

SEXUALLY TRANSMITTED DISEASES

Overview

Sexually transmitted diseases (STDs) have serious health effects and can lead to impaired fertility and adverse pregnancy outcomes such as low birthweight and prematurity. Women and children suffer disproportionately from STDs and their complications. STDs also disproportionately affect poor people, youth, and racial/ethnic minorities, compared to the population as a whole. STDs and HIV infection are linked by common underlying risk behaviors. The presence of STDs has been shown to biologically increase the transmission and acquisition of HIV infections.¹

Nationally, two-thirds of STD cases occur among young people under age 25 (excluding HIV infection).² Compared to older adults, adolescents (ages 10 to 19) and young adults (ages 20 to 24) are at higher risk for acquiring STDs for a number of reasons: they may be more likely to have multiple sexual partners rather than a single, long-term relationship, they may be more likely to engage in unprotected intercourse, and they are more likely to experiment with alcohol and drugs resulting in an increase in risk-taking behaviors including unsafe sex. In addition, there are biological reasons why young women are more susceptible to STDs than older women. Furthermore, the higher prevalence of STDs among adolescents reflects multiple barriers to STD prevention services, including lack of insurance or other ability to pay, lack of transportation, discomfort with services designed for adults, and concerns about confidentiality.³

This section of the report will focus on three of the most commonly reported STDs including chlamydia, gonorrhea, and early syphilis. For each of these STDs, the overall rates by age group will be covered followed by rates by gender, race/ethnicity, and zip code for each STD. Refer to the “HIV/AIDS” and “Sexual Behavior” sections of this report which includes information closely related to information about STDs covered in this section.

Data Source

Data for this section was obtained from the San Francisco Department of Public Health, STD Prevention and Control Program. California State law requires reporting of STDs to the local health department by all health care providers, including private physicians, hospitals, and clinics, and laboratories which perform STD testing.⁴ In practice, many STD diagnoses go unreported. Furthermore, many people with STDs are never diagnosed, because they do not have access to health care, do not recognize their symptoms as an STD, or do not develop symptoms at all. For these reasons, reported totals should be considered minimal estimates of the true number of STDs in the

¹ U.S. Department of Health and Human Services, Public Health Service, Healthy People 2000 Midcourse Review and 1995 Revisions

² U.S. Department of Health and Human Services, Public Health Service, Healthy People 2000 Midcourse Review and 1995 Revisions

³ U.S. Department of Health and Human Services, Public Health Service, Division of STD Prevention, Sexually Transmitted Disease Surveillance, 1996. Atlanta: Centers for Disease Control and Prevention, September 1997.

⁴ Providers and labs are required to report the patient's name, address, and demographic information (gender, age, and race/ethnicity). In 1996, the list of reportable STDs included syphilis of any stage, gonorrhea, chlamydia, chancroid, pelvic inflammatory disease (PID), and non-gonococcal urethritis (NGU).

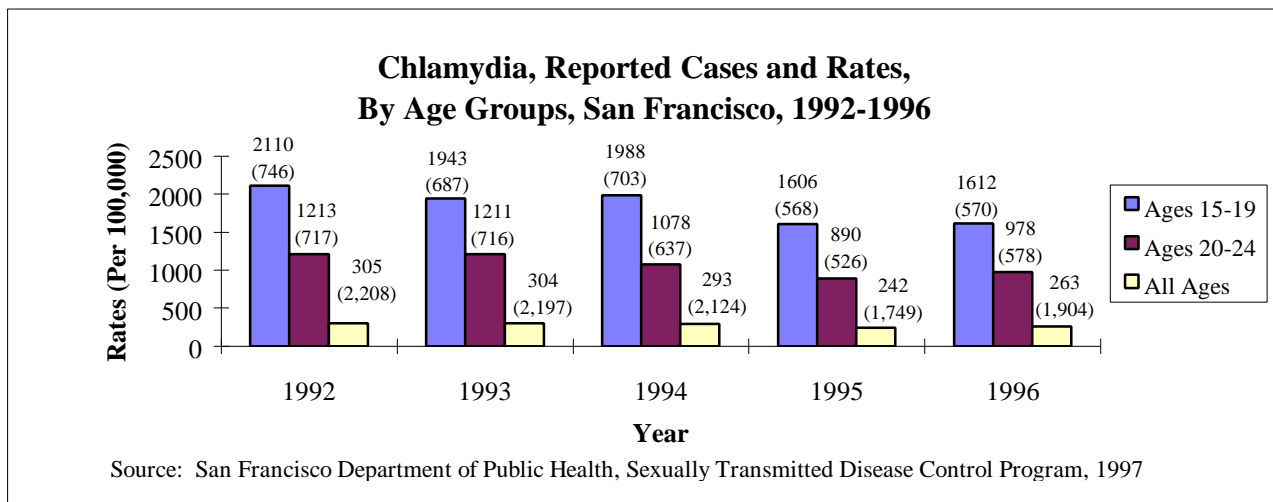
community.⁵ Also note that the number of reported cases may not equal the number of people with STD, since one person may account for more than one case during the reporting period.

STDs in San Francisco

STD rates are highly correlated with age. Youth ages 15 to 19 have the highest rates of both chlamydia and gonorrhea, two of the most commonly occurring STDs, compared to all other age groups.

Chlamydia. Chlamydia is the most commonly reported STD in San Francisco and the U.S. Untreated chlamydia can cause pelvic inflammatory disease (PID) in women of childbearing age which can result in ectopic pregnancy or infertility. Untreated chlamydia also increases the risk of HIV transmission and acquisition. In addition, because chlamydia frequently occurs without symptoms, women are less likely to seek care, increasing the likelihood of adverse health outcomes due to lack of treatment.

In 1996, there were 570 cases of chlamydia among 15 to 19 year olds in San Francisco, a rate of 1,612 per 100,000 per year, and 578 cases among 20 to 24 year olds, a rate of 978 per 100,000 per year. In 1996, the rate among 15 to 19 year olds was over six times the rate for all age groups, while the rate among 20 to 24 year olds was 3.7 times the rate for all age groups. Chlamydia cases among 15 through 24 year olds represented over 60% of all cases in the City from 1992 to 1996.



From 1992 to 1996, chlamydia rates declined by about 20% for 15 to 19 year olds, compared to a 14% citywide decline. Chlamydia rates for San Francisco as a whole are much higher than the rates for the U.S. and for California (1995). Chlamydia rates among both 15 to 19 year olds and 20 to 24 year olds increased slightly in 1996 compared to 1995. This increase coincided with and may be a result of implementation of a more sensitive urine-based test that allows for expanding screening to asymptomatic males and females.

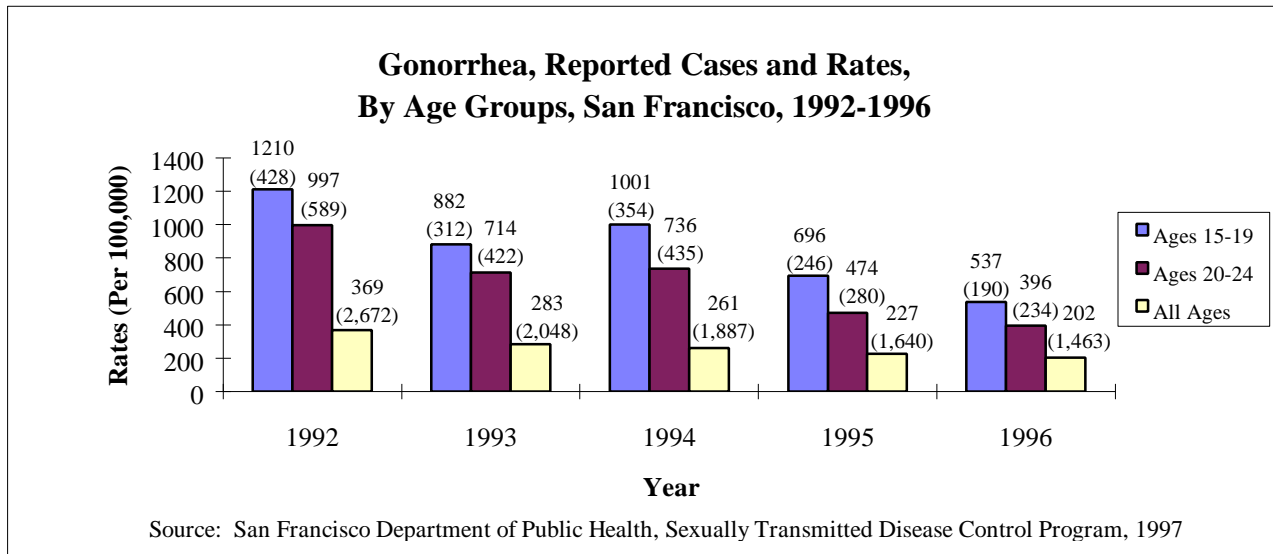
Gonorrhea. Gonorrhea is the second most frequently reported communicable disease in San Francisco and the U.S., and its incidence is used as the key indicator of progress in reducing STDs. San Francisco's overall gonorrhea rates are higher than California (1995) and U.S. (1994) rates. Like chlamydia, untreated gonorrhea can result in infertility in women and increased transmission and

⁵ STD rates in this report are equal to the number of STD cases within the specified population per 100,000 San Francisco residents in that population per year. Population figures for rates are from the 1990 U.S. Census.

acquisition of HIV in both men and women. However, symptoms of gonorrhea are usually more apparent than chlamydia, which increases the likelihood of treatment and prevention of adverse health outcomes.

In 1996, there were 190 cases of gonorrhea among 15 to 19 year olds in San Francisco (537 per 100,000), and 234 cases among 20 to 24 year olds (396 per 100,000). The gonorrhea rate among 15 to 19 year olds was close to three times the rate for all age groups (202 per 100,000), while the rate among 20 to 24 year olds was almost twice the rate for all age groups. From 1992 to 1996, gonorrhea cases among 15 to 19 and 20 to 24 year olds represented 16% and 20%, respectively, of all gonorrhea cases in the City.

Gonorrhea rates in all age groups are declining citywide. This parallels decreases seen in these other urban areas and for the U.S. as a whole.⁶ In 1996, 15 to 19 year olds experienced the greatest decrease in gonorrhea compared of all the age groups. For the second consecutive year, cases in this age group decreased at least 20%. However, the rate still greatly exceeds the Healthy People 2000 objective of 375 per 100,000 for adolescents.⁷ San Francisco has made progress toward but has yet to achieve the Healthy People 2000 goal of 100 cases per 100,000.



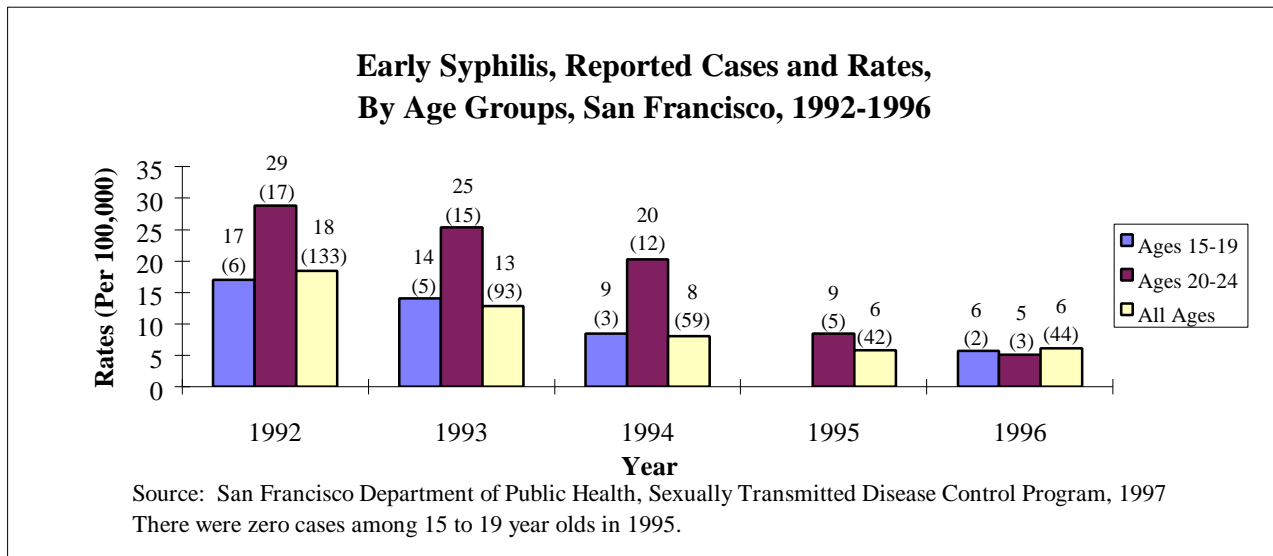
Early Syphilis. Early syphilis refers to cases of syphilis of less than one year’s duration that are possibly still infectious. Early syphilis is a serious health concern for two major reasons, including increased risk of HIV transmission due to syphilis and the possibility that the infection can be passed on from a pregnant women to her fetus, causing congenital syphilis in the infant, stillbirths, and other serious congenital problems.

⁶ San Francisco Department of Public Health, Division of Sexually Transmitted Disease Control, San Francisco Sexually Transmitted Disease Annual Summary, 1995, October 1996

⁷ This is the only Healthy People 2000 objective pertaining specifically to STDs among adolescents (19.1a). Additional Healthy People 2000 objectives for STDs refer to the population as a whole, or other target populations.

In 1996, there were 5 cases of early syphilis among adolescents and young adults ages 15 to 24 in San Francisco, or 11% of the City's total of 44 reported cases.⁸ The rate of early syphilis for 15 to 24 year olds was similar to the rate for all ages (6 per 100,000 persons per year). Early syphilis generally peaks among 30 to 34 year olds.

From 1992 to 1996, the occurrence of early syphilis declined by at least two-thirds for all age groups. Early syphilis rates for San Francisco as a whole are higher than statewide rates (1994) but lower than the U.S. rate (1995). Decreases seen in San Francisco have been much greater than those seen in other urban areas such as Los Angeles and New York City.⁹



By Gender. Rates for chlamydia, gonorrhea, and early syphilis are higher for female adolescents than for male adolescents, with the greatest gender differences seen in chlamydia rates. In contrast, rates for gonorrhea and syphilis in adults are higher among men, although chlamydia rates in adults are also higher among women.¹⁰ Part of the differences in incidence rates by gender may be due to screening efforts, which have traditionally focused on detecting infections among young women, especially for chlamydia, because of adverse reproductive outcomes of untreated infection (such as pelvic inflammatory disease) and also because there has been no convenient test to screen asymptomatic men for chlamydia.¹¹

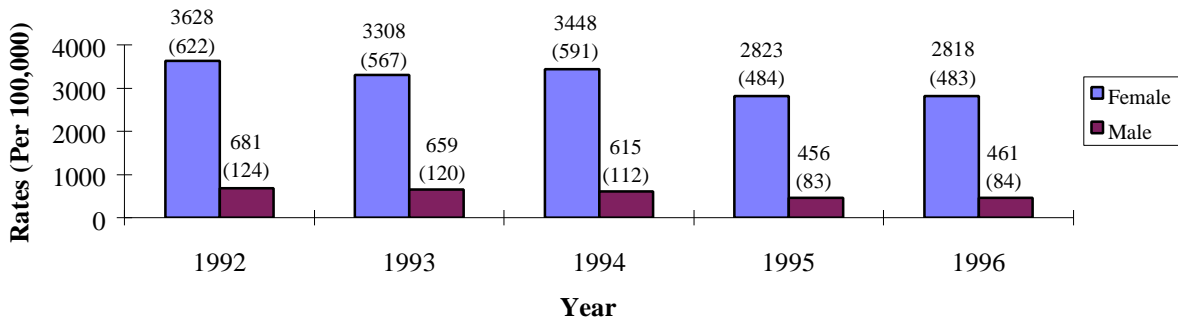
⁸ Syphilis in other stages such as late latent, latent of unknown duration, tertiary, neurosyphilis, and congenital syphilis are also required to be reported to local health authorities.

⁹ San Francisco Department of Public Health, Division of Sexually Transmitted Disease Control, San Francisco Sexually Transmitted Disease Annual Summary, 1995, October 1996

¹⁰ Healthy People 2000 Objective: Reduce gonorrhea rates for women ages 15 to 44 to 175 cases per 100,000 women. In 1995, San Francisco's rate (263) exceeded this objective.

¹¹ San Francisco Department of Public Health, Division of Sexually Transmitted Disease Control, San Francisco Sexually Transmitted Disease Annual Summary, 1995, October 1996

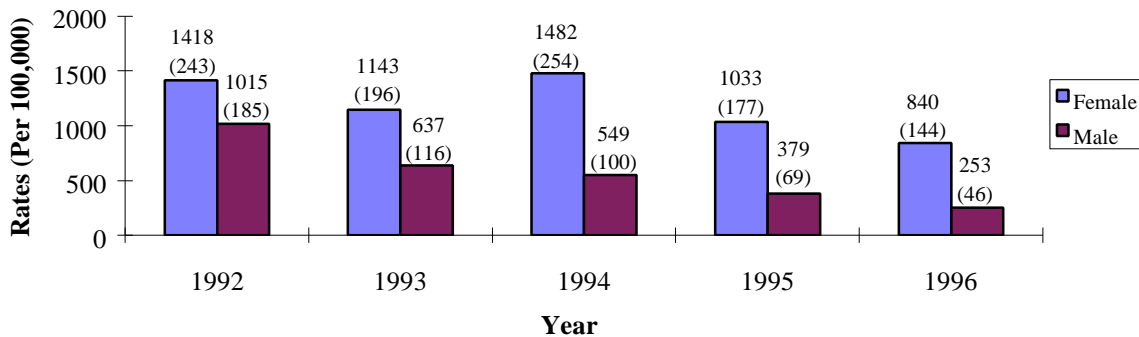
**Chlamydia, Reported Cases and Rates,
Ages 15 to 19, By Gender, San Francisco, 1992-1996**



Source: San Francisco Department of Public Health, Sexually Transmitted Disease Control Program, 1997

From 1992 through 1996, females represented two-thirds of all gonorrhea cases (1,014 of 1,530) and over 80% of chlamydia cases (2,747 of 3,274) among 15 to 19 years olds. In 1996, the gonorrhea rate

**Gonorrhea, Reported Cases and Rates,
Ages 15 to 19, By Gender, San Francisco, 1992-1996**



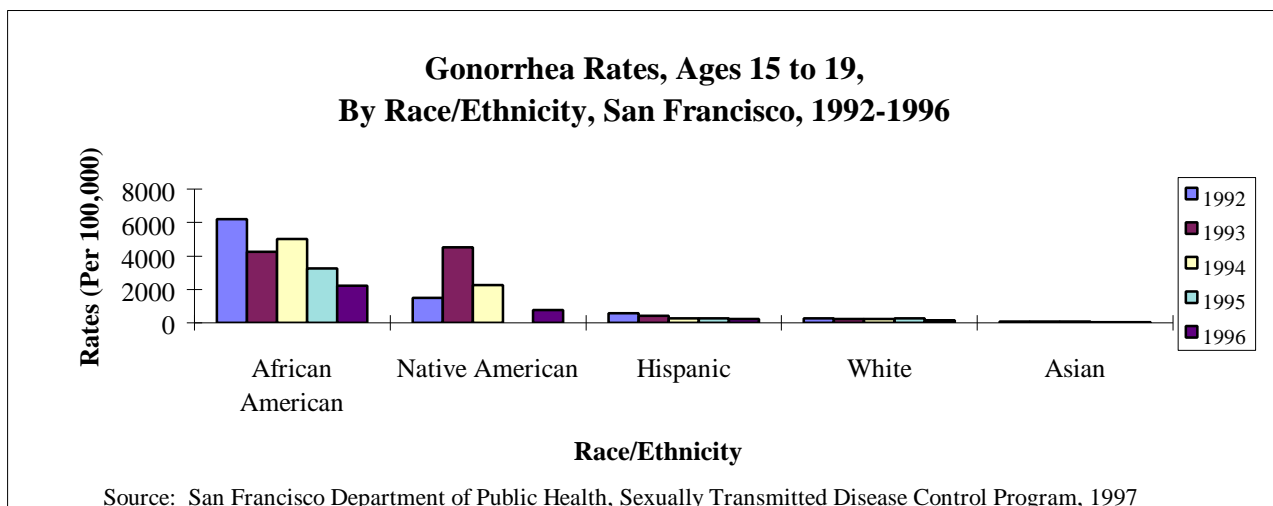
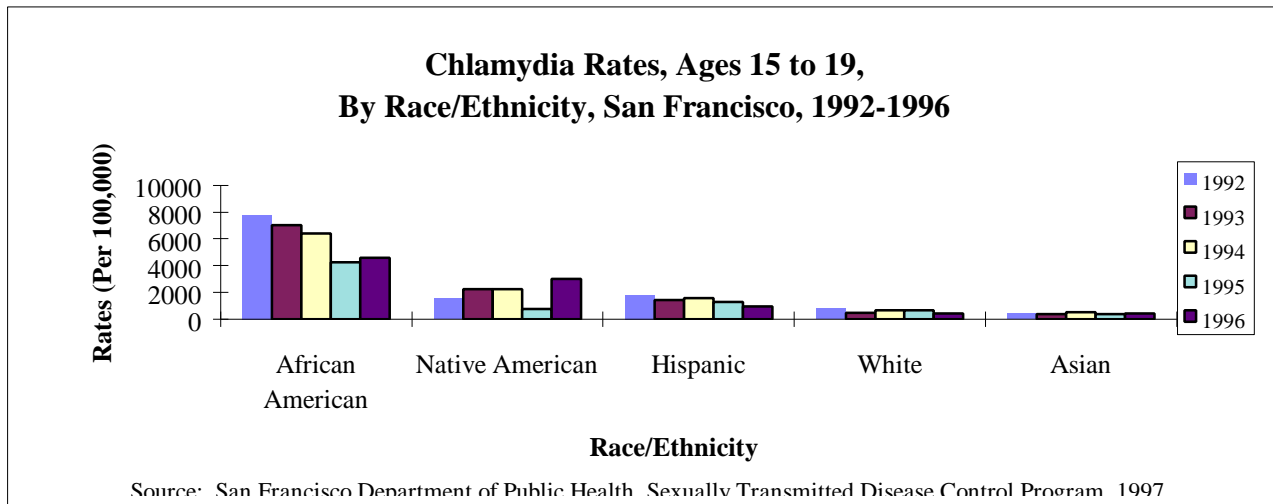
Source: San Francisco Department of Public Health, Sexually Transmitted Disease Control Program, 1997

for female adolescents was over three times the gonorrhea rate for male adolescents, and the chlamydia rate for female adolescents was over six times the chlamydia rate of male adolescents. Gonorrhea in adolescents has decreased since 1992, although by a greater proportion for males (75%) than females (41%). The rate of chlamydia also decreased in adolescents since 1992, by 32% for males and 22% for females.

With only a few recent cases of early syphilis among adolescents, analysis of early syphilis gender trends is difficult. The number of cases declined from 6 in 1992 to 5 (1993), 3 (1994), none (1998), and 2 in 1996.

By Race/Ethnicity. Chlamydia and gonorrhea rates for San Francisco adolescents ages 15 to 19 of all race/ethnic groups have generally declined since 1992. African Americans had the highest rate of chlamydia and gonorrhea, followed by Native Americans, Hispanics, Whites, and Asian/Pacific

Islanders. This relative order is the same for adult cases.¹² From 1992 through 1996, African Americans accounted for 47% of all adolescent chlamydia cases (2,747 of 3,274) and 70% of all adolescent gonorrhea cases (1,066 of 1,530). While the rate for African Americans has declined since 1992 for both chlamydia and gonorrhea, African American adolescents still have a gonorrhea rate over four times the average gonorrhea rate for all San Francisco adolescents and three times the average chlamydia rate for all San Francisco adolescents.



With only few cases of early syphilis among adolescents (16 total cases including 6 African American, 5 Hispanic, 4 White, and 1 Native American), analysis of race trends is difficult because of large swings in race-specific incidence rates.

By Geographic Area. From 1992 to 1996, 80% of gonorrhea and 74% of chlamydia cases among youth ages 15 to 19 in San Francisco were among residents of ten zip codes in the City. The Bayview

¹² With the exception that chlamydia rates for Asian adults are higher than rates for whites.

**SEXUALLY TRANSMITTED DISEASES,
REPORTED CASES,
AGES 15–19, BY ZIP CODE,
SAN FRANCISCO, 1992-1996**

		Total Reported Cases, 1992-1996					
<u>Zip Code</u>	<u>Area/Neighborhood</u>	Gonorrhea		Chlamydia		Early Syphilis	
		#	%	#	%	#	%
94124	Bayview Hunters Point	400	26%	616	19%	2	13%
94110	Inner Mission/Bernal Hts	160	10%	324	10%	3	19%
94134	Visitation Valley/Sunnydale	128	8%	378	12%	3	19%
94112	Ingle/Exels'r/Crocker-Amazon	111	7%	207	6%	0	0%
94115	Western Addition/Japantown	97	6%	321	10%	0	0%
94102	Tenderl'n/Hayes Val'y/N. of Mkt	89	6%	150	5%	0	0%
94117	Haight-Ashbury	80	5%	127	4%	1	6%
94107	Potrero Hill	78	5%	112	3%	1	6%
94103	South of Market	44	3%	99	3%	0	0%
94132	Lake Merced	35	2%	81	2%	0	0%
Other	All Other Areas/Neighborhoods	308	20%	859	26%	6	38%
	Total	1,530	100%	3,274	100%	16	100%

Hunters Point neighborhood (zip code 94124) had the highest number of both gonorrhea and chlamydia cases among adolescents, with Visitation Valley/Sunnydale (94134) and Inner Mission/Bernal Heights (94110) either second or third highest for gonorrhea and chlamydia.¹³ The geographic distribution of STD cases among adolescents is similar to the geographic distribution of adult cases.

¹³ Data on rates by zip codes is not available because of the small population size per zip code area.