TRANSBORDER LATINO WOMEN'S HEALTH STUDY

Prepared by:

Susan Gilbreath, Ph.D.
Juan D. Ruiz, M.D., M.P.H., Dr.P.H.
Michele Ginsberg, M.D.

California Department of Health Services
Office of AIDS
HIV/AIDS Epidemiology Branch
www.dhs.ca.gov/AIDS

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Kevin Reilly, D.V.M., M.P.V.M.
Deputy Director
Prevention Services

Barbara Bailey, M.S.
Acting Chief
Office of AIDS

Juan D. Ruiz, M.D., M.P.H., Dr.P.H., Chief
HIV/AIDS Epidemiology Branch
Office of AIDS

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Samantha Ehrlich

Wei Zhou

Annie Vu

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Objectives: The objectives of this study were to: 1) determine the prevalence of human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), and other sexually transmitted diseases (STDs) among Latinas from San Diego, California, and Tijuana, Mexico; 2) assess HIV-related perceptions, attitudes, and risk behaviors among these target populations; and 3) assess the extent to which these perceptions, attitudes, and behaviors put the target populations at risk for exposure to HIV.

Methods: From July 2003 through July 2004, 513 Latinas aged 18 to 35 years were recruited from San Diego and Tijuana by trained field staff using snowball sampling techniques. Women participated in in-depth interviews that included questions on HIV-related sexual and drug use risk behaviors, perceptions, and attitudes. Following the interview, specimens were collected for HIV, HBV, HCV, syphilis, chlamydia, and gonorrhea testing. Test results, counseling, and referral for services were provided during follow-up visits.

Results: One hundred sixty-three women from San Diego and 350 women from Tijuana participated in this study. The prevalence of HIV was higher among women from San Diego than Tijuana (4.9 percent versus 0.3 percent). However, rates for STDs were higher among Tijuana than San Diego participants: syphilis, 2.0 percent versus 0.0 percent; gonorrhea, 1.4 percent versus 0.0 percent; and chlamydia, 10.9 percent versus 5.0 percent. Rates for HBV were similar in both sites: 3.7 percent in women from San Diego and 3.6 percent among women from Tijuana. Rates for HCV were 6.2 percent among women from San Diego and 6.0 percent among women from Tijuana.

A majority of women from San Diego (80.1 percent) reported having sex partners from across the border while only 8.7 percent of women from Tijuana reported transborder sex partners. Almost all study participants (97.5 percent from San Diego and 98.2 percent from Tijuana) reported engaging in unprotected vaginal intercourse. Approximately one-third of women reported anal intercourse and most of these women (89.5 percent from San Diego and 94.1 percent from Tijuana) reported not using protection. More women from San Diego (38.0 percent) than Tijuana (9.9 percent) reported receiving compensation for sex. Slightly over six percent of women from both study sites reported injection drug use. A majority of women from San Diego (73.3 percent) reported previous HIV testing while only 32.4 percent of women from Tijuana had a history of HIV testing.

Associations were explored among the San Diego and Tijuana samples, separately, for the five main outcomes most relevant to HIV risk: self-reported STDs, the presence of any current STD, previous HIV testing, and recent and lifetime unprotected anal intercourse. Correlates of self-reported STDs among both samples included: high acculturation to American society, experiencing homelessness, multiple sex partners, receiving compensation for sex, injection drug use, alcohol use during sex, perceived

risk for HIV infection, receipt of HIV prevention information, and previous HIV testing. Current infection with at least one STD was associated with: living with a partner or spouse, experiencing homelessness, and multiple sex partners. Associations for previous HIV testing included: high acculturation, experiencing homelessness, multiple sex partners, receiving compensation for sex, injection drug use, perceived risk for HIV, receipt of HIV prevention information, and previous self-reported STDs. Lifetime unprotected anal intercourse was associated with: experiencing homelessness, multiple sex partners, receiving compensation for sex, injection drug use, alcohol use during sex, perceived risk for HIV, and previous HIV testing. Associations with unprotected anal intercourse in the four months prior to interviews included: experiencing homelessness, multiple sex partners, receiving compensation for sex, injection drug use, alcohol use during sex, and perceived risk for HIV.

Conclusion: Significant associations were found for history of homelessness, multiple sex partners, receiving compensation for sex, and history of injection drug use for all or most of the five main HIV risk variables assessed in this study. This survey of Latinas on the San Diego and Tijuana border area provides information about the prevalence of HIV, HBV, HCV, chlamydia, syphilis, and gonorrhea, as well as associated behavioral risks, which may be useful to those involved with improving the health of women living on the U.S./Mexico border regions.

INTRODUCTION

In 2004, Latinos represented 35.0 percent of the population in California.[1] From 1981 through July 31, 2005, there have been 30,769 Latinos diagnosed with acquired immunodeficiency syndrome (AIDS), representing 22.0 percent of cumulative AIDS cases in California.[2] However, in 2004, 39.0 percent of diagnosed AIDS cases in California were among Latinos.[2] From July 1, 2002, through July 31, 2005, more than one-quarter of human immunodeficiency virus (HIV) cases reported to the California Department of Health Services, Office of AIDS (CDHS/OA) were among Latinos.[2]

In California, through July 31, 2005, 30.0 percent of Latinas and 23.0 percent of Latino males with AIDS were younger than 30 when diagnosed.[2] These data suggest the AIDS epidemic may be growing faster among California's Latino population in comparison to other racial/ethnic groups because the younger an HIV-infected population is, the more time that population has to engage in risky behaviors that may spread the disease.

According to the U.S. Census Bureau, there were approximately 16 million Latinas (roughly 12.0 percent of the female population) in the United States in 2000. It is expected that by the year 2050, one out of every four women in the United States will be Latina.[3] The proportion of Latinas among all women is increasing in the U.S. population and Latinas are one of the fastest growing groups with HIV/AIDS. The national Latina AIDS case rate is five times higher than that of Caucasian women.[3] For each year since 1995, over ten percent of new annual AIDS cases among California's Latinos have been female.[2] Seventeen percent of California Latino HIV cases were in women. Through July 31, 2005, Latinas represented 29.0 percent of reported HIV infections in women living in California. The Centers for Disease Control and Prevention (CDC) estimates that 55.0 percent of HIV infections among Latinas are attributable to sexual contact.[3] Among Latina AIDS cases in California, 55.0 percent have been attributed to heterosexual contact and 22 percent to injection drug use.[2]

Because of traditional norms about sexuality, Latino men who have sex with men (MSM) tend to also have sex with women and identify themselves as heterosexual.[4-8] In one study, as many as 50.0 percent of Latino MSM self-identified as heterosexual or bisexual and were sexually active with women; 38.0 percent of men reported having partners outside of the primary relationship, and only 20.0 percent used condoms.[7] Another study of over 7,500 MSM in Mexico found that 85.0 percent of bisexual Latino men never used condoms during anal intercourse with women and used condoms during vaginal intercourse just 31.0 percent of the time.[9] Another study among Latino MSM from San Diego, California, and Tijuana, Mexico, found that of 249 Latino MSM, 86.0 percent had reported sex with at least one woman.[10] Of MSM reporting sex with women, 90.0 percent reported unprotected vaginal intercourse and 50.0 percent reported unprotected anal intercourse.[10]

Increasing HIV infection among Latinas may be due to language barriers, lack of access to medical services, fewer socioeconomic resources, gender inequity, and lack of health insurance.[11] Because of the *machista* culture, some Latinas do not feel comfortable talking to men about sex because it suggests promiscuity, so their male partners usually establish the frequency and type of intercourse.[12] A study in Tijuana found that female commercial sex workers did not negotiate with their customers to use condoms, were not familiar with the proper use of condoms, and/or reported discomfort associated with using condoms.[4]

Relatively few studies have examined STD prevalence and risk-taking behaviors (drug use and unprotected vaginal and anal intercourse) among young Latinas. Studies that do exist have not concurrently examined HIV serostatus, STD prevalence, risk-taking behaviors, and sexual attitudes. This report discusses one of the first epidemiological studies of HIV in Latinas involving simultaneous recruitment in the United States and Mexico to explore the impact of STDs and HIV on the border. This is particularly pertinent for the U.S./Mexico border because it separates two distinct cultures with different health policies and socioeconomic environments, yet is maintained as an open border.

The objectives of this study were to: 1) determine the prevalence of HIV, HBV, HCV, and other STDs among Latinas from San Diego, California, and Tijuana, Mexico; 2) assess HIV-related perceptions, attitudes, and risk behaviors among these target populations; and 3) assess the extent to which these perceptions, attitudes, and behaviors put the target populations at risk for exposure to HIV.

METHODS

CDHS/OA; County of San Diego, Health and Human Services Agency; Baja California's Instituto de Servicios de Salud Pública del Estado (State Public Health Services Institute, ISESALUD); and the community-based organization, Proyecto de Consejo y Apoyo Binacional (Binational AIDS Advocacy Project, PROCABI) collaborated on this study. The study was approved by the Committee for the Protection of Human Subjects, California Health and Human Services Agency.

Study Design and Population

This was a cross-sectional study conducted from July 2003 through July 2004. The study population was Latinas between the ages of 18 and 35 years, from southern San Diego County, California, and Tijuana, Mexico. Women were considered eligible for the study if they self-identified as Latina, were within the specified age range, able to provide informed consent, and able to complete interviews in either Spanish or English.

Sampling Design, Recruitment Methods, and Study Sites

A snowball sampling method was employed. Women who were initially recruited into the study referred other women for participation.

Members of the target population were recruited at selected venues. Venues from San Diego included: street-based locations (bars, street corners, etc.), drug rehabilitation facilities, low-income prenatal care centers, homeless shelters, and clinics where partners were receiving care for HIV. Among women from Tijuana, venues of recruitment included: street-based locations, drug rehabilitation facilities, low-income prenatal care centers, college campuses, and factories. Participants were given a $20 food coupon as an incentive for their participation in the study.

Trained community health workers from PROCABI conducted recruitment and interviews. A commercial sex worker recruited women for the study from street-based venues and a pregnant community health worker recruited women from low-income prenatal centers such as Special Supplemental Nutrition Program for Women, Infants, and Children in San Diego, and Instituto de Servicios de Salud Pública del Estado (State Public Health Services Institute, ISESALUD) in Tijuana. PROCABI staff recruited female partners of HIV-positive men via their own clientele.

Field Methods

Eligible women who chose to participate in the survey were read consent forms. Women provided written informed consent by initialing the forms. Participants had the option of either completing the interview at the time of recruitment or scheduling the interview for an alternate time. Private locations proximal to recruitment sites were available for interviews.

Interviewers conducted a structured 45-minute face-to-face interview with the use of a standardized questionnaire. At the completion of administering the questionnaire,

interviewers responded to questions and concerns and distributed educational materials on HIV/AIDS, STDs, HBV, and HCV. After pre-test counseling, blood specimens were collected for HIV, syphilis, HBV, and HCV testing and urine was collected for chlamydia and gonorrhea testing. Follow-up appointments were scheduled to provide results to participants, two to three weeks after specimen collection.

The participants were offered an additional ten dollar food coupon as an incentive for the follow-up appointment to obtain their HIV, STD, HBV, and HCV test results. Participants testing negative for the presence of infections were counseled on prevention and modification of existing risk behaviors, when applicable. Individuals testing positive for HIV, HBV, and HCV were counseled on the benefits of medical follow up and possible early intervention and treatment. Women diagnosed with syphilis, chlamydia, and/or gonorrhea were advised of treatment options. Participants had the option of releasing their test results to a physician of their choice and were informed they could bring their results to a physician and/or enter treatment programs established through the County of San Diego, Health and Human Services Agency, or the local health jurisdiction in Tijuana.

Questionnaire

The questionnaire items were modeled after those used in CDHS/OA's study of Latino MSM in the border region.[10] The questionnaire included items on sociodemographics, level of acculturation,[13] HIV and other STD-related risk behaviors, history of HIV testing, and their sexual attitudes measured by degree of agreement with a series of statements.

Level of acculturation into American society was assessed by standardized survey items.[13] The survey included four questions relating to language used in different situations. Attitudes were assessed by examining responses to a series of statements. Possible responses included: strongly disagree, disagree, neutral, agree, and strongly agree.

Laboratory Methods

All biological specimens were transported according to industry standards to the San Diego County Public Health Laboratory. The San Diego County Public Health Laboratory performed HIV, HBV, HCV, and syphilis testing on collected blood specimens, and chlamydia and gonorrhea testing on collected urine specimens.

The HIV status of all study participants was determined by blood tests using the standard U.S. Federal Drug Administration (FDA)-approved enzyme immune assay (EIA) test for HIV-1/2 antibody. All EIA reactive samples were confirmed by FDA-approved indirect immunofluorescence assay. All blood was screened for hepatitis B core antibody (Anti-HBc) which is indicative of prior infection. Blood testing positive for Anti-HBc was tested for hepatitis B surface antigen with reactive results indicating active infection. All blood was tested for HCV antibody using recombinant immunoblot assay which is indicative of prior infection. All blood was tested for the presence of syphilis antibodies using rapid plasma reagent by Becton Dickinson.

All urine was tested for the presence of nucleic acids for detection of *Chlamydia trachomatis* by performing the ligase chain reaction (LCR) by Abbott. All urine collected prior to July 1, 2003, was tested for the presence of nucleic acids for detection of *Neisseria gonorrhoeae* by performing LCR by Abbott. All urine collected on or after July 1, 2003, was tested for the presence of nucleic acids for detection of *Neisseria gonorrhoeae* by performing nucleic acid amplification.

Data Management and Analysis

Consent forms, questionnaires, and lab results were initially stored at the County of San Diego, Health and Human Services Agency and then forwarded to CDHS/OA. Questionnaires and laboratory test results were identified by unique study identification numbers. Consent forms and questionnaires were stored separately in locked cabinets and laboratory results were destroyed after data entry. Laboratory test results and responses to the questionnaire were entered separately into Microsoft Access databases and linked via unique study identification numbers. Statistical analyses were performed using SPSS version 12.

Numbers and proportions of discrete variables were tabulated by study site and averages were calculated for continuous variables. Variable types included: sociodemographic, behavioral (sex, alcohol and drug use, risk perception), HIV knowledge, education, and prevention, and prevalence of HIV, STDs, HBV, and HCV. Acculturation items were assessed by scoring each question between one and five. Women whose average scores equaled three or higher were considered highly acculturated.

Crude odds ratios (OR) and 95.0 percent confidence intervals (CI) were calculated for the correlation of demographic, behavioral, and HIV knowledge and prevention/education variables with the five main outcome variables of this report: self-reported STD, the presence of any current laboratory-confirmed STD, previous HIV testing, and recent (within the four months prior to interview) and lifetime anal intercourse. Unless otherwise noted, responses that were categorized as unknown, refused, or missing were excluded from the analyses.

Numbers and proportions for each response to attitudinal statements was tabulated by study site.

We also examined a subset of the data, first comparing the distribution of variables between women from low-income prenatal centers from San Diego and Tijuana, and then the distribution between women recruited from drug rehabilitation facilities from San Diego and Tijuana (Appendix I). Chi-square tests at the five percent level of significance were used to determine if responses differed between women from San Diego and Tijuana.

RESULTS

Demographic Characteristics

There were 513 Latinas recruited for this study: 163 from San Diego and 350 from Tijuana. Among women from San Diego, 23.9 percent of the sample was recruited from street-based venues, 22.7 percent from drug rehabilitation facilities, 21.5 percent from low-income prenatal centers, and 16.6 percent from homeless shelters. The remaining 15.3 percent of women from San Diego were recruited because of their partners' HIV-positive status (Table 1).

Among women from Tijuana, the largest proportion was recruited from factories (44.6 percent) while 2.6 percent of women were recruited from street-based venues. Approximately one-fifth (22.6 percent) of women were recruited from drug rehabilitation facilities, 19.7 percent from low-income prenatal centers, and 10.6 percent from college campuses.

All women recruited from prenatal centers were pregnant, but not all women recruited from colleges were students. Not all women recruited from homeless shelters self-identified as homeless, and not all women recruited from drug rehabilitation facilities were seeking treatment (i.e., some were visiting family members).

Almost all women (98.8 percent) recruited from San Diego considered San Diego County their permanent residence and 96.8 percent of women recruited from Tijuana reported that Tijuana (or proximal area) was their permanent residence. The majority of women from San Diego were born in Mexico (15.3 percent in or near Tijuana; 45.4 percent in other parts of Mexico) while 23.9 percent were born in San Diego and 13.5 percent in other areas of the United States. Over 97.0 percent of women recruited from Tijuana were born in Mexico; 33.5 percent in or near Tijuana and 64.2 percent in other areas of Mexico.

The majority (over 95.0 percent) of women self-identified as Mexican. The majority (76.1 percent) of women from San Diego reported that they had lived in the border area for at least five years with only one participant reporting that she had been in the area less than one month. Also, 71.1 percent of the participants from Tijuana reported living in the border area for at least five years and 5.5 percent of women reported one year or less. Among women from San Diego, 52.1 percent of women were found to be highly acculturated; 2.9 percent of women from Tijuana were highly acculturated.

Approximately one-fifth (17.8 percent) of women from San Diego were 18 to 21 years of age compared to 28.3 percent of women from Tijuana. Roughly two-fifths (41.1 percent) of women recruited from San Diego were 30 years of age and older compared to 26.9 percent of women from Tijuana.

Roughly one-third of women from both San Diego and Tijuana reported less than a high school education; another third reported a high school education. Slightly less than

one-third of women from both sides of the border reported education beyond high school. Fourteen percent of women from both sides of the border reported they were currently enrolled in school.

One-third (33.1 percent) of participants from San Diego reported having three or more children, 21.0 percent were pregnant at time of interview, and 25.2 percent reported not having children. Over one-fifth (22.6 percent) of women from Tijuana reported having three or more children, 24.3 percent of participants were pregnant, and 26.9 percent reported having no children.

Among women from San Diego, 54.3 percent were single, 35.8 percent were married, and another 1.2 percent reported living as married (*union libre*). Among women from Tijuana, 37.9 percent of women were single, 25.0 percent were married, and 31.0 percent reported living as married. Almost half of women from San Diego (46.0 percent) and Tijuana (47.4 percent) reported living with either a partner or spouse. More women from Tijuana (25.1 percent) reported living with parents, guardians, or relatives than women from San Diego (8.6 percent) and more women from San Diego reported living with roommates or friends (32.5 percent) than Tijuana (2.3 percent). The average age women ceased living with parents/guardians was similar: 17.2 years among women from San Diego and 17.4 years among women from Tijuana.

History of homelessness was reported by 41.4 percent of women from San Diego and 12.3 percent of women from Tijuana. Regarding incarceration, 13.6 percent of women from San Diego and 9.1 percent of women from Tijuana reported spending at least 24 hours in prison. With respect to employment, 14.1 percent of women from San Diego reported part-time employment and 28.2 percent reported full-time employment. Among women from Tijuana, 18.6 percent of women reported part-time employment and 50.4 percent reported full-time employment.

In order to receive health care, 51.5 percent of women from San Diego and 91.7 percent of women from Tijuana reported accessing clinics. More women from San Diego (24.5 percent) reported not seeking health care than women from Tijuana (0.6 percent). Most women sampled reported receiving health care in their country of residence (93.5 percent of women from San Diego and 96.3 percent from Tijuana).

Sexual Behaviors

Table 2 presents self-reported sexual behaviors by study site. Among women from Tijuana, 75.1 percent reported three or fewer sex partners in their lifetimes while 43.9 percent of participants from San Diego reported three or fewer partners. Among women from San Diego, 25.8 percent reported between four to ten partners, compared to 15.4 percent of women from Tijuana.

Among only women who reported sexual activity in their lifetimes, 63.9 percent from San Diego and 79.9 percent from Tijuana reported one partner in the previous four months. One-fourth (24.7 percent) of women from San Diego and 9.3 percent of women from Tijuana reported multiple sex partners in the previous four months.

Among women from San Diego, 17.7 percent reported ever having sex partners from countries other than the United States and Mexico compared to 6.6 percent of women from Tijuana. Interestingly, 42.9 percent of women from San Diego reported having sex with only men from Mexico during their lifetime while19.9 percent reported sex partners exclusively from the United States. Among women from Tijuana, 91.3 percent reported having sex partners only from Mexico and 0.9 percent reported having sex partners exclusively from the United Sates.

Slightly over half (52.2 percent) of participants from San Diego having sex during the four months prior to interview had sex partners exclusively from Mexico while 23.9 percent had sex partners only from the United States. Among women from Tijuana, 96.7 percent having sex in the previous four months reported having partners from Mexico only and 1.3 percent reported sex partners exclusively from the United States.

Thirty-eight percent of women from San Diego and 9.9 percent of women from Tijuana reported receiving compensation for sex in their lifetimes. During the four months prior to interview, 19.4 percent of women from San Diego and 4.2 percent from Tijuana reported receiving compensation for sex.

When asked about general frequency of condom use, 56.5 percent of women from San Diego and 69.6 percent of women from Tijuana reported "rarely" or "never" using condoms while 8.1 percent of women from San Diego and 3.2 percent of women from Tijuana reported "always" using condoms. When asked about ever engaging in vaginal intercourse without a condom, 98.1 percent of women from San Diego and 98.5 percent of women from Tijuana responded affirmatively. Restricting the question to women who were sexually active during the previous four months, 81.9 percent from San Diego and 85.6 percent from Tijuana reported unprotected vaginal sex. Roughly 70.0 percent of all women not living with a spouse or partner reported having vaginal intercourse without a condom in the previous four months.

More women from San Diego reported having anal intercourse in their lifetimes than Tijuana (36.3 percent versus 28.8 percent). Proportionally more women from San Diego (33.8 percent) reported not using a condom during anal intercourse than women from Tijuana (28.8) percent). During the four months prior to interview, 17.8 percent of women from San Diego and 9.7 percent of women from Tijuana used a condom during anal intercourse.

Alcohol and Drug Behaviors, and Use During Sex

Table 3 depicts alcohol and drug-using behaviors during participants' lifetimes and in the four months prior to the interviews. More women from San Diego (91.4 percent) than Tijuana (69.3 percent) reported ever using alcohol. Likewise, 55.8 percent of women from San Diego and 27.7 percent of women from Tijuana reported alcohol use during sex. During the four months prior to interview, 40.5 percent of women from San Diego and 20.2 percent of women from Tijuana reported alcohol consumption. More

women from San Diego (26.6 percent) reported alcohol consumption during sex in this time frame, compared to 10.4 percent of women from Tijuana.

Among women from San Diego, 51.6 percent reported marijuana use in their lifetimes compared to 19.3 percent of women from Tijuana. Marijuana use during sex was reported by 40.4 percent of women from San Diego and 9.5 percent of women from Tijuana. During the four months prior to interview, 14.6 percent of women from San Diego and 5.5 percent of women from Tijuana reported using marijuana. During the same time frame, 12.1 percent of women from San Diego and 2.3 percent of women from Tijuana reported marijuana use during sex.

Roughly 6.0 percent of women from both study areas reported injection drug use. The proportion of women from San Diego and Tijuana sharing needles was also similar (5.6 and 5.5 percent, respectively). A smaller proportion of women from San Diego (1.9 percent) than Tijuana (3.5 percent) reported injection drug use in the four months prior to interview. Again, the proportion of women from San Diego and Tijuana sharing needles in that time frame was similar (1.9 and 2.0 percent, respectively).

HIV Knowledge, Education, and Prevention

Table 4 presents data on HIV knowledge, education, and prevention by study site. Knowledge of HIV was similar between study sites. Roughly 40.0 percent of women from both San Diego and Tijuana answered 6 to 10 of the 15 knowledge questions correctly and over 55.0 percent answered 11 to 15 of the questions correctly. The mean number of correct responses was 10.5 among women from San Diego and 10.7 from Tijuana.

When asked "How likely do you think it is that you are HIV positive?," 17.2 percent of women from San Diego indicated that it was "very likely" or "likely" compared to 4.9 percent of women from Tijuana. Among women from San Diego, 36.2 percent did not know their risk of HIV/AIDS compared to 23.4 percent among women from Tijuana. When asked about knowing anyone infected with HIV/AIDS, 40.4 percent of women from San Diego and 24.9 from Tijuana responded positively. Almost 30.0 percent (28.9 percent) of women from San Diego and 21.2 percent of women from Tijuana reported knowing someone who had died from HIV/AIDS.

When asked about receiving HIV/AIDS prevention information from an organization, almost half the women (47.5 percent) from San Diego reported receiving such information compared to only 29.1 percent of women from Tijuana. Of the women who received prevention information, over 97.0 percent of the women from both sites perceived the information to be either mildly or very effective in modifying their safer sex and/or drug-using behavior. Women from San Diego reported that, on average, they first received HIV prevention information at 20.0 years of age compared to 18.4 years among women from Tijuana. Women from San Diego reported that, on average, people should receive HIV prevention information at 12.6 years of age compared to 13.5 years among women from Tijuana.

When questioned about comfort with sources of HIV/AIDS information, 97.0 percent of all women felt comfortable receiving information in a medical clinic workshop for women only. Eighty percent of all women reported feeling comfortable receiving information at a medical clinic workshop open to all genders. Approximately 90.0 percent of all women reported feeling comfortable receiving information in a classroom or school, or watching a videotape at home. More women from San Diego (57.1 percent) felt comfortable receiving information via mobile outreach than women from Tijuana (22.9 percent). Likewise, 38.7 percent of women from San Diego felt comfortable receiving information during a bar or club outreach compared to 22.3 percent of women from Tijuana.

Among women from San Diego, 68.5 percent of women believed that medical science had made good progress in treating HIV/AIDS during the last 15 years compared to 91.4 percent of women interviewed from Tijuana. More women from Tijuana reported that new medical advances for those infected with HIV/AIDS impacted their sexual and/or drug-using behavior than women from San Diego (82.5 percent versus 59.0 percent). More women from Tijuana (80.8 percent) believed there will be a cure for HIV/AIDS in the next 10 to 20 years than women interviewed from San Diego (52.2 percent).

HIV Testing and Prevalence

More women from San Diego (73.3 percent) reported previous HIV testing compared to 32.4 percent women from Tijuana (Table 5). Most common reasons cited for testing among women from San Diego included: pregnancy (39.0 percent), just to find out (22.9 percent), and routine check up (21.2 percent). More common reasons for testing cited among women from Tijuana included: pregnancy (44.0 percent), routine check up (12.8 percent), and applying for a marriage license (10.1 percent). Seven women (5.9 percent) from San Diego and one woman (0.9 percent) from Tijuana reported previously testing HIV positive.

Reasons cited for not getting tested for HIV among women from San Diego included: believing not at risk (39.5 percent), not wanting to know (34.9 percent), not knowing where to get tested (34.9 percent), and not getting around to it (27.9 percent). Common reasons for not testing among women from Tijuana included: not at risk (43.2 percent), not getting around to it (21.6 percent), and not knowing where to get tested (17.8 percent).

Eight women (4.9 percent) from San Diego and one woman (0.3 percent) from Tijuana tested positive for HIV infection in this study. Only one woman from San Diego did not know she was HIV positive prior to participation in this study.

Prevalence of STDs, HBV, and HCV

Table 6 displays the prevalence of STDs, HBV, and HCV by study site. More women from San Diego (25.0 percent) reported being diagnosed with an STD compared to women from Tijuana (6.1 percent). Conversely, more women from Tijuana (12.7 percent) were diagnosed with a current STD (chlamydia, gonorrhea, and/or syphilis) through laboratory findings compared to women from San Diego (5.1 percent). No

participants from San Diego tested positive for syphilis or gonorrhea compared to 2.0 percent and 1.4 percent, respectively, among women from Tijuana. Eight women (5.0 percent) from San Diego and 38 (10.9 percent) women from Tijuana tested positive for chlamydia. Approximately the same proportion of women from San Diego and Tijuana tested positive for a past HBV infection (3.7 and 3.8 percent, respectively). Two women from Tijuana tested positive for a current HBV infection compared to no women from San Diego. Approximately the same proportion of women from San Diego and Tijuana tested positive for a chronic, past, or current HCV infection (6.2 and 6.0 percent, respectively) although further testing was not performed to elucidate current infection information.

Correlates of Self-Reported STDs and Predictors of Current STD Infection

Self-reported STDs

Table 7 depicts the correlates of previous self-reported and current STD infection. Participants from San Diego who were more highly acculturated to American society were more likely to have reported being diagnosed with an STD (OR=6.66, 95.0 percent CI: 3.68, 12.07) compared to women less acculturated. Likewise, participants from Tijuana more highly acculturated to American society were more likely to have reported being diagnosed with an STD (OR=7.55, 95.0 percent CI: 1.80, 31.65) than those less acculturated. Women from San Diego (OR=4.22, 95.0 percent CI: 2.35, 7.58) and Tijuana (OR=5.60, 95.0 percent CI: 2.16, 14.52) who reported experiencing homelessness were more likely to report a previous STD diagnoses than women who did not report homelessness. No differences in prevalence of previous self-reported STD diagnoses were found among women from either San Diego or Tijuana with respect to age category, education level, current school enrollment, or living with a partner or spouse.

Participants from San Diego reporting two to four sex partners in their lifetimes (OR=11.75, 95.0 percent CI: 1.53, 90.02) were more likely to report previous STD diagnoses than women having one partner. Women from San Diego having five to eight sex partners (OR=28.20, 95.0 percent CI: 3.36, 236.76) and nine or more partners in their lifetimes (OR=76.91, 95.0 percent CI: 10.24, 577.79) were more likely to report previous STD diagnoses than women having one partner, indicating dose-response. A dose-response relationship can be characterized by an increase in exposure resulting in stronger effect measures. Women from Tijuana who reported between two and four sexual partners in their lifetimes (OR=15.39, 95.0 percent CI: 1.53, 90.02) and those who reported nine or more partners (OR=37.93, 95.0 percent CI: 4.61, 311.80) were more likely to report a history of STD diagnoses than women having only one partner.

Women from San Diego who received compensation for sex were more likely to report previous STD diagnoses (OR=3.84, 95.0 percent CI: 2.08, 7.09) than women who did not receive compensation for sex. Women from Tijuana who received compensation for sex were also more likely to report previous STD diagnosis (OR=3.39, 95.0 percent CI: 1.15, 10.00) than women not reporting compensation for sex.

Participants from San Diego (OR=5.90, 95.0 percent CI: 2.68, 12.99) and Tijuana (OR=8.05, 95.0 percent CI: 2.74, 23.70) reporting injection drug use in their lifetimes were more likely to report previous STD diagnoses than women who did not report injection drug use. Lifetime alcohol use among women from San Diego was correlated with previous STD infection (OR=3.08, 95.0 percent CI: 1.29, 7.38). Participants from San Diego (OR=5.04, 95.0 percent CI: 2.42, 10.48) and Tijuana (OR=3.65, 95.0 percent CI: 1.22, 10.87) reporting alcohol use during sex in their lifetimes were more likely to report previous STD diagnoses than women who did not report alcohol use during sex.

Perceived risk for HIV infection was correlated with previous STD diagnoses in women from San Diego (OR=2.40, 95.0 percent CI: 1.22, 4.72) and Tijuana (OR=3.49, 95.0 percent CI: 1.19, 10.22). Knowing someone with HIV/AIDS among women from San Diego was associated with previous STD diagnoses (OR=2.36, 95.0 percent CI: 1.33, 4.17). Participants from San Diego receiving HIV/AIDS prevention information were more likely to report previous STD diagnoses than women who did not receive prevention information (OR=5.71, 95.0 percent CI: 3.05, 10.69). Likewise, participants from Tijuana receiving HIV/AIDS prevention information were more likely to report previous STD diagnoses (OR=4.05, 95.0 percent CI: 1.60, 10.25). Participants from San Diego reporting previous HIV testing were more likely to report previous STD diagnoses than women who did not report previous testing (OR=10.17, 95.0 percent CI: 4.49, 22.99). Participants from Tijuana reporting previous HIV testing were also more likely to report previous STD (OR=7.80, 95.0 percent CI: 2.78, 21.89). No differences in prevalence of previous STD diagnoses were found among women from either San Diego or Tijuana with respect to number of knowledge questions answered correctly or knowing someone who had died of HIV/AIDS.

Current STDs

Age was found to be related to prevalence of current laboratory-confirmed STDs among participants from San Diego who were 18 to 21 years old. Women from San Diego 18 to 21 years old were 3.15 times more likely (95.0 percent CI: 1.43, 6.93) to be diagnosed with a current STD than women 30 years of age and older.

Participants from San Diego (OR=0.42, 95.0 percent CI: 0.23, 0.77) and Tijuana (OR=0.42, 95.0 percent CI: 0.23, 0.77) who reported living with a spouse or partner were less likely to be diagnosed with an STD. Women from San Diego (OR=2.15, 95.0 percent CI: 1.16, 3.98) and Tijuana (OR=3.27, 95.0 percent CI: 1.53, 6.99) who reported experiencing homelessness in their lifetimes were more likely to be diagnosed with an STD. No differences in prevalence of a current STD diagnosis were found among women from either San Diego or Tijuana with respect to acculturation, education, or current school enrollment.

Participants from San Diego reporting five to eight sex partners in their lifetimes were more likely to test positive for an STD than women having one partner (OR=3.91, 95.0 percent CI: 1.51, 10.16). A similar effect was detected among women from Tijuana (OR=3.63, 95.0 percent CI: 1.16, 11.33). Participants from San Diego (OR=3.00, 95.0 percent CI: 1.29, 6.95) and Tijuana (OR=6.06, 95.0 percent CI: 2.34, 15.68) with nine or

more sex partners in their lifetimes were also more likely to test positive for an STD than women reporting one partner.

Women from Tijuana who received compensation for sex were more likely to test positive for an STD (OR=3.36, 95.0 percent CI: 1.48, 7.67) than women not reporting compensation for sex. No differences in prevalence of STD infection were detected in participants from San Diego with respect to number of recent sex partners or reported receipt of compensation for sex.

Participants from Tijuana reporting injection drug use in their lifetimes were more likely to test positive for a current STD than women who did not report injection drug use (OR=2.75, 95.0 percent CI: 1.02, 7.47). No differences in prevalence of current STD diagnoses were found among women from San Diego or Tijuana with respect to alcohol use and alcohol use during sex.

No associations were detected in women from either site with respect to current STD infection and perceived risk for HIV, knowing someone with HIV/AIDS, knowing someone who had died from HIV/AIDS, number of correct HIV facts, receiving HIV prevention information, or response to statements concerning HIV/AIDS.

Previously diagnosed STDs were not significant predictors of current STD infection among women from either San Diego or Tijuana. Previous HIV testing was not associated with prevalence of currently diagnosed STD infection.

Correlates of Previous HIV Testing

The correlates of previous HIV testing among women are depicted in Table 8. Women from San Diego aged 18 to 21 years were less likely to report previous testing (OR=0.60, 95.0 percent CI: 0.37, 0.97) than women aged 30 years and older. Women from Tijuana aged 26 to 29 years were more likely to report previous testing (OR=2.43, 95.0 percent CI: 1.26, 4.72) than women 30 years and older.

Participants from San Diego who were highly acculturated were more likely to have reported previous HIV testing (OR=7.11 95.0 percent CI: 4.10, 12.33) compared to women less acculturated. Likewise, participants from Tijuana who were more highly acculturated to American society were more likely to have reported previous HIV testing (OR=5.13, 95.0 percent CI: 1.30, 20.22) than those less acculturated.

Women from San Diego (OR=4.01, 95.0 percent CI: 2.52, 6.37) and Tijuana (OR=3.83, 95.0 percent CI: 1.98, 7.41) who reported ever experiencing homelessness were more likely to report previous HIV testing than women who did not report being homeless. No differences in proportions of previous HIV testing were found among women from either San Diego or Tijuana with respect to education, current school enrollment, or living with a partner or spouse.

Women from San Diego with two to four sex partners in their lifetimes were more likely to report previous HIV testing (OR=1.54, 95.0 percent CI: 0.99, 2.40) than women

having one partner. Women from San Diego reporting five to eight sex partners were more likely to report previous HIV testing than women having one partner (OR=2.48, 95.0 percent CI: 1.24, 4.93). This effect was also detected among women from Tijuana (OR=2.43, 95.0 percent CI: 1.02, 5.83). Women from San Diego reporting nine or more sex partners in their lifetimes were more likely to report previous HIV testing than women having one partner (OR=5.28, 95.0 percent CI: 2.96, 9.43). Likewise, women from Tijuana reporting nine or more sex partners were more likely to report previous HIV testing than women having one partner (OR=4.54, 95.0 percent CI: 2.12, 9.75).

Women from San Diego (OR=2.54, 95.0 percent CI: 1.57, 4.11) and Tijuana (OR=2.76, 95.0 percent CI: 1.33, 5.71) who received compensation for sex were more likely to report previous HIV testing than women who did not receive compensation for sex. Participants from Tijuana reporting anal intercourse in their lifetimes were more likely to report HIV testing than women who reported never engaging in anal intercourse (OR=2.49, 95.0 percent CI: 1.51, 4.11).

Participants from San Diego (OR=2.83, 95.0 percent CI: 1.31, 6.12) and Tijuana (OR=2.68, 95.0 percent CI: 1.12, 6.41) reporting injection drug use in their lifetimes were more likely to report previous HIV testing than women who did not report injection drug use. Women from San Diego reporting alcohol use in their lifetimes were more likely to report previous HIV testing than women who did not report alcohol consumption (OR=1.89, 95.0 percent CI: 1.23, 2.90). Women from San Diego reporting alcohol use during sex were more likely to report previous HIV testing than women who did not report alcohol consumption during sex (OR=2.03, 95.0 percent CI: 1.35, 3.06).

Women from San Diego who felt it was "likely" or "very likely" they would test HIV positive were more likely to report previous HIV testing (OR=1.75, 95.0 percent CI: 1.16, 2.64) than other women. Women from Tijuana who did not know their HIV risk status were less likely to have reported previous testing then women who perceived that it was not possible they were HIV positive (OR=0.52, 95.0 percent CI: 0.27, 0.99).

Women from San Diego who knew someone who died from HIV/AIDS were more likely to have previous HIV testing than other women (OR=2.04, 95.0 percent CI: 1.35, 3.10). Women from San Diego who answered 11 to 15 of HIV/AIDS knowledge questions correctly were more likely (OR=4.94, 95.0 percent CI: 1.38, 17.72) to have been previously tested for HIV than women answering between five or fewer questions correctly. Participants from San Diego (OR=2.45, 95.0 percent CI: 1.69, 3.56) and Tijuana (OR=1.64, 95.0 percent CI: 1.01, 2.66) receiving HIV/AIDS prevention information were more likely to report previous HIV testing than women who did not receive prevention information. No differences in proportions of previous HIV testing were found among women from either San Diego or Tijuana with respect to knowing someone with HIV/AIDS or in responses to HIV/AIDS statements.

Participants from San Diego (OR=10.17, 95.0 percent CI: 4.49, 22.99) and Tijuana (OR=7.80, 95.0 percent CI: 2.78, 21.89) reporting previous STD infection were more likely to report previous HIV testing than women who did not report a previous STD.

Correlates of Lifetime and Recent Unprotected Anal Intercourse

Lifetime unprotected anal intercourse

Correlates of unprotected anal intercourse, lifetime and recent, are presented in Table 9. Women from Tijuana who were highly acculturated to American society were more likely to report unprotected anal intercourse than women who were not highly acculturated (OR=6.28, 95.0 percent CI: 1.59, 24.84). Among women from Tijuana, those reporting they were currently attending school were less likely to report unprotected sex compared to those not in school (OR=0.37, 95.0 percent CI: 0.15, 0.91). Women from San Diego (OR=1.92, 95.0 percent CI: 1.07, 3.45) and Tijuana (OR=5.35, 95.0 percent CI: 2.71, 10.56) who had ever been homeless were more likely to report unprotected anal intercourse than those not experiencing homelessness. Age, level of education, and living with a partner or spouse were not associated with unprotected anal intercourse.

Women from Tijuana reporting two to four sex partners (OR=2.17, 95.0 percent CI: 1.10, 4.28), five to eight partners (OR=10.23, 95.0 percent CI: 3.93, 26.64), and nine or more partners in their lifetimes (OR=25.00, 95.0 percent CI: 9.86, 63.40) were more likely to report unprotected anal intercourse than women having one partner. Women from San Diego reporting five to eight sex partners (OR=5.46, 95.0 percent CI: 2.26, 13.18) and nine or more partners in their lifetimes (OR=3.91, 95.0 percent CI: 1.79, 8.54) were more likely to report lifetime unprotected anal intercourse than women having one partner.

Women from San Diego (OR=4.44, 95.0 percent CI: 2.49, 7.93) and Tijuana (OR=9.90, 95.0 percent CI: 4.26, 23.02) who received compensation for sex were more likely to report unprotected anal intercourse than women not reporting receipt of compensation for sex.

Participants from San Diego (OR=2.60, 95.0 percent CI: 1.11, 6.08) and Tijuana (OR=9.56, 95.0 percent CI: 3.39, 26.96) reporting ever injecting drugs were more likely to report unprotected anal intercourse. Lifetime alcohol use among women from Tijuana was correlated with unprotected anal intercourse (OR=2.25, 95.0 percent CI: 1.26, 4.01). Participants reporting alcohol use during sex in their lifetimes from San Diego (OR=3.89, 95.0 percent CI: 1.96, 7.71) and Tijuana (OR=4.09, 95.0 percent CI: 2.28, 7.32) were more likely to report unprotected anal intercourse than women who did not report alcohol use during sex.

Women from San Diego (OR=3.01, 95.0 percent CI: 1.50, 6.06) and Tijuana (OR=3.46, 95.0 percent CI: 1.96, 6.10) with a perceived risk of testing HIV positive were more likely to report unprotected anal intercourse than other women. Women from Tijuana who knew someone with HIV/AIDS were more likely to have had unprotected anal intercourse than other women (OR=2.11, 95.0 percent CI: 1.24, 3.57).

Women from San Diego who answered six to ten HIV/AIDS knowledge questions correctly were less likely (OR=0.32, 95.0 percent CI: 0.10, 0.99) to have engaged in unprotected anal intercourse than women answering five or fewer questions correctly.

Women from San Diego who answered 11 to 15 HIV/AIDS knowledge questions correctly were less likely (OR=0.30, 95.0 percent CI: 0.10, 0.91) to have engaged in unprotected anal intercourse than women answering five or fewer questions correctly.

Participants from Tijuana who had received HIV prevention information appeared more likely to have engaged in unprotected anal intercourse (OR=1.64, 95.0 percent CI: 0.99, 2.74). Participants from Tijuana with previous STD diagnoses were more likely to report unprotected anal intercourse (OR=3.06, 95.0 percent CI: 1.25, 7.47). Women from San Diego (OR=1.76, 95.0 percent CI: 1.01, 3.06) and Tijuana (OR=2.57, 95.0 percent CI: 1.57, 4.21) who reported previous HIV testing were more likely to report unprotected anal intercourse. No differences in proportions of unprotected anal intercourse were found among women from San Diego or Tijuana with respect to knowing someone who had died from HIV/AIDS.

Recent unprotected anal intercourse

Women from Tijuana who were highly acculturated to American society were more likely to report unprotected anal intercourse than women who were not highly acculturated (OR=4.66, 95.0 percent CI: 1.11, 19.61). Women from San Diego (OR=2.08, 95.0 percent CI: 1.15, 3.75) and Tijuana (OR=3.20, 95.0 percent CI: 1.35, 7.54) who had ever been homeless were more likely to report unprotected anal intercourse than those not experiencing homelessness. Age, level of education, current school enrollment, and living with a partner or spouse were not associated with unprotected anal intercourse.

Women from San Diego reporting five to eight partners (OR=5.59, 95.0 percent CI: 2.30, 13.61), and nine or more partners in their lifetimes (OR=4.17, 95.0 percent CI: 1.90, 9.16) were more likely to report unprotected anal intercourse than women having one partner. Women from Tijuana with five to eight sex partners (OR=10.40, 95.0 percent CI: 3.02, 35.76) and nine or more partners in their lifetimes (OR=9.15, 95.0 percent CI: 2.92, 28.72) were more likely to report lifetime unprotected anal intercourse than women having one partner.

Women from San Diego (OR=4.55, 95.0 percent CI: 2.53, 8.17) and Tijuana (OR=6.65, 95.0 percent CI: 2.82, 15.72) who received compensation for sex were also more likely to report unprotected anal intercourse than women who did not receive compensation for sex.

Participants reporting injection drug use in their lifetimes from San Diego (OR=2.71, 95.0 percent CI: 1.14, 6.43) and Tijuana (OR=3.66, 95.0 percent CI: 1.32, 10.17) were more likely to report unprotected anal intercourse than women who did not report injection drug use. Participants reporting alcohol use during sex in their lifetimes from San Diego (OR=4.08, 95.0 percent CI: 2.05, 8.13) and Tijuana (OR=5.37, 95.0 percent CI: 2.05, 14.09) were more likely to report unprotected anal intercourse than women who did not report alcohol consumption during sex.

Women from San Diego (OR=3.01, 95.0 percent CI: 1.49, 6.08) and Tijuana (OR=4.18, 95.0 percent CI: 1.69, 10.33) with a perceived risk of testing positive for HIV were more

likely to report unprotected anal intercourse than women with no perceived risk. Women from Tijuana who knew someone with HIV/AIDS were more likely to have had unprotected anal intercourse than other women (OR=4.53, 95.0 percent CI: 2.13, 9.64). Women from San Diego who answered 6 to 10 (OR=0.32, 95.0 percent CI: 0.10, 0.99) and 11 to 15 (OR=0.31, 95.0 percent CI: 0.10, 0.91) HIV/AIDS knowledge questions correctly were less likely to have engaged from unprotected anal intercourse than women answering 5 or fewer questions correctly.

Participants from Tijuana with previous STD diagnoses were more likely to report unprotected anal intercourse (OR=4.25, 95.0 percent CI: 1.51, 12.01) than those who did not report previous STDs. No differences in proportions of unprotected anal intercourse were found among women from San Diego or Tijuana with respect to knowing someone who had died from HIV/AIDS, previous HIV testing, receiving HIV prevention information, and current STD diagnoses.

Agreement with Attitude Statements

The level of agreement with statements relating to behavior influenced by alcohol, safer sex attitudes, and issues concerning control are displayed in Table 10. The number of respondents and proportion of responses were tabulated by study site.

DISCUSSION

Significant associations were found for history of homelessness, multiple sex partners, receiving compensation for sex, and history of injection drug use for all or most of the five HIV risk variables assessed: self-reported STDs, the presence of any current STD, previous HIV testing, and recent and lifetime unprotected anal intercourse. This survey of Latinas from San Diego and Tijuana provides information about the prevalence of HIV, HBV, HCV, chlamydia, syphilis, and gonorrhea, as well as associated behavioral risks, which may be useful to those involved with improving the health of women living on the U.S./Mexico border regions.

It must be noted that because of the nonprobability sampling technique employed, women recruited from San Diego and Tijuana were inherently incomparable and the results between study sites cannot be extrapolated to the general population of Latinas from San Diego and Tijuana. A greater proportion of women from San Diego were recruited from venues that were more associated with risk factors for HIV.

In spite of these limitations, the data provided interesting information. Over 80.0 percent of respondents from San Diego reported having sex partners from Mexico in their lifetimes. This number excludes Mexican Americans and gives credence to the hypothesis that risk patterns and behaviors cross the border. However, just a little over eight percent of women sampled from Tijuana reported having sex partners from the United States.

A greater proportion of women from San Diego were sampled from higher risk venues. This is reflected in the higher prevalence of HIV and self-reported STD diagnoses detected among women from San Diego. The prevalence of HIV detected among the San Diego sample (4.9 percent) is much larger than the prevalence of HIV in Latinas over 18 years of age from San Diego County (0.04 percent) during the study period.[2] Likewise, the 5.0 percent prevalence of chlamydia among the San Diego sample is much greater than the 0.4 percent found among Latinas from San Diego County in 2004.[14]

More than twice as many STDs were detected among women sampled from Tijuana. This could be partially explained by the fact that chlamydia incidence is strongly associated with younger age,[15] and the participants from Tijuana were younger than those from San Diego. However, the higher incidence of STDs is still concerning as not only are STDs associated with the same behavioral risk factors as HIV; STDs have been found to facilitate HIV transmission.[16] If the same Mexican men that are having sex with women from San Diego are having sex with women from Tijuana, the HIV incidence will continue to increase on both sides of the border.

Being more acculturated to American society was strongly associated with previous self-reported STDs, and previous HIV testing on both sides of the border. It is likely that the HIV testing (and receiving HIV prevention information) occurred concurrently with

STD diagnosis. Women from Tijuana who were more acculturated to American society were more likely to have engaged in past and recent unprotected anal intercourse. These women may have been commercial sex workers as acculturation scores are highly dependent on language use and commercial sex workers may be more likely to understand English because of communication with their clientele.[4]

One of the riskiest behaviors for HIV infection is unprotected anal intercourse. Over 35.0 percent of women from San Diego and 28.0 percent of women from Tijuana reported engaging in anal intercourse and of these, roughly 90.0 percent had engaged in unprotected anal intercourse. Sociodemographic characteristics like age, education, and living with a partner or spouse were not associated with recent or lifetime unprotected sex so prevention efforts should target all women. Indicators of risky life practices such as homelessness, more than four sex partners, injection drug use, and alcohol use during sex were associated with both recent and lifetime unprotected anal intercourse. These women perceived at least some risk for HIV, indicating they may have been aware of some risk factors for HIV. However, these women were not statistically more likely to have received HIV prevention information. In fact, women answering at least 6 out of 15 questions correctly were less likely to engage in unprotected sex across exposure levels.

On average, women on both sides of the border first received HIV prevention information as young adults and both groups of women felt that prevention information should be received much earlier. The proportion of women feeling comfortable with the various prevention sources was generally higher in women sampled from San Diego, so binational prevention efforts that target both sides of the border should use methods that take the comfort level of Latinas into account. The diversity within the California Latino AIDS epidemic suggests that education and prevention programs targeting California Latinos may need to vary within the Latino subgroups; one strategy will not work for all. Mexican Americans are more likely than other Latino ethnicities to believe in casual transmission and to be skeptical of government information about AIDS; they are less likely to have heard of the HIV antibody test and to believe in the effectiveness of condoms and monogamy.[7] These are all important components for developing effective prevention and intervention strategies for growing Latino populations.

Conclusions

The percentage of new annual Latina AIDS cases in California has risen every year since 1982.[2] The lack of adequate numbers of young Latinas in epidemiological studies has led to limited and possibly misguided application of results to this population in California. Conducting epidemiological studies such as this one among young Latinas from the border cities of San Diego and Tijuana provides valuable information about the Latino HIV/AIDS epidemic at the U.S./Mexico border. The growth of the Latino population in California adds to the importance of these findings; addressing them requires a full understanding of the social and cultural dynamics within this group.

Further epidemiological studies exclusive to young Latinas are needed to develop effective HIV/AIDS prevention and education strategies targeting this at-risk population.

Future research should focus on further elucidating differences between Latinas north and south of the border by employing sampling schemes that result in more comparable study populations. Incorporating an ethnographic component into other studies of Latino populations have led to an increased understanding of motivations and risk factors[17,18] and could be useful in this population.

There has been little research focused on the direct effect of an international border on the HIV/AIDS epidemic. This is especially important in considering the U.S./Mexico border that separates San Diego and Tijuana because of the vastly different economic, social, and cultural differences between these two sites. By sampling young Latinas from both sites, the effect of these differences (and hence the effect of the border) on HIV and risk behaviors for a similar at-risk group may be assessed. Given that millions of people cross into each country where these two sites are located, an accurate picture of the HIV/AIDS epidemic in California (and the rest of the United States) needs to take this "open border" effect into account.

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TABLES

Table 1. Select Demographic Characteristics by Study Site

	San Diego		Tijuana	
	N	%	N	%
Recruitment Source				
Street-based venue	39	23.9	9	2.6
Drug rehabilitation facility	37	22.7	79	22.6
Low-income prenatal care center	35	21.5	69	19.7
Homeless shelter (San Diego only)	27	16.6	--	
HIV-positive partner (San Diego only)	25	15.3	--	
Factory (Tijuana only)	--		156	44.6
College campus (Tijuana only)	--		37	10.6
Total (N=513) †	163		350	
Permanent Residence				
San Diego County	161	98.8	2	0.6
Other area in U.S.	1	0.6	4	1.1
Tijuana or city/town near Tijuana	1	0.6	338	96.8
Other area in Mexico	0	0.0	5	1.4
Total (N=512) †	163		349	
Place of Birth				
San Diego County	39	23.9	2	0.6
Other area in U.S.	22	13.5	5	1.4
Tijuana or city/town near Tijuana	25	15.3	117	33.5
Other area in Mexico	74	45.4	224	64.2
Neither in the U.S. nor Mexico	3	1.8	1	0.3
Total (N=512) †	163		349	
Latina Ethnicity				
Mexican	154	94.5	344	99.4
Central American	3	1.8	0	0.0
South American	1	0.6	0	0.0
Puerto Rican/Dominican/Cuban/Haitian	2	1.2	1	0.3
Mixed	3	1.8	1	0.3
Total (N=509) †	163		346	
Length of Time in Border Area				
Less than 1 month	1	0.6	0	0.0
Between 1 month and 1 year	11	6.7	19	5.5
1-5 years	27	16.6	80	23.3
Over 5 years	124	76.1	244	71.1
Total (N=506) †	163		343	
Acculturation (scores of 3 or more = high acculturation)				
High acculturation	85	52.1	10	2.9
Low acculturation	78	47.9	340	97.1
Total (N=513)	163		350	
Age (years)				
18-21	29	17.8	99	28.3
22-25	37	22.7	85	24.3
26-29	30	18.4	72	20.6
30+	67	41.1	94	26.9
Total (N=513) †	163		350	
Education				
Less than high school	57	35.0	120	34.5
High school	57	35.0	128	36.8
More than high school	49	30.1	100	28.7
Total (N=511) †	163		348	

Table 1. Select Demographic Characteristics by Study Site (continued)

	San Diego		Tijuana	
	N	%	N	%
Currently in School				
No	141	86.5	302	86.3
Yes	22	13.5	48	13.7
Total (N=513)	163		350	
Number of Children				
0	41	25.2	94	26.9
1	34	20.9	93	26.6
2	34	20.9	84	24.0
3+	54	33.1	79	22.6
Total (N=513) †	163		350	
Pregnant (at time of interview)				
No	128	79.0	265	75.7
Yes	34	21.0	85	24.3
Total (N=512)	162		350	
Marital Status				
Single	88	54.3	132	37.9
Married	58	35.8	87	25.0
Separated	7	4.3	12	3.4
Divorced/Widowed	7	4.3	9	2.6
Living together	2	1.2	108	31.0
Total (N=511) †	162		348	
Current Living Situation				
Living alone in house/apartment/dwelling	14	8.6	28	8.0
Living with spouse	53	32.5	141	40.3
Living with parent(s), guardian(s), or relative(s)	14	8.6	88	25.1
Living with friends, roommate(s)	53	32.5	8	2.3
Living with boyfriend/significant other	35	21.5	43	12.3
Homeless, living on street or in shelter	20	12.3	20	5.7
Other	8	4.9	43	12.3
Not with partner/spouse	88	54.0	184	52.6
With partner/spouse	75	46.0	166	47.4
Total (N=513) ††	163		350	
Age Ceased Living with Guardian(s) (years)				
Mean	17.2		17.4	
Number	151		293	
Ever Homeless				
No	95	58.6	306	87.7
Yes	67	41.4	43	12.3
Total (N=511)	162		349	
Ever in Prison				
No	140	86.4	318	90.9
Yes	22	13.6	32	9.1
Total (N=511)	162		350	100.0
Employment				
Employed part-time	23	14.1	65	18.6
Employed full-time	46	28.2	176	50.4
Employed sometimes	24	14.7	16	4.6
Unemployed	84	51.5	21	6.0
Attending school at least part-time	11	6.7	36	10.3
Other	11	6.7	67	19.2
Total (N=512) ††	163		349	

Table 1. Select Demographic Characteristics by Study Site (continued)

	San Diego		Tijuana	
	N	%	N	%
Regular Source of Health care				
Clinics	84	51.5	321	91.7
HMO (Health Maintenance Organization)	14	8.6	5	1.4
Private doctor	15	9.2	56	16.0
Emergency room	4	2.5	1	0.3
Other	1	0.6	2	0.6
No regular source of health care	6	3.7	3	0.9
Don't seek health care	40	24.5	2	0.6
Total (N=513) ††	163		350	
Country Receives Health care				
U.S.	143	93.5	13	3.7
Mexico	10	6.5	337	96.3
Total (N=503) ††	153		350	

†Percentages may not sum to 100 due to rounding error.

††The sum of numbers exceeds the total and the sum of percentages exceeds 100 because multiple responses possible.

Source: CDHS/OA.

Table 2. Sexual Behaviors by Study Site

	San Diego		Tijuana	
	N	%	N	%
Number of Sex Partners (lifetime)				
0	0	0.0	14	4.1
1-3	68	43.9	245	71.0
4-10	40	25.8	53	15.4
11-50	38	24.5	22	6.4
51+	9	5.8	11	3.2
Total (N=500) †	155		345	
Number of Sex Partners in the Past 4 Months ǂ				
0	18	11.4	36	10.8
1	101	63.9	267	79.9
2	21	13.3	14	4.2
3-5	9	5.7	7	2.1
6+	9	5.7	10	3.0
Total (N=92)	158		334	
Sex Partners from Countries other than U.S. and Mexico (lifetime) ǂ				
No	130	82.3	313	93.4
Yes	28	17.7	22	6.6
Total (N=493)	158		335	
Sex Partners by Country (lifetime) ǂ				
Only from Mexico	67	42.9	303	91.3
Only from U.S.	31	19.9	3	0.9
Mostly from Mexico (over 2/3), some from U.S.	16	10.3	17	5.1
Mostly from U.S. (over 2/3), some from Mexico	29	18.6	3	0.9
Same number from Mexico and U.S.	13	8.3	6	1.8
Only from Mexico	67	42.9	303	91.3
Only from U.S.	31	19.9	3	0.9
From both U.S. and Mexico	58	37.2	26	7.8
Total (N=488)	156		332	
Sex Partners by Country (recent) ǂ				
Only from Mexico	72	52.2	290	96.7
Only from U.S.	33	23.9	4	1.3
Mostly from Mexico (over 2/3), some from U.S.	11	8.0	2	0.7
Mostly from U.S. (over 2/3), some from Mexico	17	12.3	2	0.7
Same number from Mexico and U.S.	5	3.6	2	0.7
Only from Mexico	72	52.2	290	96.7
Only from U.S.	33	23.9	4	1.3
From both U.S. and Mexico	33	23.9	6	2.0
Total (N=438) †	138		300	
Received Compensation for Sex (lifetime) ǂ				
No	93	62.0	301	90.1
Yes	57	38.0	33	9.9
Total (N=484)	150		334	
Received Compensation for Sex (recent) ǂ				
No	125	80.6	320	95.8
Yes	30	19.4	14	4.2
Total (N=489)	155		334	
Response to Question of General Condom Use				
Always	13	8.1	11	3.2
Usually	23	14.3	28	8.1
Sometimes	33	20.5	48	13.9
Rarely	18	11.2	109	31.6
Never	73	45.3	131	38.0
Do not have sex with men	1	0.6	18	5.2
Total (N=506)	161		345	

Table 2. Sexual Behaviors by Study Site (continued)

	San Diego		Tijuana	
	N	%	N	%
Vaginal Intercourse without a Condom (lifetime)				
No	3	1.9	5	1.5
Yes	158	98.1	330	98.5
Total (N=496)	161		335	
Vaginal Intercourse without a Condom (recent)				
No	29	18.1	47	14.1
Yes	131	81.9	286	85.9
Total (N=493)	160		333	
Vaginal Intercourse without a Condom (recent in those not living with spouse/partner)				
No	23	30.7	42	28.0
Yes	52	69.3	108	72.0
Total (N=225)	75		150	
Anal Intercourse (lifetime)				
No	100	63.7	235	71.2
Yes	57	36.3	95	28.8
Total (N=487)	157		330	
Anal Intercourse without a Condom (lifetime)				
No	104	66.2	235	71.2
Yes	53	33.8	95	28.8
Total (N=487)	157		330	
Anal Intercourse without a Condom (recent)				
No	129	82.2	298	90.3
Yes	28	17.8	32	9.7
Total (N=487)	157		330	

†Percentages may not sum to 100 due to rounding error.

╪Question limited to women who reported sexual activity in their lifetimes.

Source: CDHS/OA.

Table 3. Alcohol and Drug Behaviors, and Use During Sex by Study Site

		Use in Lifetime				Lifetime Use During Sex			
		San Diego		Tijuana		San Diego		Tijuana	
		N	%	N	%	N	%	N	%
Alcohol	No	14	8.6	107	30.7	69	44.2	250	72.3
	Yes	148	91.4	241	69.3	87	55.8	96	27.7
	Total	162		348		156		346	
Marijuana	No	77	48.4	280	80.7	93	59.6	314	90.5
	Yes	82	51.6	67	19.3	63	40.4	33	9.5
	Total	159		347		156		347	
Injection Drug Use	No	151	93.8	321	93.6				
	Yes	10	6.2	22	6.4	32	0.1		
	Total	161		343		504			
Needle Sharing	No	151	94.4	324	94.5				
	Yes	9	5.6	19	5.5				
	Total	160		343					
		Recent Use				Recent Use During Sex			
		San Diego		Tijuana		San Diego		Tijuana	
		N	%	N	%	N	%	N	%
Alcohol	No	94	59.5	277	79.8	116	73.4	311	89.6
	Yes	64	40.5	70	20.2	42	26.6	36	10.4
	Total	158		347		158		347	
Marijuana	No	134	85.4	328	94.5	138	87.9	339	97.7
	Yes	23	14.6	19	5.5	19	12.1	8	2.3
	Total	157		347		157		347	
Injection Drug Use	No	158	98.1	331	96.5	489	32.6		
	Yes	3	1.9	12	3.5	15	0.030		
	Total	161		343		504			
Needle Sharing	No	158	98.1	336	98.0				
	Yes	3	1.9	7	2.0				
	Total	161		343					

Source: CDHS/OA.

Table 4. HIV Knowledge, Education, and Prevention by Study Site

	San Diego		Tijuana	
	N	%	N	%
Number Correct on 15 HIV/AIDS Fact Questions				
1-5	9	5.5	8	2.3
6-10	63	38.7	143	40.9
11-15	91	55.8	199	56.9
Mean	10.47		10.71	
Total (N=513) †	163		350	
Perceived Risk for HIV				
Very likely (75-100% chance)	8	4.9	3	0.9
Likely (25-74% chance)	20	12.3	14	4.0
Unlikely (1-24% chance)	40	24.5	98	28.0
Not possible (0% chance)	36	22.1	153	43.7
Don't know	59	36.2	82	23.4
Total (N=513) †	163		350	
Know Someone with HIV/AIDS				
No	96	59.6	262	75.1
Yes	65	40.4	87	24.9
Total (N=510)	161		349	
Know Someone Who Died from HIV/AIDS				
No	113	71.1	275	78.8
Yes	46	28.9	74	21.2
Total (N=508)	159		349	
Received HIV/AIDS Prevention Information				
No	84	52.5	246	70.9
Yes	76	47.5	101	29.1
Total (N=507)	160		347	
Perceived Effectiveness of Information				
Very effective	50	65.8	74	73.3
Mildly effective	24	31.6	24	23.8
Not effective at all	2	2.6	3	3.0
Total (N=177) †	76		101	
Mean Age First Received Information (continuous)				
Mean	20.0		18.4	
Number	78		104	
Mean Age Think People Should Receive HIV Information (continuous)				
Mean	12.6		13.5	
Number	152		346	
Comfort with Source of HIV Information				
Medical Clinic Workshop for Women Only				
Comfortable	158	96.9	340	97.1
Uncomfortable	4	2.5	7	2.0
No opinion	1	0.6	3	0.9
Total (N=513)	163		350	
Medical Clinic Workshop Open to Everyone				
Comfortable	128	78.5	288	82.3
Uncomfortable	30	18.4	55	15.7
No opinion	5	3.1	7	2.0
Total (N=513)	163		350	

Table 4. HIV Knowledge, Education, and Prevention by Study Site (continued)

	San Diego		Tijuana	
	N	%	N	%
Comfort With Source of HIV Information (continued)				
Schools/Classroom				
Comfortable	144	88.9	312	89.4
Uncomfortable	15	9.3	35	10.0
No opinion	3	1.9	2	0.6
Total (N=511)	162		349	
Video Tape To Watch At Home				
Comfortable	142	87.7	314	90.0
Uncomfortable	16	9.9	29	8.3
No opinion	4	2.5	6	1.7
Total (N=511) †	162		349	
Mobile Outreach Van				
Comfortable	93	57.1	80	22.9
Uncomfortable	58	35.6	256	73.4
No opinion	12	7.4	13	3.7
Total (N=512) †	163		349	
Bar/Club Outreach				
Comfortable	63	38.7	78	22.3
Uncomfortable	87	53.4	261	74.6
No opinion	13	8.0	11	3.1
Total (N=513) †	163		350	
Response to Following Statements (asked as questions)				
Medical science has made good progress in treating HIV/AIDS during the last 15 years				
No	22	13.6	11	3.2
Yes	111	68.5	317	91.4
Don't know	29	17.9	19	5.5
Total (N=509)	162		347	
Impact of hearing about new medical advances for those infected with HIV/AIDS on sexual/drug-using behavior				
Large amount	51	32.7	158	45.3
Small amount	41	26.3	130	37.2
Not at all	41	26.3	14	4.0
Don’t know	23	14.7	47	13.5
Total (N=505)	156		349	
There will be a cure for HIV/AIDS in the next 10-20 years				
No	38	23.6	27	7.7
Yes	84	52.2	282	80.8
Don't know	39	24.2	40	11.5
Total (N=510) †	161		349	

†Percentages may not sum to 100 due to rounding error.

Source: CDHS/OA.

Table 5. HIV Testing and Prevalence by Study Site

	San Diego		Tijuana	
	N	%	N	%
Ever Tested For HIV				
No	43	26.7	236	67.6
Yes	118	73.3	113	32.4
Total (N=510)	161		349	
Reasons Tested				
In hospital	1	0.8	1	0.9
Employment	4	3.4	4	3.7
To apply for a marriage license	2	1.7	11	10.1
For immigration	3	2.5	0	0.0
To find out if infected	27	22.9	10	9.2
Physician referral	5	4.2	9	8.3
Pregnancy	46	39.0	48	44.0
Referral by sex partner	8	6.8	3	2.8
Partner had sex with someone else	1	0.8	10	9.2
Routine check-up	25	21.2	14	12.8
Occupational exposure	3	2.5	0	0.0
Illness	5	4.2	3	2.8
At risk for HIV	5	4.2	7	6.4
Total (N=227) ††	118		109	
Results of Last Test				
HIV positive	7	5.9	1	0.9
HIV negative	109	92.4	104	93.7
Never returned for results	2	1.7	5	4.5
Don't know; results were inconclusive	0	0.0	1	0.9
Total (N=229)	118		111	
Reasons Not Tested				
Don’t think at risk	17	39.5	102	43.2
Can’t afford the test	1	2.3	20	8.5
Don’t want to know	15	34.9	15	6.4
Don’t know where to go to get a test taken	15	34.9	42	17.8
Didn’t know that there was a test	2	4.7	18	7.6
Fear	0	0.0	15	6.4
Haven't gotten around to it	12	27.9	51	21.6
Total (N=296) ††	43		236	
Prevalence of HIV				
Negative	154	95.1	348	99.7
Positive	8	4.9	1	0.3
Total (N=511)	162		349	

†† The sum of numbers exceeds the total and the sum of percentages exceeds 100 because multiple responses possible.

Source: CDHS/OA.

Table 6. Prevalence of STDs, HBV, and HCV by Study Site

	San Diego		Tijuana	
	N	%	N	%
Self-Reported STD (lifetime)				
No	105	75.0	324	93.9
Yes	35	25.0	21	6.1
Total (N=485)	140		345	
Current STD				
No	150	94.9	302	87.3
Yes	8	5.1	44	12.7
Total (N=504)	158		346	
Syphilis				
No	159	100.0	337	98.0
Yes	0	0.0	7	2.0
Total (N=503)	159		344	
Gonorrhea				
No	161	100.0	344	98.6
Yes	0	0.0	5	1.4
Total (N=510)	161		349	
Chlamydia				
No	153	95.0	312	89.1
Yes	8	5.0	38	10.9
Total (N=511)	161		350	
Hepatitis B (past)				
No	156	96.3	332	96.2
Yes	6	3.7	13	3.8
Total (N=507)	162		345	
Hepatitis B (current)				
No	162	100.0	343	99.4
Yes	0	0.0	2	0.6
Total (N=507)	162		345	
Hepatitis C (current, chronic, or past infection)				
No	151	93.8	327	94.0
Yes	10	6.2	21	6.0
Total (N=509)	161		348	

Source: CDHS/OA.

Table 7. Correlates of Self-Reported STDs and Predictors of Current STD Infection by Study Site

	Self-Reported Past Infection						Currently Diagnosed Infection					
	San Diego			Tijuana			San Diego			Tijuana		
	OR	95%CI		OR	95%CI		OR	95%CI		OR	95%CI	
		lower	upper		lower	upper		lower	upper		lower	upper
Age (years)												
18-21	0.38	0.14	1.00	1.89	0.34	10.60	**3.15**	**1.43**	**6.93**	2.12	0.90	5.00
22-25	1.10	0.52	2.31	3.42	0.67	17.45	1.55	0.63	3.77	1.02	0.37	2.78
26-29	1.64	0.80	3.36	6.36	1.33	30.43	1.44	0.56	3.68	1.35	0.51	3.59
30+	1.00			1.00			1.00			1.00		
Acculturation (scores of 3 or more = high acculturation)												
Low acculturation	1.00			1.00			1.00			1.00		
High acculturation	**6.66**	**3.68**	**12.07**	**7.55**	**1.80**	**31.65**	0.67	0.29	1.54	3.08	0.77	12.40
Education												
Less than high school	0.56	0.28	1.12	1.25	0.43	3.65	2.01	0.92	4.38	1.86	0.80	4.32
High school	0.61	0.32	1.20	0.75	0.23	2.39	1.53	0.69	3.41	1.40	0.59	3.31
More than high school	1.00			1.00			1.00			1.00		
Currently in School												
No	1.00			1.00			1.00			1.00		
Yes	0.32	0.10	1.06	0.29	0.04	2.25	0.82	0.34	2.00	0.60	0.21	1.77
Living Situation												
Not with	1.00			1.00			1.00			1.00		
With partner/spouse	0.70	0.40	1.23	0.65	0.27	1.60	**0.42**	**0.23**	**0.77**	**0.42**	**0.22**	**0.81**
Ever Homeless												
No	1.00			1.00			1.00			1.00		
Yes	**4.22**	**2.35**	**7.58**	**5.60**	**2.16**	**14.52**	**2.15**	**1.16**	**3.98**	**3.27**	**1.53**	**6.99**
Number of Sex Partners (lifetime)												
1	1.00			1.00			1.00			1.00		
2-4	**11.75**	**1.53**	**90.02**	5.99	0.73	49.35	1.14	0.50	2.59	1.51	0.64	3.56
5-8	**28.20**	**3.36**	**236.76**	**15.39**	**1.53**	**154.57**	**3.91**	**1.51**	**10.16**	**3.63**	**1.16**	**11.33**
9+	**76.91**	**10.24**	**577.79**	**37.93**	**4.61**	**311.80**	**3.00**	**1.29**	**6.95**	**6.06**	**2.34**	**15.68**
Number of Sex Partners in the Past 4 Months (excluding those never having sex)												
0	†			†			1.00			1.00		
1							0.74	0.29	1.86	0.77	0.28	2.13
2+							2.03	0.72	5.70	2.45	0.72	8.35
Received Compensation for Sex (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	**3.84**	**2.08**	**7.09**	**3.39**	**1.15**	**10.00**	1.57	0.80	3.09	**3.36**	**1.48**	**7.67**
Anal Sex (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	1.00	0.94	1.06	1.00	0.91	1.10	0.97	0.85	1.10	0.98	0.87	1.11
Injection Drug Use												
No	1.00			1.00			1.00			1.00		
Yes	**5.90**	**2.68**	**12.99**	**8.05**	**2.74**	**23.70**	2.18	0.85	5.59	**2.75**	**1.02**	**7.47**

Table 7. Correlates of Self-Reported STDs and Predictors of Current STD Infection by Study Site (continued)

	Self-Reported Past Infection						Currently Diagnosed Infection					
	San Diego			Tijuana			San Diego			Tijuana		
	OR	95%CI		OR	95%CI		OR	95%CI		OR	95%CI	
		lower	upper		lower	upper		lower	upper		lower	upper
Alcohol Use (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	**3.08**	**1.29**	**7.38**	2.00	0.66	6.09	1.51	0.71	3.20	1.77	0.82	3.83
Alcohol Use During Sex (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	**5.04**	**2.42**	**10.48**	**3.65**	**1.22**	**10.87**	1.31	0.69	2.52	1.49	0.71	3.12
Perceived Risk for HIV												
Not possible	1.00			1.00			1.00			1.00		
Possible	**2.40**	**1.22**	**4.72**	**3.49**	**1.19**	**10.22**	1.06	0.54	2.08	1.39	0.66	2.92
Don't know	1.34	0.61	2.97	1.55	0.40	5.93	0.98	0.47	2.03	1.45	0.65	3.23
Know Someone with HIV/AIDS												
No	1.00			1.00			1.00			1.00		
Yes	**2.36**	**1.33**	**4.17**	1.57	0.61	4.03	1.02	0.99	1.05	0.79	0.36	1.72
Know Someone who Died from HIV/AIDS												
No	1.00			1.00			1.00			1.00		
Yes	1.02	0.99	1.04	1.59	0.59	4.25	0.97	0.77	1.21	1.09	0.51	2.32
Number Correct on 15 HIV/AIDS Fact Questions												
1-5 (0-33%)	1.00						1.00			1.00		
6-10 (34-66%)	0.87	0.10	7.24	xxx			2.03	0.26	16.05	1.15	0.13	9.83
11-15 (66-100%)	2.59	0.33	20.19	xxx			1.76	0.22	13.75	0.93	0.11	7.91
Received HIV/AIDS Prevention Information												
No	1.00			1.00			1.00			1.00		
Yes	**5.71**	**3.05**	**10.69**	**4.05**	**1.60**	**10.25**	1.32	0.74	2.38	1.64	0.85	3.16
Self-Reported STD (previous)												
No							1.00			1.00		
Yes							0.88	0.33	2.31	2.48	0.85	7.22
Ever Tested for HIV												
No	**1.00**			1.00			1.00			1.00		
Yes	**10.17**	**4.49**	**22.99**	**7.80**	**2.78**	**21.89**	0.88	0.33	2.31	0.87	0.44	1.73

†Analysis not performed because the exposure occurs after the outcome.

xxx = models did not converge or estimates approached infinity.

OR = odds ratio; CI = confidence

An OR of 1.00 indicates the referent category.

Odds ratios that are bolded indicate 95% CIs excluding 1.00.

Source: CDHS/OA.

Table 8. Correlates of Previous HIV Testing by Study Site

	San Diego			Tijuana		
	OR	95%CI		OR	95%CI	
		lower	upper		lower	upper
Age (years)						
18-21	**0.60**	**0.37**	**0.97**	1.20	0.63	2.28
22-25	1.13	0.70	1.81	1.66	0.87	3.17
26-29	1.24	0.76	2.04	**2.43**	**1.26**	**4.72**
30+	1.00			1.00		
Acculturation (scores of 3 or more = high acculturation)						
Low acculturation	1.00			1.00		
High acculturation	**7.11**	**4.10**	**12.33**	**5.13**	**1.30**	**20.22**
Education						
Less than high school	0.86	0.55	1.33	1.06	0.59	1.90
High school	1.05	0.68	1.62	1.47	0.84	2.57
More than high school	1.00			1.00		
Currently in School						
No	1.00			1.00		
Yes	0.83	0.50	1.39	0.75	0.38	1.47
Living Situation						
Not with partner/spouse	1.00			1.00		
With partner/spouse	0.95	0.67	1.34	0.84	0.54	1.32
Ever Homeless						
No	1.00			1.00		
Yes	**4.01**	**2.52**	**6.37**	**3.83**	**1.98**	**7.41**
Number of Sex Partners (lifetime)						
1	1.00			1.00		
2-4	**1.54**	**0.99**	**2.40**	1.11	0.64	1.91
5-8	**2.48**	**1.24**	**4.93**	**2.43**	**1.02**	**5.83**
9+	**5.28**	**2.96**	**9.43**	**4.54**	**2.12**	**9.75**
Received Compensation for Sex (lifetime)						
No	1.00			1.00		
Yes	**2.54**	**1.57**	**4.11**	**2.76**	**1.33**	**5.71**
Anal Sex (lifetime)						
No	1.00			1.00		
Yes	1.00	0.98	1.02	**2.49**	**1.51**	**4.11**
Injection Drug Use (lifetime)						
No	1.00			1.00		
Yes	**2.83**	**1.31**	**6.12**	**2.68**	**1.12**	**6.41**
Alcohol Use (lifetime)						
No	1.00			1.00		
Yes	**1.89**	**1.23**	**2.90**	1.20	0.73	1.98
Alcohol Use During Sex (lifetime)						
No	1.00			1.00		
Yes	**2.03**	**1.35**	**3.06**	1.63	0.94	2.82
Perceived Risk for HIV						
Not possible	1.00			1.00		
Possible	**1.75**	**1.16**	**2.64**	1.52	0.92	2.51
Don't know	0.86	0.55	1.35	**0.52**	**0.27**	**0.99**

Table 8. Correlates of Previous HIV Testing by Study Site (continued)

	San Diego			Tijuana		
	OR	95%CI		OR	95%CI	
		lower	upper		lower	upper
Know Someone with HIV/AIDS						
No	1.00			1.00		
Yes	0.98	0.92	1.04	1.29	0.78	2.15
Know Someone who Died from HIV/AIDS						
No	1.00			1.00		
Yes	**2.04**	**1.35**	**3.10**	1.48	0.87	2.53
Number Correct on 15 HIV/AIDS Fact Questions						
1-5	1.00			1.00		
6-10	2.45	0.68	8.87	2.36	0.28	19.80
11-15	**4.94**	**1.38**	**17.72**	4.36	0.53	36.14
Received HIV/AIDS Prevention Information						
No	1.00			1.00		
Yes	**2.45**	**1.69**	**3.56**	**1.64**	**1.01**	**2.66**
Self-reported STD (lifetime)						
No	1.00			1.00		
Yes	**10.17**	**4.49**	**22.99**	**7.80**	**2.78**	**21.89**

OR = odds ratio; CI = confidence interval.
An OR of 1.00 indicates the referent category.
Odds ratios that are bolded indicate 95% CIs excluding 1.00.

Source: CDHS/OA.

Table 9. Correlates of Lifetime and Recent Unprotected Anal Sex by Study Site

	Lifetime Unprotected Anal Sex						Recent Unprotected Anal Sex					
	San Diego			Tijuana			San Diego			Tijuana		
	OR	95%CI lower	upper	OR	95%CI lower	upper	OR	95%CI lower	upper	OR	95%CI lower	upper
Age (years)												
18-21	1.29	0.60	2.74	0.77	0.39	1.54	1.02	0.48	2.18	1.62	0.56	4.69
22-25	1.06	0.47	2.42	1.50	0.77	2.90	1.29	0.63	2.67	2.06	0.72	5.87
26-29	0.93	0.44	1.97	1.81	0.92	3.57	1.06	0.48	2.33	1.03	0.30	3.53
30+	1.00			1.00			1.00			1.00		
Acculturation (scores of 3 or more = high acculturation)												
Low acculturation	1.00			1.00			1.00			1.00		
High acculturation	1.51	0.80	2.85	**6.28**	**1.59**	**24.84**	1.62	0.86	3.08	**4.66**	**1.11**	**19.61**
Education												
Less than high school	1.01	0.51	1.99	0.78	0.42	1.45	1.01	0.51	1.99	0.70	0.29	1.71
High school	0.93	0.47	1.85	1.14	0.63	2.06	0.89	0.45	1.77	0.57	0.23	1.41
More than high school	1.00			1.00			1.00			1.00		
Currently in School												
No	1.00			1.00			1.00			1.00		
Yes	0.73	0.30	1.77	**0.37**	**0.15**	**0.91**	0.70	0.29	1.71	0.67	0.19	2.30
Living Situation												
Not with partner/spouse	1.00			1.00			1.00			1.00		
With partner/spouse	1.11	0.64	1.91	1.05	0.65	1.69	0.90	0.52	1.56	0.98	0.47	2.07
Ever Homeless												
No	1.00			1.00			1.00			1.00		
Yes	**1.92**	**1.07**	**3.45**	**5.35**	**2.71**	**10.56**	**2.08**	**1.15**	**3.75**	**3.20**	**1.35**	**7.54**
Number of Sex Partners (lifetime)												
1	1.00			1.00			1.00			1.00		
2-4	0.68	0.29	1.61	**2.17**	**1.10**	**4.28**	0.68	0.29	1.63	0.97	0.29	3.26
5-8	**5.46**	**2.26**	**13.18**	**10.23**	**3.93**	**26.64**	**5.59**	**2.30**	**13.61**	**10.40**	**3.02**	**35.76**
9+	**3.91**	**1.79**	**8.54**	**25.00**	**9.86**	**63.40**	**4.17**	**1.90**	**9.16**	**9.15**	**2.92**	**28.72**
Number of Sex Partners in the Past 4 Months (excluding those never having sex)												
0	†			†			xxx			xxx		
1												
2+												
Received Compensation for Sex (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	**4.44**	**2.49**	**7.93**	**9.90**	**4.26**	**23.02**	**4.55**	**2.53**	**8.17**	**6.65**	**2.82**	**15.72**

Table 9. Correlates of Lifetime and Recent Unprotected Anal Sex by Study Site (continued)

	Lifetime Unprotected Anal Sex						Recent Unprotected Anal Sex					
	San Diego			Tijuana			San Diego			Tijuana		
	OR	95%CI lower	95%CI upper	OR	95%CI lower	95%CI upper	OR	95%CI lower	95%CI upper	OR	95%CI lower	95%CI upper
Injection Drug Use (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	**2.60**	**1.11**	**6.08**	**9.56**	**3.39**	**26.96**	**2.71**	**1.14**	**6.43**	**3.66**	**1.32**	**10.17**
Alcohol Use (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	1.83	0.87	3.83	**2.25**	**1.26**	**4.01**	1.84	0.87	3.87	1.63	0.68	3.92
Alcohol Use During Sex (lifetime)												
No	1.00			1.00			1.00			1.00		
Yes	**3.89**	**1.96**	**7.71**	**4.09**	**2.28**	**7.32**	**4.08**	**2.05**	**8.13**	**5.37**	**2.05**	**14.09**
Perceived Risk for HIV												
Not possible	1.00			1.00			1.00			1.00		
Possible	**3.01**	**1.50**	**6.06**	**3.46**	**1.96**	**6.10**	**3.01**	**1.49**	**6.08**	**4.18**	**1.69**	**10.33**
Don't know	1.81	0.83	3.96	1.62	0.84	3.11	1.72	0.79	3.79	1.27	0.39	4.16
Know Someone with HIV/AIDS												
No	1.00			1.00			1.00			1.00		
Yes	1.02	0.99	1.05	**2.11**	**1.24**	**3.57**	1.03	1.00	1.06	**4.53**	**2.13**	**9.64**
Know Someone who Died from HIV/AIDS												
No	1.00			1.00			1.00			1.00		
Yes	1.01	0.99	1.04	1.61	0.92	2.83	1.02	0.99	1.05	1.72	0.75	3.94
Number Correct on 15 HIV/AIDS Fact Questions												
1-5 (0-33%)	1.00			1.00			1.00			1.00		
6-10 (34-66%)	**0.32**	**0.10**	**0.99**	1.00	0.19	5.18	**0.32**	**0.10**	**0.99**	0.24	0.04	1.37
11-15 (66-100%)	**0.30**	**0.10**	**0.91**	1.35	0.26	6.88	**0.31**	**0.10**	**0.94**	0.31	0.06	1.69
Received HIV/AIDS Prevention Information												
No	1.00			1.00			1.00			1.00		
Yes	1.53	0.88	2.65	**1.64**	**0.99**	**2.74**	1.58	0.91	2.75	1.84	0.87	3.91
Self-Reported STD (previous)												
No	1.00			1.00			1.00			1.00		
Yes	1.91	0.93	3.95	**3.06**	**1.25**	**7.47**	1.91	0.92	3.97	**4.25**	**1.51**	**12.01**
Current STD												
No	†			†			1.00			1.00		
Yes							1.15	0.49	2.70	1.26	0.45	3.49
Ever Tested for HIV												
No	1.00			1.00			1.00			1.00		
Yes	**1.76**	**1.01**	**3.06**	**2.57**	**1.57**	**4.21**	1.72	0.98	3.00	1.78	0.85	3.73

† Analysis not performed because the exposure occurs after the outcome.

xxx = models did not converge or estimates approached infinity.

OR = odds ratio; CI = confidence interval.

An OR of 1.00 indicates the referent category.

Odds ratios that are bolded indicate 95% CIs excluding 1.00.

Source: CDHS/OA.

Table 10. Agreement with Attitude Statements Among Participants by Study Site

Construct with Cronbach alpha coefficient and related items	San Diego						Tijuana				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	N	%	%	%	%	%	%	%	%	%	%
Alcohol Use (a = .91)											
I often feel more sexual after I've had a few drinks	510	15.4	6.8	21.6	23.5	32.7	57.2	21.3	9.8	8.9	2.9
A drink or two makes me more comfortable sexually	508	20.4	6.2	14.8	29.0	29.6	61.3	15.0	13.3	8.1	2.3
After a few drinks I am more sexually responsive	509	17.3	5.6	16.7	28.4	32.1	55.9	19.6	12.4	9.2	2.9
A drink or two makes me less shy or self-conscious	507	18.0	8.1	21.1	23.6	29.2	48.3	24.3	15.0	8.7	3.8
Safer Sex (a = .70)											
Sex isn't as enjoyable with a condom	507	20.4	5.6	19.8	22.2	32.1	10.7	19.1	55.7	11.3	3.2
Safe sex is unsatisfying	508	26.7	3.7	20.5	21.1	28.0	9.5	24.8	53.6	9.8	2.3
When a man puts on a condom it disrupts	509	26.5	2.5	19.1	17.3	34.6	26.2	27.1	28.0	14.4	4.3
Control (a = .62)											
When I have sex, I don't want to think about anything at all, I just want to enter another	509	23.5	9.3	14.8	29.0	23.5	4.9	12.4	16.1	40.9	25.6
If some one I am having sex with starts to do some thing unsafe, there is little I can do	510	33.3	14.2	22.2	16.7	13.6	9.5	14.4	25.3	46.3	4.6
When I am having sex, I can only think about what is going on at the moment	509	20.4	11.1	13.0	29.0	26.5	3.7	16.1	19.0	37.2	23.9
When I'm sexually aroused I will do any thing with any one	509	38.9	14.8	13.6	21.0	11.7	61.1	14.7	16.1	3.2	4.9
I find it difficult to limit myself to safer sex all the time	507	21.6	10.5	23.5	22.2	22.2	13.9	30.4	40.6	11.9	3.2
I can get a man I am having sex with to use a condom if I want him to (loadings reversed)	509	35.8	22.2	19.8	11.7	10.5	53.3	28.2	12.4	5.5	0.6
If someone I am having sex with does not want to use a condom there is little I can do about it	508	36.4	13.6	19.8	19.8	10.5	10.4	14.2	28.0	41.9	5.5

Source: CDHS/OA.

APPENDIX I

Characteristics of Women Recruited from Low-Income Prenatal Centers and Drug Rehabilitation Facilities by Study Site

Table 11. Select Demographic Characteristics of Women Recruited from Low-Income Prenatal Centers and Drug Rehabilitation Facilities by Study Site

	Low-Income Prenatal Center					Drug Rehabilitation Facility				
	San Diego		Tijuana			San Diego		Tijuana		
	N	%	N	%		N	%	N	%	
Age (years)										**
18-21	13	37.1	21	30.4		3	8.3	31	39.2	
22-25	9	25.7	22	31.9		7	19.4	18	22.8	
26-29	5	14.3	14	20.3		8	22.2	23	29.1	
30+	8	22.9	12	17.4		18	50.0	7	8.9	
Total	35		69		104	36		79		115
Acculturation (scores of 3 or more = high acculturation)					**					**
Low acculturation	19	54.3	69	100.0		15	41.7	69	87.3	
High acculturation	16	45.7	0	0.0		21	58.3	10	12.7	
Total	35		69		104	36		79		115
Education										
Less than high school	14	40.0	30	43.5		8	22.2	27	34.2	
High school	16	45.7	31	44.9		15	41.7	32	40.5	
More than high school	5	14.3	8	11.6		13	36.1	20	25.3	
Total	35		69		104	36		79		115
Currently in school					*					
No	28	80.0	65	94.2		34	94.4	72	91.1	
Yes	7	20.0	4	5.8		2	5.6	7	8.9	115
Total	35		69		104	36		79		
Number of Children										
0	10	28.6	15	21.7		7	19.4	18	22.8	
1	8	22.9	23	33.3		9	25.0	21	26.6	
2	9	25.7	18	26.1		7	19.4	19	24.1	
3+	8	22.9	13	18.8		13	36.1	21	26.6	
Total	35		69		104	36		79		115
Living Situation										**
Not with partner/spouse	9	25.7	8	11.6		20	55.6	66	83.5	
With partner/spouse	26	74.3	61	88.4		16	44.4	13	16.5	
Total	35		69		104	36		79		115
Ever Homeless										
No	28	82.4	64	92.8		20	55.6	51	64.6	
Yes	6	17.6	5	7.2		16	44.4	28	35.4	
Total	34		69		103	36		79		115

*p<0.05.

**p<0.01.

Percentages may not sum to 100 due to rounding error.

Source: CDHS/OA.

Table 12. Sexual Behaviors of Women Recruited from Low-Income Prenatal Centers and Drug Rehabilitation Facilities by Study Site

	Low-Income Prenatal Center					Drug Rehabilitation Facility				
	San Diego		Tijuana			San Diego		Tijuana		
	N	%	N	%		N	%	N	%	
Number of Sex Partners in Lifetime										
1-3	27	81.8	58	84.1		16	47.1	33	44.0	
4-10	4	12.1	10	14.5		9	26.5	21	28.0	
11+	2	6.1	1	1.4		9	26.5	21	28.0	
Total	33		69		102	34		75		109
Nationality of Sex Partners (lifetime)										
Only from Mexico	20	60.6	68	98.6		10	30.3	60	78.9	
Only from US	8	24.2	0	0.0		8	24.2	2	2.6	
Mostly from Mexico (over 2/3), some from	0	0.0	1	1.4		4	12.1	8	10.5	
Mostly from US (over 2/3), some from	3	9.1	0	0.0		10	30.3	2	2.6	
Same number from Mexico and US	2	6.1	0	0.0		1	3.0	4	5.3	
Total	33		69		102	33		76		109
Received Compensation for Sex (lifetime)					**					
No	26	81.3	67	98.5		25	73.5	58	73.4	
Yes	6	18.8	1	1.5		9	26.5	21	26.6	
Total	32		68		100	34		79		113
Received Compensation for Sex (recent)										
No	29	90.6	68	100.0		31	91.2	69	87.3	
Yes	3	9.4	0	0.0		3	8.8	10	12.7	
Total	32		68		100	34		79		113
Response to Question of General Condom										
Always	3	8.6	0	0.0		3	25.0	1	3.4	
Usually	2	5.7	3	4.3		7	58.3	10	34.5	
Sometimes	7	20.0	10	14.5		7	58.3	12	41.4	
Rarely	1	2.9	28	40.6		6	50.0	23	79.3	
Never	22	62.9	28	40.6		12	34.3	29	38.2	
I do not have sex with men	0	0.0	0	0.0		0	0.0	1	3.4	
Total	35	162.9	69	140.6	104	35	260.2	76	238.4	111
Vaginal Intercourse without a Condom (lifetime)										
No	0	0.0	0	0.0		0	0.0	1	1.3	
Yes	34	100.0	69	100.0		35	100.0	78	98.7	
Total	34		69		103	35		79		115
Vaginal Intercourse without a Condom (recent)										
No	2	5.9	1	1.4		12	34.3	18	22.8	
Yes	32	94.1	68	98.6		23	65.7	61	77.2	
Total	34		69		103	35		79		114
Anal Intercourse (lifetime)										
No	26	76.5	50	74.6		19	54.3	43	54.4	
Yes	8	23.5	17	25.4		16	45.7	36	45.6	
Total	34		67		101	35		79		113
Anal Intercourse without a Condom (lifetime)										
No	26	76.5	51	76.1		21	60.0	43	54.4	
Yes	7	20.6	16	23.9		14	40.0	36	45.6	
Total	34		67		101	35		79		113

*p<0.05.

**p<0.01.

Percentages may not sum to 100 due to rounding error.

Source: CDHS/OA.

Table 13. Alcohol and Drug Behaviors and Use During by Study Site and Recruitment Venue

Drug Rehabilitation Facilities		Use in Lifetime					Lifetime Use During Sex				
		San Diego		Tijuana			San Diego		Tijuana		
		N	%	N	%		N	%	N	%	
Alcohol	No	2	5.6	19	24.7		10	29.4	41	53.9	
	Yes	34	94.4	58	75.3		24	70.6	35	46.1	
	Total	36		77		*	34		76		
Marijuana	No	7	20.6	33	43.4		9	26.5	49	64.5	
	Yes	27	79.4	43	56.6		25	73.5	27	35.5	
	Total	34		76		*	34		76		*
Injection Drug Use	No	28	80.0	60	75.9						
	Yes	7	20.0	19	24.1						
	Total	35		79							
Needle Sharing	No	28	82.4	63	79.7						
	Yes	6	17.6	16	20.3						
	Total	34		79							
		Recent Use					Recent Use During Sex				
		San Diego		Tijuana			San Diego		Tijuana		
		N	%	N	%		N	%	N	%	
Alcohol	No	18	52.9	61	79.2		22	64.7	63	81.8	
	Yes	16	47.1	16	20.8		12	35.3	14	18.2	
	Total	34		77		*	34		77		
Marijuana	No	22	64.7	61	80.3		24	70.6	69	90.8	
	Yes	12	35.3	15	19.7		10	29.4	7	9.2	
	Total	34		76			34		76		
Injection Drug Use	No	33	97.1	69	87.3						
	Yes	2	5.9	10	12.7						
	Total	35		79							
Needle Sharing	No	32	94.1	73	92.4						
	Yes	2	5.9	6	7.6						
	Total	34		79							
Low-Income Prenatal Centers		Use in Lifetime					Lifetime Use During Sex				
		San Diego		Tijuana			San Diego		Tijuana		
		N	%	N	%		N	%	N	%	
Alcohol	No	9	26.5	24	34.8		25	73.5	65	94.2	
	Yes	25	73.5	45	65.2		9	26.5	4	5.8	
	Total	34		69			34		69		
Marijuana	No	26	76.5	64	92.8		30	90.9	69	100.0	
	Yes	8	23.5	5	7.2		3	9.1	0	0.0	
	Total	34		69		*	33		69		*
Injection Drug Use	No	34	100.0	66	100.0						
	Yes	0	0.0	0	0.0						
	Total	34		66							
		Recent Use					Recent Use During Sex				
		San Diego		Tijuana			San Diego		Tijuana		
		N	%	N	%		N	%	N	%	
Alcohol	No	20	58.8	66	95.7		32	97.0	69	100.0	
	Yes	5	14.7	3	4.3		1	3.0	0	0.0	
	Total	34		69		*	33		69		
Marijuana	No	34	100.0	69	100.0		34	0.0	69	0.0	
	Yes	0	0.0	0	0.0		0	0.0	0	0.0	
	Total	34		69			34		69		

*p<.05.

Source: CDHS/OA.

Table 14. HIV Knowledge, Education, and Prevention in Women Recruited from Low-Income Prenatal Centers and Drug Rehabilitation Facilities by Study Site

	Low-Income Prenatal Center					Drug Rehabilitation Facility				
	San Diego		Tijuana			San Diego		Tijuana		
	N	%	N	%		N	%	N	%	
Number correct on 15 HIV/AIDS fact questions										
1-5	5	14.3	1	1.4		1	2.8	3	3.8	
6-10	16	45.7	39	56.5		11	30.6	30	38.0	
11-15	14	40.0	29	42.0		24	66.7	46	58.2	
Total	35		69		104	36		79		115
Perceived Risk for HIV										
Very likely (75-100% chance)	0	0.0	0	0.0		4	11.1	2	2.5	
Likely (25-74% chance)	3	8.6	1	1.4		4	11.1	8	10.1	
Unlikely (1-24% chance)	7	20.0	16	23.2		11	30.6	29	36.7	
Not possible (0% chance)	12	34.3	42	60.9		6	16.7	25	31.6	
Don't know	13	37.1	10	14.5		11	30.6	15	19.0	115
Total	35		69		104	36		79		
Know someone with HIV/AIDS										
No	27	77.1	61	88.4		21	58.3	43	55.1	
Yes	8	22.9	8	11.6		15	41.7	35	44.9	
Total	35		69		104	36		78		114
Know someone who died from HIV/AIDS										
No	28	80.0	62	91.2		20	57.1	53	67.1	
Yes	7	20.0	6	8.8		15	42.9	26	32.9	
Total	35		68		103	35		79		114
Received HIV/AIDS prevention information										**
No	27	79.4	48	70.6		13	37.1	52	66.7	
Yes	7	20.6	20	29.4		22	62.9	26	33.3	
Total	34		68		102	35		78		113
Perceived effectiveness of information										
Very effective	6	85.7	15	71.4		17	81.0	14	56.0	
Mildly effective	1	14.3	6	28.6		4	19.0	10	40.0	
Not effective at all	0	0.0	0	0.0	28	0	0.0	1	4.0	
Total	7		21			21		25		46
Comfort with Source of HIV Information										
Medical Clinic Workshop for Women Only										
Comfortable	35	100.0	66	95.7		34	94.4	76	96.2	
Uncomfortable	0	0.0	2	2.9		2	5.6	3	3.8	
No opinion	0	0.0	1	1.4			0.0		0.0	
Total	35		69		104	36		79		115
Medical Clinic Workshop Open to Everyone										
Comfortable	28	80.0	54	78.3		28	77.8	59	74.7	
Uncomfortable	7	20.0	13	18.8		8	22.2	20	25.3	
No opinion	0	0.0	2	2.9		0	0.0	0	0.0	
Total	35		69		104	36		79		115

Table 14. HIV Knowledge, Education, and Prevention in Women Recruited from Low-Income Prenatal Centers and Drug Rehabilitation Facilities by Study Site (continued)

	Low-Income Prenatal Center					Drug Rehabilitation Facility				
	San Diego		Tijuana			San Diego		Tijuana		
	N	%	N	%		N	%	N	%	
Comfort With Source of HIV Information										
Video Tape To Watch At Home										
Comfortable	30	85.7	60	87.0		31	86.1	61	78.2	
Uncomfortable	5	14.3	7	10.1		4	11.1	15	19.2	
No opinion	0	0.0	2	2.9		1	2.8	2	2.6	
Total	35		69		104	36		78		114
Mobile Outreach Van										
Comfortable	19	54.3	9	13.0		19	52.8	28	35.4	
Uncomfortable	12	34.3	57	82.6		16	44.4	50	63.3	
No opinion	4	11.4	3	4.3		1	2.8	1	1.3	
Total	35		69		104	36		79		115
Bar/Club Outreach										
Comfortable	16	45.7	7	10.1		15	41.7	22	27.8	
Uncomfortable	18	51.4	58	84.1		20	55.6	56	70.9	
No opinion	1	2.9	4	5.8		1	2.8	1	1.3	
Total	35		69		104	36		79		115
Schools/Classroom										
Comfortable	32	94.1	58	84.1		29	80.6	66	83.5	
Uncomfortable	2	5.9	10	14.5		7	19.4	12	15.2	
No opinion	0	0.0	1	1.4		0	0.0	1	1.3	
Total	34		69		103	36		79		115
Response to following statements (asked as questions)										
Medical science has made good progress in treating HIV/AIDS during the last 15 years										
No	4	11.4	4	5.8		4	11.4	2	2.5	
Yes	25	71.4	62	89.9		23	65.7	67	84.8	
Don't know	6	17.1	3	4.3		8	22.9	10	12.7	
Total	35		69		104	35		79		114
Impact of hearing about new medical advances for those infected with HIV/AIDS on sexual/drug-using behavior										
Large amount	7	21.2	36	52.9		16	45.7	41	51.9	
Small amount	10	30.3	24	35.3		6	17.1	24	30.4	
Not at all	12	36.4	1	1.5		10	28.6	2	2.5	
Don’t know	4	12.1	7	10.3		3	8.6	12	15.2	
Total	33		68		101	35		79		114
There will be a cure for HIV/AIDS in the next 10-20 years										
No	16	45.7	7	10.3		3	8.3	8	10.1	
Yes	13	37.1	52	76.5		24	66.7	62	78.5	
Don't know	6	17.1	9	13.2		9	25.0	9	11.4	
Total	35		68		103	36		79		115

*p<0.05.

**p<0.01.

Percentages may not sum to 100 due to rounding error.

Source: CDHS/OA.

Table 15. HIV Testing and Prevalence in Women Recruited from Low Income Prenatal Centers and Drug Rehabilitation Facilities by Study Site

	Low Income Prenatal Center					Drug Rehabilitation Facility				
	San Diego		Tijuana			San Diego		Tijuana		
	N	%	N	%		N	%	N	%	
Ever Tested for HIV					*					**
No	9	25.7	34	49.3		6	16.7	41	51.9	
Yes	26	74.3	35	50.7		30	83.3	38	48.1	
Total	35		69		102	36		79		115
Results of last test										
HIV positive	0	0.0	0	0.0		3	10.0	1	2.7	
HIV negative	25	96.2	31	91.2		27	90.0	33	89.2	
Never returned for results	1	3.8	3	8.8		0	0.0	2	5.4	
Don't know	0	0.0	0	0.0		0	0.0	1	2.7	
Total	26		34		60	30		37		67
Prevalence of HIV										*
Negative	56	100.0	69	100.0		32	88.9	77	98.7	
Positive	0	0.0	0	0.0		4	11.1	1	1.3	
Total	56		69		104	36		78		114

Source: CDHS/OA.

Table 16. Prevalence of STDs in Women Recruited from Low-Income Prenatal Centers and Drug Rehabilitation Facilities by Study Site

	Low-Income Prenatal Center					Drug Rehabilitation Facility				
	San Diego		Tijuana			San Diego		Tijuana		
	N	%	N	%		N	%	N	%	
Self-reported STD (lifetime)										*
No	28	87.5	65	94.2		23	69.7	66	85.7	
Yes	4	12.5	4	5.8		10	30.3	11	14.3	
Total	32		69		101	33		77		110
Current STD										**
No	33	94.3	60	89.6		36	100.0	57	73.1	
Yes	2	5.7	7	10.4		0	0.0	21	26.9	
Total	35		67		102	36		78		114
Chlamydia										**
No	33	94.3	62	89.9		36	100.0	62	78.5	
Yes	2	5.7	7	10.1		0	0.0	17	21.5	
Total	35		69		102	36		79		115

*p<0.05.

**p<0.01.

Percentages may not sum to 100 due to rounding error.

Source: CDHS/OA.

APPENDIX II

Questionnaire used for Transborder Latino Women's Health Study

TRANSBORDER LATINA WOMEN'S HEALTH STUDY

Sponsored and Conducted by the California Department of Health Services, Office of AIDS.
In collaboration with the San Diego County Department of Health Services, the City of Tijuana Department of Public Health, and Proyecto de Consejo y Apoyo Binacional (PROCABI) of Tijuana, Mexico.

Interviewer Code: _____ (Initials) **Personal Identifier:____-____-**

Interview Date: ___/___/___(MM/DD/YY) **State Lab No. _____**

Site: _____

All of your answers are confidential, and your name will never be associated with any answer you give. If you do not want to answer a certain question, you do not have to, but we would appreciate it if you could answer all the questions that you can.

First, I'd like to ask you a few background questions.

A. DEMOGRAPHIC QUESTIONS

1. When were you born? What was the month, the day, and the year?

INTERVIEWER: CHECK MONTH/DAY/YEAR WITH PRESENT MONTH/DAY/YEAR TO MAKE SURE SHE'S 18-35 YEARS OLD (check to see if age range is correct)

_____/_____/_____
MONTH DAY YEAR

98. [ ] Don't know **(If don't know, probe for age):**
99. [ ] Refused to answer

INTERVIEWER: IF RESPONDENT IS YOUNGER THAN 18 OR OLDER THAN 29 YEARS OF AGE, STOP -- END OF INTERVIEW

2. Where were you born?

01._____ San Diego County
02._____ Other area in the United States
03._____ Tijuana or city/town near Tijuana
04._____ Other area in Mexico
05._____ Neither in the United States nor Mexico (Specify _____)
99._____ Refused to answer

INTERVIEWER: IF RESPONDENT BORN OUTSIDE USA, SKIP TO QUESTION #4.

3. Which generation are you?

01._____ Neither parent born *in* the USA
02._____ One parent born *in* the USA
03._____ Both parents born *in* the USA
04._____ Grandparents born *in* the USA
05._____ Other (Specify _____)
99._____ Refused to answer

4. Which of these terms best describes your Latina racial/ethnic background?

01. [ ] Mexican
02. [ ] Central American (Specify_____)
03. [ ] South American (Specify_____)
04. [ ] Puerto Rican/Dominican/Cuban/Haitian
05. [ ] Mixed (Specify_____)
99. [ ] Refused to answer

5. Which of the following areas best describes your current permanent residence:

01._____ San Diego County
02._____ Other area in the United States
03._____ Tijuana or city/town near Tijuana
04._____ Other area in Mexico
05._____ Neither in the United States nor Mexico (tourist)
99._____ Refused to answer

6. How long have you been in the San Diego – Tijuana area?

01._____ Less than a month (tourist or very new to area)
02._____ Between 1 month and one year
03._____ 1-5 years
04._____ Over 5 years
99._____ Refused to answer

1. In general, what language do you read and speak?

01. [ ] Only Spanish
02. [ ] Spanish better than English
03. [ ] Both equally
04. [ ] English better than Spanish
05. [ ] Only English

1. What language do you usually speak at home?

01. [ ] Only Spanish
02. [ ] Spanish better than English
03. [ ] Both equally
04. [ ] English better than Spanish
05. [ ] Only English

2. In which language do you usually think?

01. [ ] Only Spanish
02. [ ] Spanish better than English
03. [ ] Both equally
04. [ ] English better than Spanish
05. [ ] Only English

3. What language do you usually speak with your friends?

01. [ ] Only Spanish
02. [ ] Spanish better than English
03. [ ] Both equally
04. [ ] English better than Spanish
05. [ ] Only English

11. What is the highest grade you completed in school?

01. [ ] Never attended school
02. [ ] Less than high school degree
03. [ ] High school degree or equivalency
04. [ ] Technical or vocational school
05. [ ] Some college
06. [ ] College degree
07. [ ] Some graduate school
08. [ ] Graduate degree
99. [ ] Refused to answer

12. Are you currently in school?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

1. What is your current marital status?

01. [ ] Single
02. [ ] Married
03. [ ] Separated
04. [ ] Divorced
05. [ ] Widowed
99. [ ] Refused to answer

INTERVIEWER: IF RESPONDENT IS NOT MARRIED, SKIP TO QUESTION #15

14. Which of the following apply to your ***partner*** during the past year (you may choose more than one)? **(INTERVIEWER: Read all options and check all that apply)**

01. [ ] Employed part-time
02. [ ] Employed full-time
03. [ ] Employed sometimes
04. [ ] Unemployed
05. [ ] Attending school at least part-time
06. [ ] In prison for more than 24 hours
07. [ ] Other (Specify _____)
99. [ ] Refused to answer

15. How many children do you have?

01. [ ] None
02. [ ] One
03. [ ] Two
04. [ ] Other (Specify _____)
99. [ ] Refused to answer

16. Are you currently pregnant?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

17. Which of the following best describes your current living situation?
INTERVIEWER: READ ALL CHOICES EXCEPT "REFUSED TO ANSWER" & MARK ALL THAT APPLY

01. [ ] Living alone in house/apartment/dwelling
02. [ ] Living with spouse
03. [ ] Living with parents, guardian, or relatives **(INTERVIEWER: If checked, skip to 19)**
04. [ ] Living with friends, roommate(s)
05. [ ] Living with boyfriend/significant other
06. [ ] Homeless--living on the street or in shelters
07. [ ] Other (Specify)
99. [ ] Refused to answer

INTERVIEWER: IF RESPONSE IS ANYTHING OTHER THAN '03', PLEASE GO TO QUESTION 18

18. How old were you when you stopped living with parents, relatives, and/or guardians?
_____ (age in years)

19. Have you ever been homeless?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

20. Have you ever been incarcerated (in prison) for over one week?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

21. Which of the following apply to you during the past year (you may choose more than one)?
(INTERVIEWER: Read all options and check all that apply)

01. [ ] Employed part-time
02. [ ] Employed full-time
03. [ ] Employed sometimes
04. [ ] Unemployed
05. [ ] Attending school at least part-time
06. [ ] In prison for more than 24 hours
07. [ ] Other (Specify _____)
99. [ ] Refused to answer

22. Which of the following activities provided income/support for you during the last 4 months (you may choose more than one)?
(INTERVIEWER: Read all options and check all that apply)

01. [ ] A job (either full-time or part-time)
02. [ ] Welfare, public assistance, food stamps
03. [ ] Money provided for students (student loans, grants, scholarships, etc.)
04. [ ] Other public benefits (Social Security, Disability, Unemployment, etc.)
05. [ ] Spouse, partner, family, or friends
06. [ ] Sex for money
07. [ ] Other (Specify _____)
99. [ ] Refused to answer

B. SEXUAL BEHAVIOR QUESTIONS

Now I'm going to ask you some questions about sex. By sex, I mean oral sex (mouth to penis or anus), vaginal sex (penis in vagina), or anal sex (penis in anus). Please remember that no one is going to be able to trace these answers back to you. Some of these questions may be difficult, but try to be as honest as possible.

INTERVIEWER: PLEASE READ ALL OPTIONS AND CHECK ALL THAT APPLY AND USE WORDS RESPONDENT FEELS COMFORTABLE WITH

23. How likely do you think it is that you are HIV-positive?

01. [ ] Very likely (i.e., 75-100% chance)
02. [ ] Likely (i.e., 25-74% chance)
03. [ ] Unlikely (i.e., 1-24% chance)
04. [ ] Not possible (i.e., 0% chance)
98. [ ] Don't know
99. [ ] Refused to answer

24. Have you ever had sex with another person? By sex, I mean oral sex (mouth to penis or anus), vaginal sex (penis in vagina), or anal sex (penis in butt).

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

INTERVIEWER: IF ANSWER IS "No" OR "Refused to answer", GO TO QUESTION 42

First, I am going to ask you about the numbers of sex partners that you have had during your whole lifetime as well as during the last 4 months, that is since _____
(INTERVIEWER: PLEASE CALCULATE 4 MONTHS BACK FROM TODAY'S DATE).

Please include all partners with whom you have had sex, regardless of the circumstances, including those with whom you have traded sex for money, drugs, shelter, or anything else. Again, remember that your answers are strictly confidential.

25. During your whole lifetime, with approximately how many different men have you had sex?

Number of men _____**[IF REFUSED TO ANSWER PUT 888, IF N/A PUT 999]**

INTERVIEWER: IF ANSWER IS "0", GO TO QUESTION 42

26. During the past 4 months, with approximately how many different men have you had sex?

Number of men _____**[IF REFUSED TO ANSWER PUT 888, IF N/A PUT 999]**

First, I would like to ask you a series of questions about sex you have had with males. Sex with a male includes oral sex (mouth in contact with penis or anus), anal sex (penis in your anus), or vaginal sex (penis in your vagina). I will first ask each question as it applies during your whole lifetime, and then repeat it as it applies during the last 4 months, that is, since last _____
(INTERVIEWER: RESTATE DATE OF 4 MONTHS AGO).

27. Of the male sexual partners you have had during your lifetime, were any of these men from a country other than Mexico or the United States?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

INTERVIEWER: If ANSWER IS "Yes", ask from which countries/areas these partner(s) were from:
_____

INTERVIEWER: IF ANSWER IS "No" or "Refused to answer" GO TO QUESTION 28

28. Of the male sexual partners you have had during the last 4 months, were any of these men from a country other than Mexico or the United States?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

INTERVIEWER: If ANSWER IS "Yes", ask from which countries/areas these partner(s) were from:

_____

29. Of your lifetime male sex partners who were from Mexico or United States, which of these best describes the proportion from each country:

01. [ ] No sex with men from Mexico or the United States
02. [ ] Only men from Mexico (excluding Mexican-American males)
03. [ ] Only men from the United States (including Mexican-Americans males)
04. [ ] Mostly men from Mexico (over 2/3), some from the United States
05. [ ] Mostly men from the United States (over 2/3), some from Mexico
06. [ ] Roughly the same number of men from Mexico and the United States
99. [ ] Don't know/Refused to answer

30. Same question as before, but during the last 4 months:

01. [ ] No sex with men during the last 4 months
02. [ ] Only men from Mexico (excluding Mexican-American males)
03. [ ] Only men from the United States (including Mexican-Americans males)
04. [ ] Mostly men from Mexico (over 2/3), some from the United States
05. [ ] Mostly men from the United States (over 2/3), some from Mexico
06. [ ] Roughly the same number of men from Mexico and the United States
99. [ ] Don't know/Refused to answer

31. In your whole lifetime, have you ever had vaginal sex (penis to vagina) with a man without using a condom?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

INTERVIEWER: IF ANSWER IS "No" OR "Refused to answer" GO TO QUESTION 35

32. Of these men with whom you had vaginal sex without a condom during your lifetime, were any from:
(INTERVIEWER: CHECK ALL THAT APPLY; IF "don't know/refuse", LEAVE BLANK)

Mexico (excluding Mexican-American men)? _____
United States (including Mexican-American men)? _____
Men not from Mexico or the United States? _____

33. During the past 4 months, have you had vaginal sex with a man without using a condom ?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

INTERVIEWER: IF ANSWER IS "No" OR "Refused to answer" GO TO QUESTION 35

34. Of these men with whom you had vaginal sex without a condom during the past 4 months, were any from:
(INTERVIEWER: CHECK ALL THAT APPLY; IF "don't know/refuse", LEAVE BLANK)

Mexico (excluding Mexican-American men)? _____
United States (including Mexican-American men)? _____
Men not from Mexico or the United States? _____

35. Have you ever had anal sex with a man?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

INTERVIEWER: IF ANSWER IS "No" OR "Refused to answer", GO TO QUESTION 39

36. In your whole lifetime, have you ever had anal sex with a man without using a condom?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

37. Of these men with whom you had anal sex without a condom during your lifetime, were any from:
(INTERVIEWER: CHECK ALL THAT APPLY; IF "don't know/refuse", LEAVE BLANK)

Mexico (excluding Mexican-American men)? _____
United States (including Mexican-American men)? _____
Men not from Mexico or the United States? _____

38. During the past 4 months, have you had anal sex with a man without using a condom?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

INTERVIEWER: IF ANSWER IS "No" or "Refused to answer" GO TO QUESTION 40

39. Of these men with whom you had anal sex without a condom during the past 4 months, were any from:
(INTERVIEWER: CHECK ALL THAT APPLY; IF "don't know/refuse", LEAVE BLANK)

Mexico (excluding Mexican-American men)? _____
United States (including Mexican-American men)? _____
Men not from Mexico or the United States? _____

40. During your whole lifetime, have you ever given or received things such as food, shelter, drugs, or money in exchange for sex with a man?

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

INTERVIEWER: IF ANSWER IS "No" OR "Refused to answer" GO TO QUESTION 42

41. Same question as before, but during the last 4 months:

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

C. DRUG HISTORY QUESTIONS

Now I'm going to ask you some questions about drug and alcohol use. As with the sexual history questions, I will first ask each question as it applies to your entire life, and then repeat it soon after as it applies to the last 4 months that is, since last _____
(INTERVIEWER: RESTATE DATE OF 4 MONTHS AGO).

42. Have you ever in your lifetime injected drugs (including steroids) into your veins or under your skin with a needle? Do not include any drug prescribed to you by a doctor.

01. [ ] Yes **(If Yes, more than 3 times ? [ ] Yes [ ] No)**
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

INTERVIEWER: IF "No" OR "Don't know/Refused to answer" GO TO QUESTION 46

43. Same question as before, but during the last 4 months:

01. [ ] Yes
03. [ ] No
99. [ ] Refused to answer

44. Have you ever in your lifetime shared needles or works with other people to inject/shoot steroids or drugs? This could also mean that you borrowed them from someone else who did not shoot/inject with you.

01. [ ] Yes
02. [ ] No
99. [ ] Refused to answer

INTERVIEWER: IF "No", OR "Don't know/Refused to answer" GO TO QUESTION 46

45. Same question as before, but during the last 4 months:

01. [ ] Yes 02. [ ] No 99. [ ] Refused to answer

Questions 46-55.

Now I am going to ask you about your use of specific drugs, starting with alcohol. Again, your answers are completely private and cannot be traced back to you. Please be as honest as you can. I will ask you about lifetime use, use during the last 4 months, and use during sex. By the last one, I mean that you were buzzed or high on that particular drug while you were having sex with someone. You have the right to refuse to answer any question.

INTERVIEWER: IF ANSWER TO "EVER USED (LIFETIME)" IS "No" OR "Don't know/Refused to answer", THEN GO TO NEXT DRUG TYPE

IF ANSWER TO "EVER USED (LIFETIME)" IS "Yes", THEN CONTINUE QUESTIONING ON THAT DRUG (STAY ON THE SAME ROW OF THE TABLE) FOR EACH, CIRCLE THE ANSWER GIVEN BY RESPONDENT AS FOLLOWS:

Y = Yes N = No R = Don't know/Refused to answer

Drug or drug type	Ever used in lifetime?	Used more than 3 times?	Ever used during sex?	Used in last 4 months?	Used during sex in last 4 months?
46. Alcohol	Y N R	Y N R	Y N R	Y N R	Y N R
47. Marijuana	Y N R	Y N R	Y N R	Y N R	Y N R
48. Poppers/Nitrite Inhalants/Rush	Y N R	Y N R	Y N R	Y N R	Y N R
48. Ecstasy/XTC	Y N R	Y N R	Y N R	Y N R	Y N R
50. Speed/ Methamphetamine	Y N R	Y N R	Y N R	Y N R	Y N R
51. Downers/ Barbiturates	Y N R	Y N R	Y N R	Y N R	Y N R
52. LSD/ Mushrooms	Y N R	Y N R	Y N R	Y N R	Y N R
53. Cocaine (do not include Crack)	Y N R	Y N R	Y N R	Y N R	Y N R
54. Crack	Y N R	Y N R	Y N R	Y N R	Y N R
55. Heroin	Y N R	Y N R	Y N R	Y N R	Y N R

I. HIV/AIDS KNOWLEDGE QUESTIONS

Now I am going to ask you about some statements that involve HIV and AIDS. Please tell me if you think the statement is true, false, or you don't know or you aren't sure.

56. You can get HIV/AIDS by sharing needles used to inject (shoot up) drugs.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

57. A woman can transmit HIV to her unborn child while pregnant.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

58. An HIV infected woman can transmit HIV to her child through breastfeeding.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

59. Women can become infected with HIV through men.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

60. You can get HIV/AIDS by being bitten by a mosquito or other insects

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

61. You can get HIV/AIDS from using public toilets.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

62. HIV infected individuals may look and feel fine and may not know that they are capable of spreading the disease.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

63. You can get HIV/AIDS from having sex without a condom or rubber.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

64. You can get HIV/AIDS by performing unprotected oral sex on a man.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

65. There is a cure for AIDS

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

66. Only homosexual men get HIV/AIDS

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

67. People can lower their chances of getting HIV/AIDS by using a condom during sex.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

68. People who are HIV positive are easy to pick out of a crowd even if they have not developed AIDS.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

6**9.** An HIV-infected pregnant women may take medication to help prevent her baby from getting HIV.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

70. Medicines exist to help prevent the transmission of HIV during breastfeeding from an HIV-infected women to her baby.

01. [ ] True
02. [ ] False
98. [ ] Don't know/Aren't sure
99. [ ] Refused to answer

E. HEALTHCARE AND MEDICAL HISTORY QUESTIONS

Now I am going to ask you some questions about healthcare and your medical history.

71. Do you currently have medical insurance? This includes private insurance, through the military or public insurance like MediCAL?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

INTERVIEWER: IF ANSWER IS NO, Don't know or Refused to answer, SKIP TO 73

72. What type of insurance do you currently have?

01. [ ] Medi-CAL
02. [ ] Medicare
03. [ ] Private insurance through employer (job)
04. [ ] Private insurance for which you pay the premiums (including COBRA)
05. [ ] Private insurance that someone else pays the premiums (such as your parents or spouse)
06. [ ] Insurance through the military or Veteran's Administration
98. [ ] Don't know
99. [ ] Refused to answer

7**3**. Have you ever been told by a healthcare provider that you had been diagnosed with a venereal disease (VD) or a sexually transmitted disease such as gonorrhea (GC, clap), syphilis, chlamydia (drip), herpes or warts?

01. [ ] Yes (Specify _____)
03. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

7**4.** Have you ever been tested for HIV?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

INTERVIEWER: IF "Yes" GO TO QUESTION 76, IF "NO" OR "Don't know/Refused to answer", GO TO QUESTION 75

7**5**. Why haven't you been tested for HIV? **(INTERVIWER: CHECK ALL THAT APPLY)**

01. [ ] Don't think I'm at risk
02. [ ] Can't afford the test
03. [ ] Don't want to know
04. [ ] Don't know where to go to get a test taken
05. [ ] Didn't know that there was a test
06. [ ] Other (Specify _____)
07. [ ] Refused to answer

INTERVIEWER: GO TO QUESTION 80

7**6**. Why were you tested for HIV?

01. [ ] Hospitalization or surgical procedure
02. [ ] To apply for health insurance
03. [ ] For employment
04. [ ] To apply for a marriage license
05. [ ] For immigration
06. [ ] Just to find out if I was infected
07. [ ] Physician referral
08. [ ] Because of pregnancy
09. [ ] Referral by sex partner
10. [ ] Routine check-up
11. [ ] Occupational exposure
12. [ ] Because of illness
13. [ ] Because I am risk for HIV
14. [ ] Worried my sex partner had sex with others
15. [ ] other (specify _____)
16. [ ] Don't know/not sure
17. [ ] Refused to answer

7**7**. When were you last tested for HIV (that is, tested for the presence of antibodies to HIV)?

_____/_____ (Month/Year)

01. [ ] Never been tested for HIV
98. [ ] Don't know
99. [ ] Refused to answer

7**8.** What was your test result <u>the last time</u> you were tested for HIV?
(INTERVIEWER: READ ALL ANSWERS EXCEPT "Refused to answer" AND MARK ONLY ONE RESPONSE)

01. [ ] HIV - positive
02. [ ] HIV - negative
03. [ ] Don't know; never returned for results
04. [ ] Don't know; returned for post-test counseling but chose not to be told results
05. [ ] Don't know; results of HIV tests were inconclusive (uncertain)
98. [ ] Don't know; don't remember
99. [ ] Refused to answer

INTERVIEWER: IF RESPONDENT STATES THAT SHE TESTED HIV-POSITIVE, THEN ASK QUESTION 79; OTHERWISE GO TO QUESTION 80

7**9**. Have you ever received drug therapy for your HIV infection (such as AZT or protease inhibitors) or to prevent any HIV-related opportunistic infections (such as pentamidine/PCP prophylaxis)?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

80. What best describes your regular source of healthcare? By regular source of health care, I mean the types of facilities you most often visit to receive health services.

01. [ ]Clinics (Public Health Department Clinic, **c**ommunity-based clinic, **c**ollege/school clinic, hospital clinic, etc.)
02. [ ] HMO (Health maintenance organization, like Kaiser-Permanente)
03. [ ] Private doctor
04. [ ] Emergency room
05. [ ] Other (SPECIFY:_____)
06. [ ] Don't have a regular source of health care
07. [ ] Don't seek health care
98. [ ] Don't know
99. [ ] Refused to answer

8**1**. In which country do you receive most of your healthcare?

01. [ ] USA
02. [ ] Mexico
03. [ ] Refused to answer

8**2**. Do you personally know anyone who is HIV-positive or has AIDS?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

8**3**. Do you personally know anyone who has died from HIV/AIDS?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

F. HIV/AIDS EDUCATION, PREVENTION, AND MEDIA

8**4**. Where do you usually get your information about HIV/AIDS? List as many as you like.

_____

_____

8**5**. Have you ever received HIV/AIDS prevention information (such as safe sex education or needle maintenance) from any organization?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

INTERVIEWER: IF "No" OR "Don't know/Refused to answer", GO TO QUESTION 88

8**6.** How effective do you think this information was in helping you practice safer sexual and/or drug using behaviors (choose only one)? **(INTERVIEWER: READ CHOICES EXCEPT "Refused to answer")**

01. [ ] Very effective (behavior was impacted a lot)
02. [ ] Mildly effective (behavior was impacted a little)
03. [ ] Not effective at all (behavior was not impacted)
98. [ ] Don't know
01. [ ] Refused to answer

8**7.** At what age did you first receive such information? _____

8**8.** At what age do you think people should receive such information, if at all? _____
INTERVIEWER: PUT '99' IF RESPONSE IS "Not at all"

Questions 89-96.

I am now going to read a list of places where HIV prevention information is sometimes provided to people. I would like to know how comfortable you would feel receiving such information at each of these places. After I give you a place, respond by simply saying "comfortable", "uncomfortable", or "no opinion" if you cannot decide or have no opinion. By HIV prevention information, I again mean safe sex and drug-using procedures.

INTERVIEWER: READ EACH PLACE TO THE PARTICIPANT AND CIRCLE THEIR RESPONSE

8**9**. Medical clinic workshop, for women only

Comfortable Uncomfortable No opinion

90. Medical clinic workshop, open to everyone

Comfortable Uncomfortable No opinion

9**1**. Video tape you could watch at home

Comfortable Uncomfortable No opinion

9**2**. Mobile outreach (done from a van or RV)

Comfortable Uncomfortable No opinion

9**3**. Bar/club outreach

Comfortable Uncomfortable No opinion

9**4**. Schools/classrooms

Comfortable Uncomfortable No opinion

9**5**. Which of these options, or another that wasn't listed, would be the single most effective for you? Choose the one or two you think is/are best.

_____

Questions 96-97. Now I am going to ask you a few questions about condom use.

9**6**. When you have sex with a man, how often do you use a condom?

01. [ ] I do not have sex with men
02. [ ] Always
03. [ ] Usually
04. [ ] Sometimes
05. [ ] Rarely
06. [ ] Never
98. [ ] Don't know
99. [ ] Refused to answer

9**7**. Please list all of the places where you have obtained condoms during the past 4 months. You do not need to name specific stores, clinics, or people—just be general.

_____

_____

Questions 98-100. Now I am going to ask for your opinions about how HIV/AIDS has been handled by medical science.

9**8.** Do you think that medical science has made good progress in treating HIV/AIDS during the last 15 years?

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

9**9.** How much does hearing about new medical advances for those infected with HIV/AIDS impact your sexual or drug-using behaviors?

01. [ ] A large amount
02. [ ] A small amount
03. [ ] Not at all
98. [ ] Don't know
99. [ ] Refused to answer

100. Do you think there will be a cure for HIV/AIDS in the next 10-20 years? This could mean a drug, a vaccine, gene therapy, or any other avenue.

01. [ ] Yes
02. [ ] No
98. [ ] Don't know
99. [ ] Refused to answer

G. SEXUAL ATTITUDES

INTERVIEWER: PROVIDE CARD 1 TO PARTICIPANT (BACK PAGE) AND EXPLAIN SCALE.

READ: These statements reflect different attitudes toward sexuality. Refer to Card 1 for each statement and identify one number that best represents how strongly you agree or disagree. Please answer quickly giving your first "gut reaction". Remember: these are your opinions and there is no "correct" answer.

INTERVIWER: PLEASE CIRCLE THE APPROPRIATE NUMBER

	do not agree at all		***neutral***		***strongly agree***
101 I don't do things that could cause me to become infected with HIV	1	2	3	4	5
102 I usually do not bring up condoms with partners I don't know well	1	2	3	4	5
103 When I have sex, I don't want to think about anything at all- I just want to enter another world	1	2	3	4	5
104 I often feel more sexual after I've had a few drinks	1	2	3	4	5
105 Most of my friends think you should always use a condom when having anal sex	1	2	3	4	5
106 My sexual behavior is risky in terms of HIV	1	2	3	4	5
107 If someone I am having sex with starts to do something unsafe, there is little I can do about it	1	2	3	4	5
108 When I am having sex I can only think about what is going on at the moment	1	2	3	4	5
109 A drink or two makes me more comfortable sexually	1	2	3	4	5

	do not agree at all				*strongly agree*
1**10** Most of my **girl** friends think that condoms are too much of a hassle to use	1	2	3	4	5
11**1** There is little chance that I could become infected with HIV or infect others, from what I do sexually	1	2	3	4	5
11**2** It is easy for me to tell a sex partner I will not have anal sex without a condom	1	2	3	4	5
11**3** When I am sexually aroused I'll do anything with anyone	1	2	3	4	5
11**4**After a few drinks I am more sexually responsive	1	2	3	4	5
11**5** Most of my **girl** friends think you should avoid anal sex without condoms	1	2	3	4	5
11**6** I find it difficult to tell a sex partner not to do something I think is unsafe	1	2	3	4	5
11**7** A drink or two makes me less shy or self-conscious	1	2	3	4	5
11**8** Sex isn't as enjoyable with a condom	1	2	3	4	5
11**9** It is easy for me to tell a sex partner what I like and don't like to do during sex	1	2	3	4	5
1**20** I find it difficult to limit myself to safer sex all the time	1	2	3	4	5
12**1** I can get a man I'm having sex with to use condoms if I want him to	1	2	3	4	5
12**2** Safe sex is unsatisfying	1	2	3	4	5
12**3** If someone I'm having sex with does not want to use a condom, there is little I can do about it	1	2	3	4	5
12**4** When a man puts on a condom it disrupts sex	1	2	3	4	5

END OF INTERVIEW

FOR THE INTERVIEWER:

Confidence in responses (accuracy)

01. [ ] Very confident
02. [ ] Generally confident, but a few doubts in places
03. [ ] Some definite reservations
04. [ ] Very little confidence

At which parts of the questionnaire do the responses seem less reliable to you (if anywhere)?

_____

_____

_____

General comments:

CARD 1

For the participant

Please consult this while responding to the last section of the interview about sexual attitudes.

Remember: There is no correct or incorrect answer—your response should reflect your own personal beliefs and/or experiences, not what other people think. Again, your answers are completely confidential.

For each of the statements read, indicate your degree of agreement with how the statement applies to you by choosing one number between 1 and 5 with the following scale:

1	I strongly disagree with this statement	(I think it is completely false)
2	I mildly disagree with this statement	(I think it is usually— but not always-- false)
3	I am neutral on this statement	(I cannot say it is generally true or false)
4	I mildly agree with this statement	(I think it is usually—but not always-- true)
5	I strongly agree with this statement	(I think it is completely true)