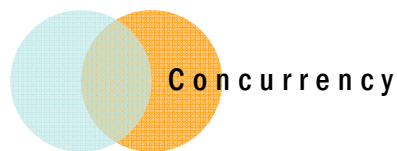


Presenting on Sexually Transmitted Disease (STD) Racial Health Disparities: A Resource Guide for Facilitators



Socio-economic status



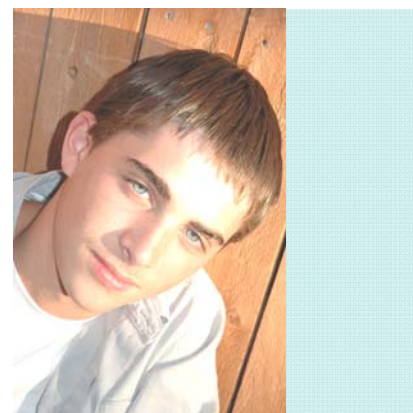
Sexual Behavior



Racism & Health

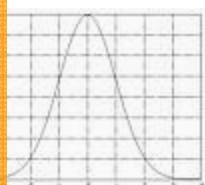


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Prevalence



**Presenting on Sexually Transmitted Disease (STD)
Racial Health Disparities:**

A Resource Guide for Facilitators

**California Department of Public Health,
Center for Infectious Diseases
Division of Communicable Disease Control
Sexually Transmitted Disease Control Branch,
and California STD/HIV Prevention Training Center**

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I. Purpose of this Document

This document is a frequently asked questions (FAQs) resource guide for facilitators that was developed in response to the complex questions and issues raised when data on racial and ethnic health disparities are presented. The purpose of this document is to serve as a resource for public health professionals and their community partners in starting discussions and/or answering questions related to the multiple individual and societal factors that influence sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV) rates among different racial/ethnic groups.

This guide is designed as a tool for experienced facilitators with established skills in conducting professional trainings and facilitating group process. It may also be used by experienced public health workers (e.g. epidemiologists, disease intervention specialists, health educators, nurses) and community agency staff who regularly conduct presentations on STD/HIV data and related factors for colleagues and community partners. For additional information on skill-based courses in group facilitation visit the CA STD/HIV Prevention Training Center (www.stdhivtraining.org) or for diversity and conflict management courses visit Quality Media Resources (www.qmr.com).

The California Department of Public Health (CDPH), Division of Communicable Disease Control (DCDC), STD Control Branch has also developed a set of data slides with presenter notes that gives information on the gender, age, race/ethnicity, and geographical break-down of STD morbidity in California. Please refer to the data slide set document for further epidemiological information at www.cdph.ca.gov/data/statistics/Pages/STDData.aspx or contact the STD Control Branch at 510-620-3400.

The main emphasis of this resource guide is to highlight the larger societal factors (e.g., poverty, racism) that influence STD/HIV rates and to encourage their inclusion in the training discussions and program planning that may traditionally focus on individual-level behavior change interventions. This document is a work in progress to which we encourage its users to add additional concepts and related research.

In the process of using this document, we encourage all facilitators to examine their own internal biases and comfort levels and to continually work on our societal development around issues of oppression and injustice. For further information on personal development related to these issues, please see the following resources: The People's Institute (www.pisab.org); Community Change, Inc. (www.communitychangeinc.org), Teaching Tolerance (www.tolerance.org) and your regional office of the National Conference for Community and Justice (NCCJ).

II. Overview of STD Epidemiological Measures and Data

A. Interpreting data measures

Epidemiological data can be shown in many different ways, depending on which aspects of the data the presenter wishes to emphasize. When presenting data on racial/ethnic disparities, it is crucial that the facilitator explain the differences in presenting STDs by number of cases, percents, and rates, and what the data mean in terms of the magnitude of infection versus level of disparities among different populations.

Number of cases is the count of the actual number of reported STD cases in a group. Percent demonstrates the proportion of cases that are represented by a particular group among all the cases. Rates are used to compare the magnitude of the problem among groups adjusting for the size of the population in each group. Rates are constructed by dividing the number of cases in each group (the numerator) by the population size of that group (the denominator), and multiplying by a constant (e.g., 100,000 population).

The examples below for reported cases of chlamydia (CT) from two counties in California demonstrate the importance of comparing the differences between number of cases, percents and rates.

Los Angeles County 2007 reported chlamydia (CT) cases among females [1]

	African American	Latina	Asian/PI	White	Total
Number	7,179	13,023	1,115	2,520	30,479
Percent *	30%	55%	5%	11%	100%
Rate †	1,502.4	544.1	154.7	167.9	586.3

* Percent calculation excludes cases of unknown race/ethnicity

† Rates are per 100,000 population.

PI: Pacific Islander

Fresno County 2007 reported CT cases among females [1]

	African American	Latina	Asian/PI	White	Total
Number	484	2,078	189	366	4,096
Percent *	15%	66%	6%	12%	100%
Rate †	2,183.1	960.0	438.1	216.4	888.3

* Percent calculation excludes cases of unknown race/ethnicity

† Rates are per 100,000 population.

PI: Pacific Islander

Tables prepared by the California Department of Public Health, Center for Infectious Diseases, Division of Communicable Disease Control, STD Control Branch.

In the tables above, Latinas account for 55 percent of the 30,479 CT cases among females in Los Angeles County, and the rate among this group is 544.1 per 100,000, in part due to the group's large population size. In comparison, African Americans account for only 30 percent of female CT cases in Los Angeles, but their rate is the highest, at 1,502.4 per 100,000 (almost three times the rate among Latinas).

In Fresno County, there was a similar number of CT cases among female non-Latina whites (366) and African Americans (484). However, the rate per 100,000 population among whites was only 216.4, compared to a rate of 2,183.1 among African Americans (more than ten times the rate among whites), again due to the smaller African Americans population size. Further, while the rate among Latina women (960.0 per 100,000) was less than half the rate among African Americans, the number (and percent) of Latina cases was much higher than any other group (2,078 cases, 66 percent of all cases), due to the large size of the Latina population in Fresno County.

When determining and examining racial/ethnic disparities, it is important to consider both the absolute amount of infection by examining the case numbers and percents, as well as the relative amount of infection by examining the rates. No one data measure alone tells the whole story or allows for the appropriate allocation of resources to control STDs.

B. Key epidemiologic characteristics

Each STD has a different magnitude of impact on different population groups, based on age, race/ethnicity, gender, sexual orientation, and other factors. For example, while only about 1 of 17 Californians is African American, well over 1 of 2 reported gonorrhea (GC) cases, and over 1 of 4 reported CT cases, were African American in 2007. Similarly, while about 1 of 3 Californians are Latino, 1 in 2 CT cases were Latino in 2007 [2].

Nationwide, in 2005, men who have sex with men (MSM) made up more than two-thirds (68 percent) of all men living with HIV [3]. Remarkable racial/ethnic disparities are also seen among heterosexuals and MSM with HIV and AIDS in California. For example, among persons living with AIDS as of May, 2008 about 1 of 5 are African American (far higher than the 1 of 17 African Americans in the California population noted above) [4]. And, this difference is even more striking among some subgroups. For example, while the rate of living AIDS cases among African American males (872.8 per 100,000 population) is 2.5 times the rate among non-Hispanic white males (347.7 per 100,000), the rate of AIDS among African American females (219.3) is almost 8.7 times the rate among non-Hispanic white females (25.2) [5]. And, there are related differences by race/ethnicity in the "exposure category" or "risk group" of AIDS cases, with about 1 of 8 MSM cases being African American compared to about 1 of 3 heterosexual contact cases [4].

A wide range of data also emphasizes these racial/ethnic disparities among HIV/AIDS cases nationally. For example, a recent report on estimates of new HIV infections in the United States indicated an incidence rate of 83.7 per 100,000 population among African Americans in 2006, almost three times higher than the next closest group (Hispanics) and more than seven times higher than the largest population group (Whites) [6]. Another recent report on HIV/AIDS diagnoses in the United States, described very striking racial/ethnic disparities among MSM cases, particularly young (13 to 24 years of age) MSM cases, with far more cases reported (7,658 cases between 2001 and 2006) among African Americans in this age category than among any other race/ethnic group [7]. Additionally, there was a higher rate of increase in this group over this time period (averaging 14.9 percent each year) than any other group.

Prevalence data from the National Health and Nutrition Examination Survey (NHANES IV), conducted 1999 through 2004, demonstrate similar racial/ethnic disparities in herpes simplex virus type 2 (HSV-2) in the United States. Seroprevalence results show that an average of 55 percent of African Americans aged 30 to 49 years have HSV-2, compared to 20 percent of whites in the same age group [8].

Among all racial/ethnic groups, CT and GC rates are highest among young women 15 to 24 years old. The rates for African American female GC cases were higher in all age groups than rates for Latina or non-Latina whites. In 2007 in California, in the female 15- to 19-year-old age group, the GC rate was over 20 times higher for African Americans (1,797) than for non-Latina whites (88); among males in this age group, the African American rate (857) was 29 times higher than among non-Latino whites (30) [9].

There are unique and important epidemiologic characteristics of STD cases among all racial and ethnic groups in California. For example, while the rate of STDs is often relatively low among the non-Hispanic white population, the absolute size of the white population results in there being a large number of cases in that group. For primary and secondary syphilis (the infectious stage of syphilis), there were more white cases than any other group and 75 percent of reported primary and secondary syphilis cases in 2007 were among MSM [10].

On the other side of the population-size spectrum, there are few Native American STD cases in California, reflecting their small population size (about 0.6 percent). However, in some instances their rates of infection are quite high, particularly in some counties with larger concentrations of Native Americans (e.g., although the numbers are small, in Humboldt County in 2007 among females, Native Americans had the highest rate of gonorrhea). The size of the Asian population in California is large relative to many states (about 12 percent of the population), but the rates of STDs are generally low, and often the lowest among both males and females, compared to other racial/ethnic groups. Hispanics, the second largest population group in California (about 36 percent of the population) have intermediate rates of

STDs, and generally high rates of chlamydia—because of the size of the Hispanic population and high rates of chlamydia, the absolute number of chlamydia cases tends to be higher among Hispanics than for any other racial/ethnic group.

African Americans are the second smallest main racial/ethnic group in California (about 6 percent of the population) but tend to have high to very high relative rates of STDs. In 2007 and in many prior years, the rates of chlamydia, gonorrhea, syphilis and HIV/AIDS are all higher among African Americans than any other racial/ethnic group. The differential in rates are so extreme for gonorrhea, that even with the small population size, the absolute number of gonorrhea cases is higher among African Americans than any other racial/ethnic group. And furthermore, as noted above, this disparity is even greater in some regions and/or groups; specifically among young persons aged 15 to 19 years.

Therefore, while it is important to describe the disparities in STDs among all racial and ethnic groups, it is particularly important to describe them in California (and much of the United States) among African Americans since their rates are overwhelming higher in many instances; the absolute numbers are higher in some instances; and, in general, the disparities are increasing.

III. Background on STD Transmission

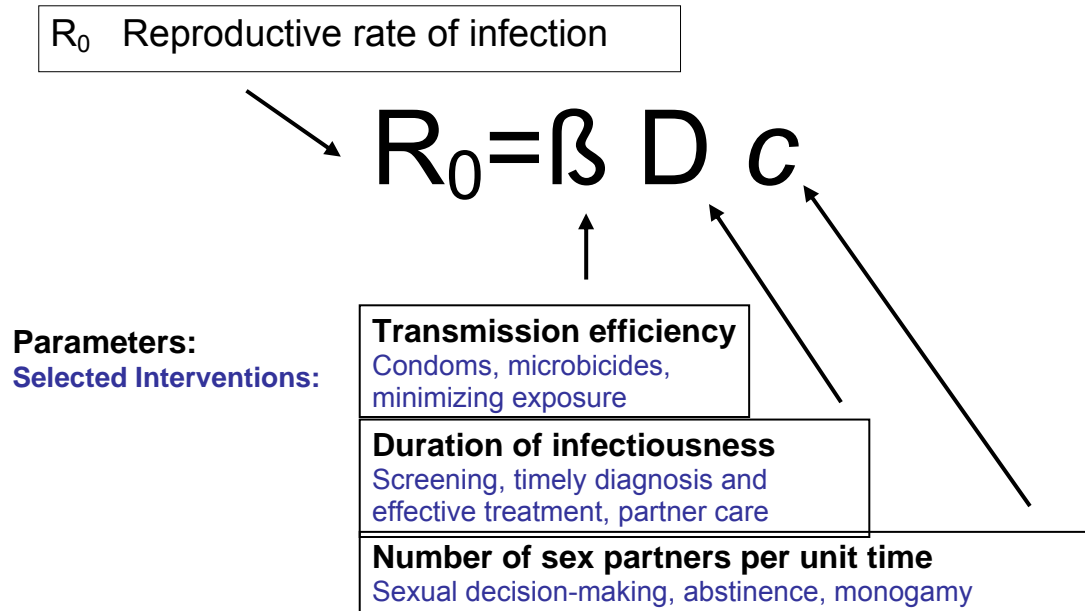
The relationship between race/ethnicity and STDs, including HIV, is multi-factorial and complex. Most of the research and program efforts in STD/HIV prevention focus on individual behavior change (e.g., condom use, number of partners, getting tested) and biomedical interventions (e.g., screening programs, treatments, and vaccines). All of these efforts attempt to prevent or slow the spread and complications of STDs. The equation below explains in more detail the main dynamics involved in population-level STD transmission.

The factors that determine the rate of population-level spread of disease (or R_0 = Reproductive Rate) are: (1) STD transmission efficiency (β) – or how easy it is for people to pass and acquire the STD organism; (2) the duration of infectiousness (D) – or how long people have the infection and can therefore infect others; and (3) the average number of sex partners (c). When any of these three factors is zero, STD transmission is stopped and there is no further spread of the infection in the population. If the reproductive rate is one ($R_0 = 1$), transmission rates are steady. If R_0 is less than one, there is a declining incidence, and if R_0 is more than one, the population incidence increases [11].

In each of the boxes below, labeling the respective three factors, there are lists of interventions that can help decrease or stop the effect of that particular factor on STD transmission.

STD Transmission Dynamics

(transmission by infected case)



Graphic prepared by the California Department of Public Health, Center for Infectious Disease, Division of Communicable Disease Control, STD Control Branch. Adapted from the Robert May and Roy M. Anderson equation in *Infectious Diseases of Humans: Dynamics and Control* (1992)

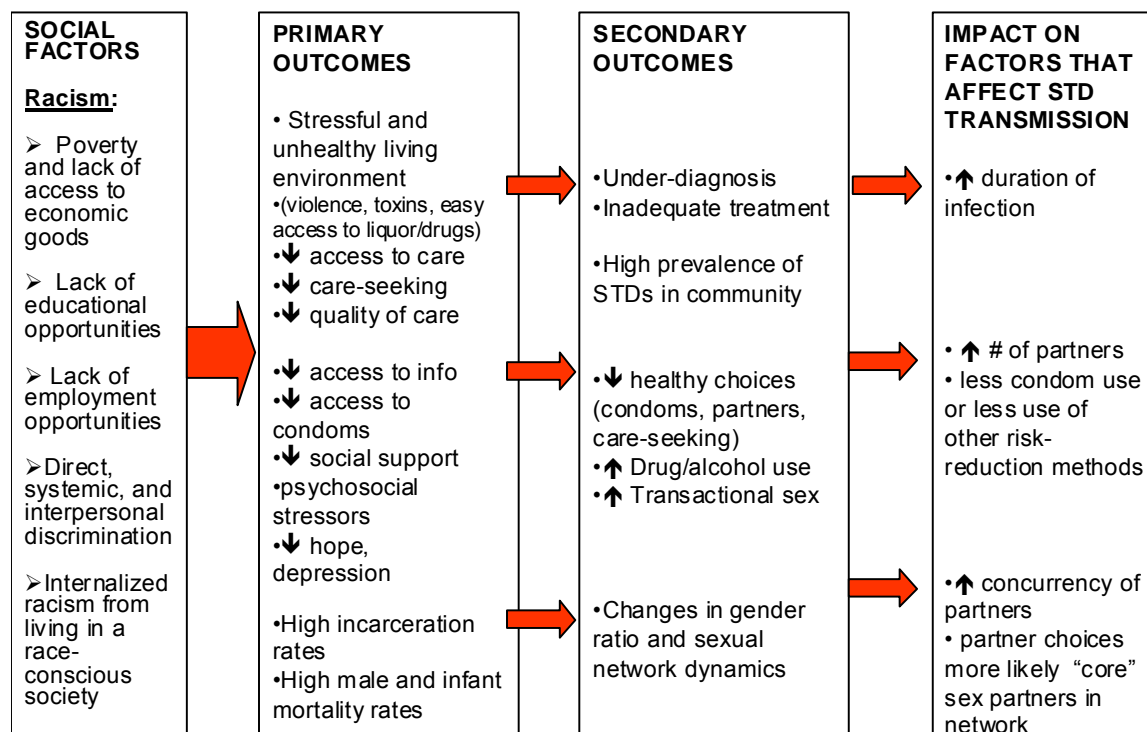
One critically important factor not represented in the above equation is STD prevalence, or the proportion of people infected in a given population. When prevalence is high, there is more likelihood that any given sex partner is infected. Therefore, the impact of factor c (or the number of sex partners) on STD transmission can be larger in a sexual network with a high prevalence.

In addition to differentials in prevalence, individual risk behaviors, and biomedical interventions, there are multiple societal factors that contribute to racial/ethnic health disparities in STDs [12]. Although this document will focus mainly on social factors that are closely associated with race/ethnicity, there are many overlapping oppressive factors including but not limited to homophobia, transphobia, xenophobia, immigration discrimination, acculturation and sexism that additionally contribute to the impact of STDs on certain groups. Some of the societal factors closely associated with race/ethnicity are racism, socioeconomic status (including educational level and income), unequal access to and quality of care, sexual network structure, and cultural differences that affect partner dynamics and individual behaviors. No single factor completely explains the racial differential in STD rates, and some of the factors are difficult to isolate in studies. More research is needed within a social justice framework

to better understand the relative weight and interplay of these factors. Undoubtedly, a multifaceted societal commitment to taking action to reduce disparities which incorporates community mobilization, interagency collaboration, and leadership is needed [13].

The model below is an attempt to demonstrate how a larger societal factor such as racism can influence STD rates through primary and secondary outcomes or indicators. For example, although it may not seem directly related, by providing more general educational opportunities to youth we are decreasing their risk of contracting an STD. Getting a good education can increase youth’s job opportunities and their hope for the future, which may then affect how they protect themselves from STDs or pregnancy. In addition, after-school and extracurricular programs that focus on youth development, athletics, arts, or community service help youth nurture their full potential and become actively engaged in productive activities that may take the place of higher-risk behaviors.

RACISM AND STD RISK: POTENTIAL THEORETICAL MODEL



Adapted from model created by Heidi Bauer, California Department of Public Health, Center for Infectious Disease, Division of Communicable Disease Control, STD Control Branch, 2007.

Below is another way of presenting how larger societal factors link to STDs:

Factors linked to racial disparities in STD rates

- Root causes
 - Racism
 - Poverty, education
 - Policies and laws
- Contributing factors
 - Lack of or reduced healthcare access
 - Differences in quality of health care received
 - Cultural competency of providers
 - Disproportionately high rates of incarceration
 - Gender ratio imbalances
 - Language/structural barriers
 - Unstable housing situations
 - Distrust of the (public) health system
- Transmission-related factors
 - Higher-risk social/sexual network structure
 - Higher STD prevalence in communities
 - Longer duration of infectiousness
 - Individual sexual behavior (e.g., number of partners, condom use)

IV. Frequently Asked Questions from Participants

Q1: How does racism affect health and STD infection?

Summary trainer note:

Racism can affect health status on a variety of levels. Institutionalized racism can be experienced as a lack of economic opportunity due to denial of jobs and/or bank loans, which can lead to the person living in an area with high levels of environmental pollutants, violence, and lack of job opportunities.

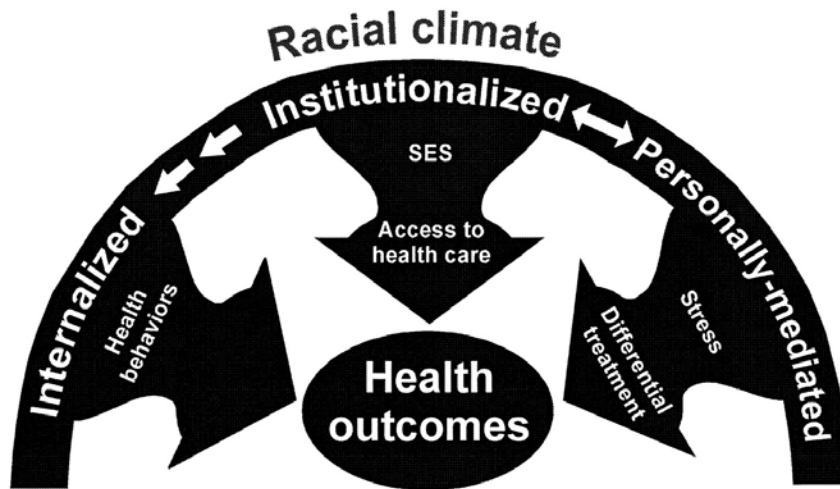
Personally-mediated racism, sustained by receiving unequal treatment from others, can affect STD outcomes, specifically through the delivery of less adequate or different care from health professionals.

Internalized racism may affect a person's sense of self-worth and his/her mental health, causing an increase in risk behaviors or a lack of healthcare-seeking behaviors [14]. In addition, racism on all levels can lead to acute and chronic stress; this stress may affect immune function and may therefore increase an individual's susceptibility to STD infection [15].

Further explanation and supporting data:

The following diagram shows the impacts of racism on health, illustrating the relationships among institutionalized racism, personally-mediated racism, and internalized racism, and various factors that contribute to race-associated differences in health outcomes [14].

The Impacts of Racism on Health



Jones CP. Am J Epidemiol 2001; 154:299-304

Most of the research in this area has been done on the effects of racism and classism on racial health disparities in chronic illnesses. It is logical to apply the same analysis to STD outcomes. For example, institutionalized racism in society and the criminal justice system (e.g., police racial profiling, unequal representation in court, a negative focus on people of color in the news media) contribute to the extremely high rates of incarceration among African Americans and other marginalized racial/ethnic groups. In 2006, African American males outnumbered imprisoned white males by six times per 100,000 population and Latinos outnumbered whites by three times per 100,000 population [16].

Incarceration and the resultant “male shortage” can affect rates of STDs by causing a gender imbalance, decreasing marriage rates, altering sexual networks, and increasing concurrency or overlapping of sex partners for both men and women [17]. In addition, approximately 25 percent of the HIV-positive population of the United States pass through correctional facilities each year [18], and the HIV prevalence in prisons is approximately five times higher than in the general population in some states [19]. Exposures within prison may include consensual and non-consensual sex, as well as needle-sharing through drugs or tattoos.

American Indians and Alaskan Natives (AI/ANs) have been shown to have far worse health outcomes than any other ethnic group in the US. In addition to the impact of

low socioeconomic status on health, the role of historical trauma and continued oppression have led to high rates of substance abuse within the AI/AN population which are linked to poor mental health outcomes and risky sexual behaviors [20].

Institutionalized racism may also lead to differential access to economic goods and opportunities, which can result in differences in underlying health status. In particular, there are significant differences across racial and ethnic groups in the amount, quality, and timing of healthcare services received [21].

Personally-mediated racism from a clinical provider can affect quality of care and future health-seeking behaviors, which may lead to increased duration of STDs or worse disease outcomes. Additionally, patient perception of clinician bias can lead to incomplete disclosure of sexual behavior risk factors and subsequent inadequate care. Research shows that clinician bias toward minorities may result in greater clinical uncertainty and clinical decisions may be made hastily based on clinician assumptions about health behaviors of the minority patients [22].

Internalized racism, or an individual's acceptance of the oppressive views of his or her race/ethnicity, can manifest in a low sense of self-worth or low self-efficacy to affect change, which may lead to higher risk behaviors (including drug use, unsafe sex, and violence) [14]. In addition, internalized racism can lead to devaluation of sex partners and community members, leading to increased abuse, lack of protection of partners, and lack of respect of other people's worth and health [12].

Racism may impact rates of STDs through the effects of stress on immune function, which is associated with susceptibility to and transmission of HIV and other STDs. Research into the relationship between social rank and health has found that, while our body's responses to stress are adaptive for acute physical stressors, those same responses are pathological for prolonged psychosocial stress (such as the long-term impact of racism in society) [15]. One study showed that, after controlling for poverty level, differences in biological indicators of repeated exposure to stressors were found between African Americans and whites [23].

Research also suggests that the way African Americans individually respond to and cope with racism and other stressors can affect health outcomes. In a study examining the use of coping strategies and breast cancer survival, significant associations among race, specific coping mechanisms, and poorer survival were found [24].

Thus, racism, on all three levels, contributes to higher STD incidence through increased risk behaviors, unequal health care, high prevalence in sexual networks, and poorer overall health.

Q2: Are there biological differences among different race/ethnic groups that explain disparities in STD rates?

Summary trainer note:

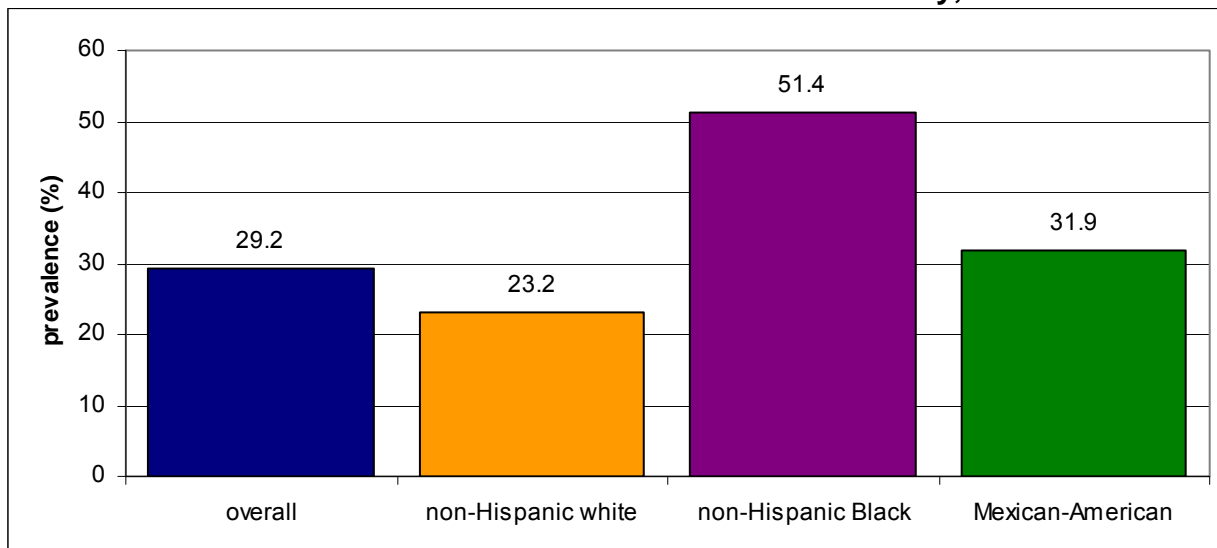
Race as a factor is less biological and more of a socially-determined classification based on phenotype that governs how someone experiences life in a race-conscious society [12]. Little research that supports explanation of racial disparities in STD rates through biology or genetics has been done. The research that has been done shows some potential biological factors relating to differences in bacterial vaginosis (BV) and vaginal pH levels.

Further explanation and supporting data:

The findings from several studies provide tentative evidence of the existence of biological differences among racial/ethnic groups that could affect acquisition of STDs [25, 26]. One study found a modest but significant racial difference in vaginal pH, while another study found an association between higher vaginal pH and GC and CT infection. Although, in the first study, the association between pH and race/ethnicity disappeared after controlling for vaginal flora, the differences in flora and their impact on vaginal pH may affect rates of STD acquisition. An imbalance in vaginal pH can lead to other conditions, such as BV and yeast infections.

The results of several large prospective studies have shown that, even when other known risk factors are controlled for, racial differences persist for rates of BV [27]. The graph below demonstrates that in the 2001 to 2004 NHANES, more than half (51.4 percent) of African American female participants had BV, compared to 23.2 percent among white females [28].

Prevalence of Bacterial Vaginosis in Women 14-49 years, by Race; National Health and Nutrition Examination Survey, 2001 - 2004



Koumans, E.H., et al. *The Prevalence of Bacterial Vaginosis in the United States, 2001-2004; Associations With Symptoms, Sexual Behaviors, and Reproductive Health*. Sex Transm Dis, 2007.

There may also be racial/ethnic-associated correlates of behaviors that lead to biological differences. For example, cultural differences exist in the frequency of male circumcision practiced by certain racial/ethnic groups. Male circumcision is strongly associated with lower rates of transmission of and susceptibility to HIV/STDs [29].

Analysis of human genes suggests that “racial” divisions, by skin tone and features, do not accurately reflect human genetic evolution and it may be more useful to think of “race” as a social construct not a biological one. The genetic diversity found on continents around the world is a subset of the genetic diversity found in Africa. Therefore, two black Africans (of the same “race”) could potentially be more different from each other genetically than a black African person and a white European person [30].

In addition to the theories above, for many American Indian and Alaskan Native communities, oral traditions contend that native peoples have always been present in North America and did not originate in Africa and then cross the Bering Strait. For trainers and educators, it is important to be aware of these various theories and what people hold true, both to not offend participants and to recognize how these traditional beliefs can give strength to individuals, which positively affects their behaviors and communities as a whole.

Q3: Does socioeconomic status (SES) and/or poverty account for the differences in racial/ethnic health disparities?

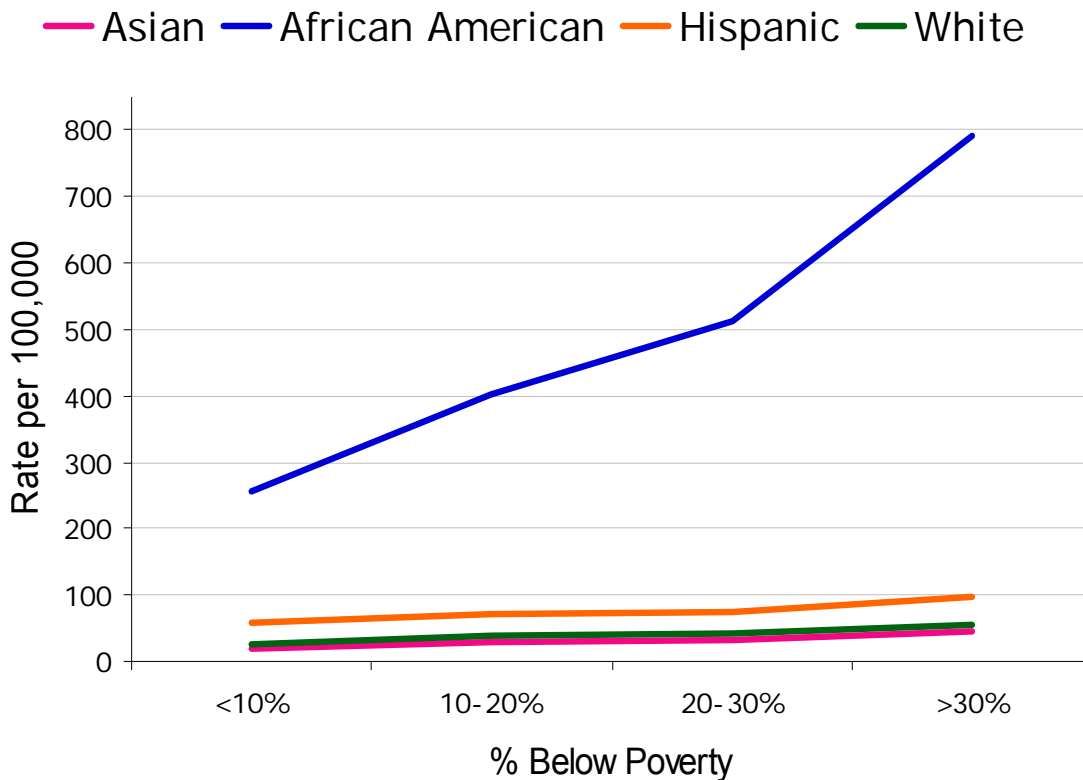
Summary trainer note:

Low SES and poverty are strongly associated with higher STD rates. Also, certain racial/ethnic groups are disproportionately affected by higher rates of poverty. However, studies have shown that even when SES is controlled for, race/ethnicity is still associated with higher rates of STD infection.

Further explanation and supporting data:

In one large national survey, after controlling for associated risk markers, including education, income, and place of residence, African Americans were still 4.7 times more likely than whites to test positive for syphilis [31]. This provides evidence that racial differences in sexual behavior and health-care behavior, combined with markers for risk (e.g., SES), do not wholly explain the racial disparity in the prevalence of some STDs.

The graph below demonstrates that in California, for all racial/ethnic groups, the rate of GC increases along with the amount of poverty. However, it also shows that, even in the higher-income areas (where zero to 9.9 percent of households are living in poverty), there is a high rate of GC among African Americans, and this rate in African Americans is substantially higher than the rate observed for other racial/ethnic groups. Therefore, the racial disparity in GC still exists regardless of poverty level [32].



Graphic prepared by the California Department of Public Health, Center for Infectious Disease, Division of Communicable Disease Control, STD Control Branch.

Q4: Are there differences in sexual behaviors among racial/ethnic groups that explain the disparity in STD rates?

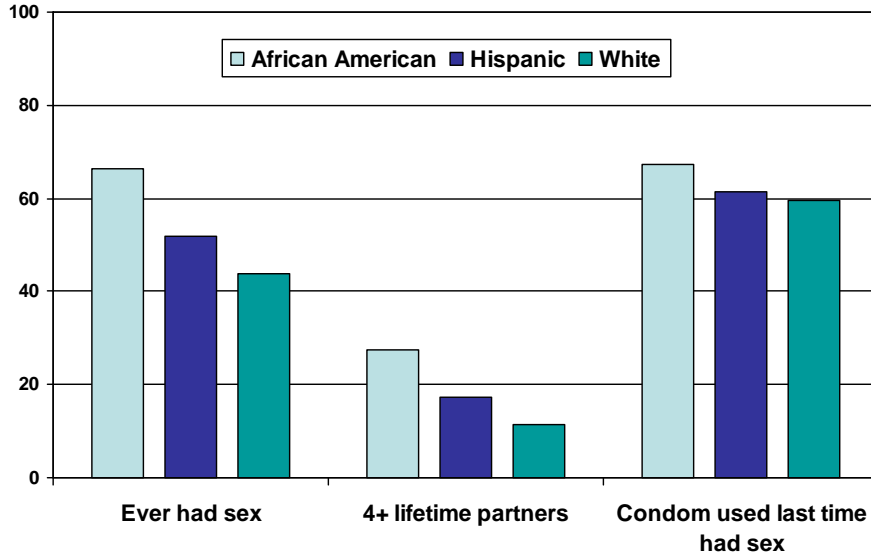
Summary trainer note:

Differences in individual sexual behaviors (e.g., average number of partners, average level of condom use) among racial/ethnic groups in both adults and adolescents have been documented. However, when these behaviors are analyzed controlling for SES, the racial/ethnic differences in individual sexual behavior do not fully account for the observed disparities in STD rates.

Further explanation and supporting data:

Several studies have found higher proportions of high-risk sexual behaviors (e.g., more partners, earlier first intercourse) reported among African Americans, compared to whites, as well as higher proportions of protective behaviors (e.g., more condom use) among African Americans and Hispanics, compared to whites, as shown in the graph below [33, 34].

STD-Related Risk Behaviors among High School Students –
United States, 2007; Youth Risk Behavior Surveillance System



Graph produced by the California Department of Public Health, Center for Infectious Disease, Division of Communicable Disease Control, STD Control Branch, with data from Centers for Disease Control and Prevention. [33]

Studies of Mexican migrant workers in California have found low levels of STDs and HIV, but relatively high levels of related risk behaviors. These behaviors would rapidly propagate STD and HIV transmission if the prevalence of STDs and/or HIV were to increase in these populations. In one recent report among Hispanic agricultural workers in rural California, 29.3 percent of males reported 2 or more sex partners in the past 5 years, and 42 percent ever had sex with a commercial sex worker [35]. In another recent report among Mexican migrant workers in San Diego and Fresno counties, males also reported high levels of past year sex with commercial sex workers and past year methamphetamine/cocaine use [36]. Moreover, Latino immigrants also have increased susceptibility to STDs depending on their level of acculturation and their subsequent sexual behaviors. Acculturation levels can be classified differently, but generally look at time of exposure to U.S. culture, English language competency, culture and residence [37].

Studies of young adult foreign-born Mexican immigrants show a protective effect of STD/HIV acquisition because they are less likely to initiate sex than US-born Mexican and non-Mexican immigrants. However, other studies indicate a continuum of risks—new immigrants may not initiate sex, however, when they do, it is more likely to be unprotected than their US-born counterparts who are more comfortable with sexual negotiation and condom-use. Additionally, greater acculturation in women has shown increased injection drug use [38]. One study of predominantly

Mexican-origin, bilingual (English/Spanish), acculturated gay, bisexual and transgender (GBT) males in San Francisco and Chicago showed that, of this already high-risk population of men, 37 percent were classified as heavy drinkers. Risky sexual behavior (i.e. unprotected anal intercourse) increases with substance use, and studies suggest that heavy drinking bordering on alcoholism is widespread in the Latino GBT community [39]. However, it is important to remember that the high-risk individuals within these communities do not account entirely for the magnitude of the disparity—even those within the community at low risk have higher rates of HIV/STDs.

The health care and other social issues related to acculturation and immigration are important things to consider for all immigrant populations, regardless of race/ethnicity, especially when this also includes language barriers and differing medical and health practices.

Society's marginalization of these populations along with complex immigration issues, low access to culturally appropriate education and services and other stressors contribute to the disparate STD rates. Although we tend to look at individual behavioral factors, they alone do not fully explain the racial disparities in STD rates. A nationally representative study found that, while white young adults are at increased risk for STDs when they engage in high-risk sexual behaviors, African American young adults are at an elevated risk even when they practice the same levels of more common, low-risk behaviors (such as few partners and low alcohol and drug use) as do low-risk whites [40]. In addition, a study on HIV infection risks among MSM showed that African American MSM reported less overall substance use and fewer sex partners, but had higher rates of STDs and HIV [41].

Factors such as access to education, migration, acculturation and alcohol/drug use, appear to account for racial disparities in STD rates, indicating the need for both population-level and structural interventions that might reduce transmission without relying solely on behavioral interventions.

Q5: How do sexual networks affect racial disparities?

Summary trainer note:

High STD prevalence within racial/ethnic groups, neighborhoods, or other dating pools, as well as the way partnerships are spaced in time, can contribute to higher rates of STD infection. Access to a pool of high-prevalence partners can mean that individuals with apparently low-risk behaviors (e.g., one partner) can actually be at relatively high risk of STD infection. There are also racial/ethnic differences in sexual network structures such as serial monogamy versus concurrent partnerships, in part due to gender imbalances in certain populations. Concurrency alone can fuel an epidemic in the network even if the average number of sex partners is relatively low, because one infected person can quickly spread disease to many people.

Further explanation and supporting data:

Three patterns of network structure in particular have been found to affect the transmission of STDs within a population: assortative mixing, in which low-risk and high-risk individuals partner sexually; concurrency, defined as sexual relationships that overlap in time; and segregation, through which individuals who reside in racially segregated neighborhoods choose partners based on geography, resulting in a concentration of infections within their community [12].

Partnerships discordant in terms of race/ethnicity, age, education, or number of partners (i.e., assortative mixing) have been shown to be associated with significant risk for GC and CT infection [42]. Several studies have found racial/ethnic differences in partner selection and STD history. One study found that the proportion of African Americans reporting an age difference of only two years or less (i.e., age concordant) with their most recent heterosexual partner decreased dramatically from 64.3 percent in 1995 to 25.9 percent in 2004 [43]. In contrast, this proportion increased somewhat in the general population during the same period.

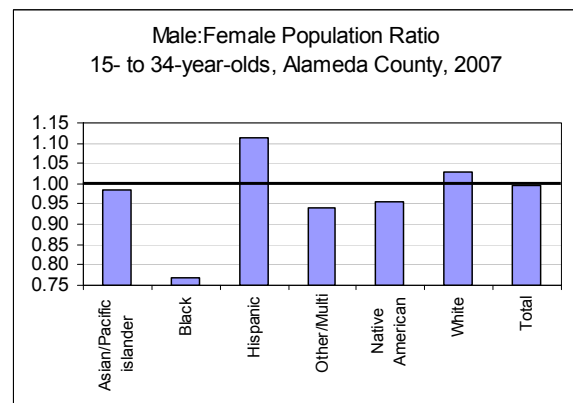
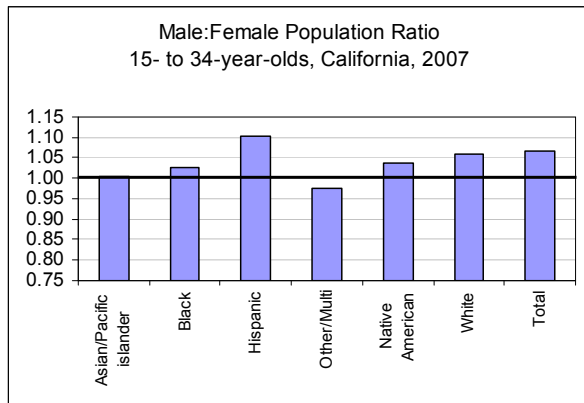
In another study, African American MSM in San Francisco had higher rates of same-race/ethnicity sexual partnerships, as well as higher rates of partners ten or more years older in age, compared to these rates in other MSM racial/ethnic groups. These differences in sexual networks among African American MSM may explain the higher HIV prevalence in this group, compared to other MSM, despite lower levels of risk behavior [43, 44].

There is a significant gender ratio imbalance of fewer men to women among African Americans in some communities in the United States, which can result in men engaging in concurrent, ongoing partnerships with multiple women. In addition, this gender imbalance influences both the practicality of and social norms regarding marriage, resulting in lower marriage rates among African Americans – and marriage has been shown in studies to be a protective factor in STD infection. Rates of partner concurrency are higher among African Americans than among other populations. Concurrency is more efficient than serial monogamy in transmitting STDs [11, 17].

The gender ratio imbalance among African Americans is partially caused by higher mortality rates in males from homicide, infant mortality, and earlier onset of chronic illness. This ratio is further impacted by disproportionately high rates of incarceration. Although African Americans account for 12 percent of the United States population, roughly 40 percent of inmates are African American, and 12 percent of African American men aged 18 to 29 were incarcerated in 2005 [45].

The bar graphs below represent the 2007 population by race/ethnicity among 15- to 34-year-olds in California overall, as well as in Alameda County, California. There is a significant gender ratio imbalance among Latinos in California (about 110 men for every 100 women) and in Alameda County (about 112 men for every 100 women). Some of this imbalance of more men among Latinos may be due to worker

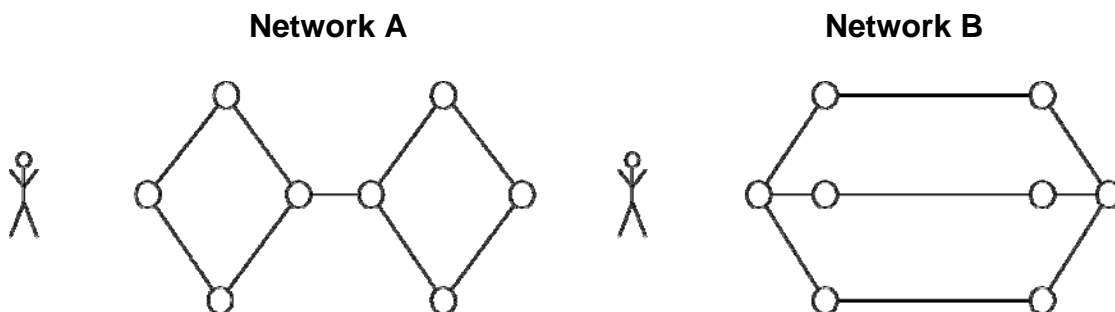
immigration patterns. There is also a significant gender ratio imbalance among African Americans in Alameda County, probably due to higher death rates, with only 77 men for every 100 women. Furthermore, because of the high numbers of African American men incarcerated in Alameda County, the ratio of African American men out of jail or prison and present in the community is actually fewer than 77 for every 100 women, which greatly affects sexual networks and STD transmission, as mentioned above.



Data Source: California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050, Sacramento, California, July 2007.

STD transmission rates remain high in African American populations because the prevalence is already high, and their partners are more likely to be other African Americans, due to individual choice and geographic segregation. Because of these factors, African Americans with lower-risk behavior and only a few partners are more likely than are lower-risk whites with few partners to encounter “core” or high-risk sex partners [46].

Network “architecture” dramatically alters risk, even though individual risk level may look the same. For outreach to succeed in reducing transmission, interventions should try to reach the most important people and cut the most important links or bridges.



In the diagram above, the two networks show that what matters is not simply risk behavior, but risk configuration. Each network has eight persons (circles) connected to nine relationships. Two persons each have three partners and the other six each have two partners, yet transmission will be less efficient in network A, and prevention will be more difficult in network B. In A, in just two steps from the index person, half the network can be infected and half spared; in B, two steps can result in everyone being infected except for the person on the extreme right. In A, sparing half the population from exposure requires intervening to prevent STD transmission at one network link or bridge, while in B, intervening at or “cutting” three bridges is required [47].

Q6: Among California reported cases, with all the missing race data, how do we know there are true disparities in STDs?

Summary trainer note:

Case-based surveillance data are often used to show racial/ethnic disparities in STD rates, but many case reports (up to 60 percent in some counties in California) are missing race/ethnic data because the provider or laboratory does not include that data with the report. However, even with the very extreme assumption that all cases with missing data were white, the African American-to-white racial differential in STD rates still remains strong. In addition, prevalence monitoring data that do not rely on reported data in California and nationwide show similar racial disparities in STD rates.

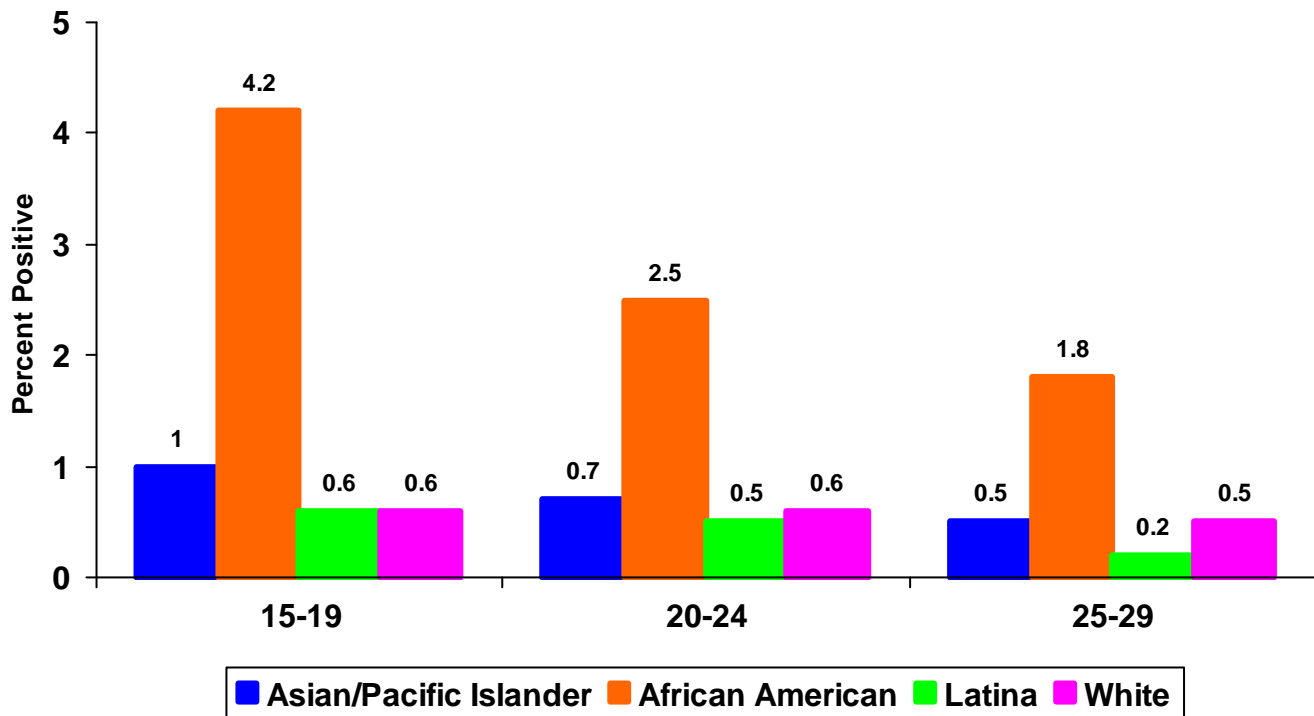
Further explanation and supporting data:

In a special California project, GC cases were interviewed and asked about their race/ethnicity after the initial case report (in which race/ethnicity is often missing) had been received. In the data from these special interviews, the pattern of race/ethnicity was essentially identical for cases for which race/ethnicity data initially had been missing compared to the cases for which the race/ethnicity data was initially complete. Based on this finding, as well as other research, we are confident that, in general, looking at the racial/ethnic differentials in case-based data gives a reasonably accurate picture of the true racial differentials, even when substantial race/ethnicity data are missing [32, 48, 49].

Prevalence monitoring projects in California that capture everyone tested at a given site and do not rely on reporting show racial disparities in STD rates similar to those found in state surveillance data. The graph below shows the percent of female clients at family planning clinics (which are generally attended by a broader range of racial/ethnic populations than are STD clinics) who tested positive for GC. For all age groups, African Americans have significantly higher proportions of positive tests than do all other racial/ethnic groups, suggesting the need for increased screening and treatment among this population.

Because this graph represents GC prevalence among women attending one type of clinic, it is a more accurate representation of actual prevalence of GC within the racial/ethnic groups that attend this clinic, compared to reported surveillance data which may be affected by different reporting rates from various sites.

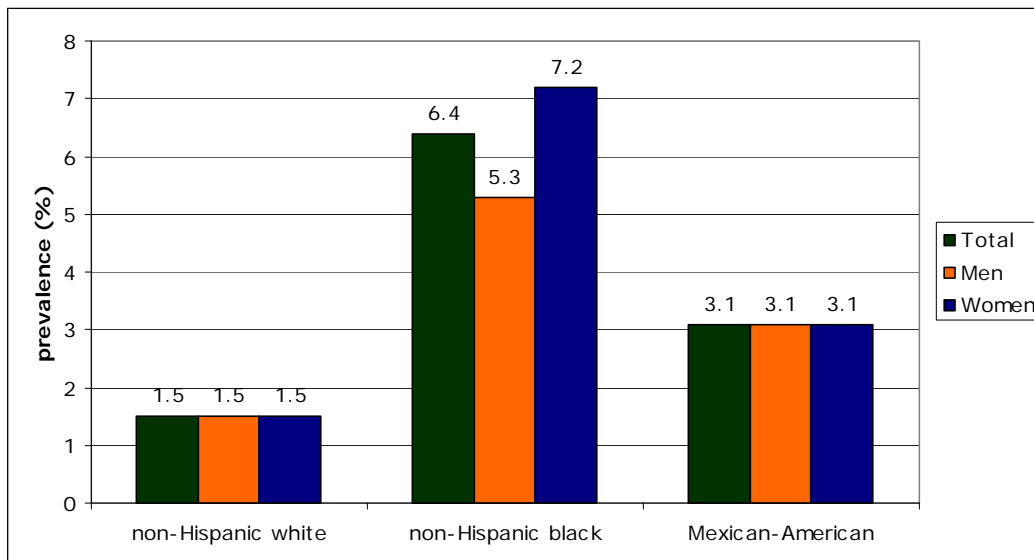
GC Prevalence Monitoring, Percent Positive for Female Family Planning Quest Clients, by Age Group and Race/Ethnicity, California, 2006



Graphic prepared by the California Department of Public Health, Center for Infectious Disease, Division of Communicable Disease Control, STD Control Branch.

In addition, national surveys that show prevalence, such as Add Health (which explores the causes of health-related behaviors of adolescents and their outcomes in young adulthood) and NHANES have found similar disparities in U.S. non-surveillance-based data, thereby supporting the accuracy of the case-based data despite missing race information [50]. The NHANES data below show the high prevalence of CT among African Americans in the United States [51].

**Chlamydia Prevalence by Race in Men and Women 14-39 years;
National Health and Nutrition Examination Survey, 1999 - 2002**



Graph adapted from: Datta, S.D., et al. *Gonorrhea and chlamydia in the United States among persons 14 to 39 years of age, 1999 to 2002*. *Ann Intern Med*, 2007. 147(2): pp. 89-96.

Q7: Is there a difference by race/ethnicity in who attends public health clinics?

Summary trainer note:

Yes, in the National Health and Social Life Survey, respondents who were young, African American, or had low SES were more likely to use a family planning clinic or emergency rooms for STD treatment than were older, wealthier, or white respondents [52]. No California-specific data is available on this topic.

Q8: Does the difference in who attends public health clinics affect STD rates by race/ethnicity in the reported cases?

Summary trainer note:

In 2006, an estimated 73 percent of STD cases were reported from sources other than public clinics in California [53]. National data suggest that non-public clinics are less compliant in reporting cases [54]. As a result, the disparity in STD rates in case-based reported data may be inflated for groups who are more likely to attend public clinics (see Q7), compared to patients who attend private clinics.

However, preliminary analysis of California surveillance data does not show a higher proportion of African American cases among those cases reported from public facilities, compared to those reported from private facilities [32], and, since African

Americans are in general less likely to seek care from any source, there could be an underestimate of their reported rate of STDs and an artificial deflation in the observed racial disparity. Randomized, population-based surveys, such as NHANES and Add Health, are a good resource for racial health disparities data because they are not affected by these same limitations in case-based reported data. As described above, the disparities seen in the California data are also found in these studies.

Q9: Are there differences in STD testing rates among races that may affect STD rates by race/ethnicity?

Summary trainer note:

It is difficult to determine rates of STD testing; however, we know from current guidelines that certain groups are the focus of targeted screening, which would increase the number of cases detected and therefore may inflate their rates. However, screening guidelines are prompted by the detection of greater morbidity among certain groups; therefore, the increased number of cases captured through screening may in fact be representative of truly higher rates.

Q10: What are some suggestions for program changes, interventions and other resources to address racial/ethnic health disparities?

Below are some general suggestions and areas of focus for action steps and programs from various resources (A through E) that may impact racial health disparities in STDs:

A. Possible strategies for decreasing racial disparities in STD rates, from CDPH CID DCDC STD Control Branch

Individual level Interventions:

- Implement culturally appropriate and effective patient counseling, health education and other behavioral interventions that aim to reduce stigma and decrease internalized oppression.

Organizational level:

- Monitor and analyze local STD/HIV data by race/ethnicity to prioritize provider technical assistance, training, screening interventions, behavioral interventions, social marketing campaigns, and other services, by high-morbidity areas and priority populations.
- Expand healthcare access programs (e.g., Family Planning, Access, Care, and Treatment (PACT)).
- Educate providers on disparities and cultural competency to improve health care service quality and usage.
- Recruit and hire professionals who are culturally competent.

- Establish, expand, and improve collaborations between public health systems and impacted communities.
- Increase implementation of culturally-appropriate programs and interventions.
 - Work with culturally-appropriate venues where people meet partners (e.g., African American MSM bars, internet sites).
 - Create, evaluate and/or implement culturally-specific and effective behavioral interventions
- Improve and increase targeted testing and treatment opportunities based on racial and geographic STD data.
 - Intervene with herpes suppression therapy when appropriate, due to the high prevalence of herpes among African Americans and the link to increased risk of HIV transmission when herpes is present.
 - Reduce high prevalence among certain racial/ethnic groups through targeted screening and earlier treatment of bacterial STDs.
 - Follow Gonorrhea screening guidelines for older African American women
 - Increase HIV testing among African American and Latina women through service integration with family planning and prenatal care
- Institute grassroots organizing, work to empower communities and local advocacy for more culturally appropriate programs and positive structural change, emphasizing assets and strengths and providing support where there are gaps.

Policy level:

- Social/political/economic change(s)
- Implement policies in correctional facilities to increase STD screening, treatment, education, and condom use during incarceration and after release.
- Implement policies in education settings to increase access to STD screening, treatment, education, and condoms for youth and young adults.
- Work to monitor the effect of and improve pre- and post-release programs and sentencing laws for the incarcerated population.
- Fund additional research on racial disparities in STDs and effective prevention strategies that affect larger social factors.

B. “Our Tasks”, outlined by Camara Phyllis Jones, M.D., M.P.H., Ph.D.

- Put racism on the agenda:
 - Name racism as a force determining the distribution of other social determinants of health.
 - Routinely monitor for differential exposures, opportunities, and outcomes by “race”.
- Ask, “How is racism operating here?”
 - Identify mechanisms in structures, policies, practices, and norms.
 - Attend to both what exists and what is lacking.

- Organize and strategize to act:
 - Join in grassroots organizing around the conditions of people’s lives.
 - Identify the structural factors creating and perpetuating those conditions.
 - Link with similar efforts across the country and around the world.

C. Results of “Health For All: California’s Strategic Approach to Eliminating Racial and Ethnic Health Disparities”, by The California Campaign to Eliminate Racial and Ethnic Disparities in Health. Adapted from the report generated by The Prevention Institute [55]:

Goal 1: Prevent the development of illness and injury by fostering healthy behaviors, healthy community environments, and institutional support of good health outcomes (not focusing only on individual health behaviors).

Twenty key factors clustered into four key areas of focus for interventions to address this goal:

Built environment:

1. Activity-promoting environment
2. Nutrition-promoting environment
3. Housing
4. Transportation
5. Environmental quality
6. Product availability
7. Aesthetic/ambiance

Social capital

8. Social cohesion and trust
9. Collective efficacy
10. Civic participation and engagement
11. Social and behavior norms
12. Gender Norms

Services and institutions

13. Public health, health, and human services
14. Public safety
15. Education and literacy
16. Community-based organizations
17. Cultural and artistic opportunities

Structural factors

18. Economic capital
19. Media and marketing
20. Ethnic, racial and inter-group relations

Goal 2: Reduce the severity of illness and injury by providing high-quality medical care to all.

1. Improve access to care.
2. Improve quality of care.
3. Provide culturally and linguistically appropriate services (including a diverse workforce).

D. Excerpts from part of the Centers for Disease Control and Prevention's (CDC) *Consultation to Address STD Disparities in African American Communities Meeting Report* (Atlanta, Georgia, June 5-6, 2007) [12]

Reducing Health Disparities: Influences and Opportunities in HealthCare Financing and Delivery (speaker Yasmin Tyler-Hill, M.D.)

- Economic, social, and physical factors converge to cause health disparities in African-American communities.
 - Geographic location of clinics: not near African-American communities
 - Insurance status and type: African-Americans are under-insured.
 - Provider payment rates: difficult to meet co-payments.
 - Linguistic and cultural competence: provider discomfort and lack of skills
 - Representation of racial/ethnic groups among health professionals
 - Implicit and explicit bias: provider value judgments and stereotypes
 - Adherence to known care standards: African-American patients may be distrustful of treatment protocols.
 - Healthcare technology: places that serve African-Americans may not have latest technology.

CDC's Heightened Response to the Ongoing Crisis of HIV/AIDS among African Americans (speaker Madeline Y. Sutton, M.D., M.P.H.)

- "Best Practices" from CDC's HIV/AIDS initiative: community mobilization, clear screening recommendations, and researchers to whom targets relate
 - Mobilizing community leaders is critical for awareness, communication and testing
 - Articulate, clear screening recommendations
 - Researchers who are culturally and demographically similar to target populations get better results.

Strategies for Prevention of Gonorrhea and Chlamydia: Achieving Common Understanding (speaker Stuart M. Berman, M.D., Sc.M.)

- Mobilize – encourage activists to develop a "passion" or cause for eliminating STDs in their communities.
- Engage – share information with communities regarding STD prevalence, and explain how these data are tracked.
- Collaborate – develop strategies for intersecting social justice causes with STD prevention at the community level.

Hearing from Us: Voices of Community Youth about STDs and Sexual Health
(moderator Dázon Dixon-Diallo, M.P.H.)

- Peer-led outreach and treatment programs are well received by young adult target audiences.
- The healthcare delivery system works best when the patient has a strong, open relationship with her/his provider.
- Treatment must be holistic and address mind, body, and spirit.

Please see the full CDC Meeting Report for more detailed summaries of speaker presentations and workshops, including topics such as social determinants of STDs, measuring health disparities, and perceptions of sexuality, faith, and STDs in African American communities.

E. Adapted from the Action Agenda from the Black AIDS Institute report titled “Left Behind: Black America: A neglected priority in the global AIDS epidemic” (August 2008):

1. Create a new sense of urgency so no one accepts that HIV/AIDS is inevitable
2. Leadership – Black ministers, civil rights leaders, and celebrities must join a national call to action and commitment to end the AIDS epidemic in America.
3. Knowledge in Black America should be increased around HIV/AIDS facts.
4. Testing should be increased – half of HIV positive Black people in the U.S. do not know their status, and therefore, do not know they can pass it on.
5. Change policy like lifting the federal ban on needle exchange programs and increasing culturally appropriate HIV/AIDS prevention efforts that include abstinence, delayed sexual activity, sexual responsibility and condom use.
6. Reduce stigma and increase support for effected groups like Black youth, women, injecting drug users and men who have sex with men.
7. Mobilization of communities to treat HIV/AIDS as a human rights issue related to economics, incarceration, homophobia, violence, and other social factors.
8. Increase Funds and Research
 - Black organizations and community leaders need more support and funds from the U.S. government in their efforts to prioritize the fight against AIDS.
 - There should be an increase in the funds allocated to HIV prevention, as well as HIV/AIDS care.
 - Public funds and private foundation funds from the U.S. that support the global AIDS epidemic should also be allocated to efforts to fight the Black American epidemic at home.
 - Research should be prioritized on HIV-related issues that Black America shares in common with other countries. And, mechanisms for a timely sharing of information gained should be established.

Q11: What are some current public health programs addressing the issue of racial/ethnic health disparities in STDs?

- I. Department of Health and Human Services Offices (www.hhs.gov):
 - A. Agency for Healthcare Research and Quality (www.ahrq.gov)
 - B. Centers for Disease Control and Prevention (www.cdc.gov)
 - 1. Syphilis Elimination Program (www.cdc.gov/stopsyphilis/plan.htm)
 - 2. HIV Testing Recommendations (www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm)
 - 3. Racial and Ethnic Approaches to Community Health – REACH (www.cdc.gov/reach2010)
 - 4. Minority AIDS Initiative (www.cdc.gov/omh/Populations/HL/HHP/MAI.htm)
 - 5. Diffusion of Effective Behavioral Interventions – DEBIs (www.effectiveinterventions.org)
 - C. Health Resources and Services Administration (www.hrsa.gov)
 - D. Indian Health Services (www.ihs.gov)
 - E. National Institutes of Health (www.nih.gov)
 - 1. The National Center on Minority Health and Health Disparities (www.ncmhd.nih.gov)
 - F. Office of Civil Rights (www.hhs.gov/ocr/)
 - G. Office of Minority Health (www.omhrc.gov) – with Minority AIDS Initiative
- II. Institute of Medicine (www.iom.edu)

III. California Department of Public Health (www.cdph.ca.gov):

A. Office of Multicultural Health

(www.cdph.ca.gov/programs/OMH/Pages/default.aspx)

B. Office of Binational Border Health

(www.cdph.ca.gov/programs/cobbh/Pages/default.aspx)

C. Center for Infectious Disease

(www.cdph.ca.gov/programs/cid/Pages/default.aspx)

1. Office of AIDS (www.cdph.ca.gov/programs/AIDS/Pages/Default.aspx)

2. Division of Communicable Disease Control

(www.cdph.ca.gov/programs/dcdc/Pages/default.aspx)

a) Tuberculosis Control Branch

(www.cdph.ca.gov/programs/tb/Pages/default.aspx)

b) STD Control Branch (www.std.ca.gov)

(1) California STD/HIV Prevention Training Center

(www.stdhivtraining.org)

IV. County of San Diego Health and Human Services Cure + Program with HIV/AIDS/TB Referrals Between the United States and Mexico

(http://www.sdcounty.ca.gov/hhsa/programs/phs/cure_tb/programa_binacional_referencia_de_tb.html)

Q12: What are some additional organizations and other resources for more information on racial/ethnic health disparities and related programs?

1. Asian and Pacific Islander American Health Forum (www.apiahf.org)

2. Black AIDS Institute (www.blackaids.org)

3. Cross Cultural Health Care Program (www.xculture.org)

4. Diversity Rx (www.diversityrx.org)

5. Kaiser Family Foundation (www.kff.org and www.kaiseredu.org)

6. National Alliance for Hispanic Health (www.hispanichealth.org)

7. National Association for the Advancement of Colored People
(www.naacp.org)

8. National Council of La Raza (www.nclr.org)

9. National Council of Urban Indian Health (www.ncuih.org)

10. National Minority AIDS Council (www.nmac.org)
11. National Native American AIDS Prevention Center (www.nnaapc.org)
12. Policy Link (www.policylink.org)
13. Project Concern International (www.projectconcern.org)
14. Tavis Smiley's Covenant with Black America (www.covenantwithblackamerica.com)
15. The California Endowment (www.calendow.org)
16. Unnatural Causes (www.unnaturalcauses.org)
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Summary

Aside from behavioral risks, multiple societal factors contribute to racial/ethnic health disparities in STD/HIV infections, including poverty, access to care, racism, and sexual networks. Addressing these health disparities is complex and requires a multidisciplinary commitment to eliminate them. The purpose of this document is to assist health departments and community agencies to build their own staff comfort levels and capacity to appropriately address health disparities, as well as to work with impacted communities to increase awareness and develop practical solutions. Accurate data, a culturally competent public health workforce, and community action are all necessary steps to develop much-needed, creative, multifaceted approaches to address and eliminate racial/ethnic health inequities.

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