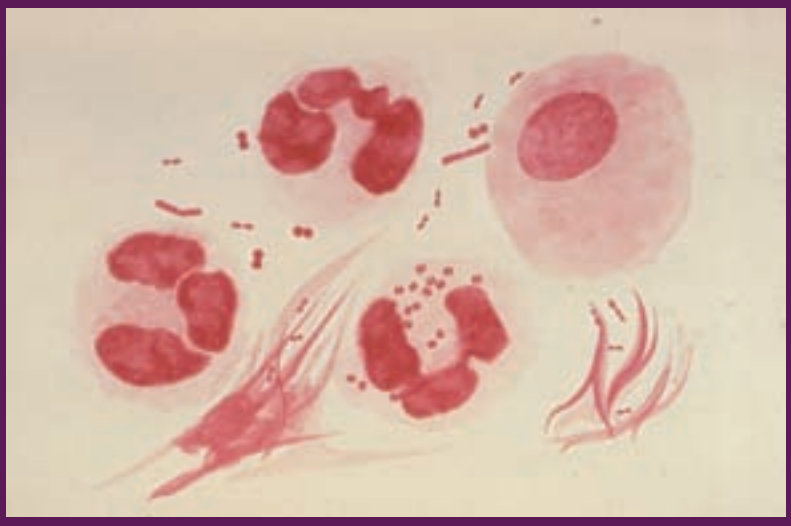
Alameda County

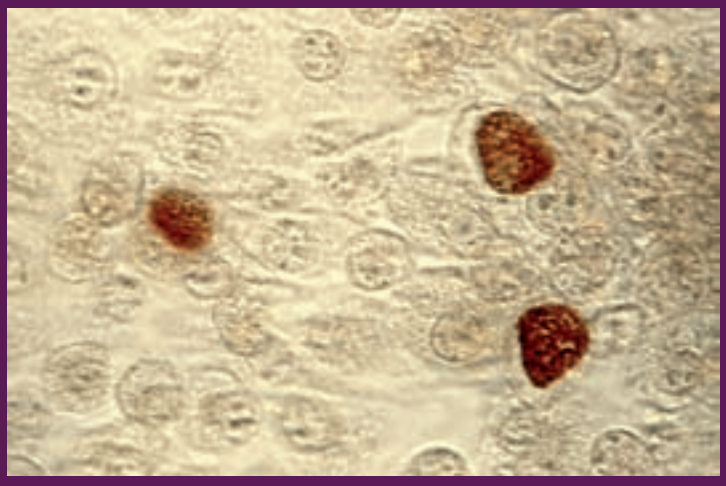
Sexually Transmitted Disease Morbidity Report

Making Sense of Sexually Transmitted Diseases

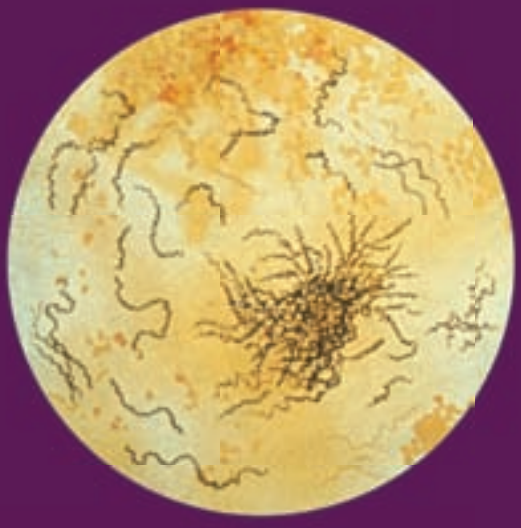
2007



gonorrhea



chlamydia



syphilis

Protecting Yourself is Always in Fashion

Alameda County Public Health Department lobby display promoting STD Awareness Month, April 2007

Created by Gay Calhoun and Michelle King

Alameda County

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Dear Colleague:

We are pleased to release the 2007 *Sexually Transmitted Disease Morbidity Report* for Alameda County. The report summarizes Sexually Transmitted Diseases (STDs) morbidity, identifies trends and patterns of infection, and informs the public about the STD Education and Prevention Program's objectives and projects.

Chlamydia, gonorrhea, and syphilis data are the focus of this first report and appear in the first section, followed by the STD Program report. Some data sections present case numbers and rates from 2006 and others from 2004 through 2006. Tabled data are given by demographic category, city, and year. Caution should be taken when interpreting data based on race/ethnicity due to incomplete reporting of this information. Maps showing disease rates geographically also are provided. The STD Program report highlights its three core components and current activities. These include enhanced surveillance and disease investigation, education and primary prevention, and clinical and provider services.

Your assistance in controlling sexually transmitted diseases through timely, accurate reporting and collaboration is a great asset in directing population-specific STD prevention and intervention activities in Alameda County.

We welcome questions and comments on this report. Please feel free to contact the STD Program at 510-267-3220.

Sincerely,

Muntu R. Davis, MD, MPH
Director
Division of Communicable Disease Control and Prevention

Gay Calhoun
Director
STD Education and Prevention Program

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Executive Summary

The purpose of this report is to give health care providers, policy makers, residents, and other community partners information needed to recognize the impact of STDs on youth, young adults, women of childbearing age, men who have sex with men (MSM), African Americans, and other groups disproportionately affected by STDs. The information in this report will be used within the Alameda County Public Health Department to inform resource allocation for clinical services and other program planning.

The report covers the distribution and burden of disease in Alameda County due to chlamydia, gonorrhea, and early syphilis (primary, secondary and early latent), the most common STDs reportable to the state. California comparisons are included where appropriate. The sequence of information is the same for each disease, beginning with rates by gender and local health jurisdiction. These are followed by age-specific rates, race/ethnic distribution of cases, rates by race/ethnicity, trends, rates by city, and finally maps by census tract. The report concludes with a description of the STD Prevention Program, its objectives and services, as well as a set of recommendations for future activities. It is through this report, the data, the program description, and the recommendations, that we hope to reach health care providers and engage them in improving surveillance and reporting activities in order to have a more complete picture of STDs in Alameda County.

Clearly, the populations most affected by STDs in Alameda County are young women, African Americans, and men who have sex with men (MSM). Rates of chlamydia and gonorrhea infection among females between the ages of 15 and 24 are several times higher than those of most other groups. Rates of early syphilis, on the other hand, are highest among men between the ages of 20 and 44. Overall, rates of all three STDs are highest among African Americans. Additionally, rates of chlamydia and gonorrhea infection are at least twice as high in neighborhoods where 30% or more of households live in poverty compared to neighborhoods where less than 10% of households live in poverty.

The nature of these age, gender, racial, and economic disparities is complex, involving a multitude of influences. Some of these include a lack of access to primary health care, low income, characteristics of sexual and cultural networks, economic dependence, and sexual exploitation of young women through either 'survival sex' (when an individual engages in sexual activity to gain food, shelter, clothing, money, or physical protection) or outright prostitution. Additionally, reentry to the community of infected men released from jail may be an important source not only of curable STDs but also HIV. Reentry of recently incarcerated individuals in conjunction with a lack of testing upon release both contribute to increased risk of disease transmission in the community. Women are also at higher risk of disease exposure due to an unwillingness among some heterosexual men to acknowledge having sex with other men, a practice referred to as being 'on the down-low.' Further influences on sexual behavior include drugs such as methamphetamines, poppers, and those used to treat erectile dysfunction. These, along with use of the internet for arranging venues for sex, appear to play an important role in the recent increase of syphilis among men who have sex with men. Any or all of these influences may interact to minimize perceptions of risky behavior and/or to heighten sexual risk-taking behavior.

Key Findings

Chlamydia

- In 2006 there were 5,915 chlamydia cases reported in Alameda County. The rate overall was 390 per 100,000.
- Female chlamydia rates increased overall between 1995 and 2006 in Alameda County by an average of 2% per year, from 454 per 100,000 in 1995 to 567 in 2006. Male chlamydia rates increased steadily from 85 per 100,000 in 1995 to 206 in 2006, an increase of about 9% per year. The county rates followed very closely with California rates.
- The chlamydia infection rate was highest among 15-19 year-old females in Alameda County (3,583 per 100,000). This pattern is different than that observed statewide in which females 20-24 have the highest rate. Rates among males aged 15-24 were much lower than female rates; this is due in to the fact that males are not targeted for screening as females are.
- Nearly half of chlamydia case reports did not have information on race/ethnicity in 2006. Of those cases for which race/ethnicity was known, African Americans made up over half of chlamydia cases.
- Female rates of chlamydia in 2006 were two to four times higher than male rates in every race/ethnic group. Infection rates among African Americans were many times higher than those in other race/ethnic groups.
- Chlamydia infection rates increase as poverty level of neighborhood increases. This is true for each race/ethnic group except Latinos, who do not experience the highest rate in the highest poverty areas.
- Alameda County cities with the highest chlamydia infection rates in 2006 were Emeryville, Oakland, Hayward, and San Leandro. The Emeryville rate was nearly twice the county rate.

Gonorrhea

- In 2006 there were 2,278 gonorrhea cases reported in all of Alameda County. The rate overall was 150 per 100,000, nearly the same for males and females.
- Rates among both males and females increased from 2003 to 2006. Presently, Alameda County rates are about 60% above California rates (96 and 85 for males and females, respectively).
- The gonorrhea infection rate was highest among 15-19 year-old females in Alameda County (990 per 100,000). Among males, the infection rate was highest among 20-24 year-olds.
- Nearly half of gonorrhea case reports did not have information on race/ethnicity in 2006. Of those cases for which race/ethnicity was known, African Americans made up nearly three-fourths (72%) of the cases.
- African American gonorrhea infection rates were very high (428 per 100,000 females and 482 per 100,000 males), roughly 27 times higher than APIs, 20 times higher than Whites, and 13 times higher than Latinos.
- Gonorrhea infection rates increased with neighborhood poverty level. The African American rate increased more than two-fold, from 197.3 per 100,000 in the lowest poverty areas to 475.7 in the highest poverty areas. Latinos also experienced a two-fold increase from low to high poverty areas; for APIs it was three-fold difference, and for Whites it was a seven-fold difference.
- The rate of gonorrhea infection was highest in Emeryville, 526 per 100,000, 3.5 times higher than the county rate of 150 per 100,000.

Early Syphilis

- There were 90 cases of early syphilis in Alameda County in 2006; 87 (92%) were males. The Alameda County rate overall was 5.9 per 100,000. The female rate was 0.9 and the male rate was 11.2
- The rate of early syphilis infection among males in Alameda County increased from 1.7 per 100,000 in 2000 to 11.2 in 2006. This trend mirrors that seen in California.
- Eighty-eight percent of male cases in 2006 were identified as MSM (n=73).
- The rate of infectious syphilis was highest among 20-24 year-olds, followed by 25-29 year-olds and 35-44 year-olds.
- Whites were the largest race/ethnic group among early syphilis cases, accounting for 41.1% of cases in 2006. African Americans accounted for 37.8%, Latinos 12.2% and APIs 8.9% of all cases. Unlike other STDs, data on race/ethnicity was complete.
- The syphilis infection rate among African Americans was 17.4 per 100,000 in 2006, almost three times greater than the rate among Whites (6.4) and five times the rate among Latinos.
- Oakland had the highest rate of early syphilis between 2004 and 2006 (9.7 cases per 100,000) followed by Hayward (8.5).

Introduction

Welcome to the Alameda County STD Morbidity Report 2007. The purpose of this report is to provide health care providers, policy makers, residents, and other community partners with information needed to recognize the impact of STDs on youth, young adults, women of childbearing age, men who have sex with men (MSM), African Americans, and other groups disproportionately affected by STDs. The information in this report will be used within the Alameda County Public Health Department, to inform resource allocation for clinical services and other program planning.

There are many kinds of sexually transmitted diseases. This report covers three that are nationally reportable: chlamydia, gonorrhea, and syphilis. It describes the distribution and burden of these diseases in Alameda County, including California comparisons where appropriate. The sequence of information for each disease begins with rates by gender and health jurisdiction, followed by age-specific rates, race/ethnic distribution of cases, rates by race/ethnicity, trends, rates by city, and finally maps by census tract (though not for syphilis due to small numbers). The report concludes with a description of the county STD Prevention Program, its objectives and services, as well as a set of recommendations for future activities.

Sexually transmitted diseases (STDs) are acquired through sexual contact. They are the most common infectious diseases in the United States today. In the United States, 65 million people are living with an incurable STD, such as HIV/AIDS or herpes.[1] It is estimated that 19 million new infections occur each year, half of them among people between the ages of 15 and 24.[1]

Because many individuals infected with STDs will show no symptoms of disease, they are less likely to be diagnosed and treated. Thus the true incidence and prevalence of STD infection is difficult to monitor since each new case that goes undetected and untreated is neither reported nor counted. Reporting of STDs, like many infectious diseases, is required of both laboratories and health care providers under Title 17 of the California Code of Regulations. But because many individuals infected with STDs will show no symptoms of disease, they are less likely to be diagnosed and treated. Even cases of disease that are detected sometimes go unreported. Providers who do not routinely report cases should be targeted for outreach and education.

Untreated STDs can cause serious health problems such as pelvic inflammatory disease (PID), which can cause damage to the fallopian tubes, uterus and surrounding tissues or lead to infertility. Additionally, infection with an STD has been shown to increase susceptibility to and transmission of HIV infection, the virus that causes AIDS.[1]

Using the Report

Most of the information presented in the report is based on 2006 data. Exceptions are 1) data presented on the basis of census tracts (Maps 1&2 and Figures 6&13) and 2) data in Figure 21 showing early syphilis rates by city. This information is based on 2004-2006 three-year average rates. This approach was used in an effort to stabilize rates based on small numbers (that is, to make them more reliable).

In order to understand the relationship between poverty and STD rates, Alameda County census

tracts were grouped based on the percentage of households in each tract living in poverty as reported in Census 2000. Rates of chlamydia and gonorrhea are reported based on these neighborhood poverty levels; they reflect neighborhood level factors and provide a proxy measure for individual poverty since no information on socioeconomic status of cases is obtained.

Historically, Alameda County has employed a standard whereby rates based on a count less than ten are not presented. For this report, that standard has been relaxed to require a count of five or more in certain instances that do not involve race/ethnicity specific subgroups. The purpose of the report was thought to be better served by relaxing this standard because some information on the smaller areas is better than none as long as the numbers were not aberrant. City-level rates based on numbers between five and twenty are noted with an '*'. For each such city, counts for previous years were checked to ensure 2006 rates did not reflect case counts out of the normal range.

Chlamydia

Chlamydia is a sexually transmitted infection caused by the bacterium *Chlamydia trachomatis*.[3] It is the most commonly reported infectious disease in the United States. While chlamydia affects both men and women, women suffer the most severe consequences of untreated infection. Consequences of untreated chlamydia infection can include pelvic inflammatory disease (PID), tubal pregnancy, and infertility. As many as 40% of untreated women will develop PID and 20% of these may become infertile.[1] Fifty percent of men and 75% of women infected with chlamydia will show no symptoms.[1]

In 2005, over 976,000 cases of chlamydia were reported in the United States, a number thought to be less than half the actual number of new cases. The 2005 national case rate was 332.5 per 100,000, up 5% from 316.5 in 2004.[2] Rates of chlamydia infection have been increasing in the United States over the last twenty years. This increase can be attributed, at least in part, to increased screening and more sensitive diagnostic tests.[1,2]

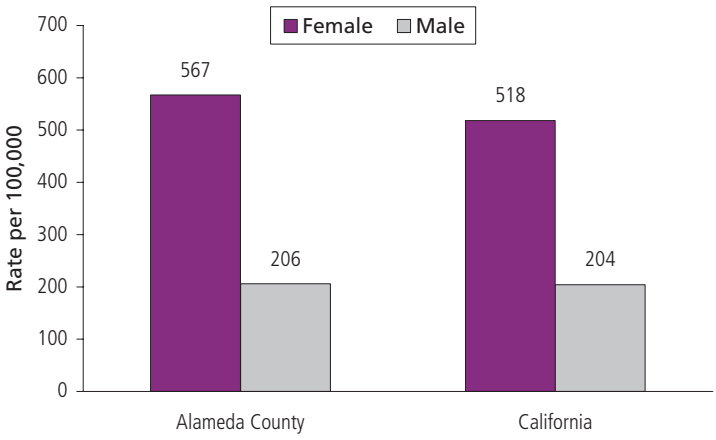
In California there were 130,748 cases of chlamydia reported in 2005. The case rate was 353.3 per 100,000, higher than the national rate. Infection is most common among females 15-19 years of age. African American females bear the greatest burden of the disease in California.[4] Chlamydia can be cured easily and its long-term consequences avoided by early detection and treatment with antibiotics.

Overall Rates

In 2006 there were 5,915 chlamydia cases reported in Alameda County. Nearly three-fourths (74%) of these were female. The rate for females was 567 per 100,000; for males it was 206 per 100,000, just under one-third of the female rate.

California female rates were slightly below Alameda County (518) while male rates were nearly the same (204).

Figure 1. Chlamydia Rates, Alameda County & California, 2006



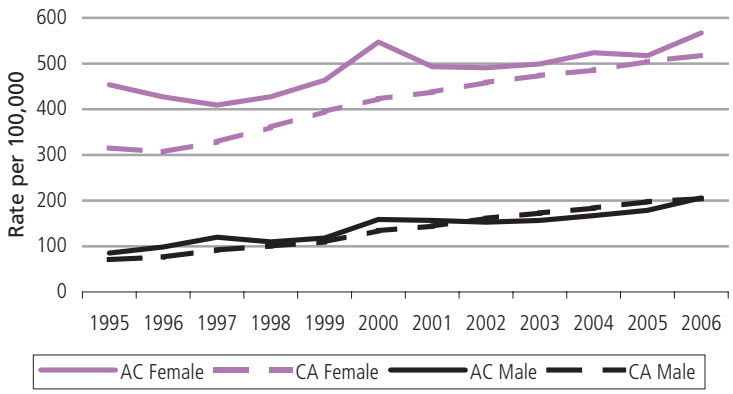
State data are preliminary and may not agree with official 2006 data

Trends

Between 1995 and 2006, female chlamydia rates in Alameda County increased by an average of 2% per year, from 454 per 100,000 in 1995 to 567 in 2006. California female rates increased steadily over the period by about 5% per year. As previously noted, the increases are due in part to increased screening efforts statewide.

Male chlamydia rates in Alameda County increased steadily from 85 per 100,000 in 1995 to 206 in 2006, an increase of about 9% per year. The county rates followed very closely with California rates.

Figure 2. Chlamydia Trends, Alameda County and California

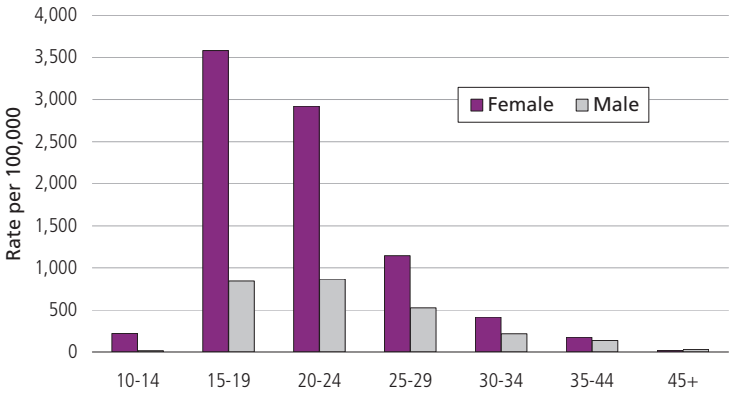


Age

The chlamydia infection rate was highest among 15-19 and 20-24 year-old females in Alameda County (3,583 and 2,921 per 100,000, respectively). Statewide, 20-24 year-old females had the highest rate (>2,700 per 100,000) followed by 15-19 year-old females (>2,200).

Rates of infection among males in the age groups 15-19 and 20-24 years were less than one-third the female rates. This difference is likely due to the fact that males are not targeted for screening to the extent that females are. Rates taper off after age 25 among both males and females.

Figure 3. Chlamydia Rates by Age Group, 2006



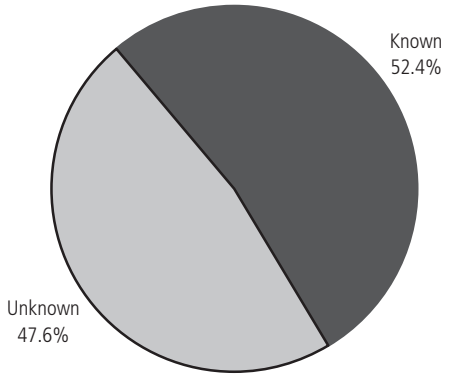
Race/Ethnicity

Nearly half (47.6%) of chlamydia case reports did not have information on race/ethnicity in 2006. Many case reports lack information on race/ethnicity because 1) they are lab reports with only minimal patient information and have no associated provider report, and 2) some providers, such as Kaiser, simply do not record patient race/ethnicity.

The California Department of Health Services, STD Control Branch has conducted studies to understand the nature of the group missing race/ethnicity information. They have suggested that the true racial composition of that group is similar to that of the known cases. If this is the case, then the race/ethnic distribution of known cases will represent all cases reasonably well.[5]

African Americans in Alameda County made up over half (54%) of the known cases, Latinos 21.9%, Whites 10.9%, and Asian/Pacific Islanders 9.2%.

Figure 4. Chlamydia Cases, 2006



2006 Total=5,915

Race/Ethnicity Known (n=3,098)

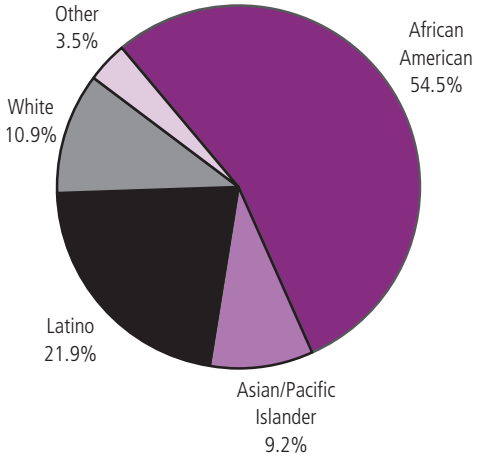
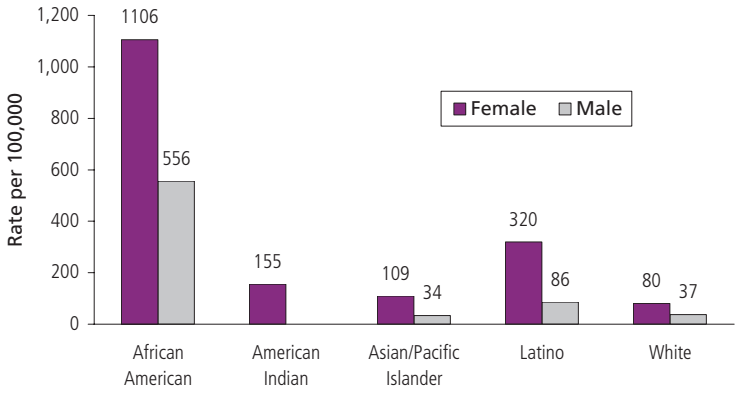


Figure 5 shows that infection rates among African Americans were many times higher than those in other race/ethnic groups. For instance, the female African American rate of 1,106 per 100,000 was 13 times the White rate, ten times the Asian/Pacific Islander rate, seven times the American Indian rate, and three times the Latina rate.

Due to the fact that nearly half the reported cases were missing information on race/ethnicity, the rates by race/ethnicity shown here are underestimates and not directly comparable to the overall county rate for all races combined of 567.1 per 100,000 females and 205.9 per 100,000 males.

Figure 5. Chlamydia Rates by Race/Ethnicity, 2006



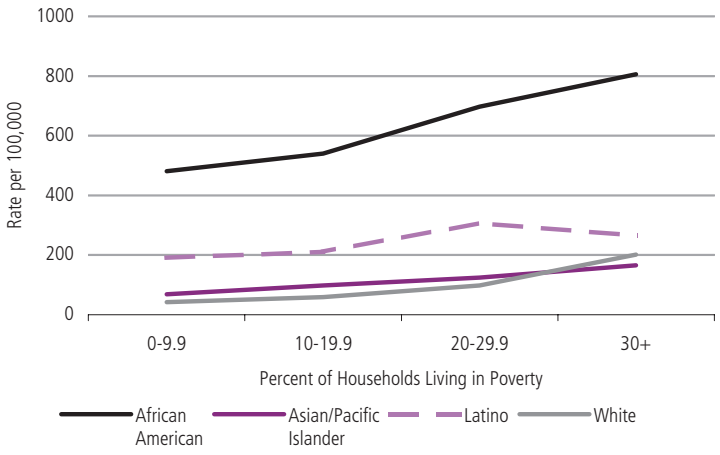
Poverty

Chlamydia infection rates increase as neighborhood poverty levels increase. This is true for each race/ethnic group except Latinos, who do not experience the highest rate in the highest poverty areas.

As Figure 6 shows, the African American rate, which is highest at every poverty level, increased from 481 per 100,000 in areas with less than 10% of households living in poverty to 806 per 100,000 in areas where 30% or more of households live in poverty.

Whites experienced nearly a five-fold increase in the rate of chlamydia infection (42.4 to 201.2), Asian/Pacific Islanders a two-fold increase (68.7 to 165.3), and Latinos a 40% increase.

Figure 6. Chlamydia Rates by Poverty, 2006

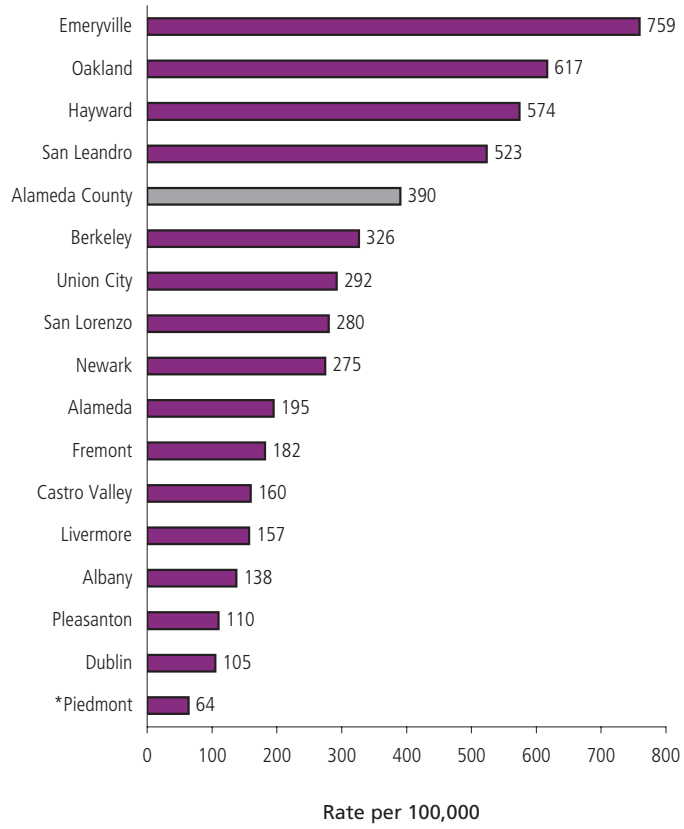


City

In 2006, Alameda County cities with the highest chlamydia infection rates were Emeryville, Oakland, Hayward, and San Leandro. Rates in all these cities were well above the Alameda County rate of 390 per 100,000. The Emeryville rate was nearly twice the county rate. Cities with the lowest infection rates were Piedmont, Dublin, Pleasanton, and Albany.

Since rates can be a reflection of screening levels, it might be that cities with very low infection rates lack sufficient screening resources. However, the Alameda County cities with low infection rates shown here all have higher income and/or education levels than the county average. Thus they might also be considered to have better than average access to health care.

Figure 7. Chlamydia Rates by City, 2006



*Small numbers (>5 and <20); cities with <5 cases not shown

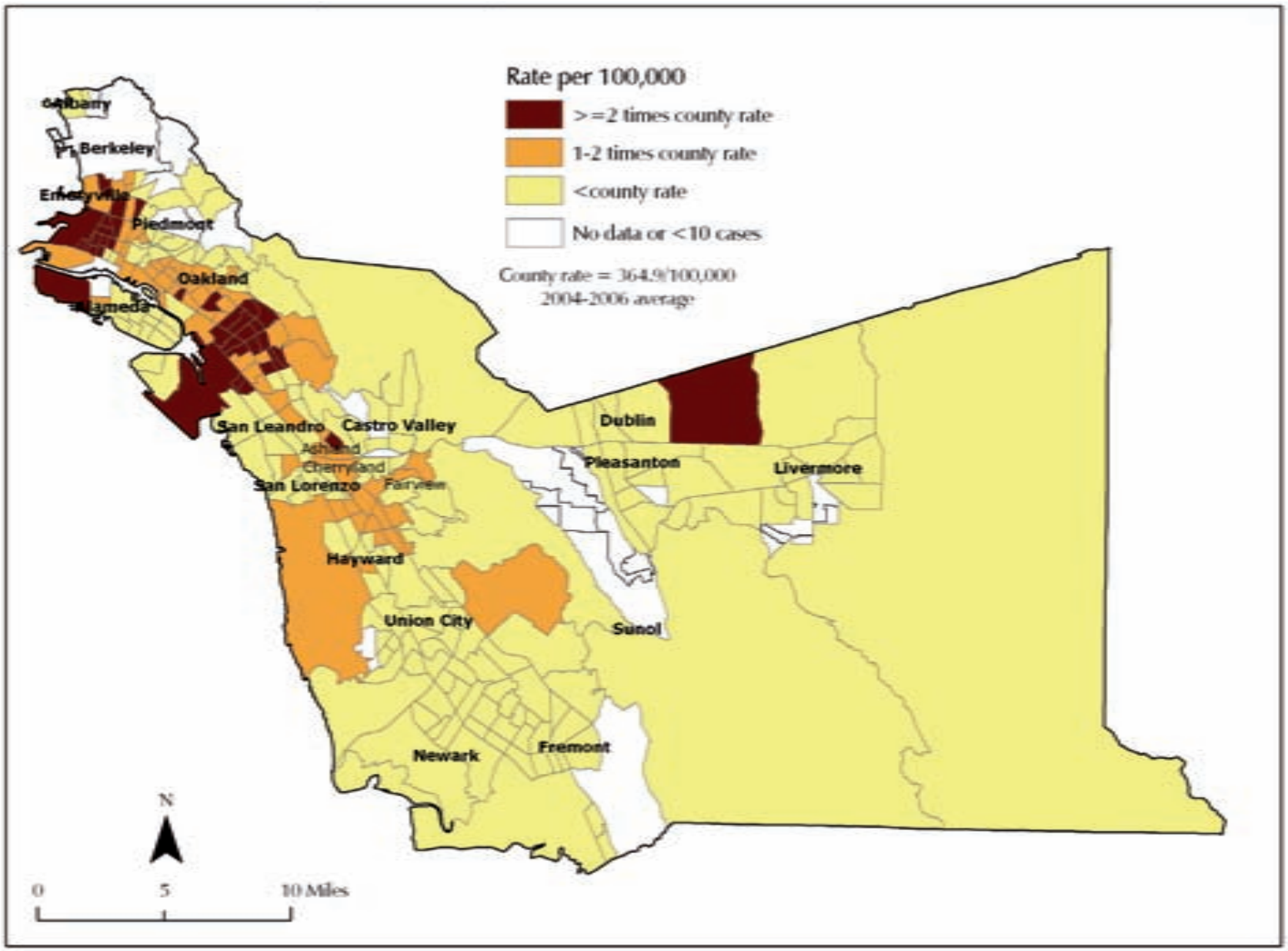
Census Tract

Rates of chlamydia infection for the three year period, 2004-2006, are shown in Map 1 by census tract. The dark brown areas are those with infection rates two or more times higher than the county rate of 364.3 per 100,000 (three-year average). These areas include parts of Emeryville, North Oakland, West Oakland, East Oakland, Alameda, Ashland, and Dublin. It is important to note that the high rates seen in west Alameda (Oakland Army Base) and Dublin may be an artifact due to recent and rapid population growth that has not yet been included in population estimates.

South County (Fremont, Newark, and Union City) and parts of Tri-Valley (Dublin, Pleasanton, and Livermore) had rates lower than the county average.

Three-year average rates are shown to increase numbers in small areas and present more reliable rates. Census tracts with fewer than ten cases are not represented, nor is Berkeley, since we did not have residential addresses for Berkeley cases.

Map 1. Alameda County Chlamydia Rates 2004-2006



Source: CAPE, with data from CA DHS and DCDCP

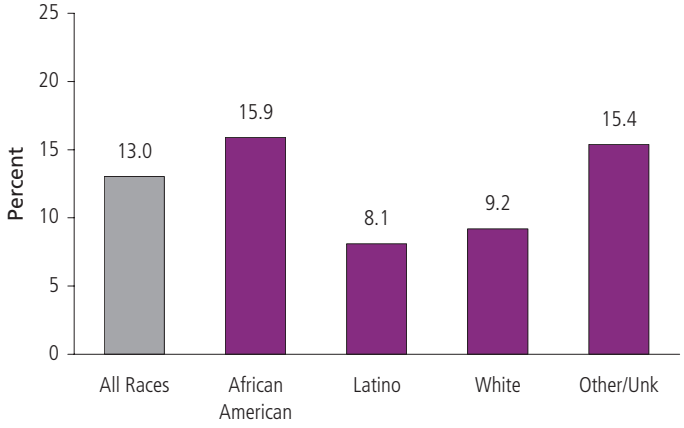
Prevalence of Chlamydia Infection Among Juvenile Hall Detainees

The Chlamydia Screening Project (ClaSP) is a program sponsored by the California Department of Health Services, STD Control Branch that targets young women entering the juvenile justice system. The program screens females for chlamydia as close to booking as possible and treats those who are positive. The aim is to provide screening within one day of entering the facility, along with rapid treatment, because many are released within 24 hours.[6] Prompt screening and treatment provides an opportunity for education and helps to prevent transmission in the community.

Youth booked into juvenile hall comprise a population that is at high risk for STDs and a variety of other poor social and health outcomes. This young population is characterized by little or no access to health care services and a history of risk-taking behavior that includes early sexual activity, inconsistent condom use, multiple sex partners, substance use or abuse, and physical or sexual abuse.[6]

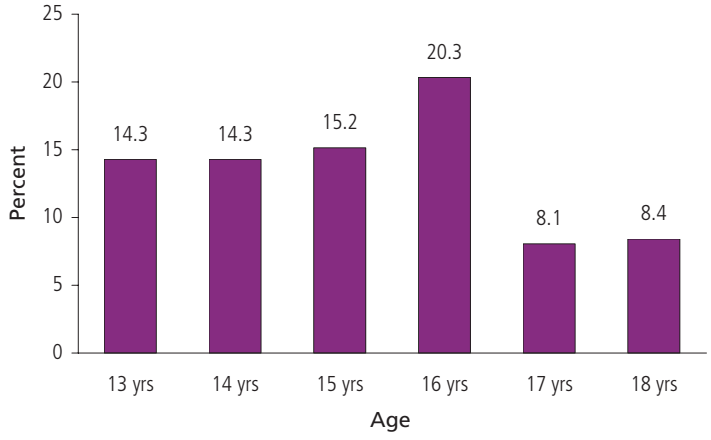
In 2006, nearly every female booked into the Alameda County Juvenile Hall was screened for chlamydia; 13.0% of these tested positive for chlamydia infection. The prevalence of infection was highest among African Americans and those of other or unknown origin (15.9% and 15.4%, respectively). Lower levels of infection were found among Latinas (8.1%) and Whites (9.2%).

Figure 8. Prevalence of Chlamydia Infection by Race/Ethnicity among Female Juvenile Hall Detainees, 2006



The prevalence of chlamydia infection was 14% to 15% between 13 and 15 years of age; it peaked at 20.3% among 16 year-olds and dropped by 60% to approximately 8% among 17 and 18 year-olds.

Figure 9. Prevalence of Chlamydia Infection by Age among Female Juvenile Hall Detainees, 2006



Gonorrhea

Gonorrhea is a sexually transmitted infection caused by the bacterium, *Neisseria gonorrhoeae*.[3] It is the second most commonly reported infectious disease in the United States after chlamydia. A total of 339,593 infections were reported in the United States in 2005.[2] Like chlamydia, gonorrhea infections are under-reported, largely because many health care providers do not comply with reporting requirements. It is believed that reported cases constitute only about half of all actual cases occurring annually.[1] Nationally, the gonorrhea rate was 115.6 per 100,000 in 2005. The rate peaked at 467.7 per 100,000 in 1975, declined steadily to 1995, and has remained fairly stable to the present.[2] In the Western United States, however, gonorrhea rates increased 42% between 2000 to 2005, from 57.2 to 81.5 per 100,000.[7] In California there were 34,350 cases of gonorrhea reported in 2005. The case rate was 92.8 per 100,000,[4] lower than the national rate but above the Western U.S. regional rate.

Gonorrhea rates are high for African Americans, adolescents and young adults. Nationally, in 2005, the African American gonorrhea rate was 18 times higher than the White rate.[2] Untreated gonorrhea can have severe health consequences. It is a major cause of pelvic inflammatory disease (PID), which can lead to infertility and tubal pregnancies in women and epididymitis and infertility in men. Gonorrhea can be cured easily and its long-term consequences avoided by early detection and treatment with antibiotics.[1]

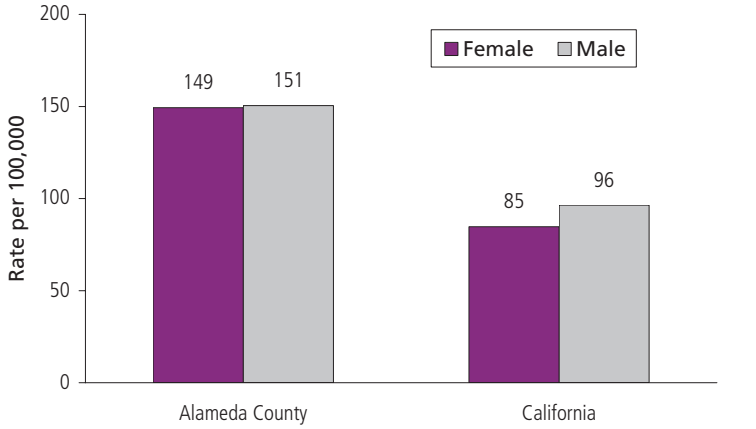
Resistance of N. gonorrhoeae to the fluoroquinolone class of antimicrobials has increased sharply in the United States since 1999.[8] Fluoroquinolone resistance was found to increase in California from 1.1% of isolates in 2000 to 25.4% in 2005. In 2000, CDC issued new treatment guidelines, recommending against the use of fluoroquinolones in Hawaii, again in California in 2002, and among MSM in 2004. Finally, in April, 2007, CDC issued new guidelines recommending that this class of drugs no longer be used to treat gonorrhea in the United States. Presently, this change leaves only one class of antibiotics available for treatment, the cephalosporins (e.g., ceftriaxone, cefixime).[8]

Overall Rates

In 2006 there were 2,278 gonorrhea cases reported in Alameda County; 51% were female.

The female rate was 149 per 100,000, nearly the same as the male rate of 151. These were well above gonorrhea infection rates in California, 85 per 100,000 females and 96 per 100,000 males.

Figure 10. Gonorrhea Rates, Alameda County & California, 2006

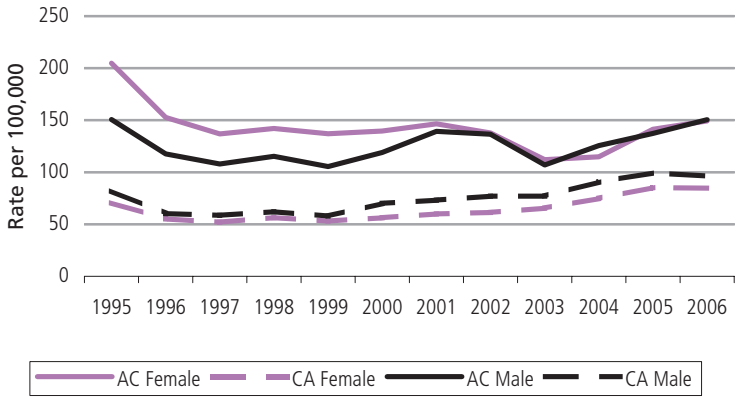


State data are preliminary and may not agree with official 2006 data

Trends

Figure 11 shows that male and female infection rates in Alameda County converged in 2001. Rates for the two genders have remained essentially the same, both dipping in 2003 and then increasing to 2006. California gonorrhea infection rates have been increasing steadily for both males and females since 1999. Presently, Alameda County rates are about 60% above California rates.

Figure 11. Gonorrhea Trends, Alameda County and California

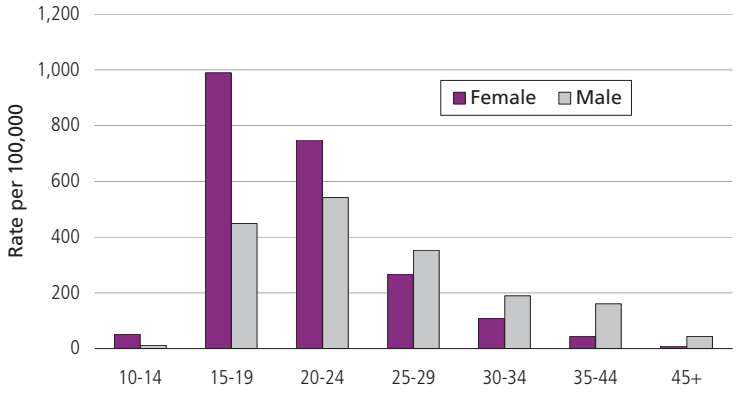


Age

The gonorrhea infection rate was highest among 15-19 year-old females in Alameda County (990 per 100,000), followed by 20-24 year-old females (747). It is noteworthy that in subsequent age groups male rates exceeded female rates. This may indicate that in some sexual networks older men are having sex with younger women.

Male infection rates were highest among 20-24 year-olds followed by 15-19 year-olds. Rates taper off after age 25 among both males and females.

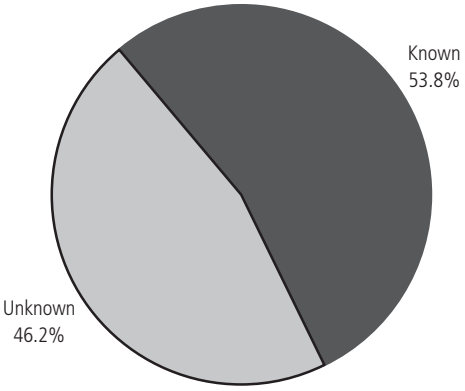
Figure 12. Gonorrhea Rates by Age Group, 2006



Race/Ethnicity

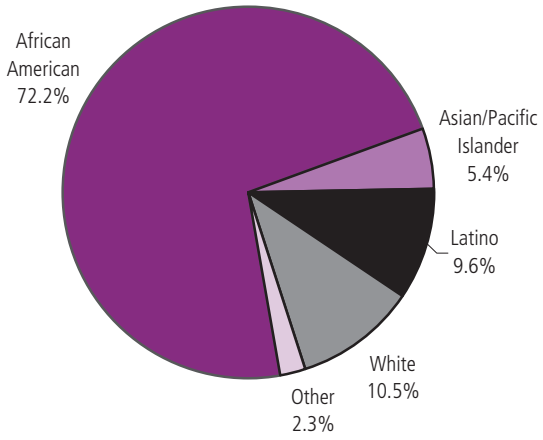
Nearly half (46.2%) of gonorrhea case reports did not have information on race/ethnicity in 2006. As with chlamydia cases, it is likely that the racial composition of race-unknown gonorrhea cases is similar to that of the known cases. African Americans made up nearly three-fourths (72.2%) of the known cases, Latinos 9.6%, Whites 10.5%, and Asian/Pacific Islanders 5.4%.

Figure 13. Gonorrhea Cases, 2006



2006 Total=2,278

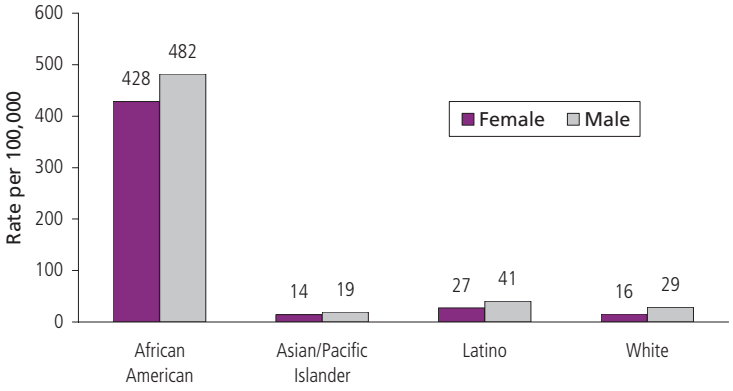
Race/Ethnicity Known (n=1,225)



Gonorrhea infection among African Americans was very high, 428 per 100,000 females and 482 per 100,000 males. These rates were roughly 27 times higher than Asian/Pacific Islanders, 20 times higher than Whites, and 13 times higher than Latinos.

Male rates exceeded female rates in every race/ethnic group, with the largest gender differences found among Whites and Latinos.

Figure 14. Gonorrhea Rates by Race/Ethnicity, 2006

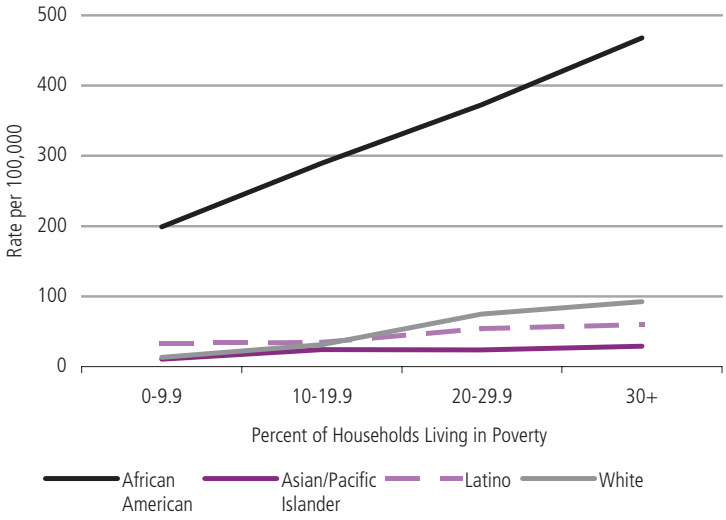


Poverty

Gonorrhea infection rates increased with neighborhood poverty level. The African American rate increased more than two-fold, from 199 per 100,000 in the lowest poverty areas to 468 in the highest poverty areas.

Rates among other race/ethnic groups were lower than that for African Americans, but the differences between low and high poverty groups were greater: Whites experienced a seven-fold increase in the rate of gonorrhea infection (13.0 to 92.2), Asian/Pacific Islanders an increase of nearly three-fold, and Latinos an increase of nearly two-fold.

Figure 15. Gonorrhea Rates by Poverty Level, 2006

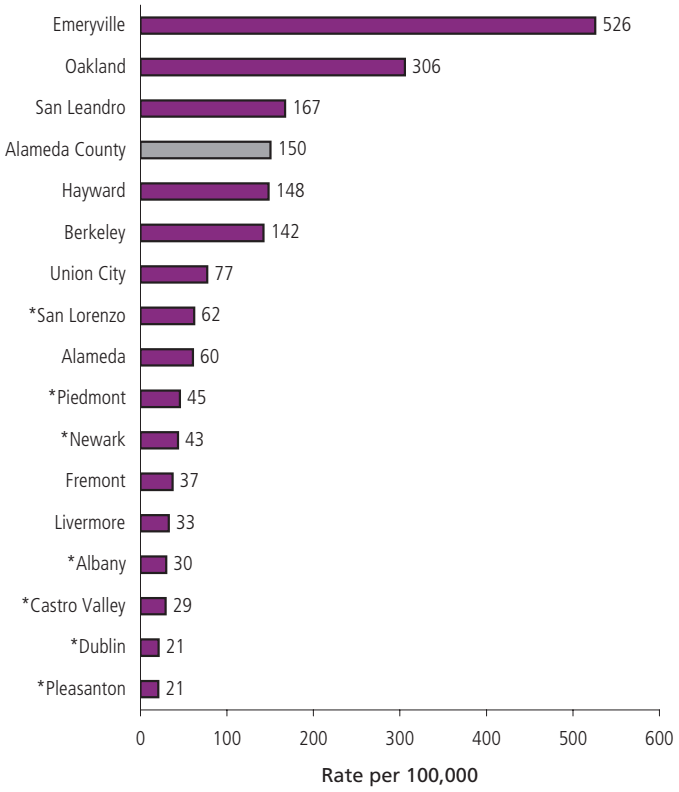


City

In 2006, Alameda County cities with the highest gonorrhea infection rates were Emeryville, Oakland, and San Leandro. The rate of gonorrhea infection in Emeryville was 526 per 100,000, 3.5 times higher than the county rate of 150 per 100,000.

Cities with the lowest infection rates were Pleasanton, Dublin, Castro Valley, and Albany.

Figure 16. Gonorrhea Rates by City, 2006



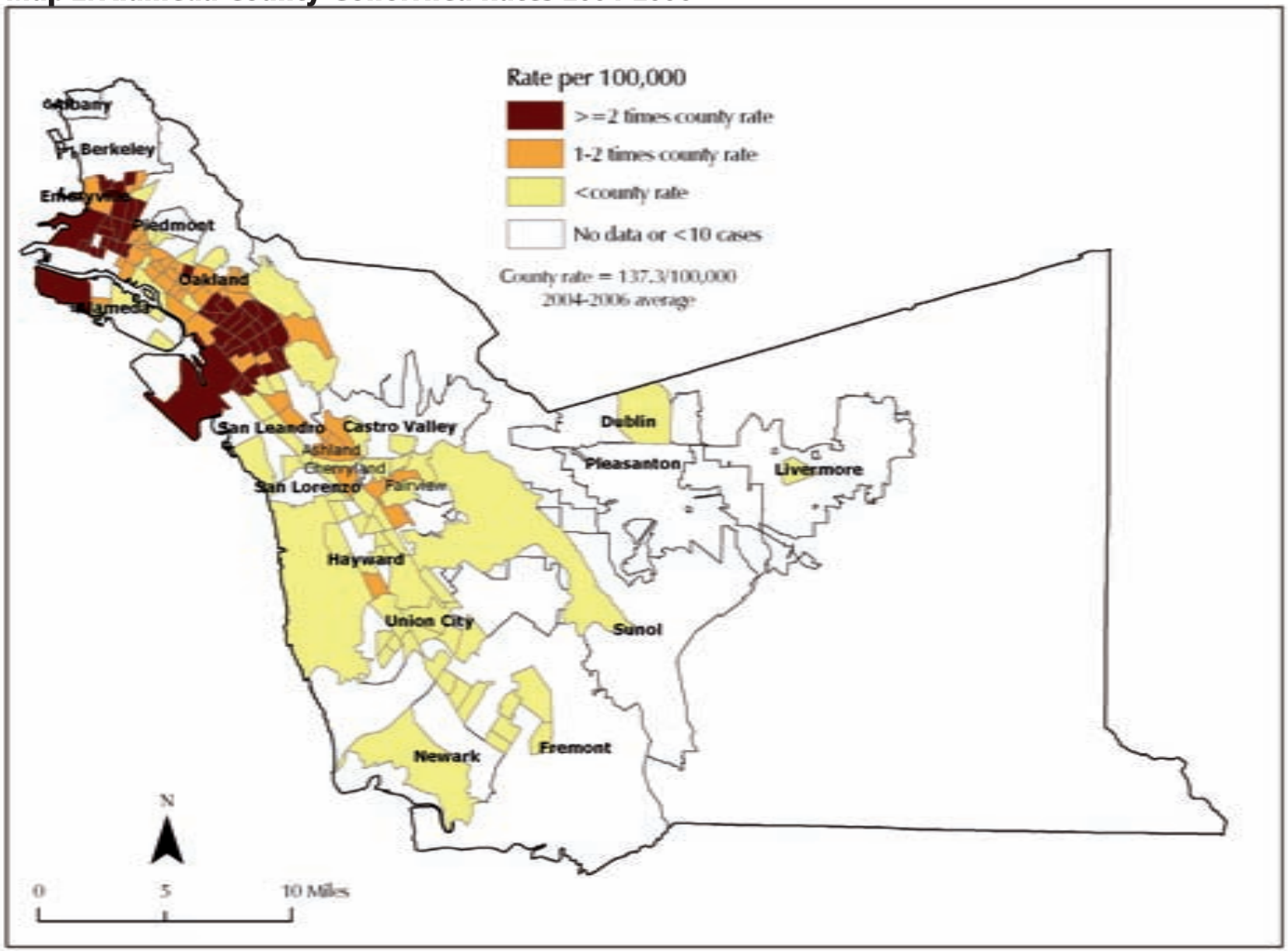
*Small numbers (>5 and <20); cities with <5 cases not shown

Census Tract

Rates of gonorrhea infection for the three year period, 2004-2006, are shown in Map 2 by census tract. The dark brown areas are those with infection rates two or more times higher than the county rate of 137.3 per 100,000 (three-year average). These areas include parts of Emeryville, North Oakland, West Oakland, East Oakland, and Alameda. Data are not shown for many areas of the county due to small numbers of cases. Parts of Oakland, San Leandro, Ashland, Cherryland and South Hayward had gonorrhea rates greater than the county rate but less than twice the county rate (tan color). South County (Fremont, Newark, and Union City) and Tri-Valley (Dublin, Pleasanton, and Livermore) had rates lower than the county average or had insufficient data.

Three year average rates are shown to increase numbers in small areas and present more reliable rates. Census tracts with fewer than 10 cases are not represented, nor is Berkeley since we did not have address of residence for Berkeley cases.

Map 2. Alameda County Gonorrhea Rates 2004-2006



Source: CAPE, with data from CA DHS and DCDCP

Syphilis

Syphilis is caused by infection with *Treponema pallidum*, a spirochete.[3] Left untreated, syphilis can lead to serious problems that include brain, heart and other organ damage, and even death. Infection in the womb results in congenital syphilis of the fetus or newborn, leading in some cases to death, physical deformity, or brain damage. As with other STDs, syphilis infection makes it easier to become infected with HIV.[1]

Nationally, the rate of primary and secondary (P&S) syphilis began climbing in 2001 after declining throughout the 1990s. In 2005, there were 8,724 reported cases in the United States. The rate was 3.0 per 100,000.[2] Most of the increase in cases has been among males, mostly men who have sex with men (MSM). The CDC has also observed increases in the last two years among African Americans and in the last year among females.[2] The rate of primary and secondary syphilis among men is now 5.1 per 100,000, about six times the female rate.[2]

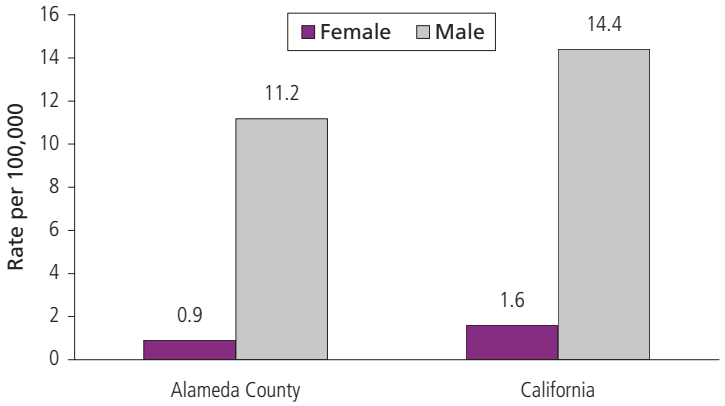
In California there were 1,583 cases of P&S syphilis in 2005. The rate was 4.3 per 100,000 overall and 7.9 for males, both higher than the national rate.[4] Males accounted for 92% of all California cases, and 79% of these were identified as MSM.[4] Of MSM cases willing to report on their HIV status, 61.3% were HIV positive.[5]

Alameda County Public Health Department has historically combined cases of *early latent* syphilis with cases of P&S syphilis, referring to the cases as "early" syphilis. The remainder of this section will present data on this combined group. For comparison purposes, California's 2005 rate of "Early" syphilis was 7.5 per 100,000, not quite double the P&S rate.[4]

Overall Rates

There were 90 cases of early syphilis in Alameda County in 2006; 87 (96.7%) were males. The Alameda County rate overall was 5.9 per 100,000. The female rate was 0.9 and the male rate was 11.2, twelve-fold higher than the female rate. California rates were higher for both genders (1.6 and 14.4 for females and males, respectively).

Figure 17. Early Syphilis Rates, 2006

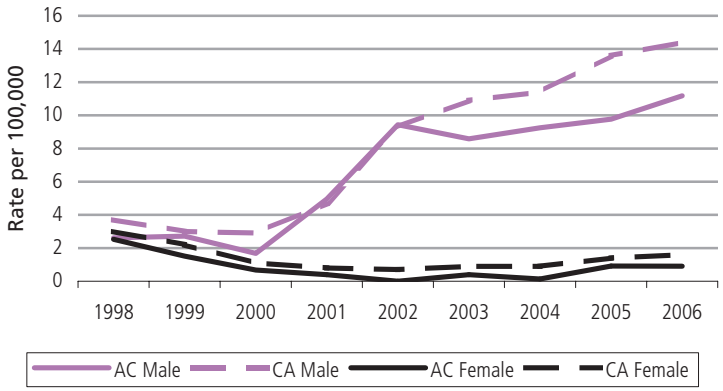


State data are preliminary and may not agree with official 2006 data

Trends

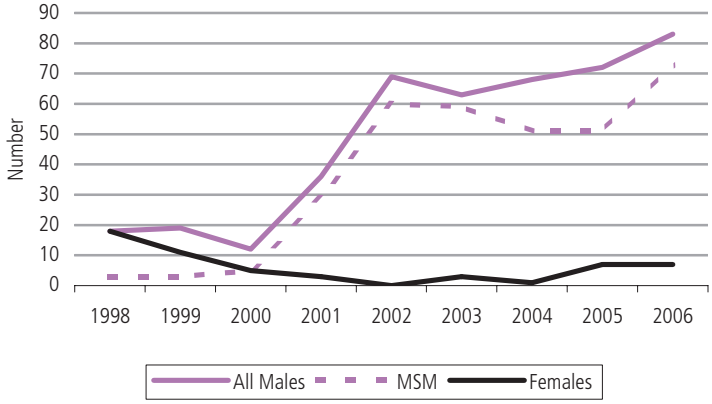
The rate of early syphilis infection among males in Alameda County increased from 1.7 per 100,000 in 2000 to 11.2 in 2006. This trend mirrors that seen in California. However, the California rate has increased more steadily than the Alameda County rate. Female rates in both Alameda County and California have increased slightly since 2004.

Figure 18. Early Syphilis Rates, Alameda County and California



The number of early syphilis cases among males in Alameda County grew rapidly in 2001 and 2002, declined for a year and then increased again from 2004 to 2006 when a total of 83 male cases were reported. Eighty-eight percent of male cases in 2006 were identified as MSM (n=73). No female cases were reported in 2002 but seven were reported in both 2005 and 2006.

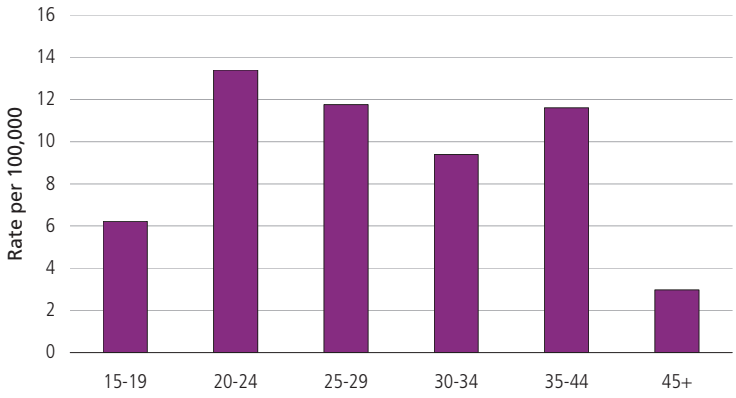
Figure 19. Number of Early Syphilis Cases, Alameda County



Age

The rate of infectious syphilis was highest among 20-24 year-olds, followed by 25-29 year-olds and 35-44 year-olds. Alameda County numbers are insufficient to present rates by age group for each gender. However, statewide data show that the rate was highest among females 20-24 and 25-29 years of age while among males the rate is highest among 35-44 year-olds.

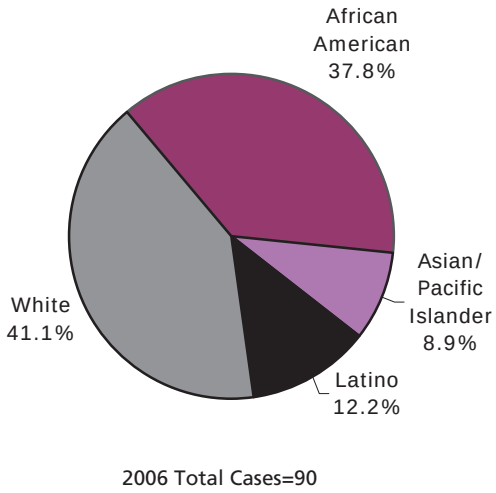
Figure 20. Early Syphilis Rates by Age Group, 2006



Race/Ethnicity

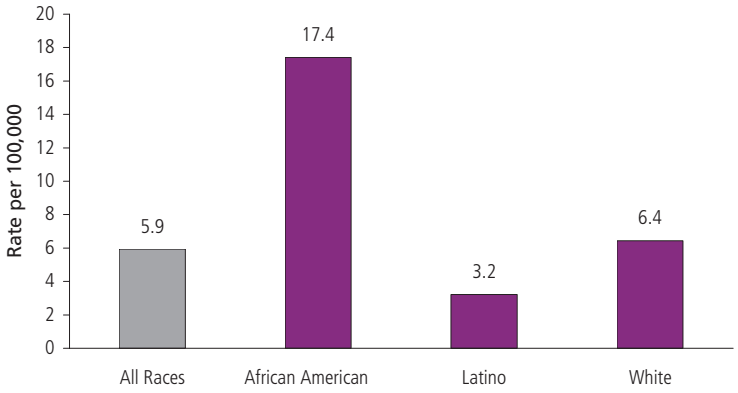
Whites were the largest race/ethnic group among early syphilis cases, accounting for 41.1% of cases in 2006. African Americans accounted for 37.8%, Latinos 12.2% and Asian/Pacific Islanders 8.9% of all cases. Unlike other STDs, since syphilis cases are reported to the state and followed up via field interviews, data on race/ethnicity was largely complete.

Figure 21. Early Syphilis Cases by Race/Ethnicity, 2006



The syphilis infection rate among African Americans was 17.4 per 100,000 in 2006, almost three times greater than the rate among Whites (6.4) and five times the rate among Latinos.

Figure 22. Early Syphilis Rates by Race/Ethnicity, 2006

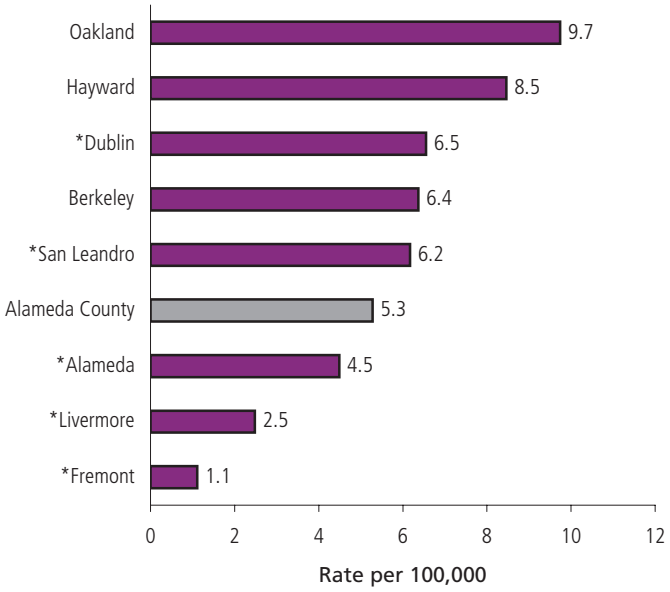


City

Oakland had the highest rate of early syphilis between 2004 and 2006 (9.7 cases per 100,000) followed by Hayward (8.5). These cities, in addition to Dublin, Berkeley, and San Leandro, had rates above the Alameda County three-year average rate of 5.3 per 100,000. However, Dublin, Berkeley, and San Leandro early syphilis rates were not significantly higher than the county average.

Emeryville is not shown here since there were fewer than five cases; however, its three-year average rate for 2004-2006 was higher than Oakland. Emeryville's syphilis rate, while perhaps unstable, should be monitored since the city had the highest rates of chlamydia and gonorrhea in the county.

Figure 23. Early Syphilis Rates by City, 2004-2006



*Small numbers (>5 and <20); cities with <5 cases not shown

Table 1. Interviewed Early Syphilis Cases, Alameda County, 2004-2006

	Total		MSM		Male Hetero/ All Female	
	N	%	N	%	N	%
Total	211	100.0	168	100.0	43	100.0
HIV Co-Infection						
Positive	74	46.5	71	50.0	3	21.4
Negative	85	53.5	71	50.0	14	78.6
Unknown/Refused	52		26		26	
Past Drug Use	131	62.1	100	59.5	31	72.1
Methamphetamines	44	20.9	29	17.3	15	34.9
Cocaine	10	4.7	8	4.8	2	4.7
Crack	3	1.4	2	1.2	1	2.3
Heroin	2	0.9	0	0.0	2	4.7
Impotence Drugs	12	5.7	11	6.5	1	2.3
Exchanges money/drugs for sex	12	5.7	6	3.6	6	14.0
Exchanges sex for money/drugs	8	3.8	5	3.0	3	7.0
Venues						
Internet	48	22.7	48	28.6	0	0.0
Bars/clubs	64	30.3	57	33.9	7	16.3
Bathhouses/Sex clubs	49	23.2	49	29.2	0	0.0
Adult bookstores/cinemas	11	5.2	11	6.5	0	0.0
Anonymous partners	108	51.2	97	57.7	11	25.6
Past STD infection (non-syphilis)	19	9.0	16	9.5	3	7.0
Past syphilis infection	29	13.7	29	17.3	0	0.0

From 2004 to 2006, 211 early syphilis cases were contacted for follow up interview. Of these, 79.6% were MSM. Half of the MSM were co-infected with HIV compared to one in five (21.4%) of all others (females and heterosexual males). Seventy-two percent of females and heterosexual males reported past drug use compared to 59.5% of MSM. Both groups reported methamphetamines as the most commonly used drug.

Females and heterosexual males were slightly more likely than MSM to report exchanging money or drugs for sex or sex for money or drugs while MSM were more likely than others to report using venues for meeting partners: 33.9% of MSM reported meeting partners in bars or clubs (compared to 16.3% of others); 28.6% reported using the internet to meet partners; 29.2% reported meeting partners in bathhouses or sex clubs; and 6.5% reported meeting partners in adult bookstores or cinemas.

Over twice as many MSM reported anonymous sex partners compared to others (57.7% vs. 25.6%). Finally, MSM were more likely than others to have had an STD infection in the past.

Sexually Transmitted Disease Education and Prevention Program

Mission Statement

To prevent, diagnose, manage and control the spread of sexually transmitted diseases (STDs) to protect the health of the community. In pursuit of this mission we promise to uphold the highest standards of respect, dignity, and confidentiality as we work to reduce the impact of STDs in Alameda County.

Our Strategy

The Program consists of three core components focused on preventing the spread and complications of STDs in Alameda County.

A. Surveillance and Disease Investigation
B. Health Education, Awareness and Primary Prevention
C. Clinical and Provider Services

An array of interventions and activities take place within these core components to achieve our mission.

Surveillance and Disease Investigation

1. Collect and monitor STD case reports from health care providers and laboratories.
2. Conduct disease investigation of syphilis, gonorrhea, Chlamydia and other designated STD cases.
3. Conduct STD case contact tracing for undiagnosed and untreated cases of syphilis, gonorrhea and Chlamydia and other designated STDs.
4. Promote the notification, counseling, medical evaluation and treatment of partners of STD cases.
5. Maintain timely and accurate reporting of STD surveillance data.
6. Generate reports, including an annual STD morbidity report, summarizing STD trends by age, gender, sexual orientation, and race/ethnicity.
7. Analyze and interpret STD rates and trends to inform and guide programmatic priorities and policy development.

Health Education, Awareness and Primary Prevention

1. Develop and maintain partnerships with community-based organizations (CBOs) to enhance efforts to educate high-risk populations, such as teens and young adults, about STDs.
2. Develop and promote effective STD education, awareness and prevention strategies to the general public, community-based organization (CBO) staff, and other key stakeholders, such as corrections, substance abuse programs, schools, and intra/interdepartmental coalitions and associations.
3. Provide STD non-clinical education and prevention training for local health care providers,

teachers, CBO staff community partners, and others community partners in collaboration with the California STD/HIV Prevention Training Center.

4. Provide updates through STD program newsletters and website and reports.
5. Actively participate as a member of appropriate health education-related councils, work groups, and coalitions.
6. Administration and oversight of STD grants.

Clinical and Provider Services

1. Disseminate State and Federal STD Treatment Guidelines, reporting regulations and updates to STD service providers and reporting laboratories.
2. Provide technical assistance and consultation in the clinical assessment, screening, treatment, education, and risk reduction counseling for STDs for all County health care providers and their patients.
3. Ensure timely and accurate reporting of Alameda County reportable STD data to the State STD Control Branch.
4. Provide referrals to medical providers, mental health, substance abuse and other social services.
5. Participate in the development and modification of State regulations regarding the treatment and reporting of STDs, HIV and AIDS.
6. Support and/or maintain STD screening programs in non-traditional or high risk settings based on assessment of local STD prevalence trends.
7. Work with medical providers and internal and external partners to explore innovative approaches in the delivery of STD clinical services.

Special Programs and Projects

Chlamydia Screening Project (ClaSP)

Rates of Chlamydia for detainees at Alameda County Juvenile Hall are among the highest of any group in Alameda County. Incarcerated youth often have an earlier sexual debut, multiple and older sex partners, a history of sexual, physical and psychological abuse, and have engaged in high-risk behaviors, such as "survival sex" – sex in exchange for food, shelter, money, protection and/or drugs. These behaviors put these youth at significantly higher risk for acquiring STDs and not accessing appropriate and timely care for STD screening and treatment, compared to non-incarcerated youth. This project is a collaborative effort between the STD Prevention Program, State STD Control Branch, and the Alameda County Public Health Laboratory, Juvenile Justice Health Services, the provider of medical services for adjudicated youth in Alameda County. The goal of this collaborative is to provide Chlamydia screening to all females and symptomatic males (those presenting with symptoms associated with an STD) booked into Juvenile Hall. The program strives to ensure the provision of medical/STD screening within 24 hours of booking, an efficient turnaround time for lab results, and appropriate and timely treatment of all positive and symptomatic cases. The program also includes a "follow-up system" designed to locate, treat, and provide risk reduction education to those youth released prior to treatment. Attempts are also made to identify and treat sexual partners who may also be infected.

Sexually Transmitted Disease Community Intervention Program (SCIP)

The purpose of this program is to facilitate, develop and enhance the ability of local youth serving organizations to expand and/or incorporate STD prevention into their work, through a process of community/health department collaboration. This approach is based on a well-established public health model for program planning. The program planning process is a systematic, on-going set of activities based on assessment data that requires establishing, enhancing and maintaining intra/interagency relationships with community leaders, schools, faith-based organizations, and other non-health organizations which provide primary prevention services to at-risk populations. The provision of technical assistance and training are also important aspects of the program.

California STD Control Branch—Enhanced Gonorrhea (GC) Surveillance System Project

Alameda County is one of several Northern California local health jurisdictions selected to participate in this project, which involves conducting a detailed, confidential interview of eligible gonorrhea cases in-person or by phone. In addition, the health care provider who ordered the GC test is contacted. Information gathered through this project will help to describe risk factors and demographic epidemiology of GC cases in the county and state that is not available through standard case-based GC surveillance; it will generate hypotheses regarding sociodemographic status, sexual and risk factor behaviors and health care access history that may be associated with GC transmission; and help guide State and local funding of GC related services, including the feasibility of sustaining an enhanced GC surveillance system in California.

What Else Do We Need To Do?

- Provide more education on STD case definitions and reporting with race/ethnicity data to improve surveillance efforts.
- Improve provider training on diagnosing, staging and treating syphilis to increase accurate diagnosis and appropriate treatment of syphilis.
- Provide more education on STDs through community-based organizations serving at risk populations.
- Continue working in partnership with health care providers to improve screening of sexually active adolescents and young adult females.
- Encourage repeat screening of adolescent and young adult cases and pregnant females within 4-6 months of treatment.
- Strengthen provider utilization of appropriate therapy to treat uncomplicated chlamydia and gonorrhea cases.
- Continue to support and promote the use of “partner delivered therapy” to prevent re-infection of cases.
- Increase community awareness regarding high rates of chlamydia and gonorrhea and their impact on the overall health of the county.

Appendix A: Technical Notes

Geographic Measures

STD case reports should include address of residence; however approximately 15% of reports contain no patient address. A subgroup of these contains a city of residence but no street address. Street address allows data to be analyzed at any geographic level, from address level to block group, census tract, zip code, and city.

Race and Ethnicity

This report restricts descriptions of race and ethnicity to short words and phrases. It is recognized that individual preference varies and that classification is not trivial. Considering the report's many text references, tables, and figures that make comparisons between races, readability and space require consistent and abbreviated usage. Thus, the report refers to African American, rather than Black or African. Other standard terms are White; American Indian; and Asian (sometimes combined with Pacific Islanders and called API). Latino includes all those of Spanish-speaking descent in the Americas, including people from Spain. Hispanic or Latino is considered by most data collectors such as the Census Bureau to be an ethnicity rather than a race. Thus, a Latino may be White or Asian or Black, but here all those persons are reported as Latino. Finally, race is often unreported, mis-reported, or unclassifiable in many data systems; the report often includes these for completeness, labeled as appropriate for the circumstance.

Data Sources

Population estimates: The population estimate for each geography is from Census 2000 and California Department of Finance (DOF) estimates. Age, sex, and race distributions are from Census 2000 (assuming that little had changed since the Census of April 1, 2000), but the total population is adjusted using the DOF May 2006 benchmarks. For the years prior to 2000, the age and sex distributions are assumed to change linearly from Census 1990 to Census 2000, with the total number of persons taken from DOF estimates.[9]

Case data: Chlamydia, Gonorrhea, and Syphilis data are from the Alameda County STD surveillance system, reported back to us by the California Department of Health Services (CDHS), STD Control Branch. The CDHS also provided us with data from the Berkeley City local health jurisdiction (without street address of reported case).

Limitations of Data

Sexually transmitted diseases The incidence of STDs depends on levels of screening. Since testing for STDs is not comprehensive or uniform throughout the jurisdiction, and since many STD infections are asymptomatic, the actual incidence of STDs is greater than that which is reported. In addition, STD data derive largely from laboratory reports which do not contain information on the race/ethnicity of the individual. Hence, the data is incomplete and conclusions about the distribution of STDs by race/ethnicity cannot be firmly drawn.

Case Definitions

Chlamydia: A case that is 1) laboratory confirmed by isolation of *Chlamydia trachomatis* or 2) diagnosed by a health care provider and reported by confidential morbidity report (CMR).

Gonorrhea: A case that is laboratory confirmed by isolation of *Neisseria gonorrhea* or 2) diagnosed by a health care provider and reported by confidential morbidity report (CMR).

Syphilis: A case that is laboratory confirmed by isolation of *Treponema pallidum*. This report defines a case as a diagnosis of either primary, secondary, or early latent syphilis.

Rates

Crude Rate: For communicable diseases, it is standard to present crude rates—the number of cases divided by the population at risk during a specified time period, expressed in units of population (e.g., per 100,000 people). Crude rates allow for a comparison of the burden of disease across populations.[10] That is, they take into account the size of the population and adjust for it. They do not, however, adjust for differences in the age, race, or gender structure of different populations.

Also presented in this report are age, gender, and race/ethnicity specific rates. These are calculated as described above and require that the age, sex, or race characteristics of cases are known, as well as those of the population at risk.

Variability of rates: All vital statistics, including death rates, are subject to random variation. This variation is inversely related to the number of events (e.g. deaths) used to calculate the rate. The smaller the number of events, the greater the likelihood of random variation. In order to protect against providing misleading information based on statistically unreliable rates, the National Center for Health Statistics (NCHS) recommends presenting only rates based on 20 or more events.[11] The ACPHD has adopted a more relaxed standard to a requisite ten or more events for rates, a standard recently adopted by the Family Health Outcomes Project of the University of California, San Francisco.[12] For the current report, some rates are even presented on counts of five or more. This was done in order to present more information on sub-county areas. In this case crude rates by city overall, where the size of the city population is well known and no subgroups are being identified. The other place in the report that the lower number was used was in three-year aggregates of census tract data used for mapping, showing a geographic representation of rates, again overall rates with no subgroups identified.

Confidence interval: A good measure of the reliability of a rate is the confidence interval (CI) around the rate estimate. A confidence interval defines the range of rates that would be determined by repeated sampling of the same phenomenon. By statistical convention, a 95% confidence interval is considered a useful measure of the range of accuracy of an estimate. This means that with repeated sampling, one would obtain a rate within the confidence interval 95% of the time. These calculations normally use the binomial distribution. Based on recommendations of the National Center for Health Statistics (NCHS) regarding the calculation of rates and confidence intervals, the standard error of any rate based on fewer than 100 events is based on the Poisson distribution.[11] The Poisson distribution is similar to the binomial distribution but is characterized by very small numbers of events occurring in a large number of trials.[13]

Appendix B: Data Tables

Chlamydia Rates by Age, Gender, and Race/Ethnicity, Alameda County, 2006

		Total	%	Rate	LCL	UCL
Total		5,915	100.0	390.5	380.5	400.4
Age	0-9	0	0.0	0.0		
	10-14	116	2.0	113.6	92.9	134.2
	15-19	2,122	35.9	2197.9	2,104.3	2,291.4
	20-24	1,813	30.7	1867.0	1,781.1	1,953.0
	25-29	929	15.7	839.5	785.5	893.5
	30-34	409	6.9	320.1	289.1	351.2
	35-44	394	6.7	157.6	142.0	173.1
	45+	132	2.2	24.6	20.4	28.8
Race/Ethnicity	Afr Am	1,689	28.6	864.7	823.5	906.0
	Amer Ind*	14	0.2	94.6	51.7	158.8
	Asian/PI	284	4.8	73.1	64.6	81.6
	Latino	679	11.5	198.3	183.4	213.2
	White	338	5.7	58.9	52.6	65.2
	Other	94	1.6			
	Unk	2,817	47.6			
Female		4,379	100.0	567.1	550.3	583.9
Age	0-9	0	0.0	0.0		
	10-14	109	2.5	218.8	177.8	259.9
	15-19	1,705	38.9	3583.3	3,413.2	3,753.4
	20-24	1,376	31.4	2921.3	2,767.0	3,075.7
	25-29	641	14.6	1145.4	1,056.7	1,234.1
	30-34	272	6.2	416.0	366.5	465.4
	35-44	221	5.0	176.6	153.3	199.9
	45+	55	1.3	19.2	14.5	25.0
Race/Ethnicity	Afr Am	1,203	27.5	1105.5	1,043.1	1,168.0
	Amer Ind*	12	0.3	155.1	80.1	270.9
	Asian/PI	218	5.0	109.2	94.7	123.7
	Latino	527	12.0	319.7	292.4	347.0
	White	234	5.3	80.4	70.1	90.7
	Other	69	1.6			
	Unk	2,116	48.3			
Male		1,529	100.0	205.9	195.5	216.2
Age	0-9	0	0.0	0.0		
	10-14*	7	0.5	13.4	5.4	27.6
	15-19	414	27.1	845.5	764.0	926.9
	20-24	434	28.4	867.9	786.3	949.6
	25-29	288	18.8	526.6	465.7	587.4
	30-34	136	8.9	218.1	181.4	254.7
	35-44	173	11.3	138.5	117.9	159.2
	45+	77	5.0	30.7	24.2	38.4
Race/Ethnicity	Afr Am	481	31.5	556.0	506.3	605.7
	Amer Ind	<5	*	*	*	*
	Asian/PI	64	4.2	33.9	26.1	43.3
	Latino	152	9.9	85.6	72.0	99.2
	White	104	6.8	36.8	29.7	43.8
	Other	25	1.6			
	Unk	701	45.8			

*Rates based on small numbers (>5 & <20) may be unreliable

Gonorrhea Rates by Age, Gender, and Race/Ethnicity, Alameda County, 2006

		Total	%	Rate	LCL	UCL
Total		2,278	100.0	150.4	144.2	156.5
Age	0-9	<5	*	*	*	*
	10-14	32	1.4	31.3	21.4	44.2
	15-19	692	30.4	716.7	663.3	770.1
	20-24	626	27.5	644.7	594.2	695.2
	25-29	343	15.1	310.0	277.2	342.8
	30-34	190	8.3	148.7	127.6	169.9
	35-44	257	11.3	102.8	90.2	115.4
	45+	134	5.9	25.0	20.7	29.2
Race/Ethnicity	Afr Am	885	38.8	453.1	423.2	483.0
	Amer Ind	<5	*	*	*	*
	Asian/PI	66	2.9	17.0	13.1	21.6
	Latino	117	5.1	34.2	28.0	40.4
	White	129	5.7	22.5	18.6	26.3
	Other	24	1.1			
	Unk	1,053	46.2			
Female		1,153	100.0	149.3	140.7	157.9
Age	0-9	<5	*	*	*	*
	10-14	26	2.3	52.2	34.1	76.5
	15-19	471	40.8	989.9	900.5	1,079.3
	20-24	352	30.5	747.3	669.2	825.4
	25-29	150	13.0	268.0	225.1	310.9
	30-34	71	6.2	108.6	84.8	137.0
	35-44	55	4.8	43.9	33.1	57.2
	45+	24	2.1	8.4	5.4	12.5
Race/Ethnicity	Afr Am	466	40.4	428.2	389.4	467.1
	Amer Ind	<5	*	*	*	*
	Asian/PI	28	2.4	14.0	9.3	20.3
	Latino	45	3.9	27.3	19.9	36.5
	White	46	4.0	15.8	11.6	21.1
	Other	12	1.0			
	Unk	553	48.0			
Male		1,118	100.0	150.5	141.7	159.3
Age	0-9	0	0.0	0.0		
	10-14*	6	0.5	11.5	4.2	25.0
	15-19	220	19.7	449.3	389.9	508.7
	20-24	271	24.2	542.0	477.4	606.5
	25-29	193	17.3	352.9	303.1	402.7
	30-34	118	10.6	189.2	155.1	223.3
	35-44	201	18.0	161.0	138.7	183.2
	45+	109	9.7	43.5	35.3	51.6
Race/Ethnicity	Afr Am	417	37.3	482.1	435.8	528.3
	Amer Ind	<5	*	*	*	*
	Asian/PI	36	3.2	19.1	13.4	26.4
	Latino	72	6.4	40.5	31.7	51.1
	White	81	7.2	28.6	22.7	35.6
	Other*	12	1.1			
	Unk	499	44.6			

*Rates based on small numbers (>5 & <20) may be unreliable

Early Syphilis Rates by Age, Gender, and Race/Ethnicity, Alameda County, 2006

		Total	%	Rate	LCL	UCL
Total		90	100.0	5.9	4.8	7.3
Sex	Female	7	7.8	0.9	0.4	1.9
	Male	83	92.2	11.2	8.9	13.9
Age	0-9	0	0.0	0.0	*	*
	10-14	<5	*	*	*	*
	15-19*	6	6.7	6.2	2.3	13.5
	20-24*	13	14.4	13.4	7.1	22.9
	25-29*	13	14.4	11.7	6.3	20.1
	30-34*	12	13.3	9.4	4.9	16.4
	35-44	29	32.2	11.6	7.8	16.7
	45+*	16	17.8	3.0	1.7	4.8
Race/Ethnicity	Afr Am	34	37.8	17.4	12.1	24.3
	Latino*	11	12.2	3.2	1.6	5.7
	White	37	41.1	6.4	4.5	8.9
	Asian/PI*	8	8.9	2.1	0.9	4.1

Chlamydia Rates by City, Alameda County, 2006

	Total	Rate	LCL	UCL
Alameda	145	194.9	163.2	226.7
Albany	23	137.7	87.3	206.6
Berkeley	342	326.4	291.8	361.0
Castro Valley	94	159.7	129.1	195.5
Dublin	45	105.2	76.7	140.8
Emeryville	65	759.5	586.1	968.0
Fremont	382	181.6	163.4	199.8
Hayward	841	574.1	535.3	612.9
Livermore	129	157.1	130.0	184.2
Newark	120	274.7	225.5	323.8
Oakland	2,552	616.8	592.8	640.7
Piedmont*	7	63.6	25.6	131.1
Pleasanton	75	109.9	86.4	137.7
San Leandro	426	523.4	473.7	573.1
San Lorenzo	63	280.1	215.2	358.3
Union City	208	292.2	252.5	331.9
Alameda County	5,915	390.5	380.5	400.4

*Rates based on small numbers (>5 & <20) may be unreliable

Gonorrhea Rates by City, Alameda County, 2006

	Total	Rate	LCL	UCL
Alameda	45	60.5	44.1	80.9
Albany*	5	29.9	9.7	69.9
Berkeley	149	142.2	119.4	165.0
Castro Valley*	17	28.9	16.8	46.2
Dublin*	9	21.0	9.6	39.9
Emeryville	45	525.8	383.5	703.5
Fremont	78	37.1	29.3	46.3
Hayward	217	148.1	128.4	167.8
Livermore	27	32.9	21.7	47.8
Newark*	19	43.5	26.2	67.9
Oakland	1,265	305.7	288.9	322.6
Piedmont*	5	45.4	14.8	106.1
Pleasanton*	14	20.5	11.2	34.4
San Leandro	136	167.1	139.0	195.2
San Lorenzo*	14	62.2	34.0	104.4
Union City	55	77.3	58.2	100.6
Alameda County	2,278	150.4	144.2	156.5

Early Syphilis Rates by City, Alameda County, 2004-2006, Three-Year Annual Average

	3-Year Total Count	Annual Avg Rate	LCL	UCL
Alameda*	10	4.5	2.2	8.3
Albany	<5	*	*	*
Berkeley	20	6.4	3.9	9.8
Castro Valley	<5	*	*	*
Dublin*	8	6.5	2.8	12.9
Emeryville	<5	*	*	*
Fremont*	7	1.1	0.4	2.3
Hayward	37	8.5	6.0	11.7
Livermore*	6	2.5	0.9	5.4
Newark	<5	*	*	*
Oakland	120	9.7	8.0	11.5
Piedmont	0	0.0		
Pleasanton	<5	*	*	*
San Leandro	15	6.2	3.5	10.2
San Lorenzo	0	0.0		
Union City	<5	*	*	*
Alameda County	238	5.3	4.6	6.0

*Rates based on small numbers (>5 & <20) may be unreliable

Chlamydia Rates, Alameda County, 1995-2006

	Year	Total	Rate	LCL	UCL
Female	1995	3,077	453.6	437.5	469.6
	1996	2,921	427.0	411.5	442.4
	1997	2,866	409.3	394.3	424.2
	1998	3,046	427.2	412.1	442.4
	1999	3,356	463.3	447.7	479.0
	2000	4,044	547.1	530.3	564.0
	2001	3,705	493.2	477.4	509.1
	2002	3,713	490.7	474.9	506.5
	2003	3,793	499.2	483.3	515.1
	2004	3,993	523.8	507.5	540.0
	2005	3,959	517.2	501.1	533.3
	2006	4,379	567.1	550.3	583.9
Male	1995	558	85.0	77.9	92.0
	1996	650	98.3	90.7	105.8
	1997	810	119.7	111.5	128.0
	1998	755	109.7	101.9	117.6
	1999	826	118.2	110.1	126.2
	2000	1,132	158.6	149.3	167.8
	2001	1,139	156.7	147.6	165.8
	2002	1,117	152.6	143.7	161.6
	2003	1,150	156.7	147.7	165.8
	2004	1,227	167.0	157.6	176.3
	2005	1,317	178.6	169.0	188.3
	2006	1,529	205.9	195.5	216.2

Gonorrhea Rates, Alameda County, 1995-2006

	Year	Total	Rate	LCL	UCL
Female	1995	1,389	204.7	194.0	215.5
	1996	1,044	152.6	143.3	161.9
	1997	958	136.8	128.1	145.5
	1998	1,013	142.1	133.3	150.8
	1999	992	137.0	128.4	145.5
	2000	1,032	139.6	131.1	148.1
	2001	1,101	146.6	137.9	155.2
	2002	1,043	137.8	129.5	146.2
	2003	852	112.1	104.6	119.7
	2004	876	114.9	107.3	122.5
	2005	1,081	141.2	132.8	149.6
	2006	1,153	149.3	140.7	157.9
Male	1995	989	150.6	141.2	160.0
	1996	778	117.6	109.3	125.9
	1997	730	107.9	100.1	115.7
	1998	793	115.3	107.2	123.3
	1999	737	105.4	97.8	113.1
	2000	850	119.1	111.1	127.1
	2001	1,012	139.2	130.7	147.8
	2002	999	136.5	128.0	145.0
	2003	785	107.0	99.5	114.5
	2004	923	125.6	117.5	133.7
	2005	1,012	137.3	128.8	145.7
	2006	1,118	150.5	141.7	159.3

Early Syphilis Rates, Alameda County, 1998-2006

	Year	Total	Rate	LCL	UCL
Female	1998*	18	2.5	1.5	4.0
	1999*	11	1.5	0.8	2.7
	2000*	5	0.7	0.2	1.6
	2001	<5	*	*	*
	2002	0	0.0		
	2003	<5	*	*	*
	2004	<5	*	*	*
	2005*	7	0.9	0.4	1.9
	2006*	7	0.9	0.4	1.9
Male	1998*	18	2.6	1.6	4.1
	1999*	19	2.7	1.6	4.2
	2000*	12	1.7	0.9	2.9
	2001	36	5.0	3.5	6.9
	2002	69	9.4	7.3	11.9
	2003	63	8.6	6.6	11.0
	2004	68	9.3	7.2	11.7
	2005	72	9.8	7.6	12.3
	2006	83	11.2	8.9	13.9

*Rates based on small numbers (>5 & <20) may be unreliable

Appendix C: Case Definitions for Reportable STDs

California State law (California Administrative Code, Title 17, Public Health, Section 2500, 1996) requires all health care providers to report selected communicable diseases to local health departments. Six of these diseases are reported directly to the Alameda County Public Health Department using the Confidential Morbidity Report (PM 110 (9/05) (Edited 10/05)). These six include: chlamydia, gonorrhea, syphilis, non-gonococcal/non-chlamydial urethritis (NGU), non-gonococcal/non-chlamydial pelvic inflammatory disease, and chancroid.

The following case definitions should assist physicians and other health care providers with the reporting process. The clinical description for each disease is brief; a more thorough discussion can be found in Sexually Transmitted Diseases (3rd Edition, 1999) by Holmes, et al. STD Program staff are available to answer questions concerning STD case definitions and STD reporting requirements. Five of the six most frequently reported STDs are discussed below.

Chlamydial Infection

1. Clinical description

Presence of mucopurulent cervical, urethral, or rectal discharge; epididymitis, salpingitis, or pelvic inflammatory disease (PID) in adults; conjunctivitis or pneumonia in infants born to mothers with untreated infection. Asymptomatic infections are common.

2. Criteria for diagnosis

Laboratory identification of Chlamydia trachomatis infection by culture, antigen detection, or nucleic acid detection (amplified or non-amplified) methods.

Gonorrhea

1. Clinical description

Presence of purulent cervical, urethral, or rectal discharge; epididymitis, pharyngitis, salpingitis, or PID in adults; conjunctivitis in neonates born to mothers with untreated infection. Asymptomatic infections are common.

2. Criteria for diagnosis

Compatible clinical picture and sexual exposure to a person infected with Neisseria gonorrhoeae, OR a, b, or c:

a. Observation of Gram-negative intracellular diplococci in urethral specimen from a male,

b. Isolation of typical Gram-negative, oxidase positive diplococci from a clinical specimen,

c. Laboratory identification of N. gonorrhoeae infection by culture, antigen detection, or nucleic acid detection (amplified or non-amplified) methods.

Syphilis

Note: Neurosyphilis may co-exist with early stages of syphilis.

Primary Syphilis

1. Clinical description

One or more painless indurated ulcers at the site of exposure. Lymphadenopathy is common.

2. Criteria for diagnosis

Compatible clinical picture AND laboratory confirmation by either a or b:

a. Demonstration of Treponema pallidum in clinical specimen by darkfield, fluorescent antibody or equivalent microscopic methods,

b. Reactive serologic test for syphilis.

** Non-treponemal tests often do not become reactive until 7-10 days following the lesion onset.

Secondary Syphilis

1. Clinical description

Clinical manifestations are many, including localized or diffuse often bilateral mucocutaneous lesions and generalized lymphadenopathy. Flu-like symptoms are common.

2. Criteria for diagnosis

Identification of T. pallidum from a lesion compatible with secondary syphilis; OR Compatible clinical picture with laboratory confirmation by either a or b:

a. Reactive non-treponemal test (>1:4) with no prior diagnosis of syphilis,

b. Four-fold or greater increase in non-treponemal test titer compared with most recent test for individuals with prior history of syphilis

Note: Treponemal test (FTA-ABS or MHA-TP) will be reactive.

Early Latent Syphilis

1. Clinical description

No clinical signs or symptoms of syphilis.

2. Criteria for diagnosis

Reactive treponemal and non-treponemal test, AND initial infection that has occurred within previous 12 months as demonstrated by either a, b, or c.

a. Nonreactive or four-fold lower titer non-treponemal test within past 12 months,

b. History consistent with untreated primary or secondary syphilis in the past 12 months,

c. Sexual exposure to a partner with primary or secondary syphilis in the past 12 months, or probable early latent syphilis (documented independently as duration < 1 year) and no history of treatment for syphilis following the exposure.

Late Latent Syphilis

1. Clinical description

No clinical signs or symptoms of syphilis.

2. Criteria for diagnosis

Reactive treponemal and non-treponemal test, AND no evidence of having acquired syphilis within the past 12 months as described under early latent syphilis, AND whose age and titer do not meet the criteria specified for latent syphilis of unknown duration.

Latent Syphilis of Unknown Duration

1. Clinical description

No clinical signs or symptoms.

2. Criteria for diagnosis

Reactive treponemal and non-treponemal test, AND case does not meet requirements for early or late latent syphilis, AND patient is ages 12-35, non-treponemal titer is > 1:32.

Late Syphilis (Late Benign and Cardiovascular)

1. Clinical description

Inflammatory lesions of the cardiovascular system, skin, and bone. Rarely, other structures may be involved.

2. Criteria for diagnosis

Compatible clinical picture with a reactive treponemal test in the absence of other known causes for the abnormalities, AND neurosyphilis has been ruled out through CSF analysis.

Neurosyphilis

Note: The diagnosis of neurosyphilis must be accompanied by a staged diagnosis.

1. Clinical description

In asymptomatic neurosyphilis, CSF abnormalities are present in the absence of neurologic symptoms or signs. Clinical findings when present include one or more of the following: syphilitic meningitis (e.g., increased intracranial tension, cranial nerve palsies, focal cerebral signs), spinal pachymeningitis (e.g., radicular pain, segmental sensory loss, spastic paraparesis), and meningovascular syphilis (e.g., personality and behavior changes, CVA, tabes, paresis).

2. Criteria for diagnosis

Either a or b:

a. Reactive VDRL from a CSF specimen uncontaminated with blood.

b. Diagnosis of syphilis and clinical signs of central nervous system syphilis with elevated CSF protein or lymphocyte count, in the absence of other known causes for these abnormalities.

Congenital Syphilis

1. Clinical description

Classic signs and symptoms may not be present at birth. Infants may have hepatosplenomegaly, skin rash, condyloma lata, snuffles, jaundice, pseudoparalysis, anemia or edema. Children may have stigmata such as interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades or Clutton joints.

2. Criteria for diagnosis

Demonstration of T. pallidum by darkfield microscopy or other laboratory technique, OR stillbirth or liveborninfant of mother with untreated or inadequately treated syphilis (e.g., non-penicillin therapy or penicillin given < 30 days before delivery), OR reactive treponemal test for syphilis in an infant or child with one of the following:

a. Evidence of congenital syphilis on physical examination or on long bone X-ray,

b. Reactive CSF VDRL,

c. Elevated CSF lymphocyte count or protein (without other known causes),

d. Reactive FTA-ABS — 19S-IgM antibody or equivalent test.

Non-Gonococcal/Non-Chlamydial Urethritis (NGU)

1. Clinical description

Visible abnormal discharge.

2. Criteria for diagnosis:

Gonococcal and chlamydial infection excluded, AND either a, b, or c.:

a. Compatible clinical picture,

b. Positive leukocyte esterase test on first void urine or microscopic examination of first-void urine demonstrating > 10 WBCs per high power field

c. Gram stain of urethral discharge showing > 5 WBCs/hpf.

Pelvic Inflammatory Disease (PID)

1. Clinical description

Presence of lower abdominal tenderness, adnexal tenderness and cervical motion tenderness in the absence of an established cause other than PID.

2. Criteria for diagnosis

Minimum criteria to diagnose PID

Sexually active women with either:

a. Uterine/adnexal tenderness OR

b. Cervical motion tenderness

And no other cause for illness can be identified.

Additional criteria may be used to enhance the specificity of the minimum criteria and those include:

Oral temperature >101 F (>38.3 C), or abnormal cervical or vaginal mucopurulent discharge, or presence of WBCs on saline microscopy of vaginal secretions, or elevated erythrocyte sedimentation rate, or elevated C-reactive protein, or laboratory documentation of cervical infection with N. gonorrhoeae or C. trachomatis.

PID caused by N. gonorrhoeae or C. trachomatis should be reported as gonorrhea or chlamydial infection, respectively. All other PID should be reported as non-gonococcal/non-chlamydial PID.

Appendix D: CMR Form

CONFIDENTIAL MORBIDITY REPORT

NOTE: For STD, Hepatitis, or TB, complete appropriate section below. Special reporting requirements and reportable diseases on back.

DISEASE BEING REPORTED: _____

Patient's Last Name

Social Security Number ___ — ___ — ____

First Name/Middle Name (or initial)

Birth Date Month Day Year

Age

Address: Number, Street **Apt./Unit Number**

City/Town **State** **ZIP Code**

Area Code **Home Telephone**

Gender M F

Pregnant? Y N Unk

Estimated Delivery Date Month Day Year

Area Code **Work Telephone**

Patient's Occupation/Setting

❒ Food service ❒ Day care ❒ Correctional facility
❒ Health care ❒ School ❒ Other _____

Ethnicity (check [✓] one)

❒ Hispanic/Latino
❒ Non-Hispanic/Non-Latino

Race (check [✓] all that apply)

❒ African-American/Black
❒ Asian:
- ❒ Asian-Indian ❒ Korean
- ❒ Cambodian ❒ Laotian
- ❒ Chinese ❒ Thai
- ❒ Hmong ❒ Vietnamese
- ❒ Japanese
- ❒ Other: _____

❒ Pacific Islander:
- ❒ Filipino ❒ Hawaiian
- ❒ Guamanian ❒ Samoan
- ❒ Other: _____

❒ Native American/Alaskan Native
❒ White: _____
❒ Other: _____

DATE OF ONSET Month Day Year

DATE DIAGNOSED Month Day Year

DATE OF DEATH Month Day Year

Reporting Health Care Provider

Reporting Health Care Facility

Address

City **State** **ZIP Code**

Telephone Number ( )

Fax ( )

Submitted by

Date Submitted (Month/Day/Year)

REPORT TO

Alameda County Public Health Dept.
Division of CD Control & Prevention
1000 Broadway, Suite 500
Oakland, CA 94607

FAX (CD/STD): (510) 268-2111
FAX (TB): (510) 577-7024
Phone: (510) 267-3250 (bus. hours)
(925) 422-7595 (after hours)

(Obtain additional forms from your local health department.)

SEXUALLY TRANSMITTED DISEASES (STD)

Syphilis

❒ Primary (lesion present)
❒ Secondary
❒ Early latent < 1 year
❒ Latent (unknown duration)
❒ Late latent > 1 year
❒ Late (tertiary)
❒ Congenital
❒ **Neurosyphilis**

Syphilis Test Results

❒ RPR Titer:_____
❒ VDRL Titer:_____
❒ FTA/MHA: ❒ Pos ❒ Neg
❒ CSF-VDRL: ❒ Pos ❒ Neg
❒ Other:_____

Gonorrhea

❒ Urethral/Cervical
❒ PID
❒ Other: _____

Chlamydia

❒ Urethral/Cervical
❒ PID
❒ Other: _____

❒ **PID (Unknown Etiology)**
❒ **Chancroid**
❒ **Non-Gonococcal Urethritis**

STD TREATMENT INFORMATION

❒ **Treated (Drugs, Dosage, Route):**

_____
_____

Date Treatment Initiated Month Day Year

❒ **Untreated**
❒ Will treat
❒ Unable to contact patient
❒ Refused treatment
❒ Referred to:_____

VIRAL HEPATITIS

		Pos	Neg	Pend	Not Done
❒ **Hep A**	anti-HAV IgM	❒	❒	❒	❒
❒ **Hep B**	HBsAg	❒	❒	❒	❒
❒ **Acute**	anti-HBc	❒	❒	❒	❒
❒ **Chronic**	anti-HBc IgM	❒	❒	❒	❒
	anti-HBs	❒	❒	❒	❒
❒ **Hep C**	anti-HCV	❒	❒	❒	❒
❒ **Acute** ❒ **Chronic**	PCR-HCV	❒	❒	❒	❒
❒ **Hep D (Delta)**	anti-Delta	❒	❒	❒	❒
❒ **Other:** _____		❒	❒	❒	❒

Suspected Exposure Type

❒ Blood transfusion ❒ Other needle exposure ❒ Sexual contact ❒ Household contact
❒ Child care ❒ Other: _____

TUBERCULOSIS (TB)

Status

❒ **Active Disease**
- ❒ Confirmed
- ❒ Suspected

❒ **Infected, No Disease**
- ❒ Convertor
- ❒ Reactor

Site(s)

❒ Pulmonary
❒ Extra-Pulmonary
❒ Both

Mantoux TB Skin Test

Date Performed Month Day Year
❒ Pending
Results:_____ mm ❒ Not Done

Chest X-Ray

Date Performed Month Day Year
❒ Normal ❒ Pending ❒ Not done
❒ Cavitary ❒ Abnormal/Noncavitary

Bacteriology

Date Specimen Collected Month Day Year

Source _____
Smear: ❒ Pos ❒ Neg ❒ Pending ❒ Not done
Culture: ❒ Pos ❒ Neg ❒ Pending ❒ Not done

Other test(s) _____

TB TREATMENT INFORMATION

❒ **Current Treatment**
- ❒ INH ❒ RIF ❒ PZA
- ❒ EMB ❒ Other:_____

Date Treatment Initiated Month Day Year

❒ **Untreated**
- ❒ Will treat
- ❒ Unable to contact patient
- ❒ Refused treatment
- ❒ Referred to: _____

REMARKS

PM 110 (9/05) (Edited 10/05)

Title 17, California Code of Regulations (CCR), §2500, §2593, §2641–2643, and §2800–2812
Reportable Diseases and Conditions*

§2500. REPORTING TO THE LOCAL HEALTH AUTHORITY.

- **§2500(b)** It shall be the duty of every health care provider, knowing of or in attendance on a case or suspected case of any of the diseases or conditic listed below, to report to the local health officer for the jurisdiction where the patient resides. Where no health care provider is in attendance, any individ having knowledge of a person who is suspected to be suffering from one of the diseases or conditions listed below may make such a report to the local hea officer for the jurisdiction where the patient resides.
- **§2500(c)** The administrator of each health facility, clinic or other setting where more than one health care provider may know of a case, a suspected ca or an outbreak of disease within the facility shall establish and be responsible for administrative procedures to assure that reports are made to the local hea officer.
- **§2500(a)(14)** "Health care provider" means a physician and surgeon, a veterinarian, a podiatrist, a nurse practitioner, a physician assistant, a registe nurse, a nurse midwife, a school nurse, an infection control practitioner, a medical examiner, a coroner, or a dentist.

URGENCY REPORTING REQUIREMENTS [17 CCR §2500 (h) (i)]

☎ = Report **immediately** by **telephone** (designated by a ◆ in regulations).
† = Report **immediately** by **telephone** when **two or more cases** or suspected cases of foodborne disease from separate households are suspec to have the same source of illness (designated by a ● in regulations).
FAX ✆ ✉ = Report by **FAX, telephone, or mail within one working day of identification** (designated by a + in regulations).
= All other diseases/conditions should be reported by FAX, telephone, or mail within seven calendar days of identification.

REPORTABLE COMMUNICABLE DISEASES §2500(j)(1), §2641–2643

Acquired Immune Deficiency Syndrome (AIDS)
(HIV infection only: see "Human Immunodeficiency Virus")
FAX ✆ ✉ Amebiasis
FAX ✆ ✉ Anisakiasis
☎ Anthrax
FAX ✆ ✉ Babesiosis
☎ Botulism (Infant, Foodborne, Wound)
☎ Brucellosis
FAX ✆ ✉ Campylobacteriosis
Chancroid
Chlamydial Infections
☎ Cholera
☎ Ciguatera Fish Poisoning
Coccidioidomycosis
FAX ✆ ✉ Colorado Tick Fever
FAX ✆ ✉ Conjunctivitis, Acute Infectious of the Newborn, Specify Etiology
FAX ✆ ✉ Cryptosporidiosis
Cysticercosis
☎ Dengue
☎ Diarrhea of the Newborn, Outbreaks
☎ Diphtheria
☎ Domoic Acid Poisoning (Amnesic Shellfish Poisoning)
Echinococcosis (Hydatid Disease)
Ehrlichiosis
FAX ✆ ✉ Encephalitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic
☎ *Escherichia coli* O157:H7 Infection
† FAX ✆ ✉ Foodborne Disease
Giardiasis
Gonococcal Infections
FAX ✆ ✉ *Haemophilus influenzae* Invasive Disease
☎ Hantavirus Infections
☎ Hemolytic Uremic Syndrome
Hepatitis, Viral
FAX ✆ ✉ Hepatitis A
Hepatitis B (specify acute case or chronic)
Hepatitis C (specify acute case or chronic)
Hepatitis D (Delta)
Hepatitis, other, acute
Human Immunodeficiency Virus (HIV) (§2641–2643): reporting is NON-NAME (see www.dhs.ca.gov/aids)
Kawasaki Syndrome (Mucocutaneous Lymph Node Syndrome)
Legionellosis
Leprosy (Hansen Disease)
Leptospirosis
FAX ✆ ✉ Listeriosis
Lyme Disease
FAX ✆ ✉ Lymphocytic Choriomeningitis
FAX ✆ ✉ Malaria
FAX ✆ ✉ Measles (Rubeola)
FAX ✆ ✉ Meningitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic
☎ Meningococcal Infections
Mumps
Non-Gonococcal Urethritis (Excluding Laboratory Confirmed Chlamydial Infections)
☎ Paralytic Shellfish Poisoning
Pelvic Inflammatory Disease (PID)
FAX ✆ ✉ Pertussis (Whooping Cough)
☎ Plague, Human or Animal
FAX ✆ ✉ Poliomyelitis, Paralytic
FAX ✆ ✉ Psittacosis
FAX ✆ ✉ Q Fever
☎ Rabies, Human or Animal
FAX ✆ ✉ Relapsing Fever
Reye Syndrome
Rheumatic Fever, Acute
Rocky Mountain Spotted Fever
Rubella (German Measles)
Rubella Syndrome, Congenital
FAX ✆ ✉ Salmonellosis (Other than Typhoid Fever)
☎ Scombroid Fish Poisoning
☎ Severe Acute Respiratory Syndrome (SARS)
FAX ✆ ✉ Shigellosis
☎ Smallpox (Variola)
FAX ✆ ✉ Streptococcal Infections (Outbreaks of Any Type and Individual Cases in Food Handlers and Dairy Workers Only)
FAX ✆ ✉ Swimmer's Itch (Schistosomal Dermatitis)
FAX ✆ ✉ Syphilis
Tetanus
Toxic Shock Syndrome
Toxoplasmosis
FAX ✆ ✉ Trichinosis
FAX ✆ ✉ Tuberculosis
☎ Tularemia
FAX ✆ ✉ Typhoid Fever, Cases and Carriers
Typhus Fever
☎ Varicella (deaths only)
FAX ✆ ✉ *Vibrio* Infections
☎ Viral Hemorrhagic Fevers (e.g., Crimean-Congo, Ebola, Lassa and Marburg viruses)
FAX ✆ ✉ Water-associated Disease
FAX ✆ ✉ West Nile Virus (WNV) Infection
☎ Yellow Fever
FAX ✆ ✉ Yersiniosis
☎ **OCCURRENCE of ANY UNUSUAL DISEASE**
☎ **OUTBREAKS of ANY DISEASE** (Including diseases not listed in §2500). Specify if institutional and/or open community.

REPORTABLE NONCOMMUNICABLE DISEASES AND CONDITIONS §2800–2812 and §2593(b)

Disorders Characterized by Lapses of Consciousness
Cancer (except (1) basal and squamous skin cancer unless occurring on genitalia, and (2) carcinoma in-situ and CIN III of the cervix)
Pesticide-related illness or injury (known or suspected cases)**

LOCALLY REPORTABLE DISEASES (If Applicable):

* This form is designed for health care providers to report those diseases mandated by Title 17, California Code of Regulations (CCR). Failure to report is a misdemeanor (Health a Safety Code §120295) and is a citable offense under the Medical Board of California's Citation and Fine Program (Title 16, CCR, §1364.10 and 1364.11).
** Failure to report is a citable offense and subject to civil penalty ($250) (Health and Safety Code §105200).

PM 110 (9/05) (Edited 10/05)

References

1. Weinstock H, et al. Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health 2004*,36(1):6-10.

2. Centers for Disease Control and Prevention, Division of STD Prevention. *Trends in Reportable Sexually Transmitted Diseases in the United States, 2005: National Surveillance Data for Chlamydia, Gonorrhea, and Syphilis.* December, 2006.

3. Heymann D.L., Ed. *Control of Communicable Diseases Manual*. 18th Edition. APHA, Washington, DC, 2004.

4. California Department of Health Services, STD Control Branch. [http://www.dhs.ca.gov/ps/dcdc/STD/docs/State%20Profile%202005.pdf]. (Accessed March, 2007).

5. Michael Samuel, Chief of Surveillance and Epidemiology, STD Control Branch, California Department of Health Services, personal communication, April, 2007.

6. Chlamydia Currents: Juvenile Justice Report. Vol 1, No 1, September, 2004.

7. Centers for Disease Control and Prevention. Increases in Gonorrhea—Eight Western States, 2000-2005. MMWR 2007; 56:222-225.

8. Centers for Disease Control and Prevention. Update to CDC's Sexually Transmitted Diseases Treatment Guidelines, 2006: Fluoroquinolones No Longer Recommended for Treatment of Gonococcal Infections. MMWR, Vol. 56, No. 14, April 13, 2007, pp 332-336.

9. State of California, Department of Finance. [http://www.dof.ca.gov/Research/Research.asp]. Accessed February, 2007).

10. Last J.M. *A Dictionary of Epidemiology*. Third Edition. New York. Oxford University Press. 1995.

11. National Center for Health Statistics. Technical Appendix from Vital Statistics of United States, 1995. Mortality. Hyattsville, MD. April 1999.

12. McCandless RR, Oliva G. Guidelines for Statistical Analysis of Public Health Data with Attention to Small Numbers: A Collaborative Effort of the Family Health Outcomes Project Technical Advisory Group. San Francisco, Calif. March 2002.

13. Kahn, HA, Sempos, CT. *Statistical Methods in Epidemiology*. New York. Oxford University Press. 1989.

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