

# LOCAL TRENDS IN ILLICIT SUBSTANCE USE

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A REPORT FOR THE  
ALCOHOL AND DRUG CRIMINAL JUSTICE WORKING GROUP

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## **Local Trends in Illicit Substance Use: Changes in Portland's Drug Arrest Landscape**

This report reviews changes in Portland's drug landscape by presenting trends in drug use and arrests over the past 5 to 10 years. Data available from the National Institute of Justice's Arrestee Drug Abuse Monitoring research program (ADAM) and from the Portland Police Bureau via annual reports and DSS Justice are examined and implications of trends are discussed.<sup>1</sup>

### **Summary**

- Since 1994, approximately 60% of arrestees have tested positive for at least one NIDA-5 substance and approximately 25% have tested positive for multiple substances since 1999.
- The multi-year pattern for male and female arrestees who have tested positive for any or multiple substances has been similar; percentages were higher for female arrestees.
- While the multi-year trend patterns of drug usage by substance have been similar for both male and female arrestees, there is a steeper increase in the percentages of males who have tested positive for marijuana and a more recent downward trend for females.
- There are downward trends in the percentages of male and female arrestees who test positive for cocaine and heroin. The most dramatic decrease has been for cocaine.
- Less than 25% of male and female arrestees test positive for methamphetamine, there has been little change in this trend since 1997.
- While the percentages of Portland arrestees with HS/GED or vocational training, access to medical insurance, and recent drug and alcohol treatment were higher than the medians for other ADAM research sites, the percentages for arrestees with employment and stable housing at the time of their arrest was lower.
- Arrest rates for drug charges in Portland peaked in 1999. Drug arrest rates in 2002 are similar to those in 1994.
- From 1993 to 2002, there has been a dramatic decrease in the rate of arrests for cocaine charges, slight upward trends in the rate of arrests for marijuana and synthetic/dangerous drugs (methamphetamine comprises 96% of this category), and little change in opiate arrests.
- While there are upward trends in the arrest rates for marijuana and synthetic/other drugs, these rates appear to have peaked in 1999-2000.
- Cocaine is the number one drug for possession charges and marijuana is the number one drug for distribution charges; these vary by user demographics
- A closer examination of marijuana arrest rates reveals that the majority of arrests are for less than one ounce, a violation. The upward trend in marijuana arrest rates has been driven by this type of charge.
- Patterns of drug arrest rates by age category observed in Portland follow national trends, marijuana is the drug of choice for offenders between ages 18 and 25; drug use varies by substance and other demographics
- ADAM and PPB arrest trends do not support the media attention given to the methamphetamine problem in Portland. However, this substance does present a unique and costly challenge to law enforcement agencies because local methamphetamine production threatens the environment and endangers public health.

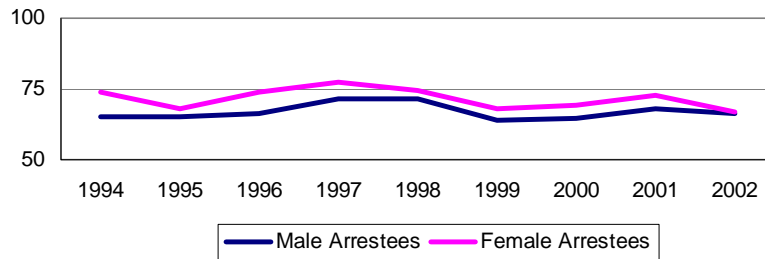
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<sup>1</sup> Portland Police Bureau data for 2001 and 2002 is preliminary.

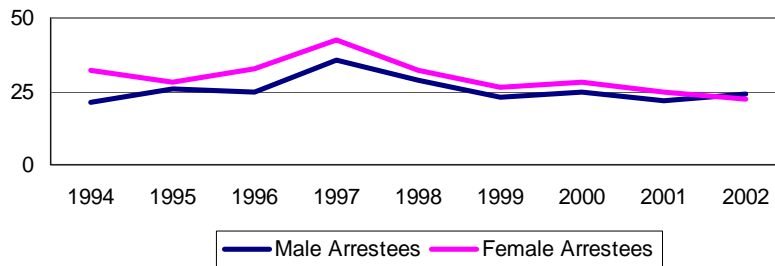
## Portland ADAM Data Trends in Arrestee Drug Usage

The following trends are based on data reported in annual reports from the National Institute of Justice's Arrestee Drug Abuse Monitoring research program (ADAM)<sup>2</sup> for Portland, Oregon. Participants in this research are male and female arrestees who are interviewed and tested for controlled substances<sup>3</sup>. The charts display the trends in the percentages of male and female arrestees who have tested positive for NIDA-5 drugs (heroin, cocaine, marijuana, methamphetamine or PCP).

**Percent Positive for Any Drug**



**Percent Positive for Multiple Drugs**



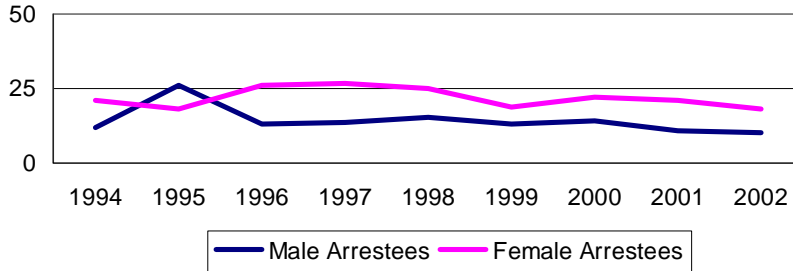
A consistent trend has been that a relatively high percentage of males and females test positive for at least one of the NIDA-5 drugs at the time of their arrest (over 60%). Approximately 25% of arrestees have tested positive for multiple substances since 1999. There was a sharp increase in multiple drug use in 1997 which dropped and has remained stable. Another consistent finding is that, while the trend patterns are very similar, the percentage of female arrestees that tested positive for any or multiple substances has been somewhat higher than it is for males.

<sup>2</sup>Regrettably, The NIJ was unable to secure Congressional funding to continue its work with ADAM data collection. Data collected in 2003 will be analyzed and archived. NIJ is hoping to implement an alternate arrestee drug abuse monitoring program if future funding allows. <http://www.ojp.usdoj.gov/nij/new.htm> Reports and other literature used in this report are available on the ADAM website <http://www.adam-nij.net/>

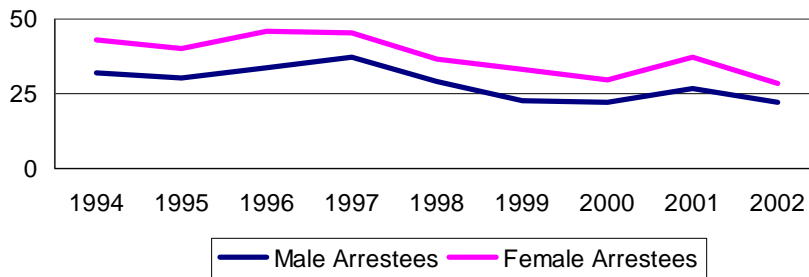
<sup>3</sup> Interviews and testing are performed seasonally four times a year, approximately 85% agree to interview and more than 85% of interviewees agree to drug testing. The data is based on the entire population of female arrestees and a random sample of male arrestees.

The following charts display trends for heroin, cocaine, marijuana, and methamphetamine<sup>4</sup>.

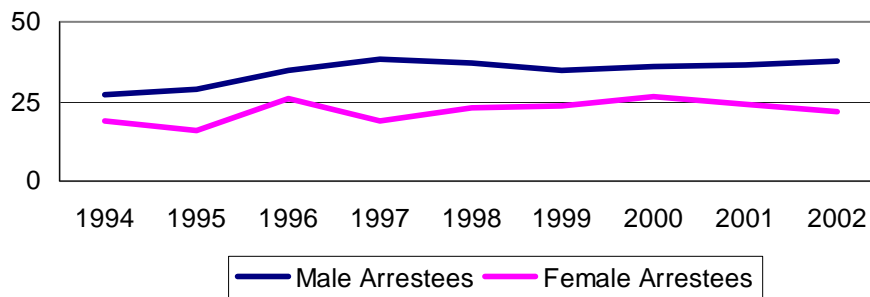
**Percent Positive for Heroin**



**Percent Positive for Cocaine**

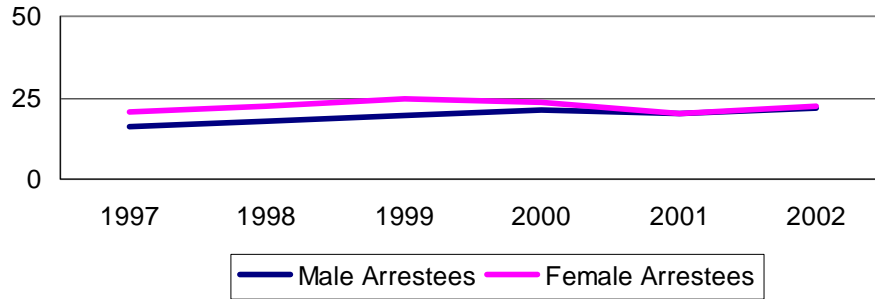


**Percent Positive for Marijuana**



<sup>4</sup>PCP trends are not included because percentages have been less than 1%, however, in 2002, 2.4% of male arrestees tested positive for this substance.

### Percent Positive for Methamphetamines

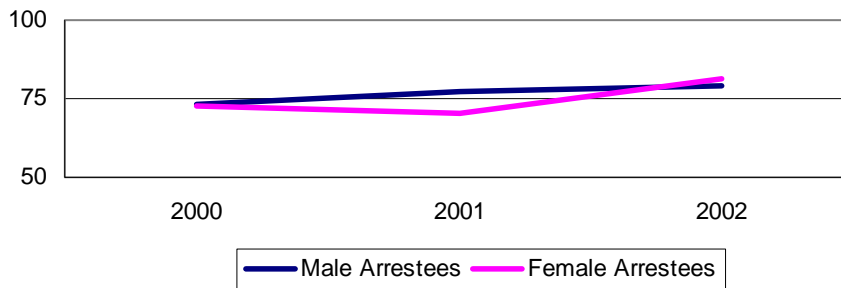


Multi-year trend patterns in drug usage are similar for both male and female arrestees for all of the above substances. A higher percentage of female arrestees tested positive for cocaine and heroin while a higher percentage of male arrestees tested positive for marijuana. There are downward trends in the percentages of arrestees who test positive for cocaine and heroin. There is an overall upward trend for marijuana usage for both male and female arrestees; however, the upward trend for males is steeper while the trend for females has been declining since 2000. There has been little change in methamphetamine usage among arrestees; the percentage of positive tests for this substance has remained less than 25%. Therefore the trend in methamphetamine usage is less dramatic than it has been depicted by recent media attention<sup>5</sup>. Overall, the steepest decline is observed in cocaine usage while the steepest increase is in marijuana usage, this is consistent with national trends<sup>6</sup>.

### Trends in Arrestee Demographics

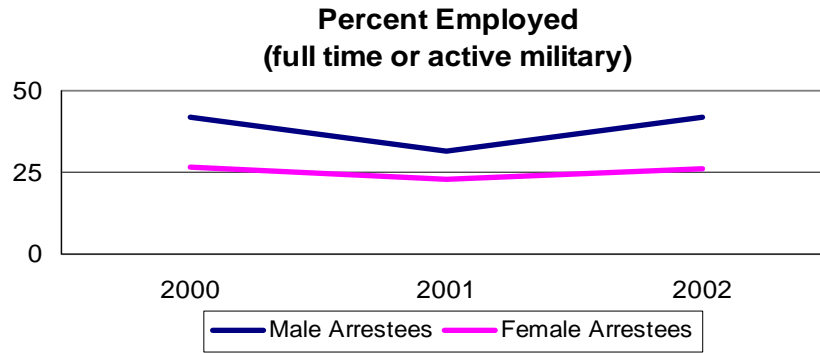
The following charts display the demographic trends for both male and female arrestees.

#### Percent HS/GED or Vocational Training



<sup>5</sup> For example see Anderson, J. (2003, April 4). *Meth cooks up citywide menace*. Portland Tribune. <http://www.portlandtribune.com/archview.cgi?id=17354>

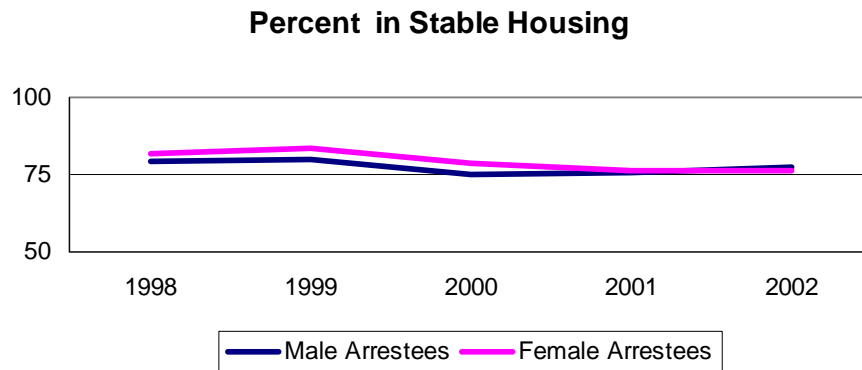
<sup>6</sup> Golub, A. & Johnson, B. D., *The rise of marijuana as a drug of choice among youthful adult arrestees*. National Institute of Justice Research in Brief, June 2001 ([http://www.adam-nij.net/files/golub\\_and\\_johnson\\_pub.pdf](http://www.adam-nij.net/files/golub_and_johnson_pub.pdf))



The percentage of arrestees with HS/GED has gradually increased for both male and female arrestees. In 2002, the percentage of male and female arrestees with HS/GED or vocational training was higher than the median for the other ADAM sites while the percentage of those employed was lower<sup>7</sup>.

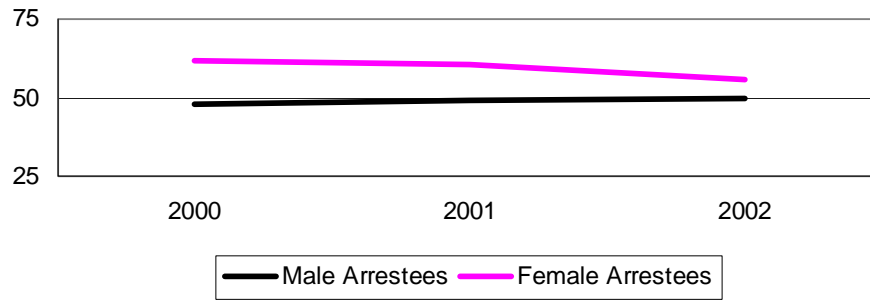
2002 Education				2002 Employment			
Male Arrestees		Female Arrestees		Male Arrestees		Female Arrestees	
Portland	Median	Portland	Median	Portland	Median	Portland	Median
79.3	70.1	81.3	70.6	41.7	60.1	26.1	40.9

Over the last 5 years, there has been a downward trend in the percentage of male and female arrestees with stable housing available. In 2002, compared to other ADAM research sites, fewer Portland arrestees had access to stable housing. Approximately 50% of male arrestees have access to medical insurance. While the percentage of female arrestees with health insurance is higher than it is for males, there has been a downward trend. The percentage of male and female arrestees with access to medical insurance was higher than the ADAM median.



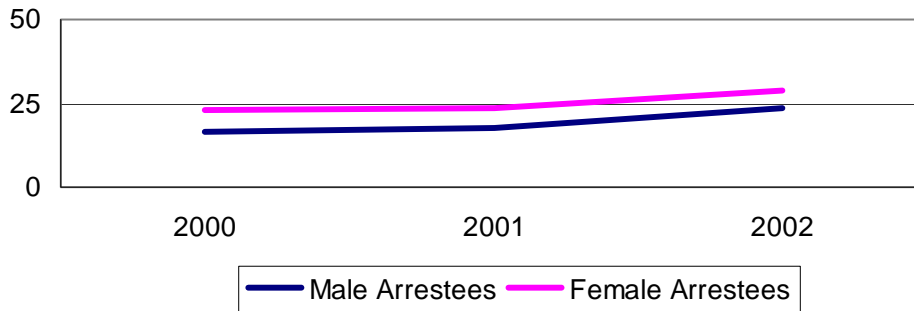
<sup>7</sup> Demographic data presented in tables is based on findings published in ADAM (2002) *Preliminary drug use & related matters among adult arrestees & juvenile detainees*. Some information may vary from the 2002 site reports.

### Percent with Health Insurance



2002 Stable Housing				2002 Medical Insurance			
Male Arrestees		Female Arrestees		Male Arrestees		Female Arrestees	
Portland	Median	Portland	Median	Portland	Median	Portland	Median
77.4	86.7	76.1	85.5	50.0	36.9	56.0	46.2

### Percent with A&D Treatment in Past Year



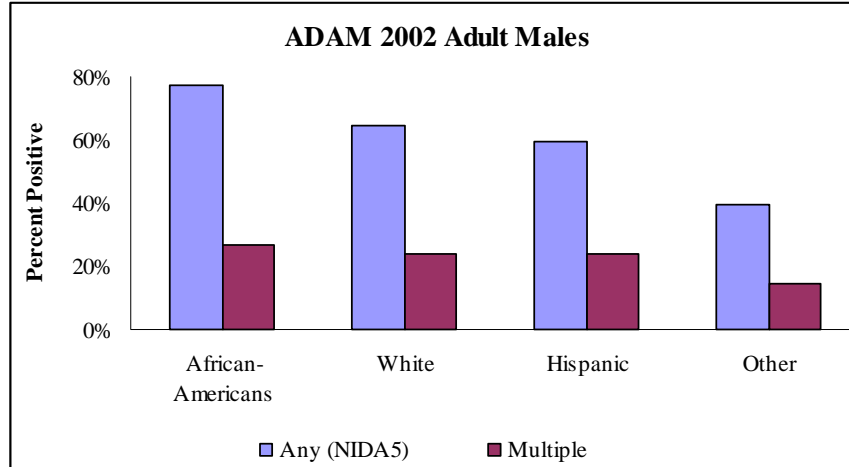
There has been an increase in the percentages of arrestees who have received alcohol and drug treatment. In 2002, compared to all other ADAM research sites, Portland had the highest percentages of male and female arrestees who reported receiving drug or alcohol treatment within a year of their arrest (this is true for both residential and outpatient care). This indicates that treatment efforts, which have been found to be cost effective in terms of criminal justice and health care savings, are reaching this vulnerable population<sup>8</sup>.

2002 Drug or Alcohol Treatment							
Male Arrestees				Female Arrestees			
Outpatient		Inpatient		Outpatient		Inpatient	
Portland	Median	Portland	Median	Portland	Median	Portland	Median
12.8	4.5	10.5	5.7	17.8	6.8	11.1	7.9

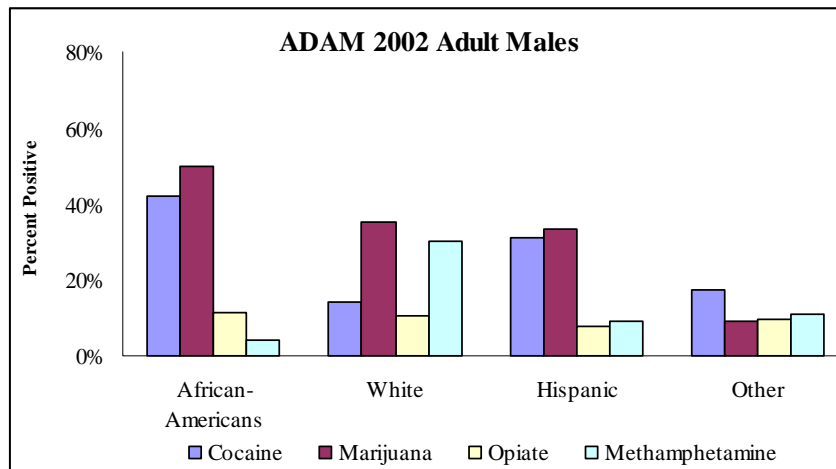
<sup>8</sup> California Department of Alcohol & Drug Programs (1994). *Evaluating recovery services: The California drug and alcohol treatment assessment (CALDATA)*; Finigan, M. (1996). *Societal Outcomes and Cost Savings of Drug and Alcohol Treatment in the State of Oregon*. NPC Research, Portland Oregon.

## Snapshot of 2002 ADAM Adult Males Arrestee by Race

The following charts display the snapshot of 2002 arrestee data for adult males by race/ ethnicity and substance.



As seen in the figure above, African-Americans had the highest proportion of testing positive for any NIDA-5 drug, with 77%. However, African-American, Whites, and Hispanics were fairly consistent in their positive tests for multiple substances.



Examining specific drug type by race identified distinct patterns for various groups.<sup>9</sup> Most cases identified marijuana as the most common drug with a positive test result. “Hard drug” patterns were more specific to racial populations: cocaine (and its derivatives) was most common in the non-White populations, while Whites showed the greatest proportion testing positive for methamphetamines. Opiates were the least common drug from adult males, with little variation in percentage by race.

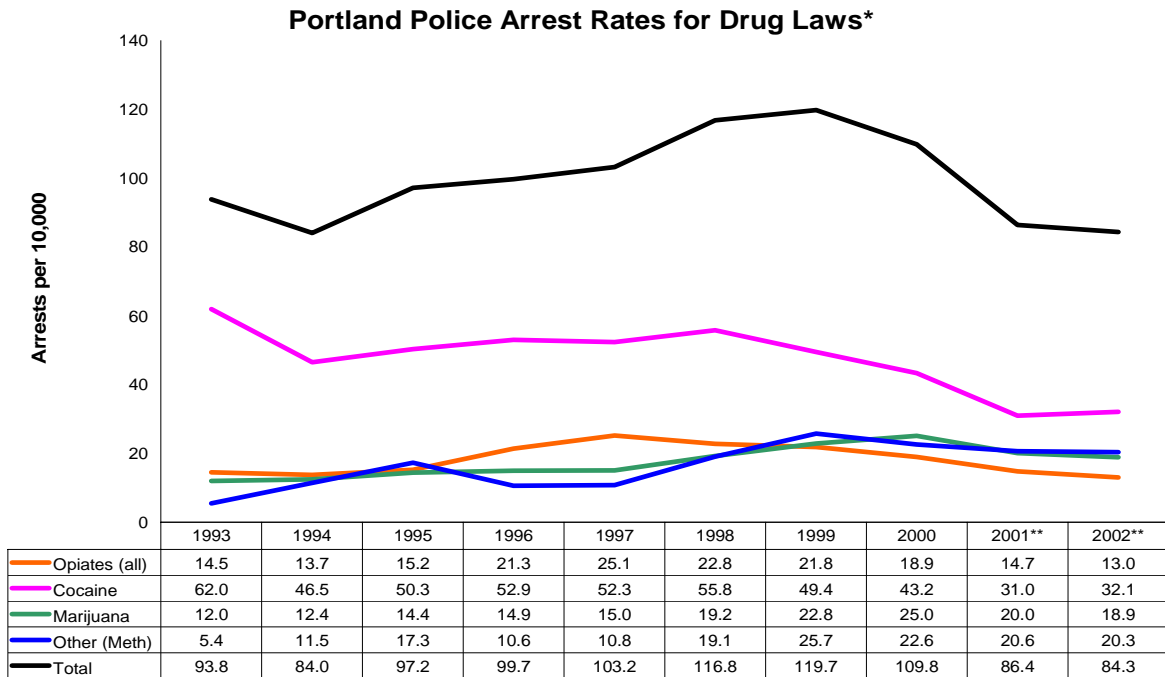
<sup>9</sup> Neither PCP nor the unknown racial category were included due to the relatively small values.



## Portland Police Bureau Arrest Activity for Drug Laws

The following chart displays trends in drug law arrests per 10,000 residents for the city of Portland (based on primary charges). Drug law charges account for approximately 11 – 15% of all PPB arrests<sup>10</sup>. While the opiate category includes all opiates, more than 95% of these arrests are for heroin-related charges. The category labeled “other” includes both synthetic and dangerous drugs but is primarily comprised of amphetamine charges (~96%) which include methamphetamine. Miscellaneous drug charges that are not related to the specific substances defined above (~1%), such as prescription drug violations or drug abuse charges within 1000 feet of a school, are not included.

Drug arrest rates began climbing in 1994 and peaked in 1999.<sup>11</sup> In 2002, drug arrest rates returned 1994 levels.



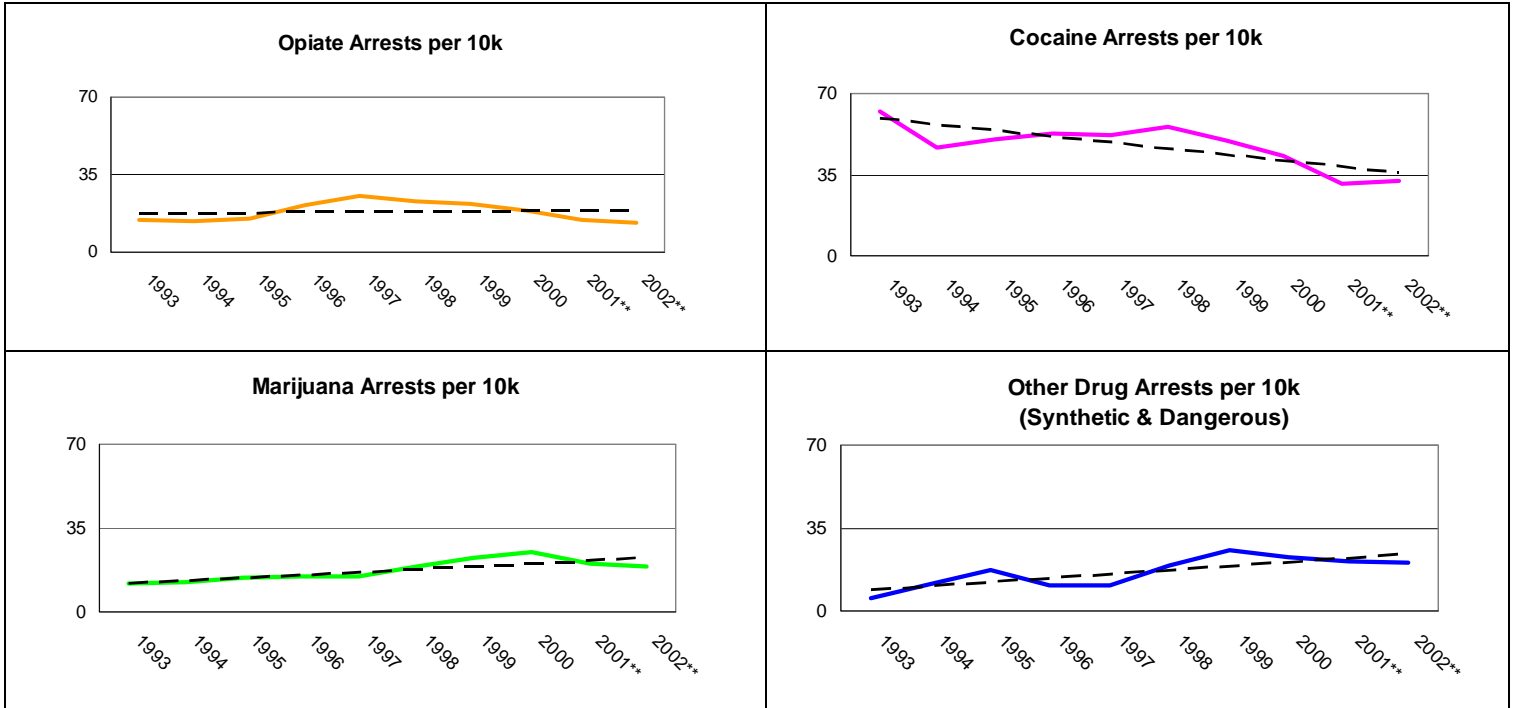
\* Includes Possession, Distribution, Manufacturing and other charges specific to substances. Source PPB Annual Statistical Reports.

\*\*Note. 2001 & 2002 data are preliminary estimates.

A closer examination of drug arrest trends for the past 10 years reveals that there has been very little change in opiate arrests, a decline in cocaine arrests, and increases in arrests for marijuana and for synthetic/dangerous drugs (primarily methamphetamines). While there have been upward trends in arrests for marijuana and synthetic/dangerous drugs, these rates appear to have peaked in 1999-2000.

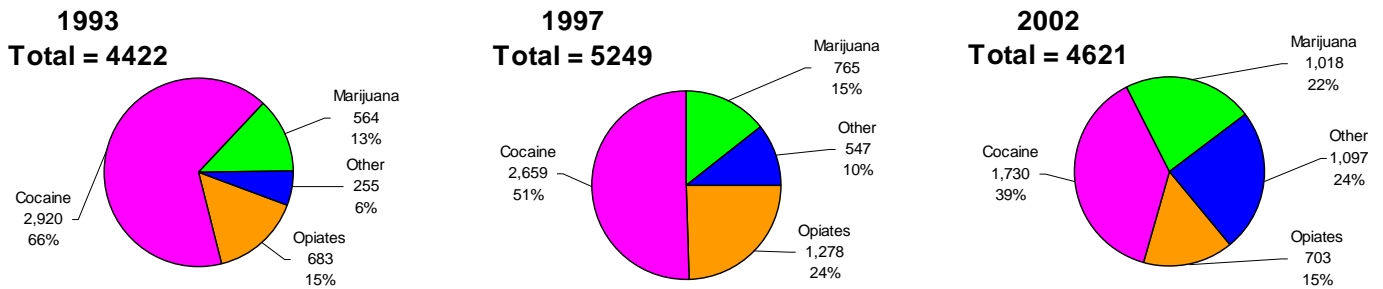
<sup>10</sup> Source: Portland Police Data System Offense and Arrest Summary Reports

<sup>11</sup> Rates were calculated using general City of Portland populations figures.



\*\*based on preliminary PPB data

The following pie charts illustrate how the proportions of drug arrests by substance have been shifting since 1993. Although the total number of drug arrests is similar for 1993 and 2002, the proportions of the substances have changed dramatically.

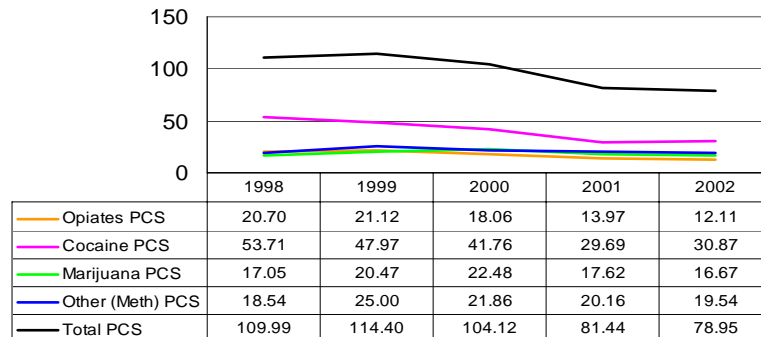


### Trends in Drug Charges

Approximately 90% of all primary drug arrest charges are for possession, 7% are for distribution, and the remaining 3% are for other types of charges such as manufacturing or tampering. The next charts are based on PPB drug arrest data available from DSS Justice (Decision Support System)<sup>12</sup> and display the trends by type of primary arrest charge: possession (PCS) or distribution (DCS) of controlled substances.

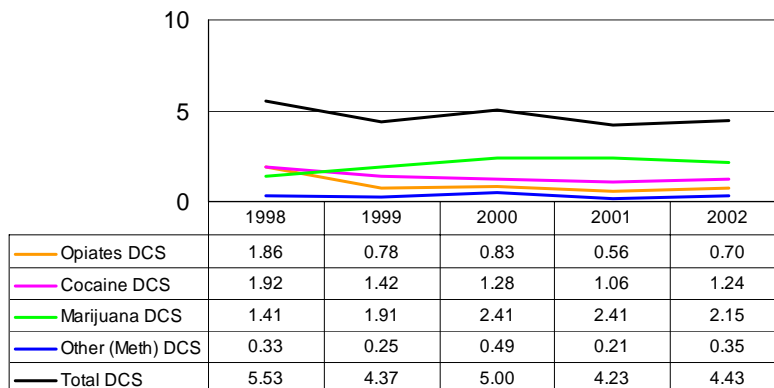
<sup>12</sup> For more detailed information about DSS Justice see: [http://www.lpscc.org/docs/overview\\_dss-j.pdf](http://www.lpscc.org/docs/overview_dss-j.pdf)

### PPB PCS Arrest Rates per 10k



There has been a downward trend in the rate of PCS arrests since 1998-1999. The steepest decline has been in arrests rates for cocaine possession followed by opiates. Arrest rates for possession of marijuana and for other synthetic/dangerous drugs have also been declining since 1999. Although the arrest rates for cocaine possession have dropped, it remains the number one substance in this charge category.

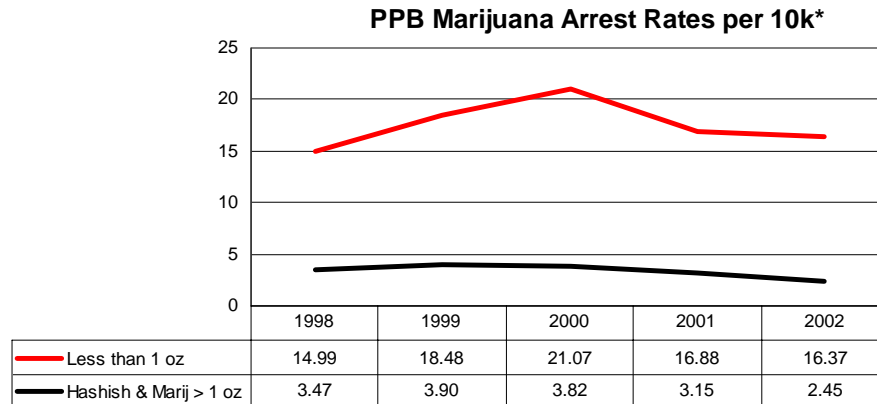
### PPB DCS Arrest Rates per 10k



Rates of arrests for distribution charges have been relatively steady with the exception of marijuana. Arrest rates for marijuana distribution have increased since 1998 and marijuana is the number one substance for distribution charges.

Most arrests for marijuana offenses are for charges involving less than one ounce (~84%). This arrest has a charge severity of 'violation' which typically is treated with a fine and not subject to jail time. A closer examination of marijuana arrests rates reveals that charges for less than one ounce have shown a slight increase since 1998 while arrest rates for hashish and marijuana over one ounce have declined slightly. Since arrest rates for hashish and greater quantities of

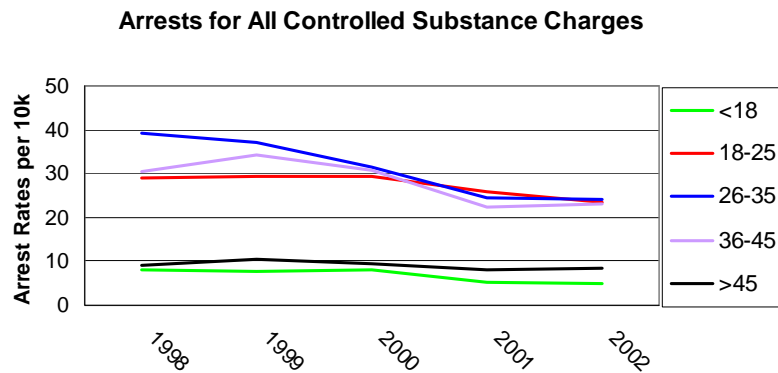
marijuana have not increased, the overall increase in marijuana arrests is due to the increase in arrests for offenses for less than one ounce.<sup>13</sup>



\*Includes all charges

### Trends in Drug Arrests by Age Categories

The following charts illustrate the rates of drug arrests by age groups using the same DSS Justice data presented above.

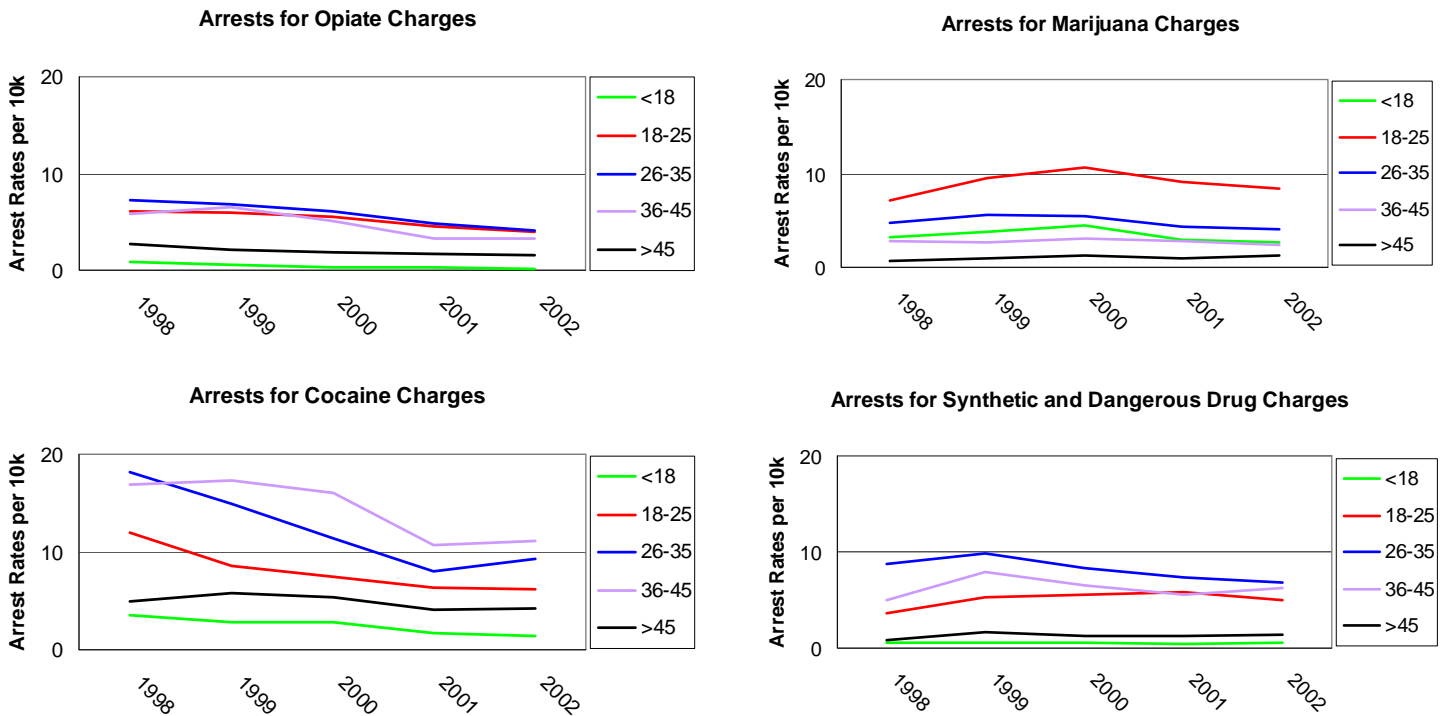


Approximately 85 to 90% of drug offense arrestees are between ages 18 and 45. Age is an important variable in this research because patterns in drug use trends are linked to the “drug of choice” of youthful age cohorts. Drug “epidemic” patterns are characterized by four phases: incubation, expansion, plateau, and decline. During the incubation and expansion phases, more and more young people are initiated to a substance as it gains popularity. During the plateau and decline phases, substance use stabilizes and subsequently declines. This pattern was observed with heroin in the 1960s and again in the 1980s with crack cocaine. According to experts, the current drug of choice for those born after 1970 is marijuana. A review of ADAM data across

<sup>13</sup> Several prominent leaders in alcohol and drug research have recently questioned the amount of resources utilized against marijuana users (Sarah Hart, Director of the National Institute of Justice; and Peter Reuter, University of Maryland, senior economist at RAND and a member of the Office of National Drug Control Policy Committee on Data Research and Evaluation). See The Urban Institute (2003). *Reducing Drug Use and Crime: Strategies that Work* (April). <http://www.urban.org/url.cfm?ID=900599>

cities in 1999 revealed that marijuana usage among arrestees in Portland was still in the expansion phase<sup>14</sup>.

The following charts display trends in drug PPB arrest rates by age of arrestee and controlled substance. The most dramatic decrease in cocaine arrests has been for arrestees over age 26 while the steepest increase in drug arrests has been for marijuana charges for arrestees between ages 18 and 25. It is also interesting to note that compared to arrest rates for other substances, marijuana charges are more prevalent for arrestees under 18. There is also an increase in arrests for synthetic and dangerous drugs among arrestees between ages 18 and 25, but there is no upward increase for the under age 18 category for this substance and arrest rates are dropping for those over age 26.



## Discussion

Taken together, the above trends illustrate how the drug arrest landscape has changed over the last 10 years. The following discussion will review these trends by substance.

### Opiates and Cocaine

Consistent with national trends, the use of opiates among arrestees (ADAM) appears to have stabilized<sup>15</sup>. This finding is also supported by PPB drug arrest trends. The percentage of arrestees

<sup>14</sup> Golub et al., 4

who test positive for cocaine (ADAM) has been dropping since the early 1990s and the decline in arrests for cocaine charges is the most notable change in arrests for controlled substances (PPB). In recent years, the majority of cocaine charge arrestees have been over age 25. These findings are consistent with the decline of cocaine as a drug of choice among youthful offenders<sup>16</sup>. Non-Whites arrestees tested positive for cocaine at higher proportions than did Whites.

## Marijuana

Trends for both marijuana use by arrestees (ADAM) and drug arrests for marijuana charges (PPB) have increased. The majority of marijuana arrests have been for charges involving less than one ounce, this type of arrest accounts for the upward trend observed in arrest rates. The most notable increase in arrests has been for offenders between ages 18 and 25. For youths under age 18, marijuana arrests are more prevalent than arrests for other controlled substances. There is a concern that marijuana is a “gateway” drug meaning users are inclined to progress to more dangerous substances. However, recent studies do not support this theory. One study suggests that, rather than being linked to a particular substance, drug use progression reflects cultural norms which vary over time<sup>17</sup>. Another study concluded that drug use progression can also be explained by drug use propensity and there is no evidence that there is a causal link between marijuana use and progressive drug abuse<sup>18</sup>. As both studies point out, trends indicate that contemporary, youthful marijuana users are not progressing to stronger, more dangerous substances at the expected rate. However, there are still links observed between early age of initiation to marijuana and disorders such as drug abuse progression<sup>19</sup> and poor psychosocial adjustment (i.e. criminal behavior, unemployment, mental health problems);<sup>20</sup> therefore the increase in marijuana arrests for offenders under 18 years of age is a particular concern. Marijuana arrest rates were higher for Whites than other groups; this was the most common drug to test positive for in adult males.

## Synthetic and Dangerous Drugs

Arrests for synthetic and dangerous drugs currently account for 24% of all drug arrests. Approximately 95% of these arrests are for amphetamine charges which includes methamphetamine. While PPB arrest rates for these substances have increased since 1993, these rates began to decrease in 1999, however the percentage of arrestees testing positive for methamphetamines has remained stable since 1997 (ADAM). In 2002, compared to 35 other

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<sup>15</sup> National Institute of Justice Annual Report on Opiate Use Among Arrestees (1998).

<http://ncjrs.org/pdffiles1/175659.pdf>

<sup>16</sup> Golub et al., 4

<sup>17</sup> Golub, A. & Johnson, B. D. *Variation in youthful risks of progression from alcohol and tobacco to marijuana and to hard drugs across generations*. American Journal of Public Health 91; 2001:225-232.

<sup>18</sup> Morral, A. R. ; McCaffrey, D. E.; & Paddock, S. M. *Reassessing the marijuana gateway effect*. Addiction, 97; 2002:1493-1504.

<sup>19</sup> Babor, T. E.; Webb, C.; Bursleson, J. A.; & Kaminer, Y. *Subtypes for classifying adolescents with marijuana use disorders: construct validity and clinical implications*. Addiction, 97; 2002:58-69

<sup>20</sup> Fergusson, D. M. & Horwood, H. *Early onset cannabis use and psychosocial adjustment in young adults*. Addiction 92; 1997:279-296.

ADAM research sites, Portland ranked eighth in terms of male arrestees testing positive for methamphetamine (21.9%), Honolulu was ranked highest at 44.8% and 18 out of the 35 sites were less than 5%, mostly located in the Eastern United States where methamphetamine traffic has been very low (although there are signs that it is beginning to spread)<sup>21</sup>. While ADAM and arrest trends indicate that Portland's methamphetamine problem has been exaggerated by media coverage, methamphetamine still poses a unique challenge to law enforcement because it is produced in home-based laboratories that are dangerous to the public and are costly to dispose of once discovered<sup>22</sup>. Whites also appeared with the highest rates for these substances in their system at testing.

## Observations

Over the last eight years positive arrestee drug tests fluctuated, but overall have remained flat. While arguably more dangerous and expensive drugs such as cocaine, and more recently heroin, have been on the decline, marijuana rates show a steady increase. Counter to local media reports, the county's methamphetamine rate has shown only a slight increase over the last six year. While more arrestees are reporting recent treatment, the lack of a corresponding decline in positive tests suggests that greater attention be placed successful completion and post-treatment supports such as housing. Indeed, Multnomah County has nearly the worst stable housing of any ADAM site nationally, and the local trend shows continued deterioration.

Female arrestees should also receive greater attention. While there were considerably fewer female arrestees than males, they consistently had greater rates of drug use, multiple drug use, and more dangerous and expensive drug use than did males. Furthermore, their full-time employment proportions were lower than their male counterparts, and as important was the substantial decrease in reported health insurance coverage.

Arrest activity seems to generally support the arrestee drug test data. Declines in arrests rates since 1997 were noted in the traditionally more dangerous and expensive drugs, while marijuana and especially methamphetamine rates increased. While marijuana arrest rates and positive arrestee tests appeared congruent, this did not appear to be the case for methamphetamines. The rate increase for methamphetamine did not appear to translate into increased positive arrestee tests in the jail population. Several reasons may explain this inconsistency, such as the possibility of methamphetamine use in the expansion phase (thus not yet translating into arrestees use), greater police focus and directed activities on methamphetamines enforcement versus other substances, a change in how police code drug arrests, or some other unknown factor. This trend should be closely monitored in future research.

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<sup>21</sup> National Drug Intelligence Center (2003, January). *National drug threat assessment 2003*. Retrieved January 15, 2004 from NDIC website: <http://www.usdoj.gov/ndic/pubs3/3300/meth.htm>

<sup>22</sup> United States. Drug Enforcement Agency. (2003, July 18). *Facing the methamphetamine problem in America: Congressional Testimony* by R. E. Guevara. Retrieved February 4, 2004 from DEA website: <http://www.usdoj.gov/dea/pubs/cngtest/ct071803.htm>

## **Acknowledgements**

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