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U.S. Department of Justice  
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# NATIONAL INSTITUTE OF JUSTICE

*Research in Brief*

# Drug Use Forecasting

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# 1991 ANNUAL REPORT

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# Drug Use Forecasting 1991 Annual Report

**N**IJ's Drug Use Forecasting (DUF) Program, now in its fifth year, continues to serve as both a practical and effective measure of arrestee drug use and as a model for replicative programs across the Nation.

As this annual report illustrates, drug use among booked arrestees in many of our Nation's major cities remains high. In San Diego, for example, 75 percent of male arrestees participating in the DUF program tested positive for a drug; in Cleveland, 79 percent of the female arrestees tested positive for a drug. In fact, in 20 of the 24 DUF sites, 50 percent or more of all male and female booked arrestees tested positive for a drug.

There is some encouraging news, however. Marijuana use has declined in all sites. And, after peaking in 1988 and 1989, cocaine use by arrestees has continued to show a decline, though it has been slight. In Philadelphia, for example, cocaine use by tested female arrestees declined from a high of 70 percent in 1989 to 64 percent in 1991.

NIJ's DUF program continues to refine its procedures. A new computerized interviewing system is being tested. And, in order to understand more fully the use of opiates among arrestees, DUF interviewers have begun to ask specific questions about heroin use by arrestees. Findings will be reported in future DUF publications.

Initial indications in 1992 were that cocaine remains the drug of choice among arrestees participating in the DUF program. We hope that the new information gleaned on heroin use will add to the body of knowledge already gained through the DUF program on arrestee drug use in major American cities.

**National Institute of Justice**

## Drug Use Forecasting Methodology

DUF data are collected in booking facilities throughout the United States. For approximately 14 consecutive evenings each quarter, trained local staff obtain voluntary and anonymous urine specimens and interviews from a new sample of booked arrestees.<sup>1</sup> In each site, approximately 225 males are sampled. In some sites, female arrestees and juvenile arrestees/detainees are also sampled. Response rates are consistently high, with more than 90 percent of the arrestees approached agreeing to be interviewed. Approximately 80 percent of those interviewed provide urine specimens.

To obtain samples with sufficient distribution of arrest charges, DUF interviewers, where possible, limit the number of male booked arrestees who are charged with the sale or possession of drugs. Because such persons are likely to be using drugs at arrest and are undersampled, DUF statistics frequently are minimum estimates of drug use in the male arrestee population. With the exception of Omaha, males charged with driving offenses generally are excluded from the sample due to DUF's emphasis on more serious crimes. (In Omaha, all male arrestees brought to the booking facility are included in the DUF sample to obtain a sample of sufficient size.) Because they are fewer in number, all adult female arrestees and all juvenile arrestees/detainees brought to the booking center or detention facility during the data collection period are included in the DUF sample, regardless of charge.

Twelve of the DUF sites collect data from male juvenile arrestees/

detainees. In each of the juvenile facilities, with the exception of Birmingham, Denver, and Indianapolis, only those youngsters who are detained by the criminal justice system are available for interviewing. Arrestees who are released to their parents or released for other reasons are not included in the DUF juvenile sample. In Birmingham, Denver, and Indianapolis, however, all juvenile arrestees are available for interviewing. For juveniles in each of the sites, excluding Washington, D.C. and St. Louis, the catchment area encompasses the county. In Washington, D.C., youngsters arrested and detained in the District of Columbia are included in the sample, and in St. Louis only male juveniles arrested and detained in the city of St. Louis are included.

All urine specimens are sent to a central laboratory for analysis. The specimens are analyzed by EMIT™ for 10 drugs: cocaine, opiates, marijuana, PCP, methadone, benzodiazepines, methaqualone, propoxyphene, barbiturates, and amphetamines. All positive results for amphetamines are confirmed by gas chromatography to eliminate positives that may be caused by over-the-counter drugs. For most drugs, the urine test can detect use in the previous 2 to 3 days. Exceptions are marijuana and PCP, which can sometimes be detected several weeks after use.

<sup>1</sup> The DUF sample is based on arrestees brought into the booking facility. Arrestees released before booking are not part of the DUF sample.

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# Drug Use Forecasting 1991 Annual Report

by Joyce Ann O'Neil, Director of the Drug Use Forecasting Program of the National Institute of Justice

In 1987 the National Institute of Justice implemented the Drug Use Forecasting (DUF) Program in Manhattan. By 1991 the DUF program had been implemented in 24 sites. The DUF program helps local governments and law enforcement agencies develop programs to combat drug abuse and establish or expand drug treatment programs. The DUF program helps these governments and agencies by identifying drug use levels among arrestees, determining what drugs are used in specific jurisdictions, and tracking changes in drug use patterns.

## 1991 Results

In 1991, 24 sites collected data from male booked arrestees, and 21 of the sites collected data from female booked arrestees. (Chicago, Miami, and Omaha do not collect data from female arrestees.) Additionally, 12 sites collected data from male juvenile arrestees/detainees (see page 15). Results from data collected each quarter were aggregated for each site (see DUF Sample Sizes chart).

## Overall Drug Use

The percent of male booked arrestees testing positive for any drug ranged from 36 percent in Omaha to 75 percent in San Diego. The percent of female booked arrestees testing positive for any drug ranged from 45 percent in San Antonio to 79 percent in Cleveland. In 20 sites, more than half of the male and female booked arrestees tested positive for a drug at arrest.

**Multiple Drugs.** Male and female arrestees in San Diego were most likely to test positive for more than one drug (37 percent and 36 percent, respectively). Other sites that had high multiple drug use were Chicago, 35 percent for males; Los Angeles, 27 percent for females; Manhattan, 26 percent for males and 33 percent for females; Philadelphia, 28 percent for males; and

Portland, 30 percent for females. For the remaining sites, less than 26 percent of the arrestees tested positive for more than one drug.

**Marijuana.** Male arrestees testing positive for marijuana ranged from 11 percent in Washington, D.C. to 33 percent in Portland and San Diego. Female arrestees testing positive for marijuana ranged from 4 percent in Detroit to 28 percent in Portland.

**Cocaine.** As in 1988, 1989, and 1990, cocaine remained the prevalent drug among most arrestees. The percent of male arrestees testing positive for cocaine ranged from 14 percent in Omaha to 62 percent in Manhattan and Philadelphia. The percent of female arrestees testing positive for cocaine ranged from 25 percent in San Antonio to 76 percent in Cleveland.

**Opiates (Heroin).** Male booked arrestees testing positive for opiates ranged from 1 percent in Ft. Lauderdale and Kansas City to 21 percent in Chicago. Female arrestees testing positive for opiates ranged from 2 percent in Denver to 21 percent in Manhattan, San Antonio, and San Diego.

**Other Drugs.** The remaining seven drugs (PCP, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene) were less likely to be detected than marijuana and cocaine. The following summarizes the use of these drugs. (Data are not presented in tables.)

Amphetamines continued to be used primarily by arrestees in western sites (for example, Los Angeles, Phoenix, Portland, San Diego, and San Jose). Less than 3 percent of the male and female arrestees in the remaining sites tested positive for amphetamines. In San Diego, amphetamine positives for arrestees remained the highest, with 18 percent of males testing positive and 26 percent of females testing positive.

Less than 9 percent of male and female arrestees tested positive for PCP. Benzodiazepine (for example, Valium) positives ranged from 1 to 13 percent for

## DUF Sample Sizes

Site	Male	Female	Juvenile Male
Atlanta	1134	595	—
Birmingham	812	384	375
Chicago	863	—	—
Cleveland	821	295	339
Dallas	930	408	—
Denver	926	405	102
Detroit	858	361	—
Ft. Lauderdale	888	396	—
Houston	961	424	—
Indianapolis	918	289	419
Kansas City	892	353	126
Los Angeles	1339	631	513
Manhattan	997	393	—
Miami	681	—	—
New Orleans	964	349	—
Omaha	892	—	—
Philadelphia	1124	444	—
Phoenix	1008	586	—
Portland	857	270	272
St. Louis	934	360	372
San Antonio	700	244	155
San Diego	924	390	366
San Jose	957	407	347
Wash., D.C.	955	346	374

Source: National Institute of Justice/ Drug Use Forecasting Program  
 Note: January through December 1991.

# Drug Use Forecasting 1991 Annual Report

male arrestees and 3 to 16 percent for female arrestees. Benzodiazepine positives were highest for males and females in Philadelphia. The use of benzodiazepines by arrestees does not necessarily indicate illicit use.

Methadone positives were highest for Manhattan arrestees, with 6 percent of males testing positive and 13 percent of females testing positive. For arrestees in the remaining sites, less than 6 percent tested positive for methadone.

Less than 3 percent of arrestees tested positive for propoxyphene (for example, Darvon). Methaqualone use was found in less than 1 percent of male and female arrestees. Less than 4 percent of arrestees tested positive for barbiturates.

## Relationship Between Drug Use and Charge at Arrest

An analysis of drug use by male and female arrestees for various charge categories (see page 21) revealed that the charge most associated with drug use by males was drug sale/possession (79 percent positive). For females, the charge most associated with drug use was prostitution (85 percent positive). However, more than 50 percent of the male and female arrestees charged with any offense, other than sex offenses and traffic offenses, also tested positive. Clearly, most arrestees in the DUF sample recently used drugs, regardless of the charge that brought them into the criminal justice system.

## Demographics

The age and race of male and female arrestees are presented on pages 10 and 11. Also, the distribution of charges for males and females is on pages 12 and 13.

## Drug Use Trends

Pages 17 through 20 present trend data for each of the DUF sites. In most DUF sites, positives for any drug among arrestees fluctuated but remained high. Results for

specific drugs revealed different trends. For example, marijuana use declined in most DUF sites (see *Drug Use Forecasting Fourth Quarter 1991*). Preliminary results from 1992, however, showed a slight increase in the percent of arrestees testing positive for marijuana. These levels, however, were still below 1988 and 1989 levels.

Cocaine use peaked in 1988 and 1989 for most DUF sites (see *Drug Use Forecasting Third Quarter 1991*), but there has been only a slight decrease in use since then. For example, in Philadelphia in 1991, 64 percent of female arrestees tested positive for cocaine, which was only 6 percent below the highest recorded use of cocaine found in 1989 (70 percent). Like their female counterparts, male arrestees showed little change in cocaine use since 1988. Preliminary findings from 1992 showed that cocaine remained the prevalent drug among arrestees. Like cocaine use, opiate use either remained stable or decreased slightly in most DUF sites (see *Drug Use Forecasting Second Quarter 1991*). To better understand the use of opiates among arrestees, the DUF program has begun to ask specific questions about heroin use, such as the smoking or snorting of the drug. Findings will be reported in future DUF publications.

## DUF in 1992

The DUF Advisory Board (see DUF Research Advisory Board box for names of members) continues to provide expertise to the project and guide the research agenda. At a recent Board meeting, members were briefed about recent DUF developments, including findings from pilot work on the DUF computerized interview. The computerized interview, piloted in three sites, had encouraging results. For example, agreement rates for giving an interview and providing a specimen were equivalent to agreement rates for paper interviews. Board members endorsed the computerized interview, and work continues on its implementation. NIJ's goal is to begin the transition to computerized interviewing during 1993.

Another important presentation at the Board meeting was the findings of an indepth analysis of the DUF sampling plan. The study included a survey on sampling procedures in 22 DUF sites; field work in 3 sites; an analysis of DUF, Uniform Crime Report (UCR), and booking center data; and calculations of drug estimates based on varying sampling schemes. Results indicated that the DUF findings are quite robust. All of the schemes for adjusting the statistics made very little difference in the estimated percent testing positive for drug use. Future DUF publications will present more information on the computerized interview and the analysis of the DUF sample.

A recent NIJ award to the San Diego Association of Governments (SANDAG) will bring DUF results to the Weed and Seed initiative. Specific DUF analyses will be conducted to assess the geographical distribution of drug use both in terms of arrest location and arrestee residence. This information will be valuable to the Weed and Seed effort because it will serve as a means to assess the extent and nature of drug use in specific neighborhoods and will also serve as a barometer for measuring the success of drug reduction efforts. Additionally, the results of this effort may provide valuable information on shaping treatment services to meet the needs of the drug-abusing criminal offender.

### DUF Research Advisory Board:

Zili Amsel  
M. Douglas Anglin  
Robert Battjes  
Alfred Blumstein  
William Butynski  
Jay Carver  
Jan M. Chaiken  
Richard Clayton  
Robert DuPont  
Nicholas J. Kozel  
Carl Leukefeld  
Mark H. Moore  
David Musto  
David L. Westrate  
Eric D. Wish

# Any Drug Use by Male and Female Booked Arrestees

Site	% Positive Any Drug		% Positive by Age					% Positive by Race			
			15-20	21-25	26-30	31-35	36+	Black	White	Hispanic	Other
Atlanta	63	70	31	63	74	77	60	65	48	**	**
Birmingham	63	62	42	64	67	75	60	66	55	**	**
Chicago	74		62	73	78	84	84	75	72	72	**
Cleveland	56	79	43	52	66	62	59	61	41	44	**
Dallas	56	56	34	53	71	66	61	59	55	45	**
Denver	50	54	40	52	56	59	44	61	41	49	25
Detroit	55	68	38	51	64	64	61	56	49	**	**
Ft. Lauderdale	61	64	48	61	67	71	54	71	53	41	**
Houston	65	59	47	66	72	75	61	77	59	41	**
Indianapolis	45	54	36	44	52	51	42	45	44	**	**
Kansas City	53	64	36	54	60	62	49	56	41	**	**
Los Angeles	62	75	43	55	70	68	66	77	65	51	20
Manhattan	73	77	50	75	78	83	73	77	74	68	**
Miami	68		50	66	69	80	71	76	57	56	**
New Orleans	59	50	43	53	65	73	66	60	51	**	**
Omaha	36		42	36	36	37	30	44	32	31	18
Philadelphia	74	75	60	73	82	86	66	75	65	76	**
Phoenix	42	61	39	42	41	49	40	53	43	37	19
Portland	61	68	48	60	62	72	58	66	58	73	44
St. Louis	59	54	49	56	73	70	51	60	54	**	**
San Antonio	49	45	35	56	60	53	45	55	48	48	**
San Diego	75	73	61	78	79	80	71	79	74	75	58
San Jose	58	52	38	61	61	67	56	72	59	56	37
Washington, D.C.	59	75	28	50	73	78	65	60	49	**	**

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, January through December 1991. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene.

\*\* Less than 20 cases.

 Males  
 Females

# Multiple Drug Use by Male and Female Booked Arrestees

Site	% Positive Multiple Drugs		% Positive by Age					% Positive by Race			
	0	20	15-20	21-25	26-30	31-35	36+	Black	White	Hispanic	Other
Atlanta	10	11	10	14	13	7	10	11	11	**	**
Birmingham	15	17	13	19	15	16	13	13	23	**	**
Chicago	35		29	38	36	38	38	36	30	34	**
Cleveland	12	15	10	12	11	11	13	12	12	9	**
Dallas	14	16	8	13	13	14	22	14	18	10	**
Denver	11	15	9	10	10	17	9	11	11	12	3
Detroit	16	14	9	14	14	20	21	15	21	**	**
Ft. Lauderdale	17	15	17	23	18	11	14	19	15	24	**
Houston	16	16	15	12	16	18	18	16	18	12	**
Indianapolis	11	19	8	11	14	11	9	10	12	**	**
Kansas City	11	18	8	13	12	13	8	12	6	**	**
Los Angeles	21	27	17	18	21	20	25	19	27	21	0
Manhattan	26	33	10	26	24	32	31	23	34	28	**
Miami	20		28	30	16	18	12	24	17	14	**
New Orleans	16	14	15	14	15	21	17	17	14	**	**
Omaha	7		9	4	7	7	7	9	6	2	0
Philadelphia	28	23	29	28	28	26	27	25	36	39	**
Phoenix	12	24	7	10	11	18	13	11	14	7	8
Portland	19	30	10	18	16	26	20	18	18	30	9
St. Louis	16	12	13	18	15	16	19	16	19	**	**
San Antonio	21	23	14	20	24	25	22	17	15	23	**
San Diego	37	36	34	34	40	42	34	32	33	44	8
San Jose	22	18	10	18	23	31	25	20	26	22	3
Washington, D.C.	16	22	5	9	18	19	28	16	26	**	**

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, January through December 1991. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene.

\*\* Less than 20 cases.

 Males  
 Females

# Marijuana Use by Male and Female Booked Arrestees

Site	% Positive Marijuana		% Positive by Age					% Positive by Race			
	0	20	15-20	21-25	26-30	31-35	36+	Black	White	Hispanic	Other
Atlanta	12	8	18	20	17	7	8	12	20	**	**
Birmingham	16	10	20	26	12	14	8	13	27	**	**
Chicago	23		28	30	22	16	10	23	20	30	**
Cleveland	12	7	14	16	12	9	6	10	21	15	**
Dallas	19	11	22	22	22	16	14	18	24	20	**
Denver	25	16	27	31	24	29	18	22	25	31	14
Detroit	18	4	31	29	17	11	5	19	9	**	**
Ft. Lauderdale	28	14	37	41	29	22	16	29	28	26	**
Houston	17	8	24	19	17	15	11	16	17	18	**
Indianapolis	23	22	27	30	30	22	9	18	29	**	**
Kansas City	18	13	23	25	22	14	10	17	20	**	**
Los Angeles	19	9	25	26	21	13	11	17	28	17	10
Manhattan	18	11	34	25	17	12	8	17	17	19	**
Miami	23		39	35	20	15	8	26	17	17	**
New Orleans	16	7	18	16	15	16	12	16	18	**	**
Omaha	26		36	26	22	21	20	27	25	24	15
Philadelphia	18	14	26	25	22	10	6	17	24	19	**
Phoenix	22	14	28	26	20	20	16	16	24	22	12
Portland	33	28	34	43	35	31	21	27	37	19	28
St. Louis	16	8	21	20	15	12	8	12	36	**	**
San Antonio	20	9	22	27	28	18	7	22	26	18	**
San Diego	33	20	41	41	32	31	22	29	35	36	12
San Jose	25	13	26	29	28	25	18	32	32	21	11
Washington, D.C.	11	6	16	16	12	4	6	11	18	**	**

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, January through December 1991.

\*\* Less than 20 cases.

 Males  
 Females

# Cocaine Use by Male and Female Booked Arrestees

Site	% Positive Cocaine		% Positive by Age					% Positive by Race			
	0	100	15-20	21-25	26-30	31-35	36+	Black	White	Hispanic	Other
Atlanta	57	66	23	54	68	74	56	59	33	**	**
Birmingham	52	44	26	48	59	66	53	59	27	**	**
Chicago	61		46	58	65	75	76	63	60	53	**
Cleveland	48	76	35	41	59	55	52	56	21	38	**
Dallas	43	45	18	40	57	55	51	50	35	30	**
Denver	30	41	22	29	37	38	23	47	16	25	3
Detroit	41	62	14	34	58	53	50	41	40	**	**
Ft. Lauderdale	44	55	26	40	50	54	45	58	32	26	**
Houston	56	52	34	54	65	71	56	70	49	29	**
Indianapolis	22	26	12	19	24	28	25	30	10	**	**
Kansas City	37	56	14	32	44	53	38	43	16	**	**
Los Angeles	44	62	25	33	49	55	52	63	27	38	10
Manhattan	62	66	25	63	70	78	64	68	59	54	**
Miami	61		38	57	63	77	66	70	44	50	**
New Orleans	50	42	36	44	59	63	56	54	28	**	**
Omaha	14		13	13	16	18	10	23	6	10	0
Philadelphia	62	64	45	61	69	77	56	66	41	68	**
Phoenix	20	45	12	19	20	29	20	41	17	15	8
Portland	30	40	18	26	28	41	33	46	18	64	19
St. Louis	48	47	37	42	62	62	45	53	26	**	**
San Antonio	31	25	21	35	37	31	30	45	18	30	**
San Diego	45	40	39	49	46	50	38	59	22	54	31
San Jose	33	30	17	33	33	40	35	54	25	33	19
Washington, D.C.	49	68	15	36	64	72	59	51	26	**	**

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, January through December 1991.

\*\* Less than 20 cases.

 Males  
 Females



# Opiate (Heroin) Use by Male and Female Booked Arrestees

Site	% Positive Opiate		% Positive by Age					% Positive by Race			
	Males	Females	15-20	21-25	26-30	31-35	36+	Black	White	Hispanic	Other
Atlanta	3	4	0	2	1	3	6	3	4	**	**
Birmingham	5	11	3	5	3	5	7	2	13	**	**
Chicago	21		14	18	23	25	31	23	16	11	**
Cleveland	3	6	0	2	*	3	9	3	2	0	**
Dallas	4	9	*	2	2	5	12	4	6	3	**
Denver	2	2	0	1	1	2	3	1	*	3	0
Detroit	8	11	1	2	2	15	19	8	12	**	**
Ft. Lauderdale	1	4	*	1	2	2	*	1	2	3	**
Houston	3	4	1	3	4	2	6	3	4	4	**
Indianapolis	3	11	1	*	2	4	6	4	2	**	**
Kansas City	1	4	*	*	1	2	2	1	2	**	**
Los Angeles	10	18	2	7	7	12	17	10	11	9	0
Manhattan	14	21	2	12	10	19	21	12	20	16	**
Miami	2		0	2	1	3	6	2	7	1	**
New Orleans	4	7	2	2	2	9	8	4	4	**	**
Omaha	2		2	*	1	*	3	1	2	0	0
Philadelphia	11	9	8	8	7	14	18	8	15	22	**
Phoenix	5	17	2	1	7	10	6	4	6	4	8
Portland	9	17	5	4	6	15	16	9	8	19	3
St. Louis	6	7	2	4	5	7	14	6	5	**	**
San Antonio	16	21	8	10	19	20	23	2	9	21	**
San Diego	17	21	8	12	23	20	21	11	12	25	0
San Jose	8	7	*	2	6	14	15	5	8	8	3
Washington, D.C.	10	16	2	2	9	14	24	10	22	**	**

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, January through December 1991.

\* Less than 1%.

\*\* Less than 20 cases.

 Males  
 Females

# Age and Race of Male Booked Arrestees

Site	Age (In Percent)					Race (In Percent)			
	15-20	21-25	26-30	31-35	36+	Black	White	Hispanic	Other
Atlanta	13	16	20	20	31	92	8	*	*
Birmingham	14	26	21	17	21	78	22	0	0
Chicago	25	26	20	14	14	78	10	11	*
Cleveland	18	25	18	17	21	74	20	4	2
Dallas	22	21	19	17	20	63	22	13	1
Denver	14	22	18	21	25	37	25	35	4
Detroit	20	22	17	16	25	91	7	2	*
Ft. Lauderdale	14	22	20	19	25	46	49	4	*
Houston	16	24	21	17	22	57	18	24	*
Indianapolis	15	25	18	16	26	58	41	*	*
Kansas City	16	20	20	20	24	77	22	1	*
Los Angeles	13	24	22	16	25	34	17	47	2
Manhattan	15	20	21	18	26	54	11	33	1
Miami	16	19	24	16	24	60	12	28	0
New Orleans	24	22	20	16	19	87	11	1	*
Omaha	22	24	19	15	20	44	47	5	4
Philadelphia	18	23	22	19	19	74	15	10	*
Phoenix	11	29	24	18	18	17	53	27	3
Portland	9	26	22	16	27	28	60	8	4
St. Louis	22	24	19	16	19	84	16	0	*
San Antonio	22	18	20	15	23	16	17	67	1
San Diego	12	27	24	18	20	23	30	44	3
San Jose	13	28	21	16	22	14	31	49	6
Washington, D.C.	19	22	21	18	20	92	5	2	*

Source: National Institute of Justice/Drug Use Forecasting Program

Note: January through December 1991.

\* Less than 1%.

# Age and Race of Female Booked Arrestees

Site	Age (In Percent)					Race (In Percent)			
	15-20	21-25	26-30	31-35	36+	Black	White	Hispanic	Other
Atlanta	10	24	26	18	22	80	20	*	0
Birmingham	9	21	25	26	18	61	38	*	*
Cleveland	9	27	27	18	19	81	16	4	0
Dallas	14	27	23	20	16	56	36	8	*
Denver	12	23	28	16	20	37	32	26	4
Detroit	8	17	28	26	22	79	20	1	0
Ft. Lauderdale	9	20	26	21	24	43	55	1	*
Houston	12	24	26	20	17	58	26	15	0
Indianapolis	12	25	24	15	23	49	51	0	0
Kansas City	9	27	27	19	18	71	29	0	*
Los Angeles	7	20	26	22	24	43	33	22	2
Manhattan	10	22	24	22	21	58	16	26	*
New Orleans	12	23	22	18	25	85	13	2	0
Philadelphia	12	23	26	19	20	79	12	8	0
Phoenix	9	27	34	16	14	22	56	20	3
Portland	8	26	25	20	20	30	63	3	4
St. Louis	16	26	22	22	14	77	23	0	*
San Antonio	22	24	17	16	21	16	24	59	*
San Diego	8	19	26	23	24	24	53	18	5
San Jose	8	22	25	17	27	21	40	36	4
Washington, D.C.	6	22	29	17	25	89	11	0	0

Source: National Institute of Justice/Drug Use Forecasting Program

Note: January through December 1991.

\* Less than 1%.

# Distribution of Charges in Male Arrestees

Site	Charge at Arrest (In Percent)																			
	Assault	Burglary	Destruction of Property	Drug Sale/ Possession <sup>A</sup>	Family Offense	Flight/Bench Warrant	Fraud/Forgery	Homicide/ Manslaughter	Larceny/Theft	Probation/Parole Violation	Prostitution	Public Peace/ Disturbances	Robbery	Sex Offense	Stolen Property	Stolen Vehicle	Traffic Offense	Weapons	Other	
Atlanta	22	9	1	17	*	*	3	*	20	*	1	11	5	3	*	3	*	3	2	
Birmingham	5	10	*	21	*	6	2	3	18	13	*	*	5	2	6	2	*	4	*	
Chicago	6	17	*	22	*	*	*	2	15	*	*	3	10	2	*	11	0	9	*	
Cleveland	3	11	1	20	11	2	*	5	8	*	*	*	8	3	2	12	0	5	2	
Dallas	14	14	*	14	0	*	4	*	17	*	*	9	7	2	0	7	0	8	1	
Denver	13	6	1	14	20	*	2	*	8	*	*	18	3	2	*	4	0	2	5	
Detroit	2	2	*	28	0	6	3	6	1	16	1	8	10	8	2	3	1	2	1	
Ft. Lauderdale	10	7	*	20	2	5	2	*	6	16	2	14	2	1	1	3	*	4	3	
Houston	8	12	*	16	*	5	2	3	16	5	2	7	7	3	*	5	1	3	*	
Indianapolis	11	6	*	12	*	2	3	*	17	*	*	26	4	5	*	3	*	2	3	
Kansas City	5	5	*	5	12	16	4	2	9	16	*	7	4	2	*	5	*	4	*	
Los Angeles	11	15	*	7	11	2	3	3	8	2	*	1	10	3	5	10	1	3	4	
Manhattan	14	11	*	9	0	*	2	1	20	0	*	5	19	1	4	*	*	3	9	
Miami	16	22	*	19	*	*	2	2	4	2	*	4	10	*	1	8	0	4	2	
New Orleans	11	11	1	11	*	7	3	4	14	2	*	2	7	4	7	4	0	9	2	
Omaha	6	5	*	6	*	13	2	*	9	3	0	17	2	3	1	*	20	6	6	
Philadelphia	16	12	*	11	*	4	1	2	14	*	*	2	14	3	*	12	0	4	3	
Phoenix	22	13	3	14	4	*	3	1	15	*	*	4	6	2	3	5	*	2	1	
Portland	15	6	*	19	4	5	2	*	10	12	*	5	5	3	*	4	*	2	3	
St. Louis	22	10	8	18	*	1	2	1	13	2	3	3	6	2	1	1	0	6	2	
San Antonio	11	5	*	15	3	1	1	*	25	1	*	16	3	3	*	2	*	6	5	
San Diego	5	16	*	30	8	0	1	*	8	*	0	*	5	2	7	9	*	4	2	
San Jose	8	8	*	20	12	1	3	*	13	7	*	2	2	5	3	3	0	3	4	
Washington, D.C.	18	3	3	18	0	13	2	2	9	0	1	2	5	*	2	11	0	6	2	

Source: National Institute of Justice/Drug Use Forecasting Program

Note: January through December 1991.

<sup>A</sup> Drug sale and possession charges are undersampled, see page 2.

\* Less than 1%.

<sup>B</sup> Includes trespassing, criminal mischief, and reckless endangerment.

# Distribution of Charges in Female Arrestees

Site	Charge at Arrest (In Percent)																		
	Assault	Burglary	Destruction of Property	Drug Sale/Possession	Family Offense	Flight/Bench Warrant	Fraud/Forgery	Homicide/Manslaughter	Larceny/Theft	Probation/Parole Violation	Prostitution	Public Peace/Disturbance <sup>a</sup>	Robbery	Sex Offense	Stolen Property	Stolen Vehicle	Traffic Offense	Weapons	Other
Atlanta	12	*	1	20	*	*	2	*	14	*	14	22	*	1	0	*	6	2	2
Birmingham	4	1	0	16	*	6	8	1	33	7	1	12	2	0	4	*	1	1	1
Cleveland	6	*	*	47	2	3	1	1	7	0	19	3	1	*	0	5	*	2	*
Dallas	9	2	0	9	*	*	15	1	21	5	12	2	2	*	0	1	16	1	1
Denver	5	*	1	6	16	23	3	*	8	2	6	13	1	*	*	2	5	*	5
Detroit	5	1	*	8	2	*	9	7	5	5	25	18	1	1	*	*	6	2	1
Ft. Lauderdale	3	2	0	26	1	9	2	0	8	11	5	8	0	0	0	*	16	*	4
Houston	6	2	0	9	*	2	1	*	12	1	9	10	1	*	*	*	38	*	5
Indianapolis	2	2	0	11	1	2	10	0	17	*	13	22	*	1	*	*	11	1	4
Kansas City	4	1	*	8	5	16	8	*	16	10	13	3	*	*	1	1	8	2	*
Los Angeles	7	7	1	14	4	2	7	*	14	2	26	*	3	1	*	3	*	*	2
Manhattan	9	3	*	34	0	*	1	*	20	0	13	5	7	*	2	*	*	1	3
New Orleans	14	2	1	11	2	12	5	*	28	1	8	8	0	*	2	*	0	1	2
Philadelphia	11	4	1	21	0	10	3	*	27	*	4	2	6	*	*	4	0	*	4
Phoenix	11	7	3	16	3	10	6	*	21	2	20	4	2	1	3	1	0	*	*
Portland	7	1	*	18	2	4	9	0	18	12	7	6	2	*	*	4	7	0	1
St. Louis	16	1	2	6	*	2	4	*	13	3	14	14	2	0	*	*	15	1	3
San Antonio	7	0	0	8	*	*	3	0	51	*	4	8	2	0	0	*	12	*	3
San Diego	5	15	*	22	4	*	5	1	11	2	3	4	2	*	2	2	8	2	3
San Jose	4	4	1	14	5	2	8	*	17	3	2	4	*	*	1	*	26	*	1
Washington, D.C.	17	1	3	29	0	14	3	*	7	0	19	1	2	*	*	1	0	1	*

Source: National Institute of Justice/Drug Use Forecasting Program

Note: January through December 1991.

\* Less than 1%.

<sup>a</sup> Includes trespassing, criminal mischief, and reckless endangerment.

# Distribution of Charges in Male Juvenile Arrestees/Detainees

Charge at Arrest (In Percent)

Site	Assault	Burglary	Destruction of Property	Drug Sales/Possession	Flight/Bench Warrant	Homicide/Manslaughter	Larceny/Theft	Probation/Parole Violation	Public Peace/Disturbance <sup>^</sup>	Robbery	Sex Offense	Status Offense	Stolen Property/Vehicle	Weapons	Other
Birmingham	5	7	*	10	*	3	14	8	8	6	3	5	19	9	2
Cleveland	9	11	3	25	2	2	7	*	2	11	8	0	15	3	3
Denver	2	12	0	3	19	1	3	18	2	4	0	5	10	4	19
Indianapolis	11	8	*	1	5	1	19	3	21	2	4	4	12	3	4
Kansas City	12	6	2	2	13	0	12	2	2	5	*	17	13	8	8
Los Angeles	6	7	2	5	4	4	2	21	*	14	2	1	19	6	7
Portland	17	13	3	9	0	3	2	*	2	10	4	16	12	5	2
St. Louis	14	9	18	15	2	2	5	9	*	7	*	*	7	8	2
San Antonio	7	20	5	2	0	0	22	3	12	*	1	8	6	5	8
San Diego	14	13	3	6	3	2	4	13	2	8	2	2	15	5	7
San Jose	12	7	4	3	10	*	6	13	4	3	2	4	11	8	14
Washington, D.C.	13	3	3	30	9	*	2	*	4	5	1	*	18	6	5

Source: National Institute of Justice/Drug Use Forecasting Program

Note: January through December 1991.

\* Less than 1%.

<sup>^</sup> Includes trespassing, criminal mischief, and reckless endangerment.

# Drug Use by Male Juvenile Arrestees/Detainees in 1991

## Drug Use Among Male Juvenile Arrestees/Detainees

In 1991 Denver became the 12th DUF site to collect data from male juvenile arrestees. Findings for male juvenile arrestees/detainees from 1991 are presented below. (See Methodology, page 2, for a description of the juvenile samples.)

### Overall Drug Use

The percent of male juvenile arrestees/detainees testing positive for drugs at arrest ranged from 11 percent in Indianapolis and St. Louis to 36 percent in Denver. In 8 of the 12 DUF sites, marijuana was the prevalent drug among juveniles. In

Cleveland, St. Louis, and Washington, D.C., juveniles tested positive more often for cocaine than any other drug. Birmingham male juveniles were as likely to test positive for marijuana (7 percent) as cocaine (8 percent).

*Other Drug Use.* The remaining eight drugs (opiates, PCP, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene) were detected less often than marijuana and cocaine. The following summarizes the use of these drugs. (Data are not presented in tables.)

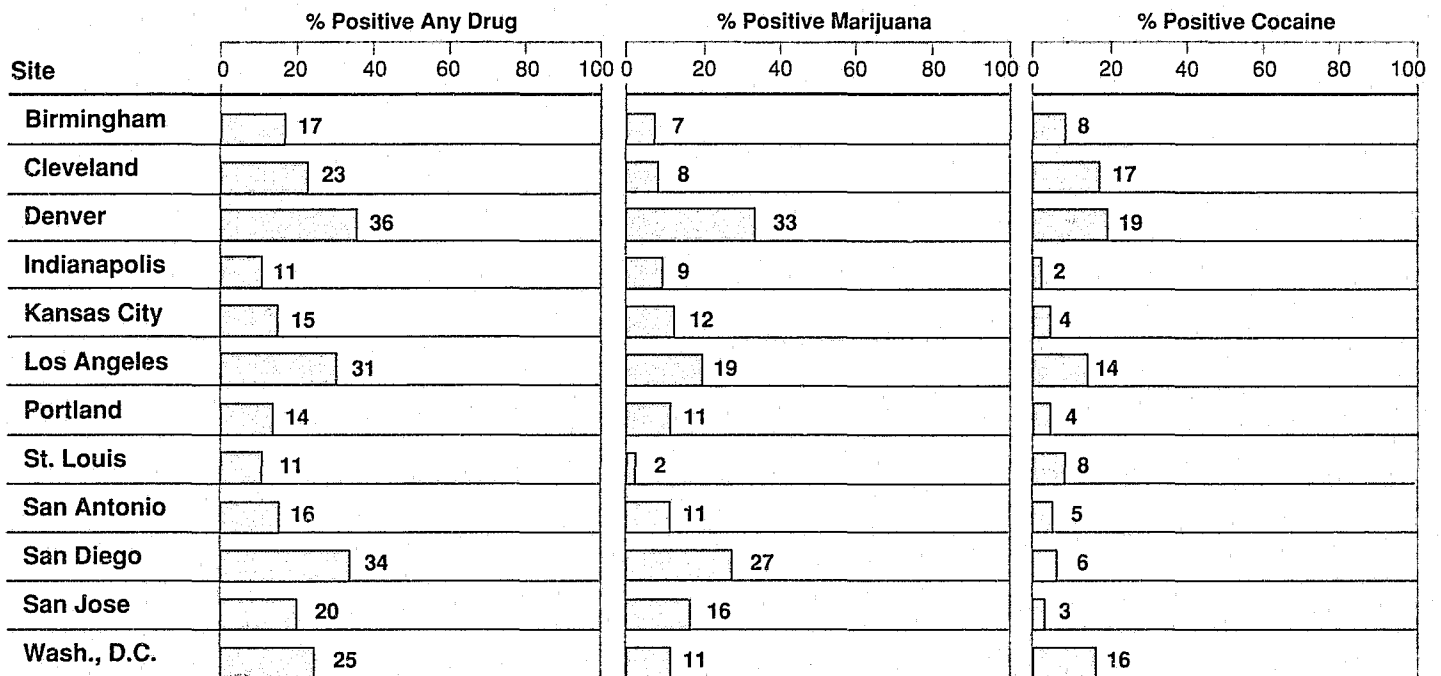
Amphetamine positives were highest in San Diego (7 percent); in the remaining sites, less than 3 percent of juveniles tested positive for the drug. Five percent of

juveniles in Los Angeles tested positive for PCP; in the remaining sites, 2 percent or less of the male juveniles were positive for PCP. Juveniles testing positive for benzodiazepines (for example, Valium) ranged from 0 to 3 percent. For the remaining drugs (propoxyphene, barbiturates, methaqualone, methadone, and opiates), 1 percent or less of juveniles tested positive.

### Demographics

For most of the 12 DUF sites, juveniles were between 15 and 18 years old. However, St. Louis and San Antonio juveniles were younger, between 13 and 16 years old.

## Drug Use by Male Juvenile Arrestees/Detainees



Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, January through December 1991. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene.

# Drug Use by Male Juvenile Arrestees/Detainees in 1991

Black male juveniles comprised the majority of the juvenile sample in 6 of the 12 sites. Hispanic male juveniles were the majority of the sample in Denver, Los Angeles, San Antonio, San Diego, and San Jose. In Portland, black male juveniles comprised 45 percent of the sample, and white male juveniles comprised 48 percent of the sample.

## Distribution of Charges

The distribution of charges for male juvenile arrestee/detainee samples (see page 14) varied considerably across sites. For example, most juveniles in Cleveland (25 percent) and Washington, D.C. (30 percent) were charged with drug sale/possession. In the remaining sites, 15 percent or less of male juveniles were arrested for drug

charges. In Kansas City, most juveniles (17 percent) were charged with status offenses.

The majority of male juveniles in seven of the DUF sites were arrested for a felony offense. Sixty percent or more of male juveniles in Denver, Kansas City, San Antonio, and San Jose faced misdemeanor charges. Indianapolis juveniles were equally likely to be charged with a misdemeanor offense (51 percent) as a felony offense (49 percent).

## Relationship Between Drug Use and Charge at Arrest

An analysis of drug use by male juveniles revealed that the charge most associated with drug use was drug sale/possession

(42 percent positive). This pattern also was seen for adult male arrestees (see Relationship Between Drug Use and Charge at Arrest, page 4). Other charge categories associated with high drug use were flight/bench warrant, 30 percent positive; probation/parole violation, 29 percent positive; weapons, 22 percent positive; and robbery and homicide, both at 21 percent positive. Drug use in all other charge categories was 20 percent or less, with the lowest category being sex offenses (5 percent positive). (Data are not presented in tables.)

## Age and Race of Male Juvenile Arrestees/Detainees

Site	Age (In Percent)				Race (In Percent)			
	9-12	13-14	15-16	17-18	Black	White	Hispanic	Other
Birmingham	3	15	42	41	79	21	*	*
Cleveland	1	14	40	44	76	20	4	*
Denver	4	17	35	44	32	10	56	2
Indianapolis	7	24	40	28	59	39	2	*
Kansas City	0	18	54	28	75	21	3	2
Los Angeles	3	12	38	48	29	12	55	4
Portland	*	19	42	39	45	48	3	4
St. Louis	5	32	52	11	91	8	0	*
San Antonio	0	26	56	18	24	10	66	*
San Diego	1	18	38	43	21	28	39	11
San Jose	*	14	47	38	10	22	52	16
Washington, D.C.	1	12	38	49	98	*	1	0

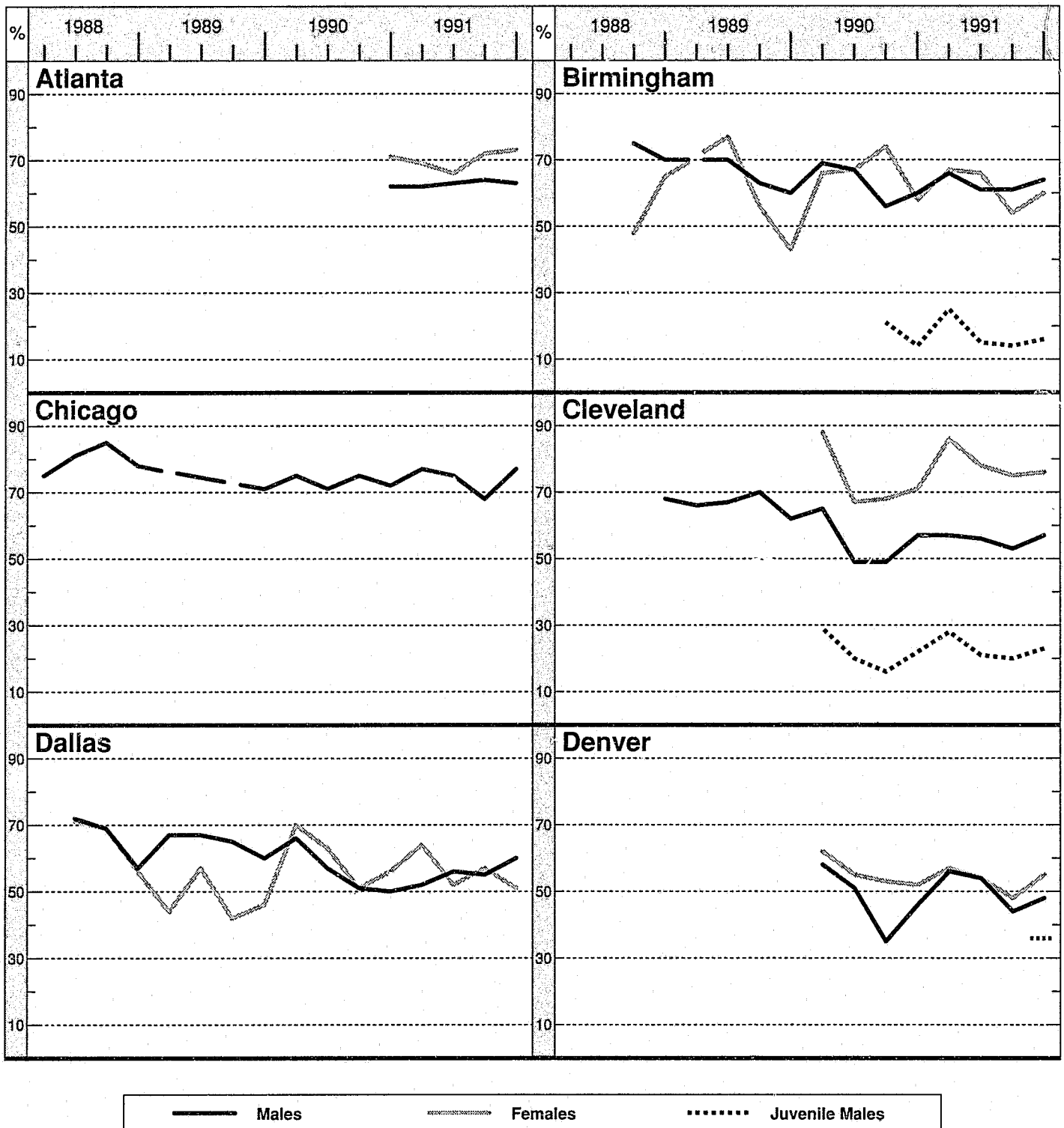
Source: National Institute of Justice/Drug Use Forecasting Program

Note: January through December 1991.

\* Less than 1%.



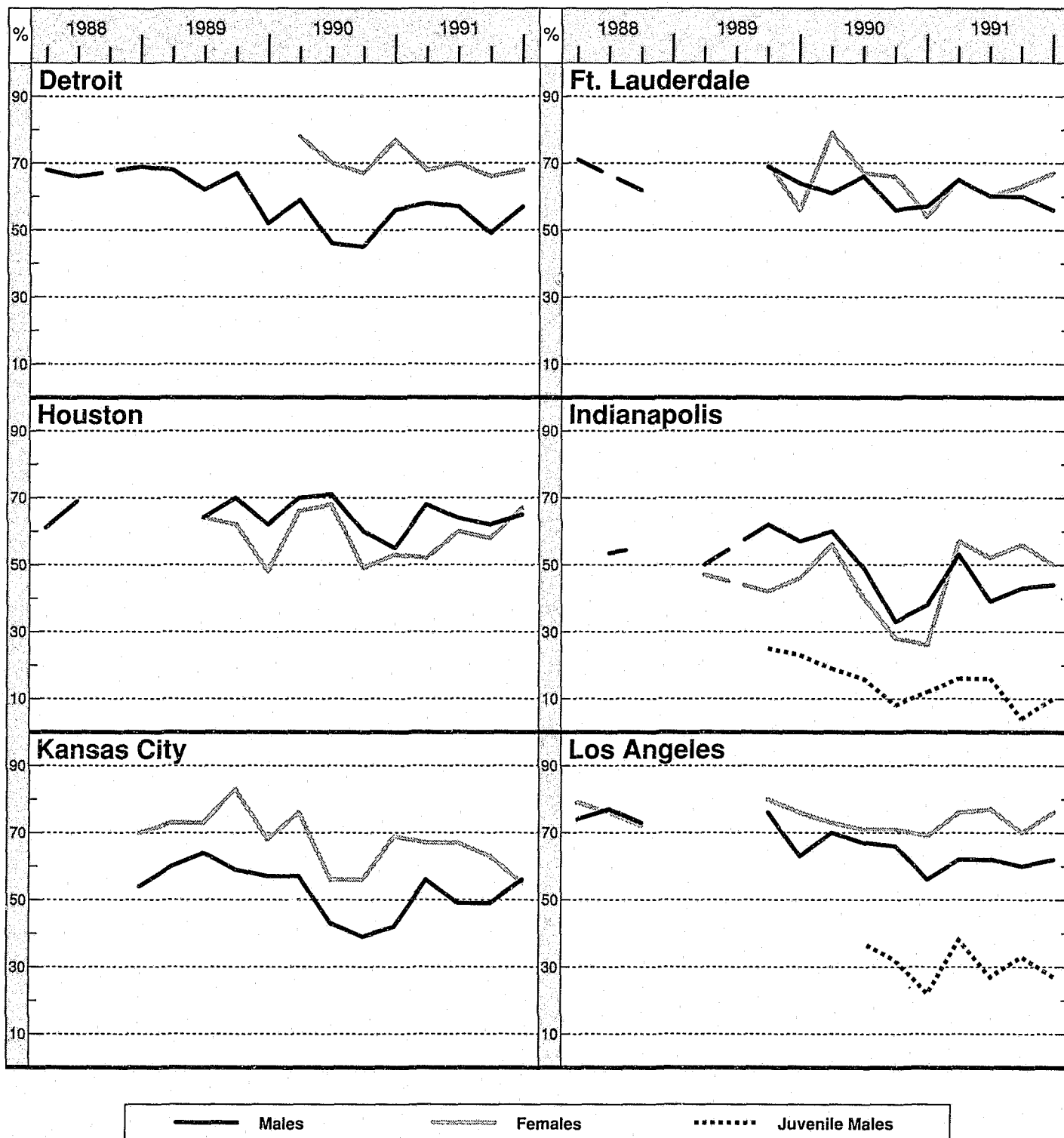
# Drug Use Trends Among Booked Arrestees



Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene. Gaps on graph represent periods when data were not collected.

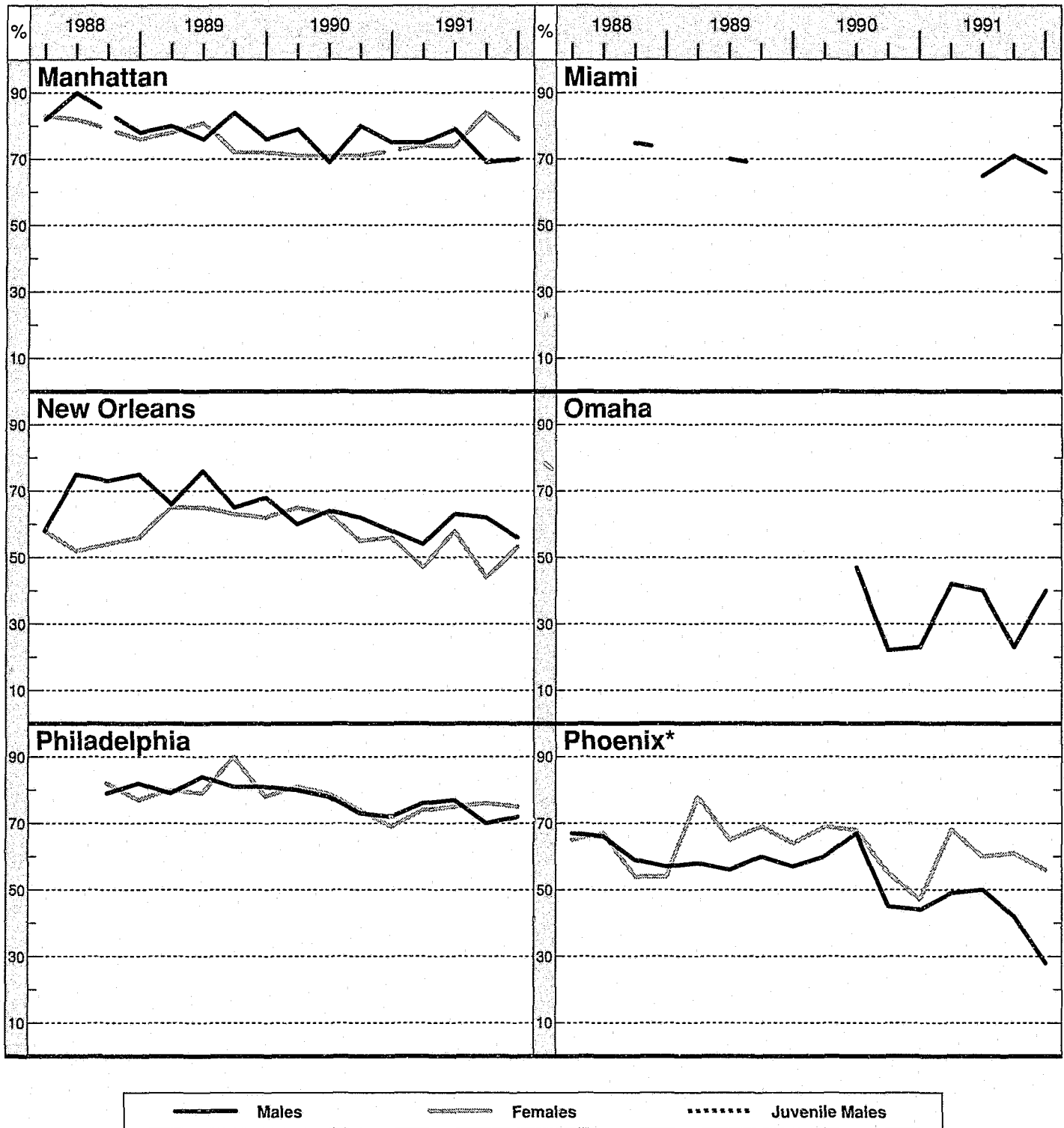
# Drug Use Trends Among Booked Arrestees



Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene. Gaps on graph represent periods when data were not collected.

# Drug Use Trends Among Booked Arrestees

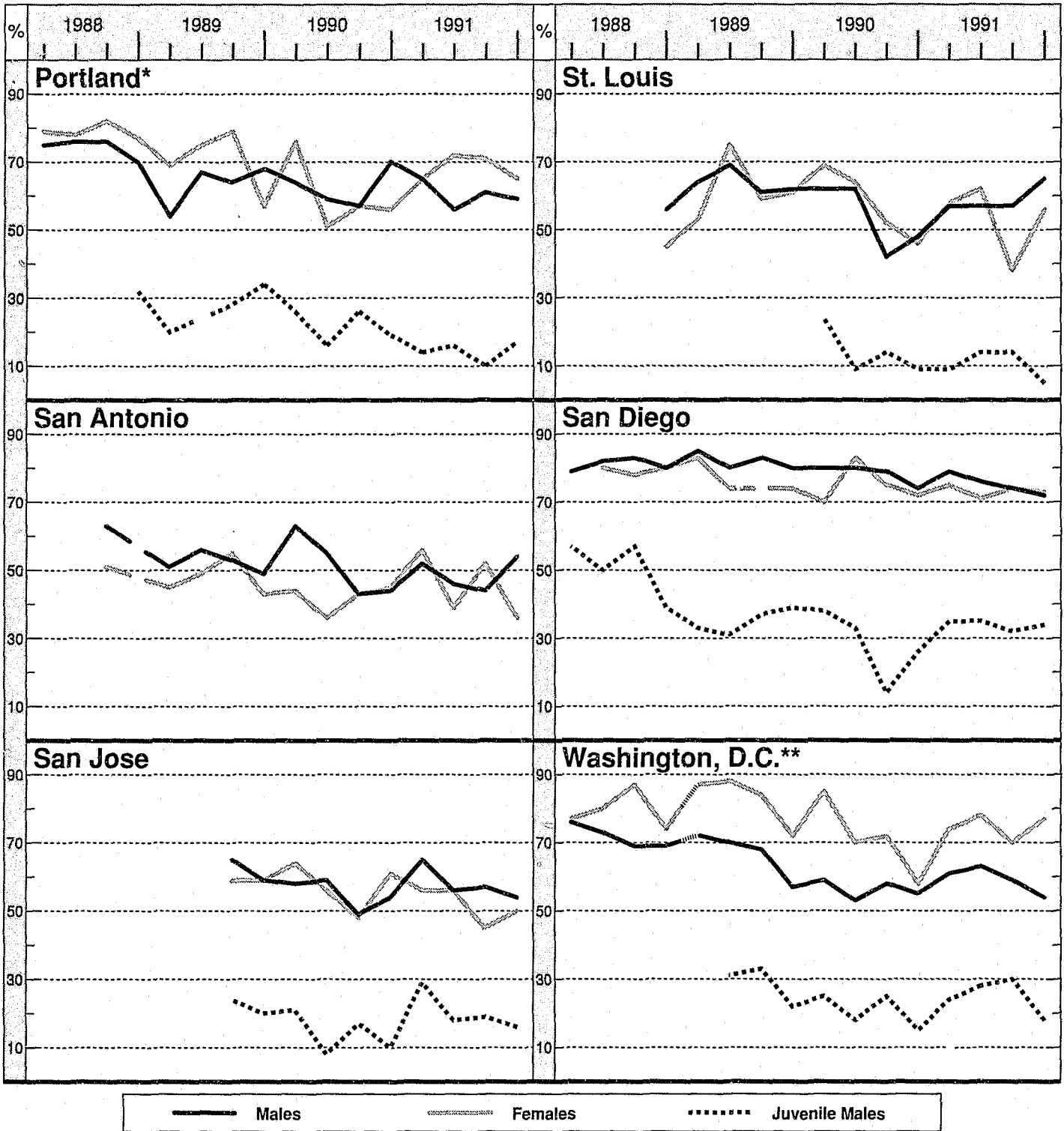


Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene. Gaps on graph represent periods when data were not collected.

\* Prior to 1991, site did not test for all 10 drugs (listed above).

# Drug Use Trends Among Booked Arrestees



Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene. Gaps on graph represent periods when data were not collected.

\* Prior to 1991, site did not test for all 10 drugs (listed above).

\*\* 1988 Washington, D.C. data based on arrestees tested by D.C. Pretrial Services Agency. Drugs tested for by the agency include cocaine, opiates, PCP, amphetamines, and methadone. Data collected after 1988 are from the DUF program.

## Drug Use by Charge at Arrest

Charge	Males		Females	
	N	% Positive for Any Drug	N	% Positive for Any Drug
Assault	2667	48	669	50
Burglary	2204	68	261	63
Damage/Destruction of Property	260	45	77	57
Drug Sale/Possession	3520	79	1389	79
Family Offense	870	40	199	38
Flight/Escapes/Warrant	863	52	417	66
Fraud/Forgery	522	56	452	51
Homicide	381	48	60	65
Larceny/Theft	2778	64	1421	58
Probation/Parole Violation	889	61	259	60
Prostitution	153	47	995	85
Public Peace/Disturbance	1529	48	665	61
Robbery	1519	65	161	76
Sex Offense	599	37	54	68
Stolen Vehicle	1208	59	117	68
Stolen Property	475	58	86	74
Traffic Offense	257	42	676	48
Weapons	964	49	91	62
Other	609	51	191	46

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, January through December 1991. Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene.

# Opiate Use Among Arrestees

Opiate use has been long associated with criminal activity. The DUF program provides an opportunity to measure opiate use among arrestees by obtaining quarterly urine samples. These specimens are tested for 10 drugs, including opiates. (See Methodology, page 2, for a listing of the 10 drugs.)

## Trends in Opiate Use

Table 1 shows trends in opiate use for male arrestees from 1987 through 1991. Table 2 (page 23) shows trends in opiate use for female arrestees from 1988 through 1991. (Data for female arrestees were not available in 1987.)

As revealed in table 1, opiate use among male booked arrestees remained low and fairly stable since the late 1980's. Even in the sites recording the highest opiate use among males (Chicago, Manhattan, and San Diego), opiate use declined in 1990 and 1991. Female arrestees recorded the same low and stable levels of opiate use. For example, about 25 percent of Portland female arrestees tested positive for opiates in 1988 and 1989. By 1991, the percent positive dropped to 17 percent. Opiate positives for females were highest in Los Angeles (18 percent), Manhattan (21 percent), Phoenix (17 percent), Portland (17 percent), San Antonio (21 percent), and San Diego (21 percent).

Preliminary results from 1992 revealed that opiate use for both male and female arrestees remained approximately the same as in 1991.

## Recent Reports on Heroin

Recent reports from Federal agencies and newspaper articles warn of a possible epidemic of heroin use due to increases in production and purity and a decrease in price. Additionally, data from the Drug Abuse Warning Network (DAWN) show an increase in heroin-involved emergency room episodes. However, where the increase in opiate use is has yet to be determined. Clearly, DUF results do not

Table 1

## Opiate Use by Male Booked Arrestees

Site	% Positive				
	1987	1988	1989	1990	1991
Atlanta	—	—	—	4	3
Birmingham	—	6	5	5	5
Chicago	14	18	27	27	21
Cleveland	—	4	3	3	3
Dallas	—	6	8	5	4
Denver	—	—	—	2	2
Detroit	12	12	8	8	8
Ft. Lauderdale	2	5	3	1	1
Houston	8	4	4	6	3
Indianapolis	—	4	3	4	3
Kansas City	—	2	2	2	1
Los Angeles	15	13	13	11	10
Manhattan	23	24	18	17	14
Miami	—	1	2	—	2
New Orleans	5	6	6	5	4
Omaha	—	1	—	2	2
Philadelphia	—	11	10	8	11
Phoenix	6	7	8	6	5
Portland	14	13	14	11	9
St. Louis	—	6	7	6	6
San Antonio	—	18	15	17	16
San Diego	20	21	22	19	17
San Jose	—	—	7	7	8
Washington, D.C.	—	—	12	13	10

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, 1987 through 1991.

## Opiate Use Among Arrestees

indicate an increase in heroin use by arrestees. In fact, DUF data show opiate use as stable and low, especially when compared to cocaine use (see page 8 for the percent of arrestees testing positive for cocaine in 1991). This discrepancy, however, is not necessarily contradictory.

Several plausible reasons exist that could explain the lack of increase in heroin use among arrestees and a concomitant increase in supply and purity. First, an increase in emergency room mentions may result more from the inability of users to safely deal with purer heroin than any increase in the *number* of heroin users. Second, the segment of the population using the purer heroin (which can be snorted, smoked, or injected) may not be coming into the criminal justice system and therefore would not be captured in the DUF statistics. (This phenomenon was seen in the 1980's when cocaine was more generally accepted and use more widespread.) This inexperienced group may be less sophisticated in its drug use, thus possibly experiencing more health consequences related to the drug. This could help explain the increase in emergency room visits.

To accurately forecast the potential spread of heroin use to the novice drug user, general population surveys must be conducted. Surveys, like DUF's, do not include drug users in the sample until their drug use leads to other criminal activity. However, it would be expected that drug users in general would be familiar with new drugs available in their communities; consequently, the DUF survey has been enhanced to gain such information. Arrestees are asked not only about their own heroin use but if they know of anyone who is using the drug. Information about snorting and smoking heroin and the availability of the drug are also obtained. DUF will continue to closely monitor the information gained from arrestees to forecast potential increases in heroin use among its sample.

Table 2

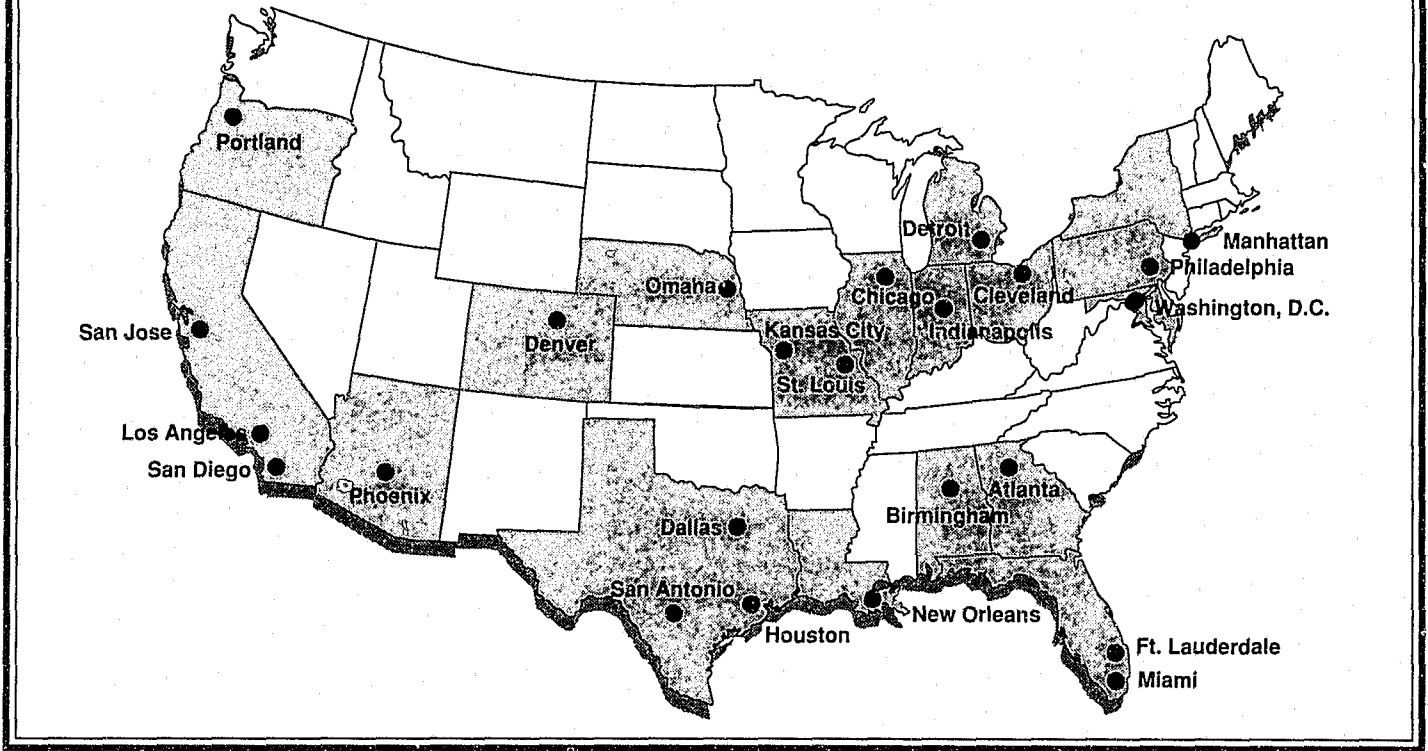
### Opiate Use by Female Booked Arrestees

Site	% Positive			
	1988	1989	1990	1991
Atlanta	—	—	6	4
Birmingham	14	5	11	11
Cleveland	—	—	5	6
Dallas	9	7	10	9
Denver	—	—	6	2
Detroit	20	—	16	11
Ft. Lauderdale	—	2	2	4
Houston	—	8	8	4
Indianapolis	—	5	7	11
Kansas City	6	5	3	4
Los Angeles	22	19	18	18
Manhattan	26	19	24	21
New Orleans	7	6	10	7
Philadelphia	18	15	11	9
Phoenix	12	15	15	17
Portland	25	26	21	17
St. Louis	7	7	8	7
San Antonio	20	20	20	21
San Diego	21	19	22	21
San Jose	—	9	12	7
Washington, D.C.	—	25	19	16

Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, 1988 through 1991.

## DUF Testing Sites Across United States



U.S. Department of Justice  
Office of Justice Programs  
National Institute of Justice  
Washington, D.C. 20531

Official Business  
Penalty for Private Use \$300

BULK RATE  
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