

Project LINC



AIDS Institute, Division of Epidemiology, Evaluation and Research, Bureau of HIV/AIDS Epidemiology

LINC

Long Islanders Now Connected

In This Issue:

National HIV Behavioral Surveillance System, Heterosexual Cycle, Long Island NY, 2006-2007 Cover

Study Eligibility and Participant Recruitment Criteria Cover

HIV Prevalence2

Sample Demographics2

Selected Characteristics3

Sexual Partners3

HIV Risk Behaviors and Prevention Services3

Limitations3

Conclusions3

Contact Information4

National HIV Behavioral Surveillance System, Heterosexual Cycle, Long Island NY, 2006-2007

This report summarizes data collected between 2006 and 2007 from heterosexuals on Long Island, NY (Nassau and Suffolk Counties) with funding from the Centers for Disease Control and Prevention. Participants were recruited using a peer referral system known as respondent-driven sampling (RDS). RDS is based on the idea that peers are effective recruiters for members of hard-to-reach populations and allows for weighting of the data to account for differences in social network sizes and recruitment patterns. Participants were interviewed using a standardized questionnaire administered by trained staff. All participants were offered an anonymous HIV antibody test; HIV-positive blood samples were tested using the Serologic Testing Algorithm for Recent HIV Seroconversions (STARHS) to classify them as recently acquired versus long-term infection.

Study Eligibility and Participant Recruitment Criteria

Heterosexuals were recruited between September 2006 and June 2007. To be eligible for the health survey, participants must have been age 18 to 50 years old, have had at least one opposite sex partner in the past 12 months, and reside in high prevalence areas (Figures 1a & 1b). High prevalence areas were impoverished census tracts with elevated prevalence of heterosexually transmitted HIV infection (contact authors for detailed methodology). Transgendered persons were ineligible. A total of 853 individuals were interviewed; 159 were excluded because they were selected by project staff to begin recruitment, were ineligible or reported recent injection drug use. Of the remaining 694, 93% (n=643) were tested for HIV antibodies.

Each eligible participant was given three coupons and asked to distribute them to individuals they knew who would be interested in joining the study. The coupons were uniquely coded cards with information on the interview locations, hours of operation, and a brief project description.

Figure 1a. Distribution of Participants by High Prevalence Area, Nassau County, NY

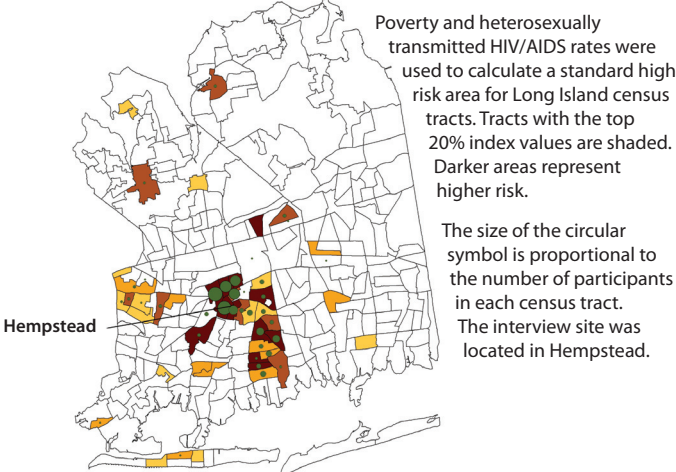


Figure 1b. Distribution of Participants by High Prevalence Area, for Suffolk County, NY

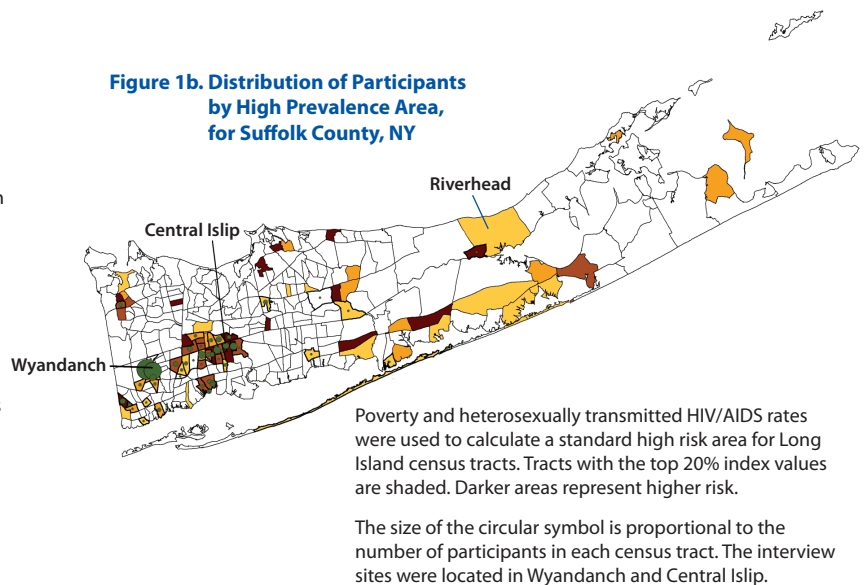


Figure 2. HIV Testing History

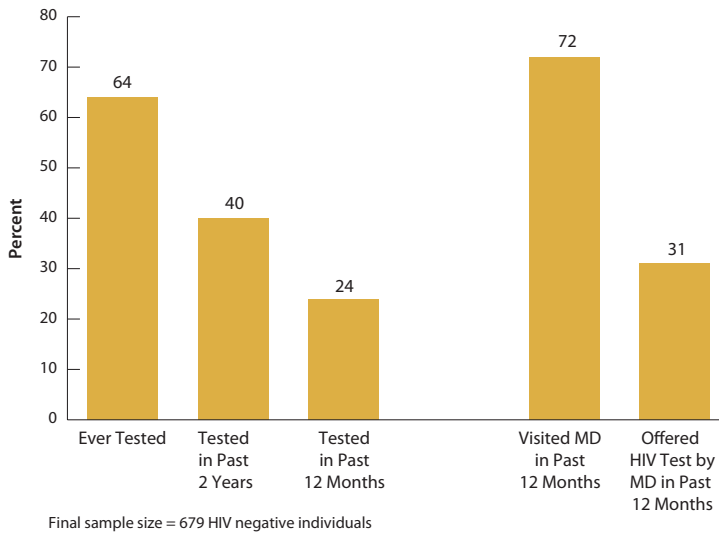
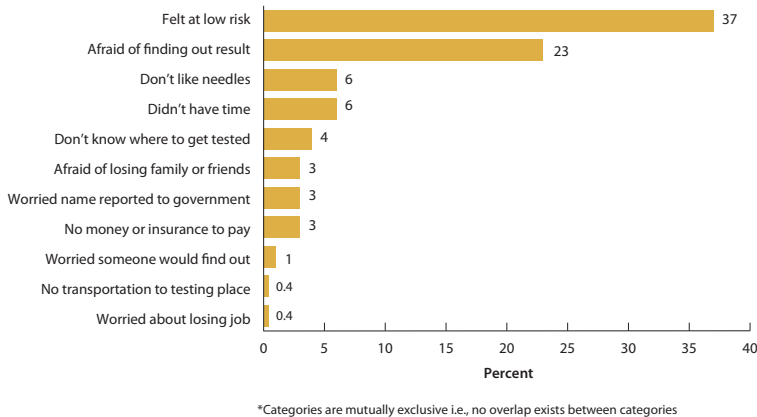


Figure 3. Main Reasons for Not Testing for HIV in the Past 12 Months



HIV Prevalence

Approximately 1 in 4 (24%) heterosexuals reported testing for HIV in the past year (Figure 2). Of those who did not test recently (76%), most reported that they felt at low risk for HIV (37%) or were afraid of finding out the result (23%) (Figure 3). Confirmed HIV infection was identified in 15 individuals for a HIV prevalence of 2.3% (15/643). Of the 15, 12 (80%) reported that they had never been tested for HIV prior to receiving the study HIV test. Two individuals were STARHS reactive indicating that infection likely occurred within 6 months of testing. The majority with confirmed HIV infection were Black (93%), female (66.7%), and age 45-50 years (73%). After assessing HIV prevalence in the sample, the 15 positive cases were excluded from further analyses for a final sample total of 679 HIV negative individuals.

Table 1. Sample Characteristics* of NHBS Heterosexuals 2006-2007

| | Number | Percent |
|--------------------------------|--------|---------|
| County | | |
| Nassau | 408 | 60 |
| Suffolk | 271 | 40 |
| Age (in years) | | |
| 18-24 | 237 | 35 |
| 25-34 | 160 | 24 |
| 35-44 | 172 | 25 |
| 45-50 | 110 | 16 |
| Gender | | |
| Male | 291 | 43 |
| Female | 388 | 57 |
| Race/Ethnicity | | |
| White, non-Hispanic | 71 | 11 |
| Black, non-Hispanic | 469 | 69 |
| Hispanic | 98 | 14 |
| Asian/Pacific Islander | 2 | <1 |
| American Indian/Alaska Native | 5 | <1 |
| Multiracial | 33 | 5 |
| Other** | 1 | <1 |
| Marital Status | | |
| Never Married | 491 | 72 |
| Separated/Divorced/Widowed | 103 | 15 |
| Married or Living as Married | 85 | 13 |
| Education | | |
| Grades 1 through 11 | 185 | 27 |
| Grades 12 or GED | 309 | 46 |
| Any post high school education | 185 | 27 |
| Employment Status | | |
| Employed full/part-time | 315 | 46 |
| Retired/Disabled/Unemployed | 238 | 35 |
| A homemaker/student | 111 | 16 |
| Other | 15 | 2 |
| Income | | |
| <\$5K | 175 | 26 |
| \$5K - <\$10K | 119 | 18 |
| \$10K - <\$20K | 154 | 23 |
| \$20K - <\$40K | 142 | 21 |
| \$40K + | 78 | 12 |

*Final sample size = 679 HIV negative individuals; see text for detailed exclusion criteria

**Inclusive of those who self-reported as Multiracial or something else

Sample Demographics

Table 1 shows characteristics of the final sample. The majority of participants were poor (67% reported <\$20,000 annual income) and female (57%). The mean age of participants was 32 years and 69% self-identified as Black. These participant characteristics indicate that the sample effectively captured demographic groups at highest risk for HIV.

Selected Characteristics

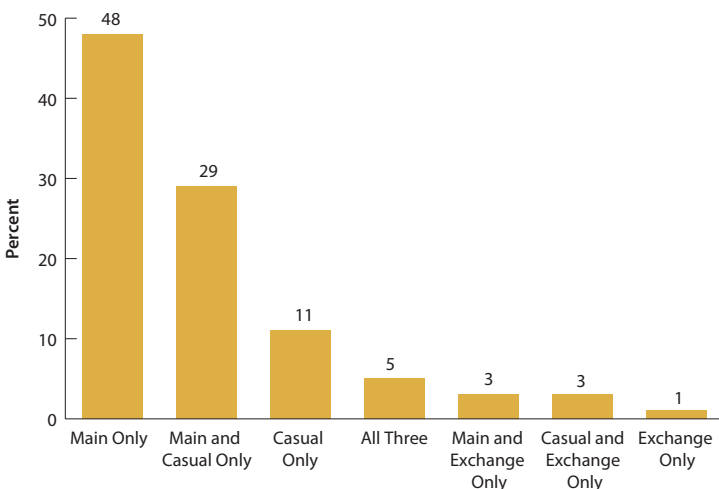
Self-reported non-injection drug use was relatively high among study participants (44%); marijuana was the most common non-injection drug reported (39%). Seven percent of participants reported having sexual partners who injected drugs at some point in their lifetime.

Alcohol use was also common; 67% of participants reported consuming alcohol during the past twelve months and 55% reported consuming alcohol during the past 30 days. One in four participants (26%) reported binge drinking (≥ 4 drinks in one sitting for females and ≥ 5 drinks in one sitting for males) during the past 30 days.

Sexual Partners

Participants were asked to classify their sexual partners as main sexual partners (i.e., someone that the participant felt committed to above anyone else), as casual sexual partners (i.e., someone that the participant did not feel committed to or did not know very well), or as exchange sexual partners (i.e., someone that the participant had sex with in exchange for things like money or drugs). Eighty-five percent of participants reported having main sexual partners in the past 12 months, 47% reported casual partners, and 11% reported exchange partners. In total, seven different sexual partner combinations were identified (Figure 4).

Figure 4. Types of Sexual Partners in the Past 12 Months



*Partner categories are mutually exclusive. Final sample size = 679 HIV negative individuals

HIV Risk Behaviors and Prevention Services

Sixty-four percent of heterosexuals reported engaging in concurrent sexual relationships (Table 2, see page 4). Significant differences were observed by age, with individuals age 18-24 years (70%) and 25-34 years (73%) reporting concurrent sexual partners at a significantly higher rate than individuals age 35-44 years (53%) and individuals age 45-50 years (48%) ($p < 0.01$).

Approximately half (54%) of all participants reported having a casual or exchange partner in the previous 12 months. Males (65%) were significantly more likely than females (45%) to report casual/exchange partners ($p < 0.01$). Roughly one-third of participants reported unprotected vaginal or anal sex with a casual/exchange partner.

Only 13% of heterosexuals reported participating in HIV-related behavioral interventions in the past 12 months and approximately one in three (32%) reported having received free condoms during that time period. Twenty-five percent of the sample reported using a condom at the last sexual encounter; 85% reported doing so for the duration of the encounter.

Limitations

Limiting recruitment to participants who resided solely in high risk areas may have prevented some individuals with risky behaviors from participating. As a result these findings may not be generalizable across Nassau and Suffolk Counties.

Conclusions

In this impoverished and predominantly minority sample, about half of participants reported engaging in sexual activity with casual partners. Concurrent sex was common and condom use during the last sexual encounter was infrequent. Fewer than half of study participants reported testing for HIV in the past 2 years and only one quarter reported testing in the past year. The main reasons for not testing were feeling at low risk for HIV or fear of finding out the result.

These findings indicate a vast difference between a participant's perceived risk for HIV infection and their actual sexual risk behaviors. They also highlight that fear of knowing HIV test results continues to be a strong barrier to testing for some individuals. Addressing the difference between actual and perceived risk for HIV transmission as well as fear-based inaction continues to be a public health challenge.

Table 2. Estimated Percentage for Eight Selected Indicators of Sexual and Behavioral Risk in the Past 12 months Among Heterosexuals, Long Island 2006-2007 †

| | More than One Opposite Sex Partner | Concurrent Sexual Partners§ | Had a Casual or Exchange Partner | Unprotected Vaginal/Anal Sex w/ Casual/Exchange Partner | Received Sexually Transmitted Infection Diagnoses¥ | Tested for HIV Infection | Participated in an HIV Behavioral Intervention‡ | Received Free Condoms |
|-----------------------|------------------------------------|-----------------------------|----------------------------------|---|--|--------------------------|---|-----------------------|
| | % | % | % | % | % | % | % | % |
| Overall | 57 | 64 | 54 | 35 | 11 | 22 | 13 | 32 |
| County | | | | * | | | | |
| Nassau | 55 | 67 | 56 | 40 | 13 | 20 | 11 | 32 |
| Suffolk | 58 | 59 | 48 | 26 | 8 | 27 | 16 | 31 |
| Gender | | | ** | | * | | | |
| Male | 63 | 67 | 65 | 39 | 7 | 21 | 15 | 34 |
| Female | 52 | 62 | 45 | 32 | 14 | 23 | 11 | 31 |
| Race/Ethnicity | | | | | | | | |
| White, Non-Hispanic | 52 | 45 | 50 | 37 | 8 | 21 | 16 | 19 |
| Black, Non-Hispanic | 56 | 67 | 56 | 37 | 11 | 22 | 13 | 34 |
| Hispanic | 58 | 62 | 46 | 21 | 9 | 25 | 7 | 21 |
| Other∞ | 64 | 63 | 52 | 33 | 22 | 18 | 17 | 53 |
| Age in Years | | ** | | | | | | |
| 18-24 | 59 | 70 | 55 | 27 | 10 | 24 | 10 | 32 |
| 25-34 | 55 | 73 | 53 | 37 | 17 | 24 | 12 | 32 |
| 35-44 | 50 | 53 | 53 | 39 | 7 | 22 | 19 | 32 |
| 45-50 | 64 | 48 | 53 | 43 | 10 | 15 | 12 | 33 |

Chi-square distribution was used to assess statistically significant differences at the following levels: * p<0.05; ** p<0.01; ***p<0.001;

† Estimates are weighted to account for differences in recruitment and size of Heterosexual peer networks.

§ Concurrent sexual partner indicates that the participant or their sexual partner had one or more sexual partners during the time span of the relationship.

‡ Behavioral intervention is participation in an individual or group discussion on HIV.

¥ Sexually transmitted infection (STI) is defined as individuals diagnosed with Syphilis, Gonorrhea, Chlamydia, Herpes, Human Papillomavirus, or some other STI in the past 12 months

∞ Other includes individuals who self-reported race as Asian/Pacific Islander, American Indian Alaska Native, Multiracial, or something else.



New York State Department of Health
AIDS Institute
Bureau of HIV/AIDS Epidemiology
Corning Tower, ESP
Albany, NY 12237

Phone: 518-474-4284

Fax: 518-474-1947

E-mail: Carol-Ann Watson

caw15@health.state.ny.us

or

P. Tyler French

ptf01@health.state.ny.us