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Research Report

1998 Annual Report on Methamphetamine Use Among Arrestees

Arrestee Drug Abuse Monitoring Program

A Program of the National Institute of Justice
Research Report

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Introduction

In 1998, the Arrestee Drug Abuse Monitoring (ADAM) program expanded from 23 to 35 urban sites across the United States. Many new sites included in the expansion are in urban areas West of the Mississippi. Sites include Albuquerque, Anchorage, Des Moines, Laredo, Las Vegas, Minneapolis, Oklahoma City, Sacramento, Salt Lake City, Seattle, Spokane, and Tucson. For many of the new sites, this report represents the first look at methamphetamine use in their arrestee populations.

Perhaps more than any other drug monitored in ADAM, methamphetamine prevalence varies across sites. There are sites in which virtually no methamphetamine is found among arrestees and others in which it is the first or second most prevalent drug detected. For example, there are 7 sites where no arrestees tested positive for methamphetamine in 1998 (Anchorage, Atlanta, Birmingham, Cleveland, Ft. Lauderdale, Laredo, and New York City). In all, 18 sites reported less than 2 percent of male or female arrestees testing positive for methamphetamine. In contrast, there are 9 sites where in 1998 as much as one-fifth of the male or female arrestees tested positive for the presence of methamphetamine, rates comparable to those more typically found with cocaine and marijuana. The 9 sites with methamphetamine prevalence rates exceeding 20 percent in the male or female arrestee population are Des Moines, Las Vegas, Phoenix, Portland, Sacramento, Salt Lake City, San Diego, San Jose, and Spokane.

Several of the sites new to ADAM show some of the highest levels of methamphetamine use reported in the ADAM system. Des Moines, for example, reports 10.2 percent positive for males and 24.2 percent positive for females; Las Vegas reports 13.8 percent positive for males and 24.3 percent positive for females; Salt Lake City reports 20.3 percent positive for males and 31.4 percent positive for females; Spokane reports 15.8 percent positive for males and 22.0 percent positive for females; and Sacramento reports 24.6 percent positive for males and 29.2 percent positive for females. Other new sites, some even in close proximity to areas reporting high methampheta-

mine use, show far lower rates. Near the Southwest border, for example, Tucson reports only 4.0 percent positive among males and 2.5 percent among female arrestees even though it is in the same region as San Diego, the ADAM site where approximately one-third of both male and female arrestees test positive for methamphetamine.

For the 23 veteran sites we are able to compare 1998 methamphetamine use with that found in previous years[1] (see Table 1). Data indicate that the high methamphetamine-positive rates reported in some areas are not declining appreciably. Only in San Diego has there been a decline of more than 5 percentage points for both male and female arrestees. However, it is important to note that even this decline still places San Diego with the highest methamphetamine rate in the ADAM system. In another veteran site (Portland) where methamphetamine positive levels are already high, there appears to be a slight increase; levels are up approximately 2 percentage points in Portland for both males and females.

It is important to preface the discussion which follows with the caveat that the numbers involved in the methamphetamine data at some sites, particularly those new sites in which only one quarter of data are represented, are quite small and that differences which appear from year to year may not in fact be statistically significant. Significance cannot be computed because ADAM samples are currently not selected using methods that allow for such computation. Moreover, extra caution should be taken this year with comparisons to previous years. As part of ADAM's transition toward probability-based county-level sampling, some sites have expanded their collection to include cases from additional jail facilities, often in more rural or suburban county areas. For example, New York City has expanded its effort to include data collection in the five boroughs, rather than just Manhattan, while in Los Angeles data collection occurred in both city and county jails in the third and fourth quarters of 1998 (see

[1] Data for 1990-1993 represent specimens that screened positive for amphetamine and did not confirm positive for over-the-counter medications. Although the overwhelming majority of these specimens are likely methamphetamine positive, a small (less than 2 percent) portion of the 1990-1993 methamphetamine data may consist of specimens that were not methamphetamine. Beginning in 1994 the data reflect true methamphetamine positives because of a change in laboratory reporting practices.

Table 1. Percentage of Male and Female Arrestees Testing Positive for Methamphetamine by Site, 1990-98

	1990 %	1991 %	1992 %	1993 %	1994 %	1995 %	1996 %	1997 %	1998 %
Albuquerque*									
Male	–	–	–	–	–	–	–	–	3.4
Female	–	–	–	–	–	–	–	–	2.4
Anchorage*									
Male	–	–	–	–	–	–	–	–	0.0
Female	–	–	–	–	–	–	–	–	0.0
Atlanta									
Male	0.0	0.1	0.1	0.4	0.1	0.4	0.0	0.6	0.0
Female	0.0	0.3	0.4	0.5	0.3	0.6	0.0	0.7	–
Birmingham									
Male	0.0	0.0	0.1	0.3	0.2	0.1	0.2	0.6	0.0
Female	0.3	0.3	2.1	0.6	1.2	0.0	1.0	0.5	0.0
Chicago									
Male	0.0	0.0	0.1	0.2	0.1	0.0	0.2	0.3	0.2
Female	–	–	–	–	–	–	–	–	0.0
Cleveland									
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Female	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dallas									
Male	1.9	1.4	0.6	3.5	2.0	2.2	1.2	2.6	3.3
Female	4.0	2.2	2.4	5.2	3.3	3.7	1.5	2.8	4.0
Denver									
Male	0.7	0.4	1.0	1.1	2.1	4.1	2.9	5.0	5.2
Female	1.6	1.5	1.7	3.1	2.1	3.2	0.7	4.6	4.6
Des Moines*									
Male	–	–	–	–	–	–	–	–	10.2
Female	–	–	–	–	–	–	–	–	24.2

* New site in 1998

Table 1. Percentage of Male and Female Arrestees Testing Positive for Methamphetamine by Site, 1990-98 (continued)

	1990 %	1991 %	1992 %	1993 %	1994 %	1995 %	1996 %	1997 %	1998 %
Detroit									
Male	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Female	0.3	0.0	0.2	0.5	0.0	0.6	0.0	0.0	0.0
Ft. Lauderdale									
Male	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0
Female	1.3	0.0	0.8	1.2	0.2	0.0	0.3	0.0	0.0
Houston									
Male	0.6	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.2
Female	3.2	0.2	0.0	1.4	0.2	0.9	0.7	0.5	0.0
Indianapolis									
Male	0.0	0.0	0.2	0.4	0.4	0.8	0.3	0.2	0.8
Female	0.3	0.0	0.7	0.0	0.6	0.0	0.2	0.2	0.0
Laredo*									
Male	–	–	–	–	–	–	–	–	0.0
Female	–	–	–	–	–	–	–	–	0.0
Las Vegas*									
Male	–	–	–	–	–	–	–	–	13.8
Female	–	–	–	–	–	–	–	–	24.3
Los Angeles									
Male	5.7	4.0	4.5	8.0	7.7	5.8	4.1	4.7	8.0
Female	6.4	6.3	7.0	8.3	9.8	11.3	12.3	8.9	11.8
Miami									
Male	–	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Female	–	–	–	–	–	–	–	–	–
Minneapolis*									
Male	–	–	–	–	–	–	–	–	0.8
Female	–	–	–	–	–	–	–	–	0.0

* New site in 1998

	1990 %	1991 %	1992 %	1993 %	1994 %	1995 %	1996 %	1997 %	1998 %
New Orleans									
Male	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.2
Female	0.3	0.3	0.3	0.3	0.5	0.0	0.3	0.0	0.3
New York City									
Male	0.0	0.2	0.0	0.0	0.3	0.0	0.2	0.0	0.0
Female	0.4	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Oklahoma City*									
Male	–	–	–	–	–	–	–	–	8.0
Female	–	–	–	–	–	–	–	–	–
Omaha									
Male	0.6	0.6	0.5	0.9	3.3	7.8	4.3	9.7	10.2
Female	–	–	–	3.7	2.7	10.3	4.9	13.3	13.6
Philadelphia									
Male	0.9	0.5	0.4	0.4	0.1	0.4	0.5	0.6	0.6
Female	1.1	0.2	0.7	0.2	0.7	1.1	0.0	0.0	0.3
Phoenix									
Male	6.7	4.1	5.0	13.7	25.4	22.0	11.1	16.4	16.4
Female	6.6	3.9	7.1	15.1	26.0	21.7	14.0	25.6	22.4
Portland									
Male	10.9	6.6	5.1	10.2	16.3	18.1	11.8	15.9	18.1
Female	10.9	10.5	6.6	14.9	21.4	19.7	13.5	20.7	22.3
Sacramento*									
Male	–	–	–	–	–	–	–	–	24.6
Female	–	–	–	–	–	–	–	–	29.2
St. Louis									
Male	0.2	0.2	0.1	0.1	0.5	0.6	0.3	0.4	0.3
Female	0.0	0.0	0.0	0.3	0.0	0.3	0.9	2.1	2.5

* New site in 1998

Table 1. Percentage of Male and Female Arrestees Testing Positive for Methamphetamine by Site, 1990-98 (continued)

	1990 %	1991 %	1992 %	1993 %	1994 %	1995 %	1996 %	1997 %	1998 %
Salt Lake City*									
Male	–	–	–	–	–	–	–	–	20.3
Female	–	–	–	–	–	–	–	–	31.4
San Antonio									
Male	2.1	1.4	0.6	0.5	1.0	1.1	1.7	1.7	2.0
Female	2.3	1.6	1.3	1.3	0.7	2.5	2.8	2.4	1.7
San Diego									
Male	27.3	14.1	22.2	32.0	41.0	36.0	29.3	39.6	33.2
Female	31.8	21.5	25.3	32.2	53.0	40.2	31.3	42.2	33.3
San Jose									
Male	8.9	5.1	4.8	13.4	19.9	16.3	12.1	18.4	19.7
Female	5.4	6.1	10.3	15.6	23.3	23.6	22.2	24.9	21.1
Seattle*									
Male	–	–	–	–	–	–	–	–	6.4
Female	–	–	–	–	–	–	–	–	5.2
Spokane*									
Male	–	–	–	–	–	–	–	–	15.8
Female	–	–	–	–	–	–	–	–	22.0
Tucson*									
Male	–	–	–	–	–	–	–	–	4.0
Female	–	–	–	–	–	–	–	–	2.5
Washington, D.C.									
Male	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.0
Female	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.5

* New site in 1998

"Methodology," page 8). Given that domestic production of methamphetamine may occur in more rural areas, inclusion of county facilities may increase the likelihood of capturing more methamphetamine-positive arrestees.

Methamphetamine Trends, 1990-98[2]

Between 1990 and 1998, approximately 250,000 adult arrestees[3] were surveyed through the Arrestee Drug Abuse Monitoring (ADAM) program. It also should be kept in mind that arrestees testing positive for methamphetamine may also test positive for other drugs. In San Diego, for example, of the 33.2 percent of males who test positive for methamphetamine in 1998, 41.1 percent also tested positive for marijuana and 9.6 percent also tested positive for cocaine.

The use of methamphetamine has increased in many veteran sites over the last nine years. The percentage of arrestees testing positive for methamphetamine has increased 7.2 percentage points for males and more than doubled for females in Portland from 10.9 percent to 22.3 percent positive since 1990. Prevalence more than doubled for both sexes in Phoenix and San Jose during that time period. In Omaha, less than one percent of males tested positive in 1990; in 1998, 10.2 percent tested positive. In San Jose 5.4 percent of female arrestees and 8.9 percent of male arrestees tested positive for methamphetamine in 1990; by 1998 the rates had risen to 21.1 and 19.7 percent, respectively. San Diego shows a slightly different pattern. Starting at a very high point in 1990 (27.3 percent positive for males and 31.8 percent positive for females) use levels remained high, peaking at 41.0 percent positive for males and 53.0 percent positive for females in 1994 and dropping back to approximately one-third methamphetamine positive for each gender in 1998.

[2] Because it is not possible to calculate standard errors for samples at this time, we offer these trend data for descriptive purposes only.

[3] We will use the term "arrestee" throughout this report. However, since no identifying data are collected in the interview setting, the data represent numbers of arrests rather than an unduplicated count of persons across quarters.

METHODOLOGY

To gauge drug use trends in urban areas, the National Institute of Justice established the Drug Use Forecasting (DUF) program in 1987. A modified version of DUF, the Arrestee Drug Abuse Monitoring (ADAM) program, was initiated in 1997. To date, 35 jurisdictions participate in ADAM. ADAM involves administration of a survey instrument, which measures historical and current drug use patterns among arrestees, and collection of a urine sample which is tested for 10 drugs. A more detailed overview of data collection methods can be found in the *1998 Annual Report on Drug Use Among Adult and Juvenile Arrestees*.[4] This box discusses how data collection methods have affected reporting methods and two significant reporting changes that will appear in next year's reports.

The first and most important change relates to sampling. Data collected after the mid-point of 1999 in all sites will be collected under probability sampling plans. This means that confidence intervals can be attached to estimates derived from ADAM data which in turn means that analysts can assess whether year-to-year changes in drug prevalence rates are significant. For example, this year in New York City, the cocaine prevalence for males fell from 57.6 percent in 1997 to 47.1 percent in 1998. ADAM cannot report that as a statistically significant decline because of limits to the current sampling plans. The 1999 reports will introduce reporting on standard errors and confidence intervals.

The second important change relates to weighting the data. Each case collected represents similar respondents (age, race, and booking charge to name a few characteristics of interest) that were not selected for interview. If a certain category of offender is represented out of proportion to the actual occurrence in the arrest population, weighting can be used to correct the disproportionality. There are numerous factors that introduce disproportion into the data. The

What is notable across sites is the steady increases in those areas where methamphetamine has taken hold, and the virtual absence of the drug in other areas. Of the 23 veteran sites, 8 sites (Denver, Los Angeles, Omaha, Phoenix, Portland, St. Louis, San Diego, and San Jose) have all seen an increase in positive tests for methamphetamine since 1990, though, as noted above, some are far more dramatic than others. In direct contrast are those sites where methamphetamine has virtually never appeared. In Atlanta, Chicago, Cleveland, Detroit, Indianapolis, Miami, New Orleans, New York City, and Washington,

[4] National Institute of Justice. (1999). "ADAM: 1998 Annual Report on Drug Use Among Adult and Juvenile Arrestees." Washington, D.C.: National Institute of Justice.

jails included in the program have changed over time, most recently as a result of standardizing site catchment areas at the county level. In addition, the DUF program operated according to a charge priority system that emphasized interviewing and testing felony offenders over misdemeanants. Drug offenders, who are more likely to test positive for drugs than their non-drug-offending counterparts, were limited to 20 percent of the total sample to prevent drug offenders from dominating the data. Traffic offenses (e.g., DUI and DWI) were generally excluded from the sample. These practices were revised in the second quarter of 1998 data collection so that all arrestees, regardless of charge, are eligible for inclusion in the ADAM study.

This year's data, as well as data collected during previous years, could be weighted by local arrest data to adjust for the data collection methods. We chose not to weight the data for two reasons. First, there may be additional changes in the data collection protocol this year that would change the weighting process, forcing us to revise the entire weighted data series. Second, since confidence intervals and quantification of uncertainty cannot be applied to the data series until next year, it seemed appropriate to do all of the design and reporting changes in one year.

In addition, it is important that the current analysis be read with an understanding that the weighting and sampling issues limit presentation and interpretation. In particular, small changes from year to year in prevalence figures should not be viewed as definitive. It should be stressed that the arrestee population is a difficult one to access, and one not adequately covered in other data collection efforts that, for example, target households, schools, or treatment populations. The data are most informative over multiple years when longer term trends can be discerned.

D.C. less than 1 percent of arrestees tested positive for methamphetamine throughout the 1990-98 time period. Ft. Lauderdale, Houston, and Philadelphia show a period in which methamphetamine positives among females were just above 1 percent (1993), though they seem to have disappeared since that reporting period.

Regional Variation

Perhaps more than any other drug, methamphetamine shows clear regional variation. For comparison purposes, we have assigned each ADAM site to one

of five geographic regions: East, South, Midwest, West/Southwest, and Northwest. Tables 2 and 3 indicate the percentage of male and female arrestees testing positive for methamphetamine, opiates, cocaine, and marijuana in each site. We include the test results for other drugs to highlight the unique regional variation found with methamphetamine not seen with other substances. As these tables indicate, cocaine and marijuana are the most commonly reported substances everywhere. The percentage of cocaine positives among males, for example, ranges from approximately 8 percent in one site to as high as 40 or 50 percent in other sites. Each region, however, has similar variation in percent positives across sites. With marijuana, one-fourth or more of male arrestees test positive in all sites in all regions.

By contrast, the distribution of methamphetamine use is skewed to sites in the West and Northwest. None of the sites in the Northeast report methamphetamine-positive rates of more than one percent, and, in fact, New York City reports no use among any arrestees. In the South, only Dallas and Oklahoma City report use of three percent or higher. In Dallas levels are fairly low: 3.3 percent of males test positive and 4.0 percent of females test positive. Levels are higher in Oklahoma City where 8.0 percent of male arrestees test positive. The rest of the Southern sites, however, have virtually no use detected. In the Midwest, there is very little use reported in most sites (less than one percent) with the exceptions of Des Moines and Omaha. In both sites the levels for males is approximately 10 percent. For female arrestees the levels are higher: 24.2 percent positive in Des Moines and 13.6 percent positive in Omaha.

Sites in the West and Northwest are where levels are far higher than anywhere else. Los Angeles, Phoenix, Portland, San Diego, and San Jose show higher levels than other sites and steady increases in those levels over time. Among the new sites, Las Vegas, Sacramento, Salt Lake City, and Spokane show equally high rates of methamphetamine-positive rates. Of the veteran sites in the West/Southwest and Northwest, Los Angeles, Phoenix, Portland, San Diego, and San Jose report methamphetamine rates that are equal to or greater than 8 percent for both males and females in 1998. The most active region appears to be California and areas to the North and West. Portland, Seattle, and Spokane

Table 2. Percentage of Adult Male Positives By Drug and Site, 1998

	Cocaine %	Opiates %	Marijuana %	Methamphetamine %
NORTHEAST				
New York City	47.1	16.2	38.7	0.0
Philadelphia	44.5	18.4	44.9	0.6
Washington, D.C.	33.3	9.7	38.0	0.0
SOUTH				
Atlanta	51.3	1.3	26.0	0.0
Birmingham	41.2	3.7	39.2	0.0
Dallas	29.0	2.3	43.1	3.3
Ft. Lauderdale	50.2	2.0	43.5	0.0
Houston	35.8	7.5	35.8	0.2
Miami	47.3	2.4	29.2	0.2
New Orleans	46.0	12.9	38.3	0.2
Oklahoma City*	27.3	1.9	53.1	8.0
MIDWEST				
Chicago	44.9	18.3	41.5	0.2
Cleveland	36.8	6.0	36.8	0.0
Des Moines*	18.1	2.8	41.8	10.2
Detroit	28.2	6.8	46.5	0.2
Indianapolis	34.2	1.8	45.1	0.8
Minneapolis*	26.7	4.7	45.4	0.8
Omaha	25.1	2.0	43.9	10.2
St. Louis	34.8	10.9	50.2	0.3
WEST/SOUTHWEST				
Albuquerque*	38.7	8.2	35.9	3.4
Denver	39.6	4.2	41.3	5.2
Laredo*	37.1	11.2	39.3	0.0
Las Vegas*	24.2	2.6	25.8	13.8
Los Angeles	42.7	5.6	27.3	8.0
Phoenix	31.1	5.7	32.2	16.4
Sacramento*	18.2	3.2	44.1	24.6
Salt Lake City*	20.3	8.2	36.8	20.3

* New site in 1998

Table 2. Percentage of Adult Male Positives By Drug and Site, 1998 (continued)

	Cocaine %	Opiates %	Marijuana %	Methamphetamine %
WEST/SOUTHWEST (continued)				
San Antonio	27.0	9.6	41.1	2.0
San Diego	19.1	9.3	36.4	33.2
San Jose	8.0	4.4	24.8	19.7
Tucson*	39.4	6.8	39.2	4.0
NORTHWEST				
Anchorage*	19.5	2.3	33.3	0.0
Portland	29.2	15.5	36.9	18.1
Seattle*	35.9	17.4	35.4	6.4
Spokane*	18.3	8.5	42.9	15.8

* New site in 1998

all report rates among both males and females over 5 percent; and female positive rates in Portland and Spokane are a remarkable 22 percent. In California, Sacramento, San Diego, and San Jose report rates for both males and females of 20 percent or higher; only Los Angeles shows somewhat lower rates with 8.0 percent of males and 11.8 percent of females testing positive.

Only San Diego has had high levels of methamphetamine positives close to their current levels over the past nine-year period. Most, like Portland or San Jose, had far lower methamphetamine levels in 1990 than in 1998. Still others like Omaha saw the appearance of methamphetamine in the early 1990s, then experienced substantial increases among both males and females in the past five years.

The spread of methamphetamine use still appears to be geographically confined, however. While it grew rapidly in areas like the West and Northwest, it has remained at marginal levels most everywhere else. The ADAM system continues to show no sign of methamphetamine's spread to the Eastern United States. Sites such as Atlanta, Ft. Lauderdale, and New York City showed no

Table 3. Percentage of Adult Female Positives By Drug and Site, 1998

	Cocaine %	Opiates %	Marijuana %	Methamphetamine %
NORTHEAST				
New York City	67.0	21.8	23.4	0.0
Philadelphia	60.9	14.9	23.7	0.3
Washington, D.C.	40.4	9.8	28.5	0.5
SOUTH				
Atlanta	–	–	–	–
Birmingham	56.8	17.6	17.6	0.0
Dallas	29.5	4.8	24.2	4.0
Ft. Lauderdale	53.4	4.7	24.5	0.0
Houston	37.3	7.0	20.1	0.0
Miami	–	–	–	–
New Orleans	38.7	3.4	22.1	0.3
Oklahoma City*	–	–	–	–
MIDWEST				
Chicago	55.5	27.0	19.7	0.0
Cleveland	40.5	1.4	27.0	0.0
Des Moines*	24.2	6.1	15.2	24.2
Detroit	46.2	21.5	21.5	0.0
Indianapolis	43.2	4.5	31.2	0.0
Minneapolis*	28.6	6.0	22.6	0.0
Omaha	35.5	4.5	28.2	13.6
St. Louis	43.6	4.9	31.9	2.5
WEST/SOUTHWEST				
Albuquerque*	59.1	15.4	24.0	2.4
Denver	49.9	3.4	29.9	4.6
Laredo*	33.3	0.0	13.3	0.0
Las Vegas*	35.1	13.5	21.6	24.3
Los Angeles	44.7	8.8	21.8	11.8
Phoenix	39.6	7.3	24.9	22.4
Sacramento*	30.7	8.4	28.2	29.2
Salt Lake City*	19.6	13.7	29.4	31.4

* New site in 1998

Table 3. Percentage of Adult Female Positives By Drug and Site, 1998
(continued)

	Cocaine %	Opiates %	Marijuana %	Methamphetamine %
WEST/SOUTHWEST (continued)				
San Antonio	20.0	8.6	17.5	1.7
San Diego	20.4	6.7	26.7	33.3
San Jose	9.5	4.8	13.6	21.1
Tucson*	41.3	7.4	21.5	2.5
NORTHWEST				
Anchorage*	50.0	3.8	23.1	0.0
Portland	36.7	25.1	23.2	22.3
Seattle*	56.9	17.2	37.9	5.2
Spokane*	31.7	17.1	26.8	22.0

* New site in 1998

methamphetamine use among arrestees for 1998. If methamphetamine use is occurring in these cities, it is doing so either in populations that are not getting arrested or populations that are found outside the program's county-level data collection boundaries.

Perhaps the most counterintuitive results are those found along the Mexican border. Sites along the Southwest border (with the obvious exception of San Diego) and in Texas show considerably lower levels of methamphetamine use than sites elsewhere in the West and Northwest, a surprising finding given reports of active methamphetamine production in and trafficking from Mexico (ONDCP, 1998; Texas Commission on Alcohol and Drug Abuse, 1998). Albuquerque, Dallas, Houston, San Antonio, and Tucson indicate rates of less than 5 percent for either male or female arrestees. Laredo, in fact, does not report a single arrestee of either gender testing positive for methamphetamine in its first data collection in 1998.

Variation of Methamphetamine Use by Age

Analyses of methamphetamine trend data yielded several interesting findings with respect to age cohorts. If we examine sites with substantial but changing levels of methamphetamine use over the past eight years, there are indications that increases have occurred among both the oldest and the youngest users.

Figures 1 and 2 show the percentage of male and female arrestees aged 15-20 or 36 and older testing positive for methamphetamine in Portland and San Jose in 1990 and 1998. Both sites experienced increases in the percentage of male and female arrestees, in general, testing positive over those years. However, San Jose's youthful arrestees tested positive for methamphetamine at a rate of less than 4 percent in 1990, which rose to 21.0 percent by 1998, an increase of over 17 percentage points. In Portland, 10.2 percent of arrestees aged 15-20 tested positive for methamphetamine in 1990, rising to 16.1 percent in 1998. In these two sites the increase was not confined to the youthful cohort, though this is where the most dramatic increases occurred. Each site also witnessed marked increases of methamphetamine positives within their oldest cohort. In Portland, the methamphetamine-positive rate for the oldest cohort (36 and older) increased from 10.5 percent in 1990 to 15.0 percent in 1998, an increase of 4.5 percentage points. In San Jose, methamphetamine positives among arrestees aged 36 and older increased by 8.2 percentage points.

Variation of Methamphetamine Use by Race and Gender

Previous ADAM data have suggested that the use of methamphetamine may be higher among white arrestees than African-American or Hispanic arrestees (Feucht and Kyle, 1996), a finding which continues in the 1998 data. Among San Diego males, 42.6 percent of white arrestees test positive for methamphetamine compared to 35.9 percent of Hispanics and 13.3 percent of African Americans. In Phoenix the numbers are similar: 25.7 percent of the white males, 8.3 percent of Hispanic males, and 7.4 percent of African-American males test positive for methamphetamine. Similarly, prevalence is higher among white females than any other racial or ethnic group. This is a pattern which is repeated across

Figure 1. Variation in Methamphetamine Use by Age Cohort for San Jose, 1990 and 1998

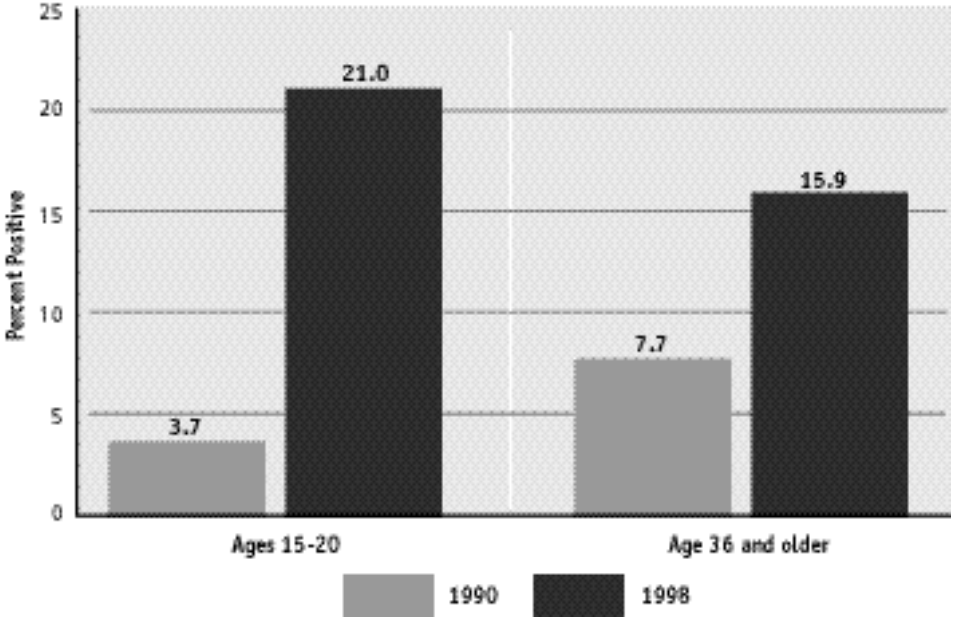
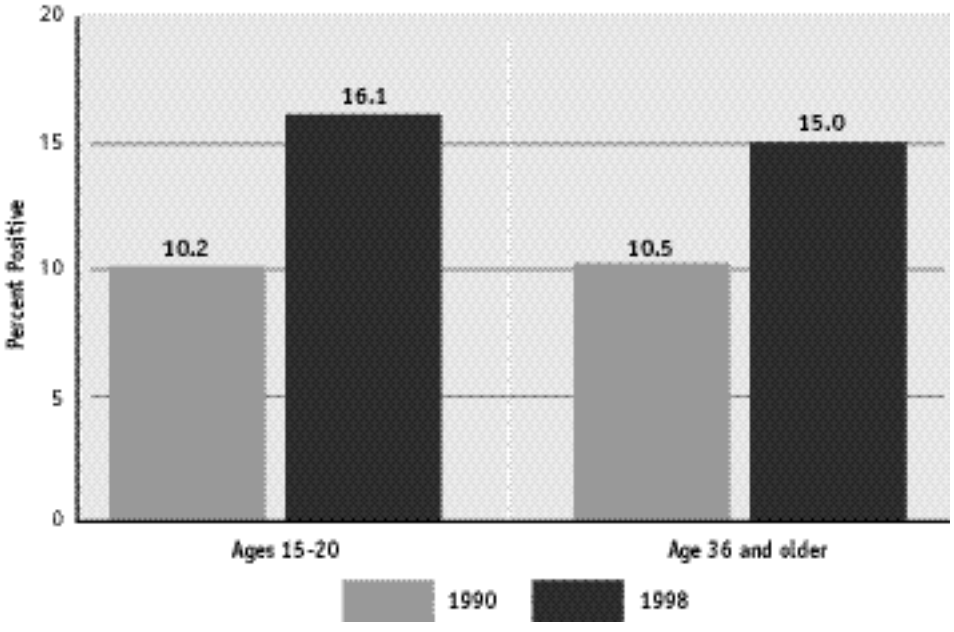


Figure 2. Variation in Methamphetamine Use by Age Cohort for Portland, 1990 and 1998



those ADAM sites in other areas of the country where methamphetamine is detected. In Denver 14.1 percent of white male arrestees test positive for methamphetamine compared to less than 1 percent of African-American male arrestees and 2.3 percent of Hispanic male arrestees. Regardless of region, there appears to be a greater likelihood of methamphetamine use among white arrestees than any other ethnic group.

Though the use of methamphetamine among arrestees appears to be dominated by whites, there are some notable recent trends in methamphetamine use among Hispanics. Looking at three veteran sites with high levels of use (Portland, San Diego, and San Jose) over the last nine years, it is evident that the proportion of Hispanic arrestees testing positive for methamphetamine has risen dramatically, most noticeably over the last four years. For example, in Portland only 3.0 percent of male Hispanic arrestees and no Hispanic female arrestees tested positive for methamphetamine in 1990. In 1997 levels among Hispanic males arrestees at that site had risen to 9.3 percent testing positive; and in 1998, 11.4 percent of male and 11.1 percent of female Hispanic arrestees test positive. In San Diego, where over one-third, and San Jose, where over one-fifth, of white arrestees test positive for methamphetamine, percentages among Hispanic arrestees testing positive have grown almost as rapidly. In San Diego 18.2 percent of Hispanic males arrestees and 16.4 percent of Hispanic female arrestees tested positive for methamphetamine in 1990. Those numbers rose to 37.7 percent (males) and 43.5 percent (females) in 1994 then declined somewhat to 35.9 percent (males) and 27.3 percent (females) in 1998.

San Jose data indicate a similar increase in the proportion of male and female Hispanic arrestees testing positive for methamphetamine beginning in 1993 and 1994. At that site, for example, the percentage of male Hispanic arrestees testing positive went from 2.7 percent in 1992 to 8.8 percent in 1993 and 19.7 percent in 1998. The 1998 rates for Hispanic males (19.7 percent) and females (25.5 percent) are similar to that found among white arrestees testing positive; 22.5 percent for white males and 25.0 percent for white female arrestees.

Omaha shows similar increases for Hispanics, though not as dramatic as in the other sites. In the early 1990s, no Hispanic male arrestees tested positive for methamphetamine.[5] In 1995, 9.1 percent of Hispanic male arrestees tested positive, 5.8 percent in 1996 and 4.3 percent in 1998. Among female Hispanic arrestees, after 1993 there were no positive methamphetamine tests until 1998, when 14.3 percent of female Hispanic arrestees test positive.

While the methamphetamine prevalence rates for Hispanics are typically lower, and in some cases, much lower, than the rates for whites, the numbers also indicate an increasing use of the drug among Hispanics. In many cases, the numbers for Hispanics represent a doubling of the proportion of both male and female arrestees testing positive from as recently as six years prior. Perhaps of equal importance, the numbers for Hispanics show that the growth in methamphetamine use has been comparable to that found among whites.

One of the most prominent variations found in the use of methamphetamine in ADAM sites is the level of use among female arrestees. Again the reader is cautioned that the number of methamphetamine positives is often small in sites, as is the sample of females. However, the discrepancy between men and women in those sites where methamphetamine is found is notable. In Des Moines and Omaha, for example, about 10 percent of the male sample test positive for methamphetamine in 1998. Among female arrestees in Omaha, 13.6 percent test positive and in Des Moines 24.2 percent test positive. In Las Vegas, a similar disparity is evident: almost twice as many females as males test positive for methamphetamine. Some sites have particularly high levels for female arrestees: San Diego (33.3 percent), Salt Lake City (31.4 percent), Sacramento (29.2 percent), Spokane (22.0 percent), and San Jose (21.1 percent). For more information on how female prevalence rates may be affected by arrest patterns, see the *1998 Annual Report on Cocaine Use Among Arrestees* (NIJ, 1999).

[5] Omaha did not begin testing females until 1993.

Summary

The findings in the current analysis suggest that the use of methamphetamine among national arrestee populations has increased substantially since 1990, but that the prevalence is still fairly geographically confined. In 7 of the 23 veteran ADAM sites, positive methamphetamine rates have increased by at least 4 percentage points for both men and women arrestees over the past 9-year period, some as much as 20 percentage points. Of the 12 new sites, for which longitudinal data are unavailable, 7 reported a positive methamphetamine rate greater than 5 percent in 1998 and two report levels among males and females of 20 percent or more.

While the prevalence of methamphetamine in the ADAM system appears to be localized to the West and Northeast, other areas like Des Moines, Oklahoma City, and Omaha are showing striking results. Omaha, the only veteran site in this group, while still lower than some sites with 10.2 of male arrestees and 13.6 percent of female arrestees testing positive in 1998, has shown a doubling then tripling of the numbers in the years since 1990. It will be of particular interest to see if the numbers of male and female arrestees testing positive in the two new sites, Des Moines and Oklahoma City, will remain as high as in this first data report.

Methamphetamine has a greater likelihood of use among women and among white arrestees than other drugs detected. Regardless of the area of the country, in those sites where any methamphetamine is detected, it appears to be more prevalent among white arrestees. It is also a drug for which a greater proportion of female arrestees test positive in most sites than male arrestees, though the samples of female arrestees are small in all sites. A similar pattern is found in the female samples with regard to cocaine in many sites; that is, female arrestees are more likely to test positive for cocaine than their male counterparts in many sites (NIJ, 1999).

Methamphetamine continues to be a serious problem in large sections of the country. Information on methamphetamine use by age suggests that in many

communities large proportions of young offenders are involved in methamphetamine. Thus, though methamphetamine's movement to other areas is slower than might be expected, the levels of use among young offenders suggest that the problem will be durable. Recent evidence indicates 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.

References

Feucht, T.E. and G.M. Kyle. (1996). "Methamphetamine Use Among Adult Arrestees: Findings from the Drug Use Forecasting (DUF) Program." Washington, D.C.: National Institute of Justice.

National Institute of Justice. (1999). "1998 Annual Report on Cocaine Use Among Arrestees." Washington, D.C.: National Institute of Justice.

Office of National Drug Control Policy. (Spring 1998). "Pulse Check: National Trends in Drug Abuse." Washington, D.C.: Executive Office of the President.

Texas Commission on Alcohol and Drug Abuse. (December 1998). "TCADA Research in Brief: Substance Abuse Trends in Texas." Dallas: Texas Commission on Alcohol and Drug Abuse.

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