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HIV Infection, Risk, Prevention, and Testing Behaviors among Persons Who Inject Drugs

National HIV Behavioral Surveillance
Injection Drug Use
20 U.S. Cities, 2015

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention

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Commentary

Lowering the annual number of new HIV infections is one of 4 national goals [1]. This goal is to be achieved by implementing 3 important strategies for reducing HIV infections: (1) intensifying HIV prevention efforts in communities where HIV is most heavily concentrated, including blacks or African Americans (hereafter referred to as blacks); Hispanics or Latinos; gay, bisexual, and other men who have sex with men (hereafter referred to as MSM); and persons who inject drugs (PWID); (2) expanding efforts to prevent HIV infection by using a combination of effective, evidence-based, scalable approaches (including drug treatment and access to sterile needles and syringes); and (3) educating the general public about the threat of HIV infection and how to prevent it. State and local health departments, as well as federal agencies, are expected to monitor progress toward national goals [1].

The Centers for Disease Control and Prevention's (CDC's) National HIV Behavioral Surveillance (NHBS) serves as a key component of its high-impact prevention approach to reducing the spread of HIV in the United States [2] by providing data for monitoring behaviors among populations at risk of acquiring or transmitting HIV infection, and identifying the populations for whom scientifically proven, cost-effective, scalable interventions are most appropriate. NHBS also helps state and local health departments in areas with high AIDS prevalence to monitor selected risk behaviors, HIV testing, use of prevention programs, and HIV prevalence in 3 populations at high risk of HIV infection: MSM, PWID, and heterosexual adults at increased risk of HIV [3, 4].

This report summarizes findings from the fourth NHBS data collection among PWID, which was conducted in 2015; previous years of data among PWID (2006, 2009, 2012) have been published [5, 6, 7]. The report provides descriptive, unweighted data that can be used to describe HIV infection among PWID and the percentages of PWID reporting specific risk behaviors, HIV testing, and participation in prevention programs. Monitoring these outcomes is useful for assessing risk behaviors and the use of prevention efforts over time and for identifying new HIV prevention opportunities for this population.

Report Changes

CDC routinely assesses NHBS reports to ensure the content and methods best meet the information needs of the nation. The following reporting changes were made from the previous NHBS PWID report [7]:

- Outcomes are no longer reported by HIV-positive unaware and HIV-positive aware participants; instead, all HIV-positive participants are presented in a single category.
- Transgender participants are included in tables reporting outcomes by gender, where possible; sexual behavior data were not available for this group.
- Prescription opioid injection (past 12 months and daily) was added (Table 9).
- Daily injection of other drug was removed (Table 9).
- Distributive syringe sharing was added (Table 10).
- Receipt of syringes from pharmacy was added (Tables 11a/b).
- Diagnosis of genital warts or HPV was revised to diagnosis of genital warts (HPV diagnosis was removed from measure definition) (Table 12).
- Hallucinogen use (past 12 months) was removed (Table 14).
- Noninjection prescription opioid use (past 12 months) was added (Table 16).

Some modifications to measure definitions are made routinely to more accurately or more precisely describe the outcome or characteristic of interest; measure definitions are described in the appendix of this report. Additionally, Table 15 is designed as a flexible reporting mechanism to respond to emerging issues; the outcomes presented in this table vary with each report.

Table Organization

The tables in this report are ordered by content. Tables 1 and 5–15 are stratified by HIV status: that is, data are presented separately for HIV-negative PWID and HIV-positive PWID (HIV status was determined from the NHBS HIV test result). A small percentage of the sample could not be classified by HIV status

because they had no valid NHBS HIV test result, meaning they did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had a negative NHBS HIV test result. For data completeness, data from these participants are reported in Table 1 in the "No valid NHBS HIV test results" column and in Tables 5–15 in the "No valid NHBS HIV test results" row.

HIGHLIGHTS

Demographic Characteristics, HIV Prevalence, and HIV Testing

This report describes data from 10,485 PWID who participated in NHBS in 2015, of whom 72% were male, 28% were female, and <1% were transgender; 38% were white, 34% were black, and 23% were Hispanic or Latino; 37% were aged ≥50 years (Table 1). Of the participants, 26% had no health insurance, 19% had not visited a health care provider in the past 12 months, and the household income of 77% was at or below the federal poverty level.

HIV prevalence is presented in Table 2. In 2015, 7% of participants with a valid HIV test result tested positive for HIV. By gender, HIV prevalence was as follows: males (7%), females (7%), and transgender (31%). By race and ethnicity, HIV prevalence was as follows: blacks (10%), Hispanics or Latinos (8%), and whites (4%).

CDC recommends that persons at increased risk of HIV infection, including PWID, undergo HIV testing at least annually [8]. Among participants who did not report a previous HIV-positive test result or who had received their first HIV-positive test result less than 12 months before interview, 57% reported that they had been tested for HIV during the 12 months before interview, and 91% reported that they had ever been tested (Table 3). Similar percentages of males and females had been tested recently.

Among participants who reported a location for their most recent HIV test, 68% reported that their most recent test was performed in a clinical setting (Table 4). The percentage of participants who reported that their most recent HIV test was performed in a clinical setting decreased with older age and varied by race/ethnicity, with Hispanics and Latinos reporting the lowest percentage of testing within a clinical setting (62%).

Sexual Behaviors

Among male and female PWID, condomless vaginal sex with a partner of the opposite sex was reported least often by HIV-positive PWID (Tables 5 and 7). However, male-male anal sex was common among HIV-positive men (30%) and almost one-quarter (24%) of HIV-positive men reported condomless anal sex with men (Table 5). Anal sex with men was less common among HIV-negative male PWID (6%). These high percentages are particularly concerning in light of the increased risk of HIV transmission associated with condomless anal sex among MSM [9].

Condomless sex was common among female PWID: 74% reported condomless vaginal sex and 25% reported condomless anal sex in the past 12 months (Table 7). As research suggests [10, 11], partner type was an important factor in condom use. Among female PWID, condomless sex with a main partner (61%) was more common than condomless sex with a casual partner (34%; Table 8).

Sexual behaviors are an important mode of HIV transmission among male and female PWID. The percentages of PWID who engaged in condomless sex underscore the importance of using targeted and scaled combination HIV prevention strategies that include access to and use of condoms, preexposure prophylaxis (PrEP), and risk-reduction counseling among PWID [12–14].

Injection Drug Use

PWID who engage in frequent or unsafe injections are at increased risk of acquiring and transmitting HIV and other bloodborne infections, including hepatitis B virus infection and hepatitis C virus (HCV) infection [15–17]. Approximately 89% of participants reported injecting heroin in the past 12 months, and a majority (73%) reported injecting heroin daily (Table 9). Among HIV-positive PWID, 59% of HIV-positive PWID reported daily heroin injection; among HIV-negative PWID, 74% reported daily heroin injection.

Injection of methamphetamines in the past 12 months was reported by 28% of participants (Table 9). Among HIV-negative participants, report of methamphetamine injection decreased with increasing age; the lowest percentage was for black PWID (10%; Table 9).

Injection of prescription opioids has been implicated in a recent outbreak of HIV infection in a rural community in Indiana [18]. Twenty percent of PWID

reported injecting prescription painkillers in the past 12 months. Among HIV-negative PWID, reported use was highest (32%) among those 18–24 years of age and decreased with increasing age.

One-time use of sterile needles and syringes remains the safest, most effective way to limit HIV transmission due to drug injection [19]. Approximately 1 in 3 PWID reported using a syringe that had been used by someone else; receptive syringe sharing was reported by 25% of HIV-positive PWID, and 34% of HIV-negative PWID (Table 10). Among HIV-negative PWID, the percentage reporting receptive syringe sharing was lowest among black PWID (21%), and highest among young PWID and decreased with increasing age. Additionally, 41% of PWID reported distributive syringe sharing; twice as many HIV-negative PWID reported distributive syringe sharing (43%) than HIV-positive PWID (21%).

Receiving sterile syringes from syringe services programs (SSPs) reduces barriers to safe injection practices among PWID and increases access to other prevention services, including substance use disorder treatments [20]. Over half (52%) of participants reported receiving syringes from SSPs during the past 12 months (Table 11a); however, the percentage of HIV-negative PWID who received syringes from SSPs varied greatly by city, from 2% to 90% (Table 11b).

Sexually Transmitted Infections and Hepatitis C Virus Infections

Sexually transmitted infections (STIs) can increase the likelihood of acquiring and transmitting HIV [21]. The percentages of PWID who reported a diagnosis of any bacterial STI (chlamydia, gonorrhea, or syphilis) during the past 12 months were highest among those who were HIV-positive (11%) and lowest among those who were HIV-negative (4%; Table 12).

HCV testing is recommended at least once for anyone who has ever injected drugs; HCV testing is recommended at least annually for persons who currently inject drugs and who are thus at continued risk of infection [22]. NHBS reports data on lifetime testing for HCV: the percentage among all PWID was high (81%; Table 13). Furthermore, substantial percentages of participants reported a diagnosis of hepatitis C (54% of HIV-positive PWID, 44% of HIV-negative PWID). Diagnoses of STIs and HCV infection may be more common among HIV-positive PWID because of increased screening for this group. Moreover, HIV-positive PWID may be more likely to be coinfected with HCV [23].

Substance Use

Table 14 presents data on noninjection drug use. HIV-negative PWID reported more use of noninjection drugs (76%) than HIV-positive PWID (67%). Marijuana use was the most common noninjection drug used by PWID in the past 12 months. Over half (52%) of HIV-negative PWID reported marijuana use.

Additional Outcomes

Table 15 presents data on additional outcomes related to the risk of HIV transmission and acquisition among PWID.

Although exposure to HIV through injection practices is a primary concern, sexual risk factors also play an important role in transmission to and from PWID. Condomless sex with an HIV-discordant partner and exchange sex were common. More than a fourth (26%) of PWID reported exchange sex with a casual partner in the past 12 months. Exchange sex with a casual partner in the past 12 months was most often reported by HIV-positive PWID (33%). Condomless sex with an HIV-discordant partner at last sex was most often reported by HIV-negative PWID (31%). However, more than one in four HIV-positive PWID (27%) also reported this behavior.

In 2014, after the publication of scientific evidence that anti-HIV medication taken by HIV-negative persons can prevent HIV infection, CDC released clinical guidance recommending the use of PrEP for persons at increased risk of contracting HIV [12]. In 2015, less than 10% of the sample had heard of PrEP, and a small percentage of HIV-negative PWID (0.3%) reported taking PrEP as indicated to prevent HIV infection.

Treatment for drug abuse is an important method of HIV risk reduction because it provides access to HIV testing and treatment and can help to reduce transmission. Of the participants, 44% received drug abuse treatment during the past 12 months.

Access to safe syringe disposal (such as through SSPs) can decrease the number of used syringes in the community and reduce accidental needle sticks. Only 18% of PWID reported exclusively disposing of their used syringes safely.

For many PWID, injection drug use can be a lifelong struggle. Among participants, the median numbers of years between the NHBS interview and their first injection was 18 years. The median number of years since first injection increased with increasing age. Among participants aged 50 years or older, the median time since first injection was 36 years.

Receipt of HIV Care

One national HIV prevention goal is to increase the proportion of persons with recently diagnosed HIV infection who are linked to clinical care [1]. Among self-reported HIV-positive PWID, 92% reported having ever visited a health care provider for HIV care, 58% reported that they did so within 3 months after diagnosis, and 83% reported visiting a health care provider for HIV care in the 6 months before interview. Current use of antiretroviral therapy was reported by 71% of self-reported HIV-positive PWID: 76% of blacks, 66% of whites, and 67% of Hispanics or Latinos (Table 16).

NHBS conducts rotating cycles of behavioral surveys among MSM, PWID, and heterosexual adults at increased risk of HIV [4]; data are collected in annual cycles from 1 risk group per year so that each population is surveyed once every 3 years. The same general eligibility criteria are used in each cycle: age of ≥18 years, current residence in a participating city, no previous participation in NHBS during the current survey cycle, ability to complete the survey in either English or Spanish, and ability to provide informed consent. In addition to these basic NHBS eligibility requirements, participation in the 2015 IDU NHBS cycle was limited to persons who (1) reported injecting a drug that was not prescribed for them during the past 12 months; and (2) presented physical evidence of recent injection (e.g., track marks) or adequately described their injection practices.

A standardized questionnaire is used to collect information about behavioral risks for HIV infection, HIV testing, and use of HIV prevention services. The anonymous in-person survey is administered by a trained interviewer using a portable computer. The goal of each participating city is to interview 500 eligible persons. All participants are offered an anonymous HIV test, which is linked to the survey data through a unique survey identifier.

Activities for NHBS were approved by CDC [24, 25] and by local institutional review boards (IRBs) for each of the 20 participating cities.

Participating Cities

State and local health departments eligible to participate in NHBS are among those whose jurisdictions include a metropolitan statistical area (MSA) or a specified division with high AIDS burden. In 2015, NHBS was conducted in 20 MSAs (see list at the end of the report), which represented approximately 45% of all persons living with HIV infection in urban areas with a population of at least 500,000 in 2014 [26]. Throughout this report, MSAs and divisions are referred to by the name of the principal city.

Sampling Method

The stigma associated with injection drug use presents particular challenges to sampling strategies for surveillance and research efforts among PWID. Participants in the 2015 NHBS cycle were recruited by using respondent-driven sampling (RDS) [27, 28]. Recruitment started with a limited number of initial participants who were chosen by referrals from people who knew the local population of PWID or through outreach to areas where PWID could be found. Initial participants who completed the eligibility screener and were found eligible were administered the survey, and those who completed the survey were asked to recruit up to 5 persons whom they knew personally and who injected drugs. Those persons, in turn, completed the survey and were asked to recruit others by using a system of coded coupons. This recruitment process continued until the sample size was reached or the sampling period ended. Participants received incentives for participating in the survey and for recruiting others.

Data Collection

Persons who brought a valid coupon to an NHBS field site were escorted to a private area for eligibility screening. For those who met eligibility requirements, trained interviewers obtained informed consent and conducted face-to-face interviews, which took approximately 40 minutes and consisted of questions concerning participants' demographic characteristics, HIV testing history, sexual and drug-use behaviors, HCV testing and diagnosis of hepatitis C, STI testing and diagnosis, and use of HIV prevention services and programs. In exchange for the time spent taking part in the interview, participants received $20–$30 (amount determined locally).

HIV testing was performed for participants who consented; blood-based rapid testing was performed in the field for all consenting participants, and blood or oral confirmatory specimens were collected for supplemental laboratory-based testing. A nonreactive rapid test result was considered HIV-negative; a reactive rapid test result was considered HIV-positive if confirmed by supplemental laboratory testing. Participants also received $10–$25 for HIV testing. Participants who agreed to recruit others received an additional incentive of $10 for each recruit (up to 5) who completed the interview.

Data Analysis

This surveillance report presents descriptive data; no statistical tests were performed. In addition, these data are cross-sectional; we did not attempt to infer causal relationships. Reported numbers less than 12 and percentages based on these numbers, should be interpreted with caution because the numbers are considered unreliable.

Data for this report are not weighted. The purpose of this report is to provide a detailed summary of surveillance data collected as part of the NHBS 2015 cycle; unweighted data provide an efficient and transparent way to do so. Further, unweighted analysis allows for detailed reporting of outcomes among small subgroups of the PWID population. Weighted analysis of HIV prevalence and selected HIV-associated outcomes is presented elsewhere [29].

In total, 13,633 persons were recruited to participate in NHBS in 2015. Of those, 2,955 did not meet NHBS eligibility criteria and were excluded from this report. An additional 193 eligible persons were excluded from this report because of lost data during electronic uploads, lack of consent to the survey, incomplete survey data, or survey responses of questionable validity.

The full analysis sample for this report includes 2015 NHBS cycle participants who consented to and completed the survey (n = 10,485, Table 1). Additional inclusion criteria were applied for certain analyses of HIV infection and of HIV-associated behaviors; details of each analysis sample can be found in the footnotes of each table.

Supplemental Material

Infographic: HIV infection, risk, and prevention among persons who inject drugs (PWID)—National HIV Behavioral Surveillance (NHBS), 20 U.S. cities, 2015 (PDF file is attached; also available at http://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-hssr-nhbs-pwid-infographic.pdf).

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Appendix: Measurement Notes

Sociodemographic Characteristics

- Gender: Male, female, or transgender.
- Age: Calculated from the reported date of birth; age categories were chosen for epidemiologic relevance and consistency of reporting across all 3 National HIV Behavioral Surveillance (NHBS) populations.
- Race/ethnicity: Participants reported 1 or more race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White). Hispanic or Latino ethnicity was asked separately; participants reporting Hispanic or Latino ethnicity were considered Hispanic or Latino, regardless of reported race. Participants reporting multiple races (but not Hispanic or Latino ethnicity) were classified as multiple races.
- Education: Highest level of education completed.
- Household income: Participants were asked about their combined monthly or yearly household income (in US$) from all sources during the 12 months before interview. The number of persons in poverty was determined by using the U.S. Department of Health and Human Services poverty guidelines for 2015. These guidelines are issued yearly for the United States and are one indicator used for determining eligibility for many federal and state programs. The 2015 guidelines [1] were used for participants interviewed in 2015. Because the poverty guidelines are not defined for the territory of Puerto Rico, the guidelines for the contiguous states and Washington, DC, were used for this jurisdiction. Participants were asked to specify the range of their income by selecting from a list of income ranges. If the participant's income range and household size resulted in an ambiguous determination of poverty level, the participant's household income was assumed to be the low point of the income range.
- Health insurance: Currently having some form of health insurance.
- Homeless: Living on the street, in a shelter, in a single-room–occupancy hotel, or in a car at any time in the past 12 months.
- Incarcerated: Having been held in a detention center, jail, or prison, for more than 24 hours in the past 12 months.
- City: Throughout this report, eligible metropolitan statistical areas (MSAs) and divisions are referred to by the name of the principal city. State and local health departments eligible to participate in NHBS are among those whose jurisdictions included an MSA or a specified division within an MSA with high prevalence of HIV. In 2015, NHBS was conducted in 20 MSAs (see list at the end of the report), which represented approximately 45% of all HIV diagnoses in urban areas with a population of at least 500,000.

HIV Status

HIV testing was performed for participants who consented to testing; blood or oral specimens were collected for either rapid testing in the field or laboratory-based testing.

- HIV-negative: Nonreactive NHBS HIV test result, or a negative laboratory test result if rapid test was not conducted and no self-report of a previous HIV-positive test result.
- HIV-positive: Reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.
- No valid NHBS HIV test result: Includes participants who did not consent to NHBS HIV testing, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result. For data completeness, participants who did not have a valid test result were included in this report but listed separately in all tables that report outcomes by HIV status.

HIV Testing

- Ever tested: Having had an HIV test during one's lifetime.

- Tested in past 12 months: Having had an HIV test during the 12 months before interview.
- Clinical setting: Participants reported the location of their most recent HIV test: private doctor's office (including health maintenance organizations), emergency room, hospital (inpatient), public health clinic or community health center, family planning or obstetrics clinic, correctional facility (jail or prison), or drug treatment program.
- Nonclinical setting: Participants reported the location of their most recent HIV test: HIV counseling and testing site, HIV street outreach program or mobile unit, syringe services program (SSP), or home.
- Other locations: "Other" locations could not be classified and are excluded from the clinical/nonclinical setting classification.

Sexual Behaviors

- Any sex: Includes vaginal, oral, or anal sex.
- Vaginal sex: Penis inserted into a partner's vagina.
- Oral sex: Mouth on a partner's vagina or penis.
- Anal sex: Penis inserted into a partner's anus.
- Condomless sex: Vaginal or anal sex during which a condom is not used.
- Main partner: Person with whom the participant has sex and to whom he or she feels most committed (e.g., girlfriend/boyfriend, wife/husband, significant other, or life partner).
- Casual partner: Person with whom the participant has sex, but to whom he or she does not feel committed or whom he or she does not know very well.

Injection Drug Use and Behaviors

- Injected in the past 12 months: A drug (excluding those prescribed for him or her) the participant reported injecting at least 1 time during the 12 months before interview.
- Injected daily: A drug (excluding those prescribed for him or her) the participant reported injecting daily during the 12 months before interview.
- Heroin: Injected by itself.
- Speedball: Heroin and cocaine injected together through a single injection.
- Powder or crack cocaine: Injection of crack or powdered cocaine.
- Methamphetamine: Injection of methamphetamine.
- Prescription opioids: Injection of painkillers, such as Oxycontin, Dilaudid, morphine, Percocet, or Demerol.
- Other drug: Injection of any drug other than those listed above.
- Receptive sharing of syringes: Injecting with a syringe or needle that had already been used by someone else.
- Receptive sharing of injection equipment: Using a cooker or cotton (used to filter particles from drug solution) that had already been used by someone else or using shared water for rinsing or injection.
- Receptive sharing of syringes to divide drugs: Dividing a drug solution by using a syringe that had already been used by someone else for injection.
- Any receptive sharing: Any combination of the 3 receptive sharing measures listed above.
- Distributive sharing: A participant giving their needle to someone else to use after he or she had already used it for injection.

Receipt of Prevention Materials

- Syringes from SSPs: Received any syringes from SSPs during the 12 months before interview.
- Syringes from pharmacy: Received any syringes from a pharmacy during the 12 months before interview.
- Injection equipment from SSPs: Received injection equipment from SSPs during the 12 months before interview. Injection equipment includes items such as cookers, cotton, or water for rinsing needles; does NOT include syringes or needles.
- Free condoms: Received free condoms during the 12 months before interview, excluding those given by a friend, relative, or sex partner.
- Individual- or group-level intervention: Defined as either one-on-one conversations with an outreach worker, a counselor, or a prevention pro-

gram worker about ways to prevent HIV, or participating in any organized sessions that involve a small group of people discussing ways to prevent HIV infections, excluding informal discussions with friends. Conversations that were part of obtaining an HIV test were excluded.

Sexually Transmitted Infections

- Chlamydia: Received a diagnosis of chlamydia during the 12 months before interview.
- Gonorrhea: Received a diagnosis of gonorrhea during the 12 months before interview.
- Syphilis: Received a diagnosis of syphilis during the 12 months before interview.
- Any bacterial STI: Received a diagnosis of chlamydia, gonorrhea, or syphilis during the 12 months before interview.
- Genital warts: Received a diagnosis of genital warts during one's lifetime.
- Genital herpes: Received a diagnosis of genital herpes during one's lifetime.

Noninjection Substance Use

Participants were asked about their use of noninjection drugs (excluding those prescribed for them) during the 12 months before interview and their use of alcohol during the 30 days before interview. Participants were not limited in the number of substances they could report using. Participants were considered to have used a substance if they reported using that substance with any frequency other than "never."

- Binge drinking: Consumed 5 or more drinks in about 2 hours (males) or 4 or more drinks in about 2 hours (females) during the 30 days before interview.
- Marijuana: Used marijuana during the 12 months before interview.
- Cocaine: Used powdered cocaine that is smoked or snorted during the 12 months before interview.
- Ecstasy: Used X or ecstasy during the 12 months before interview.
- Prescription opioids: Used pain killers, such as Oxycontin, Vicodin, morphine, or Percocet, by means other than injection during the 12 months before interview.
- Downers: Used benzodiazepines, such as Klonopin, Valium, Ativan, or Xanax, by means other than injection during the 12 months before interview.
- Methamphetamine: Used methamphetamines, including meth, crystal meth, speed, or crank, by means other than injection during the 12 months before interview.
- Crack: Used crack cocaine during the 12 months before interview.
- Heroin: Used heroin that is smoked or snorted during the 12 months before interview.
- Any noninjection drug: Used any noninjection drug, excluding alcohol, during the 12 months before interview.

Hepatitis C Virus Infection

- Hepatitis C testing: Having had a hepatitis C test during one's lifetime.
- Hepatitis C diagnosis: Having ever been told that they had hepatitis C infection by a doctor, nurse, or other health care provider.

Additional Outcomes

The additional outcomes table includes outcomes that were of particular interest at the time of publication, but were not included in the other tables.

- Number of sex partners: Median number of heterosexual sex partners during the 12 months before interview; first and third quartiles (25th and 75th percentiles) are also reported.
- Exchange sex among casual partners: For females, "exchange sex" refers to receiving money or drugs from a casual male partner in exchange for sex. For males, "exchange sex" refers to giving money or drugs to a casual female partner in exchange for sex, or giving or receiving money or drugs from a casual male partner in exchange for sex.
- Condomless sex with an HIV-discordant partner at last sex: A composite measure based on self-reported HIV status of the participant (positive, negative, or unknown), the participant's knowledge of the HIV status of his or her most recent sexual partner (positive, negative, or unknown), and whether the participant reported engaging in vaginal or anal sex without a condom during his

or her last sexual encounter with the partner. A partner was considered to be of discordant or unknown HIV status if the participant reported he or she did not know the HIV status of at least one member of the partnership (the participant or the partner) or if one member of the partnership was known to be HIV-positive while the other was known to be HIV-negative. The result of the NHBS HIV test completed after the interview was not factored into this measure.

- Heard of PrEP: Ever having heard of people who do not have HIV taking PrEP, the antiretroviral medicine taken every day for months or years to reduce the risk of getting HIV.
- Took PrEP: At any point during the 12 months before interview, taking PrEP every day for at least 2 months to reduce the risk of getting HIV (not including time when taking antiretroviral medicine for only a few days at a time).
- Drug treatment: Participating in a program to treat drug use (including outpatient, inpatient, residential, detox, methadone treatment, or 12-step programs) during the 12 months before interview.
- Safe syringe disposal only: Syringes were disposed of by putting them in a medical waste container and/or by exchanging them at an SSP, and no unknown or unsafe disposal method was indicated.
- Years since first injection: Number of years since the participant first injected drugs not prescribed to him or her, based on the participant's reported age at first injection.

Receipt of HIV Care

Participants who reported having received a positive HIV test result before interview were asked about their receipt of HIV care. Specifically, participants were asked: the date of their first HIV-positive test result; if they had ever visited a doctor, nurse, or other health care provider for a medical evaluation or care related to their HIV infection; the date of their first visit to a health care provider for HIV care after learning they had HIV; the date of their most recent visit to a health care provider for HIV care; and whether they were currently taking any anti-HIV antiretroviral medicines.

- Visited health care provider about HIV, ever: Having ever visited a health care provider for HIV care.
- Visited health care provider about HIV, within 3 months after diagnosis: Having visited a health care provider for HIV care within 3 months after the date of his or her first HIV-positive test result.
- Visited health care provider about HIV, in the past 6 months: Having visited a health care provider for HIV care during the 6 months before date of interview.
- Currently taking anti-HIV medications: Taking anti-HIV antiretroviral medicines at the time of interview.

Reference

1. Department of Health and Human Services. Annual update of the HHS Poverty Guidelines. *Federal Register*. 2015;80(14):3236–3237.

Table 1. Selected characteristics of persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	HIV-negative[a]		HIV-positive[b]		No valid NHBS HIV test result[c]		Total	
	No.	%	No.	%	No.	%	No.	%
Gender								
Male	6,954	71.9	506	69.8	61	71.8	7,521	71.7
Female	2,685	27.8	203	28.0	22	25.9	2,910	27.8
Transgender	36	0.4	16	2.2	2	2.4	54	0.5
Age at interview (yr)								
18–24	578	6.0	8	1.1	0	0.0	586	5.6
25–29	1,148	11.9	33	4.6	7	8.2	1,188	11.3
30–39	2,317	23.9	114	15.7	19	22.4	2,450	23.4
40–49	2,159	22.3	246	33.9	18	21.2	2,423	23.1
≥50	3,473	35.9	324	44.7	41	48.2	3,838	36.6
Race/ethnicity								
American Indian/Alaska Native	99	1.0	6	0.8	1	1.2	106	1.0
Asian	28	0.3	1	0.1	0	0.0	29	0.3
Black/African American	3,137	32.4	349	48.1	46	54.1	3,532	33.7
Hispanic/Latino[d]	2,162	22.3	178	24.6	17	20.0	2,357	22.5
Native Hawaiian/Other Pacific Islander	15	0.2	1	0.1	0	0.0	16	0.2
White	3,837	39.7	158	21.8	16	18.8	4,011	38.3
Multiple races	380	3.9	28	3.9	4	4.7	412	3.9
Education								
Less than high school	2,879	29.8	278	38.3	21	24.7	3,178	30.3
High school diploma or equivalent	3,991	41.3	254	35.0	41	48.2	4,286	40.9
Some college or technical degree	2,418	25.0	164	22.6	18	21.2	2,600	24.8
College degree or more	386	4.0	29	4.0	5	5.9	420	4.0
Household income[e]								
At or below the federal poverty level	7,428	76.8	590	81.4	72	84.7	8,090	77.2
Above the federal poverty level	2,172	22.4	131	18.1	11	12.9	2,314	22.1
Health insurance								
Yes	7,036	72.7	606	83.6	68	80.0	7,710	73.5
No	2,601	26.9	118	16.3	17	20.0	2,736	26.1
Visited a health care provider, past 12 months								
Yes	7,756	80.2	642	88.6	79	92.9	8,477	80.8
No	1,916	19.8	83	11.4	6	7.1	2,005	19.1
Homeless,[f] past 12 months								
Yes	6,237	64.5	409	56.4	55	64.7	6,701	63.9
No	3,438	35.5	316	43.6	30	35.3	3,784	36.1

Table 1. Selected characteristics of persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015 ***(cont)***

	HIV-negative[a]		HIV-positive[b]		No valid NHBS HIV test result[c]		Total	
	No.	%	No.	%	No.	%	No.	%
Incarcerated,[g] past 12 months								
Yes	3,617	37.4	179	24.7	33	38.8	3,829	36.5
No	6,052	62.6	545	75.2	52	61.2	6,649	63.4
City								
Atlanta, GA	388	4.0	36	5.0	6	7.1	430	4.1
Baltimore, MD	501	5.2	74	10.2	11	12.9	586	5.6
Boston, MA	489	5.1	11	1.5	10	11.8	510	4.9
Chicago, IL	528	5.5	9	1.2	4	4.7	541	5.2
Dallas, TX	493	5.1	12	1.7	4	4.7	509	4.9
Denver, CO	569	5.9	24	3.3	4	4.7	597	5.7
Detroit, MI	566	5.9	15	2.1	2	2.4	583	5.6
Houston, TX	473	4.9	44	6.1	5	5.9	522	5.0
Los Angeles, CA	510	5.3	16	2.2	5	5.9	531	5.1
Miami, FL	444	4.6	76	10.5	0	0.0	520	5.0
Nassau-Suffolk, NY	201	2.1	8	1.1	2	2.4	211	2.0
New Orleans, LA	577	6.0	31	4.3	6	7.1	614	5.9
New York City, NY	473	4.9	50	6.9	3	3.5	526	5.0
Newark, NJ	340	3.5	43	5.9	3	3.5	386	3.7
Philadelphia, PA	626	6.5	32	4.4	0	0.0	658	6.3
San Diego, CA	602	6.2	20	2.8	1	1.2	623	5.9
San Francisco, CA	454	4.7	77	10.6	7	8.2	538	5.1
San Juan, PR	480	5.0	61	8.4	5	5.9	546	5.2
Seattle, WA	505	5.2	25	3.4	3	3.5	533	5.1
Washington, DC	456	4.7	61	8.4	4	4.7	521	5.0
Total	**9,675**	**100**	**725**	**100**	**85**	**100**	**10,485**	**100**

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

Note. "Past 12 months" refers to the 12 months preceding interview.

[a] PWID with a valid negative NHBS HIV test result.

[b] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[c] PWID who did not have a valid NHBS HIV test result (i.e., a participant who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result).

[d] Hispanics/Latinos can be of any race.

[e] Poverty level is based on household income and household size.

[f] Living on the street, in a shelter, in a single-room–occupancy hotel, or in a car.

[g] Having been held in a detention center, jail, or prison for more than 24 hours.

Table 2. HIV prevalence among persons who inject drugs, by gender—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Male			Females			Transgender			Full sample		
	HIV-positive[a]		Total	HIV-positive[a]		Total	HIV-positive[a]		Total	HIV-positive[a]		Total
	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.
Age at interview (yr)												
18–24	7	1.9	373	1	0.5	209	0	0.0	4	8	1.4	586
25–29	23	2.7	839	9	2.7	338	1	25.0	4	33	2.8	1,181
30–39	84	4.9	1,717	24	3.4	700	6	42.9	14	114	4.7	2,431
40–49	157	9.3	1,689	84	12.0	701	5	33.3	15	246	10.2	2,405
≥50	235	8.3	2,842	85	9.0	940	4	26.7	15	324	8.5	3,797
Race/ethnicity												
American Indian/Alaska Native	4	6.3	63	2	5.0	40	0	0.0	2	6	5.7	105
Asian	1	4.3	23	0	0.0	5	0	0.0	1	1	3.4	29
Black/African American	221	8.8	2,500	116	12.1	957	12	41.4	29	349	10.0	3,486
Hispanic/Latino[b]	138	7.7	1,797	38	7.1	536	2	28.6	7	178	7.6	2,340
Native Hawaiian/Other Pacific Islander	1	11.1	9	0	0.0	7	0	.	0	1	6.3	16
White	117	4.2	2,788	40	3.3	1,197	1	10.0	10	158	4.0	3,995
Multiple races	21	7.9	265	6	4.3	140	1	33.3	3	28	6.9	408
City												
Atlanta, GA	25	8.0	313	11	10.0	110	0	0.0	1	36	8.5	424
Baltimore, MD	51	12.4	410	21	12.9	163	2	100	2	74	12.9	575
Boston, MA	10	2.6	380	0	0.0	118	1	50.0	2	11	2.2	500
Chicago, IL	7	1.8	393	2	1.4	144	0	.	0	9	1.7	537
Dallas, TX	8	2.3	352	4	2.6	153	0	.	0	12	2.4	505
Denver, CO	20	4.8	419	4	2.3	172	0	0.0	2	24	4.0	593
Detroit, MI	7	1.8	379	8	4.0	200	0	0.0	2	15	2.6	581
Houston, TX	36	8.4	427	5	6.1	82	3	37.5	8	44	8.5	517
Los Angeles, CA	13	3.5	376	3	2.0	149	0	0.0	1	16	3.0	526
Miami, FL	46	11.5	399	30	25.0	120	0	0.0	1	76	14.6	520
Nassau-Suffolk, NY	4	2.9	136	4	5.5	73	0	.	0	8	3.8	209
New Orleans, LA	28	6.1	460	1	0.7	145	2	66.7	3	31	5.1	608
New York City, NY	26	7.1	368	20	13.7	146	4	44.4	9	50	9.6	523
Newark, NJ	23	10.1	228	20	13.1	153	0	0.0	2	43	11.2	383
Philadelphia, PA	25	5.1	489	7	4.3	164	0	0.0	5	32	4.9	658
San Diego, CA	17	4.0	421	1	0.5	196	2	40.0	5	20	3.2	622
San Francisco, CA	60	15.6	384	15	10.6	142	2	40.0	5	77	14.5	531
San Juan, PR	52	11.2	464	9	11.8	76	0	0.0	1	61	11.3	541
Seattle, WA	19	5.6	339	6	3.2	190	0	0.0	1	25	4.7	530
Washington, DC	29	9.0	323	32	16.7	192	0	0.0	2	61	11.8	517
Total	506	6.8	7,460	203	7.0	2,888	16	30.8	52	725	7.0	10,400

Abbreviations: PWID, persons who inject drugs [footnotes only]; NHBS, National HIV Behavioral Surveillance [footnotes only].

Data include PWID with a valid NHBS HIV test result.

[a] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[b] Hispanics/Latinos can be of any race.

Table 3. HIV testing among persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Ever tested		Tested during past 12 months[a]		
	No.	%	No.	%	Total No.
Gender					
Male	6,489	90.6	4,049	56.5	7,163
Female	2,591	93.4	1,618	58.3	2,774
Transgender	38	92.7	31	75.6	41
Age at interview (yr)					
18–24	445	76.5	318	54.6	582
25–29	1,000	85.8	686	58.8	1,166
30–39	2,193	92.5	1,408	59.4	2,372
40–49	2,127	94.0	1,284	56.7	2,263
≥50	3,353	93.3	2,002	55.7	3,595
Race/ethnicity					
American Indian/Alaska Native	90	90.0	55	55.0	100
Asian	26	92.9	16	57.1	28
Black/African American	3,123	94.9	2,035	61.9	3,290
Hispanic/Latino[b]	2,024	90.3	1,245	55.6	2,241
Native Hawaiian/Other Pacific Islander	12	80.0	6	40.0	15
White	3,463	88.8	2,114	54.2	3,898
Multiple races	362	93.8	216	56.0	386
City					
Atlanta, GA	364	91.0	240	60.0	400
Baltimore, MD	526	98.5	371	69.5	534
Boston, MA	470	94.4	296	59.4	498
Chicago, IL	490	91.8	321	60.1	534
Dallas, TX	452	89.7	247	49.0	504
Denver, CO	506	88.2	296	51.6	574
Detroit, MI	504	87.5	222	38.5	576
Houston, TX	455	93.2	275	56.4	488
Los Angeles, CA	482	92.2	302	57.7	523
Miami, FL	412	88.6	300	64.5	465
Nassau-Suffolk, NY	186	90.3	115	55.8	206
New Orleans, LA	531	89.1	337	56.5	596
New York City, NY	472	96.7	372	76.2	488
Newark, NJ	333	94.1	194	54.8	354
Philadelphia, PA	590	92.0	407	63.5	641
San Diego, CA	509	83.6	265	43.5	609
San Francisco, CA	457	95.2	298	62.1	480
San Juan, PR	462	89.5	219	42.4	516
Seattle, WA	449	87.9	236	46.2	511
Washington, DC	468	97.3	385	80.0	481
Total	**9,118**	**91.4**	**5,698**	**57.1**	**9,978**

Abbreviation: PWID, persons who inject drugs [footnotes only].

Note. CDC recommends that all persons who inject drugs be tested for HIV at least annually.

Data include all PWID who did not report a previous HIV-positive test result and PWID who received their first HIV-positive test result less than 12 months before the interview.

[a] "Past 12 months" refers to the 12 months preceding interview.

[b] Hispanics/Latinos can be of any race.

Table 4. Setting of most recent HIV test among persons who inject drugs and who were tested for HIV during the 12 months preceding interview—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Clinical setting[a]		Nonclinical setting[b]		
	No.	%	No.	%	Total No.
Gender					
Male	2,721	67.2	1,123	27.7	4,049
Female	1,126	69.6	420	26.0	1,618
Transgender	19	61.3	9	29.0	31
Age at interview (yr)					
18–24	253	79.6	48	15.1	318
25–29	494	72.0	146	21.3	686
30–39	983	69.8	368	26.1	1,408
40–49	847	66.0	372	29.0	1,284
≥50	1,289	64.4	618	30.9	2,002
Race/ethnicity					
American Indian/Alaska Native	41	74.5	7	12.7	55
Asian	11	68.8	4	25.0	16
Black/African American	1,327	65.2	606	29.8	2,035
Hispanic/Latino[c]	777	62.4	411	33.0	1,245
Native Hawaiian/Other Pacific Islander	4	66.7	1	16.7	6
White	1,540	72.8	476	22.5	2,114
Multiple races	157	72.7	46	21.3	216
City					
Atlanta, GA	170	70.8	55	22.9	240
Baltimore, MD	226	60.9	122	32.9	371
Boston, MA	224	75.7	66	22.3	296
Chicago, IL	238	74.1	74	23.1	321
Dallas, TX	196	79.4	39	15.8	247
Denver, CO	207	69.9	73	24.7	296
Detroit, MI	183	82.4	36	16.2	222
Houston, TX	216	78.5	46	16.7	275
Los Angeles, CA	163	54.0	125	41.4	302
Miami, FL	205	68.3	73	24.3	300
Nassau-Suffolk, NY	96	83.5	17	14.8	115
New Orleans, LA	266	78.9	47	13.9	337
New York City, NY	231	62.1	121	32.5	372
Newark, NJ	109	56.2	76	39.2	194
Philadelphia, PA	229	56.3	174	42.8	407
San Diego, CA	202	76.2	45	17.0	265
San Francisco, CA	220	73.8	53	17.8	298
San Juan, PR	93	42.5	111	50.7	219
Seattle, WA	187	79.2	34	14.4	236
Washington, DC	205	53.2	165	42.9	385
Total	**3,866**	**67.8**	**1,552**	**27.2**	**5,698**

Abbreviations: PWID, persons who inject drugs [footnotes only]; HMO, health maintenance organization [footnotes only].

Note. Data report setting of most recent HIV test. Data exclude PWID who did not report an HIV test during the past 12 months or who reported receiving an HIV-positive test result more than 12 months before interview. Data exclude “Other” locations, which could not be classified as clinical/nonclinical settings.

[a] Clinical settings include private doctor’s office (including HMO), emergency department, hospital (inpatient), public health clinic or community health center, family planning or obstetrics clinic, correctional facility, or drug treatment program.

[b] Nonclinical settings include HIV counseling and testing site, HIV street outreach program or mobile unit, syringe services program, or home.

[c] Hispanics/Latinos can be of any race.

Table 5. Sexual behavior during the 12 months preceding interview among males who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	With female sex partners								With male sex partners						With males and females—sex of any type[a]		Total males
	Vaginal sex		Condomless vaginal sex		Anal sex		Condomless anal sex		Oral or anal sex		Anal sex		Condomless anal sex				
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
HIV-negative[b]	5,624	80.9	4,866	70.0	2,232	32.1	1,735	24.9	632	9.1	437	6.3	316	4.5	479	6.9	6,954
Age at interview (yr)																	
18–24	325	88.8	291	79.5	136	37.2	98	26.8	53	14.5	34	9.3	27	7.4	37	10.1	366
25–29	719	88.1	657	80.5	344	42.2	264	32.4	86	10.5	57	7.0	44	5.4	61	7.5	816
30–39	1,421	87.0	1,269	77.7	637	39.0	519	31.8	171	10.5	118	7.2	86	5.3	131	8.0	1,633
40–49	1,230	80.3	1,066	69.6	523	34.1	414	27.0	167	10.9	118	7.7	79	5.2	131	8.6	1,532
≥50	1,929	74.0	1,583	60.7	592	22.7	440	16.9	155	5.9	110	4.2	80	3.1	119	4.6	2,607
Race/ethnicity																	
American Indian/Alaska Native	40	67.8	33	55.9	14	23.7	11	18.6	4	6.8	1	1.7	1	1.7	4	6.8	59
Asian	17	77.3	13	59.1	4	18.2	1	4.5	3	13.6	2	9.1	2	9.1	2	9.1	22
Black/African American	1,845	81.0	1,531	67.2	574	25.2	443	19.4	131	5.7	92	4.0	66	2.9	104	4.6	2,279
Hispanic/Latino[c]	1,333	80.3	1,131	68.2	665	40.1	509	30.7	191	11.5	144	8.7	105	6.3	149	9.0	1,659
Native Hawaiian/Other Pacific Islander	7	87.5	6	75.0	2	25.0	1	12.5	1	12.5	1	12.5	1	12.5	0	0.0	8
White	2,181	81.7	1,975	73.9	892	33.4	703	26.3	270	10.1	175	6.6	126	4.7	196	7.3	2,671
Multiple races	189	77.5	167	68.4	74	30.3	60	24.6	30	12.3	21	8.6	14	5.7	22	9.0	244
HIV-positive[d]	281	55.5	167	33.0	119	23.5	63	12.5	175	34.6	153	30.2	123	24.3	56	11.1	506
Age at interview (yr)																	
18–24	0	0.0	0	0.0	0	0.0	0	0.0	6	85.7	6	85.7	5	71.4	0	0.0	7
25–29	8	34.8	5	21.7	1	4.3	0	0.0	16	69.6	16	69.6	14	60.9	3	13.0	23
30–39	42	50.0	32	38.1	24	28.6	13	15.5	43	51.2	39	46.4	36	42.9	11	13.1	84
40–49	88	56.1	57	36.3	43	27.4	24	15.3	66	42.0	57	36.3	45	28.7	24	15.3	157
≥50	143	60.9	73	31.1	51	21.7	26	11.1	44	18.7	35	14.9	23	9.8	18	7.7	235
Race/ethnicity																	
American Indian/Alaska Native	2	50.0	2	50.0	0	0.0	0	0.0	3	75.0	2	50.0	2	50.0	1	25.0	4
Asian	1	100	1	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Black/African American	133	60.2	76	34.4	47	21.3	29	13.1	50	22.6	43	19.5	29	13.1	19	8.6	221
Hispanic/Latino[c]	82	59.4	47	34.1	48	34.8	20	14.5	41	29.7	36	26.1	30	21.7	14	10.1	138
Native Hawaiian/Other Pacific Islander	1	100	1	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
White	51	43.6	33	28.2	22	18.8	14	12.0	66	56.4	59	50.4	50	42.7	17	14.5	117
Multiple races	8	38.1	6	28.6	2	9.5	0	0.0	14	66.7	12	57.1	11	52.4	4	19.0	21
No valid NHBS HIV test result[e]	42	68.9	36	59.0	16	26.2	12	19.7	12	19.7	10	16.4	6	9.8	5	8.2	61
Total	5,947	79.1	5,069	67.4	2,367	31.5	1,810	24.1	819	10.9	600	8.0	445	5.9	540	7.2	7,521

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a] PWID who reported oral, vaginal, or anal sex with at least 1 female partner and oral or anal sex with at least 1 male partner during the past 12 months.

[b] PWID with a valid negative NHBS HIV test result.

[c] Hispanics/Latinos can be of any race.

[d] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[e] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 6. Sexual behavior with female sex partners during the 12 months preceding interview among males who inject drugs, by partner type—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Main female partner				Casual female partner				Main and casual female partners—sex of any type[a]		Total males
	Vaginal or anal sex		Condomless vaginal or anal sex		Vaginal or anal sex		Condomless vaginal or anal sex				
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
HIV-negative[b]	3,855	55.4	3,479	50.0	3,581	51.5	2,709	39.0	1,869	26.9	6,954
Age at interview (yr)											
18–24	241	65.8	222	60.7	240	65.6	184	50.3	161	44.0	366
25–29	532	65.2	500	61.3	517	63.4	412	50.5	332	40.7	816
30–39	1,024	62.7	946	57.9	899	55.1	680	41.6	510	31.2	1,633
40–49	797	52.0	735	48.0	784	51.2	603	39.4	367	24.0	1,532
≥50	1,261	48.4	1,076	41.3	1,141	43.8	830	31.8	499	19.1	2,607
Race/ethnicity											
American Indian/Alaska Native	29	49.2	24	40.7	22	37.3	16	27.1	12	20.3	59
Asian	9	40.9	7	31.8	12	54.5	10	45.5	5	22.7	22
Black/African American	1,307	57.3	1,122	49.2	1,077	47.3	774	34.0	563	24.7	2,279
Hispanic/Latino[c]	865	52.1	763	46.0	874	52.7	661	39.8	414	25.0	1,659
Native Hawaiian/Other Pacific Islander	4	50.0	3	37.5	5	62.5	4	50.0	2	25.0	8
White	1,493	55.9	1,425	53.4	1,463	54.8	1,151	43.1	796	29.8	2,671
Multiple races	140	57.4	128	52.5	122	50.0	89	36.5	75	30.7	244
HIV-positive[d]	166	32.8	99	19.6	182	36.0	108	21.3	70	13.8	506
Age at interview (yr)											
18–24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7
25–29	5	21.7	3	13.0	5	21.7	3	13.0	2	8.7	23
30–39	19	22.6	14	16.7	28	33.3	21	25.0	5	6.0	84
40–49	57	36.3	39	24.8	58	36.9	37	23.6	27	17.2	157
≥50	85	36.2	43	18.3	91	38.7	47	20.0	36	15.3	235
Race/ethnicity											
American Indian/Alaska Native	1	25.0	1	25.0	1	25.0	1	25.0	0	0.0	4
Asian	0	0.0	0	0.0	1	100	1	100	0	0.0	1
Black/African American	89	40.3	51	23.1	81	36.7	50	22.6	39	17.6	221
Hispanic/Latino[c]	37	26.8	22	15.9	58	42.0	31	22.5	13	9.4	138
Native Hawaiian/Other Pacific Islander	1	100	1	100	0	0.0	0	0.0	0	0.0	1
White	31	26.5	20	17.1	34	29.1	22	18.8	14	12.0	117
Multiple races	5	23.8	4	19.0	4	19.0	2	9.5	2	9.5	21
No valid NHBS HIV test result[e]	30	49.2	25	41.0	20	32.8	15	24.6	9	14.8	61
Total	4,051	53.9	3,603	47.9	3,783	50.3	2,832	37.7	1,948	25.9	7,521

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a] PWID who reported oral, vaginal, or anal sex with at least 1 female main partner and at least 1 female casual partner during the 12 months preceding interview.

[b] PWID with a valid negative NHBS HIV test result.

[c] Hispanics/Latinos can be of any race.

[d] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[e] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 7. Sexual behavior with male sex partners during the 12 months preceding interview among females who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Vaginal sex		Condomless vaginal sex		Anal sex		Condomless anal sex		Total females
	No.	%	No.	%	No.	%	No.	%	No.
HIV-negative[a]	2,240	83.4	2,029	75.6	829	30.9	707	26.3	2,685
Age at interview (yr)									
18–24	194	93.3	187	89.9	83	39.9	68	32.7	208
25–29	308	93.6	292	88.8	136	41.3	110	33.4	329
30–39	619	91.6	569	84.2	273	40.4	243	35.9	676
40–49	526	85.3	481	78.0	198	32.1	166	26.9	617
≥50	593	69.4	500	58.5	139	16.3	120	14.0	855
Race/ethnicity									
American Indian/Alaska Native	28	73.7	26	68.4	12	31.6	11	28.9	38
Asian	3	60.0	3	60.0	3	60.0	3	60.0	5
Black/African American	636	75.6	551	65.5	199	23.7	169	20.1	841
Hispanic/Latino[b]	420	84.3	388	77.9	173	34.7	146	29.3	498
Native Hawaiian/Other Pacific Islander	5	71.4	5	71.4	2	28.6	2	28.6	7
White	1,026	88.7	942	81.4	397	34.3	337	29.1	1,157
Multiple races	119	88.8	111	82.8	41	30.6	37	27.6	134
HIV-positive[c]	151	74.4	95	46.8	54	26.6	31	15.3	203
Age at interview (yr)									
18–24	1	100	1	100	0	0.0	0	0.0	1
25–29	8	88.9	4	44.4	3	33.3	2	22.2	9
30–39	22	91.7	16	66.7	11	45.8	7	29.2	24
40–49	66	78.6	44	52.4	30	35.7	18	21.4	84
≥50	54	63.5	30	35.3	10	11.8	4	4.7	85
Race/ethnicity									
American Indian/Alaska Native	2	100	1	50.0	0	0.0	0	0.0	2
Asian	0	—	0	—	0	—	0	—	0
Black/African American	83	71.6	52	44.8	26	22.4	17	14.7	116
Hispanic/Latino[b]	27	71.1	17	44.7	12	31.6	6	15.8	38
Native Hawaiian/Other Pacific Islander	0	—	0	—	0	—	0	—	0
White	33	82.5	23	57.5	13	32.5	6	15.0	40
Multiple races	5	83.3	2	33.3	3	50.0	2	33.3	6
No valid NHBS HIV test result[d]	19	86.4	15	68.2	2	9.1	2	9.1	22
Total	2,410	82.8	2,139	73.5	885	30.4	740	25.4	2,910

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a] PWID with a valid negative NHBS HIV test result.

[b] Hispanics/Latinos can be of any race.

[c] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[d] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 8. Sexual behavior with male sex partners during the 12 months preceding interview among females who inject drugs, by partner type—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Main male partner				Casual male partner				Main and casual male partners—sex of any type[a]		Total females
	Vaginal or anal sex		Condomless vaginal or anal sex		Vaginal or anal sex		Condomless vaginal or anal sex				
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
HIV-negative[b]	1,836	68.4	1,686	62.8	1,263	47.0	941	35.0	899	33.5	2,685
Age at interview (yr)											
18–24	185	88.9	176	84.6	119	57.2	91	43.8	111	53.4	208
25–29	276	83.9	261	79.3	175	53.2	129	39.2	147	44.7	329
30–39	522	77.2	487	72.0	369	54.6	266	39.3	279	41.3	676
40–49	416	67.4	389	63.0	303	49.1	230	37.3	204	33.1	617
≥50	437	51.1	373	43.6	297	34.7	225	26.3	158	18.5	855
Race/ethnicity											
American Indian/Alaska Native	24	63.2	22	57.9	20	52.6	16	42.1	16	42.1	38
Asian	3	60.0	3	60.0	1	20.0	0	0.0	1	20.0	5
Black/African American	479	57.0	422	50.2	355	42.2	273	32.5	217	25.8	841
Hispanic/Latino[c]	333	66.9	311	62.4	253	50.8	196	39.4	171	34.3	498
Native Hawaiian/Other Pacific Islander	5	71.4	5	71.4	1	14.3	0	0.0	1	14.3	7
White	893	77.2	831	71.8	563	48.7	397	34.3	441	38.1	1,157
Multiple races	97	72.4	90	67.2	69	51.5	58	43.3	52	38.8	134
HIV-positive[d]	103	50.7	67	33.0	84	41.4	48	23.6	42	20.7	203
Age at interview (yr)											
18–24	0	0.0	0	0.0	1	100	1	100	0	0.0	1
25–29	5	55.6	2	22.2	4	44.4	2	22.2	1	11.1	9
30–39	19	79.2	14	58.3	10	41.7	6	25.0	8	33.3	24
40–49	47	56.0	31	36.9	42	50.0	26	31.0	27	32.1	84
≥50	32	37.6	20	23.5	27	31.8	13	15.3	6	7.1	85
Race/ethnicity											
American Indian/Alaska Native	2	100	1	50.0	2	100	1	50.0	2	100	2
Asian	0	—	0	—	0	—	0	—	0	—	0
Black/African American	58	50.0	37	31.9	44	37.9	26	22.4	21	18.1	116
Hispanic/Latino[c]	15	39.5	10	26.3	21	55.3	12	31.6	10	26.3	38
Native Hawaiian/Other Pacific Islander	0	—	0	—	0	—	0	—	0	—	0
White	24	60.0	17	42.5	14	35.0	8	20.0	7	17.5	40
Multiple races	4	66.7	2	33.3	2	33.3	1	16.7	2	33.3	6
No valid NHBS HIV test result[e]	12	54.5	11	50.0	9	40.9	7	31.8	3	13.6	22
Total	1,951	67.0	1,764	60.6	1,356	46.6	996	34.2	944	32.4	2,910

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a] PWID who reported oral, vaginal, or anal sex with at least 1 male main partner and at least 1 male casual partner during the 12 months preceding interview.

[b] PWID with a valid negative NHBS HIV test result.

[c] Hispanics/Latinos can be of any race.

[d] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[e] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 9. Injection drug use during the 12 months preceding interview, by selected drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Heroin				Speedball[a]				Powder or crack cocaine				Methamphetamine				Prescription opioids				Other drug		
	Injected, past 12 months		Injected daily		Injected, past 12 months		Injected daily		Injected, past 12 months		Injected daily		Injected, past 12 months		Injected daily		Injected, past 12 months		Injected daily		Injected, past 12 months		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
HIV-negative[b]	8,733	90.3	7,168	74.1	4,504	46.6	1,897	19.6	3,819	39.5	1,276	13.2	2,656	27.5	905	9.4	1,954	20.2	373	3.9	561	5.8	9,675
Gender																							
Male	6,256	90.0	5,113	73.5	3,351	48.2	1,434	20.6	2,860	41.1	955	13.7	1,923	27.7	657	9.4	1,432	20.6	279	4.0	427	6.1	6,954
Female	2,451	91.3	2,037	75.9	1,136	42.3	457	17.0	939	35.0	312	11.6	717	26.7	240	8.9	510	19.0	91	3.4	129	4.8	2,685
Transgender	26	72.2	18	50.0	17	47.2	6	16.7	20	55.6	9	25.0	16	44.4	8	22.2	12	33.3	3	8.3	5	13.9	36
Age at interview (yr)																							
18–24	539	93.3	457	79.1	279	48.3	86	14.9	266	46.0	64	11.1	275	47.6	101	17.5	186	32.2	28	4.8	78	13.5	578
25–29	1,075	93.6	931	81.1	558	48.6	203	17.7	548	47.7	148	12.9	441	38.4	148	12.9	293	25.5	52	4.5	123	10.7	1,148
30–39	2,090	90.2	1,766	76.2	1,119	48.3	474	20.5	1,009	43.5	339	14.6	760	32.8	253	10.9	590	25.5	112	4.8	196	8.5	2,317
40–49	1,876	86.9	1,547	71.7	1,010	46.8	453	21.0	798	37.0	276	12.8	606	28.1	216	10.0	369	17.1	62	2.9	82	3.8	2,159
≥50	3,153	90.8	2,467	71.0	1,538	44.3	681	19.6	1,198	34.5	449	12.9	574	16.5	187	5.4	516	14.9	119	3.4	82	2.4	3,473
Race/ethnicity																							
American Indian/Alaska Native	86	86.9	64	64.6	42	42.4	17	17.2	44	44.4	13	13.1	50	50.5	21	21.2	30	30.3	8	8.1	7	7.1	99
Asian	24	85.7	18	64.3	11	39.3	2	7.1	8	28.6	1	3.6	12	42.9	7	25.0	7	25.0	1	3.6	3	10.7	28
Black/African American	2,913	92.9	2,327	74.2	1,564	49.9	799	25.5	1,161	37.0	514	16.4	298	9.5	107	3.4	359	11.4	85	2.7	50	1.6	3,137
Hispanic/Latino[c]	1,888	87.3	1,605	74.2	1,026	47.5	580	26.8	702	32.5	294	13.6	494	22.8	178	8.2	314	14.5	78	3.6	102	4.7	2,162
Native Hawaiian/Other Pacific Islander	11	73.3	9	60.0	3	20.0	1	6.7	6	40.0	1	6.7	9	60.0	3	20.0	3	20.0	1	6.7	1	6.7	15
White	3,462	90.2	2,888	75.3	1,675	43.7	440	11.5	1,725	45.0	416	10.8	1,599	41.7	511	13.3	1,105	28.8	168	4.4	345	9.0	3,837
Multiple races	334	87.9	245	64.5	175	46.1	53	13.9	165	43.4	35	9.2	188	49.5	75	19.7	133	35.0	32	8.4	52	13.7	380
HIV-positive[d]	549	75.7	431	59.4	376	51.9	214	29.5	287	39.6	132	18.2	209	28.8	89	12.3	83	11.4	23	3.2	27	3.7	725
Gender																							
Male	362	71.5	281	55.5	261	51.6	149	29.4	196	38.7	89	17.6	170	33.6	72	14.2	55	10.9	17	3.4	20	4.0	506
Female	178	87.7	144	70.9	106	52.2	61	30.0	83	40.9	39	19.2	31	15.3	12	5.9	26	12.8	6	3.0	6	3.0	203
Transgender	9	56.3	6	37.5	9	56.3	4	25.0	8	50.0	4	25.0	8	50.0	5	31.3	2	12.5	0	0.0	1	6.3	16
Age at interview (yr)																							
18–24	7	87.5	6	75.0	3	37.5	2	25.0	1	12.5	0	0.0	4	50.0	4	50.0	0	0.0	0	0.0	0	0.0	8
25–29	20	60.6	15	45.5	13	39.4	6	18.2	12	36.4	6	18.2	19	57.6	8	24.2	8	24.2	4	12.1	2	6.1	33
30–39	74	64.9	60	52.6	54	47.4	30	26.3	41	36.0	15	13.2	60	52.6	28	24.6	15	13.2	1	0.9	8	7.0	114
40–49	183	74.4	140	56.9	130	52.8	70	28.5	101	41.1	45	18.3	72	29.3	34	13.8	25	10.2	8	3.3	9	3.7	246
≥50	265	81.8	210	64.8	176	54.3	106	32.7	132	40.7	66	20.4	54	16.7	15	4.6	35	10.8	10	3.1	8	2.5	324
Race/ethnicity																							
American Indian/Alaska Native	2	33.3	1	16.7	1	16.7	1	16.7	0	0.0	0	0.0	6	100	4	66.7	1	16.7	0	0.0	0	0.0	6
Asian	1	100	1	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100	0	0.0	0	0.0	1
Black/African American	297	85.1	236	67.6	195	55.9	113	32.4	142	40.7	73	20.9	43	12.3	17	4.9	27	7.7	9	2.6	8	2.3	349
Hispanic/Latino[c]	129	72.5	110	61.8	110	61.8	77	43.3	79	44.4	38	21.3	40	22.5	17	9.6	16	9.0	4	2.2	4	2.2	178
Native Hawaiian/Other Pacific Islander	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100	1	100	0	0.0	0	0.0	0	0.0	1
White	101	63.9	72	45.6	57	36.1	16	10.1	56	35.4	18	11.4	94	59.5	39	24.7	32	20.3	9	5.7	14	8.9	158
Multiple races	16	57.1	9	32.1	10	35.7	6	21.4	8	28.6	2	7.1	22	78.6	11	39.3	4	14.3	1	3.6	1	3.6	28
No valid NHBS HIV test result[e]	72	84.7	56	65.9	40	47.1	19	22.4	32	37.6	16	18.8	21	24.7	7	8.2	4	4.7	1	1.2	3	3.5	85
Total	9,354	89.2	7,655	73.0	4,920	46.9	2,130	20.3	4,138	39.5	1,424	13.6	2,886	27.5	1,001	9.5	2,041	19.5	397	3.8	591	5.6	10,485

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

Note. "Past 12 months" refers to the 12 months preceding interview.

[a] Heroin and cocaine being injected together.

[b] PWID with a valid negative NHBS HIV test result.

[c] Hispanics/Latinos can be of any race.

[d] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[e] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 10. Sharing of injection equipment during the 12 months preceding interview among persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Receptive sharing								Distributive sharing[a]		
	Syringes[b]		Injection equipment[c]		Syringes to divide drugs[d]		Any[e]		Syringes		
	No.	%	No.	%	No.	%	No.	%	No.	%	Total No.
HIV-negative[f]	3,304	34.1	5,445	56.3	3,411	35.3	5,867	60.6	4,149	42.9	9,675
Gender											
Male	2,288	32.9	3,872	55.7	2,368	34.1	4,169	60.0	2,928	42.1	6,954
Female	1,003	37.4	1,557	58.0	1,028	38.3	1,677	62.5	1,207	45.0	2,685
Transgender	13	36.1	16	44.4	15	41.7	21	58.3	14	38.9	36
Age at interview (yr)											
18–24	303	52.4	405	70.1	274	47.4	440	76.1	358	61.9	578
25–29	574	50.0	783	68.2	523	45.6	837	72.9	647	56.4	1,148
30–39	971	41.9	1,478	63.8	959	41.4	1,588	68.5	1,225	52.9	2,317
40–49	709	32.8	1,190	55.1	745	34.5	1,285	59.5	907	42.0	2,159
≥50	747	21.5	1,589	45.8	910	26.2	1,717	49.4	1,012	29.1	3,473
Race/ethnicity											
American Indian/Alaska Native	37	37.4	57	57.6	41	41.4	64	64.6	42	42.4	99
Asian	9	32.1	19	67.9	11	39.3	19	67.9	12	42.9	28
Black/African American	656	20.9	1,469	46.8	861	27.4	1,586	50.6	930	29.6	3,137
Hispanic/Latino[g]	765	35.4	1,230	56.9	842	38.9	1,320	61.1	1,017	47.0	2,162
Native Hawaiian/Other Pacific Islander	8	53.3	9	60.0	6	40.0	10	66.7	4	26.7	15
White	1,683	43.9	2,431	63.4	1,510	39.4	2,620	68.3	1,963	51.2	3,837
Multiple races	141	37.1	223	58.7	135	35.5	240	63.2	174	45.8	380
HIV-positive[h]	182	25.1	352	48.6	242	33.4	382	52.7	153	21.1	725
Gender											
Male	127	25.1	247	48.8	163	32.2	269	53.2	101	20.0	506
Female	50	24.6	96	47.3	72	35.5	104	51.2	47	23.2	203
Transgender	5	31.3	9	56.3	7	43.8	9	56.3	5	31.3	16
Age at interview (yr)											
18–24	3	37.5	2	25.0	1	12.5	3	37.5	3	37.5	8
25–29	9	27.3	13	39.4	11	33.3	15	45.5	8	24.2	33
30–39	42	36.8	59	51.8	46	40.4	67	58.8	28	24.6	114
40–49	67	27.2	128	52.0	87	35.4	141	57.3	55	22.4	246
≥50	61	18.8	150	46.3	97	29.9	156	48.1	59	18.2	324
Race/ethnicity											
American Indian/Alaska Native	2	33.3	3	50.0	1	16.7	4	66.7	1	16.7	6
Asian	1	100	1	100	1	100	1	100	1	100	1
Black/African American	65	18.6	166	47.6	105	30.1	176	50.4	65	18.6	349
Hispanic/Latino[g]	58	32.6	90	50.6	74	41.6	97	54.5	41	23.0	178
Native Hawaiian/Other Pacific Islander	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
White	48	30.4	77	48.7	51	32.3	87	55.1	38	24.1	158
Multiple races	7	25.0	13	46.4	9	32.1	15	53.6	6	21.4	28
No valid NHBS HIV test result[i]	22	25.9	42	49.4	29	34.1	44	51.8	30	35.3	85
Total	3,508	33.5	5,839	55.7	3,682	35.1	6,293	60.0	4,332	41.3	10,485

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a] A participant giving their needle to someone else to use after they had already used it for injection.

[b] Used a needle that had already been used by someone else for injection.

[c] Used a cooker (e.g., spoon, bottle cap) or cotton (to filter particles from drug solution) that had already been used by someone else or shared water for rinsing.

[d] Divided a drug solution by using a syringe that had already been used by someone else for injection.

[e] Used a needle that had already been used by someone else for injection, used a cooker or cotton that had already been used by someone else, shared water for rinsing, or divided a drug solution by using a syringe that had already been used by someone else for injection.

[f] PWID with a valid negative NHBS HIV test result.

[g] Hispanics/Latinos can be of any race.

[h] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[i] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 11a. Receipt of HIV prevention materials and services during the 12 months preceding interview among persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Syringes from SSPs		Syringes from pharmacy		Injection equipment from SSPs		Free condoms[a]		Individual- or group-level intervention[b]		
	No.	%	No.	%	No.	%	No.	%	No.	%	Total No.
HIV-negative[c]	4,989	51.6	4,346	44.9	4,259	44.0	4,583	47.4	2,335	24.1	9,675
Gender											
Male	3,566	51.3	3,122	44.9	3,043	43.8	3,292	47.3	1,615	23.2	6,954
Female	1,407	52.4	1,211	45.1	1,199	44.7	1,271	47.3	702	26.1	2,685
Transgender	16	44.4	13	36.1	17	47.2	20	55.6	18	50.0	36
Age at interview (yr)											
18–24	284	49.1	325	56.2	249	43.1	271	46.9	102	17.6	578
25–29	609	53.0	653	56.9	543	47.3	531	46.3	248	21.6	1,148
30–39	1,269	54.8	1,210	52.2	1,126	48.6	1,141	49.2	536	23.1	2,317
40–49	1,106	51.2	874	40.5	941	43.6	1,032	47.8	542	25.1	2,159
≥50	1,721	49.6	1,284	37.0	1,400	40.3	1,608	46.3	907	26.1	3,473
Race/ethnicity											
American Indian/Alaska Native	57	57.6	42	42.4	49	49.5	44	44.4	31	31.3	99
Asian	18	64.3	15	53.6	15	53.6	14	50.0	10	35.7	28
Black/African American	1,376	43.9	903	28.8	1,124	35.8	1,529	48.7	868	27.7	3,137
Hispanic/Latino[d]	1,188	54.9	1,028	47.5	997	46.1	1,088	50.3	541	25.0	2,162
Native Hawaiian/Other Pacific Islander	5	33.3	6	40.0	3	20.0	5	33.3	1	6.7	15
White	2,122	55.3	2,157	56.2	1,877	48.9	1,703	44.4	781	20.4	3,837
Multiple races	214	56.3	187	49.2	186	48.9	190	50.0	101	26.6	380
HIV-positive[e]	383	52.8	246	33.9	320	44.1	502	69.2	289	39.9	725
Gender											
Male	279	55.1	181	35.8	231	45.7	352	69.6	188	37.2	506
Female	97	47.8	57	28.1	83	40.9	136	67.0	93	45.8	203
Transgender	7	43.8	8	50.0	6	37.5	14	87.5	8	50.0	16
Age at interview (yr)											
18–24	4	50.0	3	37.5	3	37.5	7	87.5	4	50.0	8
25–29	19	57.6	13	39.4	16	48.5	27	81.8	11	33.3	33
30–39	56	49.1	48	42.1	46	40.4	80	70.2	46	40.4	114
40–49	128	52.0	91	37.0	112	45.5	173	70.3	93	37.8	246
≥50	176	54.3	91	28.1	143	44.1	215	66.4	135	41.7	324
Race/ethnicity											
American Indian/Alaska Native	3	50.0	2	33.3	3	50.0	5	83.3	2	33.3	6
Asian	0	0.0	0	0.0	0	0.0	1	100	1	100	1
Black/African American	160	45.8	81	23.2	132	37.8	230	65.9	150	43.0	349
Hispanic/Latino[d]	110	61.8	77	43.3	87	48.9	118	66.3	65	36.5	178
Native Hawaiian/Other Pacific Islander	0	0.0	0	0.0	1	100	1	100	1	100	1
White	88	55.7	72	45.6	80	50.6	121	76.6	57	36.1	158
Multiple races	19	67.9	12	42.9	15	53.6	23	82.1	13	46.4	28
No valid NHBS HIV test result[f]	43	50.6	31	36.5	44	51.8	60	70.6	33	38.8	85
Total	5,415	51.6	4,623	44.1	4,623	44.1	5,145	49.1	2,657	25.3	10,485

Abbreviations: SSPs, syringe services programs; NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a] Excludes condoms received from friends, relatives, or sex partners.

[b] Defined as either one-on-one conversations with an outreach worker, a counselor, or a prevention program worker about ways to prevent HIV, or participating in any organized sessions that involve a small group of people discussing ways to prevent HIV infections, excluding informal discussions with friends. Conversations that were part of obtaining an HIV test were excluded.

[c] PWID with a valid negative NHBS HIV test result.

[d] Hispanics/Latinos can be of any race.

[e] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[f] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 11b. Receipt of HIV prevention materials and services during the 12 months preceding interview among persons who inject drugs by area of residence—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Syringes from SSPs		Syringes from pharmacy		Injection equipment from SSPs		Free condoms[a]		Individual- or group-level intervention[b]		
	No.	%	No.	%	No.	%	No.	%	No.	%	Total No.
HIV-negative[c]											
Atlanta, GA	177	45.6	169	43.6	137	35.3	205	52.8	104	26.8	388
Baltimore, MD	293	58.5	95	19.0	233	46.5	265	52.9	151	30.1	501
Boston, MA	330	67.5	394	80.6	297	60.7	265	54.2	215	44.0	489
Chicago, IL	324	61.4	408	77.3	306	58.0	232	43.9	130	24.6	528
Dallas, TX	8	1.6	199	40.4	3	0.6	122	24.7	71	14.4	493
Denver, CO	360	63.3	318	55.9	309	54.3	289	50.8	113	19.9	569
Detroit, MI	218	38.5	309	54.6	165	29.2	135	23.9	98	17.3	566
Houston, TX	14	3.0	264	55.8	5	1.1	181	38.3	116	24.5	473
Los Angeles, CA	351	68.8	221	43.3	319	62.5	271	53.1	139	27.3	510
Miami, FL	14	3.2	70	15.8	3	0.7	153	34.5	59	13.3	444
Nassau-Suffolk, NY	80	39.8	138	68.7	63	31.3	109	54.2	61	30.3	201
New Orleans, LA	189	32.8	178	30.8	137	23.7	271	47.0	85	14.7	577
New York City, NY	324	68.5	243	51.4	296	62.6	275	58.1	217	45.9	473
Newark, NJ	174	51.2	90	26.5	139	40.9	138	40.6	77	22.6	340
Philadelphia, PA	449	71.7	136	21.7	404	64.5	242	38.7	90	14.4	626
San Diego, CA	255	42.4	296	49.2	214	35.5	260	43.2	77	12.8	602
San Francisco, CA	407	89.6	215	47.4	373	82.2	300	66.1	99	21.8	454
San Juan, PR	295	61.5	299	62.3	213	44.4	311	64.8	131	27.3	480
Seattle, WA	389	77.0	228	45.1	362	71.7	261	51.7	119	23.6	505
Washington, DC	338	74.1	76	16.7	281	61.6	298	65.4	183	40.1	456
HIV-positive[d]											
Atlanta, GA	11	30.6	16	44.4	9	25.0	29	80.6	12	33.3	36
Baltimore, MD	51	68.9	6	8.1	46	62.2	46	62.2	33	44.6	74
Boston, MA	9	81.8	7	63.6	7	63.6	8	72.7	8	72.7	11
Chicago, IL	3	33.3	6	66.7	4	44.4	8	88.9	3	33.3	9
Dallas, TX	1	8.3	4	33.3	0	0.0	9	75.0	5	41.7	12
Denver, CO	14	58.3	14	58.3	13	54.2	21	87.5	16	66.7	24
Detroit, MI	7	46.7	8	53.3	4	26.7	7	46.7	5	33.3	15
Houston, TX	3	6.8	27	61.4	2	4.5	32	72.7	18	40.9	44
Los Angeles, CA	10	62.5	6	37.5	9	56.3	15	93.8	8	50.0	16
Miami, FL	0	0.0	8	10.5	0	0.0	43	56.6	26	34.2	76
Nassau-Suffolk, NY	4	50.0	5	62.5	3	37.5	5	62.5	4	50.0	8
New Orleans, LA	6	19.4	7	22.6	5	16.1	23	74.2	8	25.8	31
New York City, NY	35	70.0	21	42.0	32	64.0	32	64.0	24	48.0	50
Newark, NJ	16	37.2	12	27.9	11	25.6	25	58.1	15	34.9	43
Philadelphia, PA	29	90.6	6	18.8	26	81.3	17	53.1	10	31.3	32
San Diego, CA	10	50.0	5	25.0	7	35.0	13	65.0	10	50.0	20
San Francisco, CA	69	89.6	37	48.1	59	76.6	55	71.4	19	24.7	77
San Juan, PR	46	75.4	34	55.7	33	54.1	47	77.0	20	32.8	61
Seattle, WA	22	88.0	10	40.0	20	80.0	22	88.0	15	60.0	25
Washington, DC	37	60.7	7	11.5	30	49.2	45	73.8	30	49.2	61

Abbreviations: SSPs, syringe services programs; PWID, persons who inject drugs [footnotes only]; NHBS, National HIV Behavioral Surveillance [footnotes only].

[a] Excludes condoms received from friends, relatives, or sex partners.

[b] Defined as either one-on-one conversations with an outreach worker, a counselor, or a prevention program worker about ways to prevent HIV, or participating in any organized sessions that involve a small group of people discussing ways to prevent HIV infections, excluding informal discussions with friends. Conversations that were part of obtaining an HIV test were excluded.

[c] PWID with a valid negative NHBS HIV test result.

[d] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

Table 12. Diagnosis of sexually transmitted infections among persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Diagnosis during the 12 months preceding interview								Diagnosis, ever				
	Any bacterial STI[a]		Chlamydia		Gonorrhea		Syphilis		Genital warts		Genital herpes		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total No.
HIV-negative[b]	411	4.2	225	2.3	180	1.9	111	1.1	306	3.2	382	3.9	9,675
Gender													
Male	251	3.6	117	1.7	129	1.9	74	1.1	188	2.7	220	3.2	6,954
Female	158	5.9	108	4.0	51	1.9	35	1.3	117	4.4	161	6.0	2,685
Transgender	2	5.6	0	0.0	0	0.0	2	5.6	1	2.8	1	2.8	36
Age at interview (yr)													
18–24	36	6.2	27	4.7	14	2.4	3	0.5	7	1.2	24	4.2	578
25–29	47	4.1	38	3.3	23	2.0	7	0.6	26	2.3	36	3.1	1,148
30–39	99	4.3	56	2.4	47	2.0	17	0.7	70	3.0	90	3.9	2,317
40–49	96	4.4	49	2.3	38	1.8	32	1.5	94	4.4	102	4.7	2,159
≥50	133	3.8	55	1.6	58	1.7	52	1.5	109	3.1	130	3.7	3,473
Race/ethnicity													
American Indian/Alaska Native	2	2.0	1	1.0	1	1.0	1	1.0	8	8.1	7	7.1	99
Asian	1	3.6	0	0.0	1	3.6	0	0.0	0	0.0	1	3.6	28
Black/African American	166	5.3	78	2.5	84	2.7	48	1.5	77	2.5	113	3.6	3,137
Hispanic/Latino[c]	74	3.4	37	1.7	27	1.2	28	1.3	52	2.4	96	4.4	2,162
Native Hawaiian/Other Pacific Islander	2	13.3	2	13.3	0	0.0	0	0.0	1	6.7	1	6.7	15
White	149	3.9	98	2.6	60	1.6	28	0.7	149	3.9	140	3.6	3,837
Multiple races	17	4.5	9	2.4	7	1.8	6	1.6	19	5.0	22	5.8	380
HIV-positive[d]	80	11.0	31	4.3	38	5.2	52	7.2	63	8.7	64	8.8	725
Gender													
Male	62	12.3	23	4.5	31	6.1	40	7.9	49	9.7	44	8.7	506
Female	15	7.4	8	3.9	7	3.4	9	4.4	11	5.4	18	8.9	203
Transgender	3	18.8	0	0.0	0	0.0	3	18.8	3	18.8	2	12.5	16
Age at interview (yr)													
18–24	1	12.5	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	8
25–29	11	33.3	5	15.2	8	24.2	8	24.2	6	18.2	2	6.1	33
30–39	19	16.7	7	6.1	6	5.3	13	11.4	8	7.0	7	6.1	114
40–49	23	9.3	10	4.1	10	4.1	14	5.7	17	6.9	25	10.2	246
≥50	26	8.0	9	2.8	14	4.3	16	4.9	32	9.9	30	9.3	324
Race/ethnicity													
American Indian/Alaska Native	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7	0	0.0	6
Asian	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Black/African American	29	8.3	10	2.9	13	3.7	22	6.3	33	9.5	29	8.3	349
Hispanic/Latino[c]	22	12.4	8	4.5	12	6.7	13	7.3	6	3.4	12	6.7	178
Native Hawaiian/Other Pacific Islander	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
White	20	12.7	9	5.7	9	5.7	11	7.0	20	12.7	20	12.7	158
Multiple races	9	32.1	4	14.3	4	14.3	6	21.4	3	10.7	3	10.7	28
No valid NHBS HIV test result[e]	6	7.1	0	0.0	3	3.5	4	4.7	1	1.2	5	5.9	85
Total	497	4.7	256	2.4	221	2.1	167	1.6	370	3.5	451	4.3	10,485

Abbreviations: STI, sexually transmitted infection; NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a]Any bacterial STI includes having received a diagnosis of gonorrhea, chlamydia, or syphilis during the 12 months preceding interview.

[b]PWID with a valid negative NHBS HIV test result.

[c]Hispanics/Latinos can be of any race.

[d]PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[e]PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 13. Lifetime testing for hepatitis C virus and diagnosis of hepatitis C among persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Hepatitis C virus testing		Hepatitis C diagnosis		
	No.	%	No.	%	Total No.
HIV-negative[a]	7,806	80.7	4,228	43.7	9,675
Gender					
Male	5,590	80.4	3,057	44.0	6,954
Female	2,189	81.5	1,159	43.2	2,685
Transgender	27	75.0	12	33.3	36
Age at interview (yr)					
18–24	372	64.4	115	19.9	578
25–29	877	76.4	358	31.2	1,148
30–39	1,881	81.2	927	40.0	2,317
40–49	1,736	80.4	935	43.3	2,159
≥50	2,940	84.7	1,893	54.5	3,473
Race/ethnicity					
American Indian/Alaska Native	87	87.9	44	44.4	99
Asian	23	82.1	8	28.6	28
Black/African American	2,508	79.9	1,324	42.2	3,137
Hispanic/Latino[b]	1,686	78.0	960	44.4	2,162
Native Hawaiian/Other Pacific Islander	8	53.3	5	33.3	15
White	3,161	82.4	1,722	44.9	3,837
Multiple races	320	84.2	157	41.3	380
HIV-positive[c]	617	85.1	392	54.1	725
Gender					
Male	427	84.4	278	54.9	506
Female	176	86.7	108	53.2	203
Transgender	14	87.5	6	37.5	16
Age at interview (yr)					
18–24	3	37.5	1	12.5	8
25–29	27	81.8	14	42.4	33
30–39	97	85.1	55	48.2	114
40–49	212	86.2	119	48.4	246
≥50	278	85.8	203	62.7	324
Race/ethnicity					
American Indian/Alaska Native	6	100	2	33.3	6
Asian	1	100	1	100	1
Black/African American	284	81.4	163	46.7	349
Hispanic/Latino[b]	150	84.3	106	59.6	178
Native Hawaiian/Other Pacific Islander	1	100	1	100	1
White	144	91.1	99	62.7	158
Multiple races	28	100	17	60.7	28
No valid NHBS HIV test result[d]	72	84.7	45	52.9	85
Total	**8,495**	**81.0**	**4,665**	**44.5**	**10,485**

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

[a] PWID with a valid negative NHBS HIV test result.

[b] Hispanics/Latinos can be of any race.

[c] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[d] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 14. Noninjection drug use during the 12 months preceding interview and binge drinking during the 30 days preceding interview among persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Used drug	
	No.	%
HIV-negative[a]		
Binge drinking (past 30 days)[b]	2,745	28.4
Marijuana	5,072	52.4
Cocaine	3,097	32.0
Ecstasy	934	9.7
Prescription opioids[c]	3,339	34.5
Downers[d]	3,935	40.7
Methamphetamine	2,559	26.4
Crack	3,846	39.8
Heroin	3,723	38.5
Any noninjection drugs (excludes binge drinking)	7,311	75.6
HIV-positive[e]		
Binge drinking (past 30 days)[b]	150	20.7
Marijuana	319	44.0
Cocaine	175	24.1
Ecstasy	62	8.6
Prescription opioids[c]	162	22.3
Downers[d]	187	25.8
Methamphetamine	175	24.1
Crack	255	35.2
Heroin	213	29.4
Any noninjection drugs (excludes binge drinking)	486	67.0
No valid NHBS HIV test result[f]		
Binge drinking (past 30 days)[b]	23	27.1
Marijuana	38	44.7
Cocaine	24	28.2
Ecstasy	8	9.4
Prescription opioids[c]	22	25.9
Downers[d]	26	30.6
Methamphetamine	19	22.4
Crack	34	40.0
Heroin	29	34.1
Any noninjection drugs (excludes binge drinking)	64	75.3

Disclaimer: The use of trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

Abbreviations: NHBS, National HIV Behavioral Surveillance; PWID, persons who inject drugs [footnotes only].

Note. Denominator is the total number of PWID in the category; HIV-negative PWID: n = 9,675; HIV-positive PWID: n = 725; PWID without a valid NHBS HIV test result: n = 85. Responses are not mutually exclusive; percentages may not add to 100.

[a] PWID with a valid negative NHBS HIV test result.

[b] Defined as 5 or more drinks within about 2 hours (males) or 4 or more drinks within about 2 hours (females) during the 30 days preceding interview.

[c] Painkillers, such as Oxycontin, Vicodin, morphine, or Percocet.

[d] Benzodiazepines, such as Valium, Ativan, or Xanax.

[e] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[f] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 15. Additional outcomes among persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Number of sex partners[a]	Exchange sex among casual partners[b]		Condomless sex with an HIV-discordant partner[c]		Heard of PrEP[d]		Took PrEP[e]		Received drug treatment[f]		Safe syringe disposal only[g]		Years since first injection	
	Median (Q1–Q3)	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Median (Q1–Q3)	Total No.
HIV-negative PWID[h]	2(1–4)	2,472	25.6	2,984	30.8	937	9.7	33	0.3	4,303	44.5	1,667	17.2	18(7–32)	9,675
Gender															
Male	2(1–3)	1,569	22.6	2,179	31.3	673	9.7	24	0.3	3,011	43.3	1,128	16.2	19(8–33)	6,954
Female	2(1–4)	903	33.6	805	30.0	253	9.4	8	0.3	1,281	47.7	532	19.8	14(6–28)	2,685
Transgender[i]	—	—	—	—	—	11	30.6	1	2.8	11	30.6	7	19.4	17.5(7–31.5)	36
Age at interview (yr)															
18–24	2(1–5)	110	19.0	263	45.5	73	12.6	3	0.5	280	48.4	81	14.0	4(2–6)	578
25–29	2(1–5)	230	20.0	419	36.5	109	9.5	6	0.5	591	51.5	171	14.9	6(3–9)	1,148
30–39	2(1–4)	552	23.8	791	34.1	275	11.9	13	0.6	1,140	49.2	342	14.8	12(6–17)	2,317
40–49	2(1–4)	643	29.8	667	30.9	211	9.8	6	0.3	887	41.1	381	17.6	21(12–27)	2,159
≥50	1(0–3)	937	27.0	844	24.3	269	7.7	5	0.1	1,405	40.5	692	19.9	36(28–42)	3,473
Race/ethnicity															
American Indian/Alaska Native	1(1–3)	25	25.3	28	28.3	14	14.1	0	0.0	48	48.5	28	28.3	22(9–32)	99
Asian	1(0–2)	5	17.9	6	21.4	2	7.1	0	0.0	15	53.6	5	17.9	11.5(4–19)	28
Black/African American	1(1–3)	990	31.6	837	26.7	241	7.7	7	0.2	1,276	40.7	548	17.5	30(16–40)	3,137
Hispanic/Latino[j]	2(1–4)	561	25.9	684	31.6	207	9.6	9	0.4	925	42.8	351	16.2	18(7–28)	2,162
Native Hawaiian/Other Pacific Islander	1(1–3)	1	6.7	4	26.7	1	6.7	0	0.0	5	33.3	2	13.3	14(3–34)	15
White	2(1–4)	801	20.9	1,310	34.1	426	11.1	17	0.4	1,854	48.3	655	17.1	11(5–21)	3,837
Multiple races	2(1–4)	88	23.2	110	28.9	44	11.6	0	0.0	173	45.5	74	19.5	15(6–29)	380
HIV-positive[k]	1(0–2)	237	32.7	196	27.0	34	4.7	—	—	284	39.2	170	23.4	24(15–35)	725
Gender															
Male	1(0–2)	167	33.0	134	26.5	29	5.7	—	—	191	37.7	119	23.5	26(15–37)	506
Female	1(1–3)	70	34.5	62	30.5	5	2.5	—	—	87	42.9	46	22.7	22(14–31)	203
Transgender[i]	—	—	—	—	—	0	0.0	—	—	6	37.5	5	31.3	19.5(4.5–24)	16
Age at interview (yr)															
18–24	0(0–0)	4	50.0	3	37.5	0	0.0	—	—	2	25.0	2	25.0	3.5(2–6)	8
25–29	1(0–2)	11	33.3	12	36.4	1	3.0	—	—	12	36.4	8	24.2	6(5–10)	33
30–39	1(0–2)	41	36.0	34	29.8	9	7.9	—	—	50	43.9	27	23.7	14(7–20)	114
40–49	1(0–3)	94	38.2	76	30.9	10	4.1	—	—	79	32.1	54	22.0	21.5(13–28)	246
≥50	1(0–2)	87	26.9	71	21.9	14	4.3	—	—	141	43.5	79	24.4	36(29–41)	324
Race/ethnicity															
American Indian/Alaska Native	1.5(0–2)	1	16.7	1	16.7	0	0.0	—	—	1	16.7	3	50.0	20(12–34)	6
Asian	1(1–1)	0	0.0	0	0.0	0	0.0	—	—	0	0.0	0	0.0	45(45–45)	1
Black/African American	1(0–2)	106	30.4	90	25.8	17	4.9	—	—	154	44.1	81	23.2	30(18–39)	349
Hispanic/Latino[j]	1(0–3)	64	36.0	54	30.3	6	3.4	—	—	61	34.3	25	14.0	22(14–32)	178
Native Hawaiian/Other Pacific Islander	1(1–1)	0	0.0	0	0.0	0	0.0	—	—	0	0.0	1	100	21(21–21)	1
White	1(0–2)	51	32.3	44	27.8	11	7.0	—	—	58	36.7	44	27.8	19.5(10–30)	158
Multiple races	0(0–1)	14	50.0	6	21.4	0	0.0	—	—	10	35.7	14	50.0	18(7.5–28.5)	28
No valid NHBS HIV test result[l]	1(1–2)	27	31.8	24	28.2	9	10.6	—	—	38	44.7	19	22.4	21(6–36)	85
Total	1(1–3)	2,736	26.1	3,204	30.6	980	9.3	—	—	4,625	44.1	1,856	17.7	18(8–32)	10,485

Abbreviations: Q, quartile; PrEP, preexposure prophylaxis; NHBS, National HIV Behavioral Surveillance; SSP, syringe services program [footnotes only]; PWID, persons who inject drugs [footnotes only].

[a] Number of heterosexual partners reported by participants during the 12 months before interview.

[b] For females, "exchange sex" refers to receiving money or drugs from a casual male partner in exchange for sex. For males, "exchange sex" refers to giving money or drugs to a casual female partner in exchange for sex, or giving or receiving money or drugs from a casual male partner in exchange for sex.

[c] "HIV-discordant partner" refers to a partner of different or unknown HIV status. "Condomless sex" refers to whether the participant reported engaging in vaginal or anal sex without a condom during his or her most recent sexual encounter.

[d] Ever heard of people who do not have HIV taking PrEP, the antiretroviral medicine taken every day for months or years to reduce the risk of getting HIV.

[e] Took PrEP at any point during the 12 months before interview to reduce the risk of getting HIV (not including time when taking antiretroviral medicine for only a few days at a time).

[f] Participated in drug treatment program during the 12 months before interview.

[g] Syringes were disposed of by putting them in a medical waste container and/or by exchanging them at an SSP, and no unknown or unsafe disposal method was indicated.

[h] PWID with a valid negative NHBS HIV test result.

[i] Sexual behavior data not available for transgender PWID.

[j] Hispanics/Latinos can be of any race.

[k] PWID with a reactive rapid NHBS HIV test result confirmed by supplemental laboratory-based testing, or a positive result by laboratory-based testing without a rapid HIV test.

[l] PWID who did not have a valid HIV-positive or HIV-negative NHBS test result, including those who did not consent to the HIV test, had an indeterminate result, or reported a previous HIV-positive test result but had an HIV-negative NHBS HIV test result.

Table 16. Receipt of HIV care and treatment among self-reported HIV-positive persons who inject drugs—National HIV Behavioral Surveillance, 20 U.S. cities, 2015

	Visited health care provider about HIV								
	Ever		Within 3 months after diagnosis		During past 6 months		Currently taking anti-HIV medicines		
	No.	%	No.	%	No.	%	No.	%	Total No.
Gender									
Male	363	92.8	228	58.3	322	82.4	280	71.6	391
Female	140	90.3	87	56.1	131	84.5	106	68.4	155
Transgender	13	92.9	9	64.3	12	85.7	11	78.6	14
Age at interview (yr)									
18–24	6	85.7	3	42.9	6	85.7	3	42.9	7
25–29	27	87.1	18	58.1	24	77.4	14	45.2	31
30–39	83	91.2	50	54.9	75	82.4	62	68.1	91
40–49	156	90.7	101	58.7	141	82.0	116	67.4	172
≥50	244	94.2	152	58.7	219	84.6	202	78.0	259
Race/ethnicity									
American Indian/Alaska Native	6	100	1	16.7	6	100	4	66.7	6
Asian	1	100	1	100	1	100	1	100	1
Black/African American	244	93.5	149	57.1	221	84.7	197	75.5	261
Hispanic/Latino[a]	118	89.4	65	49.2	103	78.0	89	67.4	132
Native Hawaiian/Other Pacific Islander	1	100	1	100	1	100	1	100	1
White	118	92.2	86	67.2	108	84.4	85	66.4	128
Multiple races	26	89.7	19	65.5	23	79.3	18	62.1	29
City									
Atlanta, GA	29	93.5	13	41.9	28	90.3	20	64.5	31
Baltimore, MD	51	89.5	33	57.9	40	70.2	37	64.9	57
Boston, MA	13	100	9	69.2	13	100	9	69.2	13
Chicago, IL	8	88.9	4	44.4	8	88.9	4	44.4	9
Dallas, TX	6	100	5	83.3	6	100	5	83.3	6
Denver, CO	25	100	16	64.0	24	96.0	20	80.0	25
Detroit, MI	7	100	3	42.9	7	100	7	100	7
Houston, TX	34	91.9	22	59.5	31	83.8	28	75.7	37
Los Angeles, CA	10	90.9	6	54.5	10	90.9	9	81.8	11
Miami, FL	56	88.9	32	50.8	48	76.2	40	63.5	63
Nassau-Suffolk, NY	5	100	3	60.0	5	100	5	100	5
New Orleans, LA	19	90.5	13	61.9	15	71.4	13	61.9	21
New York City, NY	38	90.5	26	61.9	37	88.1	35	83.3	42
Newark, NJ	34	91.9	19	51.4	31	83.8	27	73.0	37
Philadelphia, PA	17	94.4	11	61.1	16	88.9	14	77.8	18
San Diego, CA	15	100	12	80.0	14	93.3	13	86.7	15
San Francisco, CA	61	95.3	40	62.5	55	85.9	39	60.9	64
San Juan, PR	25	71.4	11	31.4	18	51.4	17	48.6	35
Seattle, WA	23	100	16	69.6	22	95.7	20	87.0	23
Washington, DC	40	97.6	30	73.2	37	90.2	35	85.4	41
Total	516	92.1	324	57.9	465	83.0	397	70.9	560

Abbreviations: PWID, persons who inject drugs [footnotes only]; NHBS, National HIV Behavioral Surveillance [footnotes only].

Note. Data include all PWID who reported having ever received an HIV-positive test result, including those who did not have a valid NHBS HIV test result (including those who did not consent to the HIV test). '"Past 6 months"' refers to the 6 months preceding interview.

[a] Hispanics/Latinos can be of any race.

Participating Metropolitan Statistical Areas, 2015

Principal city	Metropolitan statistical area division
Atlanta, Georgia	Atlanta–Sandy Springs–Marietta, Georgia
Baltimore, Maryland	Baltimore–Towson, Maryland
Boston, Massachusetts	Boston, Massachusetts–New Hampshire (Boston Division)
Chicago, Illinois	Chicago, Illinois–Indiana–Wisconsin (Chicago Division)
Dallas, Texas	Dallas, Texas (Dallas Division)
Denver, Colorado	Denver–Aurora, Colorado
Detroit, Michigan	Detroit, Michigan (Detroit Division)
Houston, Texas	Houston–Baytown–Sugar Land, Texas
Los Angeles, California	Los Angeles, California (Los Angeles Division)
Miami, Florida	Miami Florida (Miami Division)
Nassau–Suffolk, New York	New York, New York–New Jersey–Pennsylvania (Nassau Division)
New Orleans, Louisiana	New Orleans–Metairie–Kenner, Louisiana
New York, New York	New York, New York–New Jersey–Pennsylvania (New York–White Plains–Wayne Division)
Newark, New Jersey	New York, New York–New Jersey–Pennsylvania (Newark Division)
Philadelphia, Pennsylvania	Philadelphia, Pennsylvania–New Jersey–Delaware–Maryland (Philadelphia Division)
San Diego, California	San Diego–Carlsbad–San Marcos, California
San Francisco, California	San Francisco, California (San Francisco Division)
San Juan, Puerto Rico	San Juan–Caguas–Guaynabo, Puerto Rico
Seattle, Washington	Seattle, Washington (Seattle Division)
Washington, DC	Washington, District of Columbia (DC)–Virginia–Maryland–West Virginia (Washington Division)