

GAY ASIAN MEN IN SAN FRANCISCO FOLLOW THE INTERNATIONAL TREND: INCREASES IN RATES OF UNPROTECTED ANAL INTERCOURSE AND SEXUALLY TRANSMITTED DISEASES, 1999-2002

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Worldwide, studies of men who have sex with men (MSM) report increases in HIV risk-related behavior. Less is known about trends within minority subpopulations of MSM, particularly those of Asian and Pacific Islander (A&PI) ethnicity. A&PI MSM are underrepresented among AIDS cases (2.7%) with respect to their estimated makeup in the gay community of San Francisco (4.5%). However, recent trends in unprotected anal intercourse (UAI) and sexually transmitted diseases suggest a reversal in the relative risk for HIV among A&PI MSM compared with White MSM. Starting from lower levels in 1999, UAI with multiple partners, UAI with multiple partners of unknown HIV serostatus, the incidence of male rectal gonorrhea, and the incidence of early syphilis among A&PI MSM surpassed levels among White MSM by 2002. A window of opportunity to prevent further spread of HIV among A&PI MSM may be closing.

Increases in sexual risk behavior, sexually transmitted diseases (STDs), and, in some studies, HIV incidence have been reported for communities of men who have sex with men (MSM) around the world (Calzavara et al., 2002; Dukers et al., 2002; Katz et al., 2002). As noted by van de Ven, Mao, and Prestage (this issue), there is likely to be considerable heterogeneity in HIV-related risk across particular groups or cultures of MSM. Few studies, however, are able to examine temporal trends in HIV infection and risk behavior within minority subpopulations of MSM. In particular, there are few data on MSM of Asian and Pacific Islander (A&PI) ethnicities.

A&PI constitute 29.1% of San Francisco's adult male population (United States Census Bureau, 2000), but 2.7% of cumulative MSM AIDS cases (San Francisco Department of Public Health, 2003) (Table 1). Whites constitute 51.7% of the adult male population (United States Census Bureau, 2000) and 75.2% of MSM AIDS cases

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TABLE 1. Percentage of Asian and Pacific Islanders and Whites in the U.S. Male Population, San Francisco Male Population, San Francisco Population of Men who Have Sex with men (MSM), and among Cases of AIDS, Male Rectal Gonorrhea, and Early Syphilis

Estimate	Asian and Pacific Islander (%)	White (%)	Reference
U.S. males	3.7	75.2	United States Census (2000)
San Francisco males	29.1	51.7	United States Census (2000)
San Francisco MSM	4.5	80.5	Mills et al. (2001)
San Francisco cumulative MSM AIDS cases	2.7	78.3	San Francisco Department of Public Health (2003)
San Francisco male rectal gonorrhea cases	6.0	64.9	Present report
San Francisco early syphilis cases MSM	7.4	69.9	Present report

(San Francisco Department of Public Health, 2003). On the face of it, these statistics suggest that A&PI MSM are at lower risk for HIV infection than White MSM, but, A&PI representation in the MSM population of San Francisco may not reflect that of the overall adult male population. In-migration of MSM from the rest of the United States to San Francisco may result in an MSM community that is more reflective of the ethnic makeup of the country as a whole, where A&PI are 3.7% of the adult male population (US Census Bureau, 2000). Indeed, a recent population-based survey in San Francisco found 4% to 5% of MSM were A&PI and 78% to 83% were White (Mills et al., 2001). Studies of MSM usually include too few A&PI to measure HIV prevalence or incidence with precision or to track temporal trends in sexual behavior (Katz et al., 1998; Valleroy et al., 2000). One exception is the study by van de Ven et al. (this

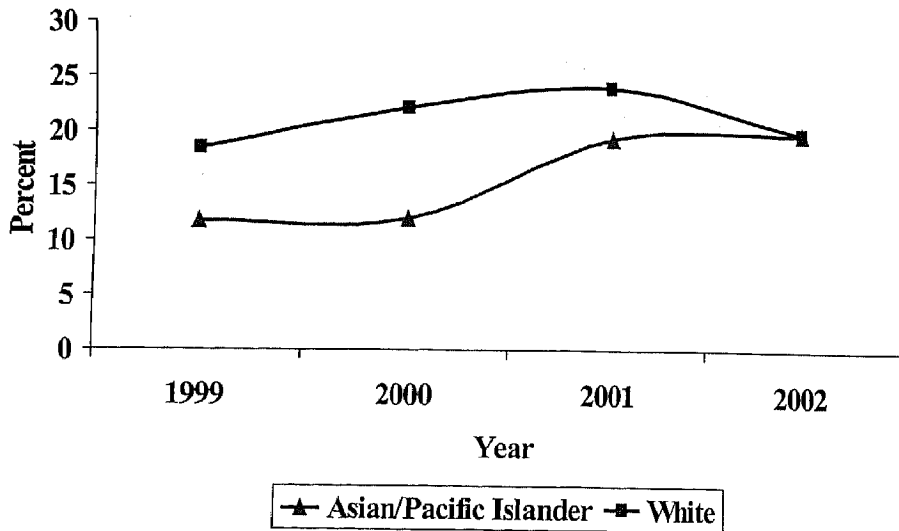


FIGURE 1. Unprotected anal intercourse with two or more partners in the last 6 months, Asian and Pacific Islander and White men who have sex with men, San Francisco, 1999-2002.

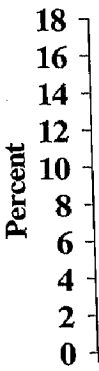


FIGURE 2. Unprotected anal intercourse with men, San Francisco

issue). The results suggest that background in risk behavior is more reflective of the majority Anglo-American population.

In San Francisco, we present here trends in the prevalence of HIV serostatus. We present here trends in the prevalence of HIV serostatus to compare Asian and Pacific Islander men with two or more partners to White men. HIV serostatus is defined as the prevalence of early HIV serostatus. There were too few Asian and Pacific Islander men for testing (Katz et al., 1998; Scheer et al., 2000).

Data on the course of HIV infection in San Francisco provided in previous studies (Katz et al., 1998; intercepted by bars, and by bars, and by bars, and by streets in with such as the C... cited to app... reporting the s... self-identified... ranged from 2002.

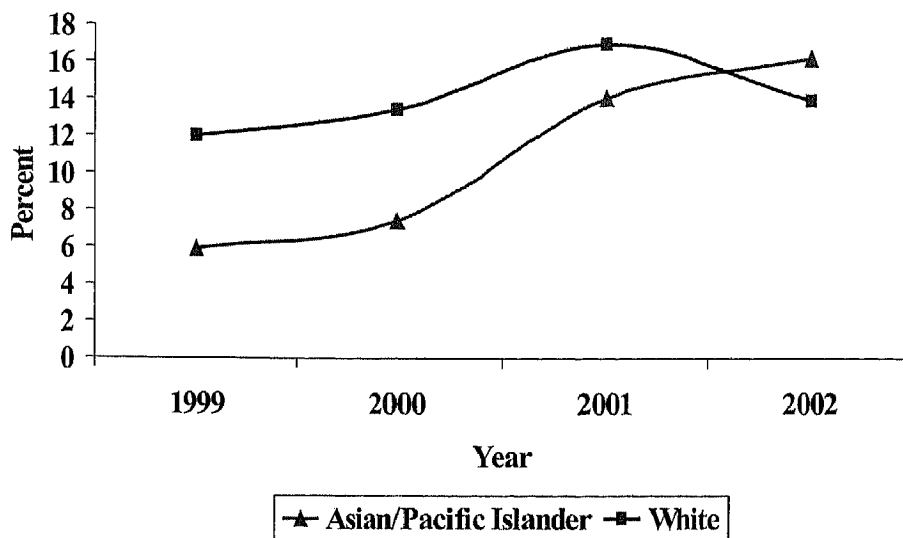


FIGURE 2. Unprotected anal intercourse with two or more partners of unknown HIV serostatus in the last 6 months, Asian and Pacific Islander and White men who have sex with men, San Francisco, 1999-2002.

issue). The researchers were able to recruit a sufficient sample of MSM of A&PI ethnic background in Sydney at two points in time. Their data indicate no increase in sexual risk behavior among A&PI MSM from 1999 to 2002 in contrast to trends in the majority Anglo-Celtic MSM population.

In San Francisco, we track several "HIV prevention indicators" to monitor trends in the epidemic (Chen et al., 2002; Katz et al., 2002; Page-Shafer et al., 2000). We present here annual trends in four indicators for which there were sufficient data to compare A&PI MSM with White MSM: unprotected anal intercourse (UAI) with two or more partners in the last 6 months, UAI with two or more partners of unknown HIV serostatus in the last 6 months, the incidence of male rectal gonorrhea, and the incidence of early syphilis among MSM. Other indicators we considered but for which there were too few A&PI MSM were the incidence of HIV among MSM seeking HIV testing (Katz et al., 2002) and the incidence of STDs among MSM living with AIDS (Scheer et al., 2001).

Data on UAI originate from brief structured interviews with MSM conducted by the Stop AIDS Project, a San Francisco community-based organization, through the course of HIV prevention outreach activities. Details of the survey methods are provided in previous publications (Chen et al. 2002; Katz et al., 2002). Briefly, MSM are intercepted by outreach workers in a variety of settings including gay-oriented clubs, bars, and businesses; at events such as the Gay Pride Parade and street fairs; and on streets in with high pedestrian traffic in neighborhoods with large gay populations such as the Castro, South of Market, and Polk Street. The structured interview is limited to approximately one page. Indicators are presented as proportions of MSM reporting the sexual risk behavior divided by all respondents for each year, stratified by self-identified A&PI and White race/ethnicity. The number of respondents per year ranged from 272 A&PI in 1999 to 115 in 2002 and 3,125 Whites in 1999 to 1,273 in 2002.

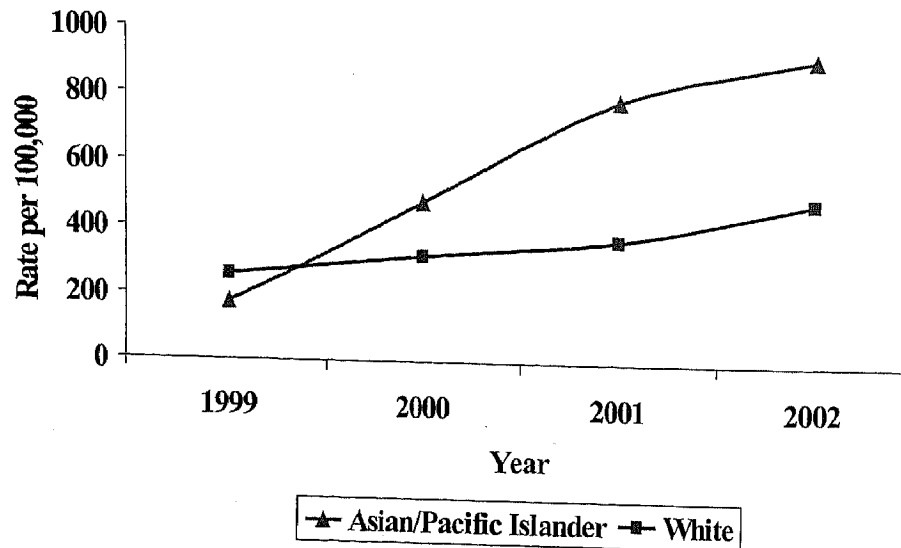


FIGURE 3. Cases of male rectal gonorrhea per 100,000 men who have sex with men, Asian and Pacific Islanders and whites, San Francisco, 1999-2002.

STD surveillance data provide two biological markers of sexual risk behavior: the incidences of male rectal gonorrhea and early syphilis (primary, secondary, and early latent) among MSM. STD surveillance data originate from passive reporting of new STD diagnoses from medical providers and laboratories citywide. The largest numbers of cases are diagnosed in the sole municipal STD clinic where reporting is more complete than private facilities. Indicators are presented as rates of infection per 100,000 MSM. We constructed the denominators of A&PI and White MSM in the following manner. The overall population of MSM of San Francisco was estimated at 50,782 based on a report from a panel of local experts (San Francisco department of Public Health, 2002). We estimated the A&PI MSM population to be 2,285 based on 4.5% of the overall MSM population according to the mid-point estimate (4-5%) of Mills et al (2001). The population of White MSM was estimated to be 40,880 based on the mid-point estimate of 80.5% (78-83%) of Mills et al. (2001).

Figures 1 to 4 present trends in the four HIV prevention indicators from 1999 through 2002. Although UAI with multiple partners (Figure 1) and UAI with multiple partners of unknown HIV serostatus (Figure 2) were substantially lower among A&PI MSM in 1999, by 2002 reported levels of risk had caught up and surpassed that of White MSM. We further stratified the analysis by age under 30 years and 30 years and older (data not shown). Levels of UAI increased for all age-race groups but did so most rapidly among older A&PI MSM. Because there were only six self-reported HIV-positive A&PI MSM reporting UAI with multiple partners in the overall sample, we did not stratify by serostatus. Of note, the behavioral indicators suggest a slight decline in risk among Whites from 2001 to 2002 but continued increases among A&PI. The incidence of male rectal gonorrhea (Figure 3) and the incidence of early syphilis (Figure 4) were also lower among A&PI MSM in 1999 but rapidly surpassed that of White MSM thereafter.

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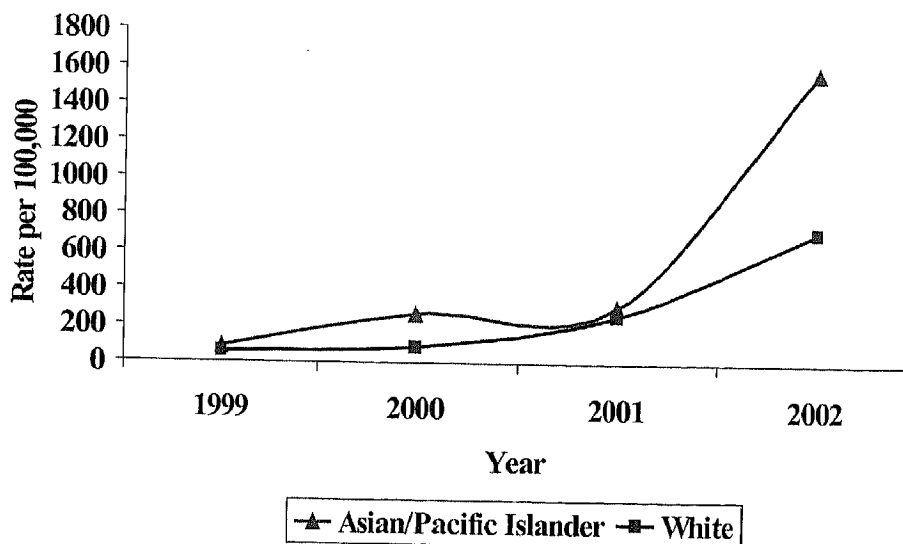


FIGURE 4. Cases of early syphilis per 100,000 men who have sex with men, Asian/Pacific Islanders and whites, San Francisco 1999-2002.

In contrast to Sydney (van de Ven et al., this issue), data from San Francisco suggest that risk for HIV infection among A&PI MSM has increased from 1999 to 2002. Indeed, our data indicate that sexual risk behavior and STD incidence among A&PI MSM have recently surpassed that of White MSM in San Francisco. Unfortunately, the STD surveillance data and the brief Stop AIDS Project questionnaire are not able to measure sexual mixing patterns between A&PI MSM and the different racial/ethnic groups—a factor that may determine the course of the HIV epidemic in the A&PI MSM community. Inference on trends in STD incidence is also hampered by uncertainty around the true denominator of A&PI MSM. In this report, we have relied on a study using a probability-based sample (Mills et al., 2001) and a report from a panel of experts (San Francisco Department of Public Health, 2002) to arrive at an estimate of 2,285 A&PI MSM in San Francisco. This figure is admittedly imprecise, and a small change in this estimate could have a large impact on the apparent relative rates of STDs. Our indicator data have other limitations, including the convenience sampling design of the Stop AIDS Project surveys, underreporting of STDs, and the scarcity of direct measures of HIV incidence among A&PI MSM.

Although our indicators may fall short of proving that HIV transmission is currently increasing among A&PI MSM, they are well worth noting. Prevention providers can react to rises in sexual risk behavior and STDs before witnessing increases in HIV incidence itself. However, our data suggest the window of opportunity to prevent further spread of HIV among sexual networks of A&PI MSM may be closing.

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