

SPECIAL FOCUS PROFILE

Special Focus Profiles

The **Special Focus Profiles** highlight trends and distribution of sexually transmitted diseases (STDs) in populations of particular interest for STD and HIV prevention programs in state and local health departments. These populations are most vulnerable to STDs and their consequences: women and infants, adolescents and young adults, minorities, men who have sex with men (MSM), and persons entering corrections facilities. The **Special Focus Profiles** refer to figures located in disease-specific sections in the **National Profile** and additional figures and tables (Figures A-GG and Tables AA-FF) that highlight specific points made in the text.

STDs in Women and Infants

Public Health Impact

Women and infants disproportionately bear the long term consequences of STDs. Women infected with *Neisseria gonorrhoeae* or *Chlamydia trachomatis* can develop pelvic inflammatory disease (PID), which, in turn, may lead to reproductive system morbidity such as ectopic pregnancy and tubal factor infertility. If not adequately treated, 20% to 40% of women infected with chlamydia¹ and 10% to 40% of women infected with gonorrhea² may develop PID. Among women with PID, tubal scarring will cause involuntary infertility in 20%, ectopic pregnancy in 9%, and chronic pelvic pain in 18%.³ Approximately 70% of chlamydia infections and 50% of gonococcal infections in women are asymptomatic.⁴⁻⁶ These infections are detected primarily through screening programs. The vague symptoms associated with chlamydial and gonococcal PID cause 85% of women to delay seeking medical care, thereby increasing the risk of infertility and ectopic pregnancy.⁷ Data from a randomized controlled trial of chlamydia screening in a managed care setting suggest that such screening programs can reduce the incidence of PID by as much as 60%.⁸

Gonorrhea and chlamydia can also result in adverse outcomes of pregnancy, including neonatal ophthalmia and, in the case of chlamydia, neonatal pneumonia. Although topical prophylaxis of infants at delivery is effective for prevention of ophthalmia neonatorum, prevention of neonatal pneumonia requires prenatal detection and treatment.

Human papillomavirus (HPV) infections are highly prevalent, especially among young sexually active women. While the great majority of HPV infections in women resolve within one year, they are a major concern because persistent infection with specific types (e.g., types 16, 18, 31, 33, 35, and 45), are causally related to cervical cancer; these types also cause Pap smear abnormalities. Other types (e.g., types 6 and 11) cause genital warts, low grade Pap smear abnormalities and, rarely, recurrent respiratory papillomatosis in infants born to infected mothers.⁹

Genital infections with herpes simplex virus are extremely common, may cause painful outbreaks, and may have serious consequences for pregnant women including potentially fatal neonatal infections.¹⁰

When a woman has a syphilis infection during pregnancy, she may transmit the infection to the fetus in utero. This may result in fetal death or an infant born with physical and mental developmental disabilities. Most cases of congenital syphilis are easily preventable if women are screened for syphilis and treated early during prenatal care.¹¹

Observations

Chlamydia and Gonorrhea

- Between 2003 and 2004, the rate of chlamydia infections in women increased from 463.6 to 485.0 per 100,000 females (Figure 5, Table 4). Chlamydia rates exceed gonorrhea rates among women in all states (Figures A and B, Tables 4 and 14).
- In 2004, the median state-specific chlamydia test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 25 states, Puerto Rico, and the Virgin Islands was 6.8% (range 3.1% to 17.6%) (Figure E).
- In 2004, the median state-specific chlamydia test positivity among 15- to 24-year-old women who were screened during visits to selected family planning clinics in all states and outlying areas was 6.3% (range 3.2% to 16.3%) (Figure 7).
- Gonorrhea rates among women were higher than the overall HP 2010 target of 19.0 cases per 100,000 population¹² in 44 states and two outlying areas in 2004 (Figure B, Table 14).
- Like chlamydia, gonorrhea is often asymptomatic in women and can only be identified through screening. Large-scale screening programs for gonorrhea in women began in the 1970s. After an initial increase in cases detected through screening, gonorrhea rates for both women and men declined steadily throughout the 1980s and early 1990s (Figure 14 and Tables 14-15). The gonorrhea rate for women in 2004 (116.5 per 100,000 females) showed a slight decline since 2000. Although the gonorrhea rate in men has been historically higher than the rate in women, the gonorrhea rate among women has been higher than the rate among men for four consecutive years (Figure 14 and Tables 14-15).
- In 2004, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 19 states, Puerto Rico, and the Virgin Islands was 0.9% (range 0% to 3.5%) (Figure F).
- In 2004, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected family planning clinics in 38 states, Puerto Rico, the District of Columbia, and the Virgin Islands was 1% (range 0.1%-4.2%).

Primary and Secondary Syphilis

- The HP2010 target for primary and secondary (P&S) syphilis is 0.2 case per 100,000 population. In 2004, 31 states, the District of Columbia, and two outlying areas had rates of P&S syphilis for women that were greater than 0.2 case per 100,000 population (Tables 27 and 31).

Congenital Syphilis

- The HP2010 target for congenital syphilis is 1.0 case per 100,000 live births. In 2004, 31 states and Puerto Rico had rates higher than this target (Figure 37, Tables 40-42).
- The number of congenital syphilis cases closely follows the trend of P&S syphilis among women (Figure 36). Peaks in congenital syphilis usually occur one year

after peaks in P&S syphilis among women. The congenital syphilis rate peaked in 1991 at 107.3 cases per 100,000 live births, and declined by 92% to 8.8 cases per 100,000 live births in 2004 (Figure 36, Table 39). The rate of P&S syphilis among women declined 95.4% (from 17.3 to 0.8 cases per 100,000 females) during 1990-2004 (Figure 30).

- The 2004 rate of congenital syphilis for the United States is currently 9 times higher than the HP2010 target of 1.0 case per 100,000 live births. This target is many times greater than the rate of congenital syphilis of most industrialized countries where syphilis and congenital syphilis have nearly been eliminated.
- While most cases of congenital syphilis occur among infants whose mothers have had some prenatal care, late or limited prenatal care has been associated with congenital syphilis. Failure of health care providers to adhere to maternal syphilis screening recommendations also contributes to the occurrence of congenital syphilis.¹³

Pelvic Inflammatory Disease

- Accurate estimates of pelvic inflammatory disease (PID) and tubal factor infertility resulting from gonococcal and chlamydia infections are difficult to obtain. Definitive diagnosis of these conditions can be complex.
- Hospitalizations for PID have declined steadily throughout the 1980s and early 1990s, but have remained relatively constant between 1995 and 2003 (Figure H). A greater proportion of women diagnosed with PID in the 1990s have been treated in outpatient instead of inpatient settings when compared to women diagnosed with PID in the 1980s.¹⁴
- The reported number of initial visits to physicians' offices for PID through the National Disease and Therapeutic Index (NDTI) has generally declined from 1993 through 2004 (Figure I and Table 47).
- In 2002, an estimated 189,662 cases of PID were diagnosed in emergency departments among women 15 to 44 years of age. In 2003 this estimate decreased to 168,837 (National Hospital Ambulatory Medical Care Survey, NCHS). As of the date of publication of this report, 2004 data are not available.

Ectopic Pregnancy

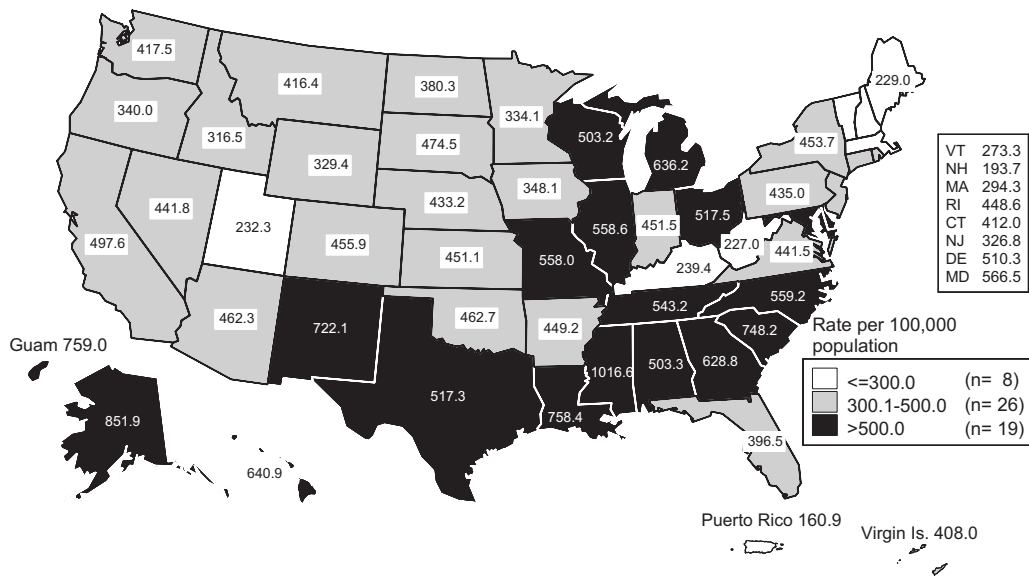
- Evidence suggests that health care practices associated with ectopic pregnancy changed in the late 1980s and early 1990s. Before that time, treatment of ectopic pregnancy usually required admission to a hospital. Hospitalization statistics were therefore useful for monitoring trends in ectopic pregnancy. Beginning in 1989, hospitalizations for ectopic pregnancy have generally declined over time (Figure G). Data suggest that nearly half of all ectopic pregnancies are treated on an outpatient basis.¹⁵

¹ Stamm WE, Guinan ME, Johnson C. Effect of treatment regimens for *Neisseria gonorrhoeae* on simultaneous infections with *Chlamydia trachomatis*. *N Engl J Med* 1984;310:545-9.

² Platt R, Rice PA, McCormack WM. Risk of acquiring gonorrhea and prevalence of abnormal adnexal findings among women recently exposed to gonorrhea. *JAMA* 1983;250:3205-9.

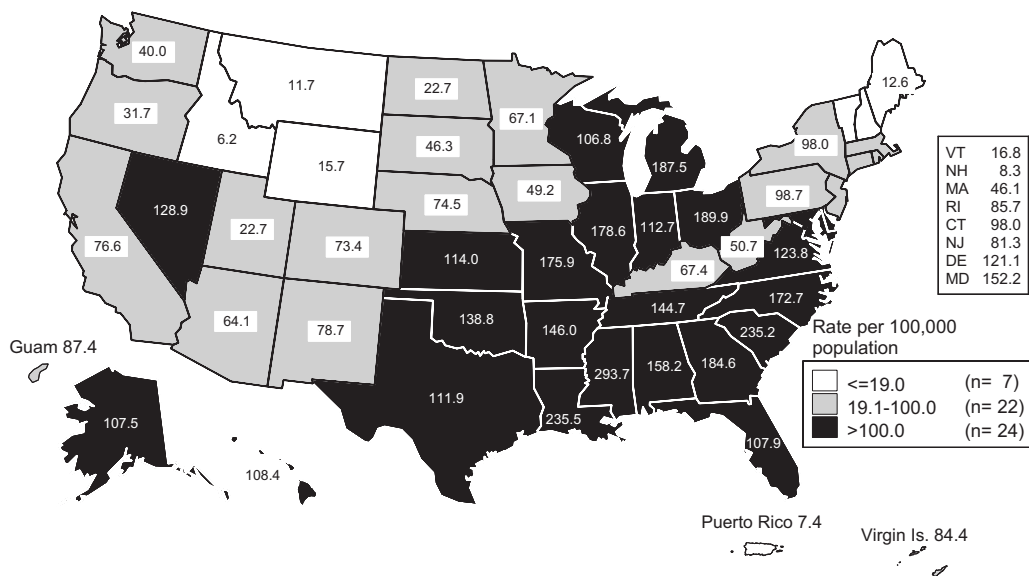
- ³ Westrom L, Joesoef R, Reynolds G, et al. Pelvic inflammatory disease and fertility: a cohort study of 1,844 women with laparoscopically verified disease and 657 control women with normal laparoscopy. *Sexually Transmitted Diseases* 1992;9:185-92.
- ⁴ Hook EW III, Handsfield HH. Gonococcal infections in the adult. In: Holmes KK, Mardh PA, Sparling PF, et al, eds. *Sexually Transmitted Diseases*, 2nd edition. New York City: McGraw-Hill, Inc, 1990:149-65.
- ⁵ Stamm WE, Holmes KK. *Chlamydia trachomatis* infections in the adult. In: Holmes KK, Mardh PA, Sparling PF, et al, eds. *Sexually Transmitted Diseases*, 2nd edition. New York City: McGraw-Hill, Inc, 1990:181-93.
- ⁶ Zimmerman HL, Potterat JJ, Dukes RL, et al. Epidemiologic differences between chlamydia and gonorrhea. *Am J Public Health* 1990;80:1338-42.
- ⁷ Hillis SD, Joesoef R, Marchbanks PA, et al. Delayed care of pelvic inflammatory disease as a risk factor for impaired fertility. *Am J Obstet Gynecol* 1993;168:1503-9.
- ⁸ Scholes D, Stergachis A, Heidrich FE, Andrilla H, Holmes KK, Stamm WE. Prevention of pelvic inflammatory disease by screening for cervical chlamydial infection. *N Engl J Med* 1996;34(21):1362-6.
- ⁹ Division of STD Prevention. *Prevention of Genital HPV Infection and Sequelae: Report of an External Consultants' Meeting*. National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, December 1999.
- ¹⁰ Handsfield HH, Stone KM, Wasserheit JN. Prevention agenda for genital herpes. *Sexually Transmitted Diseases* 1999;26:228-231.
- ¹¹ Centers for Disease Control. Guidelines for prevention and control of congenital syphilis. *MMWR* 1988;37(No.S-1).
- ¹² U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
- ¹³ Centers for Disease Control and Prevention. Congenital syphilis – United States, 2002. *MMWR* 2004;53:716-9.
- ¹⁴ Rolfs RT, Galaid EI, Zaidi AA. Pelvic inflammatory disease: trends in hospitalization and office visits, 1979 through 1988. *Am J Obstet Gynecol* 1992;166:983-90.
- ¹⁵ Centers for Disease Control and Prevention. Ectopic pregnancy in the United States, 1990-1992. *MMWR* 1995;44:46-8.

Figure A. Chlamydia — Rates among women by state: United States and outlying areas, 2004



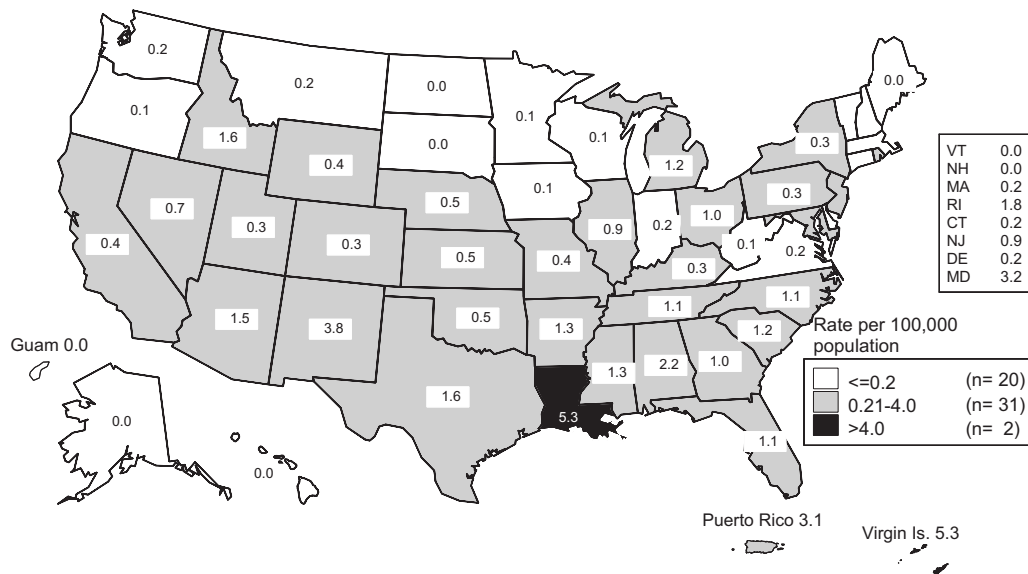
Note: The total chlamydia infection rate among women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 480.7 per 100,000 female population.

Figure B. Gonorrhea — Rates among women by state: United States and outlying areas, 2004



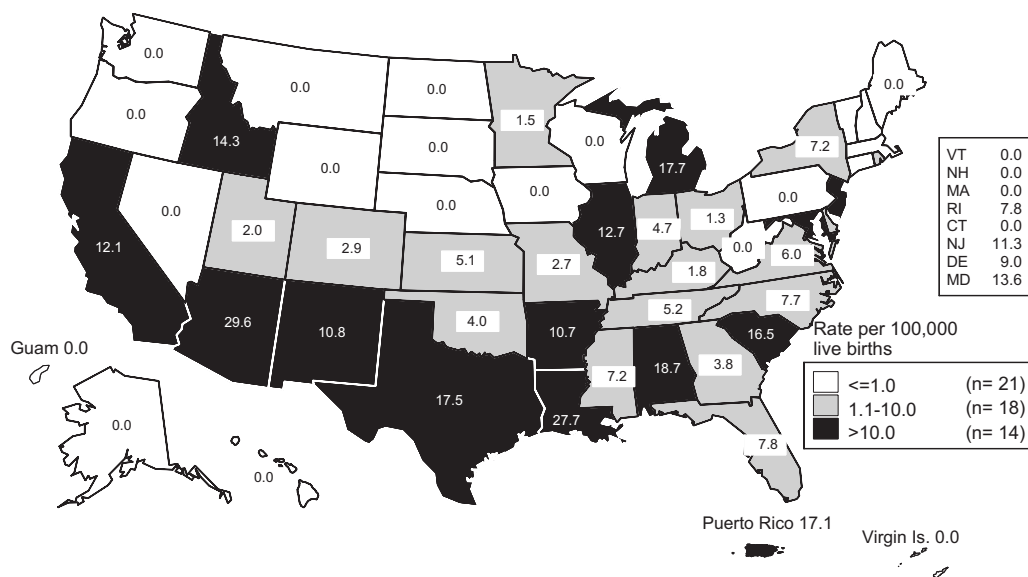
Note: The total gonorrhea infection rate among women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 115.0 per 100,000 female population.

Figure C. Primary and secondary syphilis — Rates for women by state: United States and outlying areas, 2004



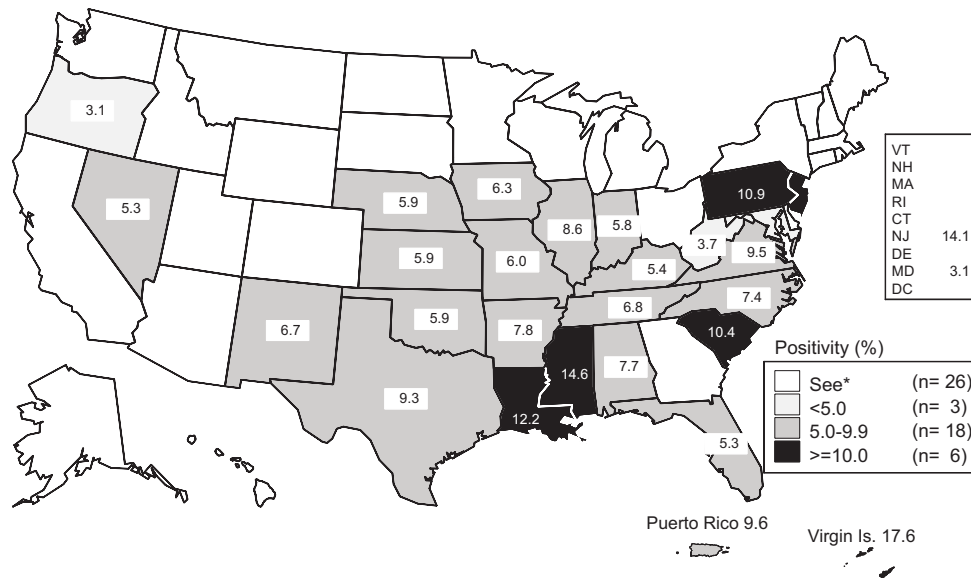
Note: The total rate of P&S syphilis among women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 0.9 per 100,000 female population.

Figure D. Congenital syphilis — Rates for infants < 1 year of age by state: United States and outlying areas, 2004



Note: The total rate of congenital syphilis for infants < 1 year of age for the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 8.9 per 100,000 live births. The Healthy People 2010 target is 1.0 case per 100,000 live births.

Figure E. Chlamydia — Positivity in 15- to 24-year-old women tested in prenatal clinics by state: United States and outlying areas, 2004

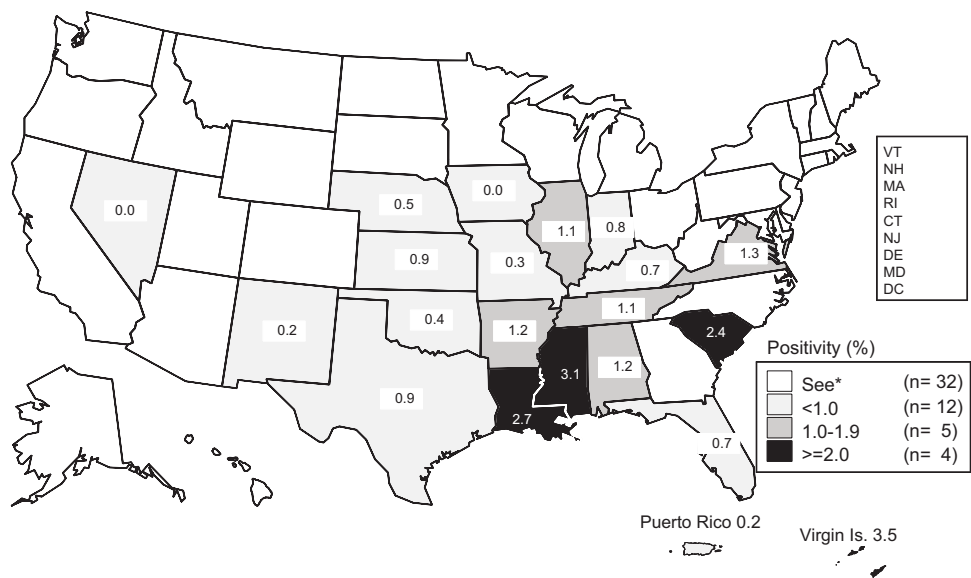


*States not reporting chlamydia positivity data in prenatal clinics.

Note: Includes states and outlying areas that reported chlamydia positivity data on at least 100 women aged 15-24 years during 2004 (except for Pennsylvania which submitted data for January-September 2004 only).

SOURCE: Regional Infertility Prevention Projects; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention

Figure F. Gonorrhea — Positivity among 15- to 24-year-old women tested in prenatal clinics by state: United States and outlying areas, 2004

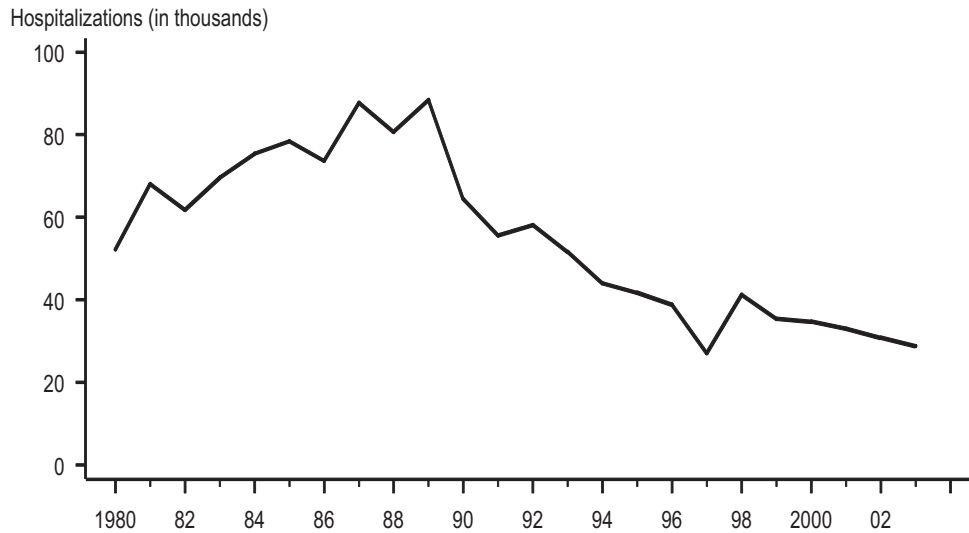


*States not reporting gonorrhea positivity data in prenatal clinics.

Note: Includes states and outlying areas that reported gonorrhea positivity data on at least 100 women aged 15-24 years during 2004.

SOURCE: Regional Infertility Prevention Projects; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention

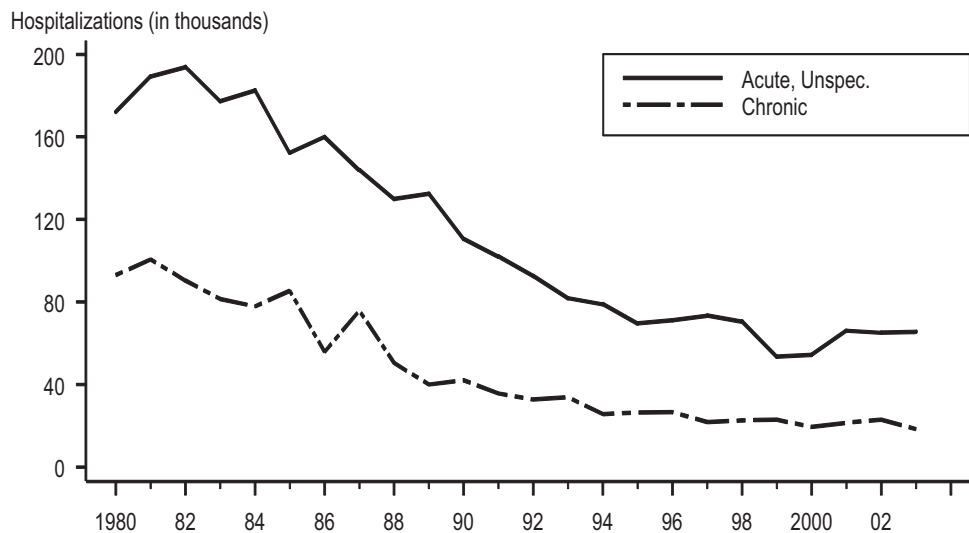
Figure G. Ectopic pregnancy — Hospitalizations of women 15 to 44 years of age: United States, 1980-2003



Note: Some variations in 1981 and 1988 estimates may be due to changes in sampling procedures. The relative standard error for these estimates ranges from 8% to 12%. Data available through 2003.

SOURCE: National Hospital Discharge Survey (National Center for Health Statistics, CDC)

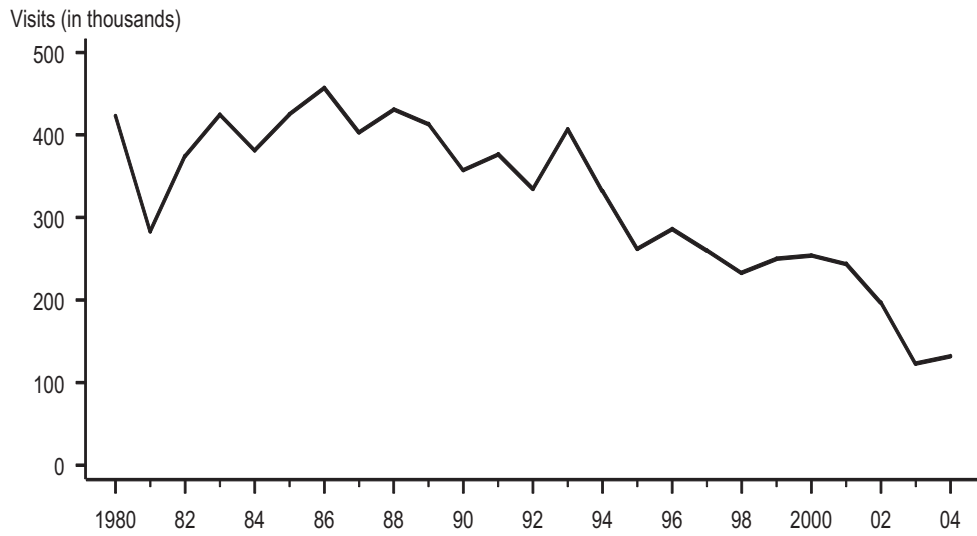
Figure H. Pelvic inflammatory disease — Hospitalizations of women 15 to 44 years of age: United States, 1980-2003



Note: The relative standard error for these estimates of the total number of acute and chronic PID cases ranges from 6% to 18%. Data available through 2003.

SOURCE: National Hospital Discharge Survey (National Center for Health Statistics, CDC)

Figure I. Pelvic inflammatory disease — Initial visits to physicians' offices by women 15 to 44 years of age: United States, 1980–2004



Note: The relative standard error for these estimates range from 19% to 30%. See Appendix (Other Data Sources) and Table 47.

SOURCE: National Disease and Therapeutic Index (IMS Health)

STDs in Adolescents and Young Adults

Public Health Impact

Compared to older adults, sexually active adolescents (10- to 19-year-olds) and young adults (20- to 24-year-olds) are at higher risk for acquiring STDs for a combination of behavioral, biological, and cultural reasons. For some STDs, for example, *Chlamydia trachomatis*, adolescent women may have a physiologically increased susceptibility to infection due to increased cervical ectopy. The higher prevalence of STDs among adolescents also reflects multiple barriers to quality STD prevention services, including lack of insurance or other ability to pay, lack of transportation, discomfort with facilities and services designed for adults, and concerns about confidentiality. Recent estimates suggest that while representing 25% of the ever sexually active population, 15- to 24-year olds acquire nearly one-half of all new STDs.¹

Observations

Chlamydia and Gonorrhea

- Numerous prevalence studies in various clinic populations have shown that sexually active adolescents have high rates of chlamydia infection.²⁻⁴ The Regional Infertility Prevention Projects that routinely perform large scale screening for detecting chlamydia infections among women attending family planning clinics demonstrate that younger women consistently have higher positivity than older women, even when overall prevalence declines. An example is the Region X Chlamydia Project, which has screened women in family planning clinics since 1988 (Figure K).
- After adjusting trends in chlamydia positivity to account for changes in laboratory test methods and associated increases in test sensitivity (see **Appendix**), in 15- to 19-year-old women chlamydia test positivity decreased in 2 of 10 HHS regions from 2003 through 2004, increased in 7 regions, and remained the same in 1 region (Figure J).
- As in previous years, 15- to 19-year-old women had the highest rates of gonorrhea compared to women in all other age categories (Figure 17 and Table 20). Women aged 20-24 had the highest rates of primary and secondary syphilis in 2004, while among men, 35- to 39-year-olds had the highest rates of primary and secondary syphilis (Figure 34 and Table 33). Among men, 20- to 24-year-olds had the highest rate of gonorrhea (Figure 18 and Table 20).
- In 15- to 19-year-old women, the 2004 gonorrhea rate of 610.9 cases per 100,000 females was a 12.7% decrease from the 2000 rate of 699.5. Among young women in the 20- to 24-year-old group, the rate of gonorrhea in 2004 decreased 8.4% from 621.0 in 2000 to 569.1 in 2004 (Figure 17, Table 20).

- Rates of gonorrhea among male adolescents decreased between the years 2000 and 2004 (Figure 18, Table 20). Among 15- to 19-year-old males, the gonorrhea rate declined by 21.1% from 320.6 in 2000 to 252.9 in 2004. Among 20- to 24-year-old males, the gonorrhea rate declined by 22.3% from 554.1 in 2000 to 430.6 in 2004.

Primary and Secondary Syphilis

- Syphilis rates in women are highest in the 20-24 year age group, 3.0 cases per 100,000 population. Rates among 15-19 year olds have decreased over time and remain low (Figure 34, Table 33).
- In men, increases have been observed in 20- to 24-year-olds (Figure 35), but rates among 15-19 year olds are low and remain relatively unchanged (Figure 35, Table 33).

National Job Training Program

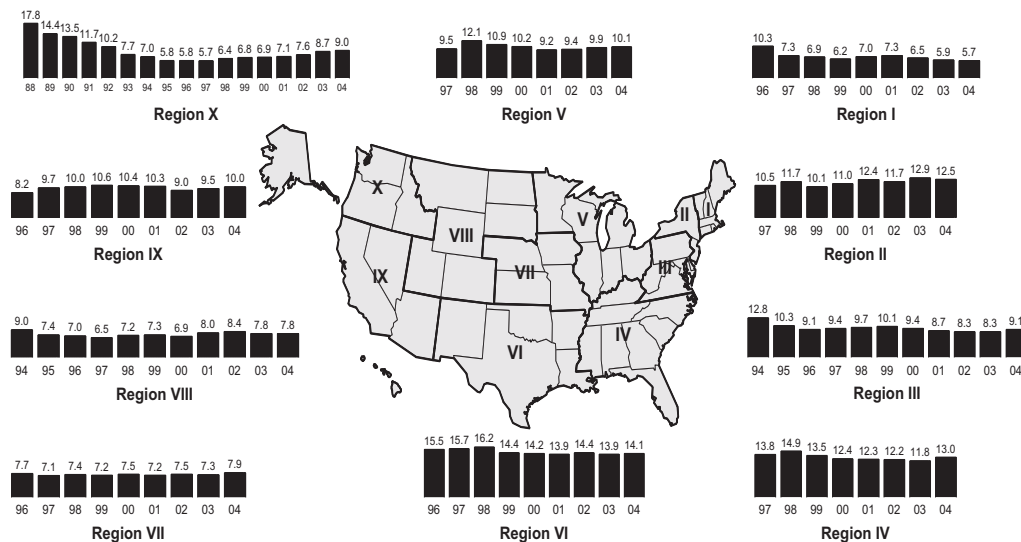
- Since 1990, approximately 20,000 female National Job Training Program entrants have been screened each year for chlamydia. This program, administered by the National Job Training Program at more than 100 sites throughout the country, is a job training program for economically- disadvantaged youth aged 16-24 years-old.
- Chlamydia infection is widespread geographically and highly prevalent among economically-disadvantaged young women in the National Job Training Program.⁴ Among women entering the program from 38 states and Puerto Rico in 2004, based on their place of residence before program entry, the median state-specific chlamydia prevalence was 9.7% (range 4.4% to 17.3%) (Figure L). Among men entering the program from 46 states, the District of Columbia, and Puerto Rico in 2004, the median state-specific chlamydia prevalence was 7.3% (range 0.8% to 13%) (Figure M).
- Data from National Job Training Program centers that submit gonorrhea specimens from female students aged 16-24 years to a national contract laboratory indicates a high prevalence of gonococcal infection in this population. Specimens from at least 100 students from each of 33 states were tested by the contract laboratory; the median state-specific gonorrhea prevalence was 2.4% (range 0% to 6.4%) in 2004 (Figure N). Among men entering the program from 8 states in 2004, the median state-specific gonorrhea prevalence was 3.7% (range 1% to 5.5%) (Figure O).

Corrections Facilities

- Among adolescent women attending juvenile corrections facilities, data from the Corrections STD Prevalence Monitoring Project identified a median chlamydia positivity of 14% (range 2.4% to 26.5%) (Table AA) and a median gonorrhea positivity of 4.5% (range 0% to 16.6%) (Table CC). See **Special Focus Profiles** (STDs in Persons Entering Corrections Facilities).

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 - ² Centers for Disease Control and Prevention. Recommendations for the prevention and management of *Chlamydia trachomatis* infections, 1993. *MMWR* 1993;42(No. RR-12).
 - ³ Lossick J, DeLisle S, Fine D, Mosure DJ, Lee V, Smith C. Regional program for widespread screening for *Chlamydia trachomatis* in family planning clinics. In: Bowie WR, Caldwell HD, Jones RP, et al., eds. *Chlamydial Infections: Proceedings of the Seventh International Symposium of Human Chlamydial Infections*, Cambridge, *Cambridge University Press* 1990, pp. 575-9.
 - ⁴ Mertz KJ, Ransom RL, St. Louis ME, Groseclose SL, Hadgu A, Levine WC, Hayman C. Decline in the prevalence of genital chlamydia infection in young women entering a National Job Training Program, 1990-1997. *Am J Pub Health* 2001;91(8):1287-1290.

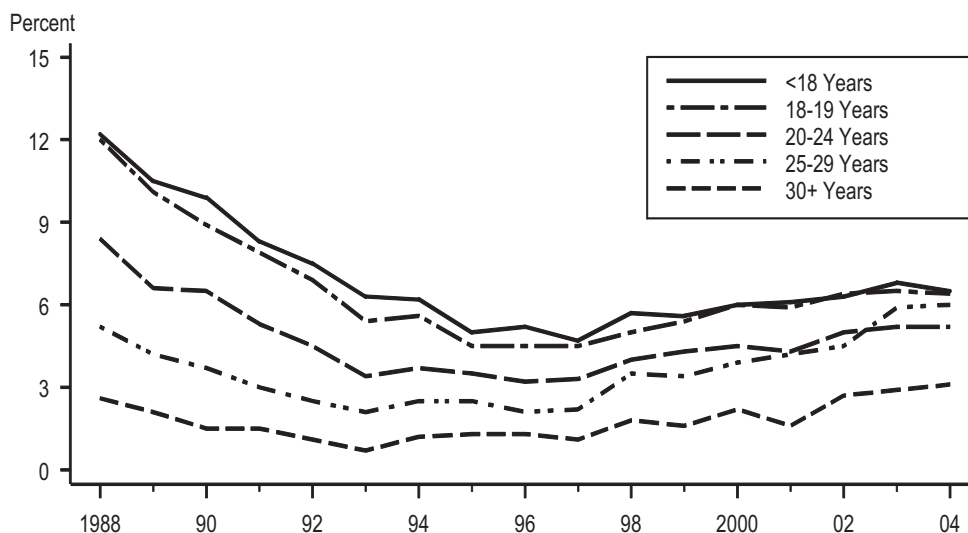
Figure J. Chlamydia — Trends in positivity among 15- to 19-year-old women tested in family planning clinics by HHS regions, 1988–2004



Note: Trends adjusted for changes in laboratory test method and associated increases in test sensitivity. See Appendix (Chlamydia, Gonorrhea, and Syphilis Prevalence Monitoring) for more information. No data on laboratory test method available for Region VII in 1995 and Regions IV and V in 1996. See Appendix for definition of Health and Human Services (HHS) regions.

SOURCE: Regional Infertility Prevention Projects; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention

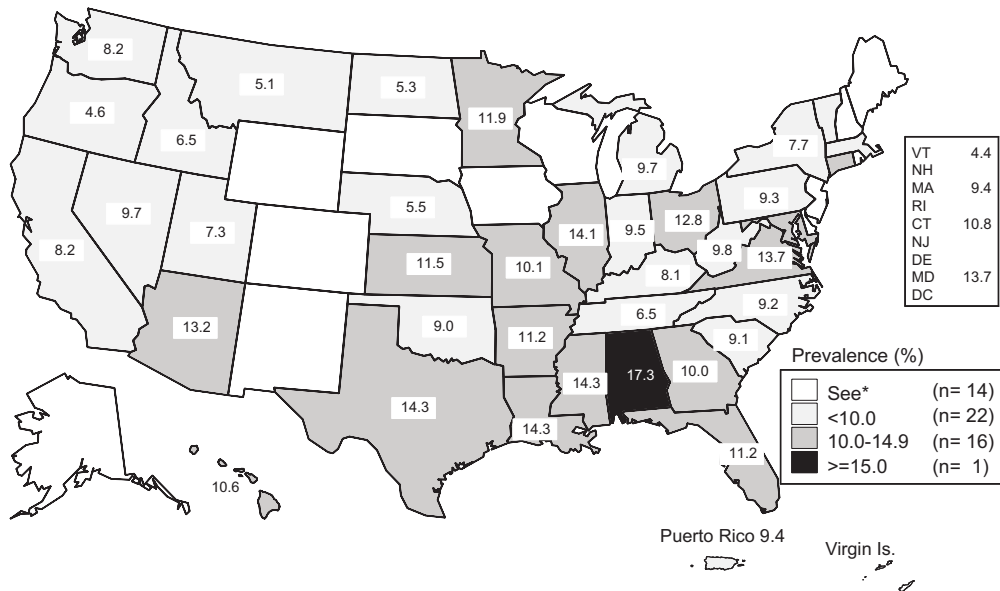
Figure K. Chlamydia — Positivity among women tested in family planning clinics by age group: Region X, 1988–2004



Note: Women who met screening criteria were tested. Trends not adjusted for changes in laboratory test method and associated increases in test sensitivity in 1994 and 1999-2004.

SOURCE: Regional Infertility Prevention Projects: Region X Chlamydia Project

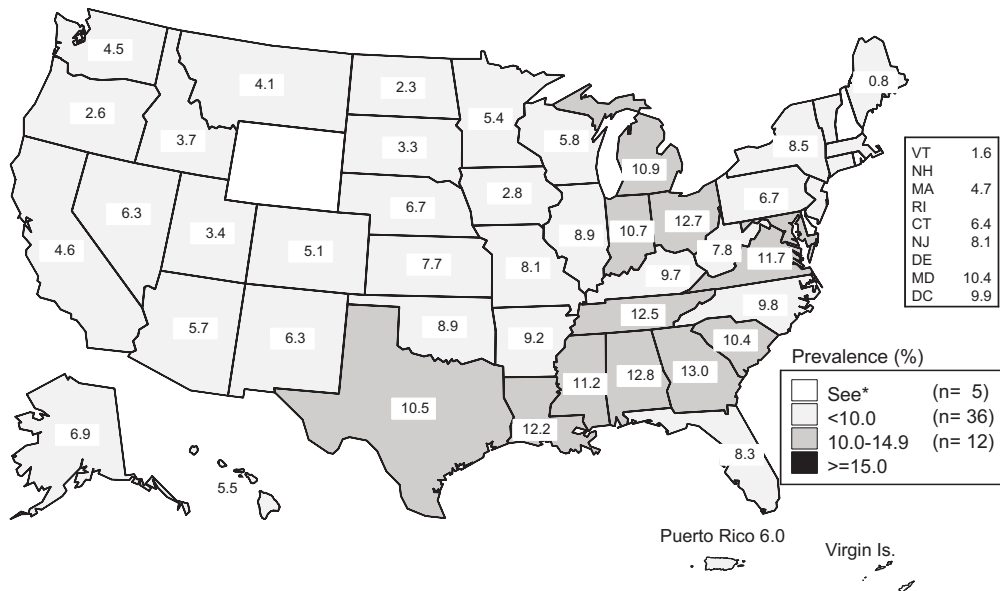
Figure L. Chlamydia — Prevalence among 16- to 24-year-old women entering the National Job Training Program by state of residence: United States and outlying areas, 2004



*Fewer than 100 women residing in these states/areas and entering the National Job Training Program were screened for chlamydia in 2004.

Note: The overall chlamydia prevalence among female students entering the National Job Training Program in 2004 was 10.3%.

Figure M. Chlamydia — Prevalence among 16- to 24-year-old men entering the National Job Training Program by state of residence: United States and outlying areas, 2004



*Fewer than 100 men residing in these states/areas and entering the National Job Training Program were screened for chlamydia in 2004.

Note: The overall chlamydia prevalence among male students entering the National Job Training Program was 8.3%.

STDs in Racial and Ethnic Minorities

Public Health Impact

Surveillance data show higher rates of reported STDs among some minority racial or ethnic groups when compared with rates among whites. Race and ethnicity in the United States are risk markers that correlate with other more fundamental determinants of health status such as poverty, access to quality health care, health care seeking behavior, illicit drug use, and living in communities with high prevalence of STDs. Acknowledging the disparity in STD rates by race or ethnicity is one of the first steps in empowering affected communities to organize and focus on this problem.

Surveillance data are based on cases of STDs reported to state and local health departments (see **Appendix**). In many areas, reporting from public sources, (for example, STD clinics) is more complete than reporting from private sources. Since minority populations may utilize public clinics more than whites, differences in rates between minorities and whites may be increased by this reporting bias.

In 2004, 23.3% of reports on gonorrhea cases were missing information on race or ethnicity, and 29.3% of reports on chlamydia cases were missing race or ethnicity (Table A1). To adjust for missing data, cases in which information is unknown are redistributed according to the distribution of cases in which race or ethnicity is known. This process may exacerbate the reporting bias.

Observations

Chlamydia

- Although chlamydia in women is a widely distributed STD among all racial and ethnic groups, trends in positivity in women screened in HHS Region X show consistently higher chlamydia positivity among minorities (Figure P).
- In 2004, the rate of chlamydia among African-American females in the United States was more than 7 times higher than the rate among white females (1,722.3 and 226.6 per 100,000, respectively) (Table 11B). The chlamydia rate among African-American males was more than 11 times higher than that among white males (645.2 and 57.3 per 100,000 population, respectively).

Gonorrhea

- In 2004, 69.6% of the total number of cases of gonorrhea reported to CDC occurred among African-Americans (Table 21A). In 2004, the rate of gonorrhea among African-Americans was 629.6 cases per 100,000 population, among American Indian/Alaska Natives the rate was 117.7, and among Hispanics the rate was 71.3. These rates are 19, 4, and 2 times higher, respectively, than the rate among whites in 2004 of 33.3 cases per 100,000 population. The rate of

gonorrhea among Asian/Pacific Islanders in 2004 was 21.4 cases per 100,000 population (Figure 15, Table 21B).

- From 2000 through 2004, gonorrhea rates among African-Americans declined by 19.1% (778.1 and 629.6 cases per 100,000 population, respectively). During the same period, gonorrhea rates increased by 19.8% among whites, 19.4% among American Indian/Alaska Natives, and 3.8% among Hispanics, and decreased by 19.9% among Asian/Pacific Islanders (Table 21B).
- Gonorrhea rates in 2004 among African-American men were 26 times higher than among white men. Gonorrhea rates in 2004 among African-American women were 15 times higher than among white women (Figure Q).
- Gonorrhea rates in 2004 were highest for African-Americans aged 15-24 years among all racial, ethnic, and age categories. In 2004, African-American women aged 15-19 years had a gonorrhea rate of 2,790.5 cases per 100,000 females. This rate was 14 times greater than the 2004 rate among white females of similar age (201.7). African-American men in the 15- to 19-year-old age category had a 2004 gonorrhea rate of 1,390.1 cases per 100,000 males, which was 37 times higher than the rate among 15- to 19-year-old white males of 37.9 per 100,000. Among 20- to 24-year-olds in 2004, the gonorrhea rate among African-Americans was 17 times greater than that among whites (2,487.2 and 149.0 cases per 100,000 population, respectively) (Table 21B).
- Although gonorrhea rates decreased for most age and race/ethnic groups during the 1980s, they did not decrease for African-American adolescents during this period; African-American 15- to 19-year-old females did not show a decrease in rates until 1991 (Figure R). Decreases among 15- to 19-year old African-American males did not begin until 1992 (Figure S). From 2000 to 2004, gonorrhea rates among 15- to 19-year-old African-American females and males decreased 19.7% and 25.5%, respectively..

Primary and Secondary Syphilis

- The syphilis epidemic in the late 1980s occurred primarily among heterosexual, minority populations.¹ During the 1990s, the rate of primary and secondary (P&S) syphilis declined among all racial and ethnic groups (Figure 31). During 2000-2004, the rate continued to decline among African-Americans, but the overall rate of P&S syphilis and rates among non-Hispanic whites, Hispanics, Asian/Pacific Islanders, and American Indian/Alaska Natives increased; increases in P&S syphilis occurred only among men and the most rapid rate of increase occurred among non-Hispanic white men during this time (Table 34B).
- Between 2003 and 2004, the rates of primary and secondary syphilis increased 11% in white men, 17% in African-American men and increased slightly (2%) among African-American women (Table 34B). Rates continued to increase among Hispanics, Asian/Pacific Islanders, and American Indian/Alaska Natives.
- In 2004, 41% of all cases of P&S syphilis reported to CDC occurred among African-Americans and 40% of all cases occurred among non-Hispanic whites (Table 34A). The 2004 rate for African-Americans was 6 times greater than the rate among non-Hispanic whites (Table 34B).
- In 2004, the incidence of P&S syphilis by sex among African-Americans was highest among women aged 20-24 years (13.4 cases per 100,000 population)

and among men aged 25-29 (34.6 cases per 100,000 population) (Table 34B). In 2003, African-American men in the 35-39 age group had the highest rates.

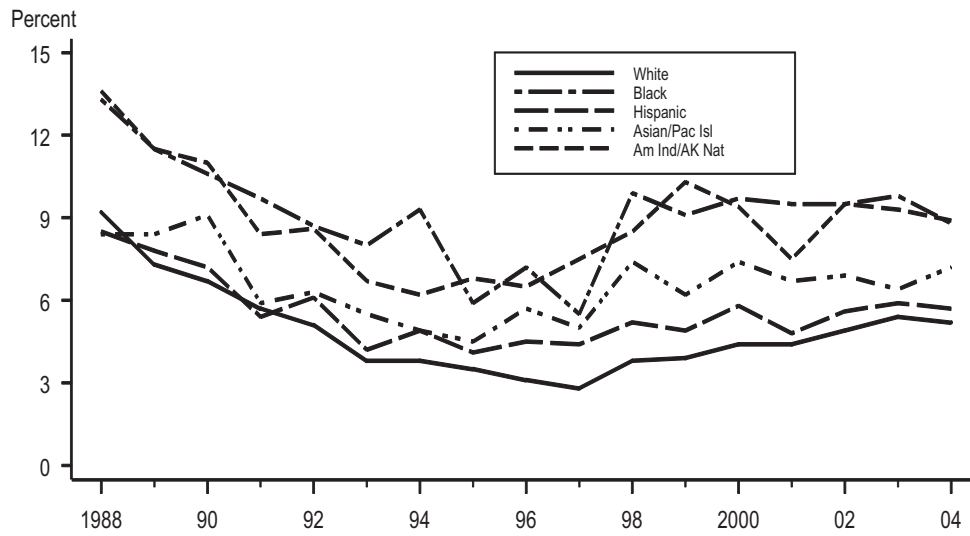
- Between 2003 and 2004, P&S syphilis rates for African-Americans in every age group increased. (Table 34B).
- In 2004, 16% of all cases of P&S syphilis reported to CDC occurred among Hispanics (Table 34A). The rate of P&S syphilis among Hispanic men increased 12% (from 4.9 to 5.5 cases per 100,000 population) between 2003 and 2004. The rate among Hispanic women remained essentially unchanged (0.7 cases per 100,000 population). The rate among Hispanics in 2004 was 2 times greater than the rate among non-Hispanic whites.
- The incidence of P&S syphilis among Hispanics was highest among women aged 20-24 years (1.9 cases per 100,000 population) and among men aged 35-39 years (14.0 cases per 100,000 population) in 2004 (Table 34B).

Congenital Syphilis

- In 2004, the rate of congenital syphilis (based on the mother's race/ethnicity) was 26.7 cases per 100,000 live births among African-Americans and 16.2 cases per 100,000 live births among Hispanics. These rates are 16 and 10 times greater, respectively, than the 2004 rate among non-Hispanic whites (1.7 cases per 100,000 live births), respectively (Figure W, Table 44).

¹ Nakashima AK, Rolfs RT, Flock ML, Kilmarx P, Greenspan JR. Epidemiology of syphilis in the United States, 1941 through 1993. *Sexually Transmitted Diseases* 1996;23:16-23.

Figure P. Chlamydia — Positivity among women tested in family planning clinics by race and ethnicity: Region X, 1988–2004



Note: Women who met screening criteria were tested. Annual race/ethnicity-specific positivity not adjusted for changes in laboratory test method and associated increases in test sensitivity in 1994, and 1999-2004.

SOURCE: Regional Infertility Prevention Projects: Region X Chlamydia Project

Figure Q. Gonorrhea — Rates by race/ethnicity and sex, 2004

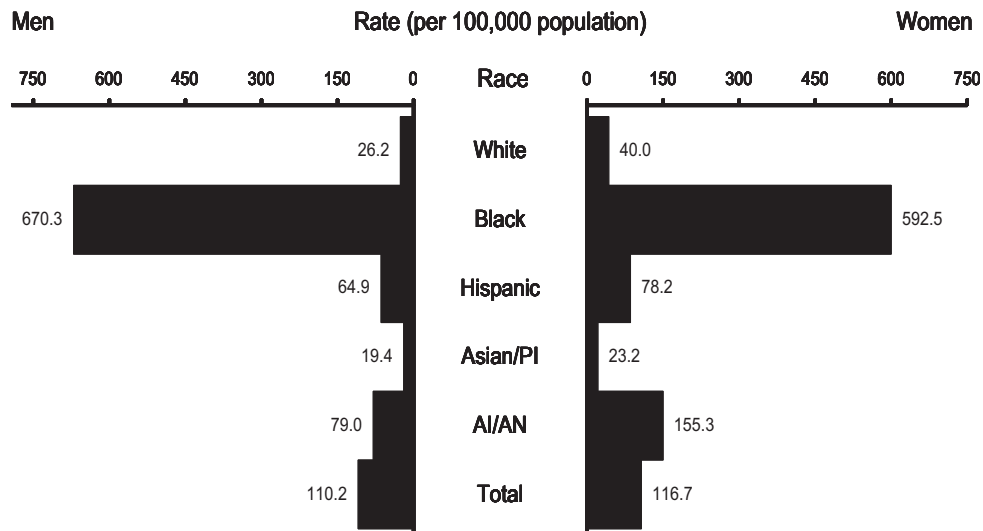


Figure R. Gonorrhea — Rates among 15- to 19-year-old females by race and ethnicity: United States, 1981–2004

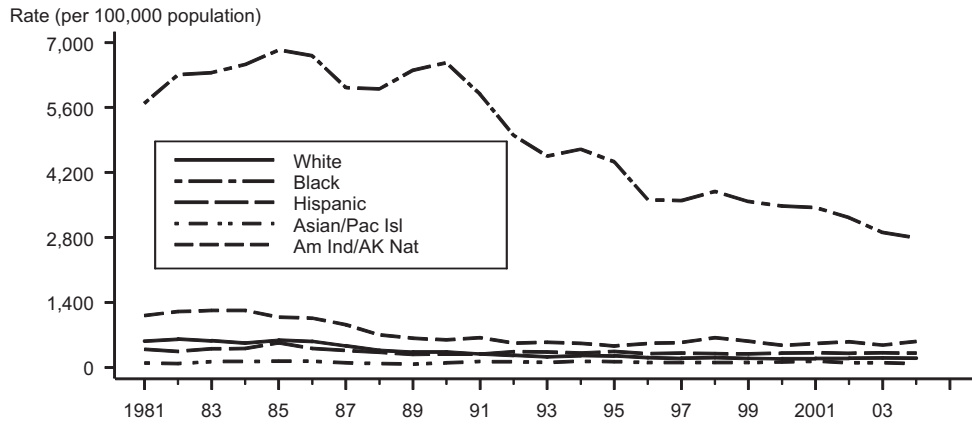


Figure S. Gonorrhea — Rates among 15- to 19-year-old males by race and ethnicity: United States, 1981–2004

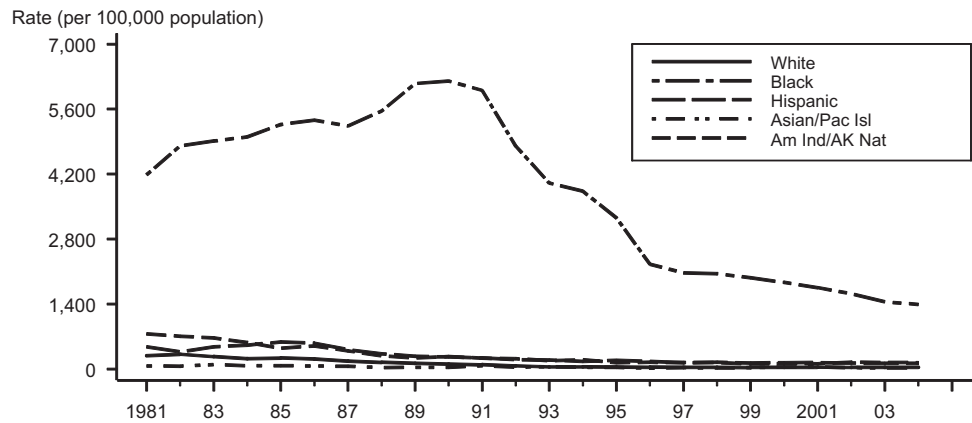


Figure T. Primary and secondary syphilis — Rates by race/ethnicity and sex: United States, 2004

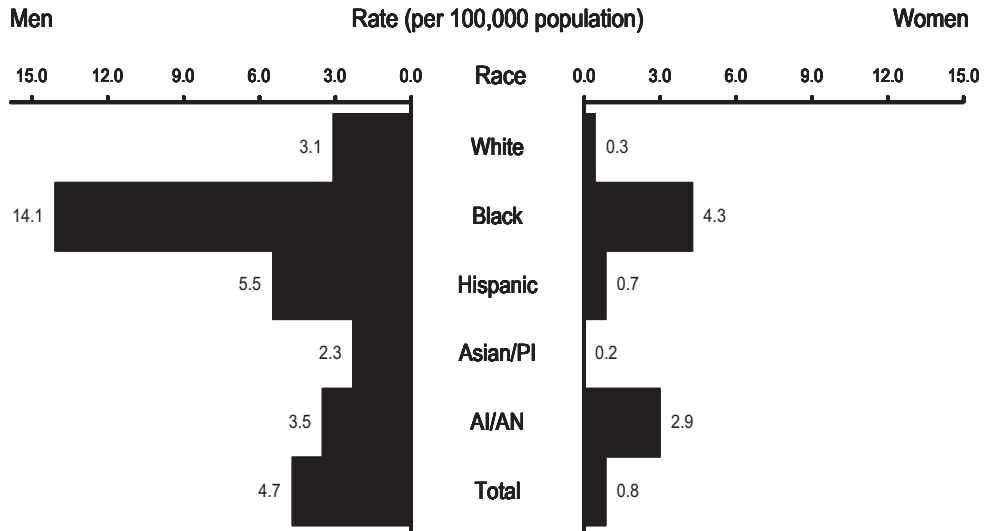


Figure U. Primary and secondary syphilis — Rates among 15- to 19-year-old females by race and ethnicity: United States, 1981–2004

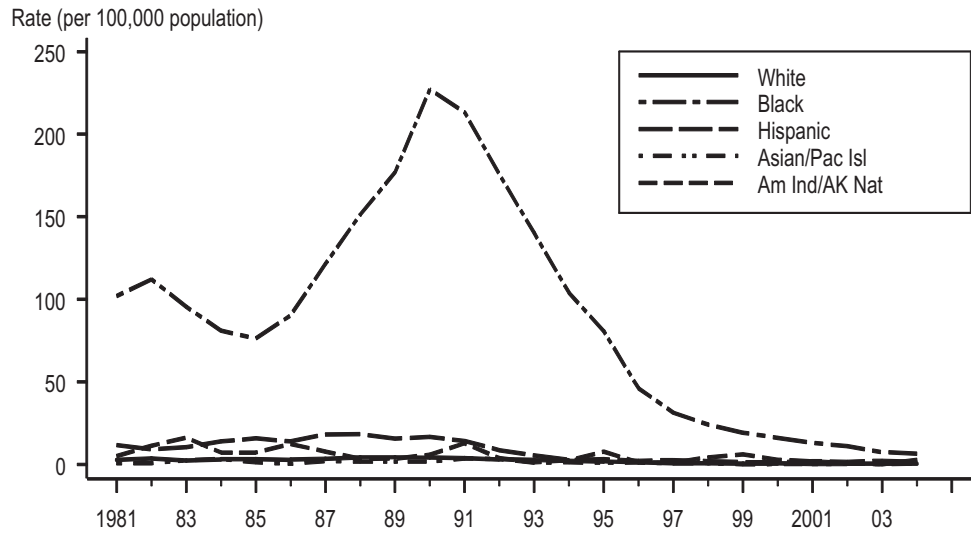


Figure V. Primary and secondary syphilis — Rates among 15- to 19-year-old males by race and ethnicity: United States, 1981–2004

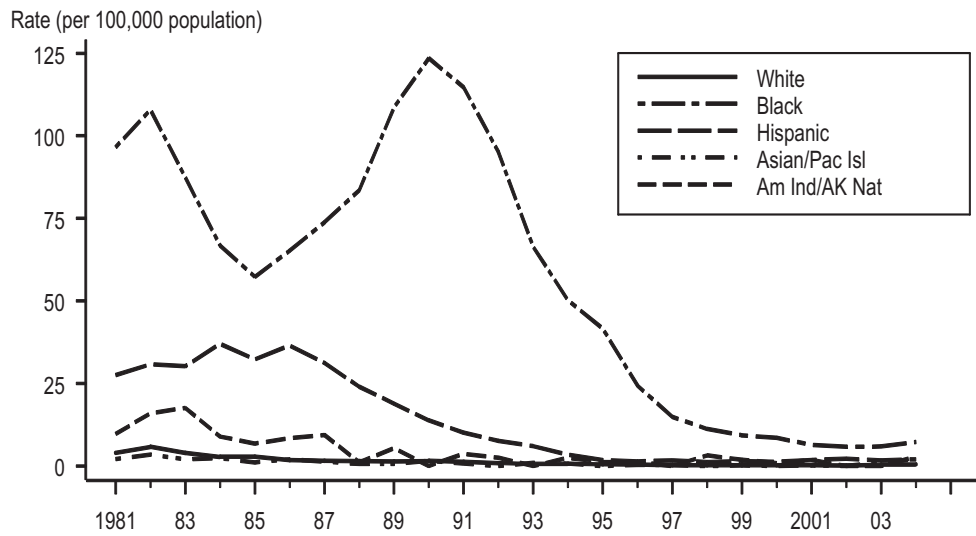
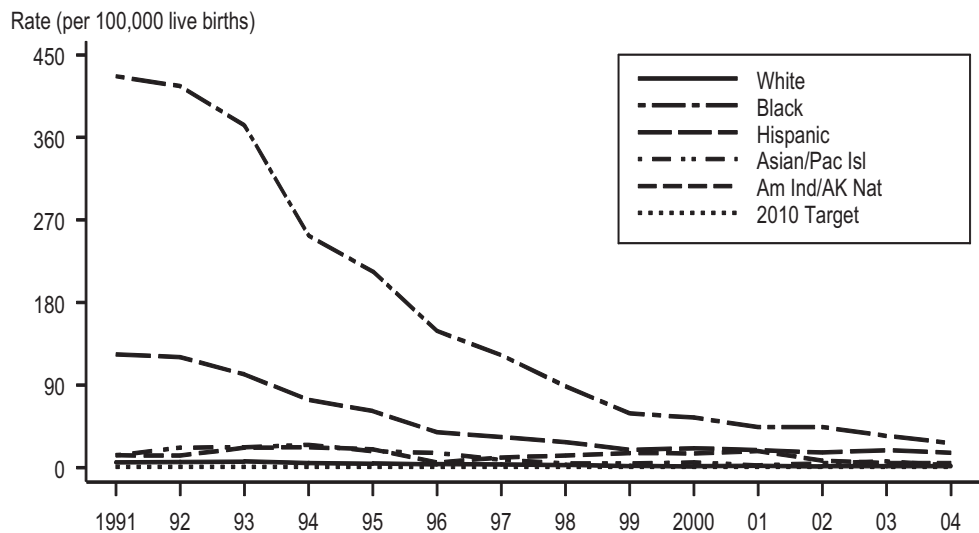


Figure W. Congenital syphilis — Rates among infants <1 year of age by mother's race and ethnicity: United States, 1991–2004 and the Healthy People 2010 target



Note: The Healthy People 2010 target for congenital syphilis is 1.0 case per 100,000 live births. Less than 5% of cases had missing race/ethnicity information and were excluded. Case counts for congenital syphilis shown in this graph correspond to those listed in Table 44.

STDs in Men Who Have Sex with Men

Public Health Impact

Data from several U.S. cities and projects, including syphilis outbreak investigations and the Gonococcal Isolate Surveillance Project (GISP), suggest that an increasing number of men who have sex with men (MSM) are acquiring STDs.¹⁻⁵ Data also suggest that an increasing number of MSM are engaging in sexual behaviors that place them at risk for STDs and HIV infection.⁶ Several factors may be contributing to this change, including the availability of highly active antiretroviral therapy (HAART) for HIV infection.⁷ Because STDs and the behaviors associated with them increase the likelihood of acquiring and transmitting HIV infection,⁸ the rise in STDs among MSM may be associated with an increase in HIV incidence among MSM.⁹

Observations

- Nationally notifiable STD surveillance data reported to CDC do not include information regarding sexual behaviors; therefore, national trends in STDs among MSM in the United States are not available. Data from enhanced surveillance projects are presented in this section to provide information regarding STDs in MSM.

Monitoring Trends in Prevalence of STDs and HIV Risk Behaviors among Men Who Have Sex with Men (MSM Prevalence Monitoring Project)

- From 1999 through 2004, nine U.S. cities participating in the MSM Prevalence Monitoring Project submitted syphilis, gonorrhea, chlamydia, and HIV test data to CDC from 81,923 MSM visits to STD clinics; data from 68,917 MSM visits were submitted from six public STD clinics (Denver, Long Beach, New York City, Philadelphia, San Francisco, and Seattle) and 13,006 MSM visits were submitted from three STD clinics in community-based, gay men's health clinics (Chicago, the District of Columbia, and Houston). In 2004, eight U.S. cities submitted information from 18,186 MSM STD clinic visits.
- In 2004, Fenway Community Health (Boston), a community-based, gay men's primary care clinic, also participating in the MSM Prevalence Monitoring Project, submitted syphilis, gonorrhea, and chlamydia test data to CDC from 22,237 primary care visits by men.
- The MSM Prevalence Monitoring Project includes data from culture and non-culture tests collected during routine care and reflects testing practices at participating clinics. City-specific medians and ranges were calculated for the proportion of tests done and STD and HIV test positivity.

Syphilis, STD Clinics, 1999-2004

- In 2004, 85% (range: 63-91%) of MSM visiting participating STD clinics had a nontreponemal serologic test for syphilis (STS) [RPR or VDRL] performed compared with 69% (range: 54-93%) in 1999.
- Overall, median syphilis seroreactivity among MSM tested increased from 4% (range: 4-13%) in 1999 to 10% (range: 6-4%) in 2004 (Figure X).

Gonorrhea, STD Clinics, 1999-2004

- In 2004, overall median clinic gonorrhea positivity in MSM was 15% (range: 11-17%) at any anatomic site (Figure Y).
- In 2004, 80% (range: 57-95%) of MSM were tested for urethral gonorrhea, 34% (range: 3-65%) were tested for rectal gonorrhea, and 50% (range: 5-92%) were tested for pharyngeal gonorrhea.
- In 2004, median clinic urethral gonorrhea positivity in MSM was 11% (range: 7-13%), median rectal gonorrhea positivity was 8% (range: 3-19%), and median pharyngeal gonorrhea positivity was 5% (range: 3-14%).
- In 2004, by race/ethnicity, urethral gonorrhea positivity was 11% (range: 8-12%) in whites, 16% (range: 9-24%) in African-Americans, and 9% (range: 3-10%) in Hispanics. Rectal gonorrhea positivity was 7% (range: 4-12%) in whites, 6% (range: 2-8%) in African-Americans, and 5% (range: 3-8%) in Hispanics. Pharyngeal gonorrhea positivity was 6% (range: 3-14%) in whites, 7% (range: 1-10%) in African-Americans, and 4% (range: 2-10%) in Hispanics (Figure Z).
- In 2004, by HIV status, urethral gonorrhea positivity was 17% (range: 12-25%) in HIV-positive MSM and 10% (range 6-12%) in MSM who were HIV-negative or of unknown HIV status; rectal gonorrhea positivity was 10% (range: 4-12%) in HIV-positive MSM and 7% (range: 3-9%) in MSM who were HIV-negative or of unknown HIV status; pharyngeal gonorrhea positivity was 5% (range: 3-10%) in HIV-positive MSM and 5% (range: 3-13%) in MSM who were HIV-negative or of unknown HIV status (Figure AA).

HIV Infection, STD Clinics, 2004

- In 2004, a median of 59% (range: 30-81%) of MSM visiting STD clinics in the project and not previously known to be HIV-positive were tested for HIV; median HIV positivity was 4% (range: 2-6%). HIV positivity varied by race and ethnicity, but was higher in African-American and Hispanic MSM. HIV positivity was 3% (range: 2-4%) in whites, 7% (range 3-13%) in African-Americans, and 7% (range: 3-7%) in Hispanics (Figure Z).
- In 2004, median HIV prevalence among MSM, including persons previously known to be HIV-positive and persons testing HIV-positive at their current visit, was 11% (range 6-14%). HIV prevalence was 11% (range: 5-14%) in whites, 16% (range: 10-20%) in African-Americans, and 11% (range: 6-14%) in Hispanics (Figure AA).

Chlamydia, STD Clinics, 2004

- In 2004, a median of 82% (range: 57-95%) of MSM visiting participating STD clinics were tested for urethral chlamydia; median urethral chlamydia positivity was 6% (range: 5-8%). Urethral chlamydia was 5% (range: 2-8%) in whites; 9% (range: 8-11%) in African-Americans, and 6% (range: 3-14%) in Hispanics (Figure Z). Median positivity was 6% (range: 5-14%) in HIV-positive MSM and 6% (range: 5-7%) in MSM who were HIV-negative or of unknown HIV status (Figure AA).

STD Testing and Positivity, Community-based, Gay Men's Primary Care Clinic, 2004

- In 2004, among men with a nontreponemal serologic test for syphilis in a gay men's primary care clinic, 5% had a reactive syphilis test result and 31% of men with reactive syphilis serologies were identified as new syphilis cases. Among men tested for gonorrhea, urethral positivity was 9%, rectal positivity was 7%, and pharyngeal positivity was 2%. Among men tested for urethral chlamydia, positivity was 5%.

Nationally Reported Syphilis Surveillance Data

- Primary and secondary (P&S) syphilis increased in the United States during 2000-2004. Between 2000 and 2004, there was a 90% increase in the number of P&S syphilis cases among men and a 49% decrease in the number of cases among women (Tables 27 and 28). Trends in the syphilis male-to-female rate ratio, which are assumed to reflect syphilis trends among MSM, have been increasing in the United States during recent years (Figure 32). In 2004, the rate of reported P&S syphilis among men (4.7 cases per 100,000 males) was 6 times greater than the rate among women (0.8 cases per 100,000 females) (Figure T). The overall male-to-female syphilis rate ratio has risen steadily since 2000 when it was 1.5 (Figure 32). The increase in the male-to-female rate ratio occurred among all racial and ethnic groups between 2000 and 2004. Additional information on syphilis can be found in the **Syphilis** section.

Gonococcal Isolate Surveillance Project (GISP)

- The Gonococcal Isolate Surveillance Project (GISP), a collaborative project among selected STD clinics, was established in 1986 to monitor trends in antimicrobial susceptibilities of strains of *Neisseria gonorrhoeae* in the United States.¹⁰
- GISP also reports the percentage of *Neisseria gonorrhoeae* isolates obtained from MSM. Overall, the proportion of isolates coming from MSM in GISP clinics increased from 4% in 1988 to 20% in 2004, with most of the increase occurring after 1993 (Figure BB). Additional information on GISP may be found in the **Gonorrhea** section.
- The proportion of isolates coming from MSM varies geographically with the largest percentage from the west coast (Figure CC).

- Due to increases in the proportion of isolates from MSM that are fluoroquinolone-resistant (Figure 23), in 2004 CDC recommended that fluoroquinolones no longer be used to treat gonorrhea among MSM.¹¹

¹ Centers for Disease Control and Prevention. Gonorrhea among men who have sex with men – selected sexually transmitted disease clinics, 1993-1996. *MMWR* 1997;46:889-92.

² Centers for Disease Control and Prevention. Resurgent bacterial sexually transmitted disease among men who have sex with men – King County, Washington, 1997-1999. *MMWR* 1999;48:773-7.

³ Centers for Disease Control and Prevention. Outbreak of syphilis among men who have sex with men – Southern California, 2000. *MMWR* 2001;50:117-20.

⁴ Fox KK, del Rio C, Holmes K, et. al. Gonorrhea in the HIV era: A reversal in trends among men who have sex with men. *Am J Public Health* 2001;91:959-964.

⁵ Centers for Disease Control and Prevention. Primary and secondary syphilis among men who have sex with men – New York City, 2001. *MMWR* 2002;51:853-6.

⁶ Stall R, Hays R, Waldo C, Ekstrand M, McFarland W. The gay '90s: a review of research in the 1990s on sexual behavior and HIV risk among men who have sex with men. *AIDS* 2000;14:S1-S14.

⁷ Scheer S, Chu PL, Klausner JD, Katz MH, Schwarcz SK. Effect of highly active antiretroviral therapy on diagnoses of sexually transmitted diseases in people with AIDS. *Lancet* 2001;357:432-5.

⁸ Fleming DT, Wasserheit JN. From epidemiologic synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect* 1999;75:3-17.

⁹ Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report, 2003*, (Vol. 15). Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2004.

¹⁰ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2004 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2004*. Atlanta, GA: U.S. Department of Health and Human Services (available first quarter 2006).

¹¹ Centers for Disease Control and Prevention. Increases in fluoroquinolone-resistant *Neisseria gonorrhoeae* among men who have sex with men – United States, 2003, and revised recommendations for gonorrhea treatment, 2004. *MMWR* 2004;53:335-338.

Figure X. MSM Prevalence Monitoring Project — Syphilis serologic reactivity among men who have sex with men, STD clinics, 1999-2004



*Data not reported in 2004.

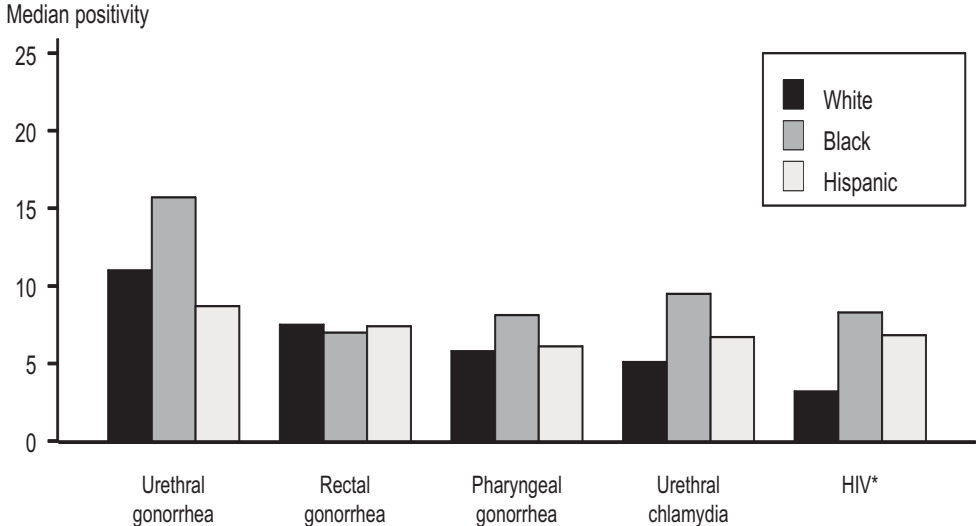
Figure Y. MSM Prevalence Monitoring Project — Gonorrhea positivity* among men who have sex with men, STD clinics, 1999-2004



*Includes testing at all anatomic sites.

[†]Data not reported in 2004.

Figure Z. MSM Prevalence Monitoring Project — Test positivity for gonorrhea, chlamydia, and HIV among men who have sex with men, by race/ethnicity, STD clinics, 2004



*Excludes persons previously known to be HIV-positive.

Figure AA. MSM Prevalence Monitoring Project — Positivity for gonorrhea and chlamydia among men who have sex with men, by HIV status, STD clinics, 2004

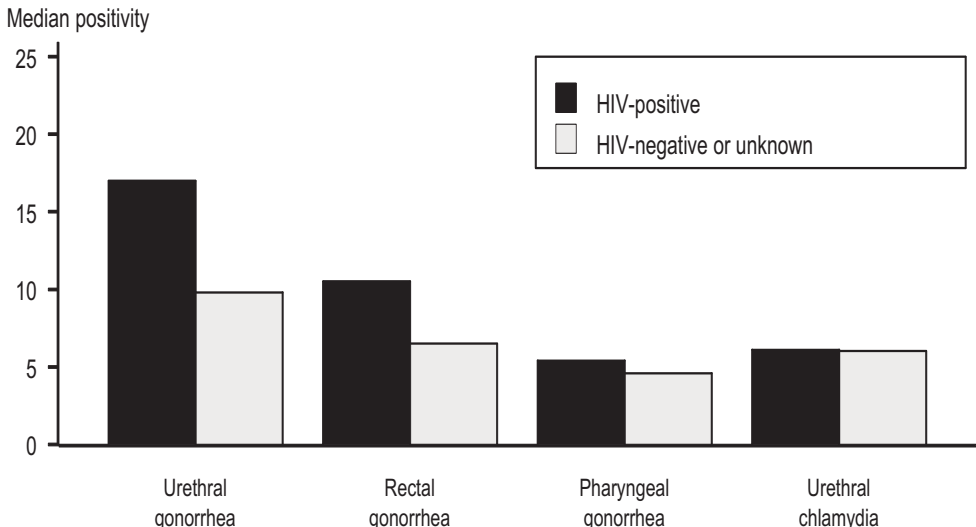


Figure BB. Gonococcal Isolate Surveillance Project (GISP) — Percent of urethral *Neisseria gonorrhoeae* isolates obtained from men who have sex with men attending STD clinics, 1988-2004

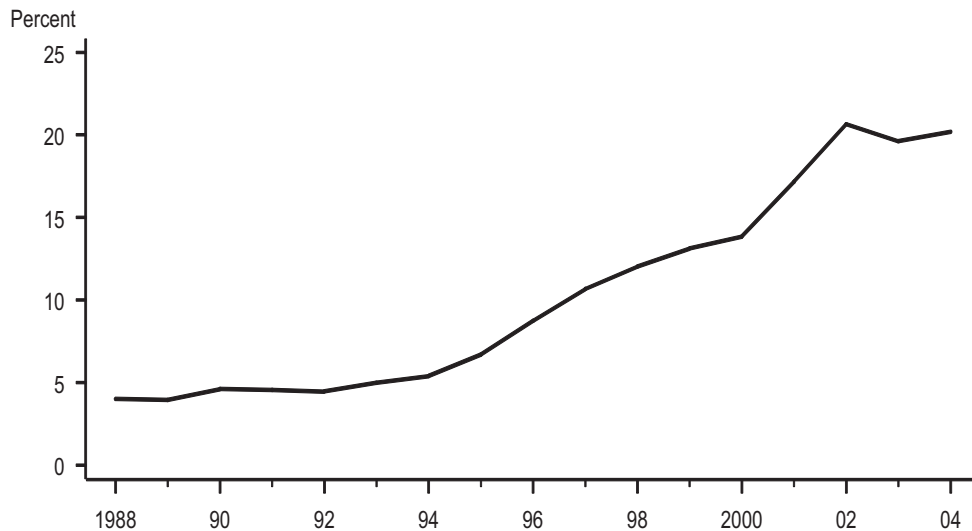
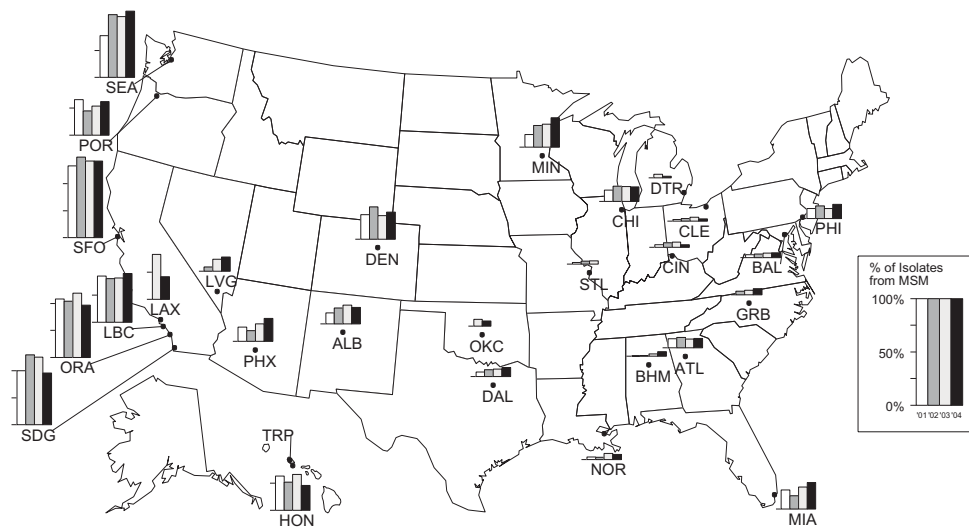


Figure CC. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates obtained from men who have sex with men attending STD clinics, 2001-2004



Note: Not all clinics participated in GISP for the last 4 years. Clinics include: ALB=Albuquerque, NM; ATL=Atlanta, GA; BAL=Baltimore, MD; BHM=Birmingham, AL; CHI=Chicago, IL; CIN=Cincinnati, OH; CLE=Cleveland, OH; DAL=Dallas, TX; DEN=Denver, CO; DTR=Detroit, MI; HON=Honolulu, HI; LAX=Los Angeles, CA; LBC=Long Beach, CA; LVG=Las Vegas, NV; MIA=Miami, FL; MIN=Minneapolis, MN; GRB=Greensboro, NC; NOR=New Orleans, LA; OKC=Oklahoma City, OK; ORA=Orange County, CA; PHI=Philadelphia, PA; PHX=Phoenix, AZ; POR=Portland, OR; STL=St Louis, MO (only has data through 2003); SDG=San Diego, CA; SEA=Seattle, WA; SFO=San Francisco, CA; and TRP=Tripler Army Medical Center, HI (does not provide sexual risk behavior data).

STDs in Persons Entering Corrections Facilities

Public Health Impact

Multiple studies and surveillance projects have demonstrated a high prevalence of STDs in persons entering jails and juvenile corrections facilities.¹⁻⁴ Screening for chlamydia, gonorrhea, and syphilis at intake offers an opportunity to identify infections, prevent complications, and reduce transmission in the general community. For example, one study has suggested that screening and treatment of women inmates for syphilis may result in reduction of syphilis in the general community.⁵ Depending on locale, a substantial proportion of all early syphilis cases are reported from corrections facilities.⁴ Collecting positivity data and analyzing trends in STD prevalence in the inmate population can provide a tool for monitoring trends in STD prevalence in the general community.⁴

Description of Population

- In 2004, STD screening data from corrections facilities were reported from 34 states for chlamydia, 29 states for gonorrhea, and 10 states for syphilis. These data were reported in response to CDC's request for data, as part of the Corrections STD Prevalence Monitoring Project and/or the Regional Infertility Prevention Project.
- The tables and figures shown in this section represent 103,595 chlamydia tests in men and 60,466 in women; 77,043 gonorrhea tests in men and 44,161 in women; and 235,017 syphilis tests in men and 56,200 in women entering corrections facilities during 2004.

Chlamydia

- In adolescent men entering 81 juvenile corrections facilities, the median chlamydia positivity was 5.8% (range 1% to 27.5%) (Table AA). In adolescent women entering 56 juvenile corrections facilities, the median chlamydia positivity was 14% (range 2.4% to 26.5%); positivity was greater than 10% in 42 of 56 facilities reporting data.
- In men entering juvenile corrections facilities, chlamydia positivity increased from 1.0% for those aged 12 years to 8.0% for those aged 17 years (Figure DD). For those aged 17 years to 19 years, the rates were similar. In women entering juvenile corrections facilities, chlamydia positivity increased from 8.5% for those aged 12 years to 16.9% for those aged 15 years.
- In men entering 35 adult corrections facilities, the median chlamydia positivity was 10.2% (range 0.7% to 30%) (Table BB). In women entering 32 adult corrections facilities, the median positivity for chlamydia was 7.2% (range 1.2% to 22.7%).

- In men entering adult corrections facilities, chlamydia positivity decreased with age from 10.7% for those aged 18-19 years to 1.9% for those aged 35 to 65 years (Figure EE). Similar trends were also observed in adult women. Although overall chlamydia positivity in women entering adult correction facilities was significantly lower than in women entering juvenile corrections facilities, chlamydia positivity in women aged 18-19 years attending adult corrections facilities was higher than in women attending juvenile corrections facilities. Similar patterns were also observed for men aged < 20 years entering adult corrections facilities compared to men entering juvenile corrections facilities.

Gonorrhea

- The median positivity for gonorrhea in adolescent men entering 49 juvenile corrections facilities was 0.8% (range 0% to 18.2%) (Table CC). The median positivity for gonorrhea in women entering 34 juvenile corrections facilities was 4.5% (range 0% to 16.6%); positivity was greater than 4% in 20 of 34 juvenile corrections facilities.
- In men entering juvenile corrections facilities, gonorrhea positivity increased from 0.2% for those aged 12 years to 1.4% for those aged 19 years (Figure FF). This trend was not observed in adolescent women.
- In men entering 27 adult corrections facilities, the median positivity was 2.6% (range 0% to 33.8%) (Table DD). In women entering 26 adult facilities, the median positivity for gonorrhea was 3.0% (range 0% to 8.4%).
- In women entering adult corrections facilities, gonorrhea positivity decreased with age from 9.5% for those aged 18-19 years to 4.2% for those aged 35 to 65 years (Figure GG). This trend was not observed in adult men. Women aged 18-19 years attending adult facilities had higher gonorrhea positivity than women attending juvenile detention facilities. This was also true for men.

Syphilis

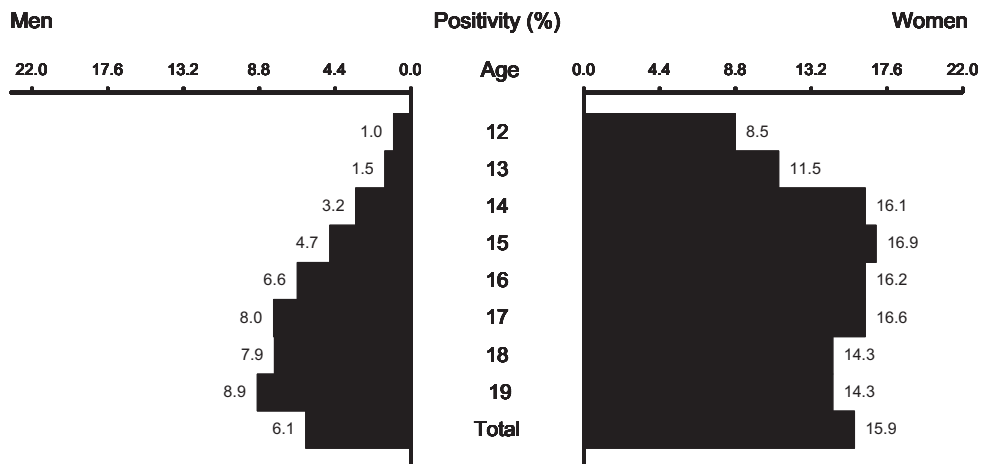
- The median reactive syphilis serology was 0.5% (range 0% to 2.4%) in adolescent men entering 5 corrections facilities and 0.7% (range 0% to 5.1%) in adolescent women entering 5 juvenile corrections facilities (Table EE).
- In men at 24 adult corrections facilities, the median reactive syphilis serology was 2.7% (range 0.2% to 5.9%) (Table FF). In women entering 19 adult corrections facilities the median percentage of reactive syphilis tests by facility was 5.3% (range 0% to 19%).

¹ Heimberger TS. Chang HG. Birkhead GS. DiFerdinando GD. Greenberg AJ. Gunn R. Morse DL. High prevalence of syphilis detected through a jail screening program. A potential public health measure to address the syphilis epidemic. *Arch Intern Med* 1993;153:1799-1804.

² Centers for Disease Control and Prevention. Syphilis screening among women arrestees at the Cook County Jail – Chicago, 1996. *MMWR* 1998;47:432-3.

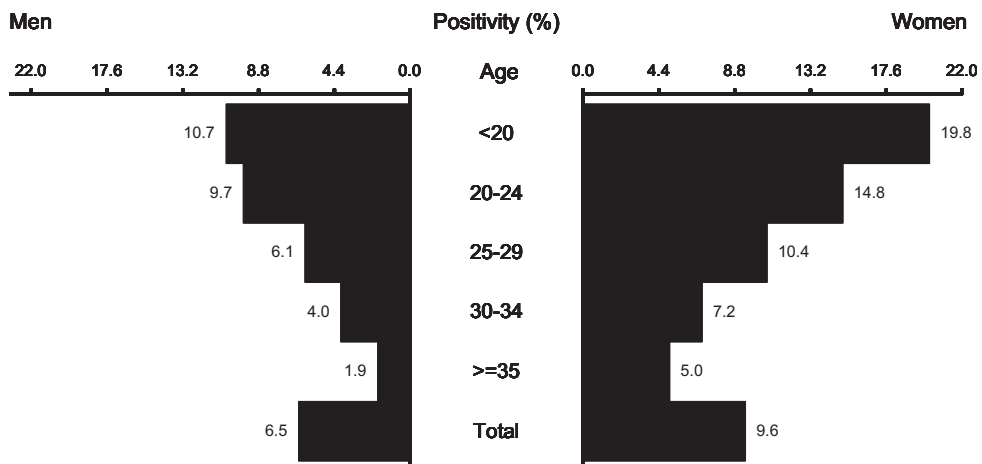
- ³ Mertz KJ, Schwebke JR, Gaydos CA, Beideinger HA, Tulloch SD, Levine WC. Screening women in jails for chlamydial and gonococcal infection using urine tests: Feasibility, acceptability, prevalence and treatment rates. *Sexually Transmitted Diseases* 2002;29:271-276.
- ⁴ Kahn R, Voigt R, Swint E, Weinstock H. Early syphilis in the United States identified in corrections facilities, 1999-2002. *Sexually Transmitted Diseases* 2004;31:360-364.
- ⁵ Blank S, McDonnell DD, Rubin SR et al., New approaches to syphilis control. Finding opportunities for syphilis treatment and congenital syphilis prevention in a women's correctional setting. *Sexually Transmitted Diseases* 1997; 24:218-26.

Figure DD. Chlamydia — Positivity by age, juvenile corrections facilities, 2004



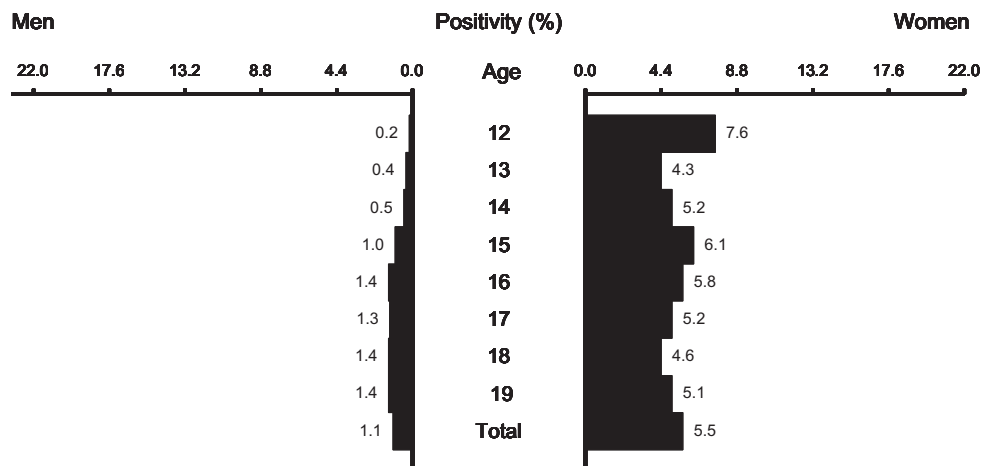
Note: Percent positivity is presented from facilities reporting > 100 test results.

Figure EE. Chlamydia — Positivity by age, adult corrections facilities, 2004



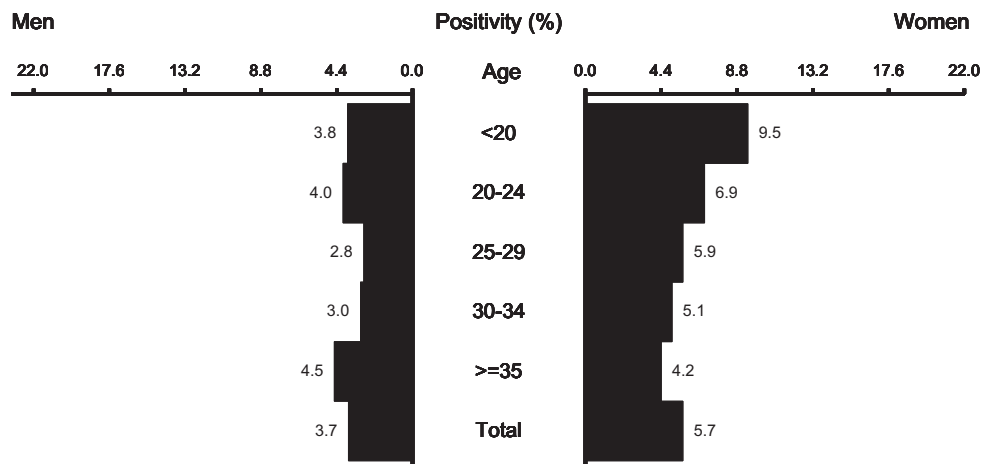
Note: Percent positivity is presented from facilities reporting > 100 test results.

Figure FF. Gonorrhea — Positivity by age, juvenile corrections facilities, 2004



Note: Percent positivity is presented from facilities reporting > 100 test results.

Figure GG. Gonorrhea — Positivity by age, adult corrections facilities, 2004



Note: Percent positivity is presented from facilities reporting > 100 test results.

Table AA. Chlamydia — Positivity among men and women in juvenile corrections facilities, 2004

State	Men			Women		
	No. of Sites	No. of Tests	Median % Positivity (Range)	No. of Sites	No. of Tests	Median % Positivity (Range)
Alabama	0	0	0	2	399	19.4 (15.4-23.4)
Arizona	3	4,758	6.5 (6.1-8.3)	4	1,975	15.7 (3.7-21.6)
California*	20	29,815	3.8 (1.2-12.9)	20	12,582	12.8 (6.3-19.9)
Connecticut	1	507	3.2	1	163	11.0
Delaware	1	1,137	5.5	1	290	11.0
Georgia	2	1,751	17.9 (8.3-27.5)	2	5,417	17.6 (8.8-26.5)
Illinois	2	4,752	6.6 (4.5-8.7)	1	662	24.3
Indiana	1	890	6.6	1	292	18.5
Kentucky	4	819	4.6 (1.4-5.8)	2	393	6.1 (2.4-9.9)
Maryland	5	2,375	3.8 (1.0-7.8)	1	450	18.9
Massachusetts	2	944	5.5 (5.2-5.8)	1	310	12.6
Michigan	3	504	6.8 (5.6-12.7)	1	133	24.1
Nebraska	1	970	8.8	1	336	17.3
Nevada	1	120	4.2	0	0	0
New Jersey	2	2,011	8.6 (5.9-11.2)	1	223	25.1
New Mexico	1	551	6.7	0	0	0
New York	8	11,265	6.2 (1.5-10.1)	5	1,059	17.6 (5.2-24.3)
North Dakota	1	175	6.9	0	0	0
Ohio	1	802	13.6	1	231	24.7
Oklahoma	3	536	10.3 (4.3-10.6)	1	148	23.6
Oregon	3	1,883	4.3 (3.0-10.7)	2	323	11.1 (5.9-16.3)
Pennsylvania	2	227	5.3 (4.3-6.3)	0	0	0
South Carolina	1	353	9.6	1	178	11.8
Texas	3	3,937	6.2 (2.4-11.1)	4	1,719	14.3 (5.0-24.2)
Utah	2	794	4.4 (4.4-4.4)	1	187	19.3
Virginia	1	632	10.0	0	0	0
Washington	5	1,381	5.9 (1.3-8.1)	2	246	12.4 (7.3-17.5)
Wisconsin	2	746	4.1 (3.1-5.1)	0	0	0
Total	81	74,635	5.8 (1.0-27.5)	56	27,716	14.0 (2.4-26.5)

Note: The median positivity is presented from facilities reporting > 100 test results. *Includes Los Angeles and San Francisco.

Table BB. Chlamydia — Positivity among men and women in adult corrections facilities, 2004

State	Men			Women		
	No. of Sites	No. of Tests	Median % Positivity (Range)	No. of Sites	No. of Tests	Median % Positivity (Range)
Arizona	2	348	16.6 (13.1-20.1)	2	3,460	10.3 (8.7-12.0)
California*	6	4,571	5.3 (3.4-6.3)	5	7,518	8.2 (5.7-19.2)
Colorado	2	269	15.5 (14.4-16.7)	1	156	11.5
Delaware	0	0	0	1	564	3.7
Hawaii	0	0	0	2	313	11.5 (7.1-16.0)
Illinois	3	9,008	10.2 (2.8-19.0)	4	13,200	8.7 (5.7-10.4)
Iowa	1	364	14.3	2	635	5.0 (3.0-7.0)
Massachusetts	3	2,724	7.7 (6.5-10.8)	2	1,245	4.8 (4.7-4.9)
Michigan	1	105	15.2	1	109	8.3
Missouri	1	1,422	7.9	2	314	4.9 (4.0-5.7)
Montana	0	0	0	1	162	1.2
Nebraska	4	2,096	9.3 (6.6-16.6)	1	253	13.8
Nevada	1	144	23.6	1	128	22.7
North Dakota	1	592	5.6	0	0	0
Oregon	1	132	15.9	1	179	8.4
Texas	1	426	11.5	2	1,936	6.8 (4.4-9.1)
Utah	1	110	30.0	0	0	0
Washington	0	0	0	1	1,258	5.0
West Virginia	2	988	4.1 (0.7-7.6)	0	0	0
Wisconsin	5	5,661	12.5 (3.2-19.1)	3	1,320	1.9 (1.8-7.2)
Total	35	28,960	10.2 (0.7-30.0)	32	32,750	7.2 (1.2-22.7)

Note: The median positivity is presented from facilities reporting > 100 test results. *Includes Los Angeles and San Francisco.

Table CC. Gonorrhea — Positivity among men and women in juvenile corrections facilities, 2004

State	Men			Women		
	No. of Sites	No. of Tests	Median % Positivity (Range)	No. of Sites	No. of Tests	Median % Positivity (Range)
Alabama	0	0	0	2	399	11.4 (10.5-12.3)
California*	7	20,284	0.7 (0.4-0.9)	8	5,909	4.0 (0.7-6.3)
Connecticut	1	511	0	1	164	1.2
Delaware	1	820	1.2	1	205	3.4
Georgia	2	1,748	10.0 (1.7-18.2)	2	5,410	5.7 (2.8-8.7)
Illinois	2	4754	2.0 (1.5-2.4)	1	663	10.4
Indiana	1	891	0	1	294	0
Kentucky	4	817	0.9 (0.5-2.2)	2	394	3.9 (1.0-6.9)
Maryland	5	2,368	0.5 (0-1.1)	1	448	5.1
Michigan	2	379	3.7 (3.5-3.8)	1	133	5.3
Nebraska	1	970	0.7	1	336	2.7
New Jersey	2	2,014	1.6 (0.8-2.3)	1	222	9.9
New Mexico	1	551	0.4	0	0	0
New York	5	9,934	0.8 (0.5-1.4)	3	559	3.9 (3.9-4.1)
Ohio	1	802	4.1	1	231	11.3
Oklahoma	3	536	0.5 (0-3.6)	1	145	16.6
Pennsylvania	1	114	0	0	0	0
South Carolina	1	353	3.7	1	178	3.9
Texas	2	2,457	1.3 (1.2-1.5)	3	898	6.4 (6.0-8.2)
Utah	0	0	0	1	181	4.4
Washington	5	1,381	0.2 (0-1.8)	2	246	3.5 (1.8-5.1)
Wisconsin	2	743	0.8 (0-1.7)	0	0	0
Total	49	52,427	0.8 (0-18.2)	34	17,015	4.5 (0-16.6)

Note: The median positivity is presented from facilities reporting > 100 test results. *Includes Los Angeles and San Francisco.

Table DD. Gonorrhea — Positivity among men and women in adult corrections facilities, 2004

State	Men			Women		
	No. of Sites	No. of Tests	Median % Positivity (Range)	No. of Sites	No. of Tests	Median % Positivity (Range)
California*	6	4,275	1.4 (0-5.0)	5	7,518	5.0 (1.5-7.1)
Colorado	2	270	2.5 (1.9-3.0)	1	157	4.5
Delaware	0	0	0	1	402	1.2
Hawaii	0	0	0	2	313	5.0 (2.4-7.6)
Illinois	3	9,011	3.0 (2.6-4.2)	4	13,235	5.7 (1.0-8.4)
Iowa	1	364	0.8	2	635	2.1 (0.2-3.9)
Missouri	1	1,421	1.8	2	313	1.9 (1.7-2.2)
Montana	0	0	0	1	162	0
Nebraska	4	2,096	1.1 (0-3.7)	1	253	4.7
Nevada	1	144	13.2	1	128	7.0
Texas	1	271	5.2	2	1,452	3.6 (1.8-5.3)
Utah	1	110	13.6	0	0	0
Washington	0	0	0	1	1,258	0.6
West Virginia	2	994	31.6 (29.4-33.8)	0	0	0
Wisconsin	5	5,660	3.5 (0-7.4)	3	1,320	0.9 (0-3.9)
Total	27	24,616	2.6 (0-33.8)	26	27,146	3.0 (0-8.4)

Note: The median positivity is presented from facilities reporting > 100 test results. *Includes Los Angeles and San Francisco.

Table EE. Syphilis— Positivity among men and women in juvenile corrections facilities, 2004

<i>State</i>	<i>Men</i>			<i>Women</i>		
	<i>No. of Sites</i>	<i>No. of Tests</i>	<i>Median % Positivity (Range)</i>	<i>No. of Sites</i>	<i>No. of Tests</i>	<i>Median % Positivity (Range)</i>
California*	3	14,349	0.5 (0.3-0.5)	3	3,269	0.7 (0.6-0.8)
Pennsylvania	1	4,723	0	1	827	0
Texas	1	34,866	2.4	1	8,798	5.1
Total	5	53,938	0.5 (0.0-2.4)	5	12,894	0.7 (0-5.1)

Note: The median positivity is presented from facilities reporting > 100 test results. *Includes Los Angeles and San Francisco.

Table FF. Syphilis— Positivity among men and women in adult corrections facilities, 2004

<i>State</i>	<i>Men</i>			<i>Women</i>		
	<i>No. of Sites</i>	<i>No. of Tests</i>	<i>Median % Positivity (Range)</i>	<i>No. of Sites</i>	<i>No. of Tests</i>	<i>Median % Positivity (Range)</i>
California*	1	1,262	4.3	1	595	3.9
Maryland	1	14,984	2.2	1	3,583	10.0
Massachusetts	1	3,442	1.3	1	528	1.9
Mississippi	5	2,594	3.8 (2.6-5.9)	0	0	0
North Carolina	7	16,997	2.9 (1.7-4.5)	7	3,611	8.3 (5.3-12.4)
Ohio	3	30,131	0.6 (0.2-1.1)	3	5,012	1.4 (0.0-2.5)
Pennsylvania	1	22,647	5.7	1	4,433	0.2
Tennessee	3	24,002	2.5 (2.0-4.2)	3	5,623	6.6 (1.2-19.0)
Texas	1	63,768	3.3	1	19,210	7.3
Wisconsin	1	1,252	1.8	1	711	5.2
Total	24	181,079	2.7 (0.2-5.9)	19	43,306	5.3 (0.0-19.0)

Note: The median positivity is presented from facilities reporting > 100 test results. *Includes Los Angeles and San Francisco.