Singapore, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine (pills/tablets)	$\downarrow$	•	•	•	•	•
Ecstasy	<b>↑</b>	$\downarrow$	$\downarrow$	$\downarrow$	1	$\downarrow$
Crystalline methamphetamine	<b>↑</b>	$\downarrow$	1	$\downarrow$	1	<b>↑</b>
Ketamine	<b>↑</b>	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	<b>↓</b>
Heroin	$\downarrow$	$\downarrow$	$\downarrow$	1	1	<b>↑</b>
Cannabis herb	<b>↑</b>	<b>↓</b>	$\downarrow$	<b>↑</b>	$\downarrow$	<b>↓</b>

↑ = Increase, ↓= Decrease,  $\leftrightarrow$  = Stable,  $\bullet$ = Not reported / no trend available

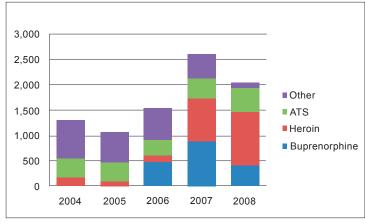
Source: DAINAP

## Arrest, seizure and price data

Drug-related arrests and seizures reported by Singapore to DAINAP refer only to cross-border trafficking cases. The total drug related arrests increased sharply between 2005 and 2007, driven by more than a ten-fold increase in number of the heroin related arrests from 98 in 2005 to 1,050 in 2008. In addition, the classification of buprenorphine as a Class A drug in 2006 also contributed to the increase, resulting in 478 arrest in 2006 and 886 in 2007 (Figure 88). Overall, the number of arrests declined by 10% in 2008, due primarily to a drop in buprenorphine arrests by more than half from 840 to 404 in the previous year (Table 89 and Figure 53).

Preliminary data for the first half of 2009 projects a sharp decline in the number of drug users arrested for buprenorphine violations while heroin related arrests are expected to increase by as much as 20% (CNB, 2009). Of the buprenorphine users arrested in the first half of 2009, 80% had a history of heroin use according to law enforcement officials.

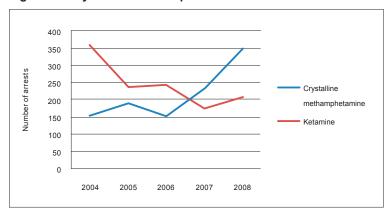
Figure 53. Drug-related arrests in Singapore, 2004-2008



Between 2004 and 2008 crystalline methamphetamine related arrests more than doubled, while arrests for ketamine declined by a little over a third. Numerically, the trend lines for the two drugs almost mirror each other in opposite directions (Figure 54).

Source: DAINAP

Figure 54. Crystalline methamphetamine and ketamine related arrests in Singapore, 2004-2008



Source: DAINAP

Table 89. Drug related arrests in Singapore\*, 2004-2008

Drug type	2004	2005	2006	2007	2008
Crystalline methamphetamine	156	190	153	234	345
Ecstasy	211	176	158	162	136
Heroin	170	98	126	840	1,050
Buprenorphine	0	0	478	886	404
Ketamine	357	236	243	174	205
Cannabis herb	153	150	158	148	88
Benzodiazepines	251	210	199	0	67
Nimetazepam	0	0	0	163	57
Bufoenine	0	0	0	6	1
Opium	1	1	4	0	0
Cocaine	7	5	0	0	1
Hallucinogens	4	2	11	0	0
Total	1,310	1,068	1,530	2,613	2,354

\*Includes Singapore nationals and non-nationals

Source: DAINAP

In 2008, 87% of drug related offenders were male, approximately the same number as preceding years. However, crystalline methamphetamine, ecstasy and nimetazepam stand out as 20% of the offenders were female compared to 10%-15% for most other major drugs of use (Table 90).

Table 90. Drug related arrests in Singapore by drug and gender, 2008

Drug type	Male	Female	Total
Crystalline methamphetamine	275	70	345
Ecstasy type	111	25	136
Heroin	927	123	1,050
Buprenorphine	363	41	404
Ketamine	180	25	205
Cannabis herb	85	3	88
Benzodiazepines	60	7	67
Nimetazepam	47	10	57
Cocaine	0	1	1
Bufotenine	1	0	1
Total for all drugs	2,049	305	2,354

Source: DAINAP

Table 91 shows the annual seizures of illicit drugs in Singapore between 2004 and 2008. Although the total number of seizures and the amounts seized by Singapore law enforcement officials are small (relative to neighboring countries), the number of seizures of crystalline methamphetamine during those years show a sizeable increase, i.e. from 4 to 25. The number of ketamine seizures also increased from 7 in 2005 to 22 in 2008. The number of buprenorphine seizures declined significantly between 2007 and 2008 with only a single seizure in 2008 compared to 17 cases the year before.

Preliminary data from the January to June 2009 suggest increasing seizures of cannabis, ecstasy, crystalline methamphetamine, and nimetazepam compared to the same period during the previous year (CNB, 2009a).

Table 91. Illicit drug seizures of selected drugs in Singapore, 2004-2008

	20	04	20	05	20	06	20	07	20	08
Drug type (measure)	Num- ber of sei- zures	Quan- tity								
Methamphetamine (pills/tablets)	3	3,480	0	0	0	0	1	48	0	0
Crystalline metham- phetamine (kg)	4	0.12	13	0.05	11	0.1	20	0.22	25	0.18
Ecstasy (pills)	7	1,235	4	610	11	1,240	11	2,128	14	735
Heroin (kg)	1	0.03	4	3.3	3	0.1	15	2.56	10	2.1
Cannabis herb (kg)	11	0.97	13	0.7	17	1.5	18	2.9	9	1.07
Cocaine (kg)	0	0	1	0.01	0	0	0	0	0	0
Ketamine (kg)	7	0.55	9	3.6	10	0.7	16	0.90	22	1.7
Buprenorphine (pills)	•	•	•	•	16	894	17	1,901	7	1,065
Nimetazepam (pills)	•	•	3	908	10	14,584	15	5,184	1	1,348
Triazolam (pills)	0	0	0	0	1	30	0	0	0	0
Bufotenine	0	0	0	0	2	2*	1	2**	1	0.15
5 methoxy-N, N- diisopropyltryptamine (pills)	0	0	0	0	1	10	0	0	0	0
4 bromo-2, 5-dime- thoxyphenethylamine (pills)	0	0	0	0	1	7	0	0	0	0
Benzodiazepines (pills)	•	•	•	•	•	•	•	•	17	3,968

\* Pieces \*\*Unspecified units

Source: DAINAP

The price for cannabis remained roughly in the same range between 2007 and 2008, but during the course of 2008 it fell somewhat from US\$35.6 for 1.5 grams in first quarter, to US\$ 33.3 in the final quarter. The same was true for heroin with a price of between US\$21.7-36.2 per 0.2 grams in the second quarter, dropping to between US\$ 20.0-26.6 in the fourth quarter. A 'straw' of heroin is now considerably more expensive than buprenorphine which in 2008 cost between US\$51.2-82.8 per tablet.

Singapore reported a purity of 4.4% for heroin No.3 and 82.6% purity for ketamine. Methamphetamine pill composition was typically under 6.5% methamphetamine, while ecstasy tablets had a typical composition of 36% MDMA.

Table 92. Prices of Illicit drugs in Singapore, 2007 and 2008

Drug type	2007	2008
Methamphetamine (pills/tablets)	US\$13.1-17.3 per tablet	US\$12.3-21.9 per tablet
Crystalline methamphetamine	US\$141.8-144.6 per 1g	US\$138.0-266.3 per 1g
Ecstasy	US\$ 19.5-24.2 per tablet	US\$ 17.3-25.3 per tablet
Heroin	US\$19.5-36.2 per straw of 0.2g	US\$20.0-36.2 per straw of 0.2g

Drug type	2007	2008
Nimetazepam	US\$4.6-7.2 per tablet	US\$4.7-5.9 per tablet
Cannabis herb	US\$26.5-36.5 per 1.5g	US\$33.3-36.6 per 1.5g
Ketamine	US\$26.0-36.2 per 1g	US\$26.6-36.2 per 1g
Buprenorphine	US\$20.0-26.0 (2 mg) US\$72.3-97.5(8 mg)	-

Source: DAINAP

#### **Treatment data**

In 2004, Singapore reported 43 admissions for drug treatment which were all for heroin use. The trend in drug treatment admissions changed noticeably in 2005 when treatment for synthetic drugs became available. In that year, 89.2% of admissions were for synthetic drugs, while heroin accounted for 10.8%. Following the classification of buprenorphine as a controlled substance, treatment admissions for that drug represented 38.1% of total admissions in that year. The proportion of treatment admissions for heroin use increased during the next couple of years and in 2008 accounted for 44.3% of admissions with 39.2% for synthetic drug use and 16.5% for buprenorphine (Table 93, 94 and Figure 55).

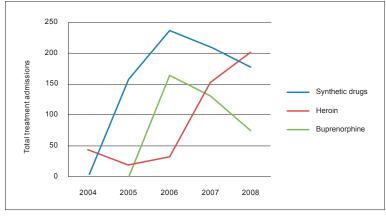
Table 93. Drug treatment for selected drugs in Singapore, 2004-2008

Drug type	2004	2005	2006	2007	2008
Synthetic drugs*	•	157	236	210	178
Heroin	43	19	32	153	201
Buprenorphine**	•	•	165	131	75

<sup>\*</sup>Synthetic drugs include methamphetamine, ecstasy, ketamine and nimetazepam. Singapore did not have drug treatment for synthetic drugs until 2005.

Source: DAINAP

Figure 55. Drug treatment admissions in Singapore for selected drugs, 2004-2008



Source: DAINAP

Table 94. Drug treatment admissions in Singapore, 2008

	N	ew admission	s	A	All admissions	S
Drug type	Male	Female	Total	Male	Female	Total
Cannabis	16	1	17	26	1	27
Heroin	32	18	50	160	41	201
Methamphetamine	39	25	64	59	28	87
Ecstasy-type	14	3	17	19	4	23

<sup>\*\*</sup> Buprenorphine was made a Class A controlled drug as of 14 Aug 2006, therefore no recorded treatment for 2004 and 2005.

	N	lew admission	s	1	All admissions	5
Drug type	Male	Female	Total	Male	Female	Total
Ketamine	14	2	16	27	4	31
Nimetazepam	22	3	25	33	4	37
Buprenorphine	15	9	24	61	14	75
Total	152	61	213	385	96	481

Source: DAINAP

## Summary, emerging trends and concerns

- Drug related arrests in Singapore increased significantly between 2005 and 2007, driven by more than a ten-fold increase in the number of heroin related arrests from 98 in 2005 to 1,050 in 2008. In addition, the classification of buprenorphine as a Class A drug in August 2006 also contributed to the overall increase, resulting in 478 arrests for that drug in 2006, 886 in 2007, and 404 in 2008.
- Projections from preliminary data for the first half of 2009 show a decline in the number of arrests for buprenorphine, while heroin arrests are expected to increase by 20%.
- Drug treatment admissions for buprenorphine and synthetic drugs declined in 2008, while heroin admissions increased sharply.

## **Thailand**



## Overview of drug use

Methamphetamine has been the most significant illicit drug of concern in Thailand since the mid-1990s. The increase in use emerged among a relatively young and urban population, who used the drug primarily in pill form and began to smoke rather than ingest it.

The increase in methamphetamine use was also reflected in the law enforcement data. By 2000, nearly 80% of all drug related offences involved ATS, and methamphetamine overtook cannabis as the leading drug in Thailand (Poshyachinda and Pernparn, 2006).

Prevalence estimates have since fluctuated significantly, from 7.8% of the population between 12 and 65 years of age in 2001 (ONCB, 2001), to 2.4% in 2003 just after the 'war on drugs', a large scale drug suppression campaign, which is likely to have contributed to a reduced self-reporting of drug use (ONCB, 2004).

According to the latest drug use survey conducted in 2007, 5.4% of the population between 12-65 years of age reported use of at least one illicit drug in their lifetime, 1.2% in the past year, and 0.7% use in the past month (ONCB, 2007)¹. Cannabis, kratom² and methamphetamine in pill form, were the most commonly used drugs at 2.3%, 3.2% and 1.7%, respectively (Table 95). By region, the Southern provinces of Thailand had the highest monthly prevalence of any illicit drug use in 2007.

Table 95. Estimated number and percent of people who used illicit substances in Thailand, by drug type in 2007

Substance	Ever used in lifetime	% of population 12-65 years of age	Used within one year	% of popula- tion 12-65 years of age	Used within 30 days	% of popula- tion 12-65 years of age
Methamphetamine (pills/tablets)	788,948	1.7	66,320	0.1	22,857	0.05
Ecstasy	124,314	0.3	15,215	0.03	3,311	0.01
Crystalline methamphetamine	41,814	0.09	2,220	0.005	590	0.001
Cannabis	1,506,300	3.2	57,527	0.1	13,558	0.03
Kratom	1,078,152	2.3	378,214	0.8	264,522	0.6
Inhalants	261,179	0.6	48,849	0.1	30,968	0.07
Opium	228,988	0.5	3,059	0.01	•	•
Heroin	151,029	0.3	3,907	0.01	•	•
Ketamine	30,324	0.07	•	•	•	•
Cocaine	28,292	0.06	•	•	•	•
Any illicit substance	2,521,507	5.4	575,312	1.2	335,806	0.7

•= Not reported Source: ONCB, 2007

#### Patterns and trends of drug use

The pattern of drug use in Thailand remained relatively unchanged between 2004 and 2007 with methamphetamine in pill form, locally known as yama or yaba, ranking as the most commonly used drug, followed by cannabis and crystalline methamphetamine. However, in 2008 Thai authorities reported a change in pattern, with cannabis becoming the most commonly used drug, followed by kratom, methamphetamine pills and inhalants (Table 96 and 97).

<sup>&</sup>lt;sup>1</sup> The National Household Survey for Substance and Alcohol Use (NHSSA) is a periodic survey of the Thai population aged 12-65 years. It is conducted by the Administrative Committee for Substance Abuse Research Network (ACSAN) of the Office of Narcotics Control Board (ONCB), Ministry of Justice. The first survey was carried out in 2001 and the second in 2003. The 2007 survey is the third in the series.

<sup>&</sup>lt;sup>2</sup> Kratom is a substance derived from the leaves of a native tree, Mitragyna speciosa, that produces both stimulant and sedative effects.

Crystalline methamphetamine dropped considerably from being ranked number three in 2007 to number eight in 2008, although the trend in use was reported as being on the increase. Heroin and ecstasy were ranked sixth and seventh respectively in 2008 and use was reported to be on the decline (Tables 97 and 98). The rank for opium, although reported as having a stable trend in both 2007 and 2008, increased to five in 2008 from nine in the previous year.

Table 96. Rank and trend of drug use, and main route of administration, in Thailand, 2008

Drug used in the past year	Rank	Drug use trend	Main route of administration
Cannabis herb	1	1	Smoked
Kratom	2	1	•
Methamphetamine pills/ tablets	3	1	Smoked, ingestion, Injected
Inhalants	4	1	Inhaled
Opium	5	$\leftrightarrow$	Smoked, ingestion
Heroin	6	<b>\</b>	Injected, Smoked
Ecstasy	7	<b>↓</b>	ingestion, Smoked
Crystalline methamphetamine	8	1	Smoked, Injected
Ketamine	9	1	•
Cocaine	10	<b>\</b>	•

↑ = Increase, ↓ = Decrease, ↔ = Stable, • = Not reported

Source: DAINAP

A noticeable change occurred in 2007 with the first reported increase in methamphetamine use in pill form after a four year decline following the war on drugs in 2003 (Table 98). The increasing trend was sustained in 2008. Crystalline methamphetamine showed an increasing use trend in each year of the 2003-2008 period, with the exception of 2007, when a decline was reported.

Heroin use has shown a declining trend in all but one year since 2003, while cannabis and kratom appear to have become increasingly popular, possibly due to concerted law enforcement efforts against methamphetamine and other drugs.

Table 97. Rank of use of specific drugs in Thailand, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Cannabis	3	2	2	2	2	1
Methamphetamine pills/tablets	2	1	1	1	1	3
Heroin	9	8	8	8	5	6
Ecstasy	6	6	6	6	6	7
Crystalline methamphetamine	•	3	3	3	3	8
Ketamine	10	6	6	6	6	9

•= Not reported Source: DAINAP

Table 98. Trend in use of specific drugs in Thailand, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine pills/tablets	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	<b>↑</b>	<b>↑</b>
Crystalline methamphetamine	•	1	<b>↑</b>	1	$\downarrow$	<b>↑</b>
Ecstasy	$\downarrow$	$\leftrightarrow$	$\downarrow$	$\downarrow$	<b>↑</b>	$\downarrow$
Ketamine	$\downarrow$	$\leftrightarrow$	$\downarrow$	$\downarrow$	$\downarrow$	<b>↑</b>
Heroin	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	<b>↑</b>	$\downarrow$
Cannabis herb	$\downarrow$	$\downarrow$	1	1	<b>↑</b>	<b>↑</b>

↑ = Increase, ↓ = Decrease, ↔ = Stable, • = Not reported

Source: DAINAP

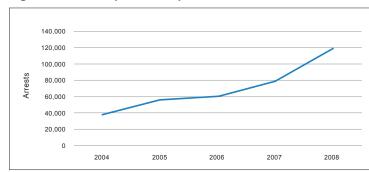
In terms of route of administration, use of methamphetamine in pill form saw a shift from oral ingestion to smoking, and most recently also to injection, routes increasingly associated with greater drug availability and health-related risks. It has been suggested that the shift from ingestion to smoking indicated a shift in motivation for use from bolstering endurance during manual labour to recreational use (Liewtiwong, 1996).

## Arrest, seizure and price data

The number of drug-related arrests has continued to increase steadily from 2004 - the lowest level since the 2003 war on drugs - where ATS-related offences accounted for a large majority of the total drug-related arrests. Between 2004 and 2008, ATS-related arrests represented 65% and 83% of all drug arrests, respectively, of which nearly all were for methamphetamine pills (Table 99 and Figure 56). Although at significantly lower levels, the number of arrests involving crystalline methamphetamine shows an even greater increasing trend with the number of arrests increasing nearly ten-fold between 2004 and 2008 (Table 99) Ecstasy-related arrests comprised less than 1% of total ATS-related arrests in 2008, showing a decreasing trend over the past few years from 749 arrests in 2004 to 550 in 2008.

A factor that may contribute to the increasing number of arrests is a change in the modus operandi of trafficking since 2006. Traffickers have increasingly used a large number of couriers carrying smaller amounts of methamphetamine, typically less than 200 grams, across the border from neighboring countries (ONCB, 2009). However, during first half of 2009, large methamphetamine pill seizures, once again, have begun to take place with about half the total seizures of 11.3 million pills.

Figure 56. Methamphetamine pill related arrests, 2004-2008



Source: ONCB website

Of the non-ATS related arrests, kratom has shown an increasing trend from 1,272 arrests in 2004 to 4,940 in 2008. Although arrests related to inhalant use remain high with nearly 6,000 arrests in 2008, the overall trend over the past few years shows a decline. Heroin-related arrests remain relatively stable, while cannabis arrests increased by 18.9% between 2007 and 2008. In addition, while the absolute numbers are relatively low compared to

the major drugs, arrests for opium have increased by 70% between 2005 and 2008 (Table 99).

Table 99. Select drug arrests in Thailand, 2004-2008

Drug type	2004	2005	2006	2007	2008
Methamphetamine pills/ tablets	38,736	55,789	60,680	79,149	118,613
Crystalline methamphetamine	265	731	1,136	1,574	2,163
Ecstasy	749	646	459	410	550
Cannabis herb (dried)	8,441	7,537	10,544	9,821	11,677
Inhalants	9,127	6,689	7,429	6,015	5,908
Kratom	1,272	1,089	2,895	4,683	4,940
Opium	952	600	736	835	1,018
Heroin	819	576	459	443	461
Ketamine	287	172	164	85	194
Cocaine	151	140	192	132	105
Codeine	370	177	175	350	•

• = Not reported Source: ONCB website

<sup>&</sup>lt;sup>3</sup> However, Thai counter narcotics officials note that several cases involve smaller amounts of crystalline methamphetamine seized together with methamphetamine pills or other drugs. As is often the case, in order to avoid duplication of data, only the main drug are recorded in the arrest statistics, possibly underplaying the role of crystalline methamphetamine (Personal communication, ONCB, May 2009).

Seizures of methamphetamine pills have shown some fluctuation during the past five years in both, seizures number of seizures and quantity seized. More than 22.1 million pills were seized in 2008, following three years of seizures between 14-16 million pills, per year. This was an an increase of 55.6% over 2007, but less than the 31 million pills seized in 2004 (Table 100). The increasing trend was sustained in the first half of 2009 with 11.3 million pills seized as of 30 June (ONCB, 2009).

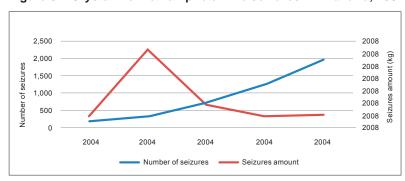
Table 100. Seizures of selected drugs in Thailand, 2004-2008

	2	2004	2	2005	2	2006	2	2007	2	2008
Drug type (mea- sure)	Num- ber of sei- zures	Quantity								
Methamphetamine (pills/tablets)	33,479	31,000,000	43,043	15,781,346	36,252	13,820,000	73,014	14,200,000	113,877	22,115,911
Crystalline metham- phetamine (kg)	190	47	323	317.2	734	92.2	1,258	47.2	1,960	52.9
Ecstasy (pills/ tablets)	554	123,174	224	33,929	300	26,656	295	113,735	460	486,533*
Cannabis herb (kg)	7,278	9,905	4,044	11,513	7,895	11,459	•	15,144	10,776	18,861.7
Cannabis resin (kg)	•	•	12	54.8	2	10.3	12	0.6	10	29.9
Opium (kg)	884	1,595	188	102.6	518	767.5	786	139.7	863	111.3
Heroin (kg)	671	789	313	948.6	346	92.5	128	292.8	391	199.8
Cocaine (kg)	113	12	52	6.2	103	36.8	114	18	90	11.5
Ketamine (kg)	157	164	72	42.2	95	22.7	63	2.54	140	18.1
Inhalants (kg)	1,625	277	3,563	85.9	6,330	294	5,909	129.3	6,212	165.3
Codeine (kg)	300	724	22	383	85	13.5	188	861	•	•
Kratom (kg)	•	•	498	728	584	3,942	3,160	36,367	3,664	12,156**

• = Not reported \* 2008 pill seizure converted at 1 pill = 300 mg. Source: DAINAP,UNODC \*\* ONCB website

Crystalline methamphetamine seizures were first recorded in 2002. A record seizure of 317.2 kg was made in 2005. Since then, the trend is reflected in a larger number of smaller individual seizures (Figure 57). During the first half of 2009, 42.3 kg of crystalline methamphetamine was seized showing a continued presence of this form of methamphetamine (ONCB, 2009).

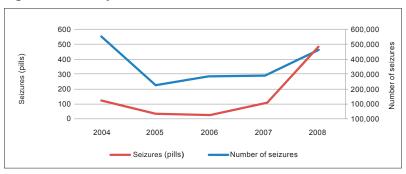
Figure 57. Crystalline methamphetamine seizures in Thailand, 2004-2008



Source: DAINAP

Compared to methamphetamine, ecstasy seizures remain relatively low, both in terms of number of seizures and quantity seized. The number of seizures of ecstasy ranged between 200 and 300 from 2005 to 2007, but increased by more than 50% in 2008. At the same time, the number of ecstasy pills seized increased almost 18-fold between 2006 and 2008 (Figure 58). These larger seizures in 2007 and 2008 may have resulted in the increased street price reported in 2008.

Figure 58. Ecstasy seizures in Thailand, 2004-2008



Source: DAINAP

Since 2005, heroin seizures have declined with 2006 recording the lowest seizure levels of the past decade. The decline in the quantities seized is also reflected in the declining frequency of seizures with the number of seizures between 2005 and 2008 ranging between 300 and 400, significantly lower than the 671 seized in 2004.

Opium production in Thailand is low and is not believed to supply the international market. However, areas under cultivation increased from 129 hectares in 2004 to 288 hectares in 2008. The ONCB reported that approximately 95% of opium poppy crops were eradicated in 2007 with a net opium production of 177 kg. Net opium production, following eradication in 2008, was estimated to be 56.35 kg.

New drugs or drug combinations continue to appear on the illicit Thai market. A drink containing a mixture of licit and illicit drugs, including cough syrup, kratom, energy drinks and mosquito repellent and known on the street as '4x100', has emerged recently, particularly in the Southern parts of the country (DEA, 2007).

The price of methamphetamine pills increased significantly following the 2003 law enforcement campaign and has since stabilized (Table 101). Between 2005 and 2008, and with the exception of a lower bottom price level in 2007, the street price of a methamphetamine pill was US\$6-10 and that of a gram of crystal-line methamphetamine US\$71-100. Ecstasy prices showed a sharp increase from US\$10-20 per pill in 2005 to about US\$28 in 2008.

Cannabis prices also increased dramatically in 2008, more than doubling in the fourth quarter of the year compared to the average price the previous year. This is likely due to large seizures of over 18 metric tons of dried cannabis herb in 2008. With successful opium poppy eradication, the farmgate price for opium also saw an increase of 17% between 2007 and 2008 to US\$1,250 per kg.

Table 101. Price of illicit drugs in Thailand, 2005-2008

Drug type	2005	2006	2007	2008
Methamphetamine pills/tablets	US\$6-9 per pill	US\$5.4-9.5 per pill	US\$2.9-14.2 per pill	US\$ 5.8-10 per pill
Crystalline metham- phetamine	US\$73-100 per gram	US\$72-95 per gram	US\$ 43-100 per gram	US\$ 71-86 per gram
Ecstasy	US\$10-20 per pill	US\$14.5-19.5 per pill	US\$8.6- 25.7per pill	US\$ 22.9-28.6 per pill
Heroin	US\$98-120 per gram	US\$97-135.1 per gram	US\$57 -86 per 1.4 gram	•
Opium	•	US\$0.8-0.9 per gram	US\$1,071 per kg (farm- gate)**	US\$1,250 per kg (farm- gate)**
Cannabis	US\$0.2-0.5 per gram	US\$0.2-0.5 per gram	US\$100 – 128.6 per kilo	US\$229-343 per kilo
Ketamine	•	US\$30-40.5 per 10 cc bottle	US\$10 per pack	•
Cocaine	US\$49-61 per gram	US\$49-81 per gram	US\$86.7 per gram	US\$85.70 per gram
Inhalants	US\$1.20 per can	US\$1.20 per can	US\$ 0.57-0.85 per can	•

\*Converted at 35 Thai Baht to 1 U.S. dollar – not inflation adjusted

Source: ONCB, 2009

Large-scale ATS manufacturing in Thailand was last reported in 2001 with 10 clandestine laboratories dismantled. However, in July 2008, a 'kitchen lab' was seized in Pathum Thani province outside Bangkok. The laboratory was reportedly unsophisticated and of very small scale, utilizing readily available precursor chemicals to produce crystalline methamphetamine. The seizure included 0.5 grams of crystalline methamphetamine and some chemicals, including a small amount of red phosphorus obtained from matchboxes. This isolated seizure and the small scale indicates the unlikelihood that the seizure is an indicator of a return to large-scale local manufacturing.

#### Forensic data

Thailand has an extensive forensic profiling system for ATS. In addition to chemical composition and impurity analysis, the analytical process includes standardized classification of shape, color, dimension, logo, hardness, water content, toughness and smell. 12 likely methamphetamine manufacturing origins have been identified through this system, as well as a large number of groups (mixed batches), and tabletting facilities. The information suggests a network of processing facilities with separate manufacturing, mixing, and tabletting operations (ONCB, 2009).

Exhibit 7. New ecstasy logos in Thailand 2008-2009



Source: ONCB

Using the system, two main groups of methamphetamine pills bearing the WY logo have been found in Thailand. The typical methamphetamine content of pills from one group (known as group G1) used to be between 20%-30% until 2007, but beginning 2008 it was found to be significantly lower at 15 - 25%. The relative presence of G1 group (among all groups of methamphetamine pills) has fluctuated from 68% of all seizures in 2007 to 45% in 2008 and again increased to 51% in the beginning of 2009. The other main group (known as group G23) has met the loss in market share, constituting 23% in 2007, 35% in 2008 and 26% in 2009. Group G1 saw a particular drop in market share in Bangkok from 80% in 2008 to 65% in 2009.

A new group of methamphetamine pills with a "TG" logo emerged in the Thai market in 2008. The pill is characterised by relatively high methamphetamine content of 20%-38%. Seizures of pills with the TG logo have occurred primarily in Northern, Central and Western Thailand.

Combined with detailed data on geographic location of particular seizures, the potential exists to identify available sup-

ply along the manufacturing, mixing, and tabletting operations, as well as emerging trafficking routes.

Recent crystalline methamphetamine seizures originating from the Golden Triangle area have been characterized by a very high purity (above 80%) and large crystals. Impurity analysis by ONCB indicates the substance being of higher purity than pharmaceutical grade methamphetamine seized in Japan (ONCB, 2009).

Drugs marketed as 'ecstasy' in Thailand usually contain some MDE or MDMA in addition to smaller amounts of methamphetamine. A selection of new logos found in Thailand in 2008 and 2009 are shown in Exhibit 7.

In addition to methamphetamine pills, crystalline methamphetamine, and ecstasy, phenylpropanolamine and methylephedrine have been found in pill and powder form in Thailand.

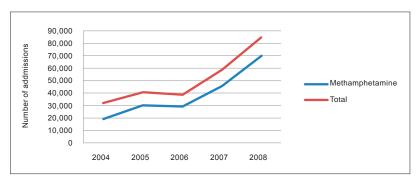
#### **Treatment data**

Thailand has a number of facilities providing drug treatment with general and specialized treatment facilities. Psychiatric hospitals are the most common and there is an extensive drug dependency treatment

program available through the correctional system in Thailand.

The total number of treatment admissions has risen sharply between 2004 and 2008, increasing by more than 250% from 32,363 to 84,575 admissions. Admissions for methamphetamine accounted for just over 80% of total admissions in 2008 (Figure 59). Admissions for the category 'heroin and opium', declined both in relation to other drugs as well as in absolute numbers, from 15% of total admissions in 2004 to 4% four years later. Treatment admissions for cannabis remained stable in 2008 from a peak in 2007 of 5,765 admissions, while admissions for inhalant use have been on an increasing trend (Table 102 and Figure 59).

Figure 59. Treatment admissions in Thailand (methamphetamine and total for all drugs), 2004-2008



Source: DAINAP

Table 102. Treatment admissions in Thailand, 2004-2008

Drug type	2004	2005	2006	2007	2008
Methamphetamine	19,489	30,403	29,235	45,847	70,005
Cannabis	3,209	3,543	4,043	5,765	5,765
Inhalants	1,779	2,175	2,268	2,644	3,516
Heroin and opium	4,937	2,958	2,427	2,705	3,071
Ecstasy	0	190	105	589	214
All others	2,949	1,717	598	1,282	2,004
Total	32,363	40,986	38,676	58,832	84,575

Source: DAINAP

#### HIV/AIDS and injecting drug use data

Thailand reported heroin and methamphetamine as being injected in 2007. According to the most recent overview and prevalence of injecting drug use among the 15-64 age group, it was estimated that 0.38% representing 160,528 individuals were injecting drug users (Lancet, 2008). Prevalence of HIV among people who injected drugs was estimated to be 42.5%.

## Summary, emerging trends and concerns

- Demand for methamphetamine is increasing. This is supported by the following indicators:
  - oMethamphetamine use in pill form was reported to be increasing in 2007 and 2008 after a period of reported decline between 2003 and 2006;
  - The number of methamphetamine related cases and arrests continued to increase steadily from 2004 to 2008;
  - oMethamphetamine pill seizures increased in 2007 and in 2008, the first increase since 2002;
  - oThere was a sharp increase in total admissions for methamphetamine treatment from 45,847 in 2007

- to 70,005 admissions in 2008, although this may be, in part, the result of additional treatment resources being made available;
- oA new group of pills with a "TG" logo emerged on the Thai market in 2008. The pills are characterised by relatively high methamphetamine content ranging between 20% and 38%.
- Methamphetamine in crystal form is showing an increasing presence within the drug user community. This is supported by the following indicators:
  - oAlthough the amount seized of crystalline methamphetamine has varied over the past five years, the number of arrests and number of seizures for methamphetamine in crystal form has increased between 2007 and 2008:
  - $\circ$ The trend in crystalline methamphetamine use has been increasing for all but one year between 2004 and 2008.
- Demand for heroin is likely to be on the decline. This is supported by the following indicators:
  - oThe number of seizures of heroin in 2008 is less than half the number of seizures recorded in 2004; oWhile total drug treatment admissions have more than doubled between 2004 and 2008, admissions for opiate dependence have declined from 4,937 admissions in 2004 to 3,071 in 2008.
- Cannabis, kratom, and inhalant use is likely to be on the increase, possibly due to increased availability or improved interdiction of other drugs such as methamphetamine:
  - oThe number of treatment admissions for cannabis increased from 3,209 in 2004 to 5,765 in 2008;
  - oThere were large seizures made in 2008 measuring more than 18 tons of cannabis and involving over ten thousand arrests. There also were large seizures in previous years, i.e. 15 tons in 2007 and nearly 14 tons in 2006:
  - oThe trend in cannabis use been reported as increasing in each year between 2005 and 2008;
  - oThe number of kratom seizures increased from around 500 in 2005 and 2006 to over 3,000 in 2007 and 2008:
  - oDrug treatment admissions for inhalant use have doubled between 2004 and 2008.
- Drug data monitoring in Thailand benefits from regular household surveys for updated prevalence estimates, and from the availability of detailed forensic data that also provide a source of intelligence for law enforcement operations.

## Viet Nam



#### Overview of drug use

Drug use patterns in Viet Nam began to shift in the mid-1990s from relatively low levels of cannabis and opium use to high levels of heroin use. This coincided with a sharp increase in the number of registered drug users which more than doubled between late 1990 and 2004 to more than 170,000, a level where it has remained through 2008. It also coincided with a decline in the average age of drug users, an increase in injection of drugs, and a higher number of female drug users.

Since 2003, methamphetamine and ecstasy have shown an increasing trend in Viet Nam, particularly among urban youth, construction and transport sector workers, and entertainment and sex workers, and currently, ATS together with ketamine are major drugs of concern. The emergence of ATS is reflected in drug seizure statistics which show over a million ATS pills seized in Viet Nam in 2008 compared to 230,000 in 2005 and less than 50,000 in 2004. In addition, the first clandestine laboratory manufacturing ecstasy and methamphetamine was seized in Viet Nam in June 2005.

## Patterns and trends of drug use

Heroin remains the most commonly used illicit drug in Viet Nam, followed by opium and cannabis (Table 103). Methamphetamine, both in pill and crystalline form, along with ecstasy and ketamine, were all seen as being equal in severity in the hierarchy of illicit drug use in Viet Nam in 2008 and, accordingly, were co-ranked fourth. Ketamine was first recorded as a drug of concern per se in 2008 (Table 104). However, since 2006, forensic information following analysis of pills marketed as 'ecstasy' has shown that these contained varying levels of ketamine (UNODC, 2007).

Crystalline methamphetamine use was reported in Viet Nam for the first time in 2008, with an increasing trend. An increase in use in 2008 was also reported for methamphetamine pills, ecstasy and heroin, continuing a consistent trend of increase since 2003 for all of these drugs. Opium use was reported to be stable in 2008 and cannabis use was on the decline (Table 103, 104 and 105).

Table 103. Reported rank and trend of drug use, and main route of administration in Viet Nam, 2008

Drugs used in the past year	Rank	Drug use trend	Main route of administra- tion
Heroin	1	1	Injected
Opium	2	<b>↓</b>	Smoked
Cannabis resin	3	$\downarrow$	Smoked
Methamphetamine (pills/tablets)	4	<b>↑</b>	•
Crystalline methamphetamine	4	1	•

•= Not reported Source: DAINAP

Table 104. Rank of use of specific drugs in Viet Nam, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Heroin	•	1	1	1	1	1
Cannabis	•	3	•	•	3	3
Methamphetamine (pills/tablets)	•	5	2	2	4	4
Crystalline methamphetamine	•	•	•	•	•	4
Ecstasy	•	4	3	3	•	4
Ketamine	•	•	•	•	•	4

•= Not reported Source: DAINAP

Table 105. Trend in use of specific drugs in Viet Nam, 2003-2008

Drug type	2003	2004	2005	2006	2007	2008
Methamphetamine (pills/tablets)	1	1	1	<b>↑</b>	•	1
Crystalline methamphetamine	•	•	•	•	•	1
Ecstasy	<b>↑</b>	1	1	<b>↑</b>	•	1
Ketamine	•	•	•	•	•	1
Heroin	<b>↑</b>	1	1	<b>↑</b>	•	1
Cannabis	•	$\leftrightarrow$	•	•	•	$\downarrow$

↑ = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  = Stable,  $\bullet$  = Not reported Source: DAINAP

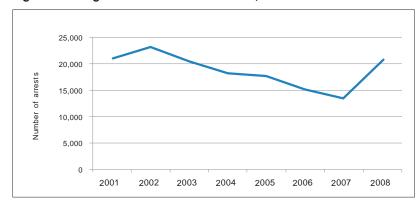
According to official reports, Viet Nam had 173,000 registered drug users in 2008, a 2.6% decrease from the previous year (SODC, 2009a). Heroin accounted for 81% of the registered drug users, opium for 11%, methamphetamine for 4%, cannabis for 1%, and other psychotropic substances for 3%. A preponderance of these were male (96%).

Illicit drug use has been identified as being particularly prominent among workers in the construction, mining, and transport sector, while ATS use is reported as a relatively new phenomenon among urban youth. Following increased police suppression and monitoring of entertainment venues, ATS use is reported to have moved increasingly into private residences and remote settings in recent years.

## Arrest, seizure and price data

The trend in total drug-related arrests has shown a steady decline from 2002 through 2007 and a sharp increase in 2008 (Figure 60). Unfortunately, reported data are not disaggregated by gender, nationality, or drug type, which obviates the potential for analysis of changes in drug trend or demographic patterns of use. While arrest data are not disaggregated by gender, anecdotal reports suggest that the number of females being arrested for drug law violations may be on the increase (SODC, 2009a).

Figure 60. Drug-related arrests in Viet Nam, 2001-2008

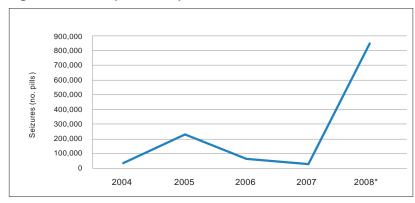


Source: DAINAP (2006-2008), Ministry of Public Security, SODC Viet Nam Country presentaion, 31st meeting of Heads of National Drug Law Enforcement Agencies, Asia and the Pacific, Bangkok, Thailand, 13 – 16 November 2007

In 2008, there was a considerable increase in the amount of ATS seized in Viet Nam. In July 2008, police seized methamphetamine weighing 53.9 kg which was being trafficked from Lao PDR into Quang Binh Province in central Viet Nam. The pills were pink with the WY logo, a product commonly available in Lao PDR, Myanmar, and Thailand. The end market was believed to be entertainment venues in Ha Noi, Ho Chi

Min City and Da Nang (SODC, 2009a). Viet Nam reported methamphetamine pill seizures in both kilograms and pills in 2008, however only in pills in 2007 and 2008 prior to this. The total seizure of methamphetamine in Viet Nam in 2008 was 60 kg and 70,000 pills. Conversion of the 60 kg of methamphetamine pills (at 90mg/pill, a standard size in the Greater Mekong Sub-Region) results in a net amount of nearly 900,000 ATS pills, more than four times the previous highest recorded annual seizure of 230,417 pills in 2005. According to preliminary data from the SODC, large seizures have continued in 2009 with over 50 kg of ATS seized in the first half of 2009, including a May 2009 case with 462,000 'WY' logo pills seized from a car driven by a Lao national (SODC, 2009). 7.6 kg and 19,000 pills of ecstasy were seized in 2008 (Table 106).

Figure 61. Methamphetamine pill seizures in Viet Nam, 2004-2008



<sup>\*</sup> Reported as 60 kg plus 70,000 pills. Converted at 1 pill= 90 mg.

According to Viet Nam drug control officials, ATS is being trafficked in larger quantities, resulting in larger seizures than in previous years. In addition, although not reflected in seizure statistics, SODC officials state that more crystalline methamphetamine is being trafficked into the country (SODC, 2009a). Officials also report drug storage points along the

Northern border with Lao PDR and collaboration between foreign and local traffickers.

Although Myanmar is believed to be the source of most methamphetamine seized in Viet Nam, the first methamphetamine laboratory seizure in Viet Nam was reported in 2005, and the first reported ephedrine seizure occurred in 2006. Between 2002 and 2006, imports of pseudoephedrine increased from 205 to 4,264 tons. While a license is required to sell or purchase ATS precursor chemicals, the existence of more than 11,000 wholesalers, suppliers and manufacturers of ATS precursors in Viet Nam provides the opportunity for diversion to illicit manufacture (SODC, 2008).

A recent official report highlights increasing precursor trafficking along the border with Cambodia citing seizures of more than ten tons of precursors (SODC, 2009a). However, the specific years of the seizures were not specified.

After rising steadily between 2001 and 2005, heroin seizures declined over subsequent years and leveled off in 2008 with 156.2 kg. Similarly, from a seizure level of about 600 kg in 2001-2002, the amount of opium seized declined dramatically during ensuing years with only 18.8 kg reportedly seized in 2008. The lower seizure amounts may indicate a shift in market demand or more sophisticated trafficking. At the same time, law enforcement officials report that opium and heroin trafficking from Viet Nam into China is increasing, with open economic zones and trading areas on the border being particularly affected (SODC, 2009a).

An emerging trend in 2007 and 2008 involves an increase in cannabis cultivation in the Northern and Southern provinces of Viet Nam, with over three tons of cannabis plants being destroyed over a 7,000 square meter area in early 2007. In May 2008, in Mong Cai, Anti-Drug Crime Investigation Police in cooperation with Quang Ninh Provincial Police and an anti-drug task force of Customs and Maritime Police detected containers with over eight tons of marijuana resin. Those arrested included individuals of Chinese and Indonesian nationality (SODC, 2008).

Table 106. Seizures of selected drugs in Viet Nam, 2004-2008

Drug type (measure)	2004	2005	2006	2007	2008
Methamphetamine (pills/tablets)	39,467	230,417	62,870	29,679 pills and 0.67 kg	70,000 pills and 60 kg
Methamphetamine powder (kg)	0.04	0.7	0	•	•
Ecstasy (pills/tablets)	•	•	•	•	19,000 and 7.6 kg
Crystalline methamphetamine (kg)	•	•	•	0.67	•
Heroin (kg)	239.4	287.7	276.6	160.2	156.2
Opium (kg)	58.6	51.1	184.0	63.4	18.8
Cannabis herb and resin (kg)	1,021	3,368	645	8,000	8,928.8*

Drug type (measure)	2004	2005	2006	2007	2008
Benzodiazepines (pills/tablets)	5,258	•	•	•	•
Ketamine (kg)	•	•	•	•	5.71
Pharmaceutical/addictive substances (pills/tablets)	•	2,002 pills and 5,893 other	167,138 pills and tubes	•	•

<sup>\*</sup> Ministy of Public Security, SODC (2008). Country report by Viet Nam 7th ACCORD Task Porce III Meeting, Philippines, 17-18 July 2008.

Source: DAINAP

#### Forensic data

Methamphetamine tablets seized in Viet Nam weighed between 90-100 mg, while 'ecstasy' pills weighed between 270-310 mg and contained methamphetamine, MDMA, ketamine, MDA, and 2C-B (DAINAP, 2008). Of those ecstasy pills found to contain MDMA, 47% had an MDMA content between 15% and 20%. Twenty-four percent of pills had a purity of over 20% and the remaining had a purity between 1% and 15% Methamphetamine pills also varied in purity level, with 53% of pills having a purity between 10% - 15%. A quarter of the sampled pills had a purity of between 5% - 10%, while only 1% of samples had methamphetamine content above 20%. Crystalline methamphetamine had relatively high purity levels between 65% and 75%. The forensic analysis of 121 heroin samples showed purity levels with wide variance, e.g. between 15 - 82%.

No price data were reported for 2007 and 2008.

#### **Treatment data**

In 2008, 45,035 individuals were admitted for drug treatment and rehabilitation (SODC, 2009). Of the drug users in treatment, 98% were opiate-related—88% were admitted for heroin, 10% for opium, with the remaining 0.8% for cannabis and 0.4% for ATS. Among treatment clients, 63.5% were reported to be injecting drug users (SODC, 2009a). There are 123 drug treatment centers under state management in Viet Nam with the capacity to treat 60,000 drug users (SODC, 2008). Although the Government has enacted a policy to encourage voluntary treatment, a majority of treatment admissions are compulsory (SODC, 2007).

#### HIV/AIDS and injecting drug use data

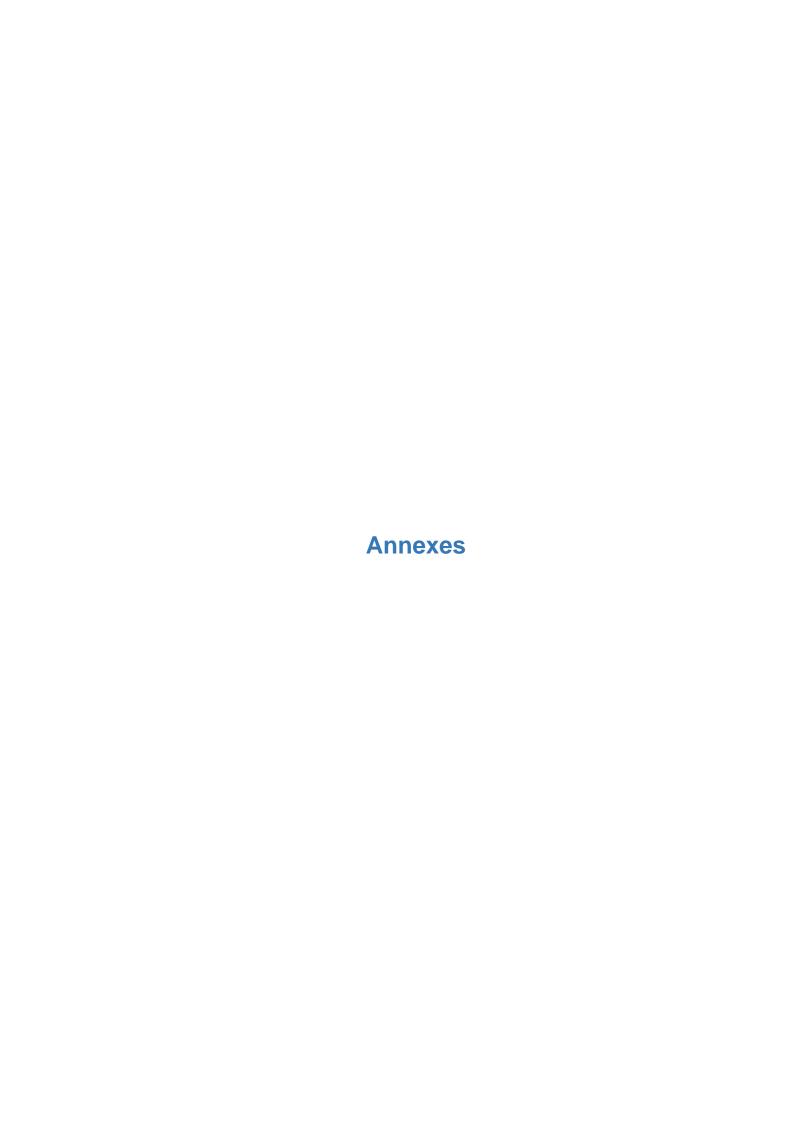
The estimated prevalence of injecting drug use in the population between 15 - 64 years of age is 0.25% (Lancet, 2008). HIV prevalence in the IDU community is estimated to be 33.9%, but with a very wide range, i.e. 1.9% to 65.8%. According to the SODC, about 70% of new HIV infections can be attributed to IDUs (SODC, 2009).

## Summary, emerging trends and concerns

- ATS use is still a relatively new phenomenon, most prevalent among urban youth.
- In 2008, methamphetamine accounted for only 4% of registered users, however, methamphetamine is increasingly being trafficked through Viet Nam, presenting a risk of spill-over into the domestic market:
  - In 2008, the total amount of ATS pills seized was more than four times the highest amount previously recorded. According to preliminary data from the SODC, large seizures are continuing to be made in 2009;
  - o Methamphetamine in pill form, as well as ecstasy, showed an increasing trend in 2008;
  - o Methamphetamine in crystal form was recorded as a drug of use for the first time in 2008 and showed an increasing trend.
- Large cannabis seizures and increased cannabis crop cultivation were documented in 2007 and 2008.

Eight tons of cannabis resin were seized in 2007 and 8.8 tons were seized in 2008.

- Heroin and opium seizures declined between 2006 and 2008, but use of heroin was reported to be on the increase in 2008.
- Arrest data are not disaggregated by gender, nationality, or drug type, reducing the potential for analysis.
- Forensic data showed the high variability in composition of 'ecstasy' tablets, often containing methamphetamine or ketamine as main psychoactive compounds (as opposed to MDA or MDMA), as early as 2006, underlining the importance of forensic information to understanding the shifting patterns of drug use and the actual substances being consumed.
- Given concerns of increasing ATS use in Viet Nam, the availability of disaggregated data for both law enforcement and treatment indicators becomes an urgent requirement.



# Data annex (East and South-East Asia) and guide to interpretation of drug control data

#### Arrest data

In most countries drug-related offences recorded by law enforcement agencies typically reflect drug-related possession/use and drug trafficking (sale), and to a much lesser degree illicit drug manufacture offences. Similar to drug seizure statistics, the number of drug offences recorded is related to both illicit drug activity in a particular country and drug enforcement activity. Additionally, reported drug offences vary dramatically between countries because of vast differences in national definitions of crimes, involving drugs. For example, national definitions of illicit drugs for personal use commonly vary based on threshold amounts of drugs involved, i.e. greater amounts may reflect drug trafficking versus personal use; the type of drug and nature of the drug; whether governments utilize administrative drug offences which may or may not be recorded and reported together with criminal offences; varying levels of law enforcement resources and priorities related to drug offences; and, how a country records and manages its administrative drug data all of which vary from country to country. These issues and others make it possible for countries with relatively minor drug problems to have drug offence rates higher compared to those with very severe ones, making comparison between countries difficult, if not inadvisable.

This problem can be mitigated by focusing the analysis to multi-year trends within countries and with the utilization of additional data source, such as drug seizures or representative surveys of illicit drug use. For example, if there is an increasing trend in reported personal use offences together with a decreasing trend in self-reported illicit drug use, as reflected in representative national surveys, an increase in enforcement activity is likely. However, if an increase in reported personal use offences occurs with an increase in self-reported drug use levels, increases in actual drug activity is likely. Drug related arrests for countries in East and South-East Asia reported for the years 2004-2008 are shown in Table 107. Annual comparisons cannot be made in this table or in subsequent tables in this section because of the different years in which countries began reporting (UNODC, 2009f).

Table 107. Drug related arrests in East and South-East Asia, 2004-2008

>-		Met	Methamphetamine	O.				Conson							
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Brunei	250	329	407	174	200	0	0	2	0	8	0	0	-	0	0
Cambodia	478	718	561	246	371	0	-	0	-	7	9	24	28	∞	9
China	•	٠	٠	•	٠	٠	٠	•	٠	•	٠	•	•	•	•
Hong Kong (SAR)	390	564	209	747	874	468	284	283	224	315	2,438	2,020	1,713	1,601	1,378
Indonesia	3,065	9,004	8,589	11,731	8,683	1,454	0	0	2,274	1,984	1,927	3,121	2,610	3,561	1,813
Japan 1	12,397	13,346	11,821	12,196	11,025	450	403	359	259	281	٠	•	•	•	•
Korea (ROK)	•	٠	٠	8,521	7,457	٠	٠	•	٠	•	٠	•	•	928	1,396
Lao PDR	102	402	479	147	344	0	0	0	0	0	10	09	0	36	45
Malaysia	•	3,832	2,367	876	٠	٠	395	210	93	•	٠	20,634	13,403	066'9	•
Myanmar	955	1,171	1,071	745	943	9	6	4	∞	9	2,403	2,712	2,078	2,015	2,059
Philippines	•	٠	٠	•	•	٠	٠	•	٠	٠	٠	•	•	•	•
Singapore	156	190	153	234	345	211	176	149	162	136	171	66	130	840	1,050
Thailand	39,001	56,520	61,816	80,723	120,776	749	646	459	410	220	1,771	1,176	1,195	1,278	1,479
Viet Nam	•	٠	٠	•	•	٠	٠	•	٠	٠	٠	•	•	•	•
Total	56,794	86,106	87,773	116,340	140,293	3,338	1,914	1,466	3,431	3,282	8,726	29,846	21,158	17,287	9,226

Source: DAINAP and multiple sources, see relevant country chapter for details \* Includes drug related arrests for all illicit drug types in the country. Duplication of total arrest data may occur in individual cases.

Table 107. Cont. Drug related arrests in East and South-East Asia, 2004-2008

			Cannabis					Total*		
Country	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Brunei	12	23	31	27	28	266	393	475	772	591
Cambodia	0	25	00	80	9	489	692	809	263	394
China	•	•	•	•	•	096'99	58,517	56,217	68,109	73,360
Hong Kong (SAR)	811	629	719	541	544	6,423	4,411	5,132	6,791	8,089
Indonesia	3,282	7,818	12,865	18,142	11,581	11,315	21,333	25,012	38,235	40,569
Japan	2,312	2,063	2,423	2,375	2,758	15,862	16,431	14,734	15,105	14,288
Korea (ROK)	•	•	•	1,170	1,045	•	•	•	10,649	868'6
Lao PDR	4	0	0	2	26	116	462	479	182	418
Malaysia	•	5,044	5,199	2,410		2,557	32,808	22,076	14,489	12,352
Myanmar	295	275	232	217	240	4,192	4,379	3,867	3,074	3,356
Philippines	•	•	•	٠	•	26,635	16,168	11,535	10,710	10,530
Singapore	153	150	158	148	88	1,310	1,068	1,545	2,613	2,353
Thailand	8,441	7,546	10,549	9,833	11,676	61,013	74,392	86,333	104,347	149,915
Viet Nam	•	•	•	٠	•	18,274	17,714	16,686	14,800	24,739
Total	15,310	23,583	32,184	34,873	27,995	218,412	248,845	244,699	290,139	350,852

Source: DAINAP and multiple sources, see relevant country chapter for details \* Includes drug related arrests for all illicit drug types in the country. Duplication of total arrest data may occur in individual cases.

Table 108. Regional illicit drug seizures in East and South-East Asia, 2004-2008

	2008	0.0	•	5,271.1	434.9	19.8	•	•	•	553.1	•	10.2	1.7	18.1	5.7	6,314.6
		0.0	•	6,101.7	96.4	•	•	•	•	267.9	•	•	6.0	28.1	•	6,469.7
	2007										0	0	_			
Ketamine	2006	·	Ĭ	1,788.5	1,006.0	Ĭ	·	Ĭ	Ĭ	109.5	16.0	98.0	0.7	22.7	Ĭ	3,041.4
	2005	•	•	2,630.0	296.1	•	•	•	•	409.8	•	7.8	3.6	42.2	•	3,389.5
	2004	•	•	•	46.4	•	•	•	•	•	•	٠	1.1	18,891.6	•	211.0
	2008	2	33	1,077,552	18,326	1,045,105	217,822	714	•	109,444****	108	513	735	486,553	19,000	2,975,967
	2007	0	300	2,219,353	65,539	1,247,302	1,277,859	18,323	•	709,888***	2,690	13	2,128	113,735	•	5,657,150
Ecstasy pills	2006	20	232	454,145	104,296	٠	196,212	356	٠	227,932	54	88	1,240	26,656	٠	1,011,256
	2005	0	1,906	2,342,397	47,694	٠	576,748	10,744	•	434,233	5,807	111	610	33,929	٠	3,454,179
	2004	0	0	3,000,000	283,568	251,072	469,483	•	•	146,744	5	103	1,235	123,174	•	4,275,384
	2008	0.38	1.9	5,523.0	45.8	709.9	399	25.6	0	**0.679	14.4	853.5	0.18	52.9	•	8,305.5
mine (kg)	2007	0.25	6.75	5,863.0	40.8	492.87	328	23.7	0	69.2	3.4	368.9	0.22	47.24	0.7	7,276.3
Crystalline methamphetamine (kg)	2006	0.4	16.2	5,946.0	6.7	1,241.2	144	21.5	0	145.2	2.3	766.0	0.2	93.74	•	8383.4
Crystalline	2005	0.7	2	5,500.0	228.1	92.29	123	19.3	4.8	39.2	280.3	104.1	0.1	322.6	•	6,991.83
	2004	0.5	0	2,746.0	15.7	28.4	411.3	•	•	83	0.2	3,676.80	0.1	47.34	•	6,989.3
	2008	0	116,772	6,255,658	•	٠	٠	151	1,227,205	281,343	1,102,199	٠	0	22,115,911	*000,058	31,949,239
sills	2007	0	420,287	7,620,322	٠	٠	٠	196	1,272,815	121,629	1,666,141	٠	48	14,200,000	29,679	25,331,117
Methamphetamine pills	2006	157	428,553	4,021,492	•	466,907	•	0	1,755,989	•	19,065,674	٠	0	13,820,000	62,870	39,621,642
Meth	2005	0	351,651	٠	•	255,016	٠	18	4,656,309	٠	3,651,505	٠	0	15,781,346	230,417	24,926,262
	2004	0	966'098	٠	•	٠	٠	٠	1,950,046	92,549	8,379,310	٠	3,480	31,000,000	39,467	42,325,848
	Country	Brunei	Cambodia	China	Hong Kong (SAR)	Indonesia	Japan	Korea (ROK)	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	Total

Source: DAINAP and multiple sources, see relevant country chapter for details
\* Reported as 60 kg plus 70,000 pills. \*\* 679 liters liquid methamphetamine. 1 liter converted to 1 kg. In addition + 379 kg methamphetamine powder was seized. \*\*\* Reported as 167.55 kg plus 151,221 pills. \*\*\*\* Reported as 8.6 kg and 80,778 pills

Table 108. Cont. Regional illicit drug seizures in East and South-East Asia, 2004-2008

			Heroin					Opium					Cannabis		
Country	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Brunei	•	•	0.0	٠	٠	•	•	٠	•	•	0.2	•	2.3	0.1	9.0
Cambodia	5.2	11.8	21.3	10.7	5.3	2.8	2.1	1.8	•	•	•	103.0	•	10.0	5.0
China	10,836.5	6,904.7	5,792.1	4,594.0	4,332.3	890.4	2,309.3	1,691.0	1,184.6	1,375.0	1,697.0	941.0	•	•	•
Hong Kong (SAR)	35.7	31.9	52.2	37.4	54.6	•	٠	٠	•		182.7	417.0	152.5	467.3	257.4
Indonesia	12.7	19.8	11.9	17.2	29.1	•	٠	٠	•	•	8,494.1	22,835.0	11,723.0	35,464.7	140,650.0
Japan	0.0	0.0	2.3	2.1	1.0	•	1.0	٠	•	9.9	970.1	•	233.8	560.5	415.7
Korea (ROK)	0.0	0.0	0.0	0.0	0.0	•	٠	•	•	•	•	18.4	20.9	22.2	92.7
Lao PDR	48.6	40.4	9.2	23.8	17.5	1.2	56.8	1.2	14.2	11.8	1,241.0	1.6	291.5	2,302.8	804.6
Malaysia	221.0	252.3	155.7	243.3	297.1	101.0	3.9	0.5	7.4	13.9	1,330.0	1,166.2	2,378.8	1,482.6	874.8
Myanmar	973.5	811.7	192.4	68.4	88.2	6.909	772.7	2,321.0	1,173.8	1,463.4	142.5	453.1	72.9	104.3	170.2
Philippines	•	•	٠	•	٠	9.0	٠	•	2.5	•	836.4	4,433.8	11,150.5	11,150.5	3,725.0
Singapore	•	3.3	0.1	2.6	2.1	•	٠	•	•	0.5	1.0	0.7	1.5	2.9	1.1
Thailand	789.0	948.6	92.5	293.6	199.8	1,595.0	102.6	767.5	139.7	111.3	206'6	13,343.8	11,875	15,384.6	18,891.6
Viet Nam	239.4	287.7	276.6	160.2	156.2	58.6	51.1	184.0	63.0	18.8	1,021.3	3,368.5	645.0	8,000.0	8,928.8
Total	13,161.6	9,312.2	6,606.3	5,453.2	5,183.2	3,264.9	3,299.5	4,967.0	2,585.6	3,001.3	25,823.1	47,082.1	38,646.7	62,009.9	174,688.3

Source: DAINAP and multiple sources, see relevant country chapter for details \* Reported as 60 kg plus 70,000 pills. \*\* 679 liters liquid methamphetamine. 1 liter converted to 1 kg. In addition + 379 kg methamphetamine powder was seized. \*\*\* Reported as 167.55 kg plus 151,221 pills. \*\*\*\* Reported as 8.6 kg and 80,778 pills

#### Seizure data

Drug seizure data represent the most commonly reported data available for most countries and, in some cases, are the only data available to assess illicit drug supply and infer patterns and trends in use. The quantity of illicit drugs seized annually, both in total weight and number of incidents, is influenced by many factors, but largely is a result of the amount of drugs available in the market and the effectiveness of interdiction efforts. There is often considerable annual variability in both of these key factors and, thus, considerable volatility in the amounts of illicit drugs reported seized annually. For example, drug traffickers often adopt new trafficking routes and concealment techniques to avoid detection without any real change in the amount of drugs available on the market. Additionally, the results of a government's interdiction efforts vary dramatically based on number of factors, such as the availability of properly trained and equipped personnel; a government's stability and its control over its territories and borders; a country's physical location and geography; and, how a country records, manages, analyzes and reports its administrative data.

An assessment of drug supply of a single drug based on seizure data from a single year, from just one country, without regard to the form or composition of a drug, e.g. methamphetamine pills versus powder or crystalline forms, can be highly misleading. To understand drug supply, it is useful to have indicators other than simply seizures, such as drug prices and purity. Trends in a drug's price per pure gram are a sign of real changes in their market supply. For example, if there is an increasing trend of seizures together with a decreasing trend in price per pure gram a real increase in supply is likely. However, if an increase in seizures occurs along with an increase in price per pure gram, increased effectiveness of interdiction efforts is more likely. The ability to assess drug purity accurately depends on the capacity of a country's forensic laboratories. Unfortunately, very few countries in the region have the resources and capacity to regularly and properly collect price and purity data, making this level of assessment challenging (UNODC, 2009f; UNODC, 2008). Seizures data for 2004 through 2008 for countries in East and South-East Asia are shown in Table 108.

#### **Treatment data**

Drug treatment data often represent the only source of data available to assess illicit drug demand in a country. Systematically collected, drug treatment trend data are useful in understanding both emerging and existing drug problems, their extent and patterns of use. However, accurately interpreting treatment data are difficult because the definition of drug 'treatment' varies between countries and the treatment services provided are often under-reported or incomplete.

Countries deliver various types of drug 'treatment' which are defined differently based on a variety of social, cultural, political, and medical contexts. Treatment focused on addressing the medical aspects of addiction may reflect a different population of drug users than services focused on the social or public health of a community. Therefore, treatment-based statistics could be misleading. For example, if services are primarily designed for the needs of opioid users, an increase in problematic methamphetamine use may not necessarily reflect increased demands for methamphetamine treatment. Additionally, the lag between onset of use and first treatment demand may take some time to occur in a population, particularly for emerging drugs and for drugs that don't cause acute reactions. This appears to be the case in some countries in East and South-East Asia.

Countries typically have a combination of treatment programs that are government-sponsored, NGO-based, and those involving private providers resulting in administrative data that are often incomplete, under-reported or simply not collected due to a variety of issues. For example, the administrative costs associated with collecting treatment data often result in providers simply avoiding the activity altogether or they may be unwilling to disclose the collected data due to concerns about of patient privacy. When reported, treatment data are often limited to geographic areas, e.g. metropolitan areas, or to specific treatment modalities, such as in-patient treatment hospitals, specific providers, for example government funded treatment only or reflect a specific substance, such as opioid-based detoxification or maintenance programs.

Even when defined and consistently reported, interpretation based on treatment services poses additional challenges. For example, while an increase in people seeking treatment may indicate an increase in drug demand, it may also indicate an increase in treatment capacity or reflect a successful initiative to intervene earlier in the progression of a drug user's dependence. Therefore, interpretation of treatment demand data is best done in the context of additional indicators of the drug use and the policy responses to it for a given country (UNODC, 2006).

Table 109 shows annual treatment admissions in East and South-East Asia in 2004-2007.

Table 109. Total annual treatment admissions in East and South-East Asia, 2004-2007

		Methamp	hetamine			Ecs	tasy			Heroin a	nd opium	
Country	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Brunei	38	74	56	59	0	0	0	0	0	1	0	0
Cambodia	•	•	•	•	•	•	•	•	•	•	•	•
China	•	•	•	•	•	•	•	•	267,000	349,000	•	•
Indonesia	259	146	580	•	0	328	•	•	5,033	3,165	2,151	•
Japan	•	•	•	•	0	0	•	•	•	•	•	•
Korea (ROK)	178	359	420	461	•	•	•	•	5	4	3	4
Lao PDR	1,047	1,077	•	•	0	0	•	•	5	•	•	•
Malaysia	•	•	•	•	•	•	•	•	•	•	•	•
Myanmar	171	254	33	23	0	0	0	0	1,246	1,762	1,281	879
Philippines	4,887	4,778	3,256	2,562	83	96	71	62	36	17	12	0
Singapore	•	157	236*	66	0	0	0	35	43	19	32	153
Thailand	19,489	30,403	29,235	45,847	0	190	105	589	4,937	2,958	2,427	2,705
Viet Nam	•	•	•	•	•	•	•	•	•	•	•	•
Total	26,069	37,248	33,816	49,018	83	614	176	686	278,305	356,296	•	•

Source: DAINAP and multiple sources, see relevant country chapter for details

Table 109. (Continued) Total annual treatment admissions in East and South-East Asia, 2004-2007

		Canr	nabis			To	tal*	
Country	2004	2005	2006	2007	2004	2005	2006	2007
Brunei	1	0	1	0	39	75	57	59
Cambodia	•	•	•	•	•	•	1,090	1,719
China	•	•	•	•	334,000	368,000	340,003	•
Indonesia	692	424	900	•	7,160	5,140	6,313	•
Japan	•	•	•	•	•	•	8,942	9,386
Korea (ROK)	24	24	19	12	207	387	442	477
Lao PDR	1	0	•	•	1,153	1,047	•	•
Malaysia	•	•	•	•	38,672	32,808	22,748	14,489
Myanmar	27	19	0	57	1,444	2,035	1,314	959
Philippines	1,836	1,976	1,807	1,421	7,372	7,446	5,161	4,287
Singapore	0	0	0	10	43	176	433	504
Thailand	3,209	3,543	4,043	5,765	32,363	39,872	38,676	58,812
Viet Nam	•	•	•	•	61,775	69,610	80,368	•
Total	5,790	5,986	6,770	7,265	484,228	526,596	505,547	•

Source: DAINAP and multiple sources, see relevant country chapter for details

<sup>\*</sup> includes all synthetic drugs (ecstasy, ketamine, methamphetamine).

<sup>\*</sup> Includes drug related treatment admissions for all illicit drug types in the country. Duplication of total treatment data may occur in individual cases.

#### Drug use data

Accurately measuring how many people engage in an illicit behavior, such as drug use, is a challenging endeavor. Two broad approaches often used are direct survey and indirect estimation, each with benefits and limitations. The direct method for estimating drug use prevalence utilizes population surveys, either for the general or specialized groups, such as students, Drug use surveys usually ask a sample of participants if drugs were used at least once in the past month, at least once in the past year, or in their lifetime, in order to estimate total drug use in the general or specialized population. The approach generates accurate estimates, if and when, a representative population sample was obtained, drug users were spread equitably around the country, i.e. metropolitan levels are typically higher than rural levels, and interviewees honestly and accurately disclosed their drug use. However, this approach leads to underestimates of the actual levels of drug use because it typical excludes marginalized groups, i.e. severe or problematic drug users unable to take part in either a household or a school-based survey, and because people may feel uncomfortable disclosing their illicit drug use.

The indirect method of estimating drug use prevalence uses multiple data sources to estimate the population of drug users. The multiplier method is a common approach which uses two independent pieces of data: one data source, e.g. the number of people receiving treatment in a year is multiplied with another, e.g. the proportion of a sample of drug users who received treatment, to estimate the drug-using population. While this approach is both less expensive and technically challenging than general population surveys and does not require people to admit to drug use, it does require multiple sources of data to perform multiple estimates, which many countries simply do not collect.

Because of the limitations noted above and others, estimates of illicit drug use sometimes have a wide range. Ranges of estimated drug use reflect the likely levels of use and the amount of uncertainty related to estimates of use. For example, amphetamine and methamphetamine past year drug use as reported in 2009 for adults aged 15-64 was between 16 and 51 million people globally. The wide range in this estimate is due to countries in Asia, notably China and India, that contain a significant proportion of the world's population, but where nationally representative population surveys of illicit drug use may not be conducted regularly. In contrast, the smaller ranges in the estimated number of users in regions such as North America and Europe reflect the longstanding and relatively well-funded research programs in some of the countries in those regions

For several countries in East and South-East Asia, there are few or no prevalence estimates on either direct or indirect measurements. In the event that no survey data is available, qualitative judgments of prevalence and changes in patterns and trends often can be made by drug experts and key informants who are familiar with available data sources, although limited, and country-specific nuances of change in population size and behavior. In this regard, UNODC requests all national counterpart agencies to make a qualitative assessment of the extent of use by providing a hierarchical ranking of drugs from the most common to the least common used as well as a report on the trend in use of each drug, based on available law enforcement agency statistics, treatment and public health office reports, social service agency information and other sources of drug use indicator data (UNODC, 2008).

Rank and trend data for East and South-East Asian countries for the years 2003 through 2008 are shown in Tables 110 and 111.

Table 110. Rank in select drugs of use in East and South-East Asia, 2003-2008

	2008	•	•	က	2	4	•	•	9	•	•	7	7	4
	2007	•	•	•	•	4	•	•	9	•	•	80	9	•
asy	2006	က	9	4	က	4	•	•	9	•	•	7	9	က
Ecstasy	2002	•	2	2	4	4	•	•	80	•	•	9	9	က
	2004	•	9	2	က	4	•	•	∞	•	7	9	9	4
	2003	•	•	•	•	•	•	•	•	•	•	9	9	•
	2008	-	•	2	2	~	<b>~</b>	•	4	•	~	4	∞	4
mine	2007	-	•	•	•	~	<b>—</b>	•	4	•	•	4	က	•
thampheta	2006	-	2	2	4	-	<b>-</b>	•	4	•	•	4	က	•
Crystalline methamphetamine	2005	٢	•	4	2	~	<b>~</b>	•	4	•	~	က	က	•
Crys	2004	-	•	4	4	~	•	•	4	•	~	က	က	•
	2003	-	•	•	•	•	•	•	•	•	•	~	•	•
	2008	•	•	2	•	•	•	~	•	က	•	•	က	4
<u>s</u>	2007	•	•	•	•	•	•	~	•	က	•	•	-	4
tamine pil	2006	•	~	က	•	•	•	~	•	က	•	•	~	2
Methamphetamine pills	2002	•	~	က	•	•	•	-	•	က	•	•	-	2
2	2004	•	_	က	•	•	•	2	•	က	•	•	_	S
	2003	•	•	•	•	•	•	•	•	•	•	က	2	•
	Country	Brunei	Cambodia	China	Indonesia	Japan	Korea (ROK)	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam

Source: DAINAP and multiple sources, see relevant country chapter for details

Table 110. Cont. Rank in select drugs of use in East and South-East Asia, 2003-2008

	2007 2008	2 2	•	•	•	3 2	2 2	4 3	3	4	• 2	7 8	2	c
Cannabis	2006	2	က	7	-	က	2	4	က	•	•	2	2	•
Car	2005	2	2	7	-	က	2	2	က	2	2	2	2	•
	2004	2	2	•	-	က	•	2	က	2	2	4	2	e
	2003	2	•	•	~	•	•	•	•	•	•	4	ဇ	•
	2008	•	•	-	4	9	•	4	_	_	•	_	9	-
	2007	•	•	•	•	9	•	က	-	-	•	2	2	-
Heroin	2006	•	2	_	2	9	•	က	~	~	•	9	00	-
_	2005	•	က	~	9	5	•	က	~	2	•	7	∞	-
	2004	•	က	_	7	9	•	က	_	2	•	2	∞	-
	2003	•	•	•	•	•	•	•	•	•	•	~	6	•
							Korea (ROK)							

Source: DAINAP and multiple sources, see relevant country chapter for details

Table 111. Reported drug trends in East and South-East Asia, 2003-2008

Country         2004			Ž	lethamphe	Methamphetamine pills	S			Cryst	alline meth	Crystalline methamphetamine	nine				Ecstasy	asy		
dia	untry	2003	2004	2005	2006	2007	2008	2003	2004	2002	2006	2007	2008	2003	2004	2002	2006	2007	2008
dia	nei	•	•	•	•	•	•	$\rightarrow$	$\rightarrow$	<b>←</b>	$\rightarrow$	$\rightarrow$	<b>1</b>	•	•	•	<b>←</b>	•	•
Signary  Si	nbodia	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	•	•	•	•	<b>←</b>	•	•	<b>←</b>	<b>←</b>	<b>←</b>	<b>‡</b>	•	•
Sign         Sign           Big         A           C         C           C	na	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	←
	onesia	•	•	•	•	•	•	<b>←</b>	<b>←</b>	<b>←</b>	•	•	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	•	←
al	PDR .	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>‡</b>	•	•	•	•	•	•	•	•	•	•	•	•
ar	oan	•	•	•	•	•	•	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>‡</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	$\rightarrow$	<b>1</b>
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	rea OK)	•	•	•	•	•	•	•	•	$\rightarrow$	←	←	$\rightarrow$	•	•	•	•	•	•
	laysia	•	•	•	•	•	•	<b>←</b>	<b>←</b>	$\rightarrow$	$\rightarrow$	$\rightarrow$	•	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	•
↑ ← → ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ← ←     ↑ ←	anmar	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	•	•	•	•	•	•	•	•	•	•	•
← → ←  ← ← ←  ← → •  ← ← •  • ← ←  • ← ←  • ← ←  • ← ←  • ← ←  • ← ←	lippines	•	•	•	•	•	•	<b>1</b>	<b>1</b>	<b>1</b>	•	•	$\rightarrow$	<b>‡</b>	<b>1</b>	•	•	•	•
	gapore	$\rightarrow$	•	•	•	•	•	<b>←</b>	$\rightarrow$	<b>←</b>	$\rightarrow$	<b>←</b>	<b>←</b>	<b>←</b>	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>←</b>	$\rightarrow$
t Nam t	ailand	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>←</b>	<b>←</b>	•	<b>←</b>	<b>←</b>	<b>←</b>	$\rightarrow$	<b>←</b>	$\rightarrow$	<b>‡</b>	$\rightarrow$	$\rightarrow$	<b>←</b>	$\rightarrow$
	t Nam	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	<b>←</b>	•	•	•	•	•	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	<b>←</b>

 $\uparrow$  = Increase,  $\downarrow$  = Decrease,  $\leftrightarrow$  =Stable,  $\bullet$  = Not reported Source: DAINAP

Table 111. Cont. Reported drug trends in East and South-East Asia, 2003-2008

			Heroin	oin					Cannabis	abis		
Country	2003	2004	2005	2006	2007	2008	2003	2004	2002	2006	2007	2008
Brunei	•	•	•	•	•	•	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>←</b>	$\rightarrow$	←
Cambodia	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	•	•	<b>←</b>	<b>‡</b>	\$	<b>‡</b>	•	•
China	<b>←</b>	$\rightarrow$	<b>←</b>	$\rightarrow$	•	<b>‡</b>	•	•	<b>‡</b>	<b>1</b>	•	•
Indonesia	<b>←</b>	<b>←</b>	<b>←</b>	•	•	$\rightarrow$	<b>←</b>	<b>←</b>	<b>←</b>	•	•	<b>‡</b>
Lao PDR	<b>‡</b>	$\rightarrow$	<b>←</b>	<b>←</b>	<b>←</b>	$\rightarrow$	<b>‡</b>	$\rightarrow$	<b>1</b>	<b>‡</b>	<b>←</b>	$\rightarrow$
Japan	$\rightarrow$	$\rightarrow$	<b>1</b>	•	<b>‡</b>	<b>‡</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	<b>‡</b>	$\rightarrow$
Korea (ROK)	•	•	•	•	•	•	•	•	<b>←</b>	<b>←</b>	<b>←</b>	$\rightarrow$
Malaysia	<b>←</b>	$\rightarrow$	<b>←</b>	$\rightarrow$	$\rightarrow$	•	<b>←</b>	<b>←</b>	<b>→</b>	$\rightarrow$	$\rightarrow$	•
Myanmar	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>1</b>	$\rightarrow$	<b>1</b>	<b>1</b>	$\rightarrow$	•	<b>1</b>	1
Philippines	•	•	•	•	•	•	$\rightarrow$	<b>‡</b>	<b>←</b>	•	•	$\rightarrow$
Singapore	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>	$\rightarrow$	$\rightarrow$	<b>←</b>	$\rightarrow$	$\rightarrow$
Thailand	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>←</b>	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>←</b>	<b>←</b>	<b>←</b>	<b>←</b>
Viet Nam	←	<b>←</b>	<b>←</b>	<b>←</b>	•	<b>←</b>	•	1	•	•	•	$\rightarrow$

 $\uparrow$  = Increase,  $\downarrow$  = Decrease,  $\,\leftrightarrow$  =Stable,  $\bullet$  = Not reported Source: DAINAP

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