AMPETAMINE-TYPE STIMULANTS (ATS)
AND OTHER SYNTHETIC DRUGS
GLOBAL AND HEMISPHERIC TRENDS
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ASSOCIATE STAFF MEMBER WITH OAS/SMS/CICAD
Amphetamine-Type Stimulants (ATS) and other synthetic drugs
Global and Hemispheric Trends

Fifty-Second Regular Session
OAS/SMS/CICAD
November 28-30, 2012 - San José, Costa Rica

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Global SMART Programme Latin America - UNODC
Associate Staff Member with OAS/SMS/CICAD
Outline

1. The problem of the ATS and NPS
2. Seizures of ATS and Ecstasy
3. The response to the problem of the ATS and other synthetic drugs
   – The Global SMART Programme
4. Main conclusions
5. Considerations for response and future challenges
1. The problem of the ATS and NPS
Amphetamine-type stimulants seized worldwide, 2002-2010


a/ Including seized amphetamine, “ecstasy”-type substances, methamphetamine, non-specified amphetamine-type stimulants, other stimulants and prescription stimulants.
## Annual prevalence of illicit drug use among the population aged 15-64, 2008-2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Cannabis</th>
<th>ATS (excluding &quot;ecstasy&quot;)</th>
<th>Ecstasy-group</th>
<th>Cocaine</th>
<th>Opioids</th>
<th>Opiates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>2.9</td>
<td>1.2</td>
<td>0.6</td>
<td>0.4</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>2009</td>
<td>2.8</td>
<td>1.3</td>
<td>0.6</td>
<td>0.5</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>2010</td>
<td>2.6</td>
<td>1.2</td>
<td>0.6</td>
<td>0.4</td>
<td>0.8</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Regional overview

North America: ATS laboratories, seizures and annual prevalence rates, 2005-2009

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>DRUG GROUP</th>
<th>2005</th>
<th>2006</th>
<th>2007*</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory (#)</td>
<td>Methamphetamine</td>
<td>13,052</td>
<td>8,218</td>
<td>6,138</td>
<td>7,259</td>
<td>9,641</td>
</tr>
<tr>
<td></td>
<td>Amphetamine</td>
<td>9</td>
<td>29</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Combined amphetamines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Ecstasy-group substances</td>
<td>37</td>
<td>35</td>
<td>27</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13,098</td>
<td>8,282</td>
<td>6,168</td>
<td>7,280</td>
<td>9,653</td>
</tr>
<tr>
<td>Seizures (kg)</td>
<td>Methamphetamine</td>
<td>7,207.3</td>
<td>7,810.4</td>
<td>6,837.2</td>
<td>8,087.0</td>
<td>15,592.5**</td>
</tr>
<tr>
<td></td>
<td>Amphetamine</td>
<td>57.2</td>
<td>38.6</td>
<td>45.4</td>
<td>428.4</td>
<td>182.8</td>
</tr>
<tr>
<td></td>
<td>Non-specified amphetamines</td>
<td>157.8</td>
<td>1,377.5</td>
<td>163.9</td>
<td>35.5</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Ecstasy-group substances</td>
<td>2,227.1</td>
<td>3,008.0</td>
<td>3,981.1</td>
<td>3,279.5</td>
<td>3,816.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9,649.4</td>
<td>12,234.5</td>
<td>11,027.7</td>
<td>11,830.4</td>
<td>19,592.2</td>
</tr>
<tr>
<td>Annual Prevalence (15-64)</td>
<td>Amphetamines-group substances</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.05%</td>
<td>1.1%</td>
</tr>
<tr>
<td></td>
<td>Ecstasy-group substances</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.9%</td>
<td>0.8%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

* From 2007 onwards, reported prevalence percentage is based on midpoint of range. ** Cuarto Informe de Ejecución, 2011; NDIC, 2010b.
- Not reported.
Source: UNODC ARQ/DELTA
### Regional overview

**South America, Central America and Caribbean: ATS laboratories, seizures and annual prevalence rates, 2005-2009**

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>DRUG GROUP</th>
<th>2005</th>
<th>2006</th>
<th>2007*</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory (§)</td>
<td>Methamphetamine</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Amphetamine</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Other synthetic/combined stimulants</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><em>Ecstasy-group substances</em></td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Seizures (kg)</td>
<td>Methamphetamine</td>
<td>0.2</td>
<td>-</td>
<td>-</td>
<td>30.4</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Amphetamine</td>
<td>35.6</td>
<td>57.6</td>
<td>496.7</td>
<td>10.5</td>
<td>162.9</td>
</tr>
<tr>
<td></td>
<td>Non-specified amphetamines</td>
<td>104.6</td>
<td>29.1</td>
<td>22.7</td>
<td>0.4</td>
<td>25.8</td>
</tr>
<tr>
<td></td>
<td><em>Ecstasy-group substances</em></td>
<td>140.8</td>
<td>52.8</td>
<td>102.5</td>
<td>46.4</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>281.2</td>
<td>139.5</td>
<td>621.9</td>
<td>87.7</td>
<td>243.2</td>
</tr>
<tr>
<td>Annual Prevalence (15-64)</td>
<td>Amphetamines-group substances</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.9%</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td><em>Ecstasy-group substances</em></td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

*From 2007 onwards, reported prevalence percentage is based on midpoint of range.*
- Not reported.

Source: UNODC ARQ/DELTA
New psychoactive substances (NPS)

- New psychoactive substances ('bath salts', 'spice')
- Pharmacological properties and effects similar to known illicit substances.
- Not controlled by the United Nations drug control treaties.
- Misleading labelling ("incense", "plant food", "bath salt", "scented sachet").
‘New psychoactive substances- an overview’

- **Ketamine**

- **Piperazines:** BZP, mcPP, TFMPP

- **Synthetic cathinones:** Mephedrone, MDPV, flephedrone, naphyrone
‘New psychoactive substances- an overview’

- **Synthetic cannabinoids:** JWH-122, ‘spice’, ‘yucatan fire’

- **Plant-based substances:** Kratom (*mitragyna speciosa*), Salvia *divinorum*
Emerging challenges…

• New psychoactive substances
• Emerging precursors (e.g. PAA, esters of PAA)
• Information gaps: unknown origin (Asia? Packaging in Europe?), unknown chemical composition, variety of different physical forms (powder, pills), misleading labelling (‘spice’- synthetic cannabinoids?)
• Lack of systematic monitoring
  • Results in low awareness and low identification of substances

Table 1: New psychoactive substances through the years

<table>
<thead>
<tr>
<th>Year</th>
<th>Chemical group</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>fentanyl</td>
<td>α-methylfentanyl</td>
</tr>
<tr>
<td></td>
<td>phenethylamines</td>
<td>DOM, MDMA</td>
</tr>
<tr>
<td>1980</td>
<td>tryptamines</td>
<td>DiPT, Foxy</td>
</tr>
<tr>
<td>2000</td>
<td>piperazines</td>
<td>BZP, mCPP, TFMPP, 2C-B</td>
</tr>
<tr>
<td></td>
<td>synth. cannabinoids</td>
<td>JWH-018,-073,-200</td>
</tr>
<tr>
<td></td>
<td>synth. cathinones</td>
<td>mephedrone, MDPV</td>
</tr>
</tbody>
</table>
2. Seizures of ATS and Ecstasy
ATS seizures on the rise, 2010
countries and territories reporting seizures* of more than 10 kg

Mixed trends for “ecstasy” seizures, 2010
(countries and territories reporting seizures* of more than 1 kg)

3. The response to the problem of the ATS and other Synthetic Drugs
UNODC The Global S.M.A.R.T. Programme

*Synthetics Monitoring: Analyses, Reporting and Trends*

- **Objective:** Member States are able to make effective evidence-based decisions to counter the problem of synthetic drugs.

- **Outcome 1:** Generate and *manage* information on synthetic and other drugs.

- **Outcome 2:** Drug information *analysed* and reported on at national, regional and global level.

- **Outcome 3:** Drug information is *used* by countries for evidence-based policy and strategic/tactical interventions.

Features of UNODC Global SMART:
- **Online data collection**
- **Situation reports**
- **Regional assessments**
Latin America is a priority region for the SMART project. Countries participating in the SMART programme from September 2011 include Argentina, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru, Uruguay, and Venezuela. The actions of this project in Latin America are possible through the support of Canada and the U.S.
Global SMART - a source of global and regional reports on synthetic drugs
The Global SMART Update -
Global synthetic drugs monitoring,
2x per year,
available in English and Spanish

Global SMART Update, Volume 7

Special segment of SMART Update highlights topical issue, Volume 7 changing approach of illicit ATS manufacture—highly relevant for Latin America and methamphetamine manufacture.

The changing faces of illicit ATS manufacture

Illicit ATS manufacture requires several chemicals but is, to a certain extent, highly flexible. As a result of the strengthening of controls on the most commonly used precursors, illicit manufacturers have changed their approach. A new trend is emerging whereby traditional precursors are being replaced with alternative types of precursors and chemically modified precursors not under international control.

The precursors for eutectic-group substances include eutectic blends of 1,4-butanediol, acetic anhydride and 3,4-methylenedioxy-N-methylamphetamine (MDMB-4CH3OMe) — also known as piperonal methyl ester (PME) — which are all under international control. The internationally controlled substance 3-phenyl-2-pyrroline (P2P), also known as benzyl methyl ketone (BMK) and its precursor phenylacrylonitrile can be used for the synthesis of both amphetamine and methamphetamine. Ephedrine and pseudoephedrine are the main precursors for methamphetamine and are also under international control, in their bulk forms.

Decline and recovery of the ecstasy market

In 2002, global volumes of 3,4-MDP-2-P for MDMA began to decline sharply to the extent that almost no volumes of the substance were reported in 2005. During the same period, seemingly as a direct result of the apparent shortage of the essential chemical, the ecstasy market went into decline. Historically, 3,4-MDP-2-P has been produced in China and was subsequently smuggled into Europe for illicit ecstasy manufacture. However, as China began to implement stricter controls and legal provisions to curb production alongside successful law enforcement interventions, a decline in availability of the precursor was observed, and reports of a declining market were published.

Flexible MDMA manufacture

Piperonal methyl ester (PME)

3,4-methylenedioxy-N-methylamphetamine (MDMB-4CH3OMe)

Flexible amphetamine manufacture

Salicylic acid

Phenylacetic acid

N-ethylamphetamine

N-ethylamphetamine (MDMA)

L-phenylalanine

P2P bisulfate salt

“Microed” ATS precursors

Substances such as the baseless product of 3,4-MPD and MDMAM are often referred to as “microed” precursors. In 2013, attempts to control the traditional form of ATS precursors, such as 3,4-MPD and 3,4-MDP-2-P for packaging and smuggling these substances in a way that is unrecognizable to law enforcement authorities (e.g., due to different physical characteristics such as powder form instead of liquid, different labeling, etc.) and then later converting them to the essential ATS precursor through the use of several readily available chemicals.

Available at: http://www.unodc.org/unodc/en/scientists/smart.html
Global SMART Programme Latin America: Activities conducted 2011 - 2012

1. Information generation

2. Reporting

3. Regional Meetings
4. Main Conclusions

The production, trafficking, and consumption of ATS, particularly methamphetamine, is a serious global problem, but also a major problem in many countries of the Americas.

Brazil: Federal Police records largest seizure of synthetic drugs

BRAZIL — 5 July 2012. The Federal Police seized more than 74,000 ecstasy pills smuggled from Portugal, on two different occasions. Some 28,000 ecstasy pills were seized at the International Airport of Guarulhos - Sao Paulo, leading to the arrest of a Brazilian national, only days after a seizure of 46,000 ecstasy pills at R$io de Janeiro International Airport also arriving from Portugal (Lisbon). Following a search by the Federal Police, two blocks of ecstasy, 10,000 points of LSD and cannabis were seized in the apartment of the three suspects. This represents the largest seizure of synthetic drugs ever made by the Federal Police at R$io de Janeiro International Airport. The arrestees were charged with international drug trafficking and face a penalty of 5 to 25 years imprisonment.

Guatemala: two ATS laboratories dismantled

SAN MARCOS and SANTA ROSA, Guatemala — 19 March & 5 April 2012. Two clandestine laboratories manufacturing amphetamine-type stimulants were dismantled during two operations in East and South Guatemala. In March, a methamphetamine laboratory was dismantled by the General Counter Narcotics Directorate in coordination with the Public Ministry, in the village Sisaltepeque, Zacapa, San Marcos (East Guatemala). Authorities found six plastic barrels that contained approximately 50 kg of a yellow solid, believed to be an intermediate product of methamphetamine. The second laboratory was uncovered in Taxisco, Santa Rosa (South Guatemala) leading to the arrest of a Mexican and a Guatemalan national. Quantities of sodium hydroxide and tannic acid were also found in the laboratory.

Uruguay: increase control of pharmaceutical preparations containing pseudoephedrine and ephedrine

URUGUAY — March 2012. A new decree entered into force by the Ministry of Health of Uruguay providing controls on the sale of pharmaceutical preparations containing ephedrine and pseudoephedrine in order to prevent diversions onto the illicit drug market. Traffickers currently divert large amounts of both drugs in bulk and pharmaceutical preparation for the synthesis of methamphetamine. The decree ensures that the use of these substances is limited to scientific and medical purposes. Import and export authorities are required for ephedrine and pseudoephedrine and will be issued by the health authority in Uruguay. Prior information on the need for importing and exporting those substances or pharmaceutical products containing those substances is needed by the health authorities.

More than 146 mt of chemical precursors seized in West Mexico

MEXICO — 13 May 2012. A joint action by the Tax Administration Service, the Secretariat of the Navy of Mexico and the Attorney General’s Office led to a total seizure of 130 mt of monomethylamine and phenylmethyl acetate, chemicals used in the manufacture of methamphetamine. The seven containers arrived at the port of Lazaro Cardenas, Michoacan (West Mexico), from China and were bound for Honduras. No arrests were made in connection with the precursor chemical seizure. This marks the first attempt in 2012, of precursors being trafficked from Mexico to Honduras. On 17 June another 10 mt seizure of the chemical precursor methamphetamine was made at the port of Manzanillo, Colima (West Mexico) onboard a ship from the Republic of Korea. The containers stored about 640 bags of 25 kg each.
Main Conclusions

• Special attention should be paid to chemical precursors - the raw material for the manufacture of synthetic drugs

• In Latin America: less knowledge by authorities and general public about their chemical composition and the harmful effects on consumers

• Increasing traffic, production, and consumption of synthetics affects all countries of the Americas
5. Considerations for response and future challenges

- The constitution of a group of experts in the field of synthetic drugs and new drugs would allow a detailed assessment of the problem in the region and would set the necessary recommendations for a comprehensive approach.

- The incorporation of new countries, collecting updated information on synthetic drugs, and disseminating this information are the main future challenges of the SMART Programme in Latin America.
THANK YOU FOR YOUR ATTENTION

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More sources for ATS information
www.unodc.org       www.apaic.org
www.cicad.oas.org