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**LOST OPPORTUNITY TO COMBAT AIDS:
DRUG ABUSERS IN THE CRIMINAL JUSTICE
SYSTEM***

By

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ACQUISITIONS

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Our nation's ability to control the course of the HIV epidemic depends greatly on our ability to control the problem of intravenous drug abuse. Intravenous drug abuse is a substantial carrier for infection, a major port of entry for the virus in the larger population.

Presidential Commission on the Human Immunodeficiency Virus Epidemic,
Chairman's Draft Recommendations for the Final Report, June 2, 1988

INTRODUCTION

In the absence of a cure for acquired immunodeficiency syndrome (AIDS) societal efforts are aimed towards limiting the spread of the disease. To accomplish this, information regarding the risk behaviors for contracting and transmitting the disease is being distributed to the general population. In addition, outreach programs are being established in many cities to target subgroups of the community to receive AIDS education and counseling. Most of these programs have been directed towards drug abusers and homosexuals, persons whose behavior may place them at high risk for AIDS.

Persons who inject illicit drugs constitute the predominant source of heterosexual and perinatal transmission of the human immunodeficiency virus (HIV) that causes AIDS (DesJarlais and Hunt 1988). According to the latest statistics available (Centers for Disease Control, 1988), 26% of the 65,000 diagnosed cases of AIDS among adults and adolescents in the United States are drug injectors (this number includes 7% who are both drug injectors and bisexuals/homosexuals). Drug injectors are at high risk of AIDS because their needle sharing behavior makes them vulnerable to infection by HIV, which, in turn, they can spread through all of the routes of transmission: by exchange of bodily fluids; by sharing injection equipment; and in the case of female drug users, by transmission from mother to infant.

Because persons do not generally publicize their injection of illicit drugs, AIDS outreach programs typically locate drug injectors by approaching persons who have entered publicly funded treatment programs, or by establishing bases in minority neighborhoods known to be frequented by drug abusers. **This paper suggests that an important additional avenue exists for reaching drug injectors-- by approaching the thousands of drug abusers among arrestees and persons supervised by the criminal justice system.**

Data from the Drug Use Forecasting (DUF) System of the National Institute of Justice (NIJ DUF Report, January, 1988) has documented the high prevalence of recent illicit drug use in arrestees in the largest cities in the United States. For example, the prevalence of recent cocaine use, measured by urinalysis, is about ten times that found

in interview surveys of student and household populations. And the majority of drug injectors surveyed through DUF indicate that they have injected cocaine. Given that other injectable drugs like methamphetamines and opiates are also detected in arrestees in various regions of the country, one might expect that the offender population would contain substantial numbers of drug injectors at risk for AIDS.

In order to assess the potential risk of HIV infection in offenders, this report analyzes new information from DUF interviews about drug injection and needle sharing behaviors in male and female arrestees. Because female arrestees may be at special risk of AIDS--they tend to have more serious drug abuse problems and are likely to engage in prostitution with numerous partners (Goldstein 1979; Wish et al. 1985; Des Jarlais et al. 1987)--we shall focus special attention on our findings from female arrestees. In the next section we briefly describe the DUF program.

The DUF Program

In 1987, the National Institute of Justice (NIJ) established the DUF program, a national data system for tracking drug use trends in arrestees. Every three months, a new sample of approximately 250 male arrestees in each participating city is asked to agree to a voluntary and anonymous interview about their drug abuse and treatment history and to provide a voluntary urine specimen for analysis. Arrestees are usually interviewed soon after arrest in the city's central booking facility. Urine specimens are tested by EMIT technology for ten drugs: opiates, cocaine, PCP, marijuana, amphetamines (all positives are confirmed by gas chromatography), methadone, Darvon, barbiturates, methaqualone and Valium. (The latter five drugs have rarely been found in the DUF samples.)

DUF interviewers intentionally oversample males charged with serious nondrug crimes because it is already well established that persons charged with the sale or possession of drugs are likely to be users. Because the resulting DUF samples have a smaller proportion of persons charged with drug offenses than would be found in a random sample of arrestees DUF estimates of drug use should be viewed as minimum estimates of recent drug use in all arrestees.

DUF interviewers typically station themselves in each city's booking facility for fourteen consecutive evenings during the most busy shifts. Over 90% of arrestees who

are approached agree to be interviewed, and about 85% of the interviewees provide a voluntary urine specimen. DUF is currently operating in thirteen cities.

In late 1987, five DUF sites began to collect information from female arrestees. Because the number of females arrested is typically far below that of males, DUF interviewers approached all available female arrestees, regardless of charge, during the two week data collection period. The goal was to interview and obtain urine specimens from 100 females in each city, every three months.

METHOD

Sample.

The findings in this report come from the five sites that have obtained data from male and female arrestees: Los Angeles, San Diego, Phoenix, New Orleans and New York City (Manhattan). The data were collected between September and December, 1987. Response rates for each site appear in Table 1.

Interview response rates for males ranged from 92% to 100% and from 89% to 100% for females. Between 81% and 95% of male interviewees and 70%-96% of female interviewees provided a urine specimen for analysis. The resulting sample of arrestees from the five sites who were interviewed and provided a urine specimen contained 516 females and 991 males. (To simplify the presentation, most of the following analyses will aggregate information across the five sites. We will present some of the more significant findings separately for each site to determine whether the findings apply to all cities.)

Demographic and case characteristics of male and female arrestees.

Table 2 compares the males and females with regard to some of the basic descriptive information obtained from the arrest report and DUF interview. The age distributions were quite similar for males and females with the modal age range being between 21 and 25 years old. Ethnicity was also similar in the two groups. The largest group of male and female arrestees were black. More than one third (35%) of the

female arrestees were white and more than a quarter of the male arrestees were Hispanic.

While larceny and drug offenses were the most common charges at arrest for both males and females there were some differences between the two groups. Males were more likely to be charged with burglary (13% vs. 6%) or robbery (7% vs. 1%) while the females were more likely to be charged with sex offenses, primarily prostitution (22% vs. 3%). The male arrestees' greater involvement in more serious crimes (seriousness as defined by legal statute) is evident in the finding that more of them were charged with a felony offense (76% vs. 42%). This difference is also attributable to the fact, noted above, that we did not oversample females charged with felony offenses as had been done with males. These differences in crime severity should not bias our findings with regard to drug abuse, however, because prior work has documented the diversity of crimes engaged in by drug abusers and indicates that the likelihood of testing positive at arrest is generally unrelated to the seriousness of the arrest charge (Wish et al. 1981; Wish and Johnson 1986).

Limitations

Several limitations should be kept in mind in reviewing the findings. First, our findings about drug injection and needle sharing are based upon voluntary self-reports. Although every effort is made to convince the arrestees of the anonymity of the findings and that the information cannot be used against them, the jail environment is inherently threatening and there is considerable underreporting of recent illicit behaviors. (We have repeatedly found that many more persons test positive for drugs than admit to recent drug use in the interview.) On the other hand, we have found considerable internal consistency in the interview information from arrestees and when persons do report illicit behaviors the information appears valid (Wish, in press). Because we know that some arrestees do conceal their illegal behaviors, we suggest that our findings about injection and needle sharing be viewed as minimal estimates of these behaviors in the arrestee population.

A second limitation involves the generalizability of our findings. In the pilot phase of DUF, we attempted to determine whether samples of 200 arrestees yielded estimates of drug use similar to those obtained by testing several thousand arrestees from the same

city. We found that in New York and in Washington, D.C. the estimates from the smaller samples were quite close (within 10 percentage points) to those yielded from larger samples. We are less sure that our findings from the smaller samples of female arrestees (sometimes as low as 50 per city) are equally representative of the wider population of female arrestees in that jurisdiction. New data from female arrestees not included in this paper, however, have replicated the principal findings in this report. Finally, it should be noted that our findings apply to persons who have been arrested and should not be generalized to the nonoffender population.

FINDINGS

Urinalysis results.

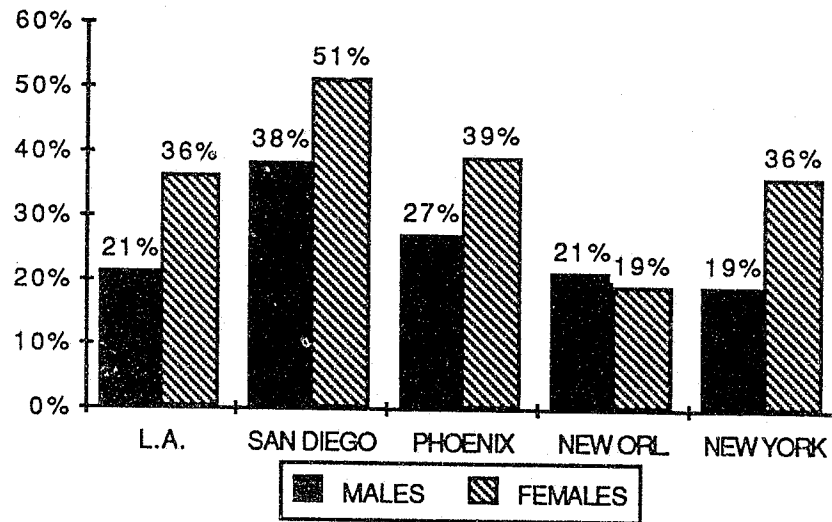
Table 3 compares the urinalysis results for the male and female arrestees in each of the five sites. In four of the cities (all except New Orleans), female arrestees were as likely to test positive for any of the ten drugs as male arrestees. However, there were differences in the specific drugs detected in male and female arrestees. Females tended to be more likely to test positive for cocaine or for heroin (opiates). The differences in heroin positives were especially large in arrestees in San Diego and in Phoenix. Marijuana was the one drug that appeared to be less prevalent in females. In Los Angeles, San Diego and New Orleans only about half as many females as males tested positive for marijuana. [Subsequent results from male and female arrestees tested in January through March 1988 replicated the above findings regarding the higher prevalence of cocaine and heroin and lower prevalence of marijuana in female arrestees (NIJ DUF Report, May, 1988.)]

These findings indicate that female arrestees are more involved with hard drugs such as heroin and cocaine than are male arrestees. They are consistent with results from a study of arrestees in jails in the 1970's (Wish et. al. 1985) and a study of male and females arrested in Manhattan in 1984 (Wish et al. 1986a). Because heroin and cocaine are often injected, our findings suggest that injection might be a more common behavior in female arrestees. The next section examines this question.

Are female arrestees more likely to inject drugs?

Figure 1 shows the percentage of male and female arrestees who reported ever having injected drugs. In all cities except New Orleans, female arrestees were more likely to admit to injecting drugs. The largest differences were found in Los Angeles (36% vs. 21%) and New York (36% vs. 19%).

FIGURE 1
PERCENT OF MALE AND FEMALE ARRESTEES WHO EVER INJECTED



Correlates of drug injection in female arrestees.

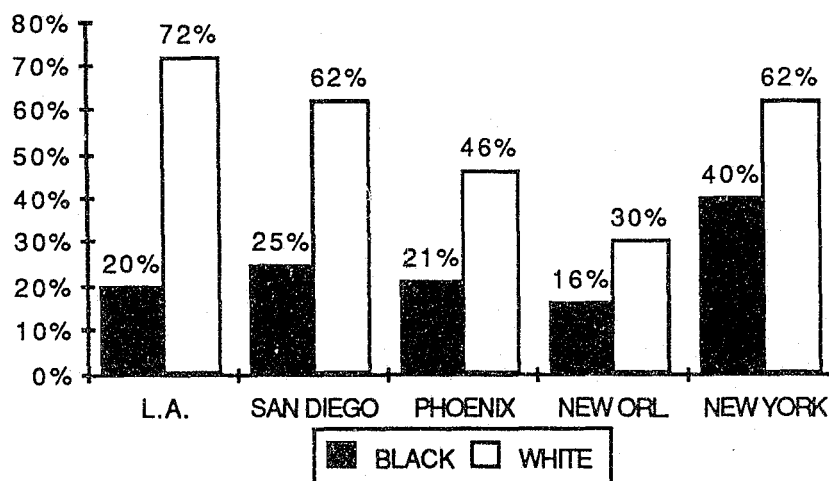
We looked at factors that might be associated with drug injection in the females (Table 4). As one would expect, age was strongly associated with injection. While about one fourth of the female arrestees under age 21 indicated having ever injected drugs, almost one half (47%) of the women above age 30 had injected. Persons who had dropped out of school by the 10th grade also had a high rate of injection (50%). (These drop-outs are the very people whom school-based surveys and in-school AIDS prevention efforts would miss.) There was little variation in injection by charge at arrest, except that persons charged with assault were least likely (18%) to have injected drugs. This is consistent with previous research showing that assaulters are among those least likely to test positive for hard drugs at arrest (Wish et al. 1986a). Persons charged with sex offenses were not more likely to have injected drugs than persons charged with

other types of offenses. However, some of the females charged with non-sex offenses may have engaged in prostitution at some time in their lives.

While we expected that older females and school drop-outs would be at higher risk of drug injection, we were surprised by the extent of ethnic differences in drug injection. White female arrestees were twice as likely as black females to have injected drugs (55% vs. 22%, $p < .001$). Hispanic females were midway between these two groups (36%). (Their small number, $N=90$, prohibited us from further analysis of the Hispanic females.) If white females were more likely to be older or to have dropped out of school it might explain why they had higher rates of injection. We found, however, that these factors did not account for the ethnic differences in injection.

Figure 2 shows that in each of the five cities white females were more likely to have injected drugs. White female arrestees in San Diego and Phoenix were twice as likely to report injection and in Los Angeles there was a three fold difference (72% vs. 20%). In the next section we attempt to understand the nature of these differences between white and black female arrestees.

FIGURE 2
PERCENT OF FEMALE ARRESTEES WHO EVER INJECTED,
BY ETHNICITY



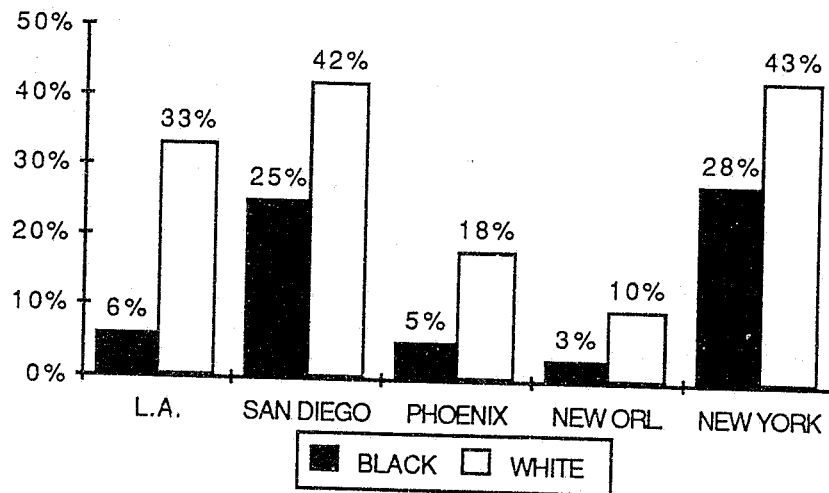
Why are white females more likely to inject?

To understand better these ethnic differences in injection, we examined other information from the DUF interview and test results. We suspected that white females may be more likely to abuse heroin or cocaine, drugs that are often injected. As Table 5 shows, we found that white females were twice as likely as black females (48% vs. 22%, $p < .001$) to report having been dependent on heroin. No differences were found with regard to dependence on cocaine, however. In spite of their greater dependence on heroin, white females were not more significantly likely to report having received drug abuse treatment (30% vs. 23%, ns).

These differences could have occurred if white arrestees had simply been more willing than black arrestees to report illicit behaviors to the interviewer. (We had attempted to minimize such a bias by ensuring that the ethnic composition of DUF interviewers was similar to that of the arrestees in each city.) We found, however, that the urine test results supported the findings from the interviews. White female arrestees were almost three times as likely to test positive for heroin than were black females (27% vs. 10%, $p < .001$). Black females were more likely to test positive for cocaine (60% vs. 47%, $p < .05$). However, we learned from the interviews that white female cocaine users were three times more likely to report a preference for injecting cocaine than were black female cocaine users (40% vs. 13%, respectively, $p < .001$). Black females who used cocaine said they typically preferred to smoke, freebase, or snort the drug.

Figure 3 shows the urine test results for heroin for black and white arrestees. In every city, white female arrestees were more likely to test positive for heroin. The largest differences were found in arrestees in Los Angeles, Phoenix and New Orleans, where white females were more than three times as likely to test positive for heroin than black females.

FIGURE 3
 PERCENT OF FEMALE ARRESTEES WHO TESTED POSITIVE FOR
 OPIATES, BY ETHNICITY



These findings suggest that the ethnic differences in injection are related both to a greater involvement of white females in heroin and a reluctance on the part of black females to inject drugs. Even when black females reported using cocaine, they tended to take the drug through routes other than injection. A similar finding of more intravenous drug use (of heroin) in white females than in black females has been reported in a study of females admitted to methadone maintenance programs and therapeutic communities in five cities (Moise et al. 1982).

Are white female arrestees more deviant than black female arrestees?

Some authors have suggested a concept of relative deviance that may explain why white female arrestees may be more serious drug abusers (Dembo and Shern 1982). According to the theory, persons who are more deviant from the norms of their social and cultural setting will exhibit more serious behavior problems and psychopathology (Kaufman 1978). Since white females are less likely to be arrested than black females, those who are arrested can be expected to be more deviant. While we cannot test this theory directly, we were able to compute a measure of the level of deviance.

Age of initiation of drug use is generally considered to be a strong correlate of deviance. The younger a person is when she begins to use drugs the more likely she is to proceed to dysfunctional drug abuse and other behavior problems. If white female

arrestees were more seriously involved with drugs we would expect them to have begun to use and inject drugs earlier. Table 6 shows this to be the case.

White females were likely to begin the use of alcohol, heroin, and marijuana about two years earlier than black arrestees. They began to use cocaine three years earlier than black arrestees. The median age of first drug injection was about four years earlier in white females than in black females. (The ages of onset for Hispanic females, not presented, were virtually identical to those of the black females.)

These findings, together with the urinalysis results offer strong support that white female arrestees are among the most serious drug abusers in the arrestee population. Their drug injection puts them at high risk for contracting and transmitting HIV. In the next section we look more closely at needle sharing behaviors in both male and female arrestees.

Needle sharing behaviors and AIDS

If a person reported injecting drugs, s/he was asked additional questions about needle sharing. We found few differences between male and female injectors with regard to sharing needles, although there were some regional differences (Table 7). Almost one half of male and female injectors in Los Angeles said that they currently share their needles with one or more persons. In the rest of the country the percentage was closer to 20-25%. New York male injectors were least likely to admit to sharing needles (5%), although our interviewers said that male arrestees were uncomfortable about this topic and probably underreported sharing.

The majority of both male and female arrestees who indicated sharing needles after the AIDS epidemic became known stated that they had changed their behaviors in some way because of AIDS. Almost all male sharers interviewed in New Orleans and New York indicated that they had changed their needle sharing behaviors. This did not necessarily imply that their altered behaviors were effective in reducing their vulnerability to AIDS, as we demonstrate below.

The interviewers recorded verbatim each respondent's explanation for why and how they had changed (or not changed) their behaviors as a result of AIDS. Several of these unedited comments appear in Table 8. While male and female arrestees claimed they were taking steps to avoid the disease, their answers underscored a number of

misconceptions regarding the disease. For example, the comment was frequently made that the person shared needles only with persons who did not look sick. This is an ineffective strategy for avoiding infection because HIV has a long incubation period and infected persons may have no symptoms for several years.

Responses from male and female arrestees frequently demonstrated a fear of AIDS and a desire to avoid infection. Arrestees and other criminal justice system detainees therefore are a receptive audience for education, prevention and treatment programs. An invaluable opportunity exists to correct their misconceptions about AIDS.

SUMMARY AND POLICY IMPLICATIONS

Summary

There is a critical need for the identification of persons who are likely to inject drugs so that they can be taught to limit the spread of AIDS. Results from the DUF program have indicated that more than 50% of the arrestees in the largest cities in the country test positive for illicit drugs. If many of these persons also inject drugs, society may be afforded a special opportunity to reach persons at high risk for AIDS.

New information from the DUF interview about drug injection and needle sharing in male and female arrestees in five cities was analyzed. The findings indicated that while illicit drug use is prevalent in all arrestees, females are more likely to test positive for injectable drugs like heroin or cocaine, and are more likely to report having injected drugs. By the time they passed age 30 about one half of the females had injected a drug. About one half of the females who dropped out of school had also injected drugs. A number of analyses were completed to examine the characteristics of female drug injectors.

Dramatic ethnic differences in injection were found in the females. White females were most likely to have injected drugs. This difference was partially explained by the fact that white females were more seriously involved with heroin. Differences in drugs used could not completely account for the ethnic differences in injection, however. Even though both black and white female arrestees appeared to be similarly involved with

cocaine, white women were far more likely to inject the drug.

Other researchers have found similar ethnic differences in injection in female drug abusers. One hypothesis is that white females who are involved with hard drugs or who are arrested in the United States tend to be more deviant. If white female arrestees were more deviant than other female arrestees, then we expected that they would have initiated drug use and injection at an earlier age. We found that white females did have an earlier age of onset of the use of all drugs looked at and began to inject drugs about four years earlier than did black females. Their apparent deviance, drug abuse and involvement in prostitution puts female arrestees, and especially white female arrestees, at unusually high risk for AIDS.

Needle sharing was reported by one quarter to one half of both male and female arrestees interviewed. The majority of male and female sharers did indicate, however, that they had changed their needle sharing behaviors as a result of the AIDS epidemic. Unfortunately, misperceptions about AIDS were common. Thus, some of the precautions that they were taking (like sharing only with someone who did not look sick) were ultimately ineffective and gave them a false sense of security. The sensitivity and responsiveness of the arrestees to the AIDS problem along with their apparent ignorance of the best methods to avoid the disease suggests that it might be possible to reduce the spread of AIDS by initiating education, prevention and treatment programs for arrestees.

Implications.

Although our findings come solely from arrestees, there is ample evidence that incarcerated persons and those released on probation or parole are simply a subset of the arrestee population with serious drug problems (Wish and Johnson 1986; Wish et al. 1986b). Thus, all persons detained or supervised by the criminal justice system should be considered to be at much greater risk of illicit drug use and AIDS than the general population.

While we did not test any of our samples of arrestees for the presence of antibodies to HIV, estimates of seropositivity rates in drug injectors are available from other sources. The rates vary considerably across the country from less than 5% of drug injectors in New Orleans and Los Angeles to over 50% for injectors in New York City

and northern New Jersey (Des Jarlais and Hunt 1988). Using the estimate of 50% of drug injectors in New York City testing seropositive, and DUF statistics showing that about 25% (19% of males and 36% of females) of all arrestees in New York have ever injected drugs (alternatively, 26% of males and 35% of females in New York City test positive for heroin), we estimate that at least 12,500 of the 100,000 persons arrested in New York City (Manhattan only) each year ($25\% \times 100,000 \times 50\%$) would test positive for HIV. (This may actually be an underestimate because the DUF program undersampled persons charged with drug offenses and an unknown percentage of arrestees refused to admit to injecting drugs.)

Because of the extreme seropositivity rates in drug injectors in New York City, the estimates above should not be directly applied to arrestees in other cities. (We do not know whether drug abusers in other cities will eventually develop rates of seropositivity similar to drug injectors in New York.) Mass screening programs of the general population of prison inmates across the country (results not available for New York) have generally reported rates of seropositivity below 3%, but one sample of "high risk" inmates (usually defined as homosexuals or drug injectors) in Houston found that 33% of those tested were seropositive (Hammett 1988). Consistent with our findings, epidemiological surveys of inmates in correctional facilities in Maryland between 1985 and 1987 found that females had twice the seropositivity rate than did males (15% vs. 7%). These rates of seropositivity in prison inmates are somewhat lower than we might have expected from the rates of drug injection that we have found in arrestees. As we suggest below, however, there are reasons to believe that inmate populations may contain fewer of the active street criminal drug abusers who show up repeatedly in the arrestee population.

By definition, criminal justice system detainees are readily accessible to societal efforts to modify the behaviors that increase their risk for AIDS. Unfortunately, the enormity of the opportunity for treating these persons contrasts greatly with the paucity of efforts devoted to this task.

To be sure, all state and federal prisons and most large city jails provide AIDS information and training (Hammett 1988). These institutions have been quick to respond to the AIDS epidemic because they have to house persons for long periods of time and are therefore more vulnerable to problems stemming from infected residents.

Thus, staff or inmate training programs are available in jails or prisons where persons are detained for some time.

The much larger population of arrestees and probationers who are typically released back into the community are less likely to receive AIDS information. In establishing the DUF program in the largest booking facilities in the country, staff have not seen a single program of AIDS education or counseling for arrestees. Arrestees in the major cities of this country tend to be housed for hours (before arraignment) in large pens with no attempts to intervene with drug abusers.

A recent survey of probation and parole departments in all fifty states has found that less than one half (about 40%) have education, prevention or information programs for persons being released to the community (Hunt 1988). Most of the departments with a program simply hand out public health or Red Cross brochures about AIDS that are not expressly tailored to the education level and needs of offenders returning to the community. The majority of these departments provide this limited information only to persons believed to have a high risk for AIDS (persons charged with sex offenses, known drug injectors, and homosexuals). And as we discuss below, this strategy would tend to miss many drug abusers (and their sexual partners) because criminal justice records and arrest or conviction charges are poor indicators of who is abusing drugs.

The survey researchers also found that while surveyed probation and parole departments expressed a "desperate" interest in providing expanded AIDS programs for releasees, they were hampered by inadequate funds and a lack of available trained personnel. The report recommended that mandatory AIDS training be provided for all staff and for all probationers and parolees (Hunt 1988).

By failing to focus sufficient resources on addressing the drug abuse and AIDS problem in arrestees and probationers, the country is losing an important opportunity to reach the largest pool of serious drug abusers entering the criminal justice system. Because of the extensive overcrowded conditions in the nation's jails, there is a deliberate attempt to detain as few arrestees as possible. Persons charged with many of the more common petty offenses committed by drug abusers (larcenies, lesser drug offenses and prostitution) are routinely released back to the community soon after arrest (pending trial), or if convicted, receive a fine, time served (the time already detained before disposition satisfies the sentence), or a term of probation (Johnson et al. 1985).

Some of these street criminals may be detained overnight in jails but rarely are sentenced to prison terms where most of the AIDS programs exist. It is this large group of arrestees and probationers, who are returning to their drug abusing friends and sexual partners, for whom AIDS education and drug abuse treatment is most crucial.

However, with one exception, systematic identification of drug abusing arrestees and referral to treatment is rare. (DUF, it should be remembered, is an anonymous program.) Only the District of Columbia has a fully operational program to test all arrestees for drug use by urinalysis. (Six participating jurisdictions are currently being funded by the Bureau of Justice Assistance to replicate the D.C. pretrial testing program and are at varying stages of development.) Persons who test positive are referred by the judge to urine monitoring and/or treatment programs as a condition of pretrial release (Carver 1986). Although probation (and parole) officers have the authority to order drug tests for persons they supervise, few departments have the resources to screen all persons for drug use. And without drug testing, most drug abusers in the criminal justice system avoid detection (Wish 1988).

Drug testing (nonanonymous programs) has the advantage of enabling the identification of persons to be referred to treatment programs or AIDS counseling, but is costly and takes time to develop. Still, there are a number of other relatively inexpensive strategies that can be rapidly adopted. Every person arrested or under the supervision of the criminal justice system could be presented with educational information about how to prevent AIDS. Posters informing persons about the risk behaviors for AIDS, and listing drug abuse treatment referral and AIDS information sources could be displayed in every police station, booking facility, probation and parole office, and detention center across the county. Credible videotapes about AIDS could be shown once an hour to the "captive audiences" in urban booking facilities. (If only a small subset of the detainees listened to the information, it would still be beneficial.) Clearly, this information will have to be drafted to account for persons' diverse reading levels and language problems. It has also been suggested that some of these programs be directed towards the spouses and sexual partners of probationers and parolees (Hunt 1988).

In view of their exceptional risk for drug injection and perinatal transmission of AIDS, female arrestees could receive individual counseling about how to avoid the disease.

If trained justice personnel are not available, local health departments could be requested to station trained personnel in central booking facilities. The relatively small number of females who are arrested, even in the largest cities, makes individual counseling a feasible approach.

Our findings also suggest that outreach and prevention programs both within and outside the criminal justice system should not be limited to members of minority groups. These programs should also target deviant white females who have been arrested or who are likely to be committing crimes or abusing drugs.

While further research is needed to determine which of the above strategies will be most effective, the magnitude of the drug abuse and AIDS problems in persons entering the criminal justice system presents a compelling case for immediate action.

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TABLE 1

**PERCENTAGE OF MALE AND FEMALE ARRESTEES WHO
 AGREED TO AN INTERVIEW AND PROVIDED A URINE
 SPECIMEN**

	<u>San Diego</u>		<u>Los Angeles</u>		<u>Phoenix</u>		<u>New Orleans</u>		<u>New York</u>	
(N approached)	<u>M</u> (231)	<u>E</u> (77)	<u>M</u> (278)	<u>E</u> (206)	<u>M</u> (205)	<u>E</u> (102)	<u>M</u> (199)	<u>E</u> (104)	<u>M</u> (247)	<u>E</u> (129)
Agreed to interview:	98%	99%	97%	98%	100%	100%	100%	99%	92%	89%
Percent of interviewees who gave a specimen:	84%	70%	81%	85%	95%	96%	94%	89%	90%	89%

TABLE 2

DEMOGRAPHIC AND CASE CHARACTERISTICS OF MALE AND FEMALE ARRESTEES

	<u>Males</u> (n=991)	<u>Females</u> (n= 516)
Age at arrest		
15-20	17	12
21-25	29	30
26-30	21	27
31-35	14	16
36+	<u>19</u>	<u>15</u>
	100%	100%
Ethnicity		
Black	41	45
White	29	35
Hispanic	28	18
Other	<u>2</u>	<u>2</u>
	100%	100%
Top charge at arrest		
Larceny	15	18
Drug sale/poss.	13	17
Burglary	13	6
Assault	10	7
Stolen property	10	4
Robbery	7	1
Weapons	4	**
Sex offense	3	22
Homicide/mans.	2	**
Other	<u>23</u>	<u>23</u>
	100%	100%
Current arrest is a felony:	76%	42%

TABLE 3**PERCENTAGE OF MALE AND FEMALE ARRESTEES WHO TESTED POSITIVE FOR DRUG USE**

	<u>DUF CITY</u>	<u>MALES</u>	<u>FEMALES</u>
Positive for any drug:	Los Angeles	69%	80%
	San Diego	75%	87%
	Phoenix	53%	69%
	New Orleans	72%	46%
	New York	79%	83%
	Positive for cocaine:	Los Angeles	46%
San Diego		44%	58%
Phoenix		21%	36%
New Orleans		45%	30%
New York		63%	70%
Positive for opiates:		Los Angeles	15%
	San Diego	24%	42%
	Phoenix	5%	14%
	New Orleans	6%	4%
	New York	26%	35%
	Positive for marijuana:	Los Angeles	28%
San Diego		44%	24%
Phoenix		42%	40%
New Orleans		48%	25%
New York		28%	25%

TABLE 4

CORRELATES OF INJECTION IN FEMALE ARRESTEES

Percent ever injected

Age at arrest

15-20	(60)	23%
21-25	(154)	31%
26-30	(139)	35%
31+	(154)	47%

Years of education:

9 or less	(82)	50%
10-11	(131)	37%
12	(172)	26%
13+	(111)	37%

Ethnicity:

White	(176)	55%
Hispanic	(90)	36%
Black	(225)	22%

Top Charge at Arrest:

Stolen property	(22)	50%
Sex offenses	(115)	40%
Burglary	(31)	39%
Larceny	(95)	36%
Drug sale/poss.	(87)	32%
Assault	(34)	18%
Other	(132)	36%

TABLE 5

**HEROIN AND COCAINE USE AND DEPENDENCE IN FEMALE
ARRESTEES, BY ETHNICITY**

	<u>Black</u> (n=225)	<u>White</u> (176)
<u>Self-reports:</u>		
Ever dependent on heroin:	22%	48%
Ever dependent on cocaine:	22%	23%
Ever received drug treatment:	23%	30%
 <u>Urine test at arrest:</u>		
Positive for heroin:	10%	27%
Positive for cocaine:	60%	47%

TABLE 6

**MEDIAN AGE OF ONSET OF DRUG USE AND INJECTION IN
BLACK AND WHITE FEMALE ARRESTEES**

(Arrestees from five DUF sites)

	<u>White Females</u>	<u>Black Females</u>
First tried marijuana	13+	15+
First tried alcohol	14+	16+
First tried heroin	17+	19
First injected	17+	21+
First tried cocaine	18+	21+

TABLE 7

NEEDLE SHARING BEHAVIOR IN MALE AND FEMALE DRUG INJECTORS

	<u>Los Angeles</u>		<u>San Diego</u>		<u>Phoenix</u>		<u>New Orleans</u>		<u>New York</u>	
	<u>M</u>	<u>E</u>	<u>M</u>	<u>E</u>	<u>M</u>	<u>E</u>	<u>M</u>	<u>E</u>	<u>M</u>	<u>E</u>
% of injectors who currently share:	47%	50%	27%	26%	37%	32%	23%	18%	5%	24%
% of sharers who changed behavior because of AIDS:	78%	68%	47%	59%	63%	76%	90%	78%	95%	50%

TABLE 8

HOW HAS AIDS CHANGED YOUR NEEDLE SHARING BEHAVIOR?

(Unedited responses from arrestees in five cities)

Males

"Don't share needles with anyone who partakes in homosexual activities." (Los Angeles - Id#3228)

"You can tell if a person is clean and keeps themselves together. Don't share with unclean people." (Los Angeles - Id#3208)

If sharing, cleans with water - usually uses needle first. (San Diego - Id#850)

Cleans with more care - bleach; shares less - change works more often. (San Diego - Id#804)

"Aids has caused me to slow down on needle sharing, but not stop completely." (Phoenix - Id#209)

Sharing is.. "dependent upon specific circumstances. If necessary, will share." (Phoenix - Id#102)

"I shared my works because we only had one, and I just take a chance and hope not to get aids. As many as five people share the same needle. There is no limit to the amount of people that can use the same needle." (New Orleans - Id#577)

"I never worry about getting aids because of using the same needles with my friends." (New Orleans - Id#588)

"Only share with people I know or in case of emergency." (New York - Id#3034)

Shares... "a little, still shares with friends." (New York - Id#3043)

Females

"I don't think I can get it. I don't think the people I do it with have it." (Los Angeles - Id#4049)

"Don't share as much. Share with just one person." Cleans with alcohol. (Los Angeles - Id#4003)

Has found it difficult to get needles. "Use whatever needles I can find." Aware of aids and still shares. (San Diego - Id#2041)

"Only inject by myself. Before shared with friends". (San Diego - Id#2085)

"Needles are easier to buy so there is no needle sharing at present". (Phoenix - Id#262)

"Quit sharing needles due to aids scare." (Phoenix - Id#294)

"It doesn't matter if I share them or not as long as I get my drugs." (New Orleans - Id#594)

"Because I only had a few needles so we shared. I didn't want to sit there and see everyone else doing it." (New Orleans - Id#703)

"I only share with one person - my boyfriend, and he is clean." (New York - Id#3161)

"I share because there are no works at the gallery." (New York - Id#3290)