Amphetamine-Type Stimulants in Latin America

Preliminary assessment report 2011
Acknowledgements

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Introduction

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, analyze and report synthetic drug information, and to apply this scientific evidence-based knowledge to the design of policies and programmes.

The Inter-American Observatory on Drugs (OAS) of the Inter-American Drug Abuse Control Commission (CICAD) supports the SMART Programme in Latin America and the Caribbean. Thanks to financial support from the Government of Canada, the SMART project will be able to develop specific activities in Latin America and the Caribbean.

The programme will start in Latin American and Caribbean countries with the support of CICAD as a result of a recent agreement between UNODC Vienna and the OAS/CICAD. In January 2011, UNODC appointed a project coordinator who is based in the offices of CICAD in Washington D.C.

The present report is the first regional situation assessment for Latin America put forward under the Global SMART Programme. It forms one of the essential key steps in providing 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 illicit ATS manufacture, trafficking and use in the Latin American region, and place policy-makers in a better position to evaluate the drug situation and to make informed decisions on intervention and prevention strategies.
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.

‘Ecstasy’ - is used in cases where there is a likelihood that pills marketed as ecstasy contain a variety of substances other than those usually associated with an ecstasy-group substance.

Data sources - This report is based almost exclusively on official data such as those contained in the Annual Report Questionnaires sent to UNODC by member states; annual and technical reports from INCB, official governmental reports and reports from intergovernmental organizations such as Interpol, UNODC, databases, and scientific literature.

Data on ATS group stimulants seizures, precursors, and illicit laboratories are subject to change for various reasons, such as new data becoming available, revisions or data that are later added to information provided by Member States. Thus, figures can sometimes be different from data formerly published. All data reflect the most up to date or precise information at the time of publication.

Country names and geographical terms - The term ‘region’ unless specified, generally refers to the geographical area that includes the countries and territories in Central America, South America and Mexico. The Bolivarian Republic of Venezuela is denoted as Venezuela and the Plurinational States of Bolivia as Bolivia.

Since there is legal and scientific ambiguity about the distinction between “use” “inadequate use” and “abuse”, this report uses the neutral terms drug “use” or drug “consumption”.

List of abbreviations

ARQ  Annual Report Questionnaire
ATS  Amphetamine-type stimulants
BMK  Benzyl methyl ketone (P-2-P)
BZP  Benzylpiperazine
CAN  Andean Community
CEN  World Customs Organization’s Customs Enforcement Network
CICAD  Inter-American Commission for Drug Abuse Control
CIS  Commonwealth of Independent States
CONACE National Council for Narcotics Control (Chile)
DEA  Drug Enforcement Administration (USA)
DELTA UNODC Database on Estimates and Long Term Trend Analysis
DEVIDA National Commission for Development and Life without Drugs - Peru
DNE  National Narcotics Directorate - Colombia
DROSCAN Support for the Andean Community in the Area of Synthetic Drugs Project
EMCDDA European Monitoring Centre for Drugs and Drug Addiction
ESPAD European School Survey Project on Alcohol and other Drugs
Europol European Police Office
GHB  Gamma Hydroxybutyrate
Govt. Government
HIV  Human Immunodeficiency Virus
ICD  Costa Rican Institute for Drugs
HONLEA Heads of National Drug Law Enforcement Agencies
ICMP  UNODC Global Illicit Crop Monitoring Programme
INCB  International Narcotics Control Board
INCSR International Narcotics Control Strategy Report (USA)
Interpol/ICPO International Criminal Police Organization
JND  National Drug Board (Uruguay)
MBDB N-Methyl-1-(3, 4-methylenedioxyphenyl)-2-butanamine
MDA  3,4-Methylenedioxyamphetamine (tenamfetamine)
mCPP m-Chlorophenylpiperazine
MDE  3,4-Methylenedioxyethylamphetamine
MDMA  3,4-Methylenedioxymethamphetamine
NGO  Non-Governmental Organization
NIDA  National Institute of Drug Abuse (USA)
OAS  Organization of American States
OECD  Organization for Economic Co-operation and Development
ONA National Anti-Drug Office (Venezuela)
P-2-P 1-Phenyl-2-propanone (BMK)
PEN  Pre-Export Notification online system
PMK  Piperonyl Methyl Ketone; 3,4-Methylenedioxyphenyl-2-propanone (3,4-MDP-2-P)
PRECAN Prevención del Desvío de Precursores Químicos para la fabricación de Drogas en los Países Andinos
PRELAC Prevention of Diversion of Precursors in Latin America and the Caribbean
SEDRONAR Secretariat of Planning for the Prevention of Drug Addiction and Drug Trafficking – Argentina
SENAD National Drug Secretariat – Paraguay
SENAD National Secretariat for Drug Policies - Brazil
SAMHSA   Substance Abuse and Mental Health Services Administration (USA)
SG-CAN   General Secretariat of the Andean Community
UNAIDS  Joint and Co-sponsored United Nations Programme on Human
         Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
UNODC   United Nations Office on Drugs and Crime
WCO     World Customs Organization
WDR     World Drug Report- UNODC
WHO     World Health Organization

Weights and measurements
u.       unit
lt.      litre
mg       milligramme
kg       kilogramme
mt       metric tons
## List of figures, tables and maps

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Executive Summary

In Latin America, cannabis, cocaine and their derivatives continue to be the most significant drug problems both in terms of use and in terms of trafficking. However, although still low, especially when compared to other regions of the world like Asia, use of amphetamine-type stimulants seems to be increasing in Latin America. This increase, coupled with the scarcity of data on ATS, the limited knowledge about the composition and effects of these drugs and the relative simplicity of manufacturing methods can increase the risks of ATS trafficking in Latin America. Most surveys show that people associate the term ‘synthetic drugs’ with prescription drugs and do not consider that use implies risks, viewing ATS use as a problem distant from their own reality. Law enforcement authorities tend to consider ATS detection to be less important than the detection of other drugs, or do not have the necessary training or adequate technology to carry out inspections in ports, airports and border crossings.

Increased understanding of the problem and effective monitoring is required to appropriately assess the risk of ATS use and trafficking in Latin America. Drug use surveys need to include more specific assessments of the multiplicity of synthetic drugs that can be used, and to allow for discriminating between pharmaceutical preparations used without prescription and illicit drugs. Laboratory analyzes of synthetic substances are important not only for determining the type of drugs distributed but also for assessing the kind of precursor chemicals used to synthesize the drugs. Given the fact that precursors can be easily replaced, it is crucial for authorities to be able to rapidly identify replacement dynamics, new methods and substances used.

At the global level, in 2009, there was a 26% increase in the number of illicit laboratories of amphetamine-type stimulants. While in the past, illicit ATS laboratories in the Americas were only reported from Canada, Mexico and the United States, reports of illicit laboratories have been received from Brazil, Guatemala, Belize, Argentina, Nicaragua and Suriname. Only a few countries in the region have no official or press reports of ATS seizures or ATS manufacture related incidents: for example, Bolivia, Honduras and Paraguay.

Mexico is the only country where ATS seizures represent a significant percentage of the global total. ATS seizures have shown an upward trend since 2008: methamphetamine increased to more than 6 mt in 2009 and 12 mt in 2010.

Increased controls over precursor chemicals in the USA have resulted in traffickers diversifying their sources and moving manufacture to other countries. Data show that as controls have increased in the USA, the problem has moved into Mexico, and as controls have been strengthened in Mexico, more precursors are being diverted from and through Central America. Some countries in the region, such as Guatemala and Nicaragua, have reported concern about the increase in ATS manufacture. ATS manufacture is often thought to be the work of criminal networks. In Mexico, for example, the drug trafficking organization ‘La Familia Michoacana’ is thought to have dominated methamphetamine manufacture. Organized crime has the potential to threaten economic development, political independence and human security and well-being of the population.

UNODC estimates that approximately 0.5% of the population between 15 and 64 years (between 1.3 and 1.8 million people) in South America have used ATS drugs over the past year. Central American countries have the highest rate with 1.3% of the population using ATS drugs over the
past year (about 320,000 users). The annual prevalence for ecstasy use is 0.2% in South America (about 500,000 users) and 0.1% in Central America (about 30,000 users).

Prevalence rates are considerably higher when considering younger populations. According to a study of high school students conducted by UNODC and CICAD in 2006, this problem is particularly acute in Colombia where the annual ecstasy prevalence rate was 3%. In Chile, prevalence was 1.6%, in Ecuador 1.1%, and in Bolivia, Paraguay and Peru it was about 0.5%. The same study also reflects higher prevalence rates of ATS among younger populations: 3.5% in Brazil and Colombia, 3% in Argentina and Bolivia, 2.2% in Chile and Paraguay, 1.6% in Uruguay, 1.3% in Ecuador and 0.7% in Peru.

Surveys indicate that in South America, inappropriate use of pharmaceutical preparations containing stimulants is very common. However, very few forensic analyzes of seized substances which could determine the chemical composition of the synthetic drugs that are used in the region have been carried out. Colombia’s National Narcotics Directorate (DNE) conducted the first exercise of chemical characterization of pills sold as synthetic drugs in the region in 2010, and found more than 149 chemical components in synthetic drugs circulating in illicit drug markets in the city of Bogota. Similar studies will be necessary to establish which synthetic drugs are sold in Latin America.

Drug treatment centres and drug use prevention campaigns tend to focus more on traditional drugs such as cannabis and cocaine, while knowledge and targeted protocols to treat synthetic drug use are still limited. Some countries are starting to pay more attention, as ATS treatment demand seems to be growing in countries like Mexico, yet it is necessary to improve treatment protocols and prevention campaigns for synthetic drug use.

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1 Use figures are based on population estimates established by UNFPA.
1. What are amphetamine type stimulants?

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).

Since the late 1990s, ATS use has been one of the most significant drug problems worldwide. The most recent global estimates of past year use of amphetamine-group substances exceed those of heroin and cocaine users combined, generating more than USD 63 billion annually in illicit revenue. 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 the cheap and easy ways to manufacture the drugs, more countries are added to the list each year.

1.1 Amphetamines-group

The amphetamines-group includes both amphetamine and methamphetamine. Although some amphetamines are manufactured for medical purposes, most amphetamines that are illegally distributed are illicitly manufactured in clandestine laboratories.

Methamphetamine is the most widely used and manufactured synthetic drug and is a central nervous system stimulant. It is easy to manufacture using ephedrine or pseudoephedrine, two chemicals which are still widely available in many regions of the world. If these precursor chemicals are unavailable, replacements are easily found, often facilitated by readily available information on the Internet.

Methamphetamine is commonly known as “anfeta”, “meta” and “tiza” in Spanish, and “speed”, “meth”, and “chalk” in English. It can be consumed as “hielo” (“ice”), “cristal” (“crystal”), “arranque” (“crank”) and “vidrio” (“glass”). The substance is a white odorless powder or crystals, with a bitter taste and readily soluble in water and alcohol. Amphetamines-group substances were originally synthesized in the late 19th century and marketed as over-the-counter nasal decongestants beginning in 1932. Similar to amphetamine, methamphetamine increases energy and activity, reduces appetite and creates a general feeling of well-being. However, when used in similar doses, methamphetamine reaches the brain in higher quantities than amphetamine, and thus its stimulant effect is stronger, with longer lasting and more damaging effects.

Amphetamine and methamphetamine are listed in Schedule II of the United Nations 1971 Convention on Psychotropic Substances, which means they are deemed to be of limited therapeutic value and can only be obtained through medical prescription. Amphetamines are used for treating narcolepsy (a sleeping disorder) and Attention Deficit Disorder. However, these medical uses are limited and the doses are typically much lower than those used when the drug is being used illicitly.
1.2 Ecstasy-group

Ecstasy or MDMA (3,4-Methylenedioxymethamphetamine) is chemically similar to amphetamines-group stimulants and to mescaline, a hallucinogenic substance. It causes an energizing effect, euphoria, emotional warmness and distortion in the perception of time and touch.

Ecstasy is ingested almost exclusively in pill form. The use of ecstasy originated among teens and young adults at raves or nightlong dance parties in Europe but is now used in various social settings and diverse demographic subgroups throughout the world. Manufacture of this drug has also spread, shifting from more traditional locations in Western Europe to often young and more lucrative consumer markets across the world.

A wide range of social and behavioural factors influence risk and protective factors for initial and progressive use of drugs. The use of certain ATS and other drugs has been sufficiently prevalent among young people for the phrase ‘club drugs’ to become a term of reference. Yet, 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 are more prone to drug use, e.g. sex workers, including bar workers and hostesses.

1.3 Other substances sold on illicit ATS markets

Gamma-Hydroxybutyric acid (GHB), flunitrazepam (e.g. Rohypnol®) and ketamine are also known for their association with ‘rave parties’. GHB and flunitrazepam are depressors of the central nervous system and their use has been described in cases of victims of sexual assault whose use of these drugs left them temporarily immobilized. Cases of GHB use seem to have increased, while cases of flunitrazepam trafficking seem to be on the decrease. Ketamine, a hallucinogenic substance, has also been available in some illicit ATS markets in Latin America for several years. Lysergic acid diethylamide (LSD) has been used in Latin America since the 60s, but with lower use rates than ATS; however, recent studies show notable use among university students (SG/CAN-UE, 2009). Use of analogue substances such as mephedrone, MDPV or BZP has not been reported from Latin America.
2. The supply of ATS

Latin American countries—with perhaps the exception of Mexico—have traditionally focused their drug control efforts on cocaine, while manufacturing, trafficking, and use of ATS was not perceived as a significant threat. Yet, there are indications that illicit manufacture of ATS may be on the rise in the region. Although concern and awareness may be increasing as well, incomplete and limited reporting and information create problems, as authorities are not aware of the speed at which these markets can emerge. The risk of ATS manufacture may increase given the further tightening of controls in North America, which may shift manufacture south.

Although trafficking in ATS end products remains primarily intra-regional, there is growing evidence that suggests increased inter-regional cooperation and trafficking. There is also a significant number of cases of precursor trafficking across the region, from countries such as Chile and Argentina to Mexico, and from Central America (usually as intermediary locations for substances moved from Asia) to Mexico.

2.1 Illicit ATS manufacture

ATS can be synthesized from a range of easily accessible precursor chemicals using a variety of methods. Thus, unlike the cultivation of the coca leaf or poppy, ATS manufacture is not limited to certain geographic locations. Illicit laboratories can operate anywhere and be relocated as risk increases. If a traditional precursor becomes unavailable, replacements are easily found, often facilitated by readily available information on the Internet. As a result, it is currently impossible to know precisely how much ATS is illicitly manufactured, as independent calculations based on remote sensing of manufacture cannot be carried out, as is the case with poppy plants and coca bushes. The information available, however, makes it possible to affirm that ATS manufacture has expanded in Latin America in recent years.

Methamphetamine and ecstasy are manufactured in all countries of North America, and Mexico has become a significant location for methamphetamine manufacture. Increasing incidents of methamphetamine-related manufacture are also occurring throughout Central and South America. Various official and unofficial sources in Nicaragua suggest a dramatic increase in the manufacture of methamphetamine in 2010. For example, in 2010, Nicaraguan authorities dismantled a large-scale methamphetamine laboratory. Only a few countries did not report ATS seizures to UNODC between 2004 and 2008 or incidents of ATS related manufacture activity since 1990: for example, Bolivia, Costa Rica, El Salvador, Ecuador, Guyana, Panama and Paraguay. Since 2008, there have been reports of small ecstasy seizures in Costa Rica (289 pills seized in 2010) and reports of a continuous flow of precursor chemicals like ephedrine through Paraguay - in March 2010, SENAD Paraguay seized 30 kg of ephedrine from a cargo container destined for Mexico. The lack of reporting in El Salvador is of interest, as this is the country with the highest ATS prevalence rates in Latin America, but with no record of seizures or manufacture-related incidents. Some press reports in 2010 mentioned the existence of a large ATS laboratory in El Salvador, but these reports were never officially confirmed.

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In recent years, ATS manufacture has undergone important changes in the countries of the region. Available information suggests that as controls on precursor chemicals have increased in the United States since 2005, the problem has been displaced to Mexico. Mexico is the only country in Latin America to report ATS seizures that represent a significant percentage of the global total (12% in 2009) and there are signs of significant increase. In 2008, 251 kg of amphetamines were seized in Mexico - nine times the level in 2007 (27.1 kg) - and although methamphetamine seizures fell from 920 kg in 2007 to 341 kg in 2008 (the lowest level since 1998), they increased to more than 6 mt in 2009 and 12 mt in 2010. In South America, 30.79 kg of amphetamines-group substances were seized in 2008, a small quantity compared to 8,532 kg in North America. Ecstasy seizures in 2008 were 41.43 kg in South America compared to 3,279 kg in North America. According to the ONDCP in 2009, Guatemala reported methamphetamine seizures totaling more than 10,600 kg, and although by 2010 the Government reported a decrease to 15 kg seized, authorities still consider Guatemala to be an important transit point for pseudoephedrine coming from India and Bangladesh, en route to Mexico.

In 2008, Mexico increased its own controls on precursor chemicals by prohibiting ephedrine and pseudoephedrine imports, and this led to a price and purity increase in the US and to a temporary reduction in the supply of methamphetamine. After the momentary decrease of methamphetamine manufacture in Mexico, available information suggests a new increasing trend. Figure 1 shows the evolution of methamphetamine seizures between 2001 and 2009 on the US-Mexican border, and of illicit methamphetamine laboratories in the United States. The number of industrial sized laboratories in the USA decreased from 245 in 2001 to 14 in 2008, while methamphetamine seizures on the border increased from 1,314 kg in 2001 to 3,477 kg in 2009. The 2010 INCB report also documents an increase in the manufacture and trafficking of methamphetamine in Mexico, as reflected by an increase in seizures of methamphetamine from 300 kg in 2008, to more than 6 mt in 2009, and 12.7 mt in 2010. Likewise, the dismantling of illicit laboratories rose from 21 in 2008 to 191 in 2009. While the number of laboratories seized in Mexico (191) remains small compared to the USA (5,286 nationwide in 2009, excluding dump sites), the laboratories seized tend to manufacture significant amounts of ATS end products, while in the USA, laboratories manufacturing the substance tend to be on a smaller-scale.

In 2009, the methamphetamine supply increased on US streets and was sold at lower prices, as Mexican cartels began to manufacture the drug with less strictly controlled precursors such as phenylacetic acid, often used as a flavouring in fragrances and food. Criminals continue to circumvent control mechanisms by changing the manufacturing processes to use chemicals with less strict or no controls, or by manufacturing controlled chemicals from non-controlled ‘pre-precursors’. In 2007, manufacturing processes in Mexico began to increasingly rely on alternative manufacturing formulas starting from phenylacetic acid and its derivatives to manufacture phenyl-2-propanone (P-2-P). In 2007, only 1% of seized methamphetamine was derived from the P-2-P method. However, by the end of 2009, it had become more prominent with 37% of methamphetamine reported to have been manufactured using this method. According to several reports, most methamphetamine laboratories seized in 2009 were P-2-P laboratories. During 2010, the Government of Mexico seized about 110 illicit laboratories, with P-2-P being the primary manufacturing method for methamphetamine identified in these laboratories.

As a result of greater reliance upon the P-2-P method, there has been a decrease in the quantities of the more potent d-methamphetamine entering the United States. Since October 2009, Mexico
has reported seizing nearly 120 mt of phenylacetic acid derivatives which are not internationally controlled. These alone could produce up to 30 mt of methamphetamine, which is almost twice the global methamphetamine seizure total reported in 2008. The Government of Mexico strengthened domestic controls and surveillance over the use and import of PAA salts and derivatives in November 2009. In March 2010, the Commission on Narcotic Drugs (CND) decided to transfer phenylacetic acid to the same level of control as the other methamphetamine precursor chemicals P-2-P, ephedrine and pseudoephedrine.

The majority of ephedrine destined for Mexico is supplied by sources in China, Czech Republic, Switzerland, Thailand, India, Bangladesh, and the USA. In June 2010, 445 kg of ephedrine concealed in wood furniture from Santa Cruz, Bolivia, were seized in the Port of Manzanillo, Mexico. Mexico is a major importer of phenylacetic acid, accounting for 132 mt of legal imports. Along with China and Serbia, Mexico accounts for the bulk of the seized substance with 30.6 mt. Phenylacetic acid enters Mexico in large quantities from suppliers in the Netherlands, Bulgaria, China and the USA. In May 2010, officials seized 88 mt of the phenylacetic acid ethyl ester, a precursor of phenylacetic acid, used to manufacture amphetamines also at the Port of Manzanillo, representing the largest single seizure of the chemical. The chemical was found in five shipping containers sent from China.

Recent reports also indicate that manufacture has expanded geographically within Mexico, and is now found in the centre of the country where previously no manufacture existed. Illicit manufacture has been reported in nine of the country’s 31 states. Precursor imports are authorized in four out of 17 Mexican ports - Nuevo Laredo (land port), Port of Veracruz (Veracruz), Port of Manzanillo (Colima), and the Mexico City Benito Juárez International Airport (AICM) Mexico City, Mexico. As noted above, significant incidents of precursor chemical diversion have been reported at the port of Manzanillo.

Between 2001 and 2006, five ATS laboratories were detected in South America, including an ecstasy laboratory in Argentina (2003), Suriname (2003) an amphetamine laboratory in Chile (2002), and two synthetic stimulants laboratories (type of substance not defined) in Colombia (2001 and 2002). In 2008, for the first time, an illicit ATS laboratory was discovered in Guatemala. Several new indicators of ATS manufacture and trafficking are beginning to appear in countries in South America, Central America and the Caribbean subregion. In 2005, Colombia reported its first amphetamine seizure (4.2 kg), which increased to 56 kg of seized amphetamine in a single incident in 2006 - representing the largest seizure of ATS in South America or Central America reported to UNODC to date.

In 2008, three illicit ecstasy laboratories were detected in Central and South America – one in Guatemala, one in Brazil and one in Argentina. A further ecstasy laboratory was seized in Brazil in 2009, along with three combined amphetamine and ecstasy-group laboratories in Guatemala. However, compared with other regions, the number of ecstasy laboratory seizures is quite low.

while P-2-P methods result in the less potent racemic d,l-methamphetamine, unless separated in an additional synthesis step.

10 Drug Enforcement Administration, Office of Diversion Control at the 4th International Forum on the Control of Precursors for ATS, Tokyo Japan, February 2008.
11 Note: due to limited reporting of forensic information, the type of laboratory, precursors used, end product, and manufacture cycle were unknown.
In July 2008, Argentinean authorities discovered a laboratory for ecstasy manufacture which was capable of manufacturing a large quantity of pills. Authorities suggested that these substances were about to be trafficked to Europe. According to ONDCP, in 2009, law enforcement agencies in Argentina, Brazil, Chile and Colombia reported seizures of ecstasy. Colombian authorities warned about attempts to barter cocaine from South America for ecstasy pills from Europe and also conducted a study whose findings confirmed that many of the pills sold as “ecstasy” on illicit markets contained a mixture of analgesics and other substances or drugs, including benzodiazepines, cocaine, heroin and methaqualone. In July 2010, the Peruvian authorities reported that 251,000 “ecstasy” pills had been seized in Lima. In 2009, Chilean authorities reported the seizure of a small-scale laboratory for illicitly manufacturing mescaline, a psychotropic substance scheduled in Table I of the 1971 Convention. It was the first time that such an illicit laboratory had been identified in Chile.

2.2 ATS trafficking

Trafficking in ATS substances remains to a large extent intra-regional, as manufacture can and does occur close to consumer markets. The popularity of ATS is also a result of a market potential with continuously high profits and low risks with little initial investment. New synthetic stimulants not yet under international control can also be quickly introduced to the market. Additionally, large profits are not only made from the sale of the drug itself, but increasingly from illicit sourcing of the key precursor chemicals used in the illicit manufacture of ATS.

The main flow of methamphetamine trafficking occurs from Mexico to the USA. Organized criminal groups in Mexico have expanded their methamphetamine distribution networks and consolidated many of the previously independent methamphetamine traffickers in the Great Lakes, Pacific, Southeast, Southwest, and West Central Regions. They have also introduced the crystalline methamphetamine into these markets and developed methamphetamine trafficking routes into Europe. Trafficking routes within the region go from Mexico to the USA, from Colombia to Venezuela and Ecuador, and from Argentina to Uruguay. Although no official reports exist, there are indications that amphetamine-type stimulants flow in and out of El Salvador. In May 2009, authorities at Mexico City airport seized two suitcases coming from El Salvador that contained amphetamine and methamphetamine pills. In February 2010, authorities from Costa Rica seized 5 kg of amphetamine smuggled by two citizens of El Salvador and thought to be en route to El Salvador. Some interregional routes can also be identified as running from Mexico, Brazil, and French Guyana to Europe, and from the Netherlands and Belgium to Chile and Brazil.

Some incidents support the concern that interregional trafficking, while still not common, is on the increase. In 2007, authorities in Peru arrested a criminal group of nine persons of various nationalities who had trafficked cocaine and undefined synthetic drugs into Europe and were in possession of 99,000 pseudoephedrine tablets. Mexican authorities believe that ecstasy-group substances are being re-routed from Europe through undisclosed Central American States. Costa Rican authorities have echoed this concern as they report increased ecstasy trafficking. Since

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15 For instance Costa Rican authorities in 2006 arrested a Venezuelan national caught body-packing 3.7 kg of pseudoephedrine destined for Mexico via air.
2003, law enforcement authorities in Ecuador have noted that their territory has been used for the international trafficking of ecstasy believed to be bound for the USA. Ecstasy also features in barter trade activities, smuggled from the Netherlands to countries in South America where it is exchanged for cocaine bound for Europe. These indicators also align with expert perceptions related to increased use. These cases are illustrative of the use of multi-tiered and multi-national supply and transit partnerships, and the common phenomenon of poly-drug trafficking which has been reported in other regions as well (e.g. North America, East and South-East Asia and Oceania).

Map 1: ATS trafficking in the Americas

Source: UNODC

2.3 Diversion and trafficking of precursor chemicals

Argentina, Brazil, Chile and Mexico are important sources of precursor or essential chemicals used in the manufacture of illicit drugs. Through the International Narcotics Control Board INCB-coordinated Operation PILA, an operation focusing on the trade of ephedrine and pseudoephedrine, including pharmaceutical preparations and ephedra, the INCSR has revealed that many suspicious shipments are destined for Mexico, with the leading source country shifting from China to India. The same report identifies Chile as a source of ephedrine for methamphetamine processing in Mexico, usually using air cargo and maritime shipments.

As countries like Mexico and the United States increase their controls over precursor chemicals, increased smuggling of substances required for the manufacture of ATS seems to be taking place. By 2006/2007, precursor traffickers were obtaining and smuggling chemicals more frequently in the form of tableted pharmaceutical preparations originating in West Asia and Africa and trafficked into Mexico via Europe. In 2006/2007, many of these illegal shipments were identified and stopped as a result of consistent utilization of existing precursor control mechanisms (namely online pre-export notification systems) and back-tracking investigations of suspicious shipments by law enforcement. However, new routes again began to emerge in 2008/2009 throughout Central and South America, and new significant sources of diversion were identified, such as Bangladesh.17 As noted above, there has been increasing concern in Guatemala due to indications that the country is being used as an important transit point for illicit shipments of precursor chemicals from India and Bangladesh to Mexico.

Although not associated with synthetic drug manufacture in the past, limited capacity for precursor control coupled with its geographic location has left Central America vulnerable to possible exploitation for this purpose. In 2006, Indian authorities stopped a shipment of 5 mt of ephedrine and 2.5 mt of pseudoephedrine on route to Belize. The governments of Costa Rica and El Salvador discovered attempts to divert large quantities of pharmaceutical preparations of these drugs.18 By 2010, according to the most recent ONDCP report, some Central American countries had strengthened regulations on precursor chemicals, causing some intraregional displacement dynamics. For example, Honduras reported a sharp increase in the amount of precursor chemicals seized, as stricter precursor controls had been adopted in other countries in Central America and the Caribbean. The INCB annual 2010 report documents a single seizure of almost 30 million pseudoephedrine preparations in Honduras that had originated in Taiwan Province of China. A second seizure was reported involving more than 152 million pills (over 9 mt) that had originated in the Syrian Arab Republic.

Despite the small number of incidents of precursor chemical diversion reported in the region as a whole, there is a clearly emerging upward trend.

17 INCB, Precursors and chemicals used in the illicit manufacture of narcotic drugs and psychotropic substances, 2009 (United Nations publication Sales No. E.10.XI.4), and previous years.
In 2001, only two significant attempts to divert ATS precursors in South America, Central America and the Caribbean were reported. By 2006, the number of countries reporting significant diversions of pseudoephedrine had increased to ten to include Bolivia, Chile, Brazil, and Argentina.

One ton of piperonal to Brazil from the UK and 1.5 mt of ephedrine from China to Guatemala.
Colombia, Ecuador, Guyana, Peru, El Salvador and Guatemala.\textsuperscript{20} In addition, Argentinean and Costa Rican authorities were also reporting seizures of modest amounts of ATS precursors. In 2009, Chilean, Colombian and Venezuelan authorities seized a total of over 1.5 mt of bulk ephedrine. Most of these interceptions were likely destined for Mexican laboratories. According to the ONDCP, in 2009, Guatemala reported having seized more than 10,600 pseudoephedrine pills and Costa Rica reported the seizure of 30 kg of norephedrine that had entered the country through Panama, although the origin of the substance was not ascertained. Initially these diversions were typically in bulk form; however, incidences of diverted pharmaceutical preparations are now being reported. For instance, in 2008 authorities in Guatemala reported a significant seizure of pharmaceutical preparations containing pseudoephedrine in a maritime shipment from Hong Kong China.\textsuperscript{21} In Peru, the National Drug Control Commission (DEVIDA) warned in 2008 that the legal importation of cold medicines containing pseudoephedrine was increasing despite the fact that reported cases of the common cold had declined in recent years. This raised concerns of possible diversion into illicit channels. Since ephedrine became a controlled substance in Mexico and price differentials soared, Argentina went from importing 5 mt of ephedrine in 2006 to 24 mt in 2008.\textsuperscript{22} Argentina, Brazil and Colombia have reported seizures of ephedrine and pseudoephedrine in the form of pharmaceutical preparations.

\textbf{2.4 Action/Regional responses}

Several countries have increased their controls on precursor chemicals that can be used for ATS manufacture. In 2001, the Council of Foreign Ministers of the Andean Community included within its Action Programme a series of activities aimed at controlling the diversion of precursor chemicals. The measures adopted included the implementation of mechanisms for notification prior to the export of controlled substances, the tightening of controls on companies that use or commercialize controlled substances, the tightening of controls for detecting controlled substances, the strengthening of mechanisms to control illicit manufacture and smuggling, the creation of mechanisms to control transportation and diversion of precursor chemicals within national territories, the creation of national registries of companies importing or exporting precursors, the identification of requirements of controlled substances in licit businesses and the development of intersectorial cooperation aimed at identifying new substances used in drug manufacture\textsuperscript{23}.

In 2008, UNODC and the European Commission supported the project PRELAC, aimed at confronting the diversion of precursor chemicals to Latin America and the Caribbean. The participation of Argentina, Brazil, Chile, Jamaica, Mexico, Panama, Trinidad and Tobago and Venezuela, along with the Andean countries, facilitated the creation of a network of countries in precursor chemical control. Based on the assessment of countries’ strengths and weaknesses, the project supported the development of a system to exchange information. The system is aimed at improving communication and technical monitoring capacities, strengthening links among authorities and private companies and training technicians involved in monitoring and research operations. Such efforts have improved custom practices and have led to the harmonization of norms regarding control and regulation of precursor chemicals.

\textsuperscript{20} International Narcotics Control Board, \textit{Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic}, 2007 (March 2008).
\textsuperscript{21} Agence France Presse, “\textit{Guatemala seizes illegal pseudoephedrine from Hong Kong}”, April 25, 2008.
\textsuperscript{22} Hallan un laboratorio que producía éxtasis. La Nación. 18 de Julio de 2008. El Triple Crimen con el sello de la mafia. Gente Online.
\textsuperscript{23} Andean Community, 2001, pp. 4-5.
Recently, Mexico and several Central American countries have also tightened controls on ephedrine and pseudoephedrine. In 2008, Mexico prohibited imports of ephedrine and pseudoephedrine (except for pseudoephedrine preparations for hospital use) and in April 2010, tightened the regulations for imports of phenylacetic acid, its salts and derivatives, methylamine and other chemicals used in ATS manufacture. In 2009, Belize adopted legislation prohibiting the importation of pseudoephedrine and restricting the importation of ephedrine. In 2010, El Salvador adopted two regulations that prohibit ephedrine and pseudoephedrine. In 2009, the Government of Honduras adopted a ministerial regulation prohibiting the importation, exportation, use and distribution of ephedrine, pseudoephedrine and their salts.

Despite these advances, at least two major constraints impede the potential effectiveness of the measures; first, the lack of appropriate technical capacity and training, and second, the rapid substitution dynamics that take place in the manufacture of ATS stimulants. Many Central American States still lack effective legislation to prevent the diversion of precursor chemicals subject to international control, or poorly enforce existing legislation. Along the same lines, a report of the DROSICAN project funded by the European Union, which trained custom agents of the four Andean countries in all relevant aspects related to the diversion of precursor chemicals and trafficking of synthetic drugs, highlighted that neither custom agents and police, nor health or judiciary officials had the capacity to adequately respond to the challenge created by the control and monitoring of synthetic drugs (both in terms of supply and demand). The Andean Community Commission as well as the Andean Council of Foreign Ministers (SICE 2008) have also undertaken important steps to strengthen control of synthetic drugs and precursor chemicals. Furthermore, due to the already mentioned ease of replacing the chemicals used in illicit ATS manufacture, increased regulation has created displacement and replacement effects, as is the case of increased controls in the US leading to greater manufacture in Mexico, and greater controls in Mexico in turn leading to increased manufacture in Central America.

In response to these problems, several steps are being taken to improve interregional cooperation:

The US Government has supported the creation of International Law Enforcement Academies (ILEAs), which provide high quality training and technical assistance, support institution building and enforcement capability development, and foster relationships between American law enforcement agencies and their counterparts around the world. In 2005, ILEA San Salvador was opened and introduced a Law Enforcement Management Development Programme (LEMDP) for law enforcement and criminal justice officials as well as specialized courses for police, prosecutors, and judicial officials. In 2007, the ILEA Regional Training Center in Lima (Peru) opened to complement the mission of ILEA San Salvador.

At a meeting held in Lima in August 2009, the CICAD Group of Experts on Chemical Substances issued a series of recommendations to CICAD aimed at improving the regulations, training, and technical capacities to monitor the manufacture and trafficking of synthetic drugs. Several Governments expressed the need for simple and reliable methods of testing for ephedrine and pseudoephedrine. Others, including the Government of Costa Rica, reported having already made use of such tests in efforts to curb the diversion of precursor chemicals. In 2009, the Union of South American Nations (UNASUR) established the Consejo Sudamericano de Lucha Contra el Narcotráfico (South American council for the fight against drug trafficking) On October 28, 2010 Chile signed the Union of South American Nations (UNASUR) joint action plan on fighting regional drug problems. Similarly, in December 2009, the European Commission approved the Cooperation Programme between Latin America and the European Union on Anti-Drugs Policies. The Programme is aimed at consolidating drug control coordination and cooperation mechanisms between the European Union and Latin America through policy support and dialogue, the
consolidation of national observatories on drugs and capacity building in reducing illicit drug supply and demand.

In February 2010, experts from Bolivia, Colombia, Ecuador and Peru exchanged experiences with regard to the control of precursors and the negative environmental impact of the disposal of chemicals from the illicit manufacture of synthetic drugs, in the framework of the DROSICAN project. Another similar exchange among experts in Europe, Latin America and the Caribbean took place in Lima, Peru in June 2010 with the support of the Peruvian government in cooperation with the European Commission and UNODC. During the meeting, representatives from 15 countries agreed to strengthen controls on precursor chemicals, and to increase their collaboration with the private sector in the area of precursor control. In June 2010, in Bogota, experts from 11 countries and several international organizations participated in the joint meeting of the task forces of Project Prism and Project Cohesion, held to evaluate the projects’ earlier activities (Operation PILA and the second phase of Operation Dice), which focused on monitoring the trade in and exchange of information on precursors used in the illicit manufacture of amphetamine-type stimulants and heroin, respectively. Experts proposed future operational activities under Project Prism and Project Cohesion and strategies to prevent the diversion of precursors. In October 2010, Chile hosted a chemical and pharmaceutical control meeting of the Organization of American States Inter-American Drug Abuse Control Commission (OAS/CICAD).

Brazil, Colombia, Haiti, Nicaragua and Peru are participating in a global project entitled “Partnership for action on comprehensive treatment: treating drug dependence and its health consequences”. The project activities, which are supported by UNODC, include promoting a sound understanding of drug dependence and its treatment.
### Table 1: Overview of national and international control measures over ATS precursors

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Programme/Measure/Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>2008</td>
<td>Restriction on import/exports of ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>Belize</td>
<td>2009</td>
<td>Prohibition on import and export of pseudoephedrine and restrictions on ephedrine</td>
</tr>
<tr>
<td>Brazil</td>
<td>2001</td>
<td>Chemical control law, Control and inspection of 143 chemicals</td>
</tr>
<tr>
<td>Chile</td>
<td>2010</td>
<td>Government decree to ban sale of ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>Colombia</td>
<td>1998</td>
<td>Creation of Chemical Sensitive Intelligence Unit (SIU) to target and dismantle chemical trafficking organizations</td>
</tr>
<tr>
<td>Colombia</td>
<td>2009</td>
<td>Prohibition of ephedrine and pseudoephedrine preparations</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2010</td>
<td>Restriction of sales of medicines containing ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2010</td>
<td>Prohibition of ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2009</td>
<td>Government agreement for prohibition of ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>Honduras</td>
<td>2009</td>
<td>Ministerial regulation prohibiting importation, exportation, use and distribution of ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>Mexico</td>
<td>2008</td>
<td>Prohibition on imports of ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>Mexico</td>
<td>2010</td>
<td>Strengthened controls over phenylacetic acid, its salts and derivatives, methylamine, hydroiodic acid, and red phosphorous</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2007</td>
<td>Prohibition of ephedrine and pseudoephedrine</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2011</td>
<td>Prohibition of pseudoephedrine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization</th>
<th>Year</th>
<th>Programme/Measure/Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andean Community</td>
<td>2001</td>
<td>Adoption of mechanisms to control diversion of precursor chemicals</td>
</tr>
<tr>
<td>UNODC and European Commission</td>
<td>2008</td>
<td>PRELAC project to address diversion of precursor chemicals</td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td>DROSICAN, Training of custom officers in aspects related to diversion of precursor chemicals and ATS trafficking</td>
</tr>
<tr>
<td>US Government</td>
<td>2005/7</td>
<td>International Law Enforcement Academies to provide training and technical assistance</td>
</tr>
<tr>
<td>UNASUR</td>
<td>2009</td>
<td>Consejo Sudamericano de Lucha contra el narcotráfico</td>
</tr>
<tr>
<td>European Commission</td>
<td>2009</td>
<td>Cooperation Programme, Consolidate drug control coordination and cooperation mechanisms</td>
</tr>
<tr>
<td>CICAD</td>
<td>2009</td>
<td>Issued recommendations to improve regulations, training and technical capacities</td>
</tr>
<tr>
<td>Project Prism</td>
<td>2002/2005</td>
<td>International initiative, facilitated by INCB, to monitor international trade in precursor chemicals most commonly used in illicit ATS manufacture</td>
</tr>
</tbody>
</table>
3. The demand for ATS

One of the main problems related to the demand for ATS in Latin America is that the general population, authorities and technicians have little knowledge on this topic. Most surveys indicate that people associate synthetic drugs with medical use and do not see use as a risk or as a problem. In fact, inappropriate use of pharmaceutical preparations with stimulant properties is a significant problem and the use of these pharmaceuticals, most of which are listed in schedule-IV of the 1971 Convention on Psychotropic Substances, is higher in the Americas than in Europe or Asia. Consistent with the lack of knowledge on ATS, treatment demand is still limited.

While some countries do have treatment programmes, others do not have dedicated drug treatment facilities or the programmes are underfunded. As ATS treatment demand increases, especially in countries like Mexico, more and better protocols for capturing information and for treatment are increasingly required and greater resources need to be channeled into prevention and treatment programmes.

3.1 ATS use

In line with general global trends, there has been an increase in use of synthetic and prescription drugs in Latin America. Although the increase in the use of ATS is not as pronounced as it has been in Asia, it is nevertheless significant.

Use of amphetamines-group substances

Annual prevalence rates of amphetamines-group substance use in South America are almost half those of North America, while prevalence rates in Central America are significantly higher than the North American ones. Mexican experts reported a significant perceived increase in ATS use in 2008. According to the 2008 Mexican National Addiction Survey (Encuesta Nacional de Adicciones), there has been an increase in ATS use, from 0.08% in 2002 to 0.5% in 2008 among the population aged 12-65. The same survey reports higher use rates than the country’s average in 10 states: Baja California, Baja California Sur, Chihuahua, Hidalgo, Distrito Federal, Durango, Jalisco, Sinaloa, Sonora and Michoacán. Countries south of Mexico such as Guatemala have also indicated a worsening ATS use problem.

In South America in 2008, between 1.3 and 1.8 million people were estimated to have used ATS (annual prevalence between 0.5% and 0.7%). The highest prevalence rates are found in Brazil and Suriname, and the lowest in Uruguay. Experts responding to the Annual Report Questionnaire sent by Member States to UNODC consider that there was an increase in the use of amphetamines over 2009. Colombia and Chile, however, reported ATS use as being stable, with annual prevalence rates of 0.5% and 0.4% respectively.

UNODC estimates that 320,000 people in Central America have used amphetamines-group substances, representing 1.3% of the population aged 15 to 64; slightly higher than the estimated percentage of North American users. The highest proportion of amphetamine prevalence is found in El Salvador (3.3%) and Belize (1.4%) and the lowest in Honduras and Nicaragua (0.8%).
Figure 2: Americas: estimated number of ATS users (population aged 15-64), 2009

<table>
<thead>
<tr>
<th>Region</th>
<th>Lower</th>
<th>Upper</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>5,170,000</td>
<td>6,210,000</td>
<td>3,770,000</td>
<td>4,020,000</td>
</tr>
<tr>
<td>Caribbean</td>
<td>30,000</td>
<td>530,000</td>
<td>20,000</td>
<td>240,000</td>
</tr>
<tr>
<td>Central America</td>
<td>320,000</td>
<td>320,000</td>
<td>20,000</td>
<td>30,000</td>
</tr>
<tr>
<td>North America</td>
<td>3,460,000</td>
<td>3,460,000</td>
<td>3,210,000</td>
<td>3,210,000</td>
</tr>
<tr>
<td>South America</td>
<td>1,340,000</td>
<td>1,890,000</td>
<td>520,000</td>
<td>530,000</td>
</tr>
</tbody>
</table>

Source: UNODC

Figure 3: Central America and Mexico: annual ATS prevalence among population aged 15-64, latest year available

<table>
<thead>
<tr>
<th>Country</th>
<th>Prevalence rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Salvador</td>
<td>3.3</td>
</tr>
<tr>
<td>Belize</td>
<td>1.4</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1.3</td>
</tr>
<tr>
<td>Panama</td>
<td>1.2</td>
</tr>
<tr>
<td>Guatemala</td>
<td>0.9</td>
</tr>
<tr>
<td>Honduras</td>
<td>0.8</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0.8</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Figure 4: South America: annual ATS prevalence among population aged 15-64, latest year available

![Graph showing annual ATS prevalence among population aged 15-64 in South America, with prevalence rates ranging from 0 to 0.8%. The graph includes countries such as Suriname, Brazil, Venezuela, Argentina, Paraguay, Guyana, Colombia, Bolivia, Chile, Peru, Ecuador, and Uruguay, with prevalence rates indicated in various countries and years.]


Compared to the general population, prevalence rates among young people are considerably high. According to a survey conducted among secondary school students by UNODC and CICAD in 2004/2005, amphetamines-group substances annual prevalence among students in Colombia and Brazil is around 3.5%, and is around 3% among students in Argentina and Bolivia. The annual prevalence rate among students in Chile and Paraguay is 2.2%, followed by Uruguay with 1.6%, Ecuador 1.3% and Peru with 0.7%. Lifetime prevalence of amphetamines-group substances among students is higher than 7% in Bolivia, between 5% and 7% in Chile and Colombia, and between 1% and 3% in Uruguay, Peru, Ecuador, Guyana and Mexico. High rates may in part reflect confusion about the substance used, which is common for synthetic drugs. A study conducted by the Venezuelan National Anti-Drug Office (ONA) in 2009 among students in Venezuela found a methamphetamine lifetime prevalence of 0.4% and an annual prevalence of 0.1%.

The most recent study of drug use among secondary school students in Argentina found a decreasing trend in the use of prescribed and non-prescribed medicines, and a study released by SENAD- Brazil in 2010 found a decrease in the use of amphetamines-group substances among students, from 3.2% in 2004 to 1.6% in 2010.
A 2009 nationwide study of university students in Brazil identified high levels of amphetamines-group substances use, with past-month use of amphetamine (excluding other forms of amphetamine-type stimulants) at 8.7%, rivaling past-month use of cannabis, which stood at 9.1%. A similar study to assess the knowledge, attitudes, risks and use of synthetic substances among university students in the Andean Community identified lifetime prevalence as being highest among students in Colombia (4.6%), followed by Peru and Bolivia, both at 1.6%, and Ecuador at 1.5%.

**Trends in ecstasy use**

Ecstasy annual prevalence rates are lower in all Latin American countries compared to North America or Europe. Ecstasy annual prevalence rates in North America (1.1%) are eleven times higher than in Central America (0.1%), and almost six times higher than in South America (0.2%). Yet, prevalence rates in Latin America are significantly higher when considering younger populations.

According to the 2011 World Drug Report, experts from most countries in South America reported a stable trend in the use of ecstasy in their countries. In South America, it is estimated that between 520,000 and 530,000 people aged 15 to 64 have used ecstasy, which is 0.2% of the population. The highest prevalence rates are found in Argentina (0.5%) and the lowest in Bolivia, Chile, Guyana, Paraguay, Peru, Suriname and Venezuela (0.1% or lower). Brazil, Colombia and Ecuador report rates of between 0.2% and 0.3%. Data from Colombia showed an increase in the estimated adult prevalence rate of ecstasy use (from 0.2% in 2005 to 0.3% in 2008). Estimates for the Bolivarian Republic of Venezuela for 2005 were revised downward (from 0.2% in 2001 to less than 0.01% in 2005). Peru’s urban household survey data from 2001 to 2007 showed rapid
increases in ecstasy use among the general population.\textsuperscript{24} In Chile, CONACE (the National Council for Narcotics Control) reports a stable trend in ecstasy annual prevalence between 2004 and 2008, but in 2011 the INCSR reported a seasonal increase in ecstasy and LSD use during the summer tourist season. Guyana reports some increase in ecstasy use, although use rates are still very low. In Uruguay, a 2007 report from the National Drug Board (JNE) found the ecstasy lifetime prevalence rate to be at 0.7\% and noted that in 2001 there were no reports of ecstasy lifetime prevalence, thus suggesting a possible increasing trend in that country.

There are between 20,000 and 30,000 estimated ecstasy users in Central America, which represents 0.1\% of the population. The highest ecstasy prevalence rates are found in Panama (0.4\%) and the lowest in El Salvador, Guatemala, Honduras and Nicaragua (0.1\% or lower).

**Figure 6: Americas: ecstasy annual prevalence rates (population aged 15-64), 2009**

<table>
<thead>
<tr>
<th>Percentage (%)</th>
<th>Lower %</th>
<th>Upper %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Caribbean</td>
<td>0.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Central America</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>North America</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>South America</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: UNODC

**Table 2: Annual ecstasy use as a percentage of the population aged 15-64, by country**

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of estimate</th>
<th>Prevalence Rate</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central America</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belize</td>
<td>2005</td>
<td>0.3</td>
<td>Govt</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2006</td>
<td>0.1-0.4</td>
<td>ARQ</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2005</td>
<td>&lt;0.1</td>
<td>CICAD</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2005</td>
<td>&lt;0.1</td>
<td>UNODC</td>
</tr>
<tr>
<td>Honduras</td>
<td>2005</td>
<td>&lt;0.1</td>
<td>UNODC</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2006</td>
<td>&lt;0.1</td>
<td>CICAD</td>
</tr>
<tr>
<td>Panama</td>
<td>2003</td>
<td>0.4</td>
<td>UNODC</td>
</tr>
<tr>
<td><strong>North America</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>2008</td>
<td>&lt;0.1</td>
<td>Govt -CONADIC</td>
</tr>
</tbody>
</table>

\textsuperscript{24} CEDRO, *El problema de las drogas en el Perú* (June 2007).
According to the 2004/2005 UNODC/CICAD study cited above, annual prevalence rates are 3% among Colombian secondary school students, 1.6% among Chilean students, and 1.1% in Ecuador. In Bolivia, Paraguay and Peru, ecstasy annual prevalence is around 0.5%. In Argentina, according to the most recent study of drug use among secondary school students conducted in 2009, 2.6% reported lifetime ecstasy prevalence and 0.9% ketamine prevalence, while the annual prevalence rate for ecstasy was 1.4%. A study conducted by ONA in Venezuela among students in 2009 found ecstasy lifetime prevalence at 0.5%. Increased use among students is related to the spread of all night dance events (“raves”) and noted cases of supply via home delivery through phone and Internet-based operations.

**Figure 7: South America: ecstasy annual prevalence rate among secondary school students in selected South American countries, 2004/5**

<table>
<thead>
<tr>
<th>South America</th>
<th>2004/5</th>
<th>Annual Prevalence Rate</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>2006</td>
<td>0.5</td>
<td>Govt</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2007</td>
<td>0.1</td>
<td>ARQ</td>
</tr>
<tr>
<td>Brazil</td>
<td>2005</td>
<td>0.2</td>
<td>UNODC</td>
</tr>
<tr>
<td>Chile</td>
<td>2008</td>
<td>0.1</td>
<td>ARQ</td>
</tr>
<tr>
<td>Colombia</td>
<td>2008</td>
<td>0.3</td>
<td>Govt</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2005</td>
<td>0.2</td>
<td>UNODC</td>
</tr>
<tr>
<td>Guyana</td>
<td>2002</td>
<td>0.1</td>
<td>UNODC</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2005</td>
<td>&lt;0.1</td>
<td>UNODC</td>
</tr>
<tr>
<td>Peru</td>
<td>2005</td>
<td>&lt;0.1</td>
<td>ARQ</td>
</tr>
<tr>
<td>Suriname</td>
<td>2007</td>
<td>&lt;0.1-0.2</td>
<td>Govt</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2006</td>
<td>0.2</td>
<td>Govt</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2005</td>
<td>&lt;0.1</td>
<td>Govt</td>
</tr>
</tbody>
</table>


Source: UNODC/CICAD, 2004/2005
3.2. ATS Treatment Demand

There is little information on treatment demand for drug use in Latin America, especially in the case of ATS, partially because there is limited treatment demand for this type of drug use, but also because protocols for capturing information are not specific about synthetic drugs. Countries such as Colombia, Argentina, Peru, Paraguay and Venezuela have conducted studies of persons in treatment for drug use and of patients in emergency rooms, which provide some useful information. For countries reporting information, treatment demand for amphetamines is higher than treatment demand for problems derived from ecstasy use. Treatment demand in Guatemala and Mexico is strikingly high when compared to the rest of countries in the region; a possible reflection of the increasing problems these two countries are facing with ATS manufacture, trafficking and use.

Table 3: ATS as primary use drugs in people treated for drug use

<table>
<thead>
<tr>
<th>Country</th>
<th>Amphetamine</th>
<th>Ecstasy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central America</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belize</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1.4</td>
<td>n.a</td>
</tr>
<tr>
<td>El Salvador</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Guatemala</td>
<td>42.1</td>
<td>21.1</td>
</tr>
<tr>
<td>Honduras</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Panama</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td><strong>North America</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>26.2</td>
<td>n.a</td>
</tr>
<tr>
<td><strong>South America</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1.4</td>
<td>n.a</td>
</tr>
<tr>
<td>Brazil</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Chile</td>
<td>2.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Colombia</td>
<td>3.6</td>
<td>n.a</td>
</tr>
<tr>
<td>Ecuador</td>
<td>0.4</td>
<td>n.a</td>
</tr>
<tr>
<td>Guyana</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Paraguay</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Peru</td>
<td>0.3</td>
<td>n.a</td>
</tr>
<tr>
<td>Suriname</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Uruguay</td>
<td>0.6</td>
<td>n.a</td>
</tr>
<tr>
<td>Venezuela</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>


Among the other countries reporting information, Colombia presents the highest rates of demand for treatment. A study conducted among patients in treatment in Colombia in 2004 (Mejia Motta 2004) revealed that 18.3% of patients had used ecstasy or other synthetic drugs and 4% reported amphetamines use, although only 7.6% of patients maintained that use of these drugs was the motivation for requesting a consultation. Although there is no recent comparable data, these results confirm that treatment demand for ATS use is significant in Colombia.
In Argentina, a study conducted by SEDRONAR (Secretariat of Planning for the Prevention of Drug Addiction and Drug Trafficking) in 2009 about the efficiency of drug treatment
programmes revealed that most patients treated between 2006 and 2008 reported alcohol (69%), cocaine (61%) and cannabis (64%) as the most prevalent drugs used, while LSD was reported by 6.8% of patients. Ten percent of patients reported the use of pills along with other drugs in the year previous to beginning their treatment. No patients reported LSD or ATS as being the drug that motivated their request for treatment and 10% reported the use of prescribed or non-prescribed medicines. These numbers show that treatment demand for ATS stimulants is still low in Argentina.

In Paraguay, a study by SENAD in 2005 found that 0.7% of patients in treatment for drug use reported to have requested treatment for the use of amphetamines, and 66.7% of them were aged between 15 and 19. Seventy five percent of amphetamine users and 100% of methamphetamine users were in ambulatory treatment. A similar study conducted by DEVIDA (National Commission for Development and Life without Drugs - Peru) in Peru in 2007 found that in 2007, only 0.2% of patients reported treatment requests due to amphetamine use, 0.3% due to ecstasy use, and 0.3% due to ketamine use. The percentage of treatment demand for ecstasy and ketamine increased compared to figures from 2005 and 2006. In 2008 the National Antidrug Office of Venezuela conducted a study of patients in treatment facilities and found that 0.06% of the population reported amphetamines as the first drug of use and 0.04% reported ecstasy as the first drug used. These numbers represent a slight increase in amphetamines compared to results from a similar study conducted in 2006 (0.05%) and a decrease in ecstasy (0.09% in 2006). Although the study does not specify whether treatment was requested for these specific drugs, it suggests that treatment demand for ATS use in Venezuela is very low compared to other countries where information is more readily available.

Available information thus shows that treatment demand for ATS use is still low in Latin America, and even in cases where patients report ATS use, they do not necessarily report this drug as the main reason for requesting treatment, suggesting that for many users, ATS use may not yet be seen as harmful enough to warrant treatment.
4. Implications for response

The report has shown that ATS information, especially with regard to use, is still limited in Latin America. Studies conducted in some countries have confirmed use of ecstasy and, in some cases, amphetamines. One particularly worrying trend is that levels of use are quite high among young students throughout the region.

The increasing size and complexity of illicit ATS operations points to the involvement of criminal organizations in some of the manufacture and trafficking dynamics. This trend has been particularly apparent in Mexico, where local trafficking organizations seem to be increasingly engaged in the illicit manufacture and trafficking of ATS, particularly methamphetamine. The violence of criminal organizations has a destabilizing effect and a wave of violence in Mexico has produced more than 34,000 deaths since 2006. Indications are that some Mexican organizations have moved southwards, especially to Guatemala, where they will likely contribute towards increasing already high levels of violence and instability. In 2009, Guatemala witnessed 6,500 homicides, displaying a per capita homicide rate almost double that of Mexico, and even though homicides decreased to 5,842 in 2010, violence is still fueled by local gangs, illicit groups, and Mexican drug trafficking organizations (especially the Sinaloa Cartel and Los Zetas) that fight for control of illicit markets. Thus, increasing awareness and knowledge on ATS manufacture, trafficking and use could be a crucial tool towards identifying the ways in which trafficking organizations try to expand their power through the exploitation of these emerging markets.

Little forensic data on the substances used are available, and thus it is difficult to determine the chemical composition of the synthetic drugs that are circulating in the region. In 2010, a study was conducted in Colombia to analyze samples of synthetic drugs sold on illicit markets in the city of Bogota. A total of 330 samples were collected. The basic components of the samples were analyzed using gas chromatography mass spectrometry and led to the identification of 149 different chemical substances. The results showed that a large variety of substances, including active pharmaceutical ingredients, veterinary medicines, illicit drugs of natural origin, and industrial chemical substances are sold as ‘synthetic drugs’. More studies of this type are necessary not only to identify the type of drugs circulating but also to identify precursors used in the manufacture of these drugs.

Much needs to be done regarding synthetic drugs in Latin America, and obtaining better data on all aspects of ATS manufacture and use should be a priority. There is a great need to further strengthen efforts to collect data and share information on issues such as the size of clandestine laboratories detected, manufacturing methods, precursors used, purities, ATS sources and their precursors. Epidemiological data on the trends and patterns of ATS use, the social, economic, health and cultural dimensions of such use and the long-term effects of such use is also important.

Such information should be used to inform the general population about the implications of the illicit manufacture, trafficking and use of synthetic drugs for health, society and security. Even among experts, ATS is often seen as a problem of somewhat lower priority. However, the limited data that is available show that ATS use is a fact in many countries of the region, particularly among younger people. It is unlikely that ATS use will go away on its own and there is the risk that use could spread and become part of the mainstream consumer culture. It is important to

address the problem before it reaches the magnitude that exists in other regions. Reliable data on drug use should also serve to implement targeted prevention efforts to reach those which are most vulnerable or to improve the response to treatment.

Training is of paramount importance given the variety of ATS substances available on the market and the complexity of ATS manufacturing methods. Drug control officials responsible for controlling and monitoring these types of substances in ports, airports, and border crossings need to be trained. In addition, the capacity of laboratories should be strengthened to facilitate the analysis of specific substances, their correct classification and their chemical composition.
**References**


UNODC (2007a) La prevención del consumo de estimulantes de tipo anfetamínico entre los jóvenes. Guía de políticas y programas. Viena: Oficina de las Naciones Unidas contra la Droga y el Delito.


