



ADAM Preliminary 2000 Findings on Drug Use & Drug Markets

Adult Male Arrestees



U.S. Department of Justice
Office of Justice Programs
810 Seventh Street N.W.
Washington, DC 20531

John Ashcroft
Attorney General

Deborah J. Daniels
Assistant Attorney General

Sarah V. Hart
Director, National Institute of Justice

Office of Justice Programs
World Wide Web Site
<http://www.ojp.usdoj.gov>

National Institute of Justice
World Wide Web Site
<http://www.ojp.usdoj.gov/nij>

ADAM Preliminary 2000 Findings on Drug Use and Drug Markets— Adult Male Arrestees

Bruce G. Taylor, National Institute of Justice

Nora Fitzgerald, National Institute of Justice

Dana Hunt, Abt Associates Inc.

Judy A. Reardon, National Institute of Justice

Henry H. Brownstein, National Institute of Justice

December 2001
NCJ 189101



National Institute of Justice

Sarah V. Hart
Director

For their forthright and insightful comments on the draft, we are indebted to our colleagues at the National Institute on Drug Abuse, particularly Lynda Erinoff, and at the Office of National Drug Control Policy, particularly Robert Eiss. We also extend special thanks to Marianne Zawitz of the Bureau of Justice Statistics, who offered numerous suggestions to make the tabular matter more reader friendly.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

CONTENTS

I. Introduction	1
<i>The ADAM redesign</i>	1
<i>ADAM data collection</i>	1
<i>Benefits of the redesign</i>	2
II. Overall Findings	3
<i>Illegal drug use</i>	3
<i>Demographics</i>	4
III. The Drugs of Abuse	7
<i>Cocaine (crack and powder)</i>	7
<i>Methamphetamine</i>	9
<i>Opiates</i>	10
<i>Marijuana</i>	12
IV. Heavy Use and Need for Treatment	15
<i>Alcohol</i>	15
<i>Drugs</i>	17
V. Drug Markets.	21
<i>Extent of drug-market participation</i>	21
<i>How drugs are acquired (cash or noncash)</i>	22
<i>Place of purchase (open-air or indoor)</i>	24
<i>Outside or inside the neighborhood</i>	25
<i>Problems obtaining drugs</i>	25
VI. Prospects and Possibilities	29
References	31
Appendixes	33
<i>Appendix A: The New ADAM Method</i>	35
<i>Appendix B: ADAM Staff—National Institute of Justice and Abt Associates Inc.</i>	39
<i>Appendix C: Appendix Tables</i>	41

Map and Tables

Map

Map: Cocaine and Methamphetamine Use, Detected by Urinalysis, by Region—Adult Male Arrestees. 11

Tables

Table 1: Drug Test Results—Any NIDA-5 Drug, by Site—Adult Male Arrestees. 5

Table 2: Drug Test Results—Cocaine, by Site—Adult Male Arrestees 7

Table 3: Crack and Powder Cocaine Use, Past 7 Days, by Site—Adult Male Arrestees. 8

Table 4: Drug Test Results—Methamphetamine, by Site—Adult Male Arrestees. 10

Table 5: Drug Test Results—Opiates, by Site—Adult Male Arrestees 12

Table 6: Drug Test Results—Marijuana, by Site—Adult Male Arrestees 13

Table 7: Heavy Use of Alcohol, by Site—Adult Male Arrestees. 16

Table 8: Heavy Use of Drugs, by Site—Adult Male Arrestees 18

Table 9: Drug Treatment Status, by Site—Adult Male Arrestees 19

Table 10: Health Insurance Status, by Site—Adult Male Arrestees 19

Table 11: Reasons Attempts to Purchase Drugs Failed (Medians), by Drug—Adult Male Arrestees 26

I. INTRODUCTION

The Arrestee Drug Abuse Monitoring (ADAM) program measures the extent of drug use in the high-risk population of people who have been arrested. This preliminary report presents the first highly reliable, probability-based findings from the ADAM program. These new findings will be useful to policymakers and practitioners who are shaping their drug policies to meet local needs. Of the 38 sites that participate in the ADAM program, data about male arrestees were available from 27 and are being released early. The forthcoming annual report will present data for men, women, and juvenile arrestees from all 38 sites.

ADAM has its roots in the Drug Use Forecasting (DUF) program, established in 1987 by the National Institute of Justice (NIJ) to provide participating communities with information for developing drug-control strategies and related public-policy responses.

In 1993, the U.S. General Accounting Office (GAO) issued a report called Drug Use Measurement—Strengths, Limitations, and Recommendations for Improvement. The report criticized DUF for producing data that were not generalizable. It did note, however, that “if DUF data are now handicapped by the sampling procedures, improvements are possible.” That report was a call to action for NIJ. Since then, many people committed themselves to work together to make possible the improvements suggested by GAO. ADAM is the product.

The ADAM redesign

Two major, recent changes in ADAM were the adoption of a sampling strategy designed to improve the reliability of the findings and inclusion in the survey instrument of new questions that permit more in-depth examination of issues related to drug use.

Several years of consultation, methods testing, and pilot implementation were required to finalize the redesign. The steps included developing the sampling method, training interviewers, developing and testing the questionnaire, collecting pilot data, and testing the reliability of these data. The changes also included the addition of more sites, so that as of 2000 there were 38 ADAM sites, most of them in large urban areas.¹

With ADAM fully implemented in 2000, it was possible for the first time to present findings based on the redesigned program.

ADAM data collection

In some respects, the procedure for collecting information about arrestees’ drug use remains the same as in the past. Information comes from interviews and urinalyses obtained voluntarily and recorded confidentially. Four times a year (quarterly), local research teams in the participating counties interview arrestees at booking facilities. After the interview, each respondent is asked to provide a urine sample, which is analyzed to detect drug use.

1. If St. Louis (currently in hiatus status) is included, the total number of ADAM sites is 39.

In the interviews, demographic data are collected and arrestees are asked about such matters as what drugs they use and how often they use them. The new questions added in the redesign were intended to shed more light on drug-use behavior and issues related to it. Thus, arrestees are asked about their housing situation during the past year, how they supported themselves, whether they have health insurance, and how and where they purchased illicit drugs.

Questions about heavy use of drugs and alcohol are intended to measure dependence and need for treatment, and arrestees are also asked about their experiences with treatment for drugs and mental health problems. A further series of questions explores arrestees' participation in drug markets, including place and method of purchase and difficulties encountered in trying to obtain drugs.²

Benefits of the redesign

The new interview questions and probability-based sample have produced, for the first time, systematically generated information that can track

trend data from year to year on such topics as drug market participation by arrestees. This means that law enforcement agencies will have access to more information on which to base drug-control strategies. With the data expanded in scope, ADAM also becomes more powerful as a platform on which to conduct research that examines the correlates of substance abuse and crime.

Perhaps the most significant change is the adoption of probability-based sampling. Findings from arrestees who are tested and interviewed in each county can be extrapolated to all arrestees in the county.³ The method permits greater confidence in study findings, making them a good estimate of drug use among all arrestees countywide. It will now be possible to track trends in a given county from year to year. Probability-based sampling also helps ensure the ADAM data are more reliable as the basis for research.

For a fuller discussion of the sampling strategy and the redesigned survey instrument, see “The New ADAM Method” (Appendix A).

2. A complete list of the new questions is in the *Methodology Guide for ADAM*, released in May 2001, which can be downloaded from the ADAM Web page (<http://www.adam-nij.net>) on the National Institute of Justice Web site (<http://www.ojp.usdoj.gov/nij>).

3. As currently designed, ADAM data do not reflect drug use by arrestees nationwide, because the selection of the sites is nonrandom. It is at the county level—in each participating county—that the data are collected through probability-based sampling. Synthetic estimation techniques could be used to generate figures on nationwide drug use by arrestees, but such techniques are beyond the scope of this report. See Rhodes (1993) and Wish (1990) for examples of the use of these techniques.

II. OVERALL FINDINGS

This preliminary report presents findings for adult male arrestees only, because data from the new methods of the ADAM redesign are now available for this group.¹ Of the 38 ADAM sites, preliminary findings are reported from 27—the ones where data were collected during at least 2 quarters of calendar year 2000.² Most sites conducted about 160 interviews quarterly and accumulated about 500 for analysis.³ (The names of all the sites, the number of interviews conducted each quarter, and related information are in Appendix Table 1.)

Illegal drug use

As in previous years, in 2000 the levels of drug use detected were high. Although urinalysis can detect 10 different drugs, the preliminary findings presented here focus on marijuana, cocaine, methamphetamine, opiates, and PCP—the “NIDA–5” drugs.⁴ (See “ADAM’s Use of Urinalysis to Detect Illicit Drugs.”)

In more than half the ADAM sites that reported data, 65 percent or more of the arrestees had recently used at least one of the NIDA–5 drugs. Use of at least one of these drugs ranged from 51 percent of arrestees (Des Moines) to 79 percent (New York City). (See Appendix Table 2.)

The data from self-reports are probably conservative estimates of drug use. As demonstrated in previous studies that used DUF and ADAM data, arrestees’ self-reports underestimated drug use detected by urinalysis by magnitudes of 40 to 60 percent, depending on the drug and site examined. (Lu, Taylor, and Riley 2001; and Johnson, Taylor, Golub, and Eterno 2001).

The findings about use of the NIDA–5 drugs are dramatic evidence of the extent of drug use in the arrestee population, but like other averages, they obscure the nuances of the data. They do not reveal, for example, that arrestees may use different

1. Although the ADAM annual report will present data on adult females and juveniles, the new sampling procedure is not used to collect data on adult females, and neither the new sampling procedure nor the new survey instrument is used to collect data on juveniles. Program resources are not yet sufficient to develop a sampling strategy that would provide countywide, representative samples of adult female arrestees and, in some sites, male and female juvenile arrestees.

2. One reason not all sites are represented is that some had more difficulty than others in implementing the changes in ADAM. Another reason is that not all 38 sites are currently operating. Weighted data from at least two quarters were not available from the two affiliate sites (so called because they use all standard ADAM conventions and procedures but are funded by other sources), Charlotte/Mecklenburg County, North Carolina; and Albany/Capital Area, New York. A third affiliate site, Kansas City/Jackson County, Missouri, was added only in 2001. Of the 27 sites reporting, 23 produced data from three calendar quarters, and 4 produced data from two quarters. All data submitted as of March 22, 2001, were included in this report.

3. Fewer than 150 interviews were conducted during the first quarter of the year by 8 sites; during the second quarter, by 9 sites; and during the third quarter, by 8 sites.

4. The 10 drugs tested in the ADAM program are cocaine, marijuana, methamphetamines, opiates, phencyclidine (PCP), methadone, benzodiazepines, methaqualone, propoxyphene, and barbiturates. The first five are the “NIDA–5,” drugs named by the National Institute on Drug Abuse (NIDA) as a standard panel of commonly used illegal drugs.

types of drugs and that drug use varies by demographic characteristics and geographic location. They also do not reveal whether polydrug use or use of a single drug is the norm.

Whether the use of multiple or single drugs dominates is a question that highlights the potential of the ADAM redesign. Urinalysis revealed that some arrestees had used more than one drug: In half the sites, 20 percent or more of the arrestees had done so, with polydrug use among the sites ranging from 10 percent of arrestees (Anchorage) to 30 percent (Tucson). The type of drugs used this way also varied by site and region of the country. In most sites, however, among arrestees testing positive by urinalysis, only a single drug was detected. (See Appendix Table 2.) This evidence needs to be interpreted cautiously, however, because studies have consistently shown

that polydrug use is the norm (U.S. Department of Health and Human Services 1998), with users substituting one drug for another when the drug of choice is scarce or mixing drugs to counter or moderate the effects of one or the other. By examining data from the ADAM interviews, it is possible to determine whether arrestees are using different types of drugs in the period of a month or a year, and how frequently they are used.

Demographics

In most of the sites reported here, the adult⁵ male arrestees were over the age of 32, with the mean age between 30 (in Minneapolis) and 35 (in Atlanta). Proportionately more arrestees were in the oldest age category (36 and over) than any other. In half the sites, more than 37 percent of the arrestees were in

5. An “adult” is defined here as anyone brought to an adult lockup facility.

ADAM’s Use of Urinalysis to Detect Illicit Drugs

The ADAM urinalysis protocol can detect 10 different drugs, but the focus is the “NIDA–5” drugs—marijuana, cocaine, methamphetamines, opiates, and phencyclidine (PCP). They were established by the National Institute on Drug Abuse (NIDA) as a standard list of commonly used illegal drugs. PCP is the one NIDA–5 drug not discussed in this report because urinalysis shows recent use of this drug at very low levels in the ADAM sites (measuring zero in 17 sites and between 1 and 8 percent of arrestees in the rest). (See Appendix Table 2.)

Urinalysis, used to confirm the information self-reported in the interviews, offers an objective assessment of recent drug use. Cocaine, PCP, methamphetamines, and opiates can be detected in the urine for up to 2 to 3 days after ingestion. Marijuana remains in the body as long as 30 days after use, so it is more likely than the other drugs to be detected at the time the urine specimen is collected. Special, confirmatory tests are used to detect methamphetamines.

Adding to the reliability of the findings is the high proportion of arrestees at all the sites who agreed to give a urine sample. Urinalysis completion rates were above 85 percent in 20 of the 27 reporting sites in 2000. The median was 88 percent, with the range from 79 percent (Cleveland) to 96 percent (Atlanta, New Orleans, and New York).*

* The number of samples available for urinalysis (reflected in the data in Appendix Table 1) is slightly smaller than the number of interviews. Approximately 500 interviews were available for analysis in most of the sites. In about 90 percent of these cases, the arrestees agreed to provide a specimen. The result was about 450 specimens available for analysis at each site.

Table 1: Drug Test Results—Any NIDA-5 Drug,* by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Tested Positive
New York, NY	79%
Philadelphia, PA	74
Sacramento, CA	73
Cleveland, OH	72
Oklahoma City, OK	72
Atlanta, GA	70
New Orleans, LA	69
Tucson, AZ	69
Birmingham, AL	67
Indianapolis, IN	66
Minneapolis, MN	66
Albuquerque, NM	65
San Diego, CA	65
Seattle, WA	65
Denver, CO	63
Miami, FL	63
Phoenix, AZ	63
Portland, OR	61
Omaha, NE	60
Laredo, TX	57
Las Vegas, NV	56
Spokane, WA	56
San Antonio, TX	55
Salt Lake City, UT	54
Anchorage, AK	53
San Jose, CA	52
Des Moines, IA	51
Median	65%

* The NIDA-5 drugs are cocaine, opiates, marijuana, methamphetamines, and PCP. NIDA established this list as a standard panel of commonly used illegal drugs. They are the drugs analyzed in this report.

Note: Data are from the period January–September 2000.

this category, while the medians for the other age categories were lower.⁶ (All demographic and sociodemographic data are in Appendix Table 3.)

In half the sites, 30 percent or more of the arrestees did not have a high school diploma. (The range was 20 percent, in San Jose and Anchorage, to 55 percent, in Laredo.) A substantial proportion of arrestees in many sites lived in a shelter or otherwise had no fixed address: In half the sites, at least 14 percent said their living situation was unstable in the month before they were interviewed.⁷ (The range was 5 percent, in Laredo, to 27 percent, in Portland and Denver.)

6. Throughout this report, the median is used as the average of any measure for all sites unless otherwise indicated. A median is the number that falls at the 50th percentile of any measure.

7. Throughout this report, “month” and “30 days” are used interchangeably to refer to the 30 days before the interview.

III. THE DRUGS OF ABUSE

Of the ten drugs analyzed by ADAM, four—cocaine (both crack and powder), marijuana, methamphetamines, and heroin—are used most often by arrestees. Overall, as measured by urinalysis, marijuana is the drug most commonly used by adult male arrestees, followed by cocaine, opiates, and methamphetamines. For each drug there are major variations among the sites, as well as age and regional patterns. Any analysis that combines data from many regions of the country would mask these differences. The differences suggest a one-size-fits-all approach to controlling drug use may not be the optimal one, and policies and strategies for enforcement and treatment are best tailored to specific user groups and locations.

Cocaine (crack and powder)

Urinalysis revealed that high percentages of ADAM arrestees had recently used cocaine (undistinguished here between crack and powder). On average, 30 percent of arrestees tested positive for cocaine. Only marijuana, for which the average was 40 percent, was higher. Cocaine use among the 27 sites ranged from 8 percent (Des Moines) to 49 percent (Atlanta). (See Appendix Table 3.) The sites where cocaine-positives among adult male arrestees were highest were, in addition to Atlanta, New York City (46 percent), Laredo (44 percent), Miami (43 percent), and Tucson (40 percent).

Many of the lowest cocaine-positive rates detected by urinalysis were among arrestees on the west coast and in the

Table 2: Drug Test Results—Cocaine, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Tested Positive
Atlanta, GA	49%
New York, NY	46
Laredo, TX	44
Miami, FL	43
Tucson, AZ	40
Cleveland, OH	37
Albuquerque, NM	35
Birmingham, AL	35
Denver, CO	34
Indianapolis, IN	32
New Orleans, LA	32
Philadelphia, PA	31
Phoenix, AZ	31
Seattle, WA	30
Minneapolis, MN	25
Oklahoma City, OK	24
Anchorage, AK	21
Las Vegas, NV	21
San Antonio, TX	21
Portland, OR	20
Sacramento, CA	18
Salt Lake City, UT	18
Omaha, NE	17
San Diego, CA	17
Spokane, WA	14
San Jose, CA	11
Des Moines, IA	8
Median	30%

Note: Data are from the period January–September 2000.

Table 3: Crack and Powder Cocaine Use, Past 7 Days, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Reported:		Ratio of Crack Cocaine to Powder Cocaine	Percent of Arrestees Who Said They Used Both Drugs
	Using Crack Cocaine	Using Powder Cocaine		
Atlanta, GA	25.1%	7.5%	3.3	3.2%
Cleveland, OH	20.3	5.0	4.1	3.1
Tucson, AZ	20.0	21.4	0.9	7.8
Phoenix, AZ	18.7	10.7	1.7	5.6
Albuquerque, NM	18.3	11.6	1.6	5.9
New York, NY	18.2	14.6	1.2	3.0
Philadelphia, PA	16.3	4.9	3.3	2.1
Birmingham, AL	16.1	3.8	4.2	2.5
Seattle, WA	16.0	9.7	1.7	4.8
Denver, CO	15.2	9.4	1.6	4.2
Indianapolis, IN	14.6	3.8	3.9	2.0
Miami, FL	14.0	15.4	0.9	3.9
Anchorage, AK	13.4	6.0	2.2	4.5
Minneapolis, MN	13.0	5.2	2.5	2.3
New Orleans, LA	12.8	6.2	2.1	1.8
Sacramento, CA	11.7	1.8	6.6	1.0
Oklahoma City, OK	11.2	4.9	2.3	1.6
Las Vegas, NV	10.7	5.6	1.9	1.1
San Diego, CA	10.2	3.4	3.0	0.1
Portland, OR	9.6	5.3	1.8	1.0
Spokane, WA	9.4	7.3	1.3	4.7
Laredo, TX	8.0	29.0	0.3	6.2
Omaha, NE	7.4	2.5	3.0	0.6
Des Moines, IA	7.1	2.4	3.0	1.0
Salt Lake City, UT	6.7	10.2	0.7	4.6
San Jose, CA	4.9	2.8	1.7	0.6
San Antonio, TX	2.3	9.7	0.2	1.9
Median	13.0%	6.0%	2.2	2.5%

Note: Data are from the period January–September 2000.

Pacific Northwest. These included San Jose (11 percent), Spokane (14 percent), San Diego (17 percent), Sacramento (18 percent), Salt Lake City (18 percent), Portland (20 percent), and Las Vegas and Anchorage (both 21 percent).

Research suggests the worst of the crack epidemic is behind us (Johnson, Golub, and Dunlap 2000), but ADAM data indicate

use among arrestees continues at high levels. (For information about the crack epidemic, see Golub and Johnson 1997.) Evidence about how much cocaine is consumed in the form of crack comes from research conducted in 1999. In the six ADAM sites studied, the overwhelming majority of cocaine-positive arrestees (88 percent) were using crack, not powder

(Riley et al. 2001).¹ In view of this finding, it is reasonable to conclude that most cocaine-positives revealed by urinalysis indicate the use of crack.

Data from the interviews also offer evidence that the crack epidemic is far from over in many cities. In Atlanta, 25 percent of the adult male arrestees said they had used crack during the 7 days before the interview. In Tucson and Phoenix, the rates were 20 percent and 19 percent, respectively. (See Appendix Table 4.) The interviews revealed differences among the sites in method of ingesting cocaine (i.e., whether crack or powder). Crack stands out. In 22 of the 27 sites, more arrestees reported recent crack use than recent powder cocaine use. In Atlanta, the difference was dramatic: In contrast to the 25 percent who said they had used crack during the 7 days before the interview, only 8 percent said they had used powder.

The interviews indicate that on the west coast and in the Pacific Northwest, where cocaine use is the lowest among arrestees, it is ingested primarily as crack. The exception is Salt Lake City. In every site in these regions except this one, the percentage of arrestees who said they had used crack in the past 7 days was higher than the percentage who had used powder cocaine. The range for powder cocaine was very low—from 2 percent (Sacramento) to 7 percent (Spokane)—while in Salt Lake City the proportion using powder cocaine was 10 percent.

Amid the overwhelming evidence from ADAM of enduringly high rates of crack cocaine use among adult male arrestees, there is reason to believe that in a few

sites a significant proportion of the cocaine-positive urinalysis results reflect powder cocaine use. Again, the evidence comes from arrestees' self-reports on crack and powder cocaine use. High proportions of arrestees in areas as geographically diverse as Laredo, San Antonio, Miami, and New York reported using powder cocaine. In several sites, the rates for 7-day powder cocaine use were similar to or much higher than those for crack. In Laredo, the percentage of arrestees who said they had used powder was higher than the percentage who said they had used crack (29 percent and 8 percent, respectively). (See Appendix Tables 4 and 5.) The same distinctions can be seen in San Antonio, Salt Lake City, and Miami. It is worth noting that even New York City, where a very high percentage of arrestees said they had used crack during the previous 7 days (18 percent), the percentage who had used powder was not that different (15 percent).

Methamphetamine

The West is the region where methamphetamine use among adult male arrestees is most prevalent. Several Midwestern States also show substantial proportions of arrestees using this substance. (See Appendix Table 3 and map.) Urinalysis confirmatory tests² indicated the highest methamphetamine use was in Sacramento (27 percent), San Diego (25 percent), San Jose (22 percent), Spokane (21 percent), Portland (20 percent), and Las Vegas (19 percent). Double-digit rates also showed up in Des Moines (17 percent), Phoenix (17 percent), Salt Lake City (17 percent), Oklahoma City (12 percent), and Seattle (10 percent).

1. The study by Riley et al. (2001) demonstrated the use of gas chromatography/mass spectrometry (GC/MS) to distinguish crack from other forms of cocaine. The screening test used by the ADAM program to detect cocaine cannot make this distinction. However, GC/MS can detect compounds specific to crack—anhydroecgonine methyl ester (AEME) and ecgonine. The presence of one or both in urine is evidence of crack. These metabolites are largely specific to the process of heating cocaine; insufflating (snorting) or injecting cocaine produces only trace amounts of AEME.

2. When urinalysis detects one or more drugs in the amphetamine group, a confirmatory test is conducted to determine whether the drug is a methamphetamine. The confirmation is necessary because several cold medications contain amphetamines.

Table 4: Drug Test Results—Methamphetamine, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Tested Positive
Sacramento, CA	27%
San Diego, CA	25
San Jose, CA	22
Spokane, WA	21
Portland, OR	20
Las Vegas, NV	19
Des Moines, IA	17
Phoenix, AZ	17
Salt Lake City, UT	17
Oklahoma City, OK	12
Seattle, WA	10
Omaha, NE	9
Tucson, AZ	7
Albuquerque, NM	5
Denver, CO	3
Minneapolis, MN	2
Indianapolis, IN	1
Anchorage, AK	0
Atlanta, GA	0
Birmingham, AL	0
Cleveland, OH	0
Laredo, TX	0
Miami, FL	0
New Orleans, LA	0
New York, NY	0
Philadelphia, PA	0
San Antonio, TX	0
Median	5%

Note: Data are from the period January–September 2000.

Lower rates of methamphetamine use (from 1 to 9 percent of arrestees) were recorded in a number of sites in the Southwest and Midwest. In 10 sites, however, no recent methamphetamine use among adult male arrestees was detected by urinalysis, including all sites in the eastern part of the country (Birmingham, Miami, New York, New Orleans, Philadelphia, Cleveland, and

Atlanta). The site closest to the east coast that recorded methamphetamine positives was Indianapolis, although there the rate was only 1 percent.

Methamphetamine is clearly a regional phenomenon, popular among urban area arrestees in one part of the country and not in others. The reason is unknown. Aside from concentration in the West, ADAM has shown that methamphetamine tends to be more widely used by white and Hispanic arrestees than black arrestees. Because ADAM will now collect data outside urban areas, the program should be better able to analyze use patterns for this type of drug.

Where methamphetamine use tends to be highest, cocaine use is fairly low. (See the map.) Thus, in the West, proportionately fewer arrestees use cocaine. The low rates would be encouraging except that self-reported data indicate it is ingested largely as crack, the more potent form of the drug, in this part of the country. Further analyses comparing users of methamphetamine and cocaine should aid in the understanding of use patterns for these two drug types.

Opiates

Opiates seem to be used by relatively few arrestees. In most of the sites reported here, urinalysis revealed that the proportion of adult male arrestees who had used opiates was much lower than for marijuana, cocaine, and in many instances, methamphetamine. Opiate use ranged from 1 percent of arrestees (Omaha) to 22 percent (New York). In addition to New York, sites with relatively high opiate use include New Orleans (15 percent of arrestees), San Antonio (14 percent), Portland (13 percent), Philadelphia (12 percent), Albuquerque (12 percent), and Seattle (11 percent). These rates suggest no geographic pattern. (See Appendix Table 3.)

Map: Cocaine and Methamphetamine Use, Detected by Urinalysis, by Region—Adult Male Arrestees

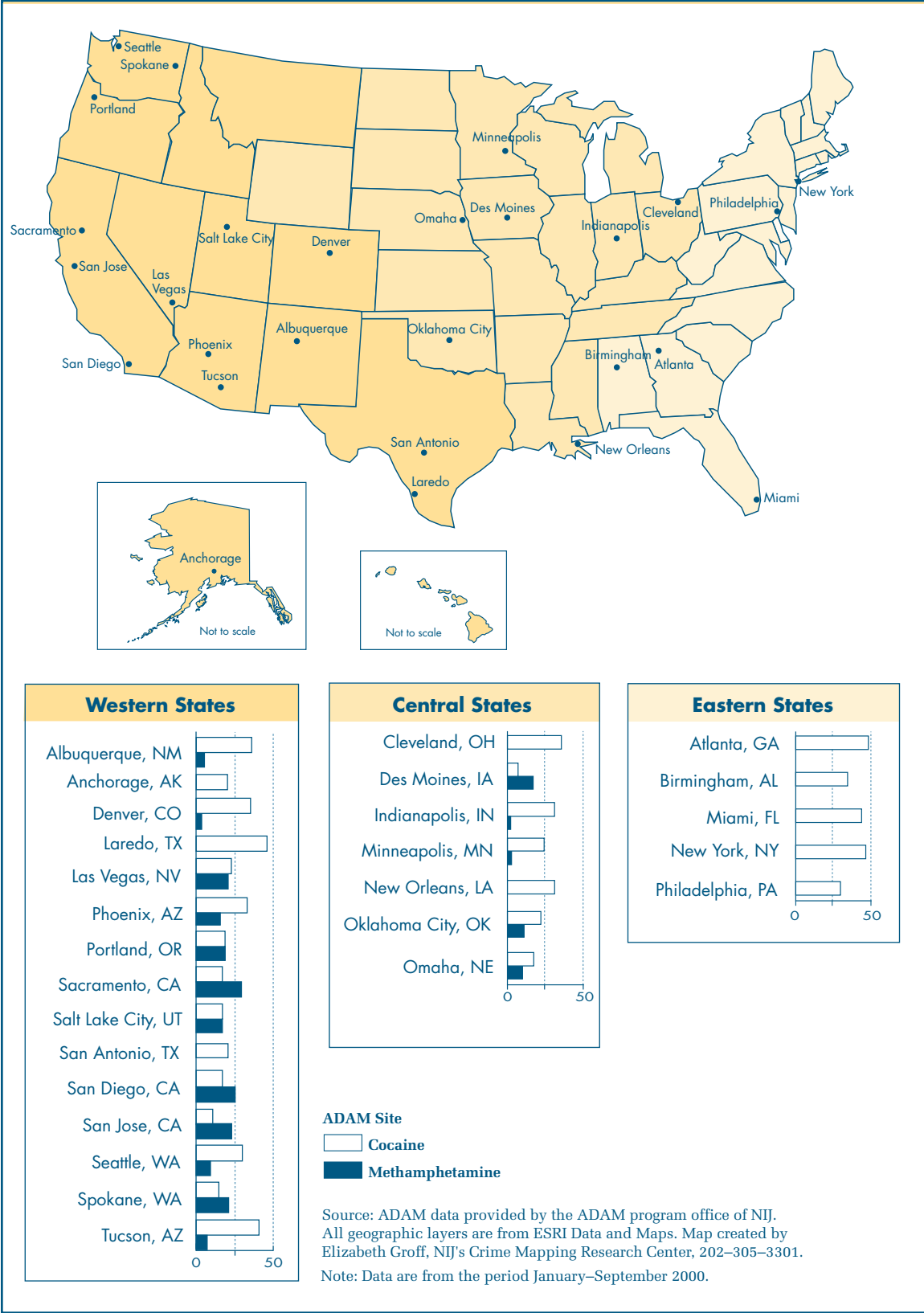


Table 5: Drug Test Results—Opiates, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Tested Positive
New York, NY	22%
New Orleans, LA	15
San Antonio, TX	14
Portland, OR	13
Albuquerque, NM	12
Philadelphia, PA	12
Birmingham, AL	11
Seattle, WA	11
Tucson, AZ	9
Spokane, WA	8
Salt Lake City, UT	7
San Jose, CA	7
Laredo, TX	6
Phoenix, AZ	6
San Diego, CA	6
Las Vegas, NV	4
Miami, FL	4
Minneapolis, MN	4
Anchorage, AK	3
Cleveland, OH	3
Denver, CO	3
Indianapolis, IN	3
Oklahoma City, OK	3
Atlanta, GA	2
Des Moines, IA	2
Sacramento, CA	2
Omaha, NE	1
Median	6%

Note: Data are from the period January–September 2000.

Arrestees who tested positive for opiates are believed to be primarily users of heroin.³ Urinalysis confirmatory tests can distinguish among the various opiates—heroin, morphine, codeine, and some synthetic forms—but the test used by ADAM cannot make these distinctions. Thus, it does not reveal which opiate has been used. In the interviews, arrestees were asked about heroin use specifically,

but not about use of other opiates. Their responses indicated that heroin use in the sites was intense, with a very high average number of days per month of use in the year before the interview.

In Des Moines, for example, arrestees who had used heroin during the year before the interview said that during the past 30 days they used it an average of 20 days. The number of days was 19 in San Jose, 18 in San Antonio, and 16 in New York. Not surprisingly, even in sites where the percentage of arrestees who had used opiates was relatively low, the average number of days they used these drugs was high. In San Jose, where 3 percent of arrestees said that they had used heroin during the past year, the average number of days per month they used it (19) indicated an almost daily use characteristic of addiction. In half the sites, arrestees used heroin 12 days or more during the past month. For crack use, the median number of days was 9; for methamphetamines, 9; for powder cocaine, 7; and for marijuana, 11. Researchers are likely to find heroin users' drug patterns distinctive enough to warrant separate analysis.

Marijuana

Marijuana is the drug used most commonly by adult male arrestees. Urinalysis revealed that an average of 40 percent of arrestees had used marijuana recently. Use was lowest in Laredo (30 percent), with Oklahoma City at the top of the range (57 percent). (See Appendix Table 3.) Interview-based information confirms the ubiquitous pattern of high marijuana rates. Again, Laredo and Oklahoma City represent the bottom and top of the range. In these two sites, 35 percent and 61 percent of arrestees, respectively, said they had used marijuana during the past year. (See Appendix Table 6.)

3. Source: Confirmatory GC/MS tests conducted by Dr. Natalie Lu of the National Institute of Justice in 1999.

Table 6: Drug Test Results—Marijuana, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Tested Positive
Oklahoma City, OK	57%
Minneapolis, MN	54
Cleveland, OH	51
Philadelphia, PA	51
Indianapolis, IN	50
Sacramento, CA	50
Albuquerque, NE	47
New Orleans, LA	47
Omaha, NE	46
Tucson, AZ	46
Birmingham, AL	44
Denver, CO	43
Anchorage, AK	40
New York, NY	40
San Antonio, TX	40
San Diego, CA	39
Spokane, WA	39
Atlanta, GA	38
Des Moines, IA	38
Miami, FL	38
Seattle, WA	38
Portland, OR	35
San Jose, CA	35
Phoenix, AZ	33
Salt Lake City, UT	33
Las Vegas, NV	31
Laredo, TX	30
Median	40%

Note: Data are from the period January–September 2000.

The overall rates, however high, are modest compared with those among younger male arrestees.⁴ In this age group (18 to 20), urinalysis showed marijuana-positives starting at 49 percent of arrestees (Portland) and rising to 81 percent (Albuquerque)

(see Appendix Table 7). These numbers are troubling and warrant closer scrutiny.

Heavy marijuana use is defined as 13 or more days of self-reported use in a 30-day period in the year before the interview.⁵ By that definition, in half the sites 29 percent or more of younger adult male arrestees used marijuana heavily. By contrast, among arrestees over 20 years old the median was 18 percent. The highest self-reported rates of heavy marijuana use among younger arrestees were in New York City (57 percent), Sacramento (48 percent), Indianapolis (39 percent), and Birmingham and Philadelphia (both 38 percent). The sites where heavy use was *lowest* among this age group were Des Moines (5 percent), Las Vegas (14 percent), San Jose (15 percent), and Denver and Portland (both 16 percent).

Another measure of very heavy use is the average number of days a drug was ingested in the past year. On this measure also, age makes a difference. The average number of days per month in which younger arrestees said they used marijuana was 14. Among arrestees over 20 years old, the average was lower: 10 days per month. (See Appendix Table 7.)

Marijuana exemplifies the difficulty of predicting use patterns on the basis of a drug's psychopharmacological effects. Because the effects of marijuana are quite different from those of heroin, cocaine, and methamphetamines, the level of use might be expected to be different. Yet the average number of days per month the younger arrestees used marijuana was as high as the number of days they used heroin and cocaine, which are generally considered to have graver effects. The reason is unknown and open to investigation.

4. See Golub and Johnson (2001) for a fuller discussion of the recent upsurge in marijuana rates among younger male arrestees.

5. This is the definition of heavy drug use established by the NHSDA.

IV. HEAVY USE AND NEED FOR TREATMENT

The redesigned ADAM includes new questions about heavy use of drugs and alcohol as well as several other issues related to substance abuse, including need for treatment. One way treatment need can be measured is through a clinically based dependency screen. The screen consists of a DSM-IV-based¹ set of questions that calculate the risk for alcohol and drug dependence. Answering “yes” to a specific set of three among the six items in the screen indicates dependence.

Because the type of drug or drugs ingested varies and use patterns also vary, some users are more vulnerable than others to addiction. This means the screening questions are only one indicator of need for treatment. The self-reports of arrestees are just as essential a measure. When the two measures are combined they create a powerful tool for identifying treatment needs.

Alcohol

Alcohol use is common among arrestees, as it is in the general population. According to the National Household Survey on Drug Abuse (NHSDA) (U.S. Department of Health and Human Services 1998), 68 percent of all male household members 12 years and older used alcohol in the year before the survey. Binge drinking is defined by the NHSDA as five or more drinks on at least one occasion in a

month. Heavy drinking is defined as five or more drinks on five or more occasions in a month. The NHSDA found that 22 percent of the men in the survey reported past month binge drinking, and 9 percent reported past month heavy drinking (U.S. Department of Health and Human Services, Office of Applied Studies 1998).

Because ADAM includes measures of alcohol use similar to those employed by the NHSDA, it is possible to compare arrestees and the general population. To some degree, the ADAM and NHSDA studies cover some of the same individuals, since arrestees may be included in the household survey. Despite this overlap, a relatively large number of people interviewed through ADAM may not be represented in the NHSDA. These are the people without fixed addresses, which includes a number who use illicit drugs and are arrested.

The newly redesigned ADAM measures past month binge drinking and past month heavy drinking, as well as risk for alcohol dependence during the past year. In more than half the sites, over 50 percent of all adult arrestees reported binge drinking in the 30 days before they were interviewed. Binge-drinking rates ranged from 41 percent (Miami) to 70 percent (Albuquerque). Reported past month heavy drinking ranged from 17 percent (Miami) to 39 percent (Albuquerque), with the average at 36 percent. The levels of heavy

1. DSM-IV refers to the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, compiled and published in 1994 by the American Psychiatric Association. It is used by psychiatrists for diagnoses and is widely used by others.

Table 7: Heavy Use of Alcohol, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Reported:		Percent of Arrestees at Risk for Alcohol Dependence, Past Year ^c
	Binge Drinking, Past 30 Days ^a	Heavy Drinking, Past 30 Days ^b	
Albuquerque, NM	70.1%	39.2%	47.4%
Anchorage, AK	69.8	38.1	46.9
Atlanta, GA	44.5	31.3	31.7
Birmingham, AL	52.6	32.6	29.1
Cleveland, OH	53.2	38.3	33.8
Denver, CO	64.8	38.9	38.0
Des Moines, IA	56.7	27.6	28.7
Indianapolis, IN	49.1	29.8	36.6
Laredo, TX	65.9	36.3	35.6
Las Vegas, NV	53.7	32.7	34.5
Miami, FL	41.3	16.9	24.4
Minneapolis, MN	52.0	27.9	31.5
New Orleans, LA	34.7	20.1	22.5
New York, NY	39.3	23.1	22.9
Oklahoma City, OK	62.1	36.8	40.5
Omaha, NE	52.9	27.2	24.1
Philadelphia, PA	38.8	25.3	24.2
Phoenix, AZ	54.1	31.8	35.9
Portland, OR	41.8	18.9	24.3
Sacramento, CA	53.9	30.4	36.9
Salt Lake City, UT	46.4	22.4	32.2
San Antonio, TX	41.7	19.5	22.4
San Diego, CA	56.3	31.9	35.6
San Jose, CA	60.2	33.3	43.1
Seattle, WA	49.7	27.5	34.0
Spokane, WA	57.6	31.7	40.1
Tucson, AZ	59.8	38.7	40.1
Median	56.7%	36.3%	35.6%

a. Binge drinking is defined in the NHSDA as consumption of five or more drinks on at least one occasion in a month.

b. Heavy drinking is defined in the NHSDA as consumption of five or more drinks on five or more occasions in a month.

c. Dependence is an indication of need for treatment. One way treatment need is measured is by a clinically based dependency screen. The screen consists of a set of questions that calculate the risk for alcohol and drug dependence. Answering “yes” to a specific set of three among the six questions indicates dependence.

Note: Data are from the period January–September 2000. Questions were asked of arrestees who reported consuming alcohol.

drinking were high even compared with the rate among the household survey’s heaviest drinking group (males ages 18 to 25), 19 percent of whom said they drank heavily during the past month.

The findings from the dependency screen showed large proportions of arrestees at risk for alcohol dependence and therefore needing treatment. In half the sites, 34 percent or more of those who said they used

alcohol were at risk, with a range of 22 percent (San Antonio) to 47 percent (Albuquerque). The percentages of arrestees who had used alcohol in the year before they were interviewed and who were treated for it were very low. This was especially evident among those at risk for alcohol dependence: On average, 13 percent received treatment. The percentage was lowest in San Antonio, where 5 percent of arrestees at risk had received treatment, and highest in New York, where 28 percent had received treatment.

Drugs

The NHSDA defines heavy drug use as consumption of any NIDA-5 drug 13 or more days a month for at least 1 month during the year before the user is interviewed.² On average, 34 percent or more of arrestees said they had used illegal drugs heavily. The range among the sites was wide, from 27 percent (Laredo) to 53 percent (New York City). In 8 sites, more than 40 percent of arrestees said they had used drugs heavily during the past month. As with alcohol, the need for treatment was great. The screen revealed high percentages at risk for drug dependence: In half the sites, 38 percent or more of arrestees were at risk.

Some clinicians consider drug injection an indicator of the need for treatment. In the ADAM interview, arrestees who said they used an illegal drug in the past year were asked if they did so through injection. The percentages who injected drugs varied widely among the sites, making injection use only one part of the picture of severe drug use. Whether injection rates can be viewed as high depends on the type of drug most often used in an area and whether injection is the conventional method of ingesting a particular drug. In Birmingham, Indianapolis,

Atlanta, Cleveland, and even New York City (where heroin use is high), the proportions of arrestees who injected drugs were low (7 percent or less at each of these sites). This is perhaps because crack, which is usually smoked, dominated illegal drug use among arrestees in these sites. On the other hand, at several sites where high percentages of arrestees used methamphetamine, high percentages injected drugs (a range of 9 to 18 percent). Portland, where the percentages of arrestees who used methamphetamine and heroin were particularly high, was at the top of the range.

Few arrestees were treated for drug abuse. In half the sites, about 9 percent or less of those who had used drugs in the year before they were interviewed received treatment. The proportion was lowest in New Orleans (4 percent) and highest in Portland (16 percent). Among the subgroup of arrestees at risk for drug dependence, the numbers were similarly low. In half the sites, 19 percent or less had received treatment. Again, New Orleans and Portland represented the lower and upper reaches of the range, at 8 percent and 35 percent, respectively.

The relatively high proportion of the ADAM sample who need treatment for substance abuse is of grave concern from a public health perspective. Perhaps of greater concern is that many are not receiving treatment and many appear to have no health insurance, either private or public, to cover it. In half the sites, 61 percent or more of the arrestees said they did not have health insurance. The range was 49 percent (Portland) to 71 percent (Salt Lake City). The figures were similar among arrestees at risk for alcohol dependence and drug dependence. In half the sites, at least 65 percent of those at risk for alcohol dependence said they lacked health insurance, with the range

2. PCP, one of the NIDA-5 drugs, is not included in this report because it is rarely detected among arrestees.

Table 8: Heavy Use of Drugs, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Reported:		Percent of Arrestees at Risk for Alcohol Dependence, Past Year ^b
	Heavy Use of a NIDA-5 Drug, Past 30 Days ^a	Injecting Drugs, Past 30 Days	
Albuquerque, NM	40.1%	16.7%	42.4%
Anchorage, AK	32.3	6.1	29.6
Atlanta, GA	35.6	2.7	38.3
Birmingham, AL	29.1	1.7	27.5
Cleveland, OH	33.7	4.2	37.2
Denver, CO	33.6	8.4	30.1
Des Moines, IA	27.7	5.6	36.0
Indianapolis, IN	33.0	2.6	34.3
Laredo, TX	26.8	8.5	29.5
Las Vegas, NV	34.5	9.1	40.0
Miami, FL	30.0	2.9	30.2
Minneapolis, MN	35.3	3.1	34.8
New Orleans, LA	33.7	8.6	37.5
New York, NY	52.8	7.3	41.0
Oklahoma City, OK	41.1	11.4	43.3
Omaha, NE	34.9	5.5	30.0
Philadelphia, PA	41.5	6.3	46.0
Phoenix, AZ	40.3	15.0	44.1
Portland, OR	33.0	18.2	36.1
Sacramento, CA	43.9	14.3	47.1
Salt Lake City, UT	31.6	12.4	40.2
San Antonio, TX	26.9	8.1	28.0
San Diego, CA	31.9	9.3	40.3
San Jose, CA	34.1	5.0	36.8
Seattle, WA	41.6	14.6	43.4
Spokane, WA	38.0	16.7	43.3
Tucson, AZ	41.7	12.6	44.9
Median	34.1%	8.4%	37.5%

a. Heavy use is defined in the NHSDA as 13 or more days of self-reported consumption of a drug in a 30-day period in the year before the interview. The NIDA-5 drugs are cocaine, opiates, marijuana, methamphetamines, and PCP. The list was established by NIDA as a standard panel of commonly used illegal drugs. They are the drugs analyzed in this report.

b. Dependence is an indication of need for treatment. One way treatment need is measured is by a clinically based dependency screen. The screen consists of a set of questions that calculate the risk for alcohol and drug dependence. Answering “yes” to a specific set of three among the six questions indicates dependence.

Note: Data are from the period January–September 2000. Questions were asked of arrestees who reported using drugs.

from 50 percent (Portland) to 80 percent (San Antonio). Among arrestees at risk for drug dependence, at least 60 percent in half the sites were without coverage.

Portland was lowest, with 46 percent lacking coverage; San Antonio was highest at 82 percent.

Table 9: Drug Treatment Status, by Site—Adult Male Arrestees

Primary City	Percent Who Said They Received Drug Treatment, Past Year*
Portland, OR	16.4%
New York, NY	16.2
Seattle, WA	12.6
Albuquerque, NM	12.3
Minneapolis, MN	11.9
San Diego, CA	11.8
Anchorage, AK	10.9
Denver, CO	10.8
Salt Lake City, UT	10.6
Philadelphia, PA	10.0
Laredo, TX	10.0
Spokane, WA	9.3
San Jose, CA	9.3
Cleveland, OH	9.2
Tucson, AZ	9.1
Phoenix, AZ	9.0
Oklahoma City, OK	8.8
Sacramento, CA	8.8
Miami, FL	7.6
Des Moines, IA	7.2
San Antonio, TX	7.2
Birmingham, AL	6.4
Indianapolis, IN	6.1
Las Vegas, NV	5.7
Omaha, NE	5.4
Atlanta, GA	4.9
New Orleans, LA	3.5
Median	9.2%

* Treatment could be inpatient or outpatient.

Note: Data are from the period January–September 2000.

Table 10: Health Insurance Status, by Site—Adult Male Arrestees

Primary City	Percent Who Said They Had No Health Insurance, Past Year
Salt Lake City, UT	70.6%
Laredo, TX	68.8
San Antonio, TX	68.8
Denver, CO	68.2
Anchorage, AK	66.6
Albuquerque, NM	66.0
Las Vegas, NV	65.1
Oklahoma City, OK	64.9
San Diego, CA	64.6
San Jose, CA	64.5
Phoenix, AZ	62.2
New Orleans, LA	62.1
Spokane, WA	62.0
Tucson, AZ	61.3
Miami, FL	61.0
Indianapolis, IN	60.8
Des Moines, IA	59.7
Seattle, WA	59.7
Cleveland, OH	58.5
Sacramento, CA	58.2
Atlanta, GA	57.7
New York, NY	56.6
Philadelphia, PA	54.5
Birmingham, AL	54.1
Omaha, NE	53.1
Minneapolis, MN	50.7
Portland, OR	48.7
Median	61.3%

Note: Data are from the period January–September 2000.

V. DRUG MARKETS

Law enforcement agencies often base their strategies for controlling drug markets on anecdotal information and the experience of individual officers. That approach is useful but limited. The new ADAM interview instrument makes it possible for the first time to routinely obtain systematic data about drug markets at the local level. Information about extent of participation in drug markets, methods of acquiring drugs (whether cash or noncash), place of purchase (whether on the street or indoors), neighborhood of purchase, and difficulties experienced in locating and buying drugs can help law enforcement officials design better control strategies.

The approach to gathering data was designed to produce a representative account of the nature of drug exchanges among arrestees. Early testing of interview questions revealed that arrestees were unable to accurately describe a “typical” exchange and either resorted to “war stories” of “best scores” or tried to mentally calculate an average from different transactions. Users may obtain drugs several times during a month or even a week, and they employ a wide range of methods and types of exchanges. Thus, “typical” was not a cognitively feasible term, so the question was made more

precise. It was reworded to ask arrestees to describe the *last* (most recent) instance in which they obtained drugs during the past 30 days, regardless of how they obtained them, both through cash and noncash transactions (e.g., by trading property or sex). This approach compels respondents to focus on one real event, the most recent one during the past 30 days, and to describe it accurately.

Previous research suggests that while all drug markets are economic markets (Brownstein 2000), the dynamics of each market are likely to be somewhat different, varying with the drug. (See Brownstein, Crimmins, and Spunt 2000; Golub and Johnson 1997; Johnson, Hamid, and Sanbria 1992.) This necessitates examining each drug separately.

Extent of drug-market participation

Data about purchases of crack, powder cocaine, and marijuana indicate that more arrestees participated in the marijuana market than in either the crack or powder cocaine markets.¹ The findings of self-reported purchases made during the past 30 days should be interpreted cautiously: The data are only for three-quarters of the year, which in some sites makes the sample size small, and

1. Special analyses of heroin and methamphetamine markets are in the planning stages.

underreporting may have to some extent affected the findings.²

As measured by unweighted numbers of arrestees who obtained drugs,³ participation was greatest in the marijuana market. Participation ranged from 86 (Laredo) to 444 adult male arrestees (Cleveland). For crack, the range was 24 (San Antonio and Laredo) to 223 (Phoenix), and for powder cocaine it was 9 (Des Moines) to 152 (New York). In half the sites, the number of arrestees who obtained crack cocaine exceeded 64, and it surpassed 100 in 7 sites. For powder cocaine and marijuana, the average numbers of arrestees participating in the market were 56 and 182, respectively. (See Appendix Table 8.) The sample sizes on which these numbers are based were small, but they suggest the types of analysis possible once a full year of data is available.

The number of days during the past month in which arrestees obtained drugs in the market varied by site and by drug. (See Appendix Table 8.) Of the three drugs, crack was highest: In half the sites, arrestees who participated in the market obtained this drug 14 or more days during the previous month. The range among the sites for crack market participation was 7 days (Des Moines) to 19 days (Miami). In the powder cocaine market, where the average number of market participation days was 7, the range was 3 days (Des Moines) to 12 days (New York). And in the marijuana market, where the average was 8 days, the range was 6 days (San Antonio) to 17 days (New York).

In half the sites, 44 percent or more of arrestees who took part in the drug market in the 30 days before they were interviewed obtained marijuana. The proportion surpassed 50 percent in four sites. For crack cocaine, the average was 16 percent of arrestees; for powder cocaine, 9 percent. (See Appendix Table 8). In fact, in every site except one (Laredo), the percentage of arrestees who were marijuana market participants was higher than in the other two markets. However, the finding that crack market participants engaged in more drug transactions per month confirms previous research and anecdotal information about the greater frequency of participation in the market for this drug (Williams 1992).

How drugs are acquired (cash or noncash)

The dollar value of drug transactions is not easy to calculate. When questions about drug acquisition were field tested in focus groups of arrestees, the answers confirmed what ethnographers have often reported (e.g., Williams 1992): A substantial portion of the drug trade at the street level consists of combinations of goods and services exchanged in addition to or in place of cash. For example, some focus group participants said that for their most recent purchase of heroin they had paid the seller \$25 and a radio for five “dime bags.” If the cash part of this transaction and no other part were taken into account, the assumption would be that five bags of heroin were worth \$25. In fact, they were sold for the equivalent of \$50. Other arrestees said they had

2. To some extent, the problem of underreporting drug use also appears to carry over to self-reported drug market participation. Although some people only sell drugs but do not consume them, it is possible to obtain some indication of whether arrestees truthfully answer the questions about drug market participation. This can be done by comparing urinalysis rates with self-reported market participation. Despite high levels of cocaine use detected by urinalysis (the average for all sites is 30 percent of arrestees), the percentage of arrestees who admitted to obtaining either crack or powder cocaine (i.e., admitted to participating in the market) is fairly low (an average of 16 percent for crack and 9 percent for powder cocaine). This disparity does not appear in the findings about the marijuana market (the average for marijuana-positives is 40 percent, while 44 percent admitted obtaining marijuana during the past 30 days).

3. Unweighted numbers are presented to convey a sense of the small size of the sample. (See Appendix Table 8.)

received a specified amount of drugs in exchange for sexual favors or services, such as transporting drugs or messages and steering customers to the seller.

Because the value of goods and services must be taken into account, ADAM examines noncash as well as cash transactions separately and combines them to determine total purchases. Although the type of transaction that was most common varied by site, there were several in which cash-only purchases dominated the market for crack, powder cocaine, and marijuana. This was true in New York City, for example, where the percentages of arrestees who obtained these drugs by paying cash were higher than the percentages who obtained them in other ways (the figures were 92 percent for crack cocaine, 91 percent for powder cocaine, and 81 percent for marijuana). The same was true in Birmingham, Cleveland, and Philadelphia. Noncash transactions dominated all three markets in only one site, Spokane. Combination transactions dominated all three markets in Des Moines. (See Appendix Table 9.)

Noncash transactions. Marijuana was the drug for which the proportion of noncash-only transactions was highest in many sites. In half the sites, 42 percent or more of arrestees said they did not pay cash for marijuana; in 19 of the 17 sites, one-third or more of arrestees who obtained drugs said their transactions were on a noncash basis (Appendix Table 9). Of the three drugs, crack cocaine was the one for which the proportion of non-cash transactions was the lowest. The median was 18 percent, with 15 of the 27 sites reporting that less than 20 percent of the transactions were on a noncash basis.

The most common noncash transaction involves receiving a drug as a gift, and the next most common is obtaining it on credit and paying cash later.⁴ Examples of gifts are marijuana joints given or shared at a party, or sharing crack. In half the sites, 55 percent or more of arrestees said that in noncash transactions they obtained drugs as gifts; in 15 of the 27 sites the rates surpassed 50 percent. Gift-giving is even more pronounced for marijuana and powder cocaine. In half the sites, more than three-fourths of the arrestees who obtained marijuana by noncash means said they received it as a gift. In all sites the rate exceeded 60 percent. For powder cocaine, at least 68 percent of arrestees in half the sites said that in their noncash transactions for this drug they had obtained it as a gift. In 20 of the 27 sites, the proportion who obtained it as a gift exceeded 60 percent. For crack, in half the sites 9 percent or more of arrestees who obtained this drug other than by cash received it on credit and paid cash later. The figures for powder cocaine and marijuana were 8 percent and 7 percent, respectively.

Cash transactions. At many sites, marijuana was the substance for which cash-only transactions were proportionately lowest. In half the sites, 22 percent or more of the arrestees said they paid cash for it. In only 9 of the 27 sites were more than one-fourth of the marijuana transactions conducted on a cash-only basis (Appendix Table 9). For powder cocaine and crack cocaine transactions, the percentages of arrestees who said they paid cash were much higher. In half the sites, 40 percent or more said they paid cash for powder cocaine, with

4. The proportion of "other" types of noncash transactions is higher than the proportion in which payment is on credit, with cash paid later.

the percentage exceeding one-third in many (22 of the 27 sites). In half the sites, 36 percent or more of arrestees who purchased crack cocaine paid cash, and the percentage exceeded one-third in 19 sites.

Cash and noncash combined. The findings of the focus group sessions were confirmed: Many drug buyers paid cash sometimes and other times used noncash payments. There are three types of these “combination” transactions. One consists of two separate exchanges, one involving cash and one involving a non-cash payment. The second combination consists of a single transaction in which the buyer simultaneously uses both cash and noncash payments (e.g., \$5 and a watch). The third consists of two exchanges, one involving noncash payment and the other both cash and noncash together.⁵

The highest percentages of combination transactions were in the crack and marijuana markets. When it comes to getting crack, in half the sites 39 percent or more of arrestees used cash and noncash, with the range between 7 percent (New York) and 53 percent (Anchorage). In a larger number of sites (19 of the 27), the proportion who obtained crack through combination transactions exceeded one-third. The numbers were similar for marijuana. In half the sites, 34 percent or more of arrestees obtained it through combination transactions, and in most of the sites (20 of the 27) more than 30 percent did so. In general, the proportion of arrestees using combination transactions to obtain powder cocaine was smaller than for the other two drugs. On average, one-fourth of arrestees in the powder cocaine market obtained the drug by cash and noncash means combined, with this type of transaction exceeding 30 percent in only 8 sites.

Place of purchase (open-air or indoor)

Crack cocaine markets first appeared in U.S. cities in the late 1980s and early 1990s. With crack, a seemingly inexpensive variety of cocaine was available as never before to drug users living in unrelenting poverty in the city centers (Inciardi, Lockwood, and Pottieger 1993; and Williams 1992). The media was quick to report on the high levels of violence associated with the emerging trade in crack cocaine (Massing 1989, and Witkin 1991). Researchers who subsequently documented the violence saw it as related to the characteristics of the substance itself and the nature of the market and marketing of the product (Belenko 1990; Brownstein et al. 1992; Fagan and Chin 1990; Goldstein, Brownstein, and Ryan 1992; and Goldstein, Brownstein, Ryan, and Bellucci 1989).

When the reported level of violent crime in urban areas began to fall in the early 1990s, some observers suggested the decline was to some extent related to the changing nature of the crack markets. (Compare Blumstein 1995; Brownstein 1996; Golub and Johnson 1997; Lattimore et al. 1997.) One change was that open air sales were being replaced by indoor transactions, which were considered safer for buyers and sellers. With ADAM now collecting information about drug markets, it is possible to assess the extent to which particular drugs in particular places at particular times are sold outdoors or indoors. The ADAM focus on individual sites, which brings to light information that would be obscured in nationwide or regional analyses of drug patterns, is particularly relevant.

The proportion of arrestees who purchased crack outdoors exceeded 50 percent in

5. All three types of transactions are included in the “combination” category because in almost all the sites, all combination transactions involved two separate transactions, one cash only and one noncash only.

11 of the 27 sites. In half the sites, at least 43 percent obtained it outdoors, with a range of 9 percent (Laredo) to 87 percent (New York). For marijuana, the proportion who made outdoor purchases exceeded 50 percent in only 4 sites (the median was 29 percent). For powder cocaine, the proportion of outdoor purchases exceeded 50 percent in only 6 sites (the median was 27 percent). (See Appendix Table 10.) For crack, the disturbing image of the open air market was confirmed in the larger cities in the sample (e.g., New York, Philadelphia, San Diego, Miami, and Atlanta), while only a few of the smaller cities were dominated by outdoor sales of this drug.

There are other differences among the sites in drug market operations. In New York, Philadelphia, New Orleans, and Cleveland, outdoor purchasing dominated the market for all three drugs—powder cocaine, marijuana, and crack. At the other end of the continuum are several sites where more than 70 percent of purchasing took place indoors for all three drugs. (They are Laredo, Oklahoma City, Anchorage, Albuquerque, Spokane, Phoenix, San Antonio, Salt Lake City, and Tucson). The accounts by arrestees in the larger cities about open-air drug markets do not seem to be duplicated in these smaller cities.

Outside or inside the neighborhood

The role of the drug trade in promoting neighborhood instability has not been studied often or systematically. Community activists note that outsiders (people who do not live in the neighborhood) come into the community to buy drugs. The ADAM data confirm their observations.

In half the sites reporting, 50 percent or more of arrestees who obtained drugs made at least one purchase of either marijuana, crack, or powder cocaine in a neighborhood other than their own. (See Appendix Table 11.)⁶

For crack and powder cocaine, the proportion of arrestees who ventured outside their own neighborhood at least once to obtain these drugs exceeded 60 percent in 6 and 10 sites, respectively. For marijuana, the proportion exceeded 50 percent in 20 sites and exceeded 60 percent in 13. The problem of outsider buys of all three drugs appeared to be particularly acute in Omaha, San Antonio, and Birmingham, with high percentages of arrestees in all these sites going outside their neighborhood.

In instances where arrestees purchased drugs in their own neighborhood, the analysis can be further refined by mapping. Using the arrestees' addresses, which ADAM obtains from official police records, mapping technology can be applied to learn where the purchases are made. By plotting the addresses by ZIP Code, it is possible to determine the concentration of purchases in a given area.

Problems obtaining drugs

Considerable law enforcement resources have been spent on making it more difficult for drug users to find and obtain illicit drugs (Sviridoff and Hillsman 1994; Kleiman 1988).

For the most part, the majority of arrestees have no difficulty in completing a drug transaction (See Appendix Table 12).⁷ In a large number of sites, fewer than one-third of the arrestees said their attempts to obtain one of the three drugs had failed

6. Because arrestees were asked, "Did you buy it [name of drug] in the neighborhood where you live or outside your neighborhood?" the definition of "neighborhood" reflected their perceptions.

7. Arrestees were asked, "Was there a time in the past 30 days when you tried to buy [name of drug] and had the cash, but you did not buy any?" They were also asked why they did not buy a particular drug.

Table 11: Reasons Attempts to Purchase Drugs Failed (Medians), by Drug—Adult Male Arrestees

Reason	Percent of Arrestees Who Cited Reason for Failing To Purchase:		
	Crack Cocaine	Powder Cocaine	Marijuana
No Dealers Available	23.0%	29.0%	20.0%
Dealers Did Not Have Any	25.0	24.0	34.0
Dealers Did Not Have Quality	13.0	9.0	13.0
Police Activity	5.0	13.0	5.0
Other	22.0	16.0	24.0

Note: Data are from the period January–September 2000.

(for marijuana, the number of sites was 8; for powder cocaine, 16; and for crack, 11). Of the three drugs, marijuana was the one for which the percentage of arrestees reporting failures was highest. In half the sites, 42 percent or more of arrestees reported a failed transaction, with a range of 14 percent (New York) to 56 percent (Laredo). For crack, the median failure rate was 38 percent; for powder cocaine, it was 31 percent.

The reason for transaction failures varied to some extent by type of drug. (See Appendix Table 13.) For crack cocaine, the most typical reason for failure was that the dealer did not have it available to sell. In half the sites, 25 percent of arrestees cited this reason, with a range from zero percent (San Antonio) to 51 percent (Salt Lake City). In 8 of the 27 sites, more than 30 percent of the arrestees reported lack of availability as the reason for failed transactions. For marijuana, lack of availability was also the most common reason for failed transactions. In half the sites, 34 percent of arrestees cited this reason. The range was 9 percent (Philadelphia) to 59 percent (San Jose). In 8 sites, this was the reason reported by 40 percent or more of the arrestees. For powder cocaine, among all reasons for failure, the most com-

monly cited was that no dealers were available: It was noted in half the sites by 29 percent of the arrestees, ranging from zero percent (Minneapolis, Omaha, and Sacramento) to 100 percent (San Diego). In nearly half the sites (12 of the 27), more than 30 percent of the arrestees cited this reason.

Not only do few transactions end in failure, but when they do, police activity is rarely specified as the reason. The proportion of arrestees who said the presence of the police had deterred them from buying crack was low among the sites. For crack and marijuana, in half the sites, 5 percent or less cited police presence; for powder cocaine the median was 13 percent. Between zero percent (in 9 sites) and 46 percent (New York) of arrestees cited police activity as the reason they failed to purchase crack. Between zero (in 10 sites) and 87 percent (Sacramento) noted police activity as the reason for failed purchases of powder cocaine. Between zero percent (Birmingham and Denver) and 41 percent (New York) cited the police as the reason for failure to purchase marijuana. In many sites, less than 10 percent of arrestees noted police activity as a deterrent: For crack it was less than 10 percent in 20 sites, in 13 sites for powder cocaine, and in 21 sites for marijuana.

There are, however, a few notable exceptions. In Sacramento, nearly one-third (31 percent) of arrestees said their transactions for powder cocaine had ended in failure, and here almost 90 percent of arrestees who sought to obtain this drug cited the police as a deterrent. In Miami, where more than one-third of arrestees said their transactions for this drug had failed, more than one-third of those who tried and failed to obtain it ascribed their failure to police presence. There were similar exceptions for crack purchasing. In Seattle, 40 percent of arrestees said their transactions failed, and of these 27 percent attributed this to police activity. In New York City, attempts to buy any of these drugs ended in failure for relatively small proportions of arrestees, but even here the police role was notable. For crack cocaine, 11 percent of arrestees said the transactions failed, with police cited as the reason by 46 percent; for powder cocaine, the figures were 12 percent and 42 percent, and for marijuana, 14 percent and 41 percent.

If police activity was not directly responsible for deterring drug transactions, it may

have had an indirect effect on the availability of drugs, even if few arrestees cited it. Crack cocaine buying in Des Moines is an example. In this site, fully 71 percent of the arrestees reported that at least one attempt to obtain crack cocaine had failed during the past month, but none cited police activity as the reason. However, in this city one-fourth of the arrestees whose purchase attempt ended in failure said the reason was that the dealers had no crack; an additional 32 percent said the dealer did not have the quality they wanted. In Oklahoma City, another example, 60 percent of the arrestees said they had experienced a failed transaction at least once during the past month, but only 3 percent attributed the failures to police activity. Here, 18 percent of the arrestees cited the reason as lack of availability of dealers; 42 percent said the dealer had no crack to sell; 14 percent said the quality they wanted was not high enough; and 23 percent noted other reasons. In these cases, it may be that police activity against dealers prevented them from being able to meet customers' needs.

VI. PROSPECTS AND POSSIBILITIES

First as DUF, and then as ADAM, this NIJ program has evolved to meet new policy and practice needs. It is one of the few Federal Government programs measuring drug prevalence that directly addresses the relationship between drug use and criminal behavior. It is the only Federal Government program in which urinalysis, the most reliable method of determining recent drug use, is the standard procedure for identifying the extent of substance abuse in this at-risk population. Another strength of the program is its focus on individual urban areas. Through the years, this focus has revealed that drug use patterns vary widely by area, and that nationwide surveys of drug use conceal these differences.

The recent decline in crime notwithstanding, drug use among the arrestee population has remained consistently high. The ADAM redesign was intended to open up new areas in which to explore the correlates of drug use, as a means to better understand the problem and, ultimately, to develop solutions. By strengthening the reliability of the findings, the redesign facilitates better analysis and understanding. This preliminary report has applied some, though by no means all, of the new variables now available for analysis and has revealed several findings that convey the intentions of the redesigned program and suggest its possibilities.

1. Some of the issues covered in this report are being more fully explored by the ADAM staff. They include need for treatment, drug-use patterns, and drug market dynamics. The findings will be released by NIJ in a series of publications now in the planning stage.

The finding that a large proportion of crack cocaine purchases still takes place outdoors seems to indicate that at least one aspect of the crack problem persists.

The dependency screen introduced by the ADAM redesign revealed, beyond speculation, high levels of risk for alcohol and drug dependence, and thus the need for treatment.¹

The revelations that few attempts to purchase drugs ended in failure, and that even when they did fail, police activity was rarely cited as the reason, may lead law enforcement officials to refine their drug control strategies.

These and other findings made possible through the ADAM redesign not only offer scientifically sound evidence, but also new evidence that may be used by local criminal justice agencies to develop drug-control strategies and related interventions.

ADAM's new capacity for computerized mapping, which enables researchers and criminal justice agencies to identify geographical concentrations of dependence, could help inform decisions on where to site treatment facilities.

Traditionally, ADAM and its forerunner DUF examined such variables as age, race, and type of offense. Combined with new variables like risk for dependence and extent of drug market participation,

they offer the prospect of more richly textured insights into drug-use patterns. It is possible, for example, that the extent of dependence varies by drug, and that users of certain drugs are more likely than others to also use alcohol heavily. The extent of participation in drug markets may be found to vary by type of

offense. Researchers may find that age is a determinant of participation in drug markets. By opening up these and other possibilities for more indepth analysis, the ADAM redesign makes the prospects for understanding substance abuse in this at-risk population far more promising than ever.

REFERENCES

- Belenko, S. 1990. "The Impact of Drug Offenders on the Criminal Justice System," in *Drugs, Crime and the Criminal Justice System*, ed. R.A. Weisheit. Cincinnati: Anderson, 27–48.
- Blumstein, A. 1995. *Youth Violence, Guns, and the Illicit-Drug Industry*. Washington, DC: U.S. Department of Justice, National Institute of Justice, NCJ 162687.
- Brownstein, H.H. 2000. "Drug Distribution and Sales as a Work System," in *Encyclopedia of Criminology and Deviant Behavior—Volume Four: Self Destructive Behavior and Devalued Identity*, C. Faupel and P.M. Roman, eds. London: Taylor and Francis, 224–227.
- Brownstein, H.H. 1996. *The Rise and Fall of a Violent Crime Wave—Crack Cocaine and the Social Construction of a Crime Problem*. Guilderland, NY: Harrow and Heston.
- Brownstein, H.H., S.M. Crimmins, and B.J. Spunt. 2000. "A Conceptual Framework for Operationalizing the Relationship Between Violence and Drug Market Stability." *Contemporary Drug Problems* 27: 867–890.
- Brownstein, H.H., H.R. Shiladar-Baxi, P.J. Goldstein, and P.J. Ryan. 1992. "The Relationship of Drugs, Drug Trafficking, and Drug Traffickers to Homicide." *Journal of Crime and Justice* 15 (2): 25–44.
- Fagan, J., and K.L. Chin. 1990. "Violence as Regulation and Social Control in the Distribution of Crack," in *Drugs and Violence: Causes, Correlates, and Consequences*, M. de la Rosa, E.Y. Lambert, and B. Gropper, eds. NIDA Research Monograph No. 103. Rockville, MD: National Institute on Drug Abuse, 8–34.
- Goldstein, P.J., H.H. Brownstein, and P.J. Ryan. 1992. "Drug-Related Homicide in New York: 1984 and 1988." *Crime and Delinquency* 38 (4): 459–476.
- Goldstein, P.J., H.H. Brownstein, P.J. Ryan, and P.A. Bellucci. 1989. "Crack and Homicide in New York City: A Conceptually Based Event Analysis." *Contemporary Drug Problems* 16 (4): 651–687.
- Golub, A., and B. Johnson. 2001. *The Rise of Marijuana as the Drug of Choice Among Youthful Adult Arrestees*. Research in Brief. Washington, DC: U.S. Department of Justice, National Institute of Justice, NCJ 187490.
- Golub, A., and B. Johnson. 1997. *Crack's Decline: Some Surprises Across U.S. Cities*. Research in Brief. Washington, DC: U.S. Department of Justice, National Institute of Justice, NCJ 165707.
- Inciardi, James A., D. Lockwood, and A.E. Pottieger. 1993. *Women and Crack-Cocaine*. New York: Macmillan Publishing Company.
- Johnson, B., A. Golub, and E. Dunlap. 2000. "Rise and Decline of Hard Drugs, Drug Markets, and Violence in Inner City New York," in *The Crime Drop in America*, A. Blumstein and J. Wallman, eds. Cambridge, United Kingdom: Cambridge University Press, 164–206.

- Johnson, B., A. Hamid, and H. Sanbria. 1992. "Emerging Models of Crack Distribution," in *Drugs, Crime, and Social Policy: Research, Issues, and Concerns*, ed. T. Mieczkowski. Boston: Allyn and Bacon, Inc.: 56–78.
- Johnson, B., A. Taylor, A. Golub, and J. Eterno. 2001. "Monitoring Impacts of Policing Initiatives on Arrestees in New York City." Final report submitted to the National Institute of Justice, U.S. Department of Justice, Washington, DC.
- Kleiman, M.A.R., A. Barnett, A.V. Bouza, and K.M. Burke. 1988. *Street-Level Drug Enforcement: Examining the Issues*. Issues and Practices, ed. M.R. Chaiken. Washington, DC: U.S. Department of Justice, National Institute of Justice, NCJ 115403.
- Lattimore, P.K., J. Trudeau, K.J. Riley, J. Leiter, and S. Edwards. 1997. *Homicide in Eight U.S. Cities: Trends, Context, and Policy Implications*. Washington, DC: U.S. Department of Justice, National Institute of Justice, NCJ 167262.
- Lu, N., B.G. Taylor, and K.J. Riley. 2001. "The Validity of Adult Arrestee Self-Reports of Crack Cocaine Use." *American Journal of Drug and Alcohol Abuse* 27 (3): 399–420.
- Massing, M. 1989. "Crack's Destructive Sprint Across America." *New York Times Magazine* (October 1): 38, 40–41, 58, 60, 62.
- Rhodes, W. 1993. "Synthetic Estimation Applied to the Prevalence of Drug Use." *Journal of Drug Issues* 23 (2): 297–321.
- Riley, K.J., N. Lu, J. Meeker, P. Lo, N. Fortner, and B. Taylor. 2001. "Monitoring the Crack Epidemic through Urine Testing: Establishment of Routine Detection Methods." *Addiction Biology* 6 (1): 83–95.
- Sviridoff, M., and S.T. Hillsman. 1994. "Assessing the Community Effects of Tactical Narcotics Teams," in *Drugs and Crime: Evaluating Public Policy Initiatives*, D.L. MacKenzie and C.D. Uchida, eds. Thousand Oaks, CA: Sage, 114–128.
- U.S. Department of Health and Human Services, Office of Applied Studies, SAMHSA. 1998. *National Household Survey on Drug Abuse. Main Findings*.
- Williams, T. 1992. *Crackhouse: Notes from the End of the Line*. New York: Penguin Books.
- Wish, E. 1990. "U.S. Drug Policy in the 1990s: Insights from New Data from Arrestees." *International Journal of the Addictions* 25 (3): 377–409.
- Witkin, G. 1991. "The Men Who Created Crack." *U.S. News and World Report* (August 19): 44–53.

APPENDIXES

Appendix A: The New ADAM Method

Appendix B: ADAM Staff—National Institute of Justice
and Abt Associates Inc.

Appendix C: Appendix Tables

APPENDIX A

The New ADAM Method

The redesign of the ADAM program has several major components, two of which are showcased here: the adoption of probability-based sampling and the development of a new, expanded survey instrument. The changes were intended by NIJ to strengthen the program by making it more scientifically sound and by opening up new possibilities for areas of use to policymakers and researchers.

Sampling

The previous practice in each site was to obtain data from only one booking facility in the county and to interview only the arrestees who were in the facility at the time the ADAM interviews were scheduled. To make sure the ADAM arrestee population was representative of the entire county, that practice changed. It meant that the number of county jail facilities included in the study had to expand to become representative of all booking facilities in the county. It also meant that the arrestees selected had to represent all people arrested throughout the day—not just those who happened to be in the facility when the ADAM interviews of arrestees were taking place. Finally, to ensure accurate weighting of cases to represent the entire arrestee population, data were collected on all bookings in a given county, not just on bookings of arrestees detained long enough to be interviewed by ADAM.

Implementing the new sampling procedures in each site required major changes in operational procedures. The changes were intended to promote more sophisticated and far-reaching analyses. By 2000, the changes had been made and the ADAM data:

- Represent the target counties' arrestee population, not simply an unspecified proportion of that population
- Indicate, by means of confidence intervals around estimates, the level of statistical significance of the various findings.

The ADAM sampling challenge

The key to sampling is knowing the probability with which every case in the sample will be selected. In general, sampling statisticians start with an exhaustive list of cases of interest (the frame) and then assign a probability of selection to every member on the list. Once the sample is drawn, each member has a sampling weight equal to the reciprocal of that member's selection probability. For example, in ADAM, if an arrestee were assigned a .10 probability of selection, he or she would represent nine people (in addition to the arrestee) in the population who were not sampled. This is what is known as weighting.

While the approach is simple in concept, in ADAM it is not easy to apply, for two

reasons. First, ADAM has no sampling frame because there is no way to know who *will* be arrested during data collection. Only those who actually are arrested is known. Second, some cases have a higher probability of selection than do others (e.g., felons or more serious offenders who are being held pending an appearance in court). Arrestees in small jails also may have a higher probability of being selected for ADAM because in such places, where there are relatively few arrestees, the interviewer has more time to conduct interviews and can, while he or she is on site, include almost everyone arrested. For other arrestees (e.g., people who are arrested early in the day and are processed and released before the ADAM interview team arrives), the probability of selection is lower.

The solution

The sampling will be biased unless all arrestees moved through the booking process are taken into account. ADAM surmounted this difficulty by using post-sampling stratification, a technique typically employed to minimize the width of confidence intervals calculated for estimates. It is used here to eliminate or reduce bias in the samples.

The first step in post-sampling stratification is to account for factors that affect the probability of selection: time of day of the arrest, day of the week of the arrest, reason for the arrest, and the particular booking facility where the arrestee was taken. These factors are used to “stratify” the data from the sample as well as the data from all bookings that took place during the data collection period.

Every arrestee in any stratum will have the same probability as any other arrestee of being selected for the sample. An example of a stratum is all arrests of males on felony charges that occur between 6:00 p.m. and 2:00 a.m. on a weekend night in a large jail. All cases of this type for

each facility from a particular county and the sample are sorted into groupings. The strata in each data set are then compared, and weights are applied to the sample cases to represent the total number of cases had all arrestees for that facility been interviewed for ADAM. For example, if there are 5 cases in a sample stratum and a total of 50 cases for the facility, each sample case represents 10 cases.

Weighting cases in this fashion enables the ADAM sites to calculate the number of arrestees in a given county who have any number of characteristics that might be of interest, such as types of drugs used, need for treatment, and whether they live in stable housing.

Because this technique also enables the sites to estimate standard errors and confidence intervals, they can, for the first time, determine if changes from one year to the next are “real” or have occurred by chance. For example, 30 percent of arrestees at a specific site may test positive for a given drug in a given year, and 35 percent the next. The increase may not be a real change if the confidence interval for those estimates is plus or minus 8 percent, for example; that is, the change has occurred but may not be statistically significant.

New instrumentation

After 2 years of development and testing, the new ADAM instrument (the questionnaire used in interviewing arrestees) was put into operation during the first quarter of 2000. It expands the focus of ADAM in major ways. First, there are additional areas for exploration, such as arrestees’ participation in drug markets and an assessment of the need for alcohol and/or drug treatment. Second, there are “cross-walk” measures that link ADAM to other national data sets on substance abuse. Third, the redesign also facilitates the application of computerized mapping to the data.

Drug markets are among the new areas for exploration. The ADAM sites will be able to track changes from year to year in certain characteristics of drug transactions and can do so for each drug examined. Examples of these characteristics are whether drug sales take place indoors or outdoors, the use of electronic devices to contact buyers, and whether payment was made with cash or other means. A simple diagnostic screen enables the sites to calculate the proportion of arrestees who need treatment for drug and/or alcohol dependence.

The new instrument includes questions that enable the sites to contrast the findings from ADAM analyses with those of other drug surveys. These are the National Household Survey on Drug Abuse (NHSDA) and the Treatment Episode Data Set (TEDS), both of which are administered by the U.S. Department of Health and Human Services.* Because the criteria for inclusion in the NHSDA are mirrored in the new ADAM instrument, researchers can determine which arrestees in the ADAM sample would

not have been eligible for the NHSDA and therefore not included in it. Similarly, questions about episodes of treatment during the past year help determine which ADAM arrestees have also been counted in the TEDS.

The redesign permits analysis of the data by means of computerized mapping. This is possible because ADAM now includes information about arrestees' residential ZIP Code and ZIP Code of arrest location. The sites can use this information to map geographic concentration of factors such as drug use, need for treatment, homelessness, or drug market activity.

Full details of the new ADAM research methods are presented in the Methodology Guide for ADAM, which can be downloaded from the ADAM Web page (<http://www.adam-nij.net>) on the NIJ Web site (<http://www.ojp.usdoj.gov/nij>). Also available on the ADAM Web page is a guide to analyzing the ADAM data, the *Analytic Guide for ADAM*.

* The NHSDA collects information nationwide on use rates, number of users, and other measures related to illicit drugs, alcohol, cigarettes, and other forms of tobacco among people 12 years of age and older. TEDS is a collection of data routinely gathered by the States in monitoring their substance abuse treatment systems. Although TEDS does not reflect the total national demand for substance abuse treatment, it does count a significant proportion of all admissions to substance abuse treatment.

APPENDIX B

ADAM Staff—National Institute of Justice and Abt Associates Inc.

National Institute of Justice

Henry Brownstein
Director, Drugs and
Crime Division, NIJ
Executive Director, ADAM
Brownsth@ojp.usdoj.gov

Bruce Taylor
Deputy Director, ADAM
Taylorb@ojp.usdoj.gov

Christine Crossland
Program and Policy Analyst
Crosslan@ojp.usdoj.gov

Karen Cyrus
Program and Policy Specialist
Cyrusk@ojp.usdoj.gov

Nora Fitzgerald
Social Science Analyst
Fitzgera@ojp.usdoj.gov

Natalie Lu
Drug Testing Technology Specialist
Lun@ojp.usdoj.gov

Diana Noone
Social Science Analyst
Nooned@ojp.usdoj.gov

Abt Associates Inc.

Dana Hunt
Project Director

Phyllis Newton
Project Manager

William Rhodes
Technical Adviser

Meg Townsend
Field Operations Manager

Carol Witcher
ADAM Data Center Manager

Jessica Davis
Site Liaison

Douglas Fuller
Site Liaison

Sara Wolf
Site Liaison

Michael Costa
Research Analyst

Laura Gandolfo
Programmer

Sylvia Young
Data Center Supervisor

Hiwotte Amare
Associate Programmer

Sara Kuck
Research Assistant

Jackie Moore
Administrative Assistant

APPENDIX C

Appendix Tables

Appendix Table 1: ADAM Sites

Primary City	County Catchment/Study Area	County Booking Facilities		Number of Interviews Completed Each Quarter, 2000 (Unweighted)				Weighted Number of Interviews
		Number in Country	Number Where Adult Male Data Were Collected	Quarter 1	Quarter 2	Quarter 3	Total	
Albuquerque, NM	Bernalillo County	1	1	150	109	75	334	2,919
Anchorage, AK	Anchorage Borough	3	2	171	138	135	444	813
Atlanta, GA	Fulton and DeKalb Counties	3	2	189	175	203	567	6,246
Birmingham, AL	Jefferson County	21	5	99	116	ND	215	1,340
Albany, NY ^a	Capital Area	38	5	ND	ND	ND	ND	ND
Charlotte, NC ^c	Charlotte-Metro	1	1	ND	ND	ND	ND	ND
Chicago, IL	Cook County	36	3	ND	ND	441	441	1,642
Cleveland, OH	Cuyahoga County	66	5	284	343	269	896	4,488
Dallas, TX	Dallas County	23	1	ND	ND	ND	ND	ND
Denver, CO	Denver County	1	1	160	175	185	520	4,042
Des Moines, IA	Polk County	5	3	90	87	83	260	1,529
Detroit, MI	Wayne County	54	6	ND	ND	291	291	456
Ft. Lauderdale, FL	Broward County	1	1	177	ND	ND	177	2,486
Honolulu, HI	Oahu	8	1	ND	ND	ND	ND	ND
Houston, TX	Harris County	115	2	ND	ND	ND	ND	ND
Indianapolis, IN	Marion County	1	1	167	186	221	574	6,660
Laredo, TX	Webb County	2	1	68	93	86	247	754
Las Vegas, NV	Clark County	4	4	201	262	250	713	5,873
Los Angeles, CA	Los Angeles County	86	12	ND	ND	ND	ND	ND
Miami, FL	Miami-Dade County	2	2	200	228	ND	428	6,334
Minneapolis, MN	Hennepin County	18	3	ND	184	206	390	3,032
New Orleans, LA	Orleans Parish	1	1	164	169	165	498	6,196
Manhattan, NY ^b	New York County	6	2	427	203	246	876	14,142
Oklahoma City, OK	Oklahoma County	1	1	192	184	180	556	2,471
Omaha, NE	Douglas County	2	1	104	102	117	323	3,276
Philadelphia, PA	County of Philadelphia	7	4	ND	155	127	282	1,483
Phoenix, AZ	Maricopa County	9	3	315	360	362	1,037	1,101

continued on page 44

continued from page 43

Appendix Table 1: ADAM Sites									
Primary City	County Catchment/Study Area	County Booking Facilities		Number of Interviews Completed Each Quarter, 2000 (Unweighted)				Weighted Number of Interviews	
		Number in Country	Number Where Adult Male Data Were Collected	Quarter 1	Quarter 2	Quarter 3	Total		
Portland, OR	Multnomah County	1	1	135	200	217	552	2,933	
Sacramento, CA	Sacramento County	1	1	143	136	164	443	5,404	
Salt Lake City, UT	Salt Lake County	1	1	159	186	171	516	2,295	
San Antonio, TX	Bexar County	28	1	108	160	183	451	5,540	
San Diego, CA	San Diego County	2	2	155	153	164	472	6,718	
San Jose, CA	Santa Clara County	4	1	158	159	187	504	7,256	
Seattle, WA	King County	7	4	217	266	280	763	4,623	
St. Louis, MO ^a									
Spokane, WA	Spokane County	1	1	137	125	134	396	2,051	
Tucson, AZ	Pima County	1	1	183	149	138	470	2,658	
Washington, DC	Washington, DC	8	4	ND	ND	ND	ND	ND	
Totals				4,553	4,803	5,280	14,636	126,677	

a. ADAM affiliate site.

b. During the first quarter of 2000, data were collected in all five boroughs of New York City, but for the remainder of the year only in Manhattan.

c. St. Louis has been in ADAM for several years, and is now in hiatus status. It will return to active status after resolution of financial and other issues.

ND = No data available

Note: Data are from the period January–September 2000. Although ADAM data are collected on a county basis, the primary (most populous) city in each county also is noted in this and all other tables in this report. The breakdown by quarter in the number of interviews conveys the change in the number from one quarter to the next. Because the number of interviews in each quarter is relatively small, it is not advisable to compare one quarter with another.

Appendix Table 2: Drug Test Results, by Drug by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Tested Positive For:*							Multiple Drugs	Percent of Interviews Completed Urine Tests
	Cocaine	Opiates	Marijuana	Metham- phetamine	PCP	Any Drug			
Albuquerque, NM	35%	12%	47%	5%	0%	65%	28%	82%	
Anchorage, AK	21	3	40	0	0	53	10	80	
Atlanta, GA	49	2	38	0	0	70	19	96	
Birmingham, AL	35	11	44	0	0	67	23	80	
Cleveland, OH	37	3	51	0	8	72	26	79	
Denver, CO	34	3	43	3	0	63	20	92	
Des Moines, IA	8	2	38	17	2	51	16	91	
Indianapolis, IN	32	3	50	1	1	66	20	91	
Laredo, TX	44	6	30	0	0	57	19	93	
Las Vegas, NV	21	4	31	19	2	56	18	87	
Miami, FL	43	4	38	0	0	63	22	90	
Minneapolis, MN	25	4	54	2	1	66	19	90	
New Orleans, LA	32	15	47	0	0	69	20	96	
New York, NY	46	22	40	0	1	79	27	96	
Oklahoma City, OK	24	3	57	12	5	72	25	96	
Omaha, NE	17	1	46	9	0	60	12	87	
Philadelphia, PA	31	12	51	0	3	74	19	83	
Phoenix, AZ	31	6	33	17	2	63	23	83	
Portland, OR	20	13	35	20	0	61	24	86	
Sacramento, CA	18	2	50	27	0	73	23	88	
Salt Lake City, UT	18	7	33	17	0	54	18	86	
San Antonio, TX	21	14	40	0	0	55	18	88	
San Diego, CA	17	6	39	25	0	65	20	95	
San Jose, CA	11	7	35	22	4	52	22	87	
Seattle, WA	30	11	38	10	2	65	22	82	
Spokane, WA	14	8	39	21	0	56	21	82	
Tucson, AZ	40	9	46	7	0	69	30	87	
Median	30%	6%	40%	5%	0%	65%	20%	88%	

* These five drugs are the NIDA-5 drugs, established by NIDA as a standard panel of commonly used illegal drugs. They are the drugs analyzed in this report.
Note: Data are from the period January–September 2000. Percentages are based on weighted data.

Appendix Table 3: Demographics and Sociodemographics, by Site—Adult Male Arrestees

Primary City	Percent Whose Age Is:						Percent Who Say Racially/Ethnically They Are:				Percent Who Say They Were Employed	Percent Who Say They Have No High School Diploma	Percent Who Say Their Housing Situation Was Unstable, Past 30 Days
	15–20 years	21–25 years	26–30 years	31–35 years	36+ years	Mean	White	Black	Hispanic	Other			
	Albuquerque, NM	15.8%	18.2%	17.4%	11.1%	37.6%	31.9%	20.2%	10.7%	57.2%			
Anchorage, AK	13.2	16.8	13.2	17.3	39.5	32.5	52.2	13.6	2.6	31.7	53.6	19.8	25.1
Atlanta, GA	13.1	12.8	12.0	13.8	48.3	34.6	8.3	88.9	2.4	0.4	66.5	33.9	23.0
Birmingham, AL	15.5	18.3	18.4	14.7	33.1	31.7	33.6	63.5	0.9	2.0	66.2	33.6	9.2
Cleveland, OH	15.5	20.2	15.9	10.4	38.0	32.3	20.5	75.4	3.7	0.3	66.1	34.3	7.3
Denver, CO	15.1	15.7	16.4	13.2	39.6	32.8	30.1	30.0	36.2	3.7	66.5	32.6	26.7
Des Moines, IA	14.7	16.8	18.1	17.0	33.4	32.3	61.9	31.0	6.3	0.9	67.9	21.3	17.6
Indianapolis, IN	15.8	19.5	12.5	13.0	39.2	32.3	42.9	56.4	0.3	0.4	68.2	43.5	9.7
Laredo, TX	18.2	22.0	19.9	12.1	27.8	29.8	29.0	1.6	69.0	0.3	66.5	54.9	4.9
Las Vegas, NV	9.0	20.2	15.2	18.0	37.6	34.0	56.6	26.0	14.1	3.4	66.9	24.6	18.7
Miami, FL	11.0	22.2	11.9	17.8	37.1	33.8	39.0	55.1	5.9	0.0	64.4	33.0	13.4
Minneapolis, MN	19.6	22.3	15.9	16.6	25.6	29.6	35.3	59.0	0.4	5.3	57.1	25.2	15.6
New Orleans, LA	21.8	24.6	17.3	9.0	27.3	29.8	9.8	89.7	0.4	0.1	61.0	52.3	5.8
New York, NY	18.0	13.4	11.9	12.7	44.0	32.8	10.6	62.2	26.2	1.0	45.7	41.3	13.9
Omaha, NE	14.0	25.1	18.6	13.5	28.8	30.3	47.2	43.9	5.0	4.0	78.3	22.8	6.7
Philadelphia, PA	18.8	23.4	12.5	15.9	29.5	30.9	20.8	78.1	0.0	1.1	54.7	30.2	5.5
Phoenix, AZ	13.5	21.4	16.1	14.5	34.5	31.7	46.4	14.1	32.7	6.8	70.6	32.2	16.2
Portland, OR	10.2	15.2	15.8	17.0	41.8	33.8	67.0	26.4	4.1	2.5	51.3	27.5	26.8
Sacramento, CA	8.9	14.4	18.3	16.6	41.8	33.9	40.3	39.3	17.0	3.3	51.9	24.2	19.0
Salt Lake City, UT	14.0	25.5	17.0	15.0	28.6	30.2	62.6	6.3	22.2	8.9	70.2	35.8	13.6
San Antonio, TX	22.2	21.1	17.5	9.0	30.2	30.6	37.2	12.9	49.8	0.0	67.8	32.8	12.2
San Diego, CA	12.3	16.9	17.3	15.3	38.3	32.8	39.8	24.6	31.8	3.9	59.9	22.9	24.4
San Jose, CA	13.7	19.0	14.3	13.8	39.1	32.7	35.6	18.7	36.8	8.9	68.9	19.8	18.5
Seattle, WA	13.5	18.5	15.5	14.0	38.5	32.5	60.8	31.1	0.7	7.4	61.4	20.5	23.4
Spokane, WA	13.8	16.1	16.9	17.3	35.9	32.2	79.6	13.0	1.9	5.5	52.4	23.8	14.4
Tucson, AZ	12.3	21.2	17.2	14.3	35.0	32.4	41.3	12.4	39.8	6.6	64.7	33.9	18.1
Median	14.0%	19.2%	16.3%	14.4%	37.4%	32.3%	39.4%	30.5%	6.1%	3.3%	66.1%	31.2%	15.0%

Note: Data are from the period January–September 2000.

Appendix Table 4: Crack Cocaine Use, by Site—Adult Male Arrestees

Primary City	Crack Cocaine Use			Average Number of Days in Past 30 in Which Crack Was Used (in Past Year)*
	Past 7 Days	Past 30 Days	Past Year	
Albuquerque, NM	18.3%	19.3%	25.3%	12.1 days
Anchorage, AK	13.4	16.6	21.9	7.4
Atlanta, GA	25.1	26.3	29.6	13.0
Birmingham, AL	16.1	17.5	20.9	11.6
Cleveland, OH	20.3	21.2	22.5	9.2
Denver, CO	15.2	18.7	21.3	8.3
Des Moines, IA	7.1	9.7	12.9	8.2
Indianapolis, IN	14.6	15.9	18.8	11.1
Laredo, TX	8.0	9.2	12.9	7.9
Las Vegas, NV	10.7	12.9	17.4	9.1
Miami, FL	14.0	14.1	15.8	11.0
Minneapolis, MN	13.0	15.4	17.5	7.3
New Orleans, LA	12.8	14.6	15.9	9.0
New York, NY	18.2	20.4	21.9	13.2
Oklahoma City, OK	11.2	12.3	15.6	8.7
Omaha, NE	7.4	8.6	10.7	8.4
Philadelphia, PA	16.3	18.5	21.2	9.7
Phoenix, AZ	18.7	20.7	25.7	10.6
Portland, OR	9.6	11.6	15.5	8.2
Sacramento, CA	11.7	13.5	17.4	8.3
Salt Lake City, UT	6.7	7.8	14.3	7.5
San Antonio, TX	2.3	3.8	7.0	6.3
San Diego, CA	10.2	10.9	13.6	6.8
San Jose, CA	4.9	5.6	8.3	6.5
Seattle, WA	16.0	18.0	23.1	9.7
Spokane, WA	9.4	16.0	22.0	7.1
Tucson, AZ	20.0	22.4	26.6	9.2
Median	13.0%	15.4%	17.5%	8.7 days

* Asked of those who said they had used crack cocaine in the past year.

Note: Data are from the period January–September 2000. Any given arrestee may not use crack and powder cocaine exclusively, but could use both.

Appendix Table 5: Powder Cocaine Use, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Reported Powder Cocaine Use In:			Average Number of Days in Past 30 in Which Powder Cocaine Was Used (in Past Year)*
	Past 7 Days	Past 30 Days	Past Year	
Albuquerque, NM	11.6%	18.2%	25.0%	5.9 days
Anchorage, AK	6.0	11.1	19.1	5.0
Atlanta, GA	7.5	9.1	13.4	8.4
Birmingham, AL	3.8	6.8	9.4	4.8
Cleveland, OH	5.0	6.3	8.4	7.6
Denver, CO	9.4	11.2	17.1	6.4
Des Moines, IA	2.4	4.5	7.6	5.1
Indianapolis, IN	3.8	8.2	10.9	6.6
Laredo, TX	29.0	34.8	40.8	6.7
Las Vegas, NV	5.6	8.3	13.6	8.1
Miami, FL	15.4	17.2	23.1	7.8
Minneapolis, MN	5.2	8.4	13.3	3.7
New Orleans, LA	6.2	7.2	9.5	6.7
New York, NY	14.6	16.5	18.2	10.5
Oklahoma City, OK	4.9	7.3	12.3	6.9
Omaha, NE	2.5	5.3	8.5	4.7
Philadelphia, PA	4.9	6.8	9.2	5.9
Phoenix, AZ	10.7	13.9	21.2	7.1
Portland, OR	5.3	7.5	11.5	7.5
Sacramento, CA	1.8	3.6	5.1	5.1
Salt Lake City, UT	10.2	13.6	21.3	6.5
San Antonio, TX	9.7	13.7	19.1	8.7
San Diego, CA	3.4	6.3	10.2	3.1
San Jose, CA	2.8	4.8	11.4	3.0
Seattle, WA	9.7	11.5	17.1	6.1
Spokane, WA	7.3	12.2	18.9	7.9
Tucson, AZ	21.4	26.8	36.4	6.1
Median	6.0%	8.4%	13.4%	6.5 days

* Asked of those who said they had used powder cocaine in the past year.

Note: Data are from the period January–September 2000. Any given arrestee may not use crack and powder cocaine exclusively, but could use both.

Appendix Table 6: Marijuana Use, by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Reported Marijuana Use In:			Average Number of Days in Past 30 in Which Marijuana Was Used (in Past Year)*
	Past 7 Days	Past 30 Days	Past Year	
Albuquerque, NM	44.5%	51.7%	56.7%	11.7 days
Anchorage, AK	36.2	40.5	50.0	11.1
Atlanta, GA	33.8	36.7	45.2	11.7
Birmingham, AL	36.7	44.9	56.9	9.6
Cleveland, OH	46.2	49.9	58.8	10.2
Denver, CO	42.0	48.9	54.8	10.4
Des Moines, IA	35.4	43.2	49.9	10.3
Indianapolis, IN	40.7	45.2	53.0	12.7
Laredo, TX	26.8	30.8	35.1	11.4
Las Vegas, NV	31.8	39.2	47.4	10.5
Miami, FL	29.4	34.5	41.4	9.9
Minneapolis, MN	44.6	52.1	60.1	11.4
New Orleans, LA	44.7	48.4	55.9	10.6
New York, NY	43.9	48.3	52.4	13.7
Oklahoma City, OK	49.0	53.3	60.8	12.4
Omaha, NE	43.7	50.4	56.1	13.1
Philadelphia, PA	48.7	54.0	58.9	12.9
Phoenix, AZ	31.9	38.4	46.3	10.9
Portland, OR	30.7	38.6	50.0	9.4
Sacramento, CA	42.8	50.2	56.3	12.2
Salt Lake City, UT	28.4	35.6	43.5	10.5
San Antonio, TX	25.6	29.3	40.8	11.3
San Diego, CA	33.3	39.6	49.1	9.8
San Jose, CA	33.2	40.7	47.5	11.4
Seattle, WA	39.5	48.1	56.3	11.2
Spokane, WA	38.7	47.8	52.9	9.8
Tucson, AZ	42.4	49.7	56.4	12.1
Median	38.7%	45.2%	52.9%	11.2 days

* Asked of those who said they had used marijuana in the past year.

Note: Data are from the period January–September 2000.

Appendix Table 7: Marijuana Use—Measured by Urinalysis and Self-Reports, by Age by Site—Adult Male Arrestees

Primary City	Age 20 and Under		Over 20		Age 20 and Under		Over 20	
	Age 20 and Under	Over 20	Age 20 and Under	Over 20	Age 20 and Under	Over 20	Age 20 and Under	Over 20
Albuquerque, NM	80.5%	42.3%	15.0 days	10.9 days	29.6%	18.5%		
Anchorage, AK	70.9	34.8	14.7	9.9	35.1	14.0		
Atlanta, GA	66.8	33.5	13.1	11.3	32.6	18.2		
Birmingham, AL	61.6	42.0	12.4	8.9	38.1	13.8		
Cleveland, OH	68.2	47.4	12.1	9.7	21.4	14.4		
Denver, CO	52.0	42.1	9.9	10.5	15.6	18.2		
Des Moines, IA	52.6	35.7	10.9	10.1	5.1	14.6		
Indianapolis, IN	72.7	45.8	15.6	11.8	38.7	18.9		
Laredo, TX	57.0	24.0	12.5	10.8	25.8	17.8		
Las Vegas, NV	53.6	28.7	13.9	10.0	14.2	16.4		
Miami, FL	53.9	36.8	12.5	9.5	26.6	14.7		
Minneapolis, MN	74.7	49.0	12.6	10.9	28.6	19.3		
New Orleans, LA	68.8	39.5	12.9	9.7	25.5	14.5		
New York, NY	70.6	33.9	17.0	12.7	57.1	34.1		
Oklahoma City, OK	77.0	53.0	14.4	11.8	33.0	24.4		
Omaha, NE	65.6	42.7	11.3	13.6	20.3	29.9		
Philadelphia, PA	78.6	43.1	14.8	12.2	38.0	27.8		
Phoenix, AZ	63.6	28.6	14.1	10.0	31.6	17.4		
Portland, OR	49.3	34.3	11.5	9.1	15.8	10.4		
Sacramento, CA	79.7	47.3	16.8	11.6	48.2	17.6		
Salt Lake City, UT	55.5	29.1	12.6	9.8	24.7	13.9		
San Antonio, TX	58.3	34.6	11.9	10.9	19.5	18.0		
San Diego, CA	53.5	37.5	13.7	9.2	16.8	15.3		
San Jose, CA	66.3	29.3	15.8	10.0	15.1	12.1		
Seattle, WA	63.8	33.9	13.7	10.4	32.1	18.5		
Spokane, WA	60.2	36.6	14.7	8.7	33.2	9.0		
Tucson, AZ	65.1	43.5	14.4	11.5	33.3	21.4		
Median	65.1%	36.8%	13.7 days	10.4 days	28.6%	17.6%		

a. Asked of those who said they had used marijuana in the past year.

b. Heavy use is defined in the NHSDA as 13 or more days of self-reported consumption of a drug in a 30-day period in the year before the interview.

Note: Data are from the period January–September 2000.

Appendix Table 8: Drug Market Participation in Past 30 Days, by Drug by Site—Adult Male Arrestees

Primary City	Crack Cocaine			Powder Cocaine			Marijuana		
	Number of Arrestees Who Said They Obtained Drug in Past 30 Days ^a	Percent Who Said They Obtained Drug in Past 30 Days	Number of Days Arrestees Said They Obtained Drug in Past 30 Days ^b	Number of Arrestees Who Said They Obtained Drug in Past 30 Days ^a	Percent Who Said They Obtained Drug in Past 30 Days	Number of Days Arrestees Said They Obtained Drug in Past 30 Days ^b	Number of Arrestees Who Said They Obtained Drug in Past 30 Days ^a	Percent Who Said They Obtained Drug in Past 30 Days	Number of Days Arrestees Said They Obtained Drug in Past 30 Days ^b
Albuquerque, NM	62	21.8%	15.1 days	60	19.2%	5.6 days	148	50.6%	7.6 days
Anchorage, AK	73	16.7	14.0	62	13.8	7.1	179	40.8	8.1
Atlanta, GA	158	27.9	18.8	57	10.0	10.1	221	36.7	11.3
Birmingham, AL	39	18.8	15.5	18	7.5	3.9	94	44.3	10.5
Cleveland, OH	214	23.1	11.4	54	6.6	4.0	444	50.5	9.8
Denver, CO	98	19.3	11.5	61	12.1	6.3	238	45.8	6.4
Des Moines, IA	25	10.1	6.7	9	4.1	2.6	106	41.4	6.8
Indianapolis, IN	95	17.0	13.8	56	9.1	5.1	258	43.8	9.7
Laredo, TX	24	10.3	12.0	85	36.3	7.8	86	32.6	8.6
Las Vegas, NV	102	12.6	14.8	63	8.2	8.0	253	37.0	6.1
Miami, FL	68	14.6	19.0	80	17.6	10.4	133	30.6	11.9
Minneapolis, MN	59	15.7	9.6	30	8.4	3.1	174	44.6	10.7
New Orleans, LA	76	14.2	14.3	34	6.8	9.4	242	48.3	12.2
New York, NY	183	20.2	16.1	152	16.2	12.2	377	48.5	17.2
Oklahoma City, OK	73	14.6	14.6	42	7.7	8.2	253	47.7	9.7

continued on page 52

continued from page 51

Appendix Table 8: Drug Market Participation in Past 30 Days, by Drug by Site—Adult Male Arrestees

Primary City	Crack Cocaine			Powder Cocaine			Marijuana		
	Number of Arrestees Who Said They Obtained Drug in Past 30 Days ^a	Percent Who Said They Obtained Drug in Past 30 Days	Number of Days Arrestees Said They Obtained Drug in Past 30 Days ^b	Number of Arrestees Who Said They Obtained Drug in Past 30 Days ^a	Percent Who Said They Obtained Drug in Past 30 Days	Number of Days Arrestees Said They Obtained Drug in Past 30 Days ^b	Number of Arrestees Who Said They Obtained Drug in Past 30 Days ^a	Percent Who Said They Obtained Drug in Past 30 Days	Number of Days Arrestees Said They Obtained Drug in Past 30 Days ^b
Omaha, NE	33	8.6	13.1	20	4.3	3.1	146	44.6	8.2
Philadelphia, PA	50	18.7	11.7	21	7.9	9.7	142	51.5	15.3
Phoenix, AZ	223	21.8	16.8	149	14.7	7.0	386	38.0	6.3
Portland, OR	63	11.2	11.7	50	8.3	8.3	168	30.8	6.9
Sacramento, CA	64	14.3	13.5	15	4.1	4.8	213	48.6	10.5
Salt Lake City, UT	45	8.2	12.0	72	14.6	7.4	182	37.1	6.8
San Antonio, TX	24	4.2	11.0	62	14.4	6.8	127	28.9	5.7
San Diego, CA	46	11.1	13.0	43	7.8	4.7	197	40.8	6.7
San Jose, CA	35	5.8	8.8	36	5.1	3.4	180	39.4	6.5
Seattle, WA	135	19.8	16.3	98	13.8	6.6	312	44.6	8.1
Spokane, WA	60	16.5	8.8	48	14.1	5.4	160	45.0	6.5
Tucson, AZ	106	22.4	15.6	132	29.1	6.8	227	51.8	6.6
Median	64.0	15.7%	13.5 days	56.0	9.1%	6.8 days	182.0	44.3%	8.1 days

a. Numbers are unweighted. Question was asked of arrestees who said they obtained the drug.

b. Numbers are means.

Note: Data are from the period January–September 2000. Findings from the sites where numbers are particularly small should be interpreted cautiously.

Appendix Table 9: Drug Transaction Type (Cash or Noncash), by Drug by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Reported Obtaining:											
	Crack Cocaine			Powder Cocaine			Marijuana			Cash and Noncash Combined		
	Cash Only	Noncash Only	Cash and Noncash Combined	Cash Only	Noncash Only	Cash and Noncash Combined	Cash Only	Noncash Only	Cash and Noncash Combined	Cash Only	Noncash Only	Cash and Noncash Combined
Albuquerque, NM	34.4%	22.0%	43.6%	30.4%	46.9%	22.7%	13.8%	44.7%	41.6%			
Anchorage, AK	30.6	16.4	53.0	38.5	26.7	34.8	19.5	43.3	37.2			
Atlanta, GA	52.6	8.9	38.4	47.8	23.3	28.9	31.6	37.0	31.4			
Birmingham, AL	54.8	11.8	33.4	60.5	7.6	31.9	41.9	29.6	28.4			
Cleveland, OH	47.2	18.9	33.9	61.9	26.2	11.9	36.8	30.6	32.6			
Denver, CO	38.5	26.3	35.1	35.4	39.4	25.3	20.8	49.0	30.2			
Des Moines, IA	33.7	27.8	38.6	39.6	12.2	48.3	19.7	35.4	44.9			
Indianapolis, IN	36.3	13.6	50.1	47.5	29.6	22.9	26.3	32.4	41.4			
Laredo, TX	44.5	25.3	30.2	34.3	37.0	28.7	18.3	53.9	27.8			
Las Vegas, NV	42.5	13.8	43.7	42.2	33.0	24.8	20.9	47.4	31.6			
Miami, FL	67.7	4.6	27.6	46.2	21.6	32.2	36.4	25.5	38.2			
Minneapolis, MN	36.0	22.7	41.4	44.9	41.1	13.9	25.4	33.3	41.3			
New Orleans, LA	56.4	20.7	22.9	64.2	18.6	17.2	35.4	25.3	39.3			
New York, NY	91.9	1.6	6.5	91.3	5.4	3.3	80.9	6.4	12.8			
Oklahoma City, OK	32.1	34.6	33.3	37.2	29.3	33.5	24.4	37.0	38.6			
Omaha, NE	50.4	6.7	42.9	52.7	34.7	12.6	23.1	35.8	41.1			
Philadelphia, PA	86.9	3.5	9.6	65.6	21.5	12.8	53.6	16.1	30.3			
Phoenix, AZ	31.6	17.9	50.5	21.9	47.2	30.8	15.8	48.7	35.5			
Portland, OR	63.0	13.1	23.9	57.0	24.6	18.4	22.0	53.8	24.3			
Sacramento, CA	34.2	20.5	45.3	26.7	45.8	27.5	20.8	32.6	46.6			
Salt Lake City, UT	29.6	44.9	25.5	44.4	22.0	33.6	13.6	58.7	27.7			
San Antonio, TX	31.0	27.3	41.6	25.0	53.2	21.8	22.3	45.9	31.8			
San Diego, CA	35.6	13.7	50.7	38.7	48.8	12.5	11.0	48.6	40.4			
San Jose, CA	36.8	10.2	52.9	38.1	38.5	23.4	18.2	57.5	24.3			
Seattle, WA	29.2	18.2	52.7	39.2	28.7	32.1	19.1	41.6	39.2			
Spokane, WA	22.7	43.5	33.9	30.4	44.3	25.2	23.3	46.8	29.9			
Tucson, AZ	31.0	21.6	47.4	35.3	38.8	25.9	13.8	51.9	34.4			
Median	36.3%	18.2%	38.6%	39.6%	29.6%	25.2%	22.0%	41.6%	34.4%			

Note: Data are from the period January–September 2000. Questions were asked of arrestees who said they had obtained drugs in the 30 days before the interview. Findings from the sites where numbers are particularly small should be interpreted cautiously.

Appendix Table 10: Outdoor Purchases, by Drug by Site—Adult Male Arrestees

Primary City	Percent Who Said They Had Purchased Drugs Outdoors		
	Crack Cocaine	Powder Cocaine	Marijuana
Albuquerque, NM	22.0%	19.0%	21.7%
Anchorage, AK	21.3	18.2	22.9
Atlanta, GA	54.9	45.5	41.0
Birmingham, AL	35.9	19.0	37.0
Cleveland, OH	67.9	55.9	61.4
Denver, CO	44.9	29.0	39.2
Des Moines, IA	32.1	27.1	23.3
Indianapolis, IN	22.1	24.4	34.8
Laredo, TX	8.7	5.7	16.3
Las Vegas, NV	44.6	18.6	25.0
Miami, FL	57.2	37.4	40.0
Minneapolis, MN	58.0	47.8	48.3
New Orleans, LA	75.5	54.9	76.1
New York, NY	87.0	79.1	78.8
Oklahoma City, OK	18.5	12.6	14.7
Omaha, NE	55.9	29.8	25.3
Philadelphia, PA	77.8	64.8	73.1
Phoenix, AZ	23.3	16.8	24.0
Portland, OR	52.8	54.5	32.7
Sacramento, CA	39.4	9.1	22.9
Salt Lake City, UT	27.6	23.0	15.3
San Antonio, TX	24.7	11.2	19.7
San Diego, CA	59.1	26.8	46.3
San Jose, CA	42.9	64.0	29.1
Seattle, WA	55.8	40.1	34.8
Spokane, WA	23.2	8.9	8.4
Tucson, AZ	28.9	20.1	27.3
Median	42.9%	26.8%	29.1%

Note: Data are from the period January–September 2000. Question was asked of arrestees who said they had purchased drugs.

Appendix Table 11: Outside-Neighborhood Purchases, by Drug by Site—Adult Male Arrestees

Primary City	Percent Who Said They Had Purchased Drugs Outside Their Neighborhood		
	Crack Cocaine	Powder Cocaine	Marijuana
Albuquerque, NM	66.3%	68.9%	71.8%
Anchorage, AK	61.2	58.0	74.3
Atlanta, GA	42.8	50.5	55.7
Birmingham, AL	76.4	71.4	61.5
Cleveland, OH	47.3	61.6	43.8
Denver, CO	43.6	59.6	49.9
Des Moines, IA	38.5	49.6	73.8
Indianapolis, IN	49.4	55.3	63.2
Laredo, TX	55.0	70.1	61.9
Las Vegas, NV	34.0	55.3	64.9
Miami, FL	42.3	60.0	34.1
Minneapolis, MN	52.0	34.8	56.2
New Orleans, LA	56.8	49.7	58.0
New York, NY	34.8	29.5	26.7
Oklahoma City, OK	56.2	63.7	70.9
Omaha, NE	71.9	93.8	67.9
Philadelphia, PA	52.2	44.0	49.1
Phoenix, AZ	48.4	34.1	55.1
Portland, OR	49.2	65.2	54.0
Sacramento, CA	40.0	87.3	46.4
Salt Lake City, UT	33.0	44.6	74.3
San Antonio, TX	81.6	61.5	74.1
San Diego, CA	44.9	50.2	51.8
San Jose, CA	50.1	38.2	47.1
Seattle, WA	57.1	64.7	65.3
Spokane, WA	71.8	48.7	61.2
Tucson, AZ	53.7	52.2	56.9
Median	50.1%	55.3%	58.0%

Note: Data are from the period January–September 2000. Question was asked of arrestees who said they had purchased drugs. Because the question was, "Did you buy it [name of drug] in the neighborhood where you live or outside your neighborhood?" the definition of "neighborhood" reflected the arrestees' perception.

Appendix Table 12: Failed Purchases, by Drug by Site—Adult Male Arrestees

Primary City	Percent Who Said They Had Failed in Trying To Purchase:		
	Crack Cocaine	Powder Cocaine	Marijuana
Albuquerque, NM	39.2%	32.8%	40.8%
Anchorage, AK	39.5	34.1	43.0
Atlanta, GA	37.8	28.8	40.6
Birmingham, AL	22.6	8.2	21.7
Cleveland, OH	26.5	11.5	35.9
Denver, CO	37.8	37.3	34.7
Des Moines, IA	70.7	43.8	39.2
Indianapolis, IN	35.1	40.8	54.0
Laredo, TX	28.8	49.9	56.4
Las Vegas, NV	40.7	26.5	42.8
Miami, FL	37.2	35.2	41.7
Minneapolis, MN	53.8	34.4	43.9
New Orleans, LA	16.0	27.5	18.7
New York, NY	11.3	12.0	13.8
Oklahoma City, OK	60.0	34.9	49.4
Omaha, NE	28.9	4.7	44.5
Philadelphia, PA	31.5	25.8	32.1
Phoenix, AZ	27.1	28.0	44.2
Portland, OR	29.7	22.2	26.6
Sacramento, CA	41.0	30.6	49.6
Salt Lake City, UT	47.0	21.2	29.2
San Antonio, TX	15.2	38.3	51.1
San Diego, CA	38.0	12.3	47.5
San Jose, CA	25.5	34.1	43.6
Seattle, WA	39.9	35.1	41.8
Spokane, WA	38.9	17.3	31.8
Tucson, AZ	39.4	31.7	31.9
Median	37.8%	30.6%	41.7%

Note: Data are from the period January–September 2000. Question was asked of arrestees who said they had purchased drugs in the past 30 days.

Appendix Table 13: Reasons Attempts to Purchase Drugs Failed, by Drug by Site—Adult Male Arrestees

Primary City	Percent of Arrestees Who Failed To Purchase Crack Cocaine Because:					Percent of Arrestees Who Failed To Purchase Powder Cocaine Because:					Percent of Arrestees Who Failed To Purchase Marijuana Because:				
	No Dealers Available	Dealers Did Not Have Any	Dealers Did Not Have Quality	Police Activity	Other	No Dealers Available	Dealers Did Not Have Any	Dealers Did Not Have Quality	Police Activity	Other	No Dealers Available	Dealers Did Not Have Any	Dealers Did Not Have Quality	Police Activity	Other
Albuquerque, NM	15.5%	47.2%	0%	0%	37.4%	18.2%	53.9%	0%	0%	27.9%	31.4%	33.9%	11.7%	1.4%	21.5%
Anchorage, AK	40.4	30.7	4.0	12.3	12.6	37.1	42.5	12.8	0	7.6	32.7	42.5	14.8	2.8	7.3
Atlanta, GA	16.1	15.8	15.9	6.4	45.8	15.3	15.4	17.8	24.3	27.1	19.9	17.5	22.9	6.9	32.9
Birmingham, AL	22.1	48.7	7.3	7.4	14.6	50.0	50.0	0	0	0	17.0	40.1	34.4	0	8.5
Cleveland, OH	53.4	21.8	11.1	6.6	7.1	43.3	30.9	12.9	12.9	0	56.5	20.9	5.5	11.0	6.0
Denver, CO	23.0	26.1	16.1	16.3	18.5	43.5	30.4	18.4	0	7.7	21.7	44.8	13.6	0	19.9
Des Moines, IA	0	25.4	32.2	0	42.4	29.6	0	0	0	70.4	21.0	37.1	6.4	2.1	33.5
Indianapolis, IN	31.1	11.0	7.3	3.4	47.3	42.4	5.5	2.5	12.6	36.9	17.0	22.0	11.8	4.4	44.8
Laredo, TX	0	23.8	14.3	0	61.9	12.3	30.4	6.0	20.5	30.9	8.0	39.5	2.9	10.2	39.5
Las Vegas, NV	31.0	19.5	9.5	7.8	32.1	13.6	23.6	0	17.4	45.4	19.6	35.6	14.7	1.6	28.5
Miami, FL	22.4	32.9	12.3	9.9	22.5	24.9	15.1	19.5	34.6	5.9	17.9	22.0	16.2	14.1	29.8
Minneapolis, MN	12.1	41.6	11.2	2.5	32.6	0	52.2	0	0	47.8	17.6	30.7	28.0	7.3	16.4
New Orleans, LA	29.7	28.0	12.7	8.8	20.8	12.5	22.4	0	12.5	52.6	25.6	34.1	2.7	8.1	29.4
New York, NY	35.1	10.9	7.9	46.1	0	47.2	0	10.8	42.0	0	23.3	12.5	22.3	40.8	1.0
Oklahoma City, OK	18.2	41.7	14.2	3.1	22.8	24.2	68.0	0	0	7.8	12.3	46.1	12.4	9.3	19.9
Omaha, NE	6.3	23.2	48.7	3.2	18.6	0	53.5	46.5	0	0	21.3	23.3	13.0	4.4	38.0
Philadelphia, PA	14.4	12.7	7.7	0	65.2	26.7	0	26.6	19.9	26.7	31.7	8.5	21.4	12.4	26.0
Phoenix, AZ	23.4	28.3	6.1	17.5	24.6	30.6	3.3	9.8	16.5	39.8	28.7	31.9	5.5	4.1	29.7
Portland, OR	32.1	25.2	22.4	0	20.3	35.2	6.3	44.3	0	14.2	19.1	38.3	2.2	3.1	37.3
Sacramento, CA	29.7	25.0	9.0	4.6	31.7	0	13.0	0	87.0	0	27.1	28.5	11.0	9.8	23.6
Salt Lake City, UT	18.5	50.8	25.4	0	5.2	53.0	23.5	0	18.8	4.8	26.6	46.0	13.4	9.7	4.3
San Antonio, TX	28.8	0	42.3	0	28.8	14.1	35.3	9.0	5.2	36.5	17.0	33.6	15.4	3.3	30.7
San Diego, CA	36.8	10.2	13.0	18.2	21.8	100.0	0	0	0	0	21.9	23.4	27.5	12.3	14.8
San Jose, CA	58.7	6.1	22.7	0	12.5	43.0	5.8	16.9	16.9	17.4	16.6	59.1	14.9	3.2	6.2
Seattle, WA	29.2	16.9	14.5	26.9	12.5	19.8	31.8	11.9	15.8	20.7	17.8	32.8	22.3	3.3	23.8
Spokane, WA	16.4	28.4	40.4	0	14.8	53.6	27.2	11.2	8.1	0	14.0	51.5	10.7	4.9	18.9
Tucson, AZ	30.0	43.1	0	14.4	12.5	28.5	44.9	2.6	7.9	16.1	17.6	44.8	3.8	9.8	24.1
Median	23.4%	25.2%	12.7%	4.6%	21.8%	28.5%	23.6%	9.0%	12.5%	16.1%	19.9%	33.9%	13.4%	4.9%	23.8%

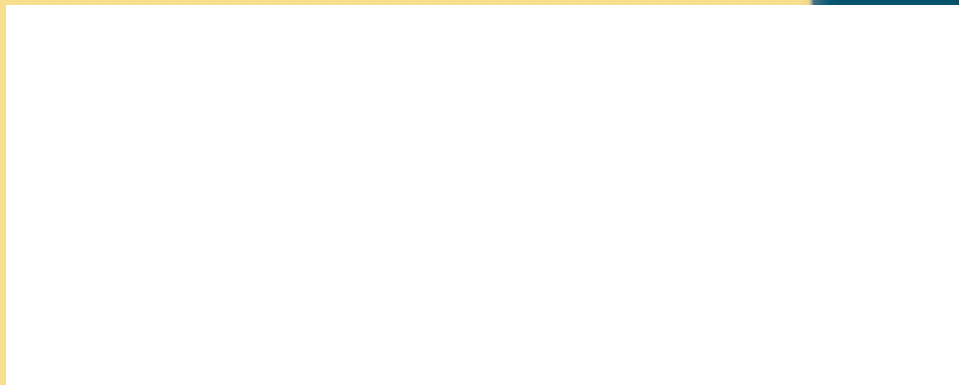
Note: Data are from the period January–September 2000. Question was asked of arrestees who said they had attempted to purchase drugs in the past 30 days but failed.

U.S. Department of Justice

Office of Justice Programs

National Institute of Justice

Washington, DC 20531



Research Report