

# THE HOP2 STUDY

## BASELINE DESCRIPTIVE RESULTS

### **The Prevention & Health Service Needs of HIV Positive Individuals in the San Francisco County Jail System**



**San Francisco Department of Public Health  
AIDS Office  
Forensic AIDS Project**



*CONTINUUM*  
**Continuum HIV Day Services**

**2005**



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# BACKGROUND

## The Homebase Outcome Program Evaluation [HOPE] Study

In 1999 the Centers for Disease Control and Prevention and the Health Resources and Services Administration jointly funded seven health departments to address the HIV prevention and health service needs of inmates in jails, prisons, and juvenile facilities throughout the United States. As part of a California initiative, a collaborative group of representatives from Continuum HIV Adult Day Services, the San Francisco Department of Public Health Forensic AIDS Project, and the Department of Public Health AIDS Office developed an enhanced discharge planning and case management program for HIV-positive inmates in the San Francisco County Jail System.

The San Francisco Department of Public Health AIDS Office obtained additional funds from the City and County of San Francisco, the California State Office of AIDS and the Centers for Disease Control and Prevention to evaluate this enhanced intervention. Representatives from the AIDS Office and Continuum collaboratively designed and implemented a randomized control trial (the Homebase Outcome Program Evaluation [HOPE] study) to determine whether the enhanced intervention had an effect on:

- Post-release service utilization
- HIV medication adherence
- Sexual and drug risk behaviors
- Re-incarceration.

This report summarizes the baseline data that was collected from all participants prior to random assignment, the enhanced intervention, and post-release follow-up.

# METHODS

Medical providers from Forensic AIDS Project approached all HIV-positive inmates to determine interest in the intervention and study. The names of interested individuals were forwarded to HOPE study staff for eligibility confirmation.

To be eligible for study and intervention participation, individuals had to:

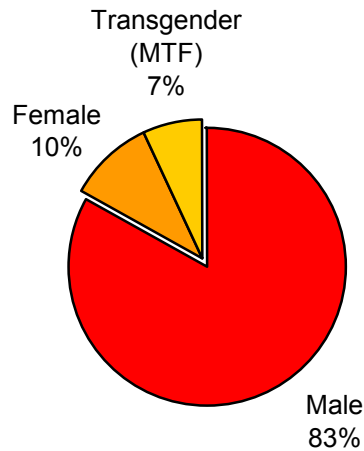
- 1) Be HIV-positive
- 2) Be 18 years of age or older
- 3) Have at least two weeks of jail time remaining
- 4) Be able to consent and interview in English or Spanish
- 5) Not have a planned transfer to prison or another county jail
- 6) Not have a psychological condition so extreme that they would not be able to participate in a post-release community intervention.

Between April 10, 2001 and June 30, 2003, a medical provider approached 492 HIV-positive inmates. Of these, 68 (14%) declined participation, 156 (32%) were ineligible due to having less than two weeks of jail time remaining and/or a planned transfer to prison or another county jail, 7 (1%) were ineligible due to an extreme psychological condition, and 261 (53%) were eligible and participated in the baseline interview. There were no significant differences in the demographic characteristics of participants and non-participants.

# SOEIOBEOERAPHICS

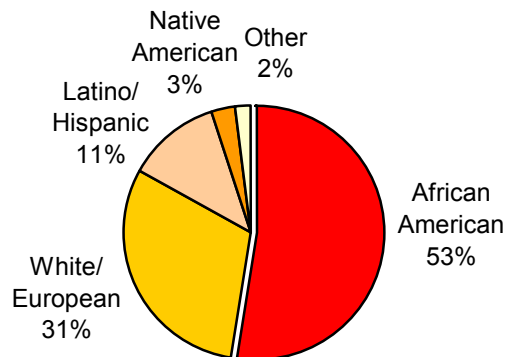
Of the 261 inmates enrolled in the study, 83% were male, 10% were female, and 7% were transgendered, male-to-female (Figure 1). The mean age of the sample population was 40.1 years (range 21-62).

**Figure 1. Gender**



As shown in Figure 2, over half of the participants self-identified as African-American, almost a third identified as White/European, and 11% identified as Latino or Hispanic.

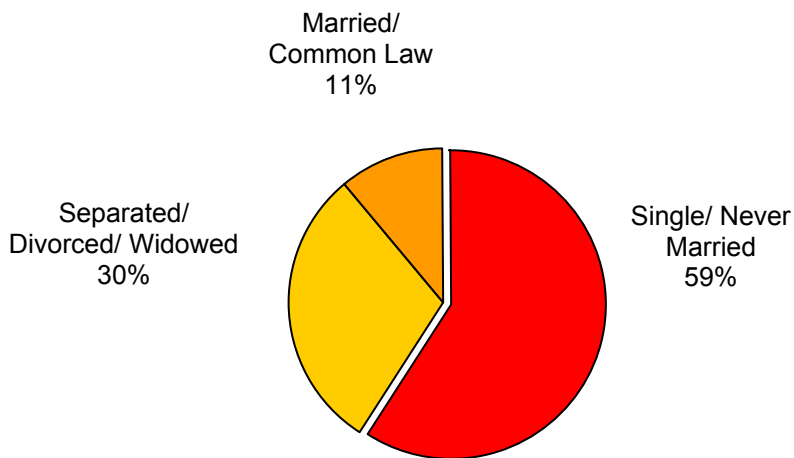
**Figure 2. Race/ Ethnicity <sup>1</sup>**



<sup>1</sup> Other category includes Asian (1), Pacific Islander (1), Creole (1), and French (1)

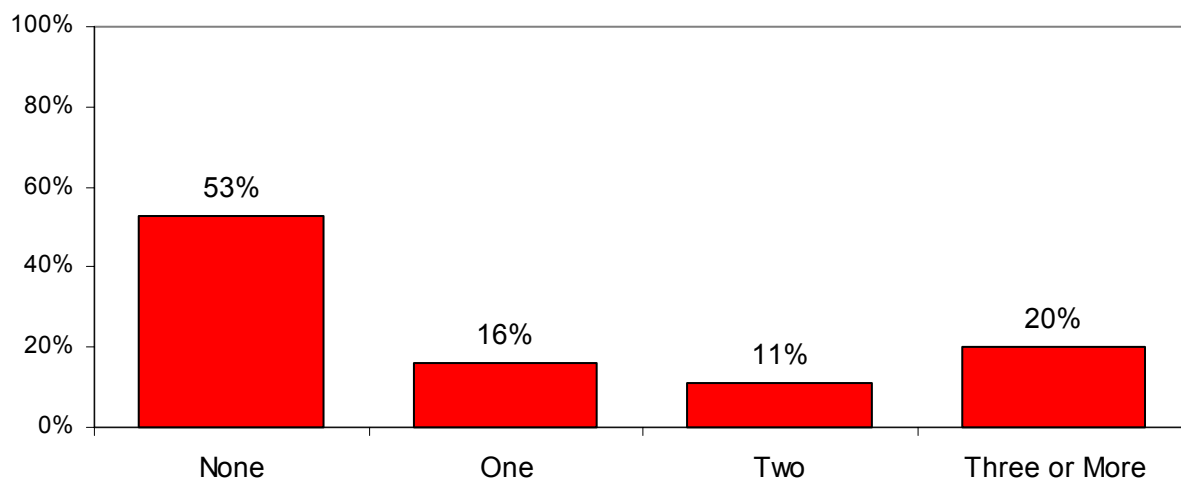
Fifty-seven percent of participants identified as heterosexual/straight, 20% as homosexual/gay, 18% as bisexual, and 4% as “other” such as asexual. As shown in Figure 3, 59% of participants were single or never married; while only 11% were legally married or in a common law partnership.

**Figure 3. Marital Status**



As shown in Figure 4, almost half of the participants (48%) had at least one child; 20% had 3 or more children.

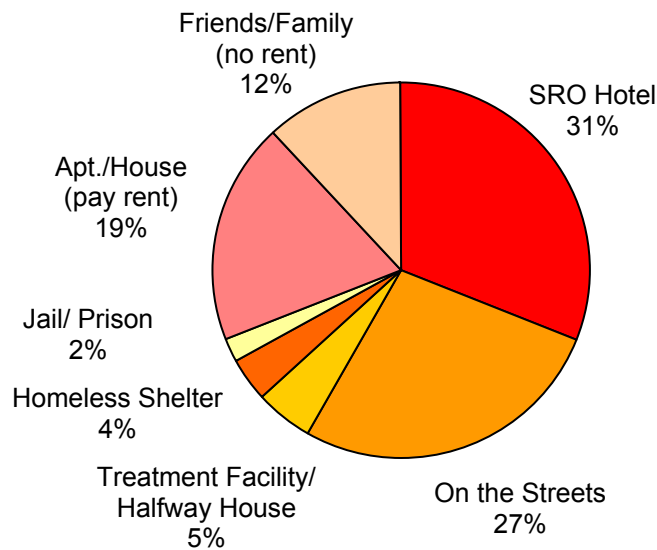
**Figure 4. Number of Children**





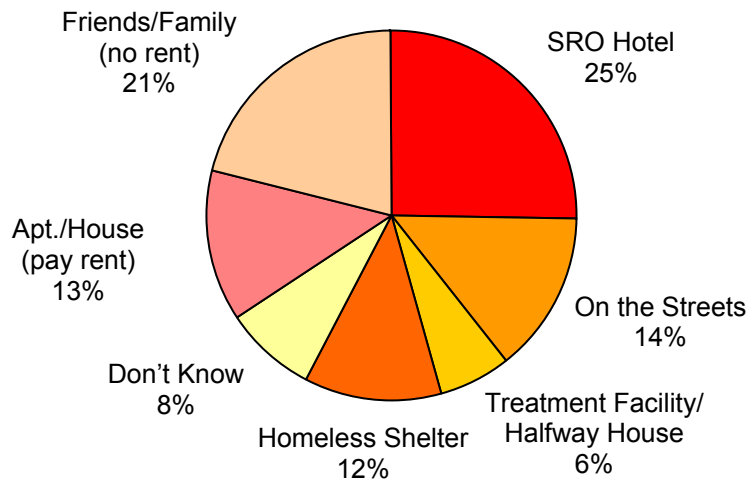
Sixty-nine percent of the sample primarily lived in unstable housing during the month before incarceration (an SRO, the streets, a homeless shelter, jail/prison, treatment facility, halfway house). In addition, staying with friends or family without paying rent could be considered unstable for some participants (Figure 5).

**Figure 5. Primary Living Situation—Month Before Incarceration**



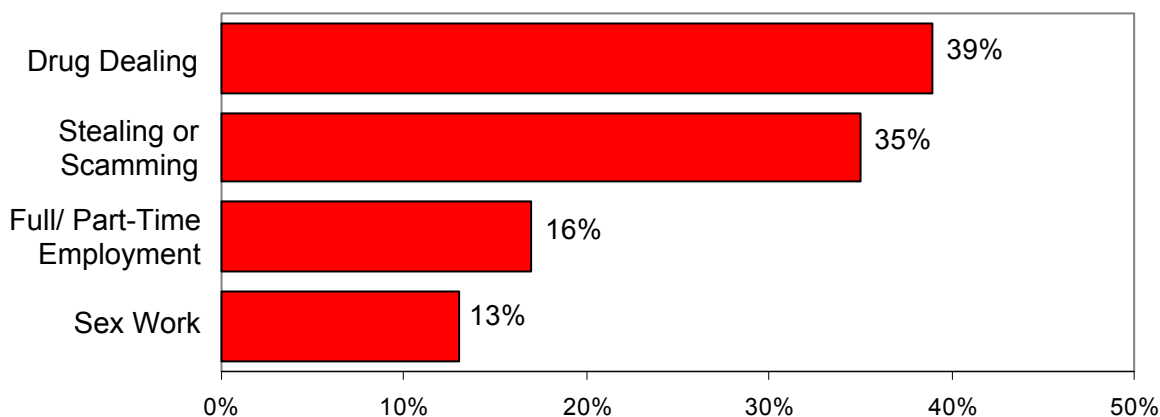
When asked where they would stay if they were released that day, only 34% thought they could find stable housing (staying with friends/family or in their own apartment/house) (Figure 6).

**Figure 6. Where Stay If Released That Day**



Thirty-six percent of participants had not completed high school or earned a graduate equivalent degree (GED), 37% had a high school or GED degree, and 27% had some college education or a college degree. As shown in Figure 7, the main sources of income the month before incarceration (non-mutually exclusive) were drug dealing and stealing; only 16% had part or full-time legal employment. The median monthly income, including all legal work, illegal work, and benefits (after taxes) was \$900.

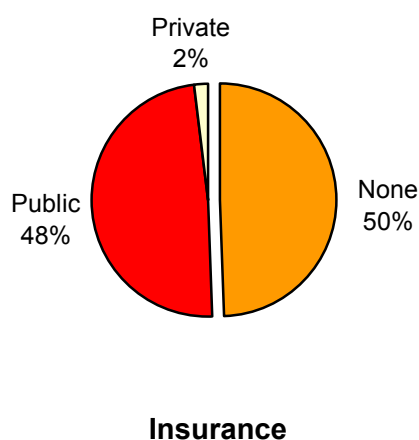
**Figure 7. Main Source of Income—Month Before Incarceration <sup>1</sup>**



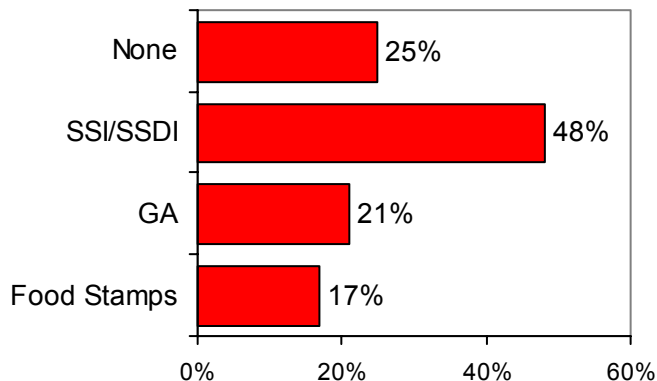
<sup>1</sup> Multiple Responses Possible

Despite the low monthly income and lack of employment, 25% of participants did not receive benefits during the month before incarceration and 49% did not have any form of health insurance (Figures 8 and 9).

**Figures 8 and 9. Health Insurance and Financial Benefits <sup>1</sup>  
Month Before Incarceration**



**Insurance**



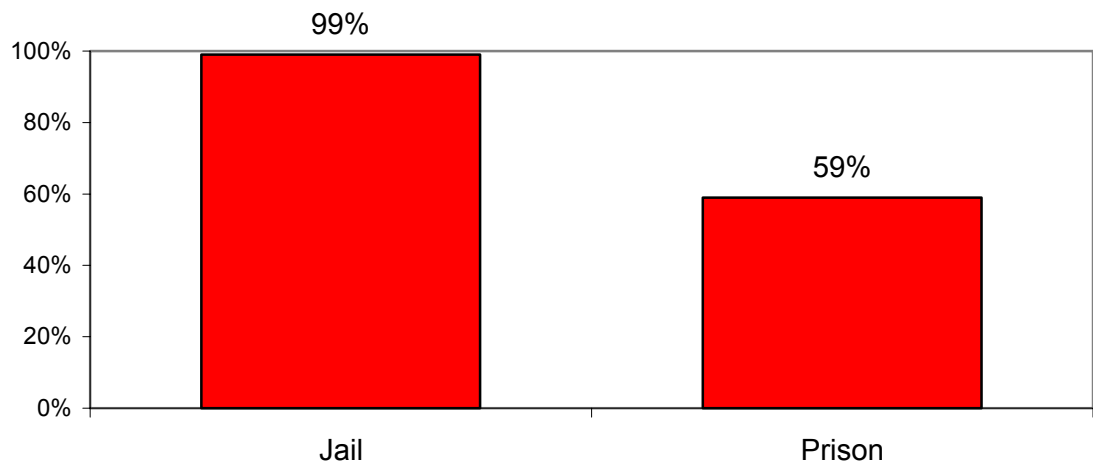
**Benefits**

<sup>1</sup> Multiple responses possible.

# INCARCERATION HISTORY

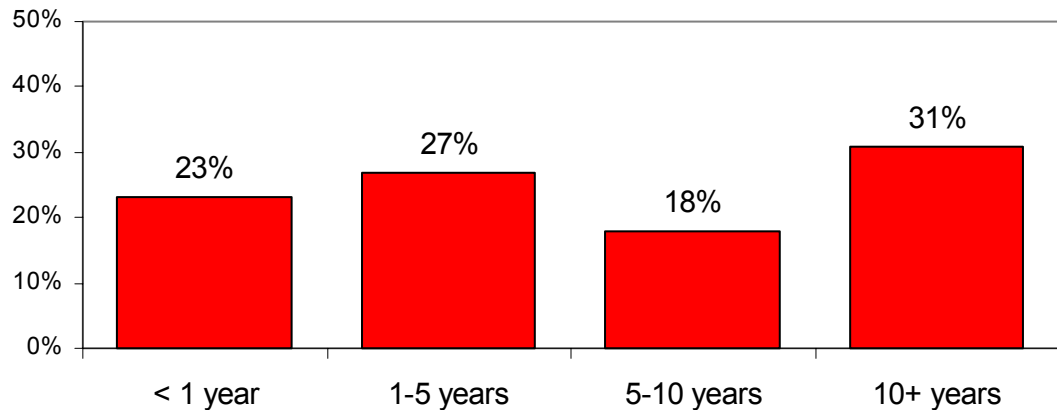
As shown in Figure 10, almost all participants had previously been incarcerated in jail and 59% had been incarcerated in prison.

**Figure 10. History of Jail and Prison Incarceration**



About half the sample had been incarcerated over 5 years (Figure 11). Fifty-eight percent were currently on probation and 11% on parole.

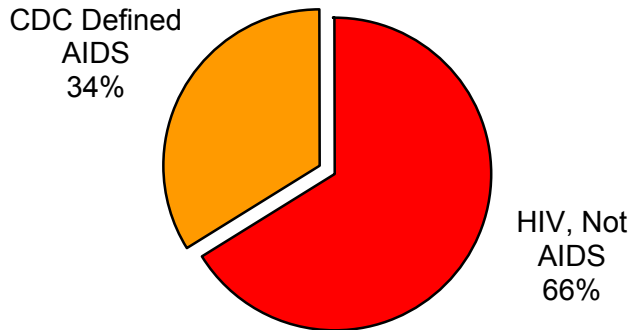
**Figure 11. Lifetime Incarceration**



# HIV/AIDS STATUS AND SERVICE USE

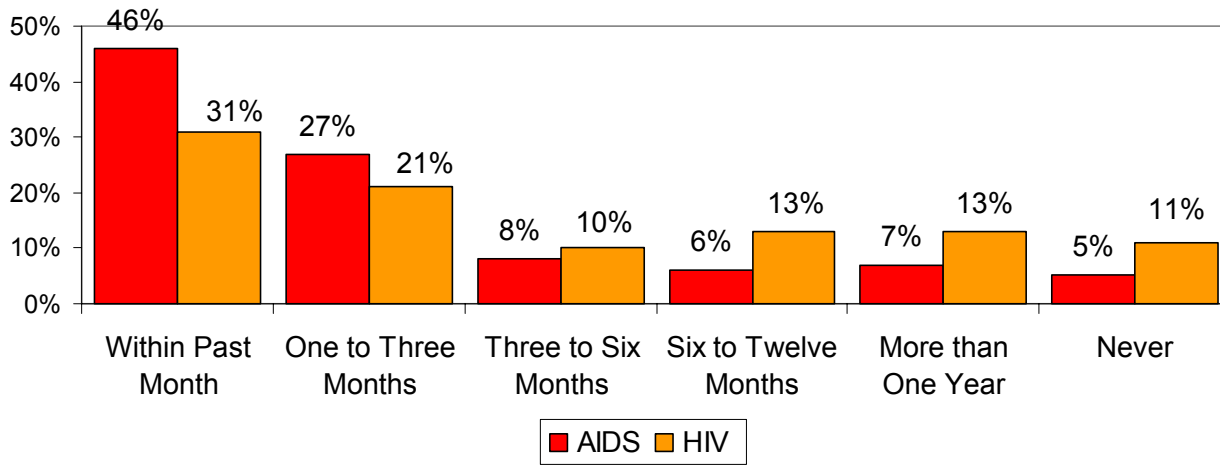
Just over one third of the sample had a CDC-defined AIDS diagnosis (Figure 12).

**Figure 12. HIV / AIDS Status**



Five percent of participants (n=12) tested positive for HIV for the first time during their current incarceration. Over three quarters of participants with an AIDS diagnosis and about half of those living with HIV had seen a community HIV health care provider within three months of their current incarceration. However, 12% of participants with AIDS and 24% living with HIV had not received care for a year or longer (Figure 13).

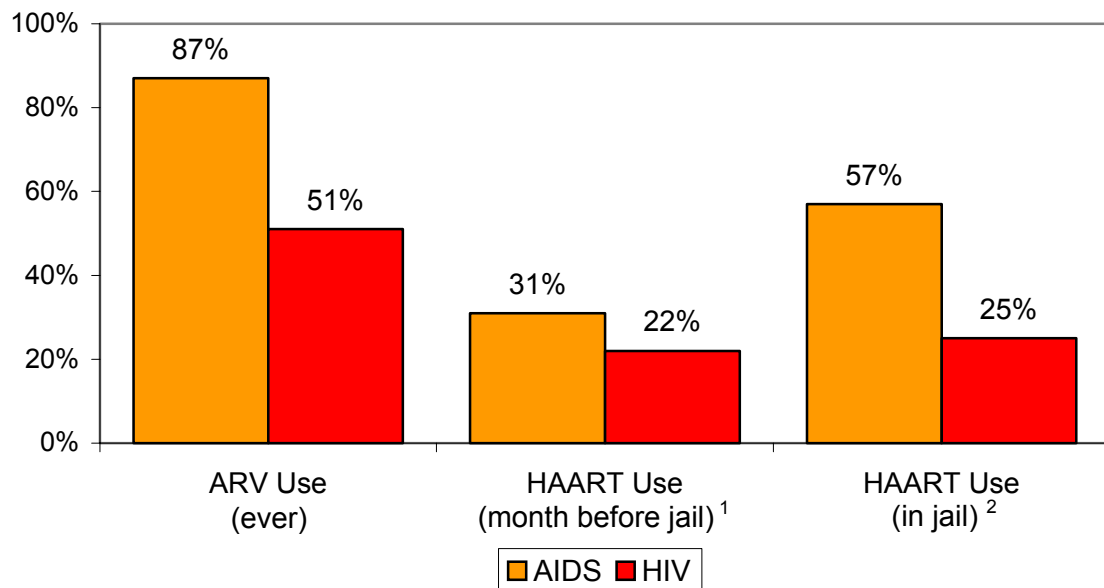
**Figure 13. Time Since Last HIV Medical Care in the Community <sup>1</sup>**



<sup>1</sup> N = 243 (12 participants tested positive during current incarceration; 6 missing)

Just over half of the participants with HIV and 87% of those with an AIDS diagnosis had taken HIV antiretroviral therapies in the past, however; only 22% of those with HIV and 31% with AIDS reported the use of highly active antiretroviral therapy (HAART) during the month before coming to jail. The proportion of participants with an AIDS diagnosis taking HAART increased once they were in jail, but it remained similar for those with HIV (Figure 14).

**Figure 14. Antiretroviral Medication Use— Ever, Month Before Incarceration, While Incarcerated**



<sup>1</sup> N = 244 (12 participants tested positive during current incarceration; 5 missing)

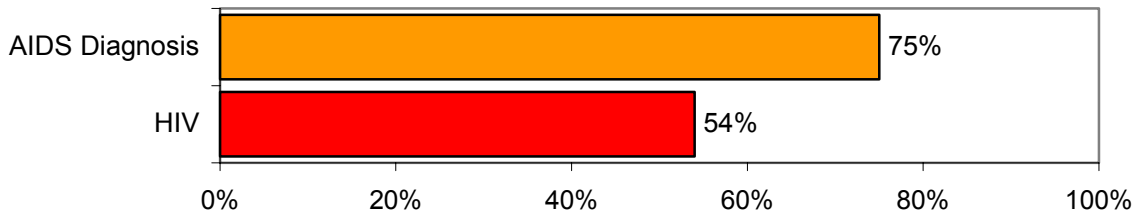
<sup>2</sup> N = 260 (1 missing)

Fifty-eight percent of participants living with HIV and 65% with an AIDS diagnosis who had a history of taking antiretrovirals were no longer taking them the month before incarceration. The top non-mutually exclusive reasons participants listed for stopping antiretroviral therapy (n=91) were:

- Problems with timing, too many pills, too difficult (27%)
- Side effects (24%)
- Provider advised stopping (19%)
- Drug use (16%)
- Busy with other things (16%)
- Drugs toxic or harmful (12%)
- Financial barriers (too expensive, unable to get ADAP, could not get refills) (12%).

Just over half of those with HIV and 75% with an AIDS diagnosis were enrolled in ADAP or Medicaid ensuring financial coverage of antiretroviral therapy and other drugs during the month before incarceration (Figure 15).

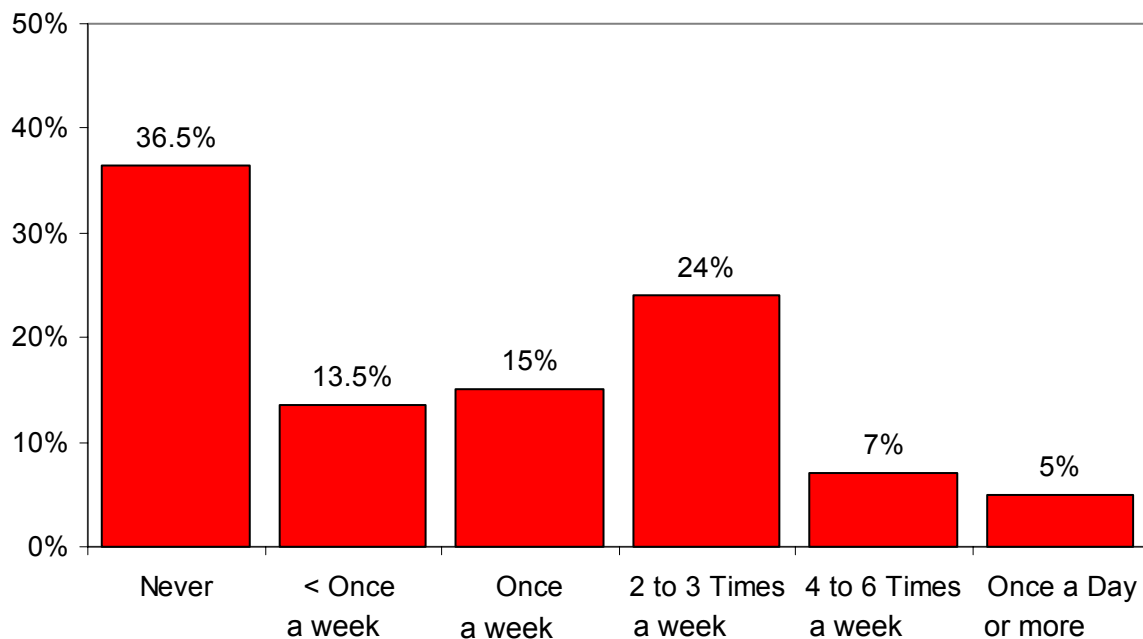
**Figure 15. ADAP or Medicaid/MediCal Medication Benefits—  
Month Before Incarceration <sup>1</sup>**



<sup>1</sup> N = 249 (12 participants tested positive during current incarceration)

Among participants who were on HAART during the month before jail, 36% reported that they never missed a dose and 14% missed a dose or did not take a complete dose less than once a week (Figure 16).

**Figure 16. HIV Medication Adherence (Missed or Incomplete Doses)—  
Month Before Incarceration <sup>1</sup>**

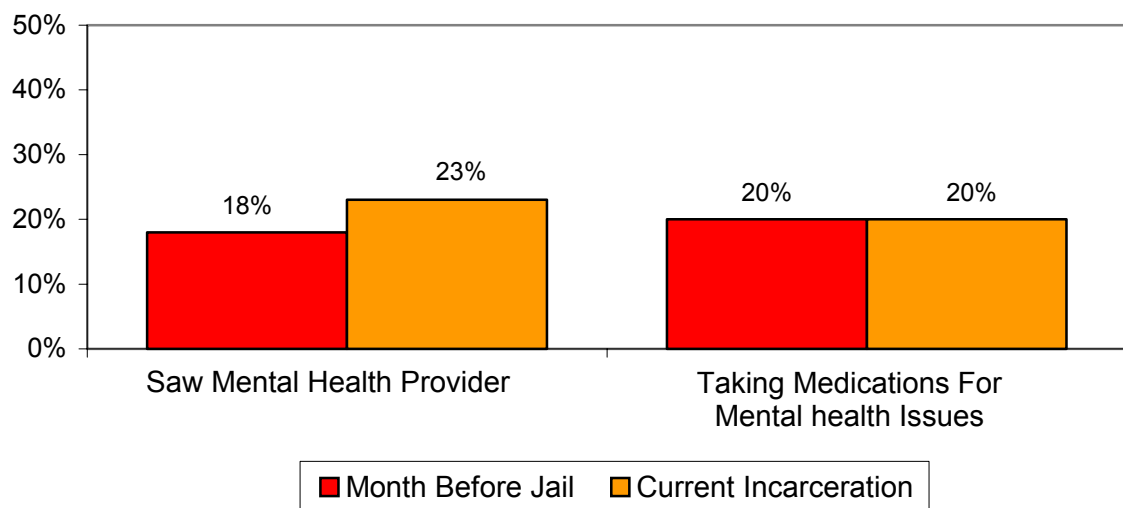


<sup>1</sup> Among those on HAART during the month before incarceration (N = 59); missing 2

# MENTAL HEALTH

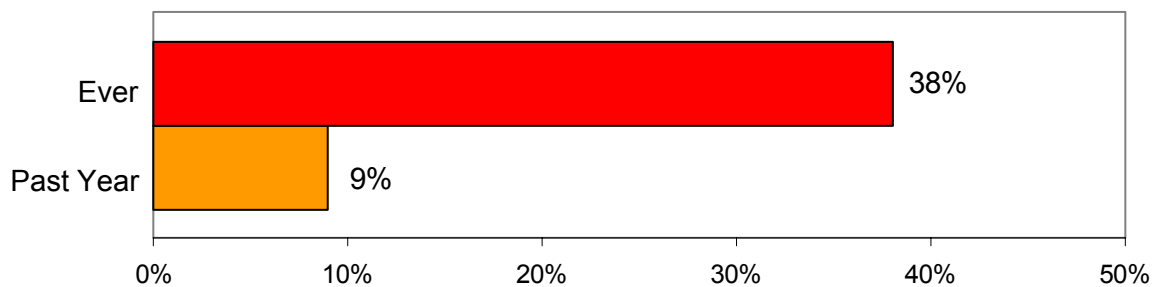
As shown in Figure 17, about one fifth of the sample saw a mental health provider in the community the month before jail and during their current incarceration. A similar proportion took medications for a mental health condition in the community and in jail. As would be expected with an incarcerated population, 80% received a score on the Center for Epidemiologic Studies Depression Scale (CES-D) indicative of depression in the past seven days (CES-D  $\geq$  16).

**Figure 17. Mental Health Service Use**



Thirty-eight percent of participants had a history of attempting suicide and 9% attempted suicide in the past year (Figure 18). The past suicide attempts were typically serious as 60% resulted in injury or illness, 72% resulted in going to a doctor or emergency room, and 60% resulted in hospital admission.

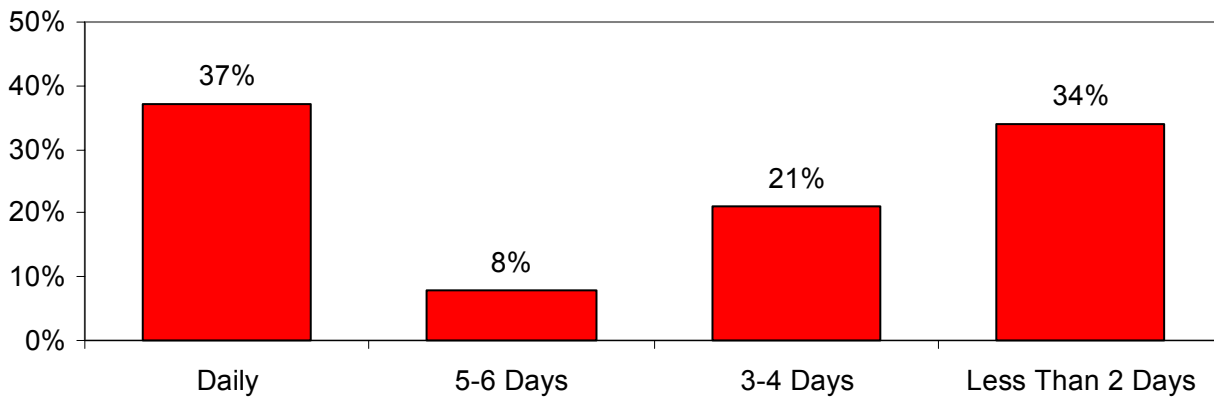
**Figure 18. Attempted Suicide (Lifetime & Past Year)**



# ALCOHOL & DRUG USE

Fifty-one percent consumed alcohol during the month before incarceration. As shown in Figure 20, 37% of participants who consumed alcohol reported drinking every day. The median number of drinks consumed on an average day was 6 (range = 1-49).

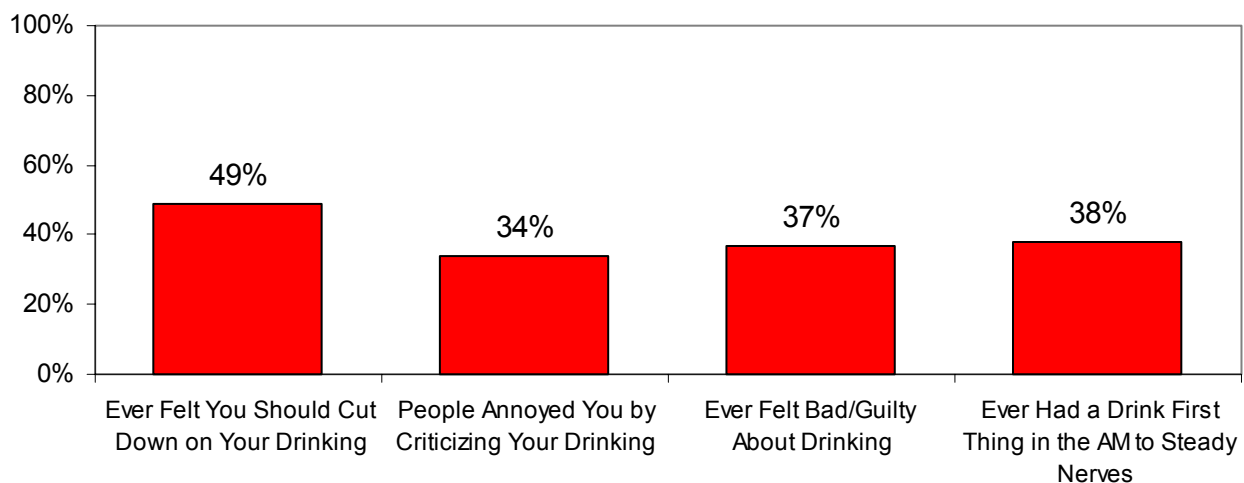
**Figure 19. Weekly Alcohol Consumption <sup>1</sup>**



<sup>1</sup> Among those who reported alcohol use during the month before incarceration (N= 134)

The overall responses to the CAGE Alcohol Screening Questionnaire for alcohol dependence are shown in Figure 20. Forty-four percent of participants answered yes to two or more questions indicating a past or current problem with alcohol.

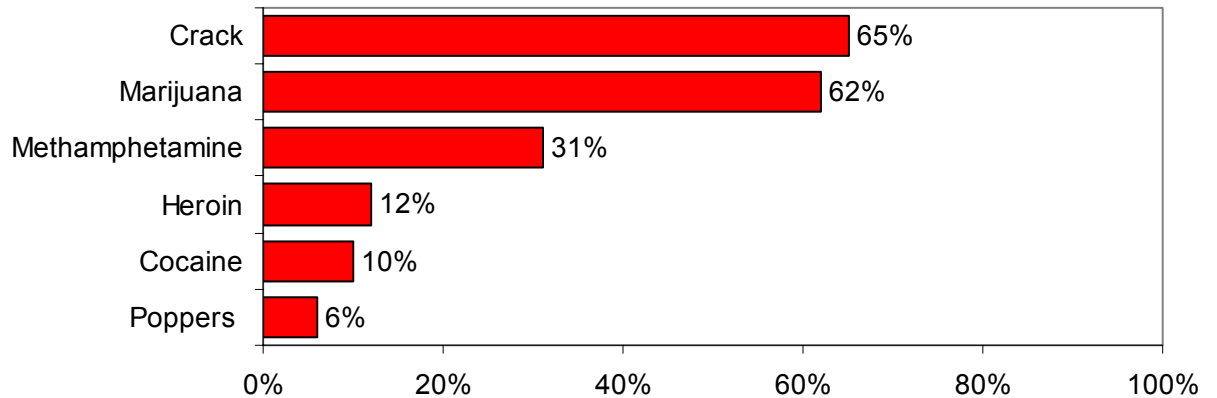
**Figure 20. CAGE Alcohol Dependence Screening**





Eighty-four percent of participants (n = 218) reported non-injection drug use the month before jail. Among non-injection drug users, the most commonly used drugs used were crack (65%), marijuana (62%), and methamphetamine (31%) (Figure 21).

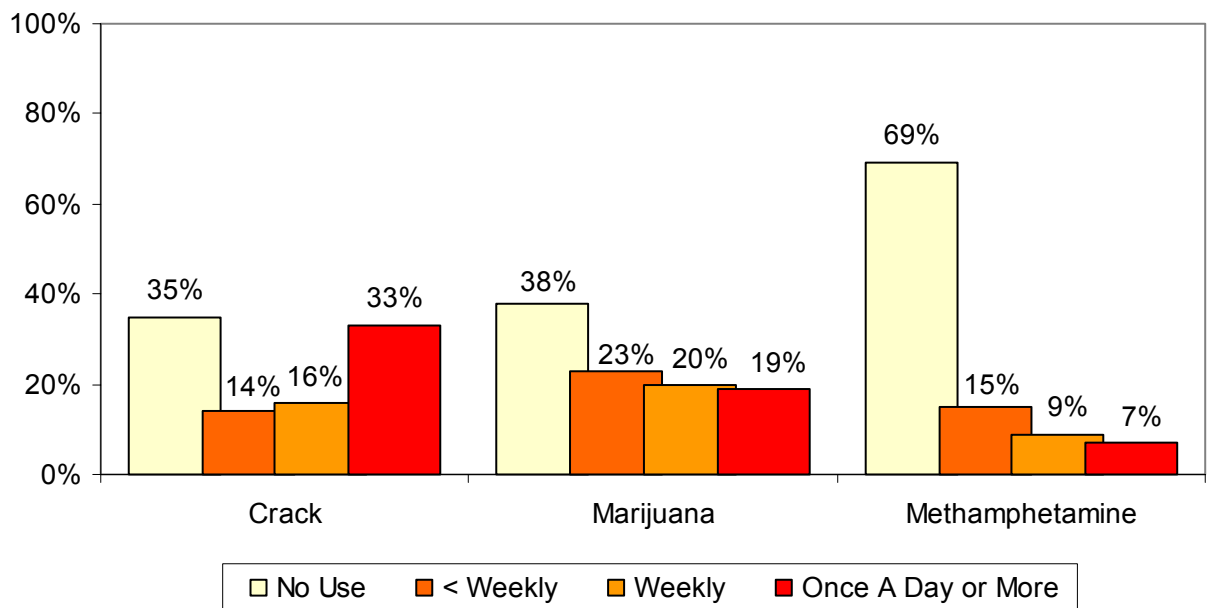
**Figure 21. Non-Injection Drug Use— Month Before Incarceration <sup>1</sup>**



<sup>1</sup> Among those who reported non-injection drug use during the month before incarceration (N= 218)

As shown in figure 22, very frequent drug use (once a day or more) was reported for crack (33%), marijuana (19%), and methamphetamine (7%).

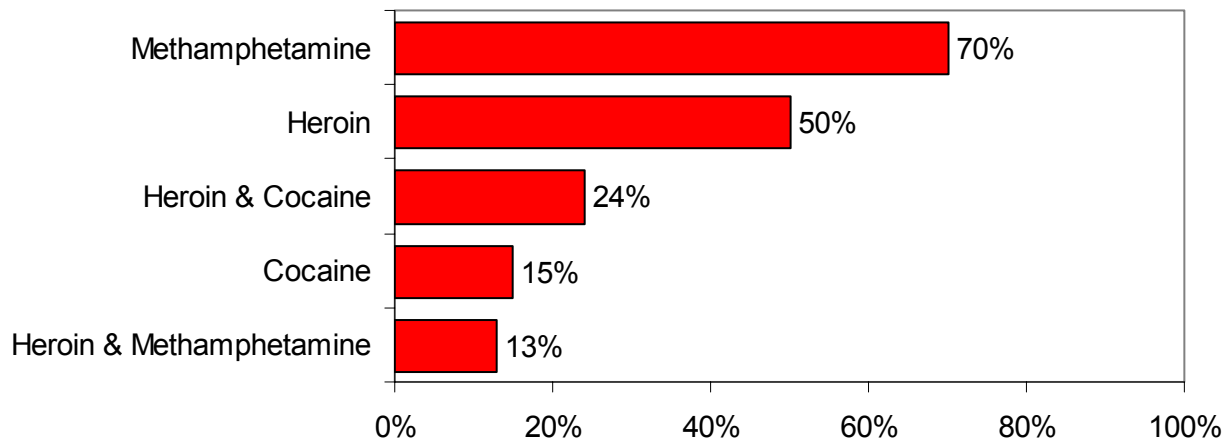
**Figure 22. Frequency of Drug Use— Month Before Incarceration <sup>1</sup>**



<sup>1</sup> Among those who reported non-injection drug use during the month before incarceration (N= 218)

Half of the sample (n = 131) reported injection drug use during the month before jail. Most injection drug users injected methamphetamine (70%) and heroin (50%) (Figure 23).

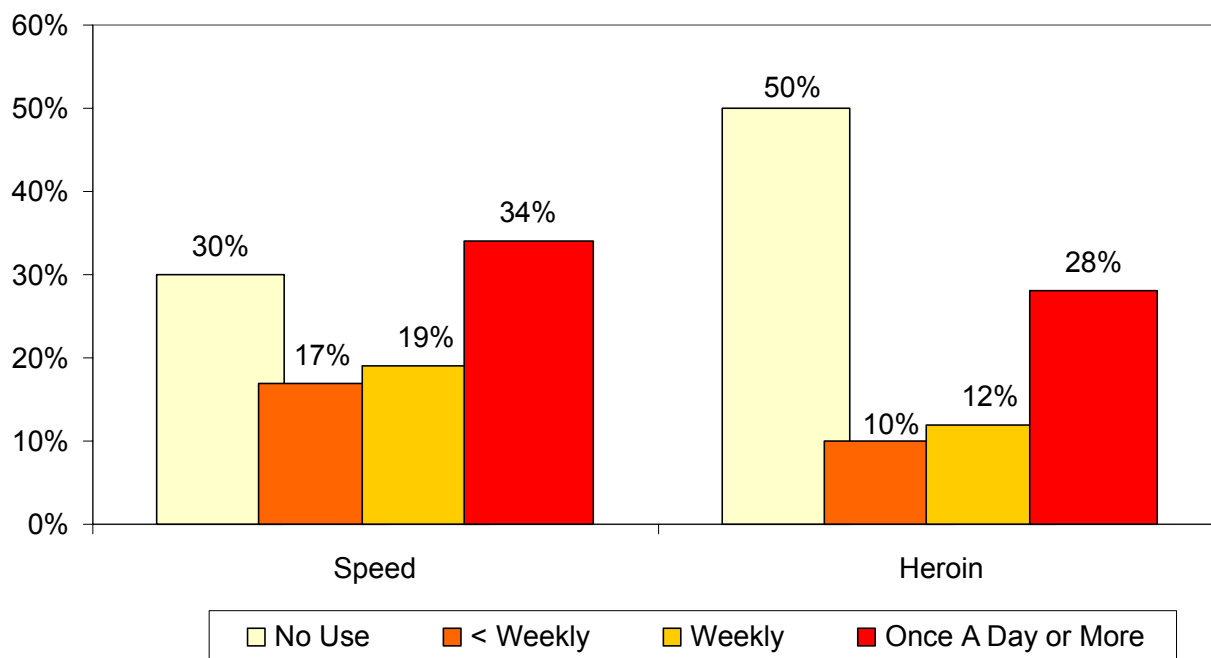
**Figure 23. Injection Drug Use— Month Before Incarceration <sup>1</sup>**



<sup>1</sup> Among those reporting injection drug use (N=131)

As shown in Figure 24, about one third of injection drug users injected methamphetamine once a day or more and 28% injected heroin once a day or more.

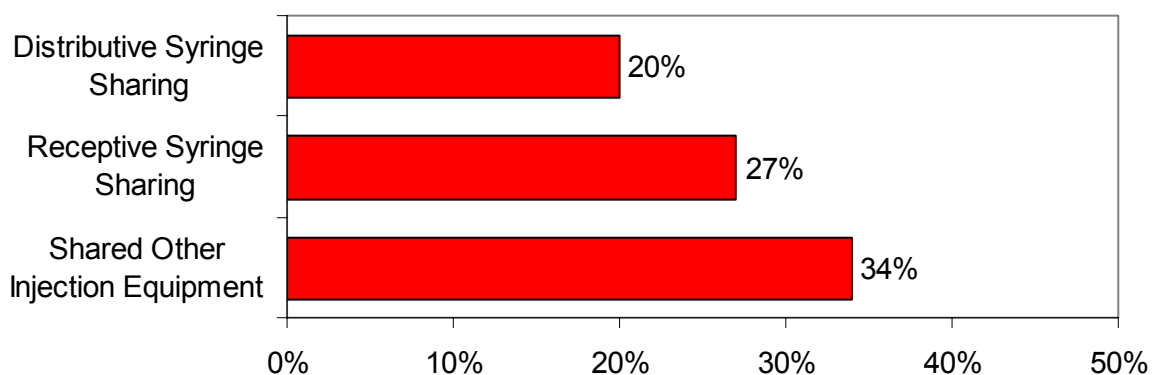
**Figure 24. Frequency of Injection Drug Use— Month Before Jail <sup>1</sup>**



<sup>1</sup> Among those reporting injection drug use (N=131)

Among those who injected drugs the month before incarceration, 20% engaged in distributive needle sharing (someone using a syringe after they had used it), 27% in receptive needle sharing (using a syringe after someone else), and 34% shared other injection equipment such as a cooker, filter/cotton, or water (Figure 25). Sixty-four percent of injection drug users obtained clean syringes from a needle exchange program the month before incarceration; the median number of times that these participants went to the site was 4 (range = 1-30). In addition, 8% of the sample obtained clean syringes through secondary needle exchange.

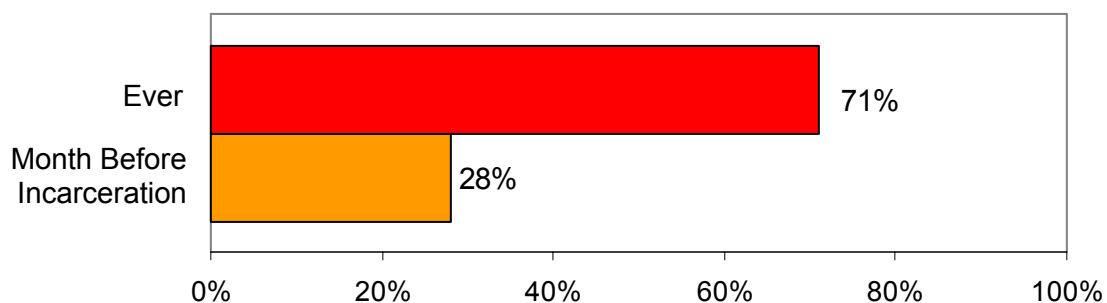
**Figure 25. Injection Drug Use Risk Behaviors <sup>1</sup>**



<sup>1</sup> Among those reporting injection drug use (N=131)

Nine percent of the sample reported an alcohol or drug overdose requiring medical assistance during the month before incarceration. Almost three quarters (71%) of participants had a history of alcohol or drug treatment and 28% had been in treatment the month before incarceration (Figure 26). Over half (57%) of the participants not in treatment the month before jail felt they needed treatment.

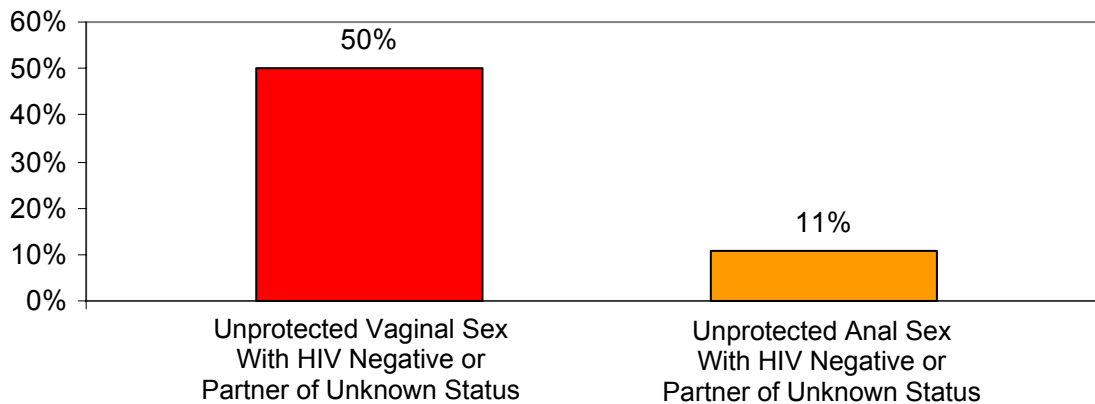
**Figure 26. Alcohol and Drug Treatment**



# SEXUAL BEHAVIORS

Two thirds (n=18) of the 27 female participants had sex with a male partner the month before incarceration; 50% of this group had vaginal sex without using a condom with an HIV-negative partner or partner of unknown HIV status (Figure 27). The number of females reporting sex with other females (n=5) was too small to assess sexual behaviors.

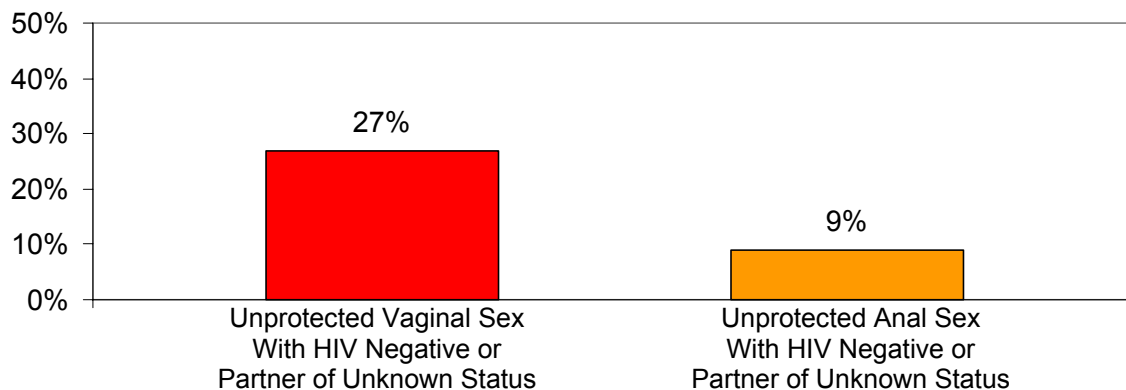
**Figure 27. Females Who Had Sex With Males—Month Before Jail <sup>1</sup>**



<sup>1</sup> Among females who had sex with males in the month prior to being incarcerated (n=18).

Fifty-two percent of male participants (n=113) had sex with a female during the month before jail; 27% of this group had unprotected vaginal sex and 9% had unprotected anal sex with an HIV-negative female or female partner of unknown HIV status (Figure 28).

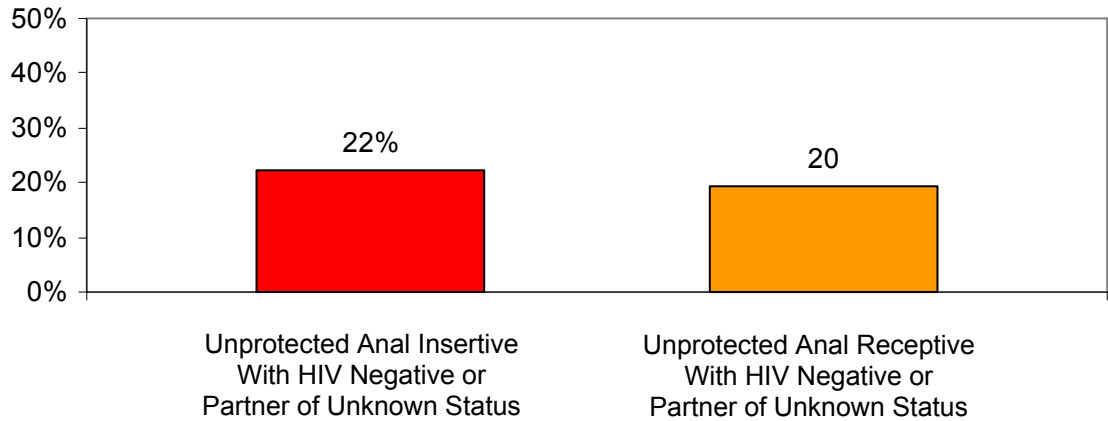
**Figure 28. HIV Sexual Risk: Males Who Had Sex With Females—Month Before Jail <sup>1</sup>**



<sup>1</sup> Among males who had sex with females in the month prior to being incarcerated (n=113)

Thirty percent of the male participants (n=65) had sex with another male the month before incarceration, of whom, 22% reported unprotected insertive anal sex with an HIV-negative partner or partner of unknown HIV status and 20% had unprotected receptive anal sex with a negative partner or partner of unknown HIV status (Figure 29). The transgender sample was too small to assess individual sexual risk behaviors.

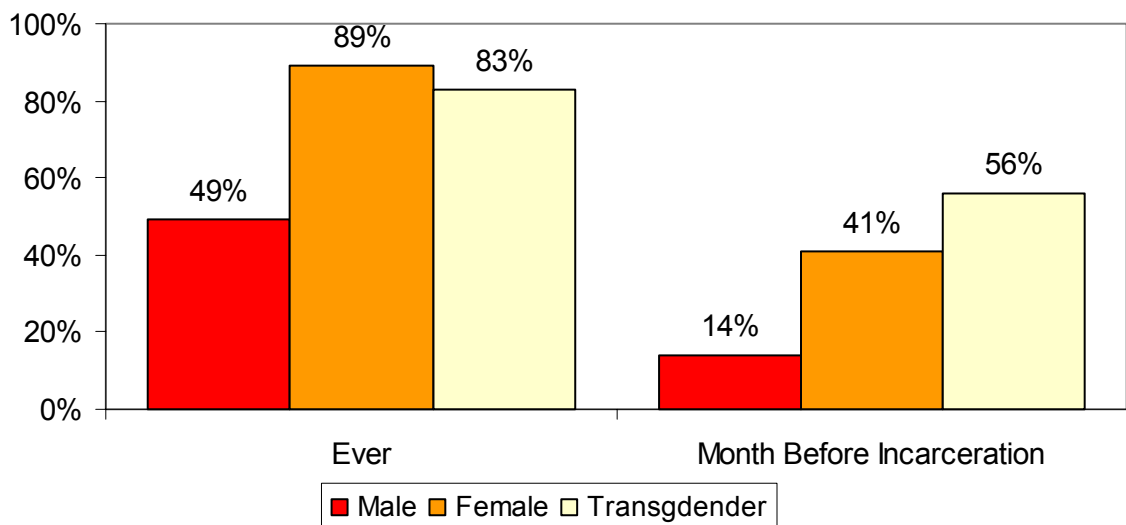
**Figure 29. HIV Sexual Risk: Males Who Had Sex With Males—  
Month Before Jail <sup>1</sup>**



<sup>1</sup> Among males who had sex with males in the month prior to being incarcerated (n=65)

As shown in Figure 30, female and transgendered participants were more likely than male participants to report having sex in exchange for money, drugs, or shelter.

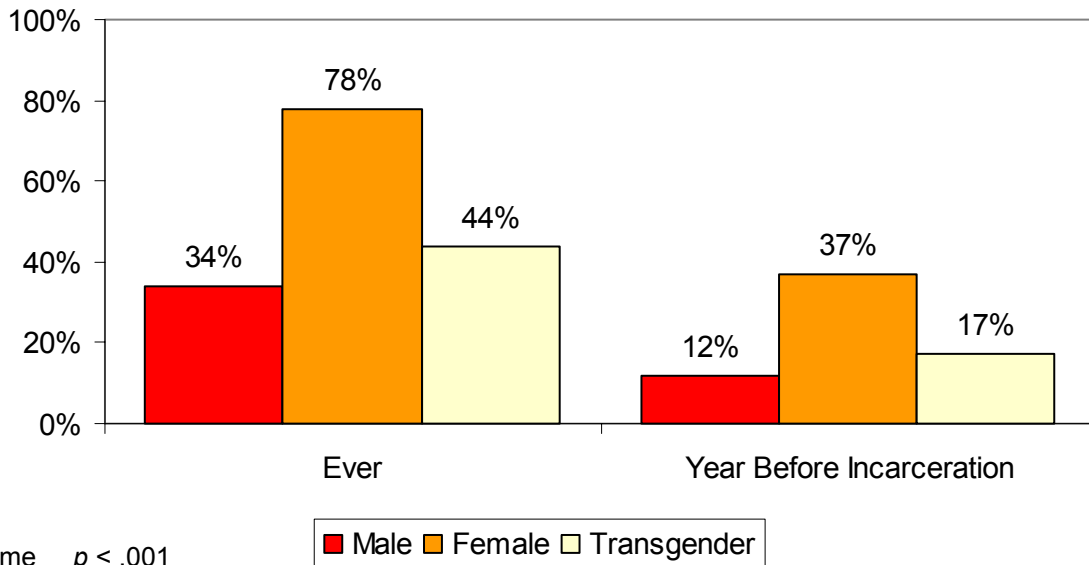
**Figure 30. Sex In Exchange for Money, Drugs, Shelter**



$p < .001$

There was also a higher prevalence of lifetime and recent forced sex/rape reported by females (Figure 31). Intimate partner violence in the past year was more common among females (33%) than males (17%) and transgendered persons (22%). However, this difference was not statistically significant.

**Figure 31. Forced Sex or Rape**



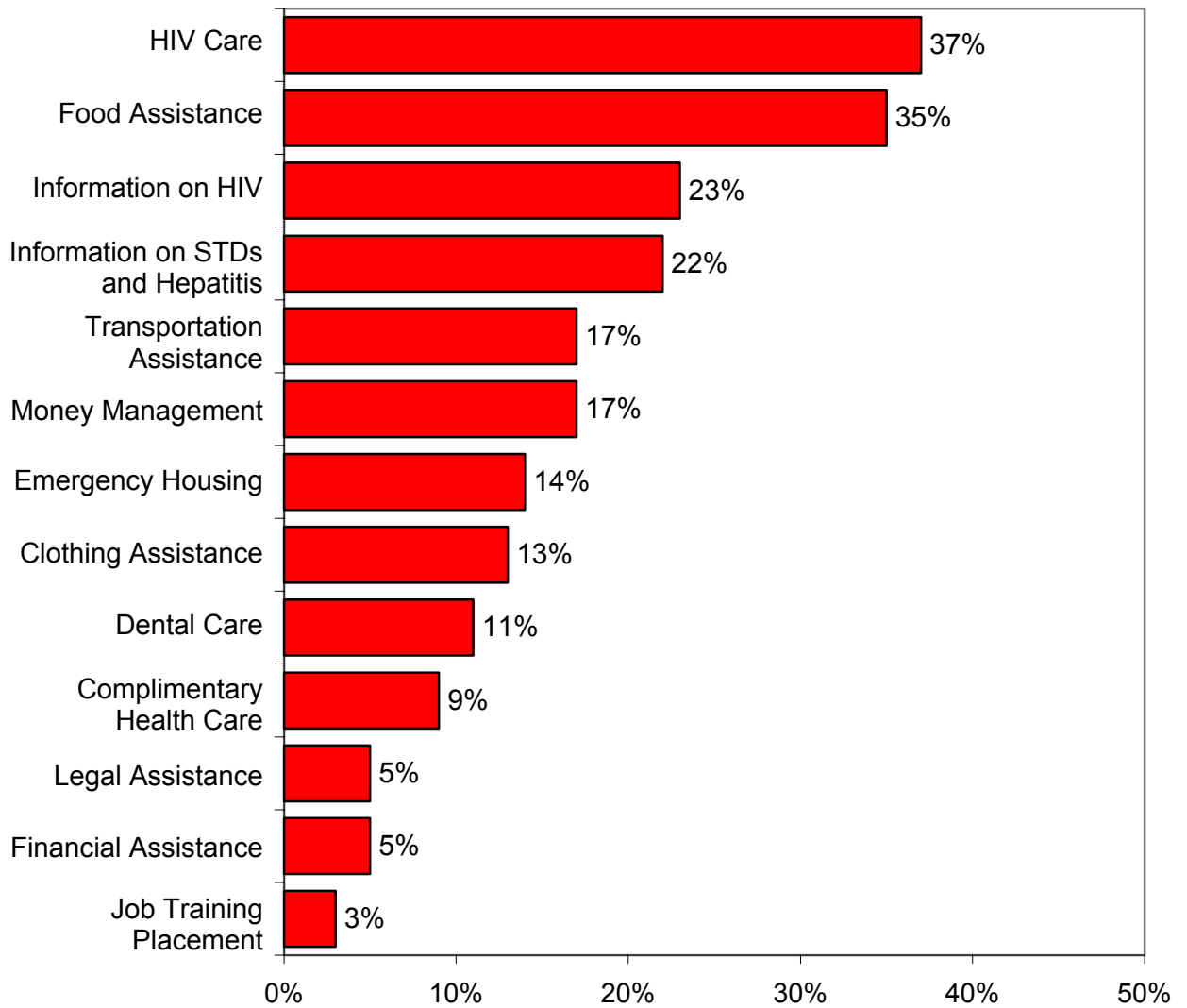
Lifetime  $p < .001$   
Past year  $p < .003$

■ Male ■ Female ■ Transgender

# CASE MANAGEMENT & OTHER SERVICES

Thirty-five percent of the sample saw a community case manager during the month before incarceration; the median number of times participants talked to a case manager was 2 (range = 1-30). Figure 32 describes the community services participants received during the month before incarceration.

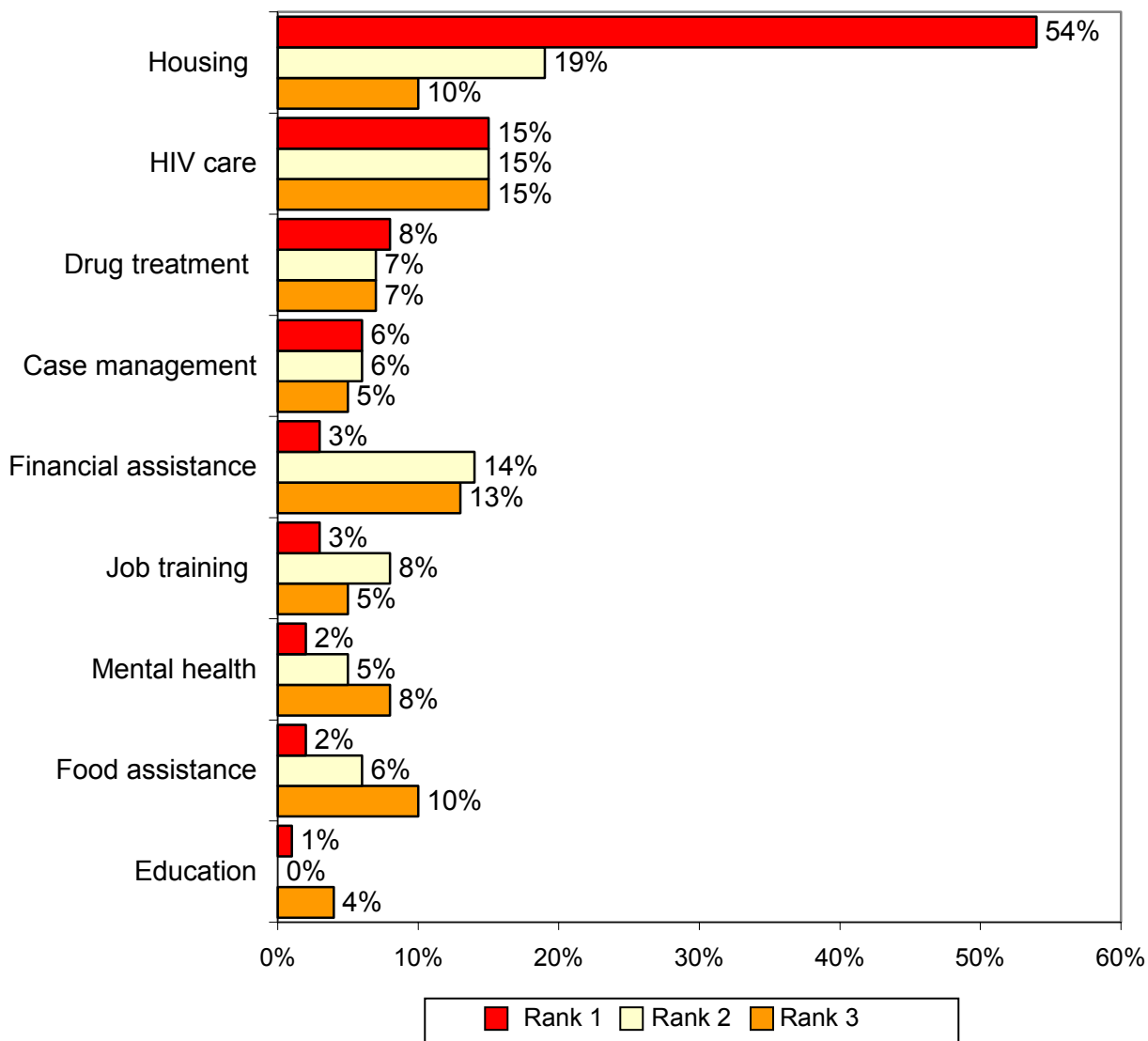
**Figure 32. Community Services Received—  
Month Before Jail**



Access to HIV prevention services during the month before jail was low overall. Only 21% said that a counselor, case manager, outreach worker, or medical provider talked with them about their sexual or drug risk behaviors. About one fifth of the sample (18%) attended a group that addressed sexual or drug risk behaviors, typically associated with alcohol/drug treatment.

Sixty-one percent of participants saw a case manager in jail and talked with them a median of 2 times (range = 1-50). Figure 33 shows participants ranking of the top three services they believe they will need when released. It is evident that housing is a top priority for most participants and HIV care and medication consistently was ranked in the top three.

**Figure 33. Ranking of Top Three Services Participants Will Need When Released<sup>1</sup>**



<sup>1</sup> Services listed in top priority ranking



# CONCLUSIONS

The baseline findings describe a vulnerable population of HIV-positive individuals with multiple needs. An advisory committee made up of representatives from the San Francisco Department of Public Health Forensic AIDS Project, Continuum HIV Adult Day Services, and the San Francisco Department of Public Health, AIDS Office reviewed the data and identified five specific areas of need and developed recommendations based on the findings.

## Areas of Need

**Housing and Benefits:** Lack of stable housing and benefits were two areas of unmet need among the HIV-positive inmates.

- ▶ 69% lived in unstable housing during the month before jail and only 66% thought they would have stable housing once released.
- ▶ 25% did not receive any financial benefits during the month before jail.
- ▶ 49% did not have any form of health insurance during the month before jail.

**HIV Medications and Adherence:** While the advent of triple combination therapies has had a tremendous impact on survival time and quality of life among HIV-positive individuals, we found lack of financial coverage for HIV medications and poor medication compliance.

- ▶ 25% with an AIDS diagnosis and 46% living with HIV did not have ADAP or Medicaid/MediCal coverage for HIV drugs the month before jail.
- ▶ Only 31% with an AIDS diagnosis and 22% living with HIV were on HAART the month prior to incarceration.
- ▶ Although 50% of participants taking HIV antiretrovirals the month before jail had good adherence, half missed doses once a week or more.

**Substance Use Risk Behavior:** Substance use and injection risk behaviors during the month before incarceration was extremely high in this population.

- ▶ 84% of participants reported non-injection drug use the month before jail. Of whom 65% used crack, 62% used marijuana, and 31% used speed.
- ▶ 50% of the sample injected drugs during the month before jail, of whom 34% injected speed and 28% injected heroin once a day or more.
- ▶ 27% of injection drug users reported receptive syringe sharing and 19% reported distributive syringe sharing during the month before jail.

**Sexual Risk Behaviors:** We found high levels of unprotected sex with an HIV negative partner or partner of unknown HIV status during the month before jail.

- ▶ 50% females who had sex with males had unprotected vaginal sex with an HIV negative partner or partner of unknown HIV status during the month before jail.
- ▶ 27% of the males who had sex with females had unprotected vaginal sex with an HIV negative partner or partner of unknown HIV status during the month before jail.
- ▶ 22% of males who had sex with males reported unprotected insertive anal sex and 20% reported unprotected receptive anal sex with an HIV negative partner or partner of unknown HIV status during the month before jail.

**HIV Health and Prevention Services:** About half of participants living with HIV and over three quarters with an AIDS diagnosis had seen a community HIV health care provider within three months of being incarcerated. However, use of case management and exposure to HIV prevention counseling was low.

- ▶ Only 35% of participants saw a community case manager during the month before jail.
- ▶ Only 21% said that a counselor, case manager, outreach worker, or medical provider talked with them about sexual and drug use risk behaviors.

# RECOMMENDATIONS

- ▶ **Transitional housing and employment programs** are greatly needed to stabilize participants post-release. HIV-positive ex-offenders must have their immediate needs met before they can address medication adherence and drug and sexual risk reduction.
- ▶ **More transitional case management programs** are needed. Community case managers should establish a relationship with HIV-positive inmates while in jail and continue working with them post release.
- ▶ **Community medical providers should work closely with jail medical providers** to ensure a smooth transition of medical care and medication use post-release.
- ▶ **Community medical providers should be trained** in ways to assist this vulnerable population in medication adherence.
- ▶ **Discharge planning and transitional case management programs** must actively enroll eligible clients in ADAP and Medicaid/MediCal to cover HIV medications.
- ▶ **A greater variety of harm reduction and substance abuse programs** are needed to meet ex-offenders' diverse needs. Substance abuse program staff should also be trained in ways to assist HIV-positive ex-offenders with medication adherence and drug and sexual risk reduction.
- ▶ **“Prevention with Positives” programs** should be developed for this high-risk population.
- ▶ **Jail-based individual and group prevention interventions** are needed. Such programs should also work with the partners of incarcerated individuals. This should include peer-based approaches.

