What does the Term “ATS” Encompass?

- Two main groups:
  - Amphetamine-group substances (amphetamine [incl. fake Captagon], methamphetamine, methcathinone)
  - Ecstasy-group substances (MDMA and its analogues, and substances containing or thought to contain MDMA)

What we know...globally

- ATS comprise the 2\textsuperscript{nd} most widely used illicit drug category in the world, following cannabis (UNODC, 2012).
- The type of ATS abused varies by region
  - Amphetamines in Europe and the Middle East
  - Methamphetamine in the US, Australia, and SE Asia
- Different precursors used in the manufacturing process
- Increasing reports of abuse of MDMA and synthetic cathinones
- Increasing problems with the use of Khat
What we know…in the U.S.

- Much of the previous attention about methamphetamine was focused specifically on men who have sex with men
  - High prevalence of use
  - Sex-drug connection
- Recent prevalence and initiation data imply that the meth epidemic is on the rebound
- Meth dependence is a chronic, relapsing brain disease that affects the user’s brain, body, and behavior
- Methamphetamine addiction is treatable
Methamphetamine

Methamphetamine Powder

Users’ Description: Beige/yellowy/off-white powder

Base / Paste Methamphetamine

Users’ Description: ‘Oily’, ‘gunky’, ‘gluggy’ gel, moist, waxy

Crystalline Methamphetamine

Users’ Description: White/clear crystals/rocks; ‘crushed glass’ / ‘rock salt’
The active ingredient in making “homemade” methamphetamine is ephedrine or pseudoephedrine, commonly found in over the counter cold remedies.
Chemical Ingredients, continued

- Trichloroethane (Gun Scrubber)
- Toluene (Brake Cleaner)
- Methanol (Gasoline Additive)
- Gasoline
- Kerosene
- Lithium (Camera Batteries)
- Anhydrous Ammonia (Farm Fertilizer)
- Red Phosphorus (Matches)
- Iodine (Veterinarian Products)
- Muriatic Acid
- Campfire Fuel
- Paint Thinner
- Acetone
- Sulfuric Acid (Drain Cleaner)
- Table Salt/Rock Salt
- Sodium Hydroxide (Lye)
- Alcohol (Rubbing/Gasoline Additive)
A US government effort to reduce the supply of pseudoephedrine precursors to make methamphetamine successfully disrupted the methamphetamine market and interrupted a trajectory of increasing usage—for a while.

- The price of methamphetamine tripled
- Purity declined
- Amphetamine-related hospital and treatment admissions dropped 50 percent and 35 percent
- Felony methamphetamine arrests fell 50 percent
Alternative Precursor Sources

- India & China – primary sources of supply
- Mexican DTOs increasingly turning to use of P2P and Central/South America sources
- Shipments often transit Middle East, Europe, Africa, and South America en route to Mexico
- South Africa
  - Third largest non-U.S. importer of pseudoephedrine
  - Fourth largest non-U.S. importer of ephedrine

Epidemiology of Methamphetamine

United States
...Despite these efforts, use and lab busts in the US are on the rise!

Estimated Number of Past 30-Day Meth Users and Clandestine Meth Lab Incidents:

2004-2009

Estimated Users

Number Reporting Past 30-Day Use → Clandestine Lab Incidents

Metric Tons of Suspected Meth Submitted to the DEA Regional Laboratories: 2000-2012*

[Graph showing the trend of metric tons of suspected meth submitted from 2000 to 2012, with a significant increase in 2012.]

Projected. Source: DEA STRIDE
U.S.: Past Month Methamphetamine Users By Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>731,000</td>
</tr>
<tr>
<td>2007</td>
<td>529,000</td>
</tr>
<tr>
<td>2008</td>
<td>314,000</td>
</tr>
<tr>
<td>2009</td>
<td>502,000</td>
</tr>
<tr>
<td>2010</td>
<td>353,000</td>
</tr>
</tbody>
</table>

SOURCE: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2010 findings.
U.S.: Primary Methamphetamine Treatment Admissions – 2000-2010

% of all admissions

SOURCE: SAMHSA, Office of Applied Studies, Treatment Episode Data Set, 2010 findings.
U.S.: Percentage of Admissions for Meth By Route of Administration

SOURCE: SAMHSA, Office of Applied Studies, Treatment Episode Data Set, 2010 findings.
The Meth Problem Remains Significant in Traditional Use Regions (Western U.S.)

Methamphetamine Use in the Past Year among Persons Aged 12 and Older, By State: Percentages of Annual Averages Based on 2005-2008

Percentage of Persons:  
- 0.04 - 0.19  
- 0.20 - 0.39  
- 0.40 - 0.89  
- 0.90 - 1.14  
- 1.15 - 2.0  

Source: SAMHSA, Office of Applied Studies, NSDUH, 2005-2008
U.S.: Admissions for Primary Meth Users By Region and Year

SOURCE: SAMHSA, Office of Applied Studies, Treatment Episode Data Set, 2010 findings.
Epidemiology of ATS

A Global Look
Illicit Market for ATS: Major Themes (2012)

1. A picture of stability?
2. Increased methamphetamine seizures in N. America

Amphetamine market expands in Europe

1. Methamphetamine seizures in SE Asia
2. Decrease in ATS seizures vs. increase in detected labs in Europe
3. Ecstasy market shows signs of recovery
4. Increasing flexibility in ATS manufacture
5. Emerging markets and trafficking routes

In 2010, there was estimated to be between 14-52 million ATS users globally.

Amphetamine seizures in Europe continue to fall
Signs of recovery in the “ecstasy” market...

Countries reporting “ecstasy” manufacture in 2010 were Australia, Canada, Indonesia, Malaysia, and Argentina.

Emerging Markets and Trafficking Routes

West Africa
- ATS, mostly methamphetamine, smuggled through West Africa to other parts of the world, most notably East Asia (Japan and Republic of Korea)
- Seizures started to increase in West Africa in 2008

Near and Middle East
- Increases in annual legitimate requirements for precursor chemicals of ATS in places like the Islamic Republic of Iran, Syrian Arab Republic, and Pakistan
- Amphetamine market may be expanding in Iraq (2010 saw record seizures of 1.6 tons of amphetamine in the form of Captagon®)
- Reports of seizures in Israel and Jordan, as well
The Use of Amphetamine in Europe

- The spread of methamphetamine is limited
  - Methamphetamine long documented problem in Czech and Slovak republics

- Europe accounted for less than 1% of global methamphetamine seizures in 2004-05

- Diffusion throughout Europe is impeded by a strong market for other stimulant drugs (cocaine, amphetamine, and MDMA)

- In many parts of Europe, amphetamine use is well established (especially by injection)

Crystal Meth is Indonesia’s Primary Illicit Drug Threat

- Seizures rose 79% in 2011 to 1,161 kg from the 649 kg seized in 2010
- Use has expanded continually, particularly among laborers, students and commercial sex workers.
- Of the estimated 3.7 to 4.7 million drug users in Indonesia in 2011, 1:3 (about 1.2 million) used crystal meth and 1:5 (some 950,000) used ecstasy.
- In 2011, arrests related to crystal meth accounted for about 62% of all drug-related arrests, compared with 53% in 2010 and 38% in 2009.

Captagon®

- Historically was a pharmaceutical (fenethylline); hasn't been legitimately made in years

- All tablets seized now are fake; illicitly manufactured, consisting of low levels of amphetamine (~10-20 mg/tablet), caffeine, and bulking agents.

- Almost exclusively trafficked for Mid East markets.
  - Increasingly trafficked through Syria from Turkey and Lebanon destined for the Gulf States, in particular, Saudi Arabia
  - Smuggled through Syria to Iraq
  - Reports of clandestine production in Romania

SOURCES: UNODC, personal communication with M. Nice, 12/12/12; 2009 World Drug Report, p. 130.
Both Australia and UK reported MDMA “drought” for the last few years. Australian EDRS reports drop in MDMA use from 52% in 2003 to 27% in 2011 but increased 32% in 2012. Shift from PMK to safrole to make MDMA. Because MDMA is harder to get, have MDMA users switched to other stimulants, including khat and synthetic cathinones?

"http://www.ecstasydata.org/stats_substance_by_year.php"
Summary

- Precursor laws have a temporary effect on availability and use, as both have quickly rebounded, as has among of meth seized and lab incidents (U.S.).
- With initiation rates on the rise, prevention programs need to continue to address meth and related issues.
- Treatment outcome data indicate that psychosocial treatments used in community treatment programs produce comparable outcomes for methamphetamine dependent individuals and those with other forms of drug dependency.
Thank you for your time!

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