The Developing Methamphetamine Problem: Selected CESAR Publications
July 1996–April 2006*

Center for Substance Abuse Research (CESAR)
4321 Hartwick Rd, Ste 501
College Park, MD 20740
301-405-9770
301-403-8342 (fax)
cesar@cesar.umd.edu
http://www.cesar.umd.edu

* Updated April 4, 2006. New selections are added to this publication as they are released. Check www.cesar.umd.edu periodically for the most up-to-date version of this publication.

This publication was supported by BJAG-2005-1206, awarded by the U.S. Department of Justice (USDOJ) through the Maryland Governor’s Office of Crime Control and Prevention (GOCCP). The Assistant Attorney General, Office of Justice Programs, coordinates the activities of the program offices and bureaus. Points of view or opinions contained within this document are those of the authors and do not necessarily represent the official position or policies of USDOJ or GOCCP.
The Developing Methamphetamine Problem: July 1996–April 2006

Table of Contents

CESAR FAX
Using Urine Specimens from Parolees/Probationers to Create a Statewide Drug Monitoring System (March 6, 2006)

Proposed FY 2007 Federal Drug Control Budget Increases Funding for Drug Courts; Decreases Funding for Many State and Local Drug Programs (February 27, 2006)

Study Finds 5% of Pregnant Women Use Methamphetamine in Methamphetamine-Prevalent Areas of the U.S. (February 20, 2006)

Colorado Survey Finds Relatively High Rates of Lifetime Club Drug Use Among Adolescent Treatment Clients (February 13, 2006)

Use of Depressants Among U.S. 12th Graders Increases While Amphetamine Use Decreases; Meth Use Not Spreading in This Population (December 19, 2005)

BJA Report: Drug Courts May Be an Effective Tool for Communities Facing Methamphetamine Problems (October 31, 2005)

New National Household Survey Data Illustrates Geographical Variation in Methamphetamine Use (October 3, 2005)

New CEWG Advance Report Released: Cocaine Most Widely Abused Illicit Stimulant; Methamphetamine Abuse Varies (September 19, 2005)

Leading Doctors, Scientists, and Researchers Request that Media and Policymakers Stop Perpetuating "Meth Baby" Myths (August 15, 2005)

Methamphetamine Named Top Problem by Majority of County Law Enforcement Agencies in Western U.S.; Will the East Follow? (July 25, 2005)

Methamphetamine Treatment Admission Rates Higher than Those of Cocaine and/or Heroin in Western States (March 21, 2005)

National Methamphetamine Epidemic? (March 7, 2005)

Cocaine and Methamphetamine Greatest U.S. Drug Threats, According to State and Local Law Enforcement Agencies (August 16, 2004)

Cocaine, Heroin, Methamphetamine, and Marijuana Are Greatest Drug Threats to U.S. (March 11, 2002)
Arrestees Who Use Methamphetamine Less Likely Than Non-Meth Users to Be Arrested for a Violent Offense (July 5, 1999)

Arrestee Methamphetamine Use Shows Clear Regional Variations (June 28, 1999)

Methamphetamine Use in the Western United States: An In-Depth Look (July 28, 1997)

Arrestee Methamphetamine Use Concentrated in West Coast DUF Sites (August 26, 1996)

National DAWN Data Show Significant Increases in Drug-Related Emergency Department Episodes (July 1, 1996)

**CESAR BRIEFING**
Methamphetamine in Maryland (March 2005)

**Online Publications**
Drug Information: Methamphetamine (2002)
Using Urine Specimens from Parolees/Probationers to Create a Statewide Drug Monitoring System

Trends in the drugs detected in urinalysis from offenders have been found to provide advance warning of drug epidemics in the greater community. The recent demise of the national ADAM (Arrestee Drug Abuse Monitoring) program and the Maryland OPUS (Offender Population Urine Screening) program has left Maryland and other states without important tools for forecasting drug epidemics. DEWS staff therefore worked with the Maryland Division of Parole and Probation (DPP) to pilot an innovative program of expanded testing of urine specimens that DPP staff routinely collect from probationers and parolees. DEWS staff over-sampled drug positive specimens that the DPP Guilford Laboratory had tested for a panel of five drugs (benzodiazepines, cocaine, marijuana, opiates, and PCP). The study specimens were then sent to an independent, private laboratory who tested them for the presence of more than 30 drugs. Key findings from the pilot study include:

• Almost all (97%) of the probationers/parolees who tested positive for at least one of the drugs in the expanded screen had already tested positive for at least one of the five more common drugs tested for by the DPP. However, the use of some less common drugs, notably buprenorphine, methadone, and oxycodone, would have gone undetected by the DPP’s drug screen.

• Sixteen specimens contained oxycodone and 15 specimens contained buprenorphine. About one half of the specimens that contained buprenorphine or oxycodone also contained two or more other drugs, raising the possibility of abuse of these prescription drugs in Maryland.

• Methamphetamine does not appear to be used by this population in the six jurisdictions sampled in Maryland. Only one specimen tested positive for amphetamine and confirmatory testing did not detect methamphetamine.

• The pattern of positive test results for cocaine, PCP, marijuana, and opiates was consistent with the types of drugs for which the general population in the sampled localities sought treatment.

• It was remarkably quick and inexpensive for the researchers to sample 299 specimens and send them to an independent lab to be screened for a wide variety of drugs.

Maryland and other states should consider implementing a program of periodic expanded testing of urine specimens routinely collected from probationers/parolees, not only to ensure that they are routinely testing for the drugs being used by the persons they supervise, but also to provide the state with a tool for rapidly detecting and researching emerging drug problems.

*While about 20% of all specimens screened by DPP tested positive in 2004, 75% of the 299 specimens selected for this study had tested positive in the DPP panel. The number of drugs detected by the expanded testing is therefore higher than would be expected in a random sample of all DPP specimens.

†The Guilford Laboratory is a centralized urinalysis testing facility for 15 DPP collection facilities located in Baltimore City and Baltimore, Howard, Prince George’s Charles, and Washington counties.

SOURCE: Maryland Drug Early Warning System (DEWS), CESAR. “Using Urine Specimens from Parolees/Probationers to Create a Statewide Drug Monitoring System,” DEWS Investigates, February 2006. Available online at http://www.cesar.umd.edu. Print copies may be obtained by emailing cesar@cesar.umd.edu. For more information, contact Dr. Eric Wish at ewish@cesar.umd.edu.
Proposed FY 2007 Federal Drug Control Budget Increases Funding for Drug Courts; Decreases Funding for Many State and Local Drug Programs

The proposed $12.7 billion National Drug Control Budget for fiscal year 2007 increases funding for drug courts, student drug testing, and the National Youth Anti-Drug Media Campaign. At the same time, federal support for many state and local drug programs are proposed to be reduced or eliminated. Reasons for these reductions include that the programs have achieved their purpose, are inappropriately focused, are ineffective, and/or may be more appropriately supported through other resources. Following are highlights of some of the changes proposed by the FY2007 drug control budget.

Programs with Increased Funding
- Drug Courts (+$59.3 million; from $9.9 to $69.2 million)
- Safe and Drug-Free Schools and Communities National Programs (+$21.5 million; from $144.4 to $165.9 million)
  - Research-Based Grant Assistance to Local Educational Agencies (+$52 million; from $0 to $52 million)
  - Student Drug Testing (+$4.6 million; from $10.4 to $15 million)
- National Youth Anti-Drug Media Campaign (+$21 million; from $99 to $120 million)
- Methamphetamine Laboratory Cleanup Program (+$20.4 million; from $19.7 to $40.1 million)
- Prescription Drug Monitoring Program (+$2.5 million; from $7.4 to $9.9 million)

Programs with Reduced Funding
- Treatment Programs of Regional & National Significance (-$23.5 million; from $398.9 to $375.4 million)
- High Intensity Drug Trafficking Areas (HIDTA) (-$17.1 million; from $224.7 to $207.6 million)
- Prevention Programs of Regional & National Significance (-$12.3 million; from $192.9 to $180.6 million)
- National Institute on Drug Abuse (-$5.2 million; from $1.0 to $994.8 million)

Programs Eliminated
- Safe and Drug-Free Schools and Communities State Grants (-$346.5 million) and Alcohol Abuse Reduction Programs (-$32.4 million)
- Enforcing Underage Drinking Laws (-$24.7 million)
- Residential Substance Abuse Treatment (-$9.9 million)
- Drug Enforcement Administration Demand Reduction Program (-$9.3 million)
- National Alliance of Model State Drug Laws (-$1.0 million)

There have also been proposed cuts to grant programs that are not a part of the National Drug Control Budget, but that may have an impact on state substance abuse efforts. The $327.2 million Byrne Justice Assistance Grant Program, which provides funds to state and local governments to prevent and control crime, is slated to be discontinued, as is the Byrne Discretionary Grant Program ($189.3 million) and the Juvenile Accountability Incentive Block Grant Program ($49.4 million).

Study Finds 5% of Pregnant Women Use Methamphetamine in Methamphetamine-Prevalent Areas of the U.S.

According to the first large-scale study to estimate the prevalence of prenatal substance use in areas of the U.S. known to have methamphetamine problems, 5% of women living in these regions used methamphetamine at least once during their pregnancy. One-fourth of the women in this study used tobacco and 23% used alcohol while pregnant. In addition, 11% used illicit drugs prenatally. The authors note that “the finding that approximately 5% of pregnant women in this study use methamphetamine at some point during their pregnancy highlights the need for educating primary care physicians and obstetric and gynecologic specialty practitioners to be aware of treatment options and community resources to enable access to treatment,” particularly “in regions where methamphetamine is currently a large problem and in other areas where it is an emerging concern” (p. 8).

Percentage of Women Using Substances At Least Once During Pregnancy, Los Angeles, CA; Des Moines, IA; Tulsa, OK; and Honolulu, HI; 2004 (n=1,632)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>25%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>23%</td>
</tr>
<tr>
<td>Any Illicit Drug</td>
<td>41%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>6%</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>5%</td>
</tr>
</tbody>
</table>

NOTES: Data presented are from initial results of the Infant Development, Environment, and Lifestyle (IDEAL) study, an ongoing longitudinal multi-site study of prenatal methamphetamine exposure being conducted in Los Angeles, CA; Des Moines, IA; Tulsa, OK; and Honolulu, HI (NIDA Grant R01DA014948; P.I.: Dr. Barry Lester). Staff members at each site were responsible for monitoring hospital delivery logs and attempting to approach every mother who delivered a baby within the last 48 hours. An average of 75% of mothers who recently delivered were approached for consent and screened for eligibility. Substance use was determined by either self-report or meconium testing.


CESAR Seeking PI-Level Researchers with Existing Funding

CESAR is seeking PI-level researchers who wish to relocate to CESAR with their existing grants and/or collaborate with CESAR in obtaining new funding. If you have a proven funding track record and are interested in working in a supportive and stimulating, university-based team environment, please send a letter of interest and a resume to Dr. Eric Wish at CESAR, 4321 Hartwick Rd, Ste 501, College Park, MD 20740; 301-403-8342 (fax); cesar@cesar.umd.edu.

CESAR FAX may be copied without permission. Please cite CESAR as the source.

The Governor’s Office of Crime Control and Prevention funded this project under grant BJAG 2005-1206. All points of view in this document are those of the author and do not necessarily represent the official position of any State agency.
Colorado Survey Finds Relatively High Rates of Lifetime Club Drug Use Among Adolescent Treatment Clients

Previous survey research on club drug use has focused almost exclusively on student, household, and rave populations. However, relatively high rates of club drug use have also been found among youths in treatment, according to a recently published Colorado study. Nearly one-half of adolescents in publicly funded substance abuse treatment programs in Colorado reported using LSD at least once in their lifetime and nearly one-third reported using MDMA or methamphetamine (see figure below). The authors note that while high rates of club drug use in a treatment population may not be surprising, they underscore the importance of continued collection of information about club drug use among youths in treatment. Specifically, “state agencies that monitor and plan for adolescent and young adult treatment needs should consider incorporating club drug variables into existing treatment client data collections systems” if they are not already doing so (p. 97).

### Percentage of Adolescent (age 17 and younger) Treatment Clients Reporting Lifetime Use of Club Drugs, Colorado, 2001

<table>
<thead>
<tr>
<th>Drug</th>
<th>Percent of Adolescent Treatment Clients Ever Using Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSD</td>
<td>48.6%</td>
</tr>
<tr>
<td>MDMA</td>
<td>32.3%</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>30.2%</td>
</tr>
<tr>
<td>Ketamine</td>
<td>18.3%</td>
</tr>
<tr>
<td>GHB</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

NOTE: Data presented are from a survey of a convenience sample of adolescents and young adults receiving treatment from 13 publicly funded substance abuse treatment programs in Colorado from May through September 2001.


### CESAR Seeking PI-Level Researchers with Existing Funding

CESAR is seeking PI-level researchers who wish to relocate to CESAR with their existing grants and/or collaborate with CESAR in obtaining new funding. If you have a proven funding track record and are interested in working in a supportive and stimulating, university-based team environment, please send a letter of interest and a resume to Dr. Eric Wish at CESAR, 4321 Hartwick Rd, Ste 501, College Park, MD 20740; 301-403-8342 (fax); cesar@cesar.umd.edu.

...
Use of Depressants Among U.S. 12th Graders Increases
While Amphetamine Use Decreases; Meth Use Not Spreading in This Population

The use of depressants among high school seniors in the U.S. continues to increase, according to recently released data from the 2005 Monitoring the Future survey. The percentage of 12th graders reporting past year use of tranquilizers and sedatives—central nervous system depressants—increased from a low of 2.8% in 1992 to around 7% in 2005. During the same time period the use of the stimulants cocaine and amphetamines increased slightly but has stabilized (cocaine) or declined (amphetamines) in recent years. Methamphetamine use has decreased as well, reaching a low of 2.5% in 2005. The authors acknowledge that “the pattern of declining meth use among adolescents seems to be inconsistent with recent press reports of a growing meth epidemic” but note that “if use is spreading, it does not seem to be doing so in this segment of the population” (p. 3).

Percentage of Twelfth Graders Reporting Use of Depressants and Stimulants in the Past Year, 1975 to 2005

* Methamphetamine is also included in amphetamines.


CESAR Looking to Hire Principal Investigator-Level Researchers

CESAR is seeking to hire a PI-level researchers with a proven funding track record. If you are interested in working in a supportive and stimulating, university-based team environment, please send a letter of interest and a resume to Dr. Eric Wish at CESAR, 4321 Hartwick Rd, Ste 501, College Park, MD 20740; 301-405-9787 (fax); cesar@cesar.umd.edu.
BJA Report: Drug Courts May Be an Effective Tool for Communities Facing Methamphetamine Problems

Methamphetamine use is a growing problem in many parts of the United States, overwhelming the resources of not only drug treatment programs but also the criminal justice system.* Drug courts—which were first implemented in the early 1980s to provide treatment for cocaine- and heroin-addicted offenders—are now being used in several states to adjudicate methamphetamine-using offenders, according to a recent report from the Bureau of Justice Assistance (BJA). Drug courts can be effective with this population because they provide increased accountability, supervision, monitoring, and structure. They are also an ideal setting for providing comprehensive, long-term, and evidence-based treatment specific to methamphetamine abuse. For example, drug courts can provide services for methamphetamine addicts that are more intensive and longer in duration than those received by offenders addicted to other drugs. The BJA report, available online at http://www.ncjrs.gov/pdffiles1/bja/209549.pdf, offers the following recommendations for existing drug courts planning to target a methamphetamine-using population.

- Make sure that community supervision strategies include random, unannounced home visits and drug testing, using probation and law enforcement officers who are trained in detecting methamphetamine laboratories and use.
- Increase the frequency of drug court status hearings (e.g., weekly) for the first 90 days of the program to increase the methamphetamine user’s accountability.
- Set short-term treatment compliance and abstinence goals and provide positive reinforcements (e.g., public praise, vouchers for goods or services, free dental care) when these goals are achieved.
- Ensure that treatment services are longer, evidence-based, and relevant to the methamphetamine-using population. Offer stimulant abuse-specific strategies and use cognitive-behavioral treatment modalities, including treatment for co-occurring mental health disorders.
- Provide total service coordination and comprehensive case management during treatment. Provide physical health, comprehensive relapse prevention, community reinforcement, and continuing care and aftercare services before discharge. Maintain monthly telephone contact and provide ongoing alumni with support meetings after discharge.


New National Household Survey Data Illustrates
Geographical Variation in Methamphetamine Use

Methamphetamine use is highest in the western United States and lowest in the Northeast, according to recently released data from the National Survey on Drug Use and Health. Overall, 0.6% of U.S. residents—an estimated 1.4 million persons—reported using methamphetamine in the past year, ranging from 2.2% in Nevada to 0.04% in Connecticut. States with 1% or more of their residents reporting methamphetamine use were predominantly in the western U.S., while states with less than 0.5% of their residents reporting methamphetamine use were clustered in the northeastern part of the nation. These findings support geographical variations found in other indicators of methamphetamine use (see CESAR FAX, Volume 14, Issues 12 and 30). It should be noted, however, that the average level of methamphetamine use across the United States (0.6%) remains substantially lower than those of almost all other illicit drugs, including marijuana (10.6%), prescription pain relievers used non-medically (4.7%), cocaine (2.4%), tranquilizers (2.1%), and hallucinogens (1.6%).

Methamphetamine Use in the Past Year Among U.S. Residents Age 12 or Older, 2002-2004

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0% to 0.4%</td>
<td></td>
</tr>
<tr>
<td>0.5% to 0.9%</td>
<td></td>
</tr>
<tr>
<td>1.0% to 2.2%</td>
<td></td>
</tr>
</tbody>
</table>

New CEWG Advance Report Released:  
Cocaine Most Widely Abused Illicit Stimulant; Methamphetamine Abuse Varies

The Community Epidemiology Work Group (CEWG) is a network of epidemiologists and researchers from 21 U.S. areas that meets twice a year to discuss current and emerging substance abuse problems. The 57th meeting, held in California this past January, focused on stimulant abuse, particularly of methamphetamine and cocaine. Following are highlights from the recently released advance report of the meeting proceedings.

- **Cocaine** continues to be the most widely abused illicit stimulant in CEWG areas. Indicators of cocaine abuse remain high in all CEWG areas except Honolulu and San Diego, where cocaine indicators are low but methamphetamine indicators remain at high levels.

- The extent of **methamphetamine** abuse varies greatly across CEWG areas. Methamphetamine abuse indicators continue to be high in Honolulu, San Diego, San Francisco, and Seattle. “Eastern CEWG areas other than Atlanta continue to report very low indicators of methamphetamine abuse, but some eastern area CEWG representatives reported recent increases in methamphetamine labs instate and, although the numbers remain small, increases were observed in methamphetamine treatment admissions in some CEWG metropolitan and outlying nonmetropolitan areas” (p. 6).

- While **methamphetamine** continues to be more prevalent in rural areas, there are clear indications of the availability and abuse of methamphetamine in some suburban and urban areas as well. In Atlanta, “methamphetamine is an increasing threat in the suburban areas because of the drug’s low price and ease of availability; as a consequence, it is replacing some traditional drugs as a less expensive, more potent alternative” (p. 15).

- **Methamphetamine** use among gay males was reported in several CEWG areas, including New York; Philadelphia; Washington, D.C.; and Miami, “raising concern that the combination of methamphetamine use and associated sexual behaviors may increase risk for HIV transmission” (p. 16).

Leading Doctors, Scientists, and Researchers Request that
Media and Policymakers Stop Perpetuating “Meth Baby” Myths

On July 27, 2005, more than 90 leading medical doctors, scientists, psychological researchers, and treatment specialists released an open letter requesting that “policies addressing prenatal exposure to methamphetamines and media coverage of this issue be based on science, not presumption or prejudice.” Following are some of the highlights of the letter.

- The terms “ice babies” and “meth babies” lack medical and scientific validity and should not be used.

- “Although research on the medical and developmental effects of prenatal methamphetamine exposure is still in its early stages, our experience with almost 20 years of research on the chemically related drug, cocaine, has not identified a recognizable condition, syndrome or disorder that should be termed ‘crack baby’ nor found the degree of harm reported in the media and then used to justify numerous punitive legislative proposals.”

- Previous research with similar labels applied to children exposed parentally to cocaine have found that these labels “harm the children to which they are applied, lowering expectations for their academic and life achievements, discouraging investigation into other causes for physical and social problems the child might encounter, and leading to policies that ignore factors, including poverty, that may play a much more significant role in their lives.”

- There is no such thing as a “meth-addicted baby.” Addiction is defined as “compulsive behavior that continues in spite of adverse consequences.” Thus, by definition, babies cannot be “addicted” to methamphetamines or anything else.

- While physiologic dependence (not addiction) has been documented among infants exposed in utero to opiates, no such dependence symptoms have been found following prenatal cocaine or methamphetamine exposure.

- Media and policymakers too often “rely on people who lack any scientific experience or expertise for their information about the effects of prenatal exposure to methamphetamine and about the efficacy of treatment.”

A copy of the letter, including a listing of the professionals signing the letter, is available online at http://www.jointogether.org/sa/files/pdf/Meth_Letter.pdf. For more information, contact Dr. David C. Lewis at 401-444-1818 or David_Lewis@brown.edu.

More than one-half of 500 county law enforcement agencies in the U.S. report that methamphetamine is their primary drug problem, according to a recent survey conducted by the National Association of Counties.* Three-fourths of law enforcement agencies in the Northwest and Southwest part of the country reported that, based on drug-related arrests in the last year, methamphetamine was the biggest problem in their county. More than one-half of responding agencies in the Upper Midwest (67%) and Lower Midwest (57%) reported the same. In contrast, around one-fourth of agencies in the Southeast and only 4% of those in the Northeast reported methamphetamine as their number one drug problem. While these findings support previous research indicating that the West and Midwest have been hit hardest by methamphetamine use (see CESAR FAX, Volume 14, Issue 12), they also suggest that the Eastern U.S. should be vigilant for any increase in methamphetamine-related problems.

NOTE: Methamphetamine has historically been found in rural counties, which typically have smaller populations. More than three-fourths (81.6%) of the county law enforcement agencies responding to this survey were from counties with a population of less than 50,000. (In comparison, 70.1% of all counties in the U.S. have a population of less than 50,000.) Thus, the counties reporting a methamphetamine problem may actually represent a relatively small percentage of the U.S. population.

*Surveys were conducted by Research, Inc., of Washington, D.C., with 500 county law enforcement agencies from 45 states (Connecticut, Delaware, Hawaii, Massachusetts, and Rhode Island did not respond to the survey).

Methamphetamine Treatment Admission Rates Higher Than Those of Cocaine and/or Heroin in Western States

More than three-fourths of western states have higher rates of methamphetamine/amphetamine-related* treatment admissions than cocaine- or heroin-related admissions, according to data from the 2002 national Treatment Episode Data Set (TEDS). In Idaho, for example, methamphetamine and other amphetamines were reported as the primary drugs of abuse at a rate of 116 per 100,000 residents, compared to a rate of 6 per 100,000 for cocaine and 3 per 100,000 for heroin. In contrast, one-third (4 out of 12) of states in the north central region of the country, 2 of the 17 southern states, and none of the northeastern states had rates of methamphetamine/amphetamine treatment admissions higher than those for cocaine and/or heroin.

U.S. Treatment Admissions per 100,000 Population by Primary Substance of Abuse, 2002

(Highlighted methamphetamine rates are those that are higher than cocaine and/or heroin treatment rates in that state)

<table>
<thead>
<tr>
<th>State</th>
<th>Cocaine</th>
<th>Heroin</th>
<th>Meth*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>42</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Arizona</td>
<td>14</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>California</td>
<td>81</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td>Colorado</td>
<td>78</td>
<td>44</td>
<td>68</td>
</tr>
<tr>
<td>Hawaii</td>
<td>33</td>
<td>21</td>
<td>217</td>
</tr>
<tr>
<td>Idaho</td>
<td>6</td>
<td>3</td>
<td>116</td>
</tr>
<tr>
<td>Montana</td>
<td>16</td>
<td>8</td>
<td>119</td>
</tr>
<tr>
<td>Nevada</td>
<td>61</td>
<td>39</td>
<td>157</td>
</tr>
<tr>
<td>New Mexico</td>
<td>10</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Oregon</td>
<td>56</td>
<td>158</td>
<td>324</td>
</tr>
<tr>
<td>Utah</td>
<td>42</td>
<td>49</td>
<td>115</td>
</tr>
<tr>
<td>Washington</td>
<td>81</td>
<td>111</td>
<td>150</td>
</tr>
<tr>
<td>Wyoming</td>
<td>25</td>
<td>2</td>
<td>167</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Cocaine</th>
<th>Heroin</th>
<th>Meth*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>183</td>
<td>626</td>
<td>4</td>
</tr>
<tr>
<td>Maine</td>
<td>36</td>
<td>99</td>
<td>4</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>60</td>
<td>671</td>
<td>1</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>28</td>
<td>47</td>
<td>7</td>
</tr>
<tr>
<td>New Jersey</td>
<td>74</td>
<td>370</td>
<td>2</td>
</tr>
<tr>
<td>New York</td>
<td>269</td>
<td>366</td>
<td>3</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>93</td>
<td>116</td>
<td>2</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>173</td>
<td>485</td>
<td>2</td>
</tr>
<tr>
<td>Vermont</td>
<td>72</td>
<td>164</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Cocaine</th>
<th>Heroin</th>
<th>Meth*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>149</td>
<td>108</td>
<td>13</td>
</tr>
<tr>
<td>Indiana</td>
<td>64</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Iowa</td>
<td>64</td>
<td>10</td>
<td>198</td>
</tr>
<tr>
<td>Kansas</td>
<td>102</td>
<td>3</td>
<td>61</td>
</tr>
<tr>
<td>Michigan</td>
<td>122</td>
<td>90</td>
<td>5</td>
</tr>
<tr>
<td>Minnesota</td>
<td>93</td>
<td>22</td>
<td>78</td>
</tr>
<tr>
<td>Missouri</td>
<td>161</td>
<td>32</td>
<td>86</td>
</tr>
<tr>
<td>Nebraska</td>
<td>49</td>
<td>&lt;1</td>
<td>102</td>
</tr>
<tr>
<td>North Dakota</td>
<td>6</td>
<td>1</td>
<td>65</td>
</tr>
<tr>
<td>Ohio</td>
<td>73</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>South Dakota</td>
<td>13</td>
<td>2</td>
<td>69</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>36</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

* Methamphetamine constitutes about 95 percent of combined methamphetamine/amphetamine admissions. Four states (Arkansas, Connecticut, Oregon, and Texas) do not distinguish between methamphetamine and amphetamine admissions.
--- Heroin admissions are included in Other Opiates in Tennessee.

NOTES: Data are from treatment facilities that are state-licensed/certified and/or receive public funding. Treatment clients may report up to three substance problems. Geographic divisions are based on the U.S. Census Bureau regions.

National Methamphetamine Epidemic?

“...smokable methamphetamine will be the drug plague of the 1990’s”

“...meth could become the biggest scourge of American drug enforcement since the cocaine epidemic.”
(Christian Science Monitor, October 27, 1995)

“...the drug [methamphetamine] could become ‘the crack of the 21st century’.”
(The Oregonian, December 31, 2004)

While methamphetamine use has gradually spread eastward during the past decade, the majority of methamphetamine use and production remains west of the Mississippi River. Many communities in the Northeast and mid-Atlantic regions of the country have yet to experience the degree of methamphetamine problems seen in other areas, suggesting that at present the problem should not be portrayed as a national epidemic. Rather, it appears to be concentrated and growing in rural communities. Yet speculation that “meth use is exploding in cities and suburbs all across America”¹ periodically reemerges.² Media coverage of this “national” methamphetamine problem prompted a recent CESAR analysis of methamphetamine use in Maryland. Following is a summary of the major findings of the report, Methamphetamine in Maryland, which will be available this week at http://www.cesar.umd.edu.

- Methamphetamine ranked last among nine illicit drugs most commonly used by Maryland students. Less than 5% of 10th and 12th grade students reported ever using methamphetamine in 2002, compared to 36% for marijuana, 11% for other stimulants, and 10% for hallucinogens.
- Less than 0.5% of all treatment admissions in Maryland in FY2004 were methamphetamine related.
- In the Baltimore and Washington, D.C., metropolitan statistical areas combined there were 39 methamphetamine-related emergency department visits in 2002, compared to 9,002 for cocaine and 6,312 for heroin. There was one methamphetamine-caused death in Maryland in 2004.
- According to the National Clandestine Laboratory Database, one methamphetamine lab was found in Maryland in 2004, compared to 474 in California and 1,049 in Missouri.³
- Small pockets of use do exist among certain populations and regions of the state. As elsewhere in the country, methamphetamine users in Maryland are most likely to be white males of diverse socioeconomic backgrounds living in rural areas.
- While available data do not indicate that methamphetamine is a prevalent drug of abuse in Maryland, the growing number of methamphetamine labs and use reported in neighboring states, such as Virginia, suggest that indicators of methamphetamine use in Maryland should continue to be monitored.

¹The Today Show, “Methamphetamine abuse on rise with suburban women” March 2, 2005.
²For a discussion on how a previous localized methamphetamine problem came to be projected on a national level, see Jenkins, Philip. “‘The Ice Age’ The Social Construction of a Drug Panic,” Justice Quarterly (11):1:7-31, 1994.
³These figures may underestimate the actual number of methamphetamine labs seized in each state because law enforcement agencies are not required to report lab seizures to the National Clandestine Laboratory Database.

SOURCE: Center for Substance Abuse Research, “Methamphetamine in Maryland,” CESAR Briefing, March 2005. For more information, contact Eric Wish at 301-405-9774 or ewish@cesar.umd.edu.
Cocaine and Methamphetamine Greatest U.S. Drug Threats, According to State and Local Law Enforcement Agencies

Cocaine and methamphetamine were identified by the majority of U.S. state and local law enforcement agencies as the greatest drug threat in their region, according to data from the 2003 National Drug Intelligence Center National Drug Threat Survey. More than two-thirds of the state and local law enforcement agencies surveyed identified either powder or crack cocaine (37%) or methamphetamine (36%) as the greatest drug threat in their area. Marijuana and heroin were the next greatest drug threats reported (by 13% and 9%, respectively.) Cocaine was considered to be a greater threat in the Great Lakes, Northeast/Mid-Atlantic, and Southeast regions of the U.S., while methamphetamine was generally reported as a greater problem in the Pacific, West Central, and Southwest regions (data not shown).

### Percentage of U.S. State and Local Law Enforcement Agencies that Identified a Particular Drug as the Greatest Threat to Their Region, 2003*

<table>
<thead>
<tr>
<th>Drug</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocaine</td>
<td>37%</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>36%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>13%</td>
</tr>
<tr>
<td>Heroin</td>
<td>9%</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>2%</td>
</tr>
<tr>
<td>MDMA</td>
<td>1%</td>
</tr>
<tr>
<td>Other Dangerous Drugs**</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>

*N=3,497

*Percentages do not add up to 100 due to the omission of the “no response” category.

**Other Dangerous Drugs include the club drugs GHB, ketamine, and Rohypnol® as well as the hallucinogens LSD, PCP, and psilocybin.

NOTE: The 2003 National Drug Threat Survey was administered to a probability-based sample of state and local law enforcement agencies and was designed to provide representative data at national, regional, and state levels.

Cocaine, Heroin, Methamphetamine, and Marijuana Are Greatest Drug Threats to U.S.

Cocaine is the primary drug threat to the United States, followed by heroin, methamphetamine, and marijuana, according to the 2002 National Drug Threat Assessment issued by the National Drug Intelligence Center. MDMA (ecstasy) trafficking and use has also increased greatly over the past year. Other club drugs (GHB, ketamine, and Rohypnol), hallucinogens, and prescription drugs are also a growing concern. A copy of the full report is available online at http://www.usdoj.gov/ndic/

Current Availability, Demand, Production, and Distribution of Selected Drugs, 2002

<table>
<thead>
<tr>
<th>Drug</th>
<th>Availability</th>
<th>Demand</th>
<th>Production</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocaine</td>
<td>All areas of the country.</td>
<td>High and relatively stable since the mid-90s. Slight downward trends recently.</td>
<td>South America, primarily Colombia.</td>
<td>Gangs control most retail distribution across the country. Violence is common.</td>
</tr>
<tr>
<td>Heroin</td>
<td>All major metropolitan areas; increasingly available in many rural and suburban areas.</td>
<td>Has increased steadily since early 90s; use now appears to be stabilizing at high levels.</td>
<td>South America (primarily Colombia) and Mexico.</td>
<td>Criminal groups, gangs.</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>Throughout the western U.S. and increasingly available in eastern areas.</td>
<td>Stable or increasing slightly.</td>
<td>United States and Mexico</td>
<td>Criminal groups, gangs (including motorcycle), and local independents</td>
</tr>
<tr>
<td>Marijuana</td>
<td>Most widely available illicit drug</td>
<td>Stable or decreased slightly. Exceeds that of any other illicit drug.</td>
<td>United States and Mexico</td>
<td>Criminal groups (wholesale), gangs (including motorcycle), and independents</td>
</tr>
<tr>
<td>MDMA (ecstasy)</td>
<td>In every state; availability is increasing.</td>
<td>Increased sharply since mid-90s and is growing</td>
<td>Primarily Netherlands or Belgium; labs emerging in Canada and Mexico</td>
<td>Independents and gangs.</td>
</tr>
</tbody>
</table>

NOTE: Gangs refer to groups or associations of three or more persons with a common identifying sign, symbol, or name, the members of which individually or collectively engage in criminal activity that creates an atmosphere of fear and intimidation.


“Prescription Drug Abuse—A New Epidemic” to Be Held at Rockville Barnes & Noble Store

The Honorable Asa Hutchinson (Administrator of the Drug Enforcement Administration), Cindy Mogil (author of the book “Swallowing a Bitter Pill”), other specialists, and guest politicians will discuss this critical health problem at the Rockville Barnes & Noble Store on Monday, March 18th at 7:30 pm.
Methamphetamine users were significantly less likely than non-users to be arrested for a violent offense, according to recent data from five western Arrestee Drug Abuse Monitoring (ADAM) program sites.* Overall, 16% of the adult arrestees who reported using meth within the 30 days prior to the interview had been charged with violent crimes--compared to nearly twice as many non-methamphetamine users (28%). According to the authors, this finding appears to differ with medical literature and popular press reports about the connection between methamphetamine and violent behavior. A similar finding 15 years ago showed that D.C. arrestees who used PCP were less likely to be arrested for violent crimes (Wish, 1986).

Percentage of Adult Arrestees Charged with Violent, Drug/Alcohol, Property, and Other Offenses, by Reported Methamphetamine Use, 1996-97
(n=929 arrestees in Los Angeles, Phoenix, Portland, San Diego, and San Jose ADAM Sites)

*A methamphetamine addendum was added to the interviews conducted in five western ADAM sites that appeared to have increasing rates of meth use--Los Angeles, Phoenix, Portland, San Diego, and San Jose.

NOTES: Methamphetamine use was measured by self-report. Non-methamphetamine users may have used one or more other drugs.

Arrestee Methamphetamine Use Shows Clear Regional Variations

Recent data from the Arrestee Drug Abuse Monitoring (ADAM) program (formerly the DUF program) show that the majority of adult arrestees who test positive by urinalysis for methamphetamine use are in western U.S. ADAM sites. The most active regions appear to be California and areas to the north (Washington, Oregon) and west (Arizona, Nevada, Utah), where methamphetamine positive rates have continued to steadily increase since 1990. In contrast, arrestee meth use in eastern and southern ADAM sites is virtually nonexistent. The authors conclude that “although the rapid growth in methamphetamine use among arrestees has abated, it nevertheless has a broad and strong hold in areas where it appeared a decade ago” (p. 20).

Percentage of Adult Arrestees Testing Positive for Methamphetamine, by ADAM Site, 1998

Methamphetamine Use in the Western United States: An In-Depth Look

Over the past several years, the Office of National Drug Control Policy’s Pulse Check series has reported the increase and spread of methamphetamine use in West Coast states. To gain more in-depth information concerning this trend, a special Pulse Check study was conducted in six states that appear to have been affected the most by methamphetamine--Arizona, California, Hawaii, New Mexico, Oregon, and Washington. Drug ethnographers, law enforcement officials, and treatment providers in each state were interviewed to determine the nature and extent of methamphetamine use in this region.

What is the Level of Methamphetamine Use?
Ethnographers, law enforcement officials, and treatment providers in all six states reported that methamphetamine use was a high-priority problem. On average, 27% to 55% of treatment admissions in each of the states were methamphetamine users. In several areas, methamphetamine has surpassed alcohol and cocaine as the primary drugs of abuse among treatment admissions. Interestingly, all states reported that the primary reason for methamphetamine clients’ entry into treatment was legal problems, such as “aggressive behaviors like fighting or bizarre or inappropriate behaviors which prompt others to call the police” (p. X).

Who is Using Methamphetamine?
In five of the six states, the majority of methamphetamine users are described by sources as white males in their 20s and 30s who are blue collar workers or unemployed. However, there have been recent increases in use among youth, Native American and Hispanic populations. Hawaii was the only one of the six states to report a wide range in the types of users; “while many [treatment] programs report that users are young (teens and twenties), there is a range of jobs, ethnicities, and education levels reported” (p. IX).

How is Methamphetamine Being Used?
Patterns of use varied across the six states. According to treatment data, snorting and smoking were the most common modes of ingestion in California and Arizona, while the majority of treated users in Oregon and New Mexico preferred snorting or injecting the drug. In Hawaii, no treatment programs reported that clients injected; 81% reported that clients smoked the drug. Treatment providers in Washington reported that clients were equally likely to smoke, snort, or inject methamphetamine. Some unique modes of ingestion were also reported. In California, “putting methamphetamine into coffee in what is termed ‘biker’s coffee’ is reported by ethnographic sources as popular among young professionals interested in the drug’s energizing and appetite suppressant effects” (p. III). Eating methamphetamine (putting methamphetamine on paper or food and chewing it) was reported by a law enforcement source in Washington State.

Arrestee Methamphetamine Use Concentrated in West Coast DUF Sites

According to the 1995 Drug Use Forecasting (DUF) Annual Report, methamphetamine use among arrestees varies greatly by region of the country, with the highest drug positive rates found at western DUF sites (see figure). However, "sites such as Denver, Omaha, and St. Louis could experience significant increases if current trends continue" (p. 13). In 1995, methamphetamine rivaled or surpassed use of cocaine and marijuana at four West Coast sites (Phoenix, Portland, San Diego, and San Jose). One possible explanation for these findings is that many of these sites are close to Mexico, thought to be a major source of methamphetamine.

Percentage of Adult Arrestees Testing Positive by Urinalysis for Methamphetamine, by DUF Site, 1995*
(N=approximately 1,700 arrestees at each site)

<table>
<thead>
<tr>
<th>DUF Site</th>
<th>Percent Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, D.C.</td>
<td>0.1</td>
</tr>
<tr>
<td>Ft. Lauderdale</td>
<td>0.1</td>
</tr>
<tr>
<td>Detroit</td>
<td>0.1</td>
</tr>
<tr>
<td>Manhattan</td>
<td>0.1</td>
</tr>
<tr>
<td>Birmingham</td>
<td>0.1</td>
</tr>
<tr>
<td>Houston</td>
<td>0.4</td>
</tr>
<tr>
<td>St. Louis</td>
<td>0.4</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>0.4</td>
</tr>
<tr>
<td>Atlanta</td>
<td>0.5</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>0.6</td>
</tr>
<tr>
<td>San Antonio</td>
<td>1.2</td>
</tr>
<tr>
<td>Dallas</td>
<td>2.7</td>
</tr>
<tr>
<td>Denver</td>
<td>3.2</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>6.5</td>
</tr>
<tr>
<td>Omaha</td>
<td>8.1</td>
</tr>
<tr>
<td>Portland</td>
<td>15.2</td>
</tr>
<tr>
<td>San Jose</td>
<td>16.3</td>
</tr>
<tr>
<td>Phoenix</td>
<td>19.5</td>
</tr>
<tr>
<td>San Diego</td>
<td>30.6</td>
</tr>
</tbody>
</table>

*Four of the 23 DUF sites (Chicago, Cleveland, Miami, and New Orleans) had no adults test positive for methamphetamine in 1995 and are not shown in the table.

SOURCE: Adapted by CESAR from data from the "1995 Annual Report on Adult and Juvenile Arrestees," Drug Use Forecasting, National Institute of Justice. To obtain a copy of this report, please contact NCJRS at 800-851-3420 or 301-251-5500.

WANT TO LEARN MORE ABOUT METHAMPHETAMINE?

CESAR's electronic bulletin board, the CESAR BOARD, has information on both methamphetamine and amphetamine (including descriptions of the drugs and the effects of use) under the Metnet Drug Information Database and the Drug Information Conference. The CESAR BOARD can be accessed via modem (301-403-8343 or 1-800-84-CESAR for callers) or World Wide Web (www.bsos.umd.edu/cesar/cesar.html).

CESAR FAX is supported by a grant from the Governor's Office of Crime Control & Prevention. CESAR FAX may be copied without permission. Please cite CESAR as the source.

· 301-403-8329 (voice) · 301-403-8342 (fax) · CESAR@cesar.umd.edu (e-mail)
National DAWN Data Show Significant Increases in Drug-Related Emergency Department Episodes

Preliminary data from the Drug Abuse Warning Network (DAWN) for the first 6 months of 1995 show that individuals suffering negative health consequences of illicit drug use continue to seek services from hospital emergency departments (EDs) across the nation. Significant increases were found among ED episodes related to cocaine (12%), heroin (27%), marijuana (32%), and methamphetamine (35%) compared with data from the first half of 1994. One possible explanation for the increases in the cocaine- and heroin-related ED visits is that a cohort of users is experiencing chronic effects of long-term drug use. "DAWN data show that the proportion of drug-related episodes among persons aged 35 years and older has been increasing. As drug users age . . . they become susceptible to a variety of health problems which are exacerbated by drug use, especially the cumulative effects of prolonged use. These individuals may be using emergency departments for treatment of nonurgent health problems" (p. 13).


In 2003, a relatively low number of U.S. residents—5% or an estimated 12.3 million people—reported using methamphetamine at least once in their lifetime, compared to 41% for marijuana, 15% for cocaine, and 2% for heroin, as shown in Figure 1 (Substance Abuse and Mental Health Services Administration, 2004). Methamphetamine use has historically been concentrated in Hawaii, California, and other West Coast states (Anglin, Burke, Perrochet, Stamper, & Dawud-Noursi, 2000) and the majority of methamphetamine use and production remains in localized areas west of the Mississippi River (National Drug Intelligence Center, 2004; Substance Abuse and Mental Health Services Administration, 2003). Despite the fact that methamphetamine production, trafficking, and use in the eastern U.S. are isolated and limited relative to that of other drugs, there has been recent speculation that “meth use is exploding in cities and suburbs all across America” (Teague, March 2, 2005).¹ The purpose of this report is to analyze existing indicators of methamphetamine use and its consequences in Maryland to provide an evidence-based evaluation of the current status and potential threat of methamphetamine in this state. Supporting data for this report can be found online at www.cesar.umd.edu.

What Is the Scope of Methamphetamine Use in Maryland?

Methamphetamine is rarely produced or used in Maryland. From January 2003 to May 2004, law enforcement officials report that there were 8 methamphetamine labs seized in Maryland (Washington/Baltimore High Intensity Drug Trafficking Area, 2004), compared to 15,994 labs seized nationally in 2004 (Drug Enforcement Administration, n.d.). Methamphetamine ranked last among 9 illicit drugs most commonly used by 10th and 12th grade students—less than 5% reported ever using the drug in 2002, as shown in Figure 2 (Center for Substance Abuse Research, 2004). Furthermore, less than 0.5% of all treatment admissions in Maryland in FY2004 were

¹ For a discussion on how a previous localized methamphetamine problem came to be projected on a national level, see Jenkins, 1994.
methamphetamine related, as shown in Figure 3 (Maryland Alcohol and Drug Abuse Administration, 2004). In the Baltimore and Washington, D.C., metropolitan statistical areas (MSAs)\textsuperscript{2} there were 39 methamphetamine-related emergency department visits in 2002, compared to 9,002 for cocaine and 6,312 for heroin (Substance Abuse and Mental Health Services Administration, 2003). Additionally, there were no methamphetamine-caused deaths in Maryland in 2003 and one death in 2004 (Maryland Office of the Chief Medical Examiner, 2004).

Who Uses Methamphetamine in Maryland?

As the above section shows, the demand for and availability of methamphetamine is relatively low in Maryland. However, several sources indicate that small pockets of use do exist among certain populations. Users are most likely to be white males of diverse backgrounds, including unemployed persons (Maryland Alcohol and Drug Abuse Administration, 2004), blue-collar workers, persons with ties to traditional methamphetamine users (i.e. motorcycle gang members and long-distance truckers), white-collar professionals, and homosexuals (National Drug Intelligence Center, 2002). The small percentage of youth who use methamphetamine are also most likely to be white males and they report using multiple other drugs in their lifetime (Center for Substance Abuse Research, 2004). There is evidence that youth methamphetamine users are also involved with other club drug use and the rave/club scenes (Center for Substance Abuse Research, 2004; Office of National Drug Control Policy, 2004; Washington/Baltimore High Intensity Drug Trafficking Area, 2004).

Where Is Methamphetamine Used in Maryland?

Geographically, the primary markets for methamphetamine in Maryland are in the western, northeastern, and southern parts of the state. Residents of western Maryland are some of the primary users of methamphetamine (Office of National Drug Control Policy, 2004). High school students in Garrett, Allegany, and Washington counties have the first, second, and fourth highest rates of lifetime methamphetamine use in the state—more than double the statewide rate of 4.4% (Center for Substance Abuse Research, 2004). In addition, three of the eight methamphetamine labs seized from January 2003 to May 2004 were from the western Maryland counties of Garrett and Washington (Washington/Baltimore High Intensity Drug Trafficking Area, 2004).

Methamphetamine use also exists in counties in the northeastern part of the state. High school students in Cecil, Kent, Queen Anne's, Caroline, and Talbot counties have above average rates of lifetime methamphetamine use ranging from 5.5% to 9.0% (Center for Substance Abuse Research, 2004). Kent, Queen Anne's, Caroline, and Talbot counties also have some of the highest rates of methamphetamine-related treatment admissions in the state, ranging from 11.8 to 15.6 per 100,000 residents (Maryland Alcohol and Drug Abuse Administration, 2004). One of the eight labs seized from January 2003 to May 2004 was in Cecil County (Washington/Baltimore High Intensity Drug Trafficking Area, 2004).

---

\textsuperscript{2}The Baltimore MSA encompasses Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's counties and Baltimore City. The Washington, D.C., MSA encompasses the District of Columbia, Calvert, Charles, Frederick, Montgomery, and Prince George's counties, and 10 counties in Virginia.
Another pocket of methamphetamine use is in southern Maryland, particularly Charles and St. Mary's counties. High school students in these two counties have above average lifetime rates of methamphetamine use (Center for Substance Abuse Research, 2004). In addition, three of the eight labs seized from January 2003 to May 2004 were in Charles County (Washington/Baltimore High Intensity Drug Trafficking Area, 2004). According to law enforcement officials, Charles County is at risk for methamphetamine use because “geographically and demographically, Charles County fits the national methamphetamine-hosting ‘prototype,’ in that it is less urban in nature, more sparsely populated, and comprised of fewer African Americans” (Washington/Baltimore High Intensity Drug Trafficking Area, 2004). Methamphetamine use and trafficking in southern Maryland has also been attributed to the prison release of members of motorcycle gangs that have been linked to retail methamphetamine trafficking (Washington/Baltimore High Intensity Drug Trafficking Area, 2004).

Figure 4: Percentage of Maryland 10th and 12th Grade Students Reporting Lifetime Use of Methamphetamine, by County, 2002

Is Methamphetamine an Emerging Problem?

While defining an emerging drug problem is extremely subjective, a drug may be potentially emerging as a problem in a certain area of the state if indicators of use, treatment, and/or law enforcement are increasing in that area or are relatively high or increasing in surrounding areas. Indicators of methamphetamine use and related health consequences have remained relatively stable or decreased in the past few years. For example, lifetime methamphetamine use among Maryland high school seniors has remained at 5% since 2001, down from the recent peak of 9% in 1996 (Maryland State Department of Education, 1997-2003). The number of methamphetamine-related emergency department mentions in the Washington, D.C., and Baltimore MSAs combined decreased from 68 in 2000 to 39 in 2002 (Substance Abuse and Mental Health Services Administration, 2003). And the number of methamphetamine labs seized has not increased in Maryland. Law enforcement reports to the National Clandestine Laboratory Database indicate that there were 0 labs reported in 2000, 2 labs reported in 2001, 1 in 2002, 2 in 2003, and 1 in 2004 (Drug Enforcement Administration, 2005a).

Methamphetamine is present in areas surrounding Maryland, particularly in Washington, D.C., within the homosexual community and club scene, (Washington/Baltimore High Intensity Drug Trafficking Area, 2004) and the Shenandoah Valley of Virginia (Boorstein, August 22, 2004; Washington/Baltimore High Intensity Drug Trafficking Area, 2004). In addition, the number of methamphetamine labs seized in surrounding states has been increasing. For example, one methamphetamine lab was seized in Virginia in 2000, compared to 61 in 2004 (Drug Enforcement Administration, 2005c). The number of labs seized between 2000 and 2004 increased in West Virginia from 3 to 84 (Drug Enforcement Administration,

---

*3 Some law enforcement agencies do not report lab seizures to the National Clandestine Laboratory Database, especially in rural areas. Thus these figures generally are an underestimate of the actual number of methamphetamine labs seized.
Methamphetamine in Maryland

2005d) and in Pennsylvania from 8 to 63 (Drug Enforcement Administration, 2005b). There is also anecdotal evidence that Hispanic criminal groups may expand their distribution networks from Virginia to Maryland (Washington/Baltimore High Intensity Drug Trafficking Area, 2004).

Conclusions

The demand for and availability of methamphetamine in Maryland is extremely low compared to other drugs. Methamphetamine users in Maryland tend to be Caucasian males, including blue- and white-collar workers, persons with ties to motorcycle gang members and long-distance truckers, youths, homosexuals, and those involved with the rave and club scenes. In addition, methamphetamine use is more prevalent in the western, northeastern, and southern parts of the state. While available data do not indicate that methamphetamine is an emerging drug in Maryland, the growing number of methamphetamine labs and use reported in neighboring states could be indicative of an increase in methamphetamine use in our area at some point in the future.

Based on these conclusions, CESAR recommends the following:

1) Indicators of methamphetamine use should continue to be monitored, with close attention paid to the specific populations and areas of the state that have shown signs of methamphetamine use.

2) While methamphetamine production, trafficking, and use are low in Maryland, this drug presents a unique threat to first responders. Substances used in methamphetamine labs are extremely flammable, explosive, and toxic. Police officers, firefighters, emergency medical technicians, and hospital personnel should receive comprehensive training in identifying and handling methamphetamine labs and contaminated materials.

3) Maryland’s existing legislation on methamphetamine and its precursors should be reviewed and compared with those of other states to ensure that Maryland’s laws will be adequate should methamphetamine become a problem in the future.

4) Methamphetamine prevention, education, and training should be instituted in parts of the state and among populations that have shown above average use of methamphetamine. For example, school-based methamphetamine education and prevention could be instituted in counties with relatively high rates of student drug use, such as Garrett County. Targeting high-risk behaviors in general may also be effective, since many methamphetamine users are poly-drug users.

References


Methamphetamine in Maryland


Maryland Alcohol and Drug Abuse Administration. (2004). Data supplied to the Center for Substance Abuse Research (CESAR) from the Substance Abuse Management Information System (SAMIS).


Drug Information: Methamphetamine
(as posted on http://www.cesar.umd.edu)

Profile
Methamphetamine is a highly addictive and very potent central nervous stimulant, also known as "meth," "crystal meth," "ice," and "glass."\(^1\) A Schedule II drug, methamphetamine is an extremely powerful amphetamine. The effects are long-lasting, and users have been known to stay awake for days on end during binges; these potent stimulant effects are the reason the drug is often labeled as a "club drug." Methamphetamine is produced in illegal laboratories and in larger "superlabs" across the United States, particularly in California, Arizona, Utah, and Texas.\(^2\) However, the expansion of Mexico-based traffickers and the growth of independent U.S.-based laboratories have dramatically increased in the Pacific Northwest, Midwest, and some portions of the Southeast; production and availability is also beginning to spread to the Northeast.\(^3\)

History
Methamphetamine was derived from amphetamine in Japan in 1919. Both of these chemicals were originally used in nasal decongestants and in bronchial inhalers.\(^4\) Methamphetamine has also been used in the treatment of obesity.\(^5\) It first came to the United States in the 1930's.\(^6\) Use of the drug surged in the 1950's and 1960's, when users began injecting more frequently. The drug was outlawed as a part of the U.S. Drug Abuse and Regulation Control Act of 1970. Production and trafficking soared again in the 1990's in relation to organized crime in the Southwestern United States and Mexico.\(^7\)

Methods of Use
Methamphetamine can be taken orally, by intravenous injection, by smoking, or by snorting. The drug appears in powder ("crystal") form, which can be processed into a rock ("ice") or liquid form for the purpose of injection. After taking the drug, users experience a short, but intense rush that lasts 5-30 minutes, depending on the route of administration. Afterwards, the stimulant's other effects, including increased activity, decreased appetite, and a sense of well-being, can last 6 to 12 hours. Some users will continue taking doses of methamphetamine every so often in order to sustain the high and to avoid the severe withdrawal symptoms.\(^8\)

Methamphetamine's Effects on the Brain
Methamphetamine is a very strong psychomotor stimulant that mimics the actions of certain neurotransmitters that affect mood and movement.\(^9\) Methamphetamine causes a release of dopamine and serotonin, producing the intense rush that users feel. Even after the initial rush subsides, the brain remains in an alert state and keeps the user's body on edge. After the effects have worn off, the brain is depleted of its dopamine, and depression is a common result. Methamphetamine easily hooks users because the highs are so intense and the lows are so awful. In addition, regular users build up a tolerance to the drug's effects, needing more of the drug to feel the original effect. Furthermore, methamphetamine can be extremely addictive. Methamphetamine appears to have neurotoxic (brain-damaging) effects, destroying brain cells that contain dopamine and serotonin.\(^10\) Over time, abuse appears to cause reduced levels of dopamine, which can result in symptoms like those of Parkinson's disease.\(^11\) Methamphetamine also stimulates locomotor activity (i.e. - reflexes, basic physical movements) and produces...
"stereotypic behaviors" - random, repetitive, compulsive movements and actions such as twitching or picking at the skin - as a side effect.\textsuperscript{12}

**Methamphetamine's Effects on the User**

In addition to being physically addictive, methamphetamine can also be very psychologically addictive as well. Under the influence of methamphetamine, users experience bursts of energy, talkativeness, and excitement. Users are able to go for hours or even days without sleep or food.\textsuperscript{13} High doses or chronic use have been associated with increased nervousness, irritability, paranoia, and occasionally violent behavior, while withdrawal from high doses generally leads to severe depression. Chronic abuse produces a psychosis similar to schizophrenia and is characterized by paranoia, picking at the skin, self-absorption, auditory and visual hallucinations, and sometimes episodes of violence.

**Tweaking**

The most dangerous stage of methamphetamine abuse occurs when an abuser has not slept in 3-15 days and is irritable and paranoid. This behavior is referred to as "tweaking," and the user is known as the "tweaker." The tweaker craves more methamphetamine, but it is difficult to achieve the original high, causing frustration and unstable behavior in the user. Because of the tweaker's unpredictability, there have been reports that they can react violently, which can lead to involvement in domestic disputes, spur-of-the-moment crimes, or motor vehicle accidents. A tweaker can appear normal - eyes clear, speech concise, and movements brisk; however, a closer look will reveal that the person's eyes are moving ten times faster than normal, the voice has a slight quiver, and movements are quick and jerky.\textsuperscript{14} These physical signs are more difficult to identify if the tweaker has been using a depressant such as alcohol; however, if the tweaker has been using a depressant, his or her negative feelings - including paranoia and frustration - can increase substantially. A person should use extreme caution when dealing with an individual on methamphetamine.

**Short-Term Effects**\textsuperscript{15}

The following effects are traits that methamphetamine users demonstrate while under the influence of the drug:

- Brief rush, euphoria, surge of energy
- Increased physical activity
- Increased blood pressure and breathing rate
- Dangerously elevated body temperature
- Loss of appetite
- Sleeplessness
- Paranoia, irritability
- Unpredictable behavior
- Performing repetitive, meaningless tasks
- Dilated pupils
- Heavy sweating
- Nausea, vomiting, diarrhea
- Tremors
- Dry mouth, bad breath
- Headache
- Uncontrollable jaw clenching
- Seizures, sudden death

**Long-Term Effects**

These negative effects can onset during or after methamphetamine intoxication:
- Damaged nerve terminals in the brain
- Brain damage similar to Parkinson's or Alzheimer's Diseases
- High blood pressure
- Prolonged anxiety, paranoia, insomnia
- Psychotic behavior, violence, auditory hallucinations and delusions
- Homicidal or suicidal thoughts
- Weakened immune system
- Cracked teeth
- Sores, skin infections, acne
- Strokes, heart infections, lung disease, kidney damage, liver damage
- Increased risk behavior, especially if drug is injected
- When used by a pregnant woman, premature birth; babies suffer cardiac defects, cleft palate, and other birth defects
- Death

**Signs Of Abuse**

There are several indicators that can help identify a person who has been abusing methamphetamine. Methamphetamine abuse can cause insomnia, anxiety, and violent or psychotic behavior. If this type of behavior is not typical for that person, he or she may have a drug problem. Chronic methamphetamine users also often display poor hygiene, a pale, unhealthy complexion, and sores on their bodies from picking at "crank bugs" - the tactile hallucination that tweakers often experience. In addition, users may have cracked teeth due to extreme jaw-clenching during a methamphetamine high.

**Terminology**

**Slang Terms for Methamphetamine:**
- Meth, Crystal Meth, Crystal, Speed, Crank, Ice, Glass, Chalk, Redneck Cocaine, Yellow Powder, Yellow Barn, Tina, Tick-Tick, Spoosh, Scootie

**Slang Terms for Smokeable Methamphetamine:**
- Hot Ice, Super Ice, L.A. Glass, L.A. Ice, Quartz, Batu, Hanyak, Hiropon

**Links**
- NIDA Methamphetamine Infofax ([http://www.drugabuse.gov/Infofax/methamphetamine.html](http://www.drugabuse.gov/Infofax/methamphetamine.html))
- DEA Amphetamines/Methamphetamine Page  
  (http://www.dea.gov/concern/amphetamines.html)
- InTheKnowZone Methamphetamine Page  
  (http://www.intheknowzone.com/meth/index.htm)

Footnotes
3 ONDCP Methamphetamine Page.
5 NIDA Methamphetamine Infofax.
8 InTheKnowZone Methamphetamine Page.
9 InTheKnowZone Methamphetamine Page.
10 NIDA Methamphetamine Infofax.
11 NIDA Methamphetamine Infofax.
12 InTheKnowZone Methamphetamine Page.
13 InTheKnowZone Methamphetamine Page.
14 InTheKnowZone Methamphetamine Page.
15 InTheKnowZone Methamphetamine Page.
16 InTheKnowZone Methamphetamine Page.
17 ONDCP Methamphetamine Page.