Sexually Transmitted Disease Surveillance 2006

Division of STD Prevention

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Division of STD Prevention
Atlanta, Georgia 30333

Centers for Disease Control and Prevention.....Julie Louise Gerberding, M.D., M.P.H.
Director

Coordinating Center for Infectious Diseases .....Mitchell L. Cohen, M.D.
Director

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.....Kevin Fenton, M.D., Ph.D.
Director

Division of STD Prevention .....John M. Douglas, Jr., M.D.
Director

Epidemiology and Surveillance Branch .....Stuart M. Berman, M.D., Sc.M.
Chief

Surveillance and Special Studies Team .....Hillard S. Weinstock, M.D., M.P.H.
Lead

Statistics and Data Management Branch .....Samuel L. Groseclose, D.V.M., M.P.H.
Chief

Rose Horsley
Team Lead

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Selected STD Surveillance and Prevention References and Websites

Supplemental STD Surveillance Reports – 2006

- *2006 Chlamydia Prevalence Monitoring Project*: **http://www.cdc.gov/std/chlamydia2006/**
- *2006 Gonococcal Isolate Surveillance Project*: **http://www.cdc.gov/std/GISP2006/**
- *2006 Syphilis Surveillance Project*: **http://www.cdc.gov/std/Syphilis2006/**

STD Surveillance Reports 1993 – 2006

- **http://www.cdc.gov/nchstp/dstd/Stats_Trends/Stats_and_Trends.htm**

STD Data on Wonder

- **http://wonder.cdc.gov/std.html**

STD Fact Sheets

- **http://www.cdc.gov/std/healthcomm/fact_sheets.htm**

STD Treatment Guidelines

- **http://www.cdc.gov/STD/treatment/**

STD Program Evaluation Guidelines

http://www.cdc.gov/std/program/pupestd.htm

STD Program Operation Guidelines

- **http://www.cdc.gov/std/program/default.htm**

Recommendations for Public Health Surveillance of Syphilis in the United States

- **http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5233a7.htm**

Behavioral Surveillance

- Youth Risk Behavior Surveillance System: **http://www.cdc.gov/HealthyYouth/yrbs/index.htm**
- National Survey of Family Growth: Advance Data 362. Sexual Behavior and Selected Health Measures: Men and Women 15-44 Years of Age, United States, 2002. 56 pp. (PHS) 2003-1250: **http://www.cdc.gov/nchs/products/pubs/pubd/ad/361-370/ad362.htm**

Foreword

"STDs are hidden epidemics of enormous health and economic consequence in the United States. They are hidden because many Americans are reluctant to address sexual health issues in an open way and because of the biologic and social characteristics of these diseases. All Americans have an interest in STD prevention because all communities are impacted by STDs and all individuals directly or indirectly pay for the costs of these diseases. STDs are public health problems that lack easy solutions because they are rooted in human behavior and fundamental societal problems. Indeed, there are many obstacles to effective prevention efforts. The first hurdle will be to confront the reluctance of American society to openly confront issues surrounding sexuality and STDs. Despite the barriers, there are existing individual- and community-based interventions that are effective and can be implemented immediately. That is why a multifaceted approach is necessary to both the individual and community levels.

To successfully prevent STDs, many stakeholders need to redefine their mission, refocus their efforts, modify how they deliver services, and accept new responsibilities. In this process, strong leadership, innovative thinking, partnerships, and adequate resources will be required. The additional investment required to effectively prevent STDs may be considerable, but it is negligible when compared with the likely return on the investment. The process of preventing STDs must be a collaborative one. No one agency, organization, or sector can effectively do it alone; all members of the community must do their part. A successful national initiative to confront and prevent STDs requires widespread public awareness and participation and bold national leadership from the highest levels."[1]

[1]Concluding statement from the Institute of Medicine's Summary Report, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*, National Academy Press, Washington, DC, 1997, p.43.

Preface

Sexually Transmitted Disease Surveillance, 2006 presents statistics and trends for sexually transmitted diseases (STDs) in the United States through 2006. This annual publication is intended as a reference document for policy makers, program managers, health planners, researchers, and others who are concerned with the public health implications of these diseases. ***The figures and tables in this edition supersede those in earlier publications of these data.***

The surveillance information in this report is based on the following sources of data: (1) case reports from state and local STD programs; (2) the Regional Infertility Prevention Projects, the National Job Training Program, the Corrections STD Prevalence Monitoring Project, and the Men Who Have Sex With Men (MSM) Prevalence Monitoring Project; (3) the Gonococcal Isolate Surveillance Project (GISP); and (4) national surveys implemented by federal and private organizations.

The STD surveillance systems operated by state and local STD control programs, which provide the case report data for chlamydia, gonorrhea, syphilis, and chancroid are the data sources of many of the figures and most of the statistical tables in this publication. These systems are an integral part of program management at all levels of STD prevention and control in the United States. Because of incomplete diagnosis and reporting, the number of STD cases reported to CDC is less than the actual number of cases occurring in the United States population. Case report data for other STDs are not available because they are not nationally notifiable diseases.

Sexually Transmitted Disease Surveillance, 2006 consists of four parts. The **National Profile** contains figures that provide an overview of STD morbidity in the United States. The accompanying text identifies major findings and trends for selected STDs. The **Special Focus Profiles** contain figures and text describing STDs in selected subgroups and populations that are a focus of national and state prevention efforts. The **Detailed Tables** provide statistical information about STDs at the county, metropolitan statistical area (MSA), regional, state, and national levels. The **Appendix** includes information on interpreting the STD surveillance data used to produce this report, Healthy People 2010 STD objectives, Government Performance and Results Act (GPRA) goals, and STD surveillance case definitions.

Selected figures and tables in this document identify goals that reflect progress towards some of the Healthy People 2010 (HP2010) national health status objectives for STDs.[1] **Appendix** Table A3 displays progress made towards the HP2010 targets for STDs. These targets are used as reference points throughout this edition of *Sexually Transmitted Disease Surveillance 2006*.

Any comments and suggestions that would improve the usefulness of future publications are appreciated and should be sent to Director, Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road, Mailstop E-02, Atlanta, Georgia, 30333.

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[1] 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.

Acknowledgments

Publication of this report would not have been possible without the contributions of the State and Territorial Health Departments and the Sexually Transmitted Disease Control Programs and the Regional Infertility Prevention Projects, which provided surveillance data to the Centers for Disease Control and Prevention.

This report was prepared by the following staff and contractors of the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention:

Office of the Director

Keith Davis
John Douglas
Melinda Flock
Suzanne Haecker
Amy Pulver

Epidemiology and Surveillance Branch

John Beltrami
Stuart Berman
Deblina Datta
Riduan Joesoef
Katrina Kramer
Kristen Mahle
Lori Newman
Catherine Lindsey Satterwhite
Hillard Weinstock
Eileen Yee

Statistics and Data Management Branch

Susan Bradley
Jim Braxton
Sharon Clanton
Darlene Davis
Miatta Dennis
Molly Dowling
LaZetta Grier
Samuel Groseclose
Alesia Harvey
Donna Helms
Rose Horsley
Kathleen Hutchins
Rob Nelson
Maya Sternberg
Akbar Zaidi

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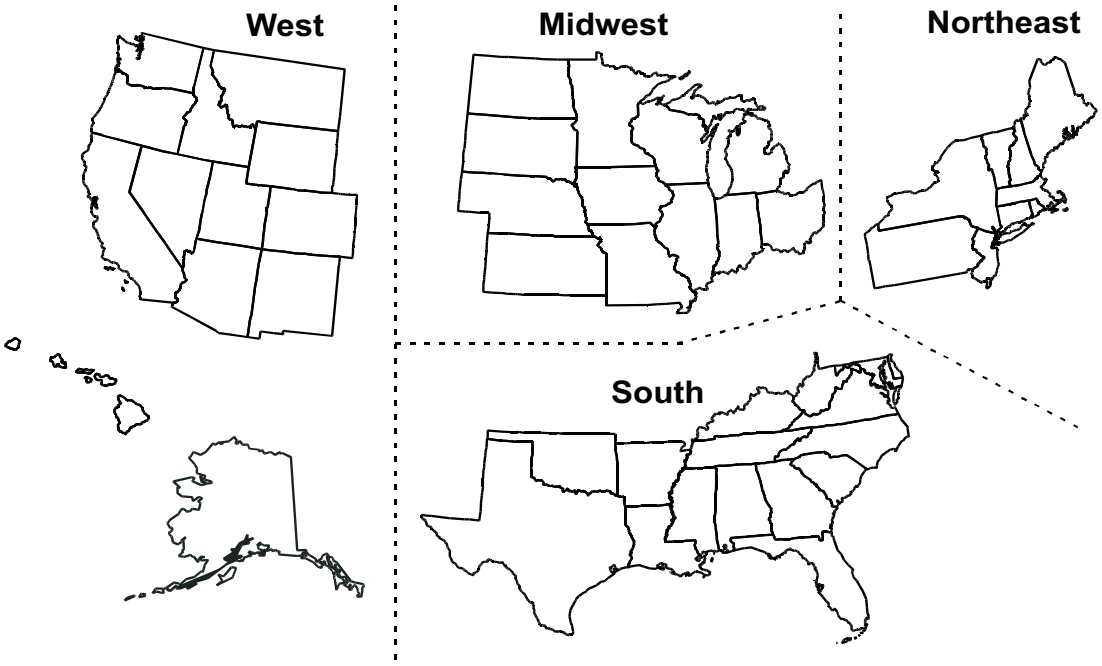


West	Midwest	South	Northeast
Alaska	Illinois	Alabama	Connecticut
Arizona	Indiana	Arkansas	Maine
California	Iowa	Delaware	Massachusetts
Colorado	Kansas	District of Columbia	New Hampshire
Hawaii	Michigan	Florida	New Jersey
Idaho	Minnesota	Georgia	New York
Montana	Missouri	Kentucky	Pennsylvania
Nevada	Nebraska	Louisiana	Rhode Island
New Mexico	North Dakota	Maryland	Vermont
Oregon	Ohio	Mississippi	
Utah	South Dakota	North Carolina	
Washington	Wisconsin	Oklahoma	
Wyoming		South Carolina	
		Tennessee	
		Texas	
		Virginia	
		West Virginia	

National Overview of Sexually Transmitted Diseases, 2006

The logo on the cover of *Sexually Transmitted Disease Surveillance, 2006* is a reminder of the multifaceted, national dimensions of the morbidity, mortality, and costs that result from sexually transmitted diseases (STDs) in the United States. It highlights the central role of STD prevention in improving health among women and infants and in promoting HIV prevention. Organized collaboration among interested, committed public and private organizations and communities is the key to reducing STDs and their related health burdens. As noted in the report of the Institute of Medicine, *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*,[1] surveillance is a key component of our efforts to prevent and control these diseases.

This overview summarizes national surveillance data on the three notifiable diseases for which there are federally-funded control programs: chlamydia, gonorrhea, and syphilis. Several observations for 2006 are worthy of note.

Chlamydia

In 2006, 1,030,911 cases of genital *Chlamydia trachomatis* infection were reported to CDC (Table 1). This case count corresponds to a rate of 347.8 cases per 100,000 population, an increase of 5.6% compared with the rate in 2005. Rates of reported chlamydial infections among women have been increasing annually since the late 1980s when public programs for screening and treatment of women were first established to avert pelvic inflammatory disease and related complications. The continued increase in chlamydia case reports in 2006 most likely represents a continued increase in screening for this infection, more sensitive tests, and more complete national reporting, but it may also reflect a true increase in morbidity.

In 2006, the overall rate of chlamydial infection in the United States among women (515.8 cases per 100,000 females) was almost three times the rate among men (173.0 cases per 100,000 males), reflecting the large number of women screened for this disease (Tables 4 and 5). However, with the increased availability of urine testing, men are increasingly being tested for chlamydial infection.[2] From 2002 through 2006, the chlamydia rate in men increased by 36% (compared with a 16% increase in women over this period).

Data from multiple sources on prevalence of chlamydial infection in defined populations have been useful in monitoring disease burden and guiding chlamydia screening programs.

In 2006, the median state-specific chlamydia test positivity among women 15 to 24 years of age who were screened at selected family planning clinics in all states, the District of Columbia, Puerto Rico, and the Virgin Islands was 6.7% (range 2.8% to 16.9%) (Figures 8 and 9).

At selected prenatal clinics in 23 states, Puerto Rico, and the Virgin Islands the

median state-specific chlamydia prevalence was 8.1% (range 3.5% to 16.7%) (Figure E).

The prevalence of infection is greater among economically-disadvantaged women 16 to 24 years of age who entered the National Job Training Program in 2006 from 40 states, the District of Columbia, and Puerto Rico. The median state-specific prevalence was 13.1% (range 4.9% to 20.0%) (Figure K). Among men entering the program in 2006 from 48 states, the District of Columbia, and Puerto Rico the median state-specific chlamydia prevalence was 7.9% (range 1.8% to 12.4%) (Figure L).

The prevalence is even greater among adolescent women entering 57 juvenile detention centers; the median chlamydia positivity by facility was 14.2% (range 2.8% to 29.4%) (Table AA).

Among adolescent men entering 83 juvenile detention centers, the median chlamydia positivity was 5.3% by facility (range 0.5% to 46.7%) (Table AA).

Although these data on prevalence are not entirely comparable because of differences in the populations screened, in the performance characteristics of the screening tests, and variations in screening criteria, they provide important information on the continuing high burden of disease in the United States.

Gonorrhea

Following a 74% decline in the rate of reported gonorrhea from 1975 to 1997, overall gonorrhea rates appeared to plateau. In 2006, 358,366 cases of gonorrhea were reported in the United States, corresponding to a rate of 120.9 per 100,000 population, an increase of 5.5% percent since 2005 and an increase for the second consecutive year. (Figure 11 and Table 1). This rate considerably exceeds the Healthy People 2010 (HP2010) target of 19 cases per 100,000 population.

As in previous years, in 2006 the South had the highest gonorrhea rate among the four regions of the country (Table 12). Although the gonorrhea rate in the South declined for many years, in 2006, it rose by 12% from 2005 to a rate of 159.2 cases per 100,000 population. The rate in the West continued to increase slightly in 2006 while rates in the Northeast declined and the rate in the Midwest showed little change.

For the fifth consecutive year, the gonorrhea rate in women in 2006 was higher (124.3 per 100,000 population) than the rate among men (116.8 per 100,000 population) (Figure 12). As with chlamydia, gonorrhea rates in women 15 to 24 years of age are particularly high. In men, they are highest among men 20 to 29 years of age (Figure 18). In 2006, the gonorrhea rate among African American men was 25 times higher than among white men; the gonorrhea rate for African American women was 14 times higher than that for white women.

In 2006, data on gonorrhea prevalence in defined populations were available from several sources. These data showed a continuing high burden of disease in adolescents and young adults in some parts of the United States.

For 16- to 24-year-old women entering the National Job Training Program in 36 states, the District of Columbia and Puerto Rico in 2006, the median state-specific gonorrhea prevalence was 2.4% (range 0.0% to 7.1%).

Among men entering the program from 20 states, the median state-specific gonorrhea prevalence was 3.6% (range 0.0% to 6.2%).

Among women entering juvenile corrections facilities the median gonorrhea positivity was 3.8% (range 0.0% to 12.2%); the median gonorrhea positivity for men entering juvenile corrections facilities was 0.9% (range 0.0% to 4.5%).

Among women entering adult corrections facilities, the median gonorrhea positivity was 4.1% (range 0.0% to 10.9%). In men, the median gonorrhea positivity was 2.3% (range 0.0% to 18.3%) in adult corrections facilities.

Among men who have sex with men (MSM) attending eight STD clinics, the median clinic urethral gonorrhea positivity was 10% (range 8% to 13%).

In the Gonococcal Isolate Surveillance Project (GISP), a sentinel surveillance project located in 28 STD clinics throughout the United States, the proportion of isolates among MSM that were resistant to ciprofloxacin increased in 2006 to 39%. The overall proportion of resistant isolates among heterosexuals doubled from 3.8% in 2005 to 7% in 2006. As a result of the high prevalence of quinolone resistant *N. gonorrhoeae* among MSM and heterosexuals, CDC revised the *2006 STD Treatment Guidelines*. Fluoroquinolones are no longer recommended for the treatment of gonorrhea and associated conditions such as pelvic inflammatory disease.[3]

Syphilis

The rate of primary and secondary (P&S) syphilis reported in the United States decreased during the 1990s and in 2000 was the lowest since reporting began in 1941. The low rate of syphilis and the concentration of the majority of syphilis cases in a small number of geographic areas led to the development of the National Plan to Eliminate Syphilis from the United States, which was announced by the Surgeon General in 1999 and updated in 2006.[4] The rate of P&S syphilis in the United States declined by 89.7% from 1990 through 2000. However, the rate of P&S syphilis has increased each year since 2001, mostly in men, but also in women for the past two years. In 2006, 9,756 cases of P&S syphilis cases were reported to CDC, corresponding to a rate of 3.3 cases per 100,000 population, a 13.8% increase from 2005. Since 2001, the rate of P&S syphilis has increased 57%. After 14 years of decline, the rate of congenital syphilis increased in 2006 to 8.5 cases per 100,000 live births from 8.2 in 2005. There were 349 cases of congenital syphilis reported.

Although wide disparities exist in the rates of STDs among racial and ethnic groups, there has been a reduction in these differences for syphilis over the past seven years. The P&S syphilis rate for 2006 among African Americans was 5.9 times the rate among whites, reflecting a substantial decline from 1999, when the rate among African Americans was 29 times greater than that among whites (Table 33B). While this has reflected decreasing rates among African Americans, it also reflects increases among white men during the past five years. In 2006, increases were observed among both African-American men (18.3 cases per 100,000 population, up from 15.5 in 2005) and African-American women (4.9 cases per 100,000 population, up from 4.4 in 2005). An increase was also observed among white men (3.5 cases per 100,000 population), up from 3.3 in 2005, while the rate in white women remained the same (0.3 per 100,000 population).

While syphilis elimination efforts have successfully focused on heterosexual minority populations at risk for syphilis, increases in syphilis among MSM since 2001 and more recent increases among women and African Americans highlight the importance of continually reassessing and refining surveillance, prevention, and control strategies.

[1] Institute of Medicine. *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*, Committee on Prevention and Control of Sexually Transmitted Diseases, National Academy Press, Washington, DC, 1997.

[2] Centers for Disease Control and Prevention. Male chlamydia screening consultation, Atlanta, Georgia, May 28-29, 2006, Meeting Report, May 22, 2007. Available at: http://www.cdc.gov/std/chlamydia/ChlamydiaScreening-males.pdf. Accessed October 16, 2007.

[3] 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, 2007;56:332-336.

[4] Division of STD Prevention. *The National Plan to Eliminate Syphilis from the United States*. National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, 2006.

NATIONAL PROFILE

NATIONAL PROFILE

National Profile

The **National Profile** section contains figures showing trends and the distribution of nationally reportable sexually transmitted diseases (chlamydia, gonorrhea, syphilis and chancroid) by age, sex, race/ethnicity, and location for the United States. Where relevant, the figures illustrate progress towards specific Healthy People 2010 targets* for the nation.[1]

* See the **Appendix** for a listing of the Healthy People 2010 objectives for the diseases addressed in this report.

[1] 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.

Chlamydia

Background

Chlamydia trachomatis infections are the most commonly-reported notifiable disease in the United States. They are among the most prevalent of all STDs and, since 1994, have comprised the largest proportion of all STDs reported to CDC (Table 1). Recent studies also demonstrate the high prevalence of chlamydial infections in the general U.S. population. From 1999 to 2002, chlamydia prevalence among participants (aged 14-39 years) in the National Health and Nutrition Examination Survey was 2.2%.[1] Among young adults (18-26 years of age) participating in the National Longitudinal Study of Adolescent Health from 2001 to 2002, chlamydia prevalence was 4.2%.[2]

In women, chlamydial infections, which are usually asymptomatic, may result in pelvic inflammatory disease (PID), which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. Data from a randomized controlled trial of chlamydia screening in a managed care setting suggested that screening programs can lead to a reduction in the incidence of PID by as much as 60%.[3] As with other inflammatory STDs, chlamydial infection can facilitate the transmission of HIV infection. In addition, pregnant women infected with chlamydia can pass the infection to their infants during delivery, potentially resulting in neonatal ophthalmia and pneumonia. Due to the large burden of disease and risks associated with infection, CDC recommends screening all sexually active women younger than 26 years of age for chlamydia annually.[4]

The increase in reported chlamydial infections during the last 10 years reflects the expansion of chlamydia screening activities, use of increasingly sensitive diagnostic tests, an increased emphasis on case reporting from providers and laboratories, improvements in the information systems for reporting, and, possibly, true increases in disease. However, many women who are at risk are still not being tested, reflecting, in part, lack of awareness among some health care providers and limited resources available to support screening. Chlamydia screening and reporting are likely to continue to expand further in response to the Healthcare Effectiveness Data and Information Set (HEDIS) measure for chlamydia screening of sexually active women 15 through 25 years of age who receive medical care through commercial or Medicaid managed care organizations.[5]

To better monitor trends in disease burden in defined populations during the expansion of chlamydia screening activities, data on chlamydia positivity among persons screened in a variety of settings are used. In most instances, test positivity serves as a reasonable approximation of prevalence.[6]

Chlamydia - United States

In 2000, for the first time, all 50 states and the District of Columbia had regulations requiring the reporting of chlamydia cases.

In 2006, 1,030,911 chlamydial infections were reported to CDC from 50 states and the District of Columbia (Table 1). This is the first time reported cases of chlamydia

have exceeded 1 million. This case count corresponds to a rate of 347.8 cases per 100,000 population, an increase of 5.6% compared with the rate of 329.4 in 2005. The reported number of chlamydial infections was almost three times the number of reported cases of gonorrhea (358,366 gonorrhea cases were reported in 2006) (Table 1).

From 1987 through 2006, the rate of reported chlamydial infection increased from 50.8 to 347.8 cases per 100,000 population (Figure 1, Table 1).

Chlamydia by Region

For the years 1997-2001, chlamydia rates in the southern region of the United States were slightly higher than in any other region of the country (Figure 2, Table 3). For the years 2002-2006, overall rates were comparable in the Midwest, West, and South. Rates have consistently remained lowest in the Northeast. In 2006, rates increased in the South, West, and Northeast (363.3, 357.9, 299.0 cases per 100,000 population, respectively) and remained the same in the Midwest (352.4 cases).

Chlamydia by State

In 2006, chlamydia rates per 100,000 population by state ranged from 152.4 cases in New Hampshire to 681.8 cases in Alaska (Figure 3, Table 2). Thirty states, the District of Columbia, and Guam had chlamydia case rates higher than 300 cases per 100,000 population.

Chlamydia by Metropolitan Statistical Area (MSA)

In 2006, the chlamydia case rate per 100,000 population in the 50 most populous MSAs increased overall, among both women and men (Table 7). Among women, the 2006 case rate of 533.8 is a 4.4% increase over the 2005 case rate of 511.3 (Table 8). The 2006 case rate among men (191.5 per 100,000 population) increased 7.5% from the 2005 case rate (178.2) (Table 9). In 2006, 56.7% of chlamydia cases were reported by these MSAs.

Chlamydia by County

Counties in the United States with the highest chlamydia case rates per 100,000 population were located primarily in the Southeast and West, including Alaska (Figure 4). In 2006, 842 (26.8%) of 3,140 counties had rates greater than 300.0 cases per 100,000 population. Rates per 100,000 population were 150.0 or less in 1,296 counties (41.3%) and between 150.1 and 300 in 1,002 counties (31.9%). Eighty-nine counties and independent cities reported 50% of all chlamydia cases in 2006. Fifty-four with the greatest number of cases are shown in Table 6, with case rates ranging from 213.3 (Miami-Dade County, Florida) to 1330.3 (St. Louis (City), Missouri) per 100,000 population.

Chlamydia by Reporting Source

The majority of chlamydia cases reported in 2006 were reported from venues outside of STD clinics (Figure 5, Table A2). Among women, only 12.0% of chlamydia cases were reported through an STD clinic (93,169 of 775,788 total cases). In contrast, among men, 32.7% of chlamydia cases were reported through an STD clinic in 2006 (82,638 of 252,630 total cases).

Chlamydia by Race/Ethnicity

In 2006, chlamydia rates increased for all racial and ethnic groups except Asian/Pacific Islanders (Figure 6, Table 11B). The rate of chlamydia among African Americans was over eight times higher than that of whites (1,275.0 and 153.1 cases per 100,000, respectively). The rates among American Indian/Alaska Natives (797.3) and Hispanics (477.0) were also higher

than that of whites (5.2 and 3.1 times higher, respectively). In 2006, the chlamydia case rate per 100,000 population among Asian/Pacific Islanders was 132.1, a decrease of 11.0% from the 2005 rate (148.4).

Chlamydia by Sex

In 2006, the overall rate of reported chlamydial infection among women in the United States (515.8 cases per 100,000 females) was almost three times as high as the rate among men (173.0 cases per 100,000 males), likely reflecting a greater number of women screened for this infection (Figure 1, Tables 4 and 5). The lower rates among men also suggest that many of the sex partners of women with chlamydia are not being diagnosed or reported as having chlamydia. However, with the advent of highly sensitive nucleic acid amplification tests that can be performed on urine, symptomatic and asymptomatic men are increasingly being diagnosed with chlamydial infection. From 2002 through 2006, the chlamydial infection rate in men increased by 36.4% (from 126.8 to 173.0 cases per 100,000 males) compared with a 15.9% increase in women during the same period (from 445.0 to 515.8 cases per 100,000 females).

Chlamydia by Age and Sex

Among women, the highest age-specific rates of reported chlamydia in 2006 were among those 15 to 19 years of age (2,862.7 cases per 100,000 females) and 20 to 24 years of age (2,797.0 cases per 100,000 females) (Figure 7, Table 10). These increased rates in women may, in part, reflect increased screening in this group. Age-specific rates among men, while substantially lower than the rates among women, were highest in the 20- to 24-year-old age group (856.9 cases per 100,000 males) (Figure 7, Table 10).

Chlamydia Screening and Prevalence Monitoring Project

Chlamydia screening and prevalence monitoring activities were initiated in Health and Human Services (HHS) Region X (Alaska, Idaho, Oregon, Washington) in 1988 as a CDC-supported demonstration project. In 1993, chlamydia screening services for women were expanded to three additional HHS regions (III, VII, and VIII) and, in 1995, to the remaining HHS regions (I, II, IV, V, VI, and IX). In some regions, federally-funded chlamydia screening supplements local-and state-funded screening programs. Screening criteria and practices vary by region and state.

In 2006, 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 6.7% (range 2.8% to 16.9%) (Figures 8 and 9). See **Appendix** (Chlamydia, Gonorrhea, and Syphilis Prevalence Monitoring) for details.

To examine trends in regional chlamydia positivity, rates are adjusted to account for changes in laboratory test methods and associated increases in test sensitivity (Figure 10, see **Appendix**).[7] Even after adjustment, chlamydia test positivity has remained fairly stable in all 10 HHS regions between 2002 and 2006. Positivity slightly decreased in three regions from 2005 to 2006, increased in five regions, and remained the same in two regions.

Chlamydia Among Special Populations

Additional information on chlamydia screening programs for women of reproductive age and chlamydia among adolescents and minority populations can be found in the **Special Focus Profiles**.

Chlamydia Summary

Both prevalence and reported cases of genital *Chlamydia trachomatis* infections remain high across age groups, race/ethnicity groups, geographic locales, and both sexes. The burden of chlamydia appears higher among women, especially those of younger age (15 to19 and 20 to 24 years of age), but this may be a reflection of which persons are screened. Racial differences also persist; case rates among African Americans continue to be substantially higher than rates among other race/ethnicity groups.

[1] Datta SD, Sternberg M, Johnson RE, Berman S, Papp JR, McQuillan G, Weinstock H. Gonorrhea and chlamydia in the United States among persons 14 to 39 years of age, 1999 to 2002. *Ann Intern Med* 2007;147(2):89-96.

[2] Miller WC, Ford CA, Morris M, Handcock MD, Schmitz JL, Hobbs MM, Cohen MS, Mullan Harris K, Udry JR. Prevalence of chlamydial and gonococcal infections among young adults in the United States. *JAMA* 2004;291(18): 2229-36.

[3] 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):1362-66.

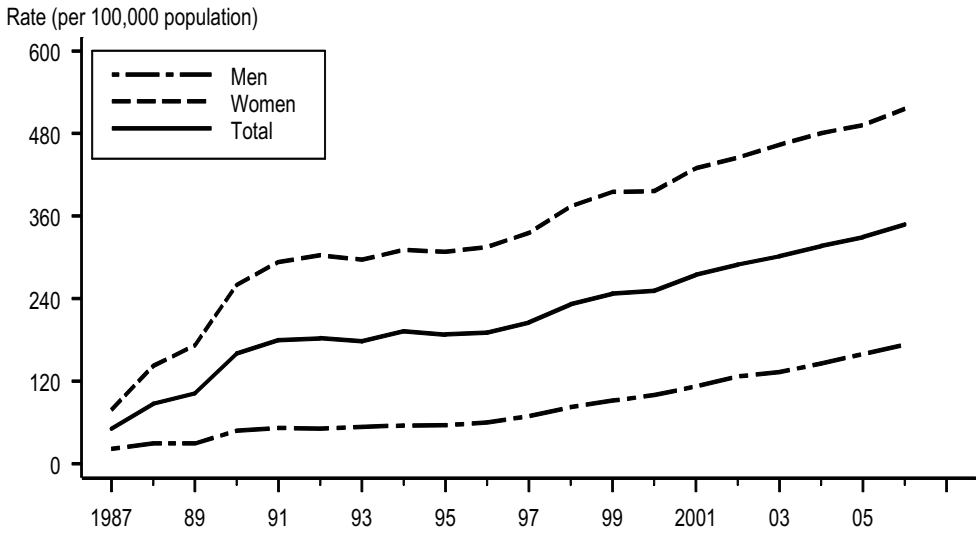
[4] Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2006. *MMWR*, 2006;55(No.RR-11):38.

[5] National Committee for Quality Assurance (NCQA). HEDIS 2000: Technical Specifications, Washington, DC, 1999, pp. 68-70, 285-286.

[6] Dicker LW, Mosure DJ, Levine WC. Chlamydia positivity versus prevalence: what's the difference? *Sexually Transmitted Diseases* 1998;25:251-3.

[7] Dicker LW, Mosure DJ, Levine WC, et al. Impact of switching laboratory tests on reported trends in *Chlamydia trachomatis* infections. *Am J Epidemiol* 2000;51:430-5.

Figure 1. Chlamydia — Rates: Total and by sex: United States, 1987–2006



Note: As of January 2000, all 50 states and the District of Columbia had regulations requiring the reporting of chlamydia cases.

Figure 2. Chlamydia — Rates by region: United States, 1997–2006

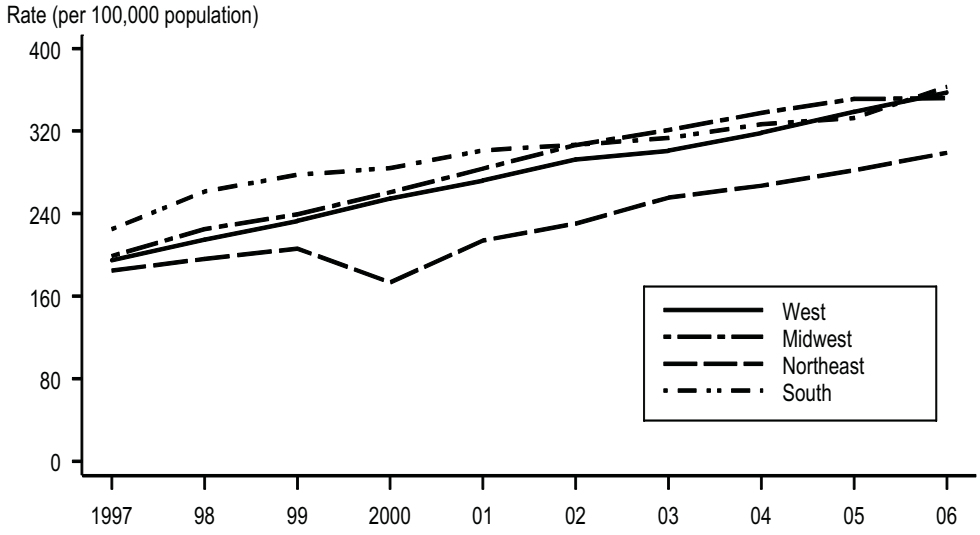
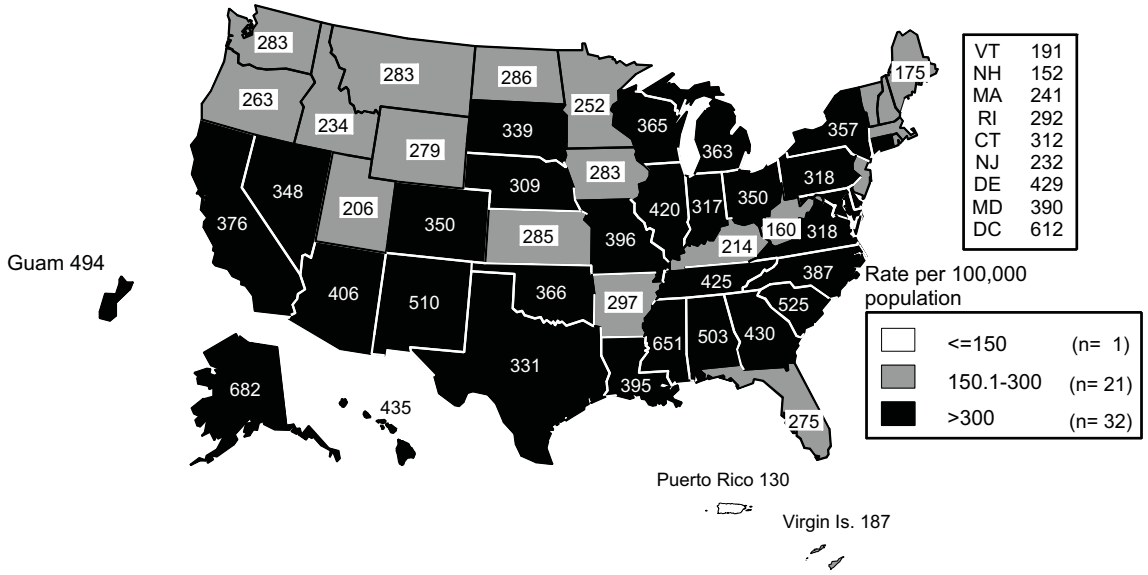


Figure 3. Chlamydia — Rates by state: United States and outlying areas, 2006



Note: The total rate of chlamydia for the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 345.0 per 100,000 population. For further information on chlamydia reporting, see Appendix (Chlamydia Morbidity Reporting).

Figure 4. Chlamydia — Rates by county: United States, 2006

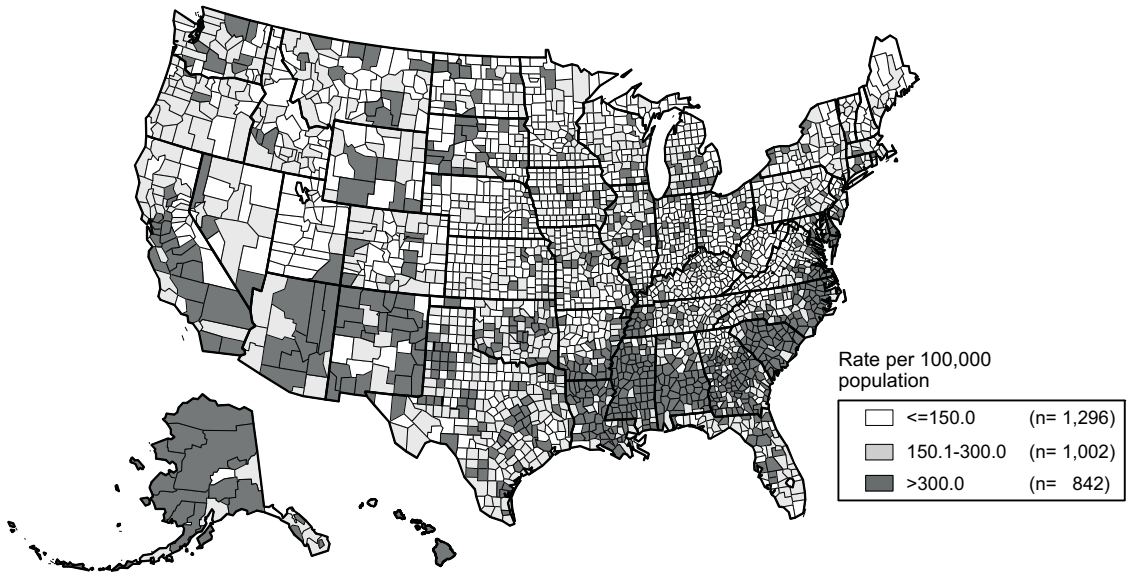


Figure 5. Chlamydia — Cases by reporting source and sex: United States, 1997–2006

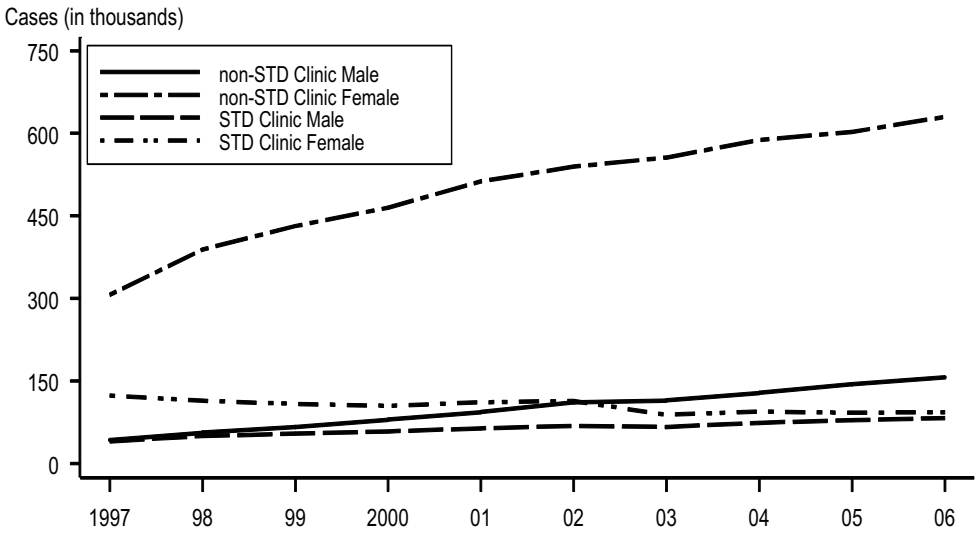


Figure 6. Chlamydia — Rates by race/ethnicity: United States, 1997–2006

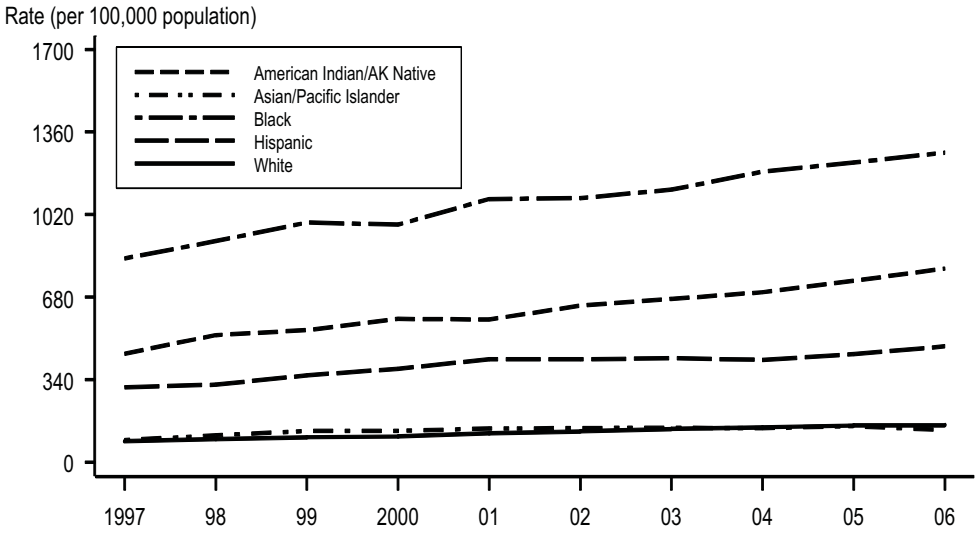


Figure 7. Chlamydia — Age- and sex-specific rates: United States, 2006

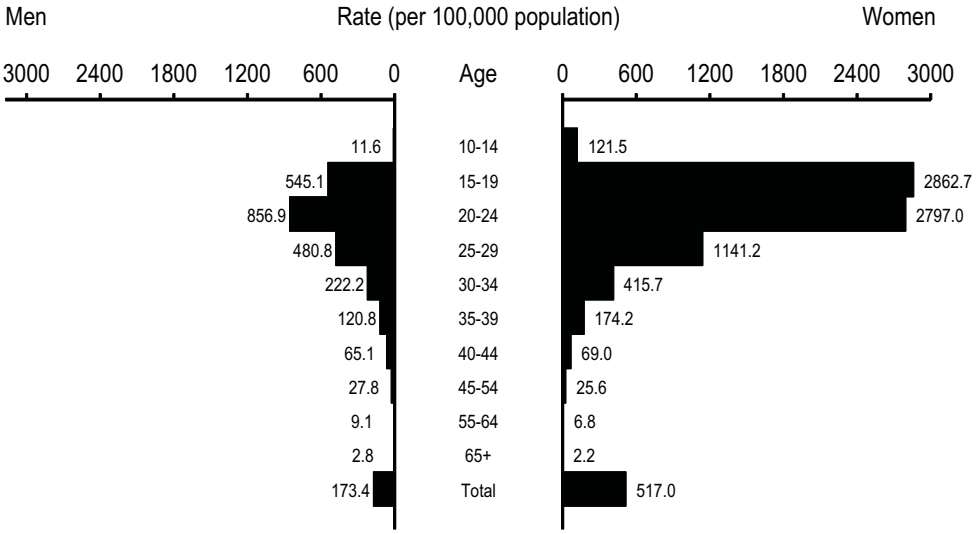
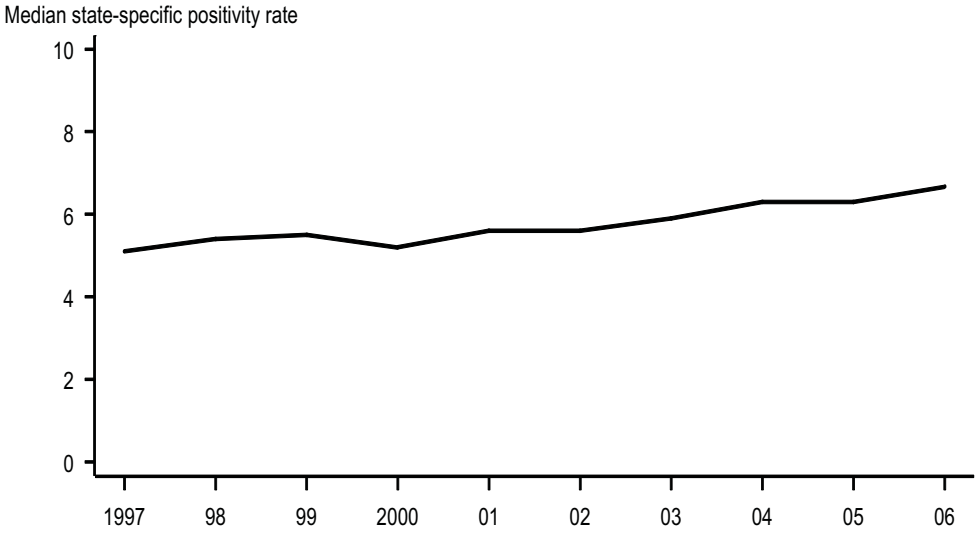


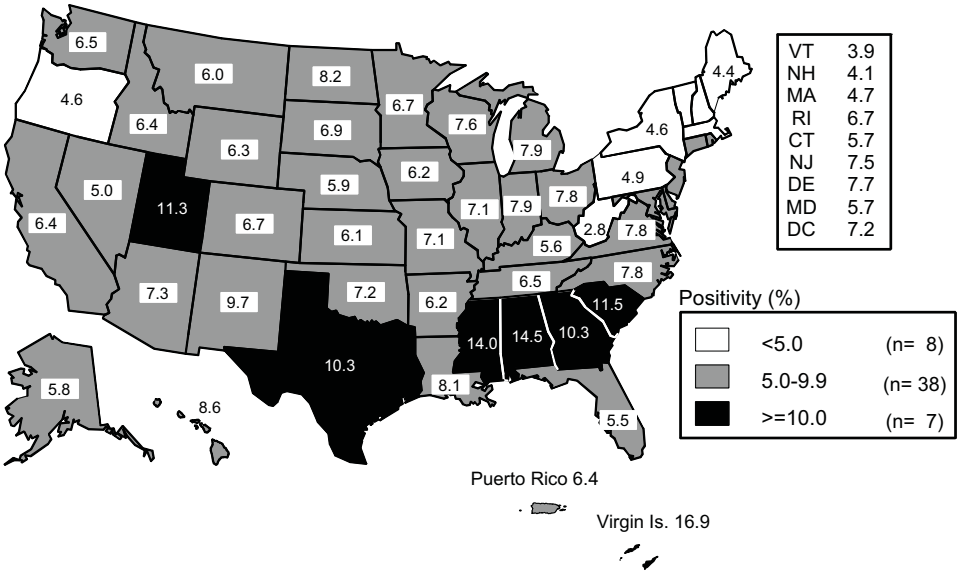
Figure 8. Chlamydia — Median state-specific positivity among 15- to 24-year-old women tested in family planning clinics: United States, 1997–2006



Note: As of 1997, all 10 Health and Human Services (HHS) regions, representing all 50 states, the District of Columbia, and outlying areas, reported chlamydia positivity data. See Appendix for definitions of HHS regions.

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

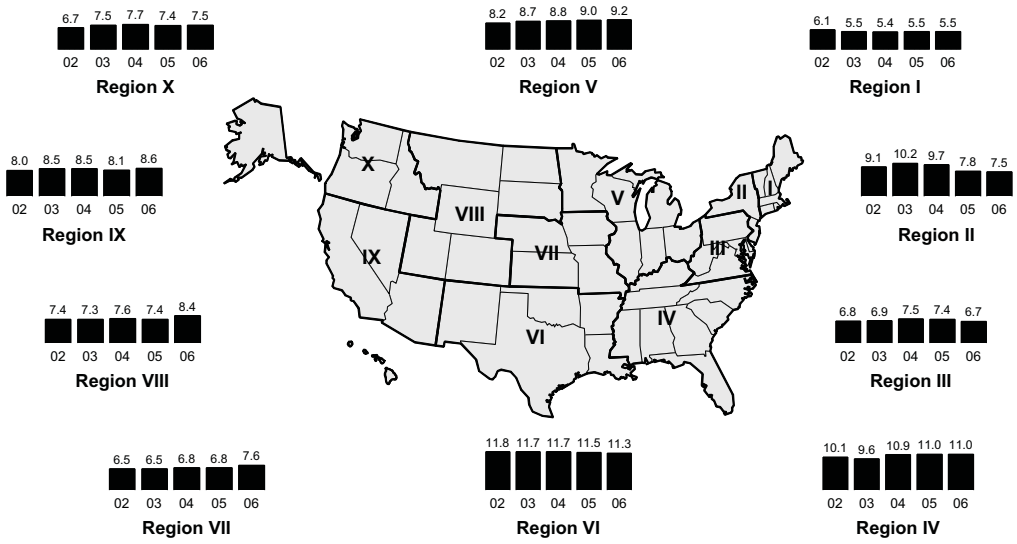
Figure 9. Chlamydia — Positivity among 15- to 24-year-old women tested in family planning clinics by state: United States and outlying areas, 2006



Note: Includes states and outlying areas that reported chlamydia positivity data on at least 500 women aged 15-24 years screened during 2006.

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

Figure 10. Chlamydia — Trends in positivity among 15- to 24-year-old women tested in family planning clinics by HHS region, 2002–2006



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. See Appendix for definitions 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

Gonorrhea

Background

Gonorrhea is the second most commonly-reported notifiable disease in the United States. Infections due to *Neisseria gonorrhoeae*, like those resulting from *Chlamydia trachomatis*, are a major cause of PID in the United States. PID can lead to serious outcomes in women such as tubal infertility, ectopic pregnancy, and chronic pelvic pain. In addition, epidemiologic and biologic studies provide strong evidence that gonococcal infections facilitate the transmission of HIV infection.[1]

From 1975 through 1997, the national gonorrhea rate declined 74% following implementation of the national gonorrhea control program in the mid-1970s (Table 1). Gonorrhea rates subsequently appeared to plateau for several years. However, rates increased for the second consecutive year, with 358,366 cases of gonorrhea reported in the United States in 2006 (Figure 11 and Table 1).

Increases in gonorrhea rates in 8 western states from 2000 to 2005 have been described among a wide variety of populations in the affected states.[2] Increases in quinolone-resistant *Neisseria gonorrhoeae* (QRNG) in 2006 led to changes in national guidelines that now limit the recommended treatment of gonorrhea to a single class of drug, the cephalosporins.[3] The combination of increases in gonorrhea morbidity with increases in resistance and decreased treatment options have increased the need for better understanding of the epidemiology of gonorrhea.

Although gonorrhea case reporting is useful for monitoring trends in gonorrhea, true increases or decreases in disease may be masked by changes in screening practices (affected by concomitant testing for chlamydia and broader use of urine-based testing), use of diagnostic tests with differing test performance, and changes in reporting practices.[4]

For most areas, the number of gonorrhea cases reported to CDC is affected by many factors, in addition to the occurrence of the infection within the population. As with reporting of other STDs, reporting of gonorrhea cases to CDC is incomplete.[5] For these reasons, supplemental data on gonorrhea prevalence in persons screened in a variety of different settings are useful in assessing disease burden in selected populations.

Gonorrhea – United States

In 2006, 358,366 cases of gonorrhea were reported in the United States. The rate of reported gonorrhea in the United States was 120.9 cases per 100,000 population in 2006 (Figure 11 and Table 1), an increase of 5.5% since 2005. Gonorrhea rates increased in 2006 for the second consecutive year.

Gonorrhea by Region

As in previous years, in 2006 the South had the highest gonorrhea rate among the four regions of the country. Although the gonorrhea rate in the South declined for many years, in 2006 it rose by 12.3% from 2005 to a rate of 159.2 cases per 100,000 population. The rate in the West continued

to increase, with an increase of 31.8% from 2002 to 2006. In contrast, the rate in the Northeast decreased by 21.2% from 93.6 cases per 100,000 population in 2002 to 73.8 in 2006. The rate in the Midwest (142.2 in 2002 and 136.9 in 2006) has shown minimal change (Figure 13 and Table 13).

An evaluation of increases in gonorrhea in eight western states suggested that increases were likely due to a variety of factors such as changes in testing practices (increased volume and use of more sensitive tests) as well real increases in disease.[2]

Gonorrhea by State

In 2006, only four states and Puerto Rico had gonorrhea rates below the HP2010 national target of 19 cases per 100,000 population (Figure 14 and Tables 12 & 13).[6] Unfortunately this is two fewer states than met the HP2010 target in 2005.

Gonorrhea by Metropolitan Statistical Area (MSA)

The overall gonorrhea rate in the 50 most populous MSAs was 131.1 cases per 100,000 population in 2006. This is a 3.3% increase from 2005. All of these MSAs had rates higher than the HP2010 target of 19 cases per 100,000 population (Table 17). In 2006, 58.3% of gonorrhea cases were reported by these MSAs. Similar to previous years, in 2006 the total gonorrhea rate among females in these MSAs (130.1) remained similar to that among males (131.6) (Tables 18 and 19).

Gonorrhea by County

In 2006, 1,234 (39.3%) of 3,140 counties in the United States had gonorrhea rates at or below the HP2010 national target of 19 cases per 100,000 population. Rates per 100,000 population were between 19 and 100 in 1,134 counties (36.1%), and greater than 100 in 772 counties (24.6%). The majority of counties with greater than 100 cases per 100,000 population were located in the South (Figure 15).

In 2006, 50% of reported gonorrhea cases occurred in just 68 counties or independent cities (Table 16).

Gonorrhea by Reporting Source

In 2006, 26.8% of gonorrhea cases were reported by STD clinics (Table A2). This is a change from 2002, when 35.2% of gonorrhea cases were reported by STD clinics. In 2006, a higher proportion of male gonorrhea cases were reported from STD clinics than female cases (37.9% and 16.7% respectively) (Figure 16).

Gonorrhea by Race/Ethnicity

Changes in gonorrhea rates between 2002 and 2006 differed by race/ethnic group. Gonorrhea rates decreased by 7.7% during this time period for African Americans from 713.7 to 658.4 cases per 100,000 population. However, the gonorrhea rate among African Americans increased by 6.3% between 2005 and 2006, the first increase for this population since 1998.

Other racial and ethnic groups have also seen increases in gonorrhea rates. Since 2002, the gonorrhea rate among American Indian/Alaska Natives increased 22.8%, whites increased 17.7%, and Hispanics increased 11.8%. The gonorrhea rate among Asian/Pacific Islanders decreased 1.4% between 2002 and 2006(Figure 17 and Table 21B).

In 2006, the gonorrhea rate among African Americans was 18 times greater than the rate for whites. This is a decrease from 2002 when there was a 23-fold difference in rates. Gonorrhea rates were 3.8 times greater among American Indian/Alaska Natives, and 2.1 times greater among Hispanics than among whites in 2006. Rates among Asian/Pacific Islanders were

1.7 times lower than among whites in 2006.

Gonorrhea by Sex

Prior to 1996, rates of gonorrhea among men were higher than rates among women. For the sixth consecutive year, however, gonorrhea rates among women are slightly higher than among men (Figure 12). In 2006, the gonorrhea rate among women was 124.3 and the rate among men was 116.8 cases per 100,000 population (Tables 14 and 15).

Gonorrhea by Region and Sex

Between 2002 and 2006, gonorrhea rates among women increased 39.3% in the West and 1.3% in the South. Gonorrhea rates among women decreased 22.0% in the Northeast and were unchanged in the Midwest during the same time period.

Between 2002 and 2006, gonorrhea rates among men increased 25.7% in the West, and decreased 20.1% in the Northeast, 8.1% in the Midwest, and 4.8% in the South (Tables 14 and 15).

Gonorrhea by Age and Sex

In 2006, gonorrhea rates continued to be highest among adolescents and young adults. The overall gonorrhea rate was highest for the 20- to 24-year-old age group (527.5), which is over four times higher than the national gonorrhea rate. Among females in 2006, 15- to 19- and 20- to 24-year-old women had the highest rates of gonorrhea (647.9 and 605.7, respectively); 20- to 24-year-old males had the highest rate (454.1) (Figure 18 and Table 20).

Although the gonorrhea rate among those 15 to 19 years of age decreased in recent years, in 2006 this rate increased 6.3%. Similar slight increases were seen among other younger age groups (4.4% among those 20 to 24 years of age and 8.1% among those 25 to 29 years of age) (Table 20). Similar increases were seen among both males and females in all age groups 29 years of age and younger (8.4% for males and 5.3% for females ages 15 to 19 years of age; 4.5% and 4.4% for males and females aged 20 to 24 years of age, respectively; and 7.6% for males and 8.8% for females aged 25 to 29 years of age) (Figures 19 and 20, and Table 20).

Gonorrhea by Race/Ethnicity and Sex

From 2002 to 2006 the overall rate in African-American men decreased 8.8% from 770.7 per 100,000 population to 702.7 despite an increase of 6.8% between 2005 and 2006. Increases were seen in this time period for African-American men in most age groups. The overall rate in American Indian/Alaska Native men increased 8.5% between 2005 and 2006, 7.4% among Hispanic men, and 2.5% among white men. Gonorrhea rates among Asian/Pacific Islander men decreased 24.0% between 2005 and 2006 (Table 21B).

Between 2002 and 2006 the overall rate among African-American women decreased 6.6% from 662.1 per 100,000 population to 618.1. However, increases of 5.8% were seen between 2005 and 2006 overall for African-American women and in most age groups. Currently, 15- to 19-year-old African-American women still have the highest gonorrhea rate of any group (2,898.1 per 100,000 population).

Rates among Hispanic women increased 6.5% between 2005 and 2006, 4.7% among white women, and 3.5% among American Indian/Alaska Native women. A decrease of 8.1% was seen among Asian/Pacific Island women (Table 21B).

Gonorrhea Prevalence Monitoring Projects

Gonorrhea test positivity data are available from a variety of settings. Screening criteria

and practices may vary by state and over time.

Family Planning Clinics

In 2006, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected family planning clinics in 43 states, Puerto Rico, the District of Columbia, and the Virgin Islands was 1.1% (range 0.0% to 4.8%) (Figure 21). Median gonorrhea positivity in family planning clinics has shown minimal change in recent years (0.9% in 2002).

Prenatal Clinics

For women attending selected prenatal clinics in 20 states, Puerto Rico, and the Virgin Islands, the median positivity was 1.0% (range 0.0% to 3.2%) (Figure F). Median gonorrhea positivity in prenatal clinics has shown minimal change in recent years (0.9% in 2002).

National Job Training Program

For 16- to 24-year-old women entering the National Job Training Program in 36 states, Puerto Rico, and the District of Columbia in 2006, the median state-specific gonorrhea prevalence was 2.4% (range 0.0% to 7.1%) in 2006 (Figure M). Among men entering the program from 20 states in 2006, the median state-specific gonorrhea positivity was 3.6% (range 0.0% to 6.2%) (Figure N).

Juvenile Corrections

In 2006, the median positivity for gonorrhea in women entering 37 juvenile corrections facilities was 3.8% (range 0.0% to 12.2%), and in men entering 62 juvenile corrections facilities was 0.9% (range 0.0% to 4.5%) (Table CC).

Gonococcal Isolate Surveillance Project (GISP)

Antimicrobial resistance remains an important consideration in the treatment of gonorrhea.[3,7-14] In 1986, the Gonococcal Isolate Surveillance Project (GISP), a national sentinel surveillance system, was established to monitor trends in antimicrobial susceptibilities of strains of *Neisseria gonorrhoeae* in the United States among selected STD clinics or sites[14] (Figure 22).

Overall, 25.6% of isolates collected in 2006 in 28 GISP sites were resistant to penicillin, tetracycline, ciprofloxacin, or some combination of those antibiotics (Figure 23).

Quinolone-resistant N. Gonorrhoeae (QRNG)

Resistance to ciprofloxacin (a fluoroquinolone in the quinolone family of antimicrobials) was first identified in GISP sites in 1991. From 1991 through 1998, fewer than nine quinolone-resistant *N. gonorrhoeae* (QRNG) isolates were identified each year, and such isolates were identified in only a few GISP clinics. However since 1999 QRNG prevalence has steadily increased, first in Hawaii and in the Pacific Islands, then in the Western states, and then among MSM.[8-11,13,15] In 2006, 843 (13.8% of the total) GISP isolates were identified as QRNG, an increase from 2005, when 581 (9.4% of the total) isolates were identified as QRNG. QRNG isolates were submitted from 27 of 28 GISP clinics in 2006 (Figures 22 and 24).

QRNG by Region

In 2006, 34 (35.8%) of 95 isolates submitted from Honolulu demonstrated ciprofloxacin-resistance, up from 17 (19.3%) of 88 isolates in 2005.

In California, increases in the number of isolates resistant to ciprofloxacin were identified in all GISP sites. In Los Angeles,

22.7% of isolates in 2006 were ciprofloxacin-resistant compared with 14.5% in 2005; in Long Beach, 28.4% were resistant in 2006 compared with 23.5% in 2005; in Orange County, 34.6% were resistant in 2006 compared with 27.5% in 2005; in San Diego, 35.1% were resistant in 2006 compared to 26.2% with 2005; and in San Francisco, 44.5% were resistant in 2006 compared with 31.3% in 2005.

Similarly in other West Coast sites, Denver, Las Vegas, Phoenix, Portland, and Seattle the prevalence of QRNG remains high. Between 2005 and 2006, in Denver, the prevalence increased to 15.7% from 10.9%; in Las Vegas, increased to 8.7% from 5.4%; in Phoenix, to 11.9% from 7.1%; in Portland, to 27.2% from 23.1%; and in Seattle the prevalence almost tripled to 31.8% from 11.6%.

In the South, increases in the prevalence of QRNG continued to be observed in Atlanta, Dallas, Greensboro, Miami, New Orleans, and Oklahoma City. Between 2005 and 2006 in Atlanta, QRNG resistance increased to 5.7% from 3.8%; in Dallas, the prevalence doubled to 6.1% from 3.2%; in Greensboro it increased to 1.7% from 0.6%; in Miami it doubled to 19.8% from 9.1%; in New Orleans, the prevalence of QRNG increased to 10.2% from 6.3%; and in Oklahoma City, it increased to 4.3% from 2.3%. In Baltimore, the prevalence was slightly down to 1.4% in 2006 from 3% in 2005. In Birmingham, the prevalence remained the same at 1.1%.

In the Midwest and Northeast, increases in prevalence of QRNG were seen in Cleveland and Philadelphia. In Cleveland, the prevalence of isolates that were resistant to ciprofloxacin increased to 3.1% in 2006 from 2.8% in 2005 and in Philadelphia, the prevalence more than doubled to 30.3% in 2006 from 14.3% in 2005. There was a slight decrease in QRNG prevalence in Chicago to 4.1% in 2006 from 4.7% in 2005; in Cincinnati to 0.7% from 1%; and in Minneapolis to 5.7% from 8%. The prevalence remained the same for Detroit at 0.3%.

Sites that identified ciprofloxacin-resistant isolates for the first time in GISP in 2006 included Albuquerque and New York City (which joined GISP in 2006). Tripler Army Medical Center did not identify any QRNG isolates in 2006 (Figure 22).

Additional information on antimicrobial susceptibility data and treatment recommendations from state and local health departments may be found in the 2006 GISP report[9] or the GISP website: **http://www.cdc.gov/std/GISP**

QRNG by Sexual Behavior

The number of QRNG isolates from MSM has continued to increase in 2006 to 499 (39% of all specimens from MSM) from 387 (29%) isolates in 2005. During the same time period, the number of these isolates from heterosexuals almost doubled from 183 (3.8%) to 328 (7%) (Figure 25).

As a result of this continued high prevalence of QRNG among MSM and more recently among heterosexuals, in April 2007, CDC revised the *2006 CDC STD Treatment Guidelines*. Fluoroquinolones are no longer recommended for use in the treatment of gonorrhea and associated conditions such as pelvic inflammatory disease.[12]

Other Antimicrobial Susceptibility Testing

To date, cephalosporin resistance has not been identified in GISP, and the proportion of GISP isolates demonstrating decreased susceptibility to ceftriaxone or cefixime has remained very low over time. In 2001, three GISP isolates with decreased susceptibility to cefixime were also found to be resistant to penicillin, tetracycline, and ciprofloxacin; such multi-drug resistance in

combination with decreased susceptibility to cefixime had not previously been identified in the United States.[13] In 2004, two GISP isolates had decreased susceptibility to cefixime; one of those isolates demonstrated the same resistance pattern as the 2001 isolates described above. In 2005, there were no GISP isolates that had decreased susceptibility to ceftriaxone or cefixime; in 2006, one GISP isolate had decreased susceptibility to cefixime only.

The proportion of GISP isolates demonstrating elevated minimum inhibitory concentrations (MICs) to azithromycin has been increasing since GISP began monitoring azithromycin susceptibility in 1992. In 2005, there was a change in the media used for antimicrobial susceptibility testing which resulted in an observational shift of the MIC curve for azithromycin. Thus, the azithromycin MIC for decreased susceptibility was changed from $\geq$ 1.0 μg/ml to $\geq$ 2.0 μg/ml from 2005 and thereafter. In 2006, 0.2% (14/6,089) isolates had azithromycin MIC $\geq$ 2.0 μg/ml which is a slight decrease from 0.6% (35/6,199) isolates from 2005.

Gonorrhea Among Special Populations

Additional information about gonorrhea in racial and ethnic minority populations, adolescents, MSM, and other at risk populations can be found in the **Special Focus Profiles**.

Gonorrhea Summary

In summary, the national gonorrhea rate increased in 2006 for the second consecutive year. Gonorrhea rates increased in all regions of the country except the Northeast, among most age groups, and among all race/ethnic groups except Asian/Pacific Islanders.

Of particular concern are increases noted for the first time since 1998 among African Americans, the population with the greatest burden of disease and experiencing the greatest disparity as compared to other race/ethnic groups.

Rates among adolescent and young adults had been decreasing in recent years, but 2006 data demonstrate increases in these populations as well.

In addition, 2006 GISP data shows notable increases in QRNG prevalence, especially in the Midwest and Northeast; regions where previously it had been lower. As a response, modifications were made to the *2006 CDC STD Treatment Guidelines*.[3]

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[1] Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect*, 1999 Feb;75(1):3-17.

[2] Centers for Disease Control and Prevention. Increases in gonorrhea – Eight western states, 2000-2005. *MMWR* 2007;56:222-225.

[3] 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*, 2007;56: 332-336.

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[5] Sexually Transmitted Diseases in America: How Many Cases and At What Cost? Prepared for the Kaiser Family Foundation by: American Social Health Association, December 1998, ASHA: Research Triangle Park, NC, Kaiser Family Foundation: Menlo Park, CA 94025.

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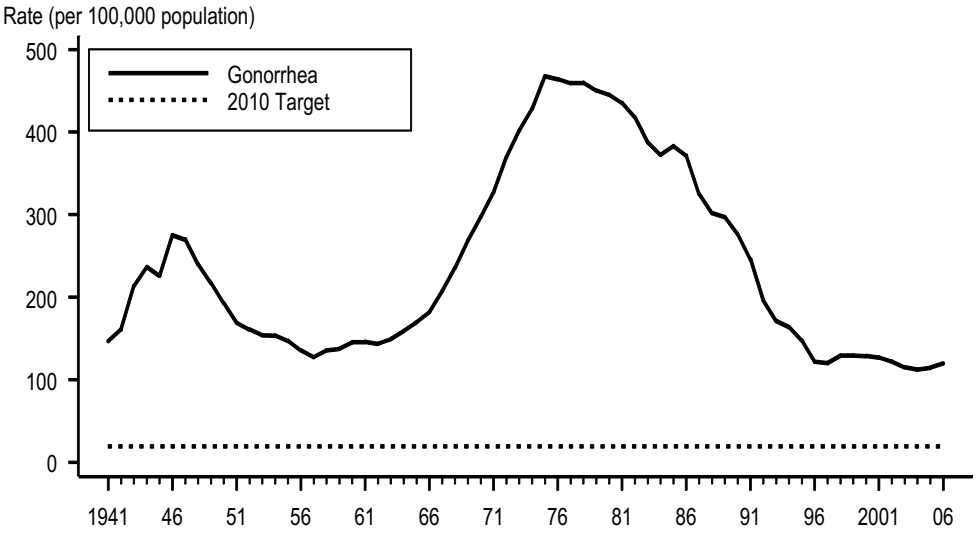
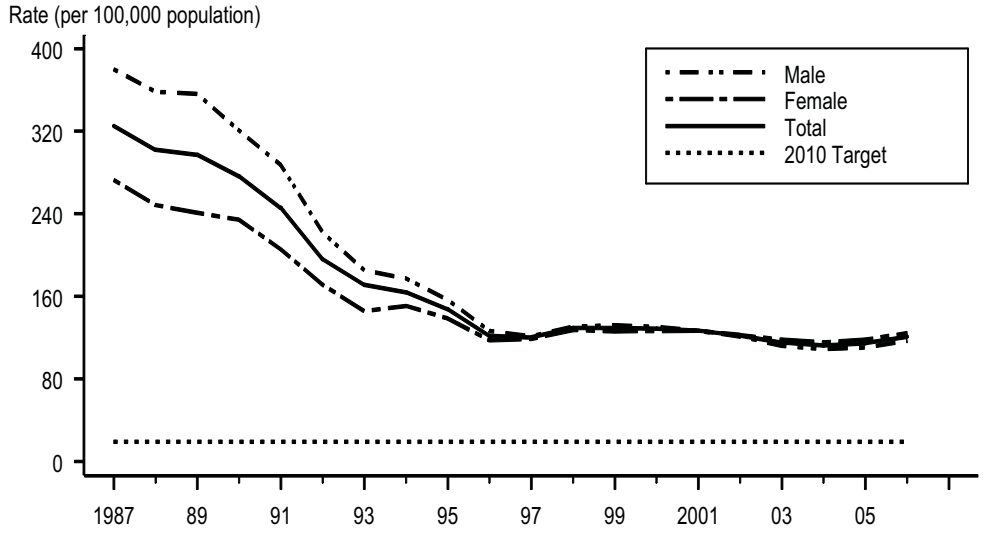
[15] Wang SA, Harvey AB, Conner SM, et al. Antimicrobial Resistance for *Neisseria gonorrhoeae* in the United States, 1988 to 2003: The Spread of Fluoroquinolone Resistance. *Annals of Internal Medicine* 2007;147:81-89.

Figure 11. Gonorrhea — Rates: United States, 1941–2006 and the Healthy People 2010 target



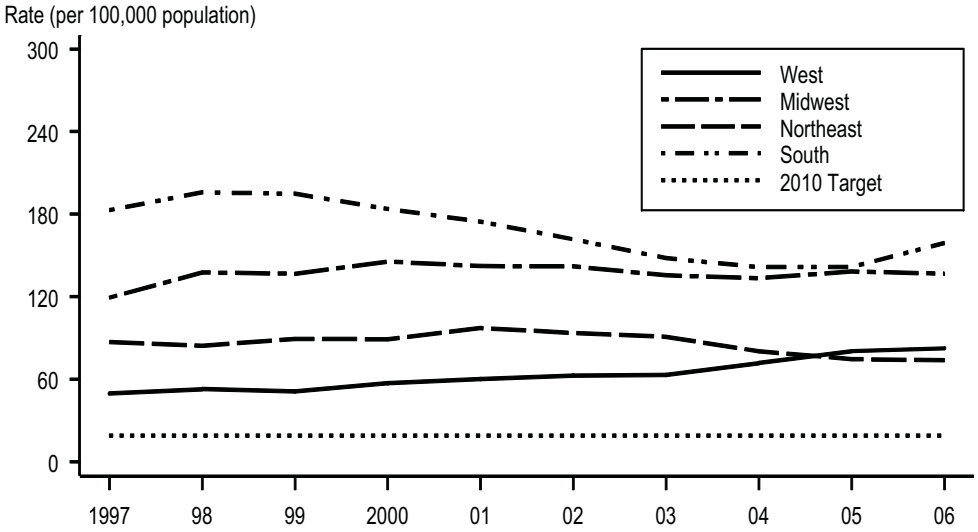
Note: The Healthy People 2010 target for gonorrhea is 19.0 cases per 100,000 population.

Figure 12. Gonorrhea — Rates: Total and by sex: United States, 1987–2006 and the Healthy People 2010 target



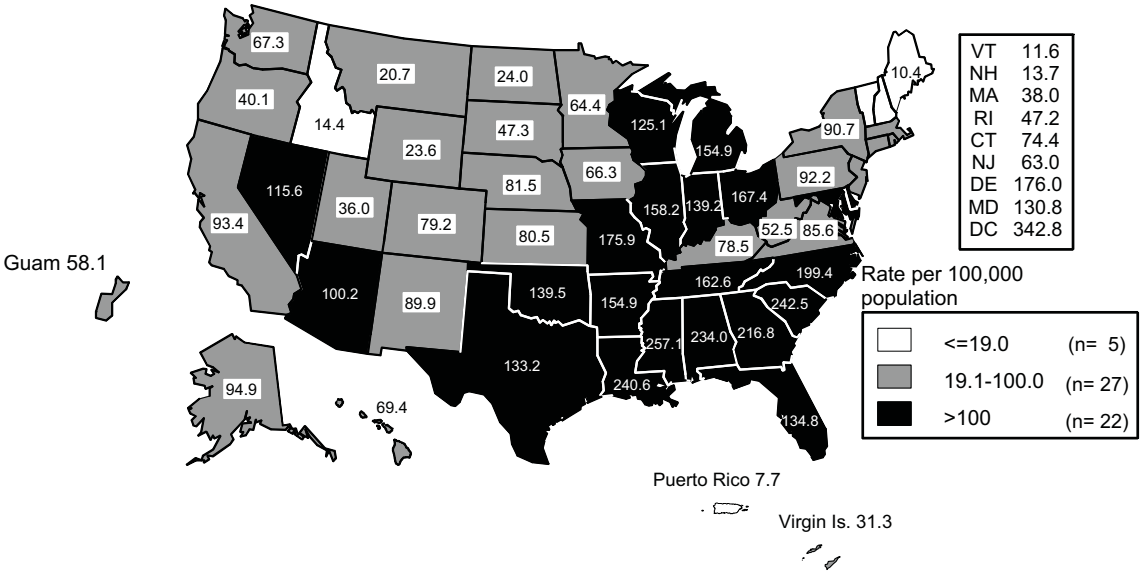
Note: The Healthy People 2010 target for gonorrhea is 19.0 cases per 100,000 population.

Figure 13. Gonorrhea — Rates by region: United States 1997–2006 and the Healthy People 2010 target



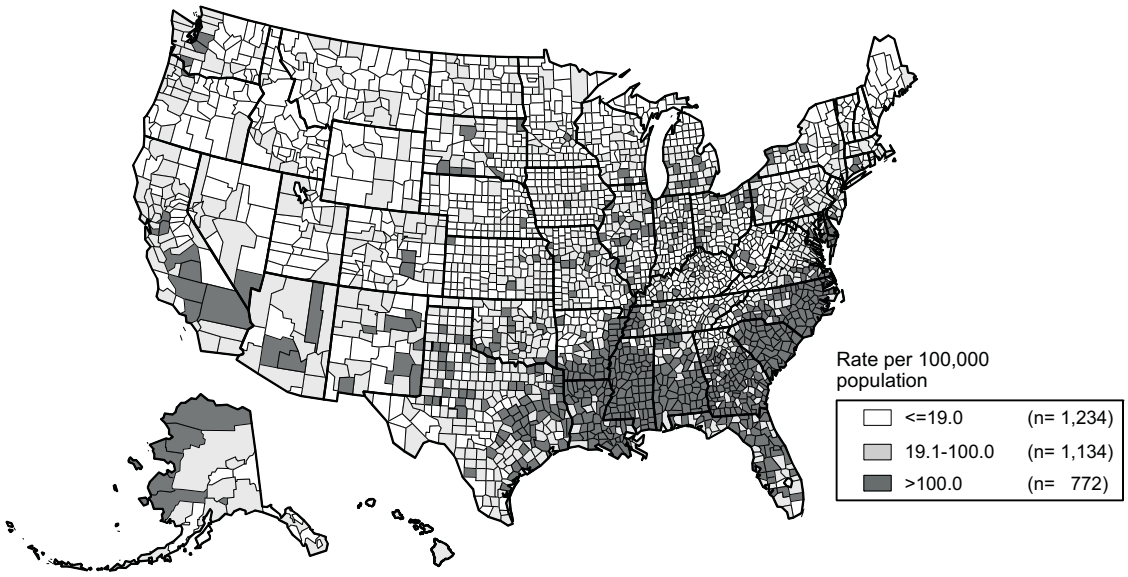
Note: The Healthy People 2010 target for gonorrhea is 19.0 cases per 100,000 population.

Figure 14. Gonorrhea — Rates by state: United States and outlying areas, 2006



Note: The total rate of gonorrhea for the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 119.4 per 100,000 population. The Healthy People 2010 target is 19.0 cases per 100,000 population.

Figure 15. Gonorrhea — Rates by county: United States, 2006



Note: The Healthy People 2010 target for gonorrhea is 19.0 cases per 100,000 population.

Figure 16. Gonorrhea — Cases by reporting source and sex: United States, 1997–2006

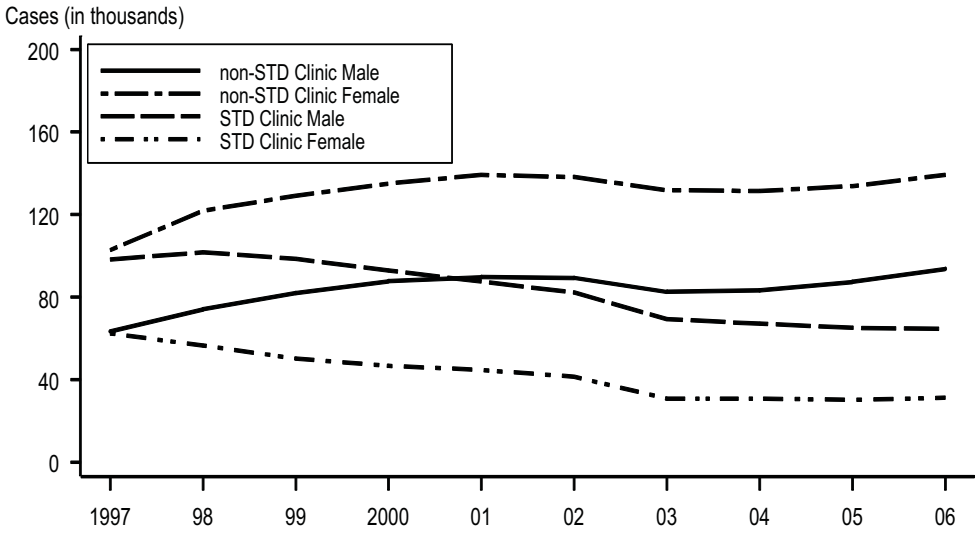


Figure 17. Gonorrhea — Rates by race/ethnicity: United States, 1997–2006

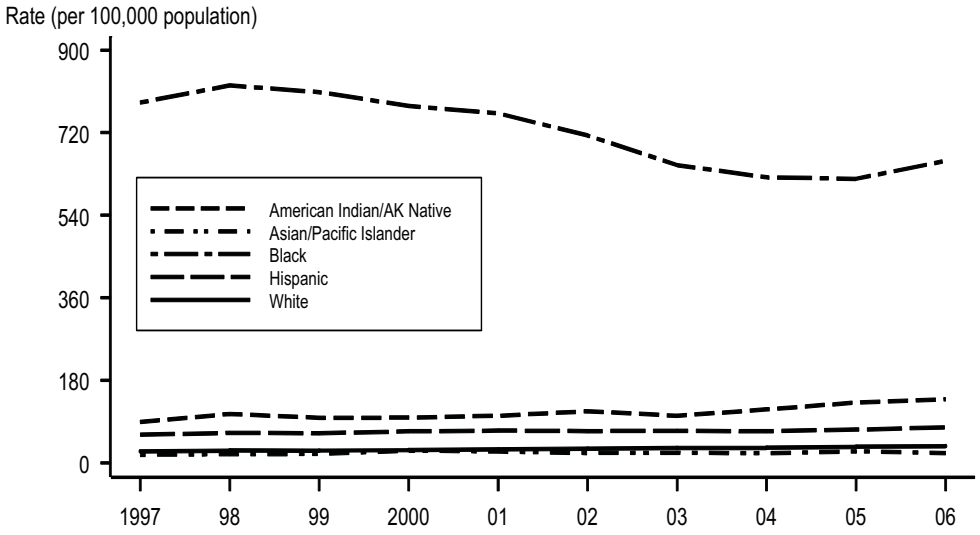


Figure 18. Gonorrhea — Age- and sex-specific rates: United States, 2006

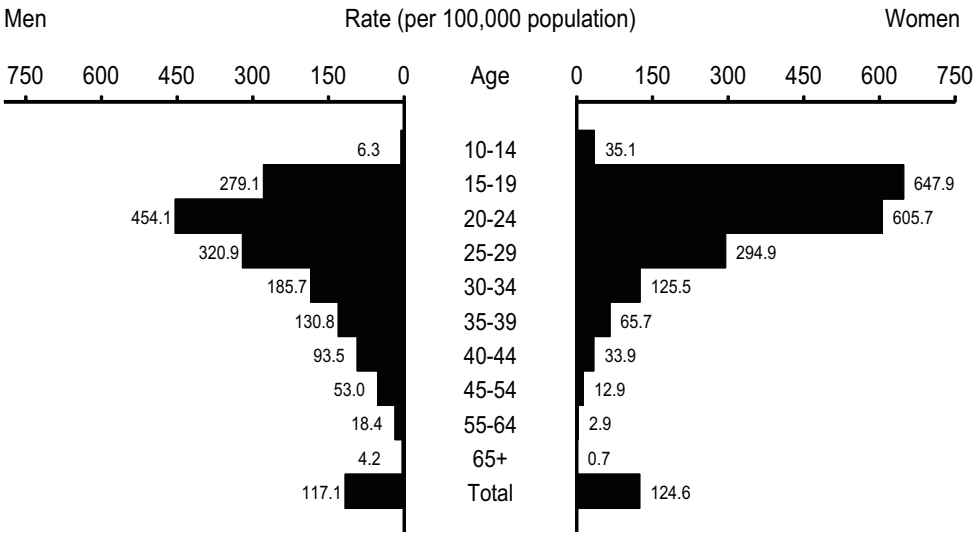


Figure 19. Gonorrhea — Age-specific rates among women 15 to 44 years of age: United States, 1997–2006

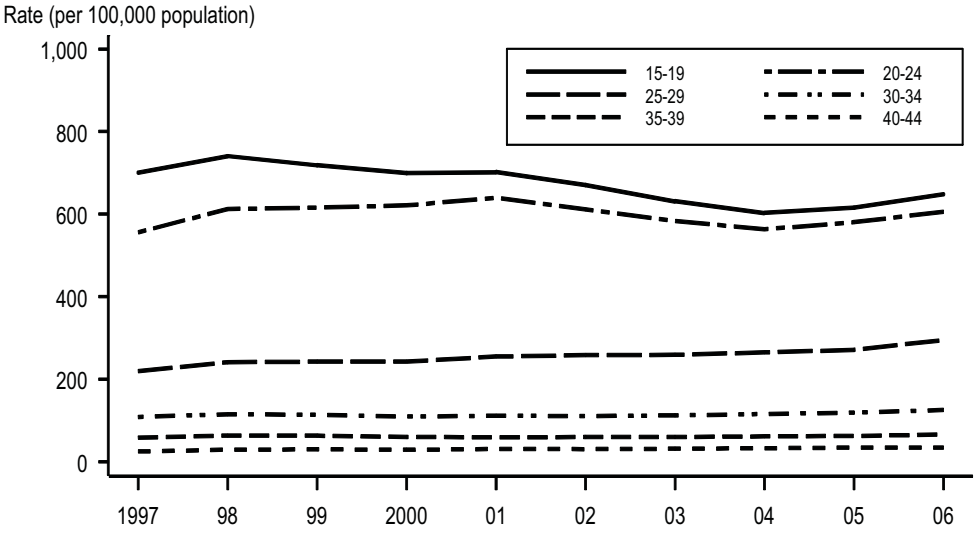


Figure 20. Gonorrhea — Age-specific rates among men 15 to 44 years of age: United States, 1997–2006

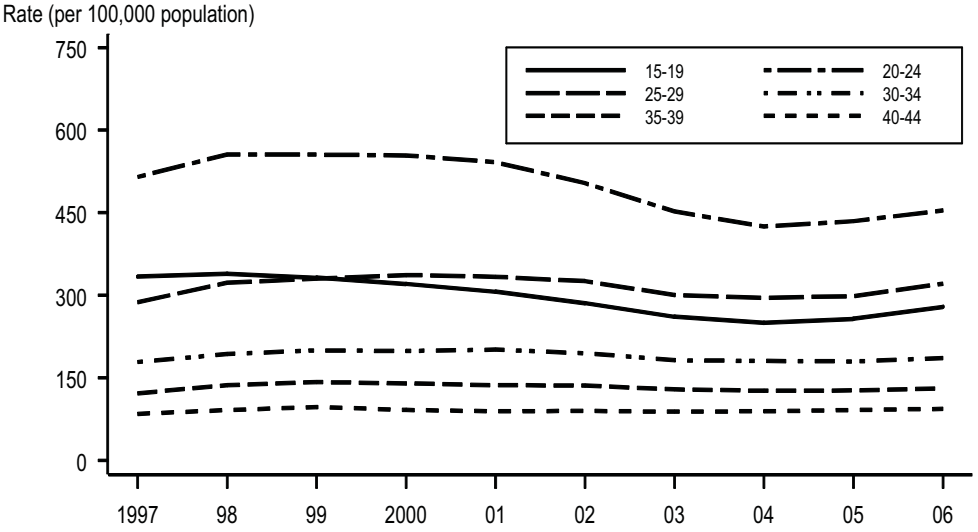
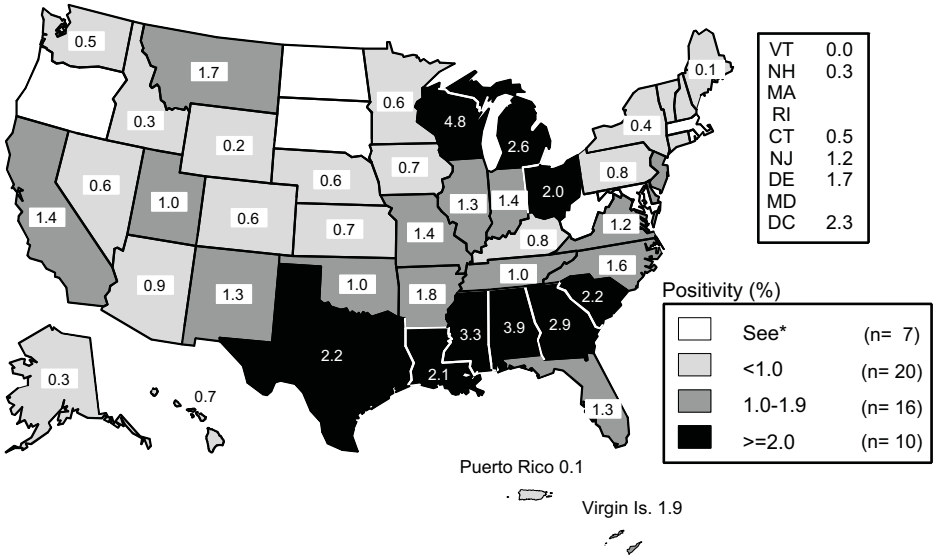


Figure 21. Gonorrhea — Positivity among 15- to 24-year-old women tested in family planning clinics by state: United States and outlying areas, 2006

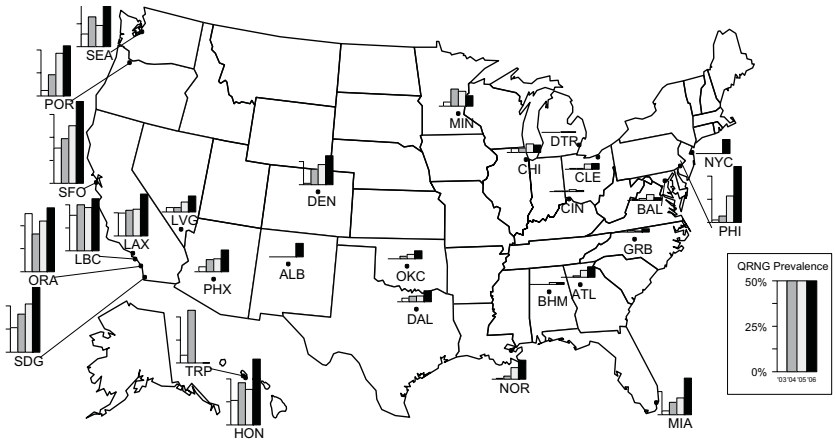


*States/areas not meeting minimum inclusion criteria.

Note: Includes states and outlying areas that reported positivity data on at least 500 women aged 15-24 years screened during 2006.

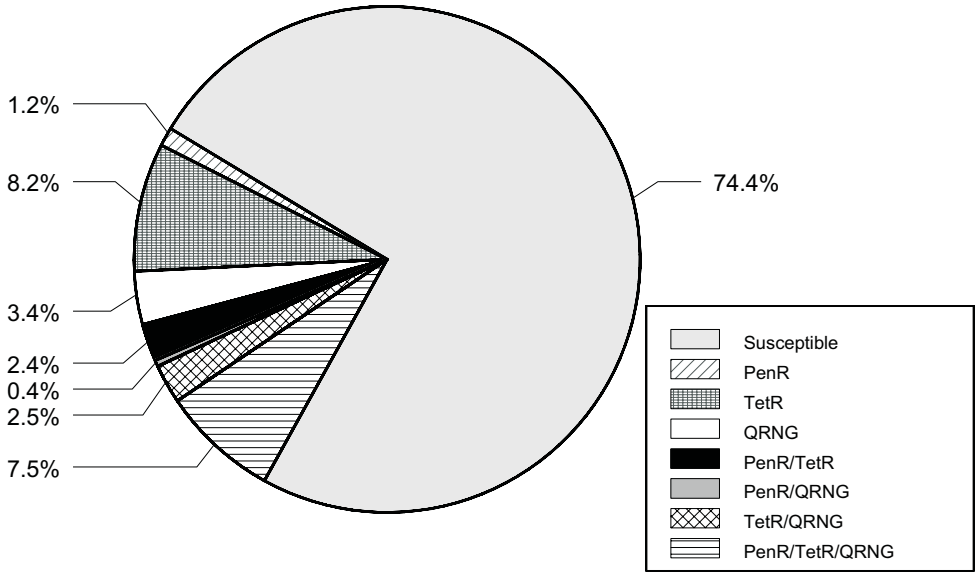
SOURCE: Regional Infertility Prevention Projects; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention

Figure 22. Gonococcal Isolate Surveillance Project (GISP) — Prevalence of ciprofloxacin resistant *Neisseria gonorrhoeae* by GISP site, 2003-2006



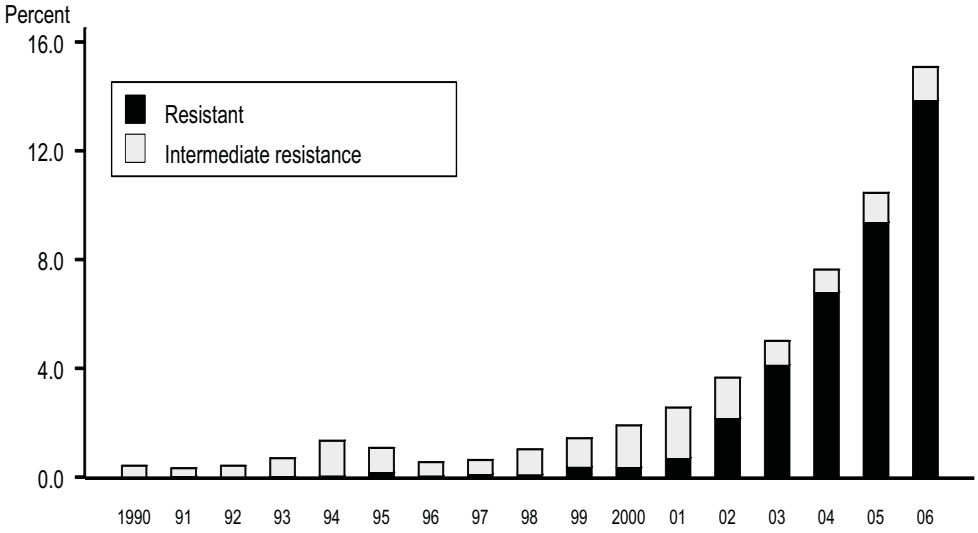
Note: Not all clinics participated in GISP for the last 4 years. Clinics include: ALB=Albuquerque, NM; ATL=Atlanta, GA; BAL=Baltimore, MD; BHM=Birmingham, AL; CHI=Chicago, IL; CIN=Cincinnati, OH; CLE=Cleveland, OH; DAL=Dallas, TX; DEN=Denver, CO; DTR=Detroit, MI; HON=Honolulu, HI; LAX=Los Angeles, CA;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

Figure 23. Gonococcal Isolate Surveillance Project (GISP) — Penicillin, tetracycline, and ciprofloxacin resistance among GISP isolates, 2006



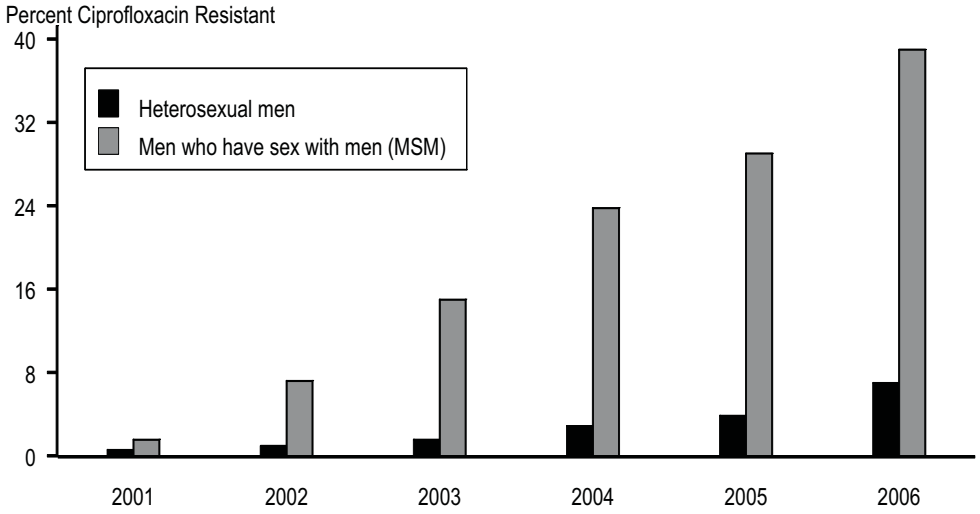
Note: PenR=penicillinase producing *N. gonorrhoeae* and chromosomally mediated penicillin-resistant *N. gonorrhoeae*; TetR=chromosomally and plasmid mediated tetracycline-resistant *N. gonorrhoeae*; QRNG=ciprofloxacin resistant *N. gonorrhoeae.*

Figure 24. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates with resistance or intermediate resistance to ciprofloxacin, 1990–2006



Note: Resistant isolates have ciprofloxacin MICs ≥ 1 μg/ml. Isolates with intermediate resistance have ciprofloxacin MICs of 0.125 - 0.5 μg/ml. Susceptibility to ciprofloxacin was first measured in GISP in 1990.

Figure 25. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates with resistance to ciprofloxacin by sexual behavior, 2001–2006



Syphilis

Background

Syphilis, a genital ulcerative disease, causes significant complications if untreated and facilitates the transmission of HIV. Untreated early syphilis in pregnant women results in perinatal death in up to 40% of cases and, if acquired during the four years preceding pregnancy, may lead to infection of the fetus in 80% of cases.[1]

The rate of primary and secondary (P&S) syphilis reported in the United States decreased during the 1990s; in 2000, the rate was the lowest since reporting began in 1941 (Figure 26). The low rate of infectious syphilis and the concentration of the majority of syphilis cases in a small number of geographic areas in the United States led to the development of the CDC's *National Plan to Eliminate Syphilis*, which was announced by Surgeon General David Satcher in October 1999 and revised in May 2006.[2]

Although the rate of P&S syphilis in the United States declined 89.7% between 1990 and 2000, the rate of P&S syphilis increased between 2001 and 2006. Overall increases in rates between 2001 and 2006 were observed primarily among men (from 3.0 cases per 100,000 population to 5.7 cases per 100,000 population). After persistent declines since 1990, the rate of P&S syphilis among women increased from 0.8 cases per 100,000 population in 2004 to 0.9 cases per 100,000 population in 2005 to 1.0 case per 100,000 population in 2006.

Syphilis remains an important problem in the South and in urban areas in other regions of the country. Increases in cases among MSM have occurred and have been characterized by high rates of HIV co-infection and high-risk sexual behavior.[3-7] The estimated proportion of P&S syphilis cases attributable to MSM increased from 4% in 2000 to 62% in 2004.[8,9] In 2005, CDC requested that all state health departments report gender of sex partners for persons with syphilis. In 2006, the first full year for which data are available, 64% of all P&S syphilis cases from 30 areas (29 states and Washington, D.C.) with available information were among MSM.[10]

Syphilis - All Stages (P&S, Early Latent, Late, Late Latent, Congenital)

Between 2005 and 2006, the number of cases of early latent syphilis reported to CDC increased 12.4% (from 8,176 to 9,186), while the number of cases of late and late latent syphilis increased 9.9% (from 16,049 to 17,644) (Table 1). The total number of cases of syphilis (all stages: P&S, early latent, late, late latent, and congenital syphilis) reported to CDC increased 11.0% (from 33,288 to 36,935) between 2005 and 2006 (Table 1).

P&S Syphilis - United States

In 2006, P&S syphilis cases reported to CDC increased to 9,756 from 8,724 in 2005, an increase of 11.8%. The rate of P&S syphilis in the United States in 2006 (3.3 cases per 100,000 population) was 13.8% higher than the rate in 2005 (2.9 cases per 100,000 population), and it is greater than the HP 2010 target of 0.2 case per 100,000 population (Figure 27, Table

1).[11] Between 2005 and 2006, P&S syphilis rates in most age groups increased (Table 32).

P&S Syphilis by Region

The South accounted for 47.1% of the P&S syphilis cases in 2006 and 46.4% in 2005. Between 2005 and 2006, rates increased 13.2% in the South (from 3.8 to 4.3 cases per 100,000 population), 13.0% in the Northeast (from 2.3 to 2.6), and 15.2% in the West (from 3.3 to 3.8); rates remained the same in the Midwest (1.8). The 2006 rates in all regions were greater than the HP 2010 target of 0.2 cases per 100,000 population (Figure 28, Table 25).

P&S Syphilis by State

In 2006, P&S syphilis rates in four states were less than or equal to the HP 2010 target of 0.2 case per 100,000 population (Figure 29, Table 24). Five states and two outlying areas reported five or fewer cases of P&S syphilis in 2006 (Table 24).

P&S Syphilis by Metropolitan Statistical Area (MSA)

The rate of P&S syphilis in 2006 for the 50 most populous MSAs (4.9) exceeded the HP 2010 target of 0.2 case per 100,000 population (Table 29).

P&S Syphilis by County

In 2006, 2,360 of 3,140 counties (75.2%) in the United States reported no cases of P&S syphilis compared with 2,434 (77.5%) in 2005. Of 780 counties reporting at least one case of P&S syphilis in 2006, 7 (0.9%) had rates at or below the HP2010 target of 0.2 cases per 100,000 population. Rates of P&S syphilis were above the HP2010 target for 773 counties in 2006 (Figure 30). These 773 counties (24.6% of the total number of counties in the United States) accounted for 99.9% of the total P&S syphilis cases reported in 2006.

In 2006, half of the total number of P&S syphilis cases were reported from 20 counties and two cities (Table 28).

P&S Syphilis by Reporting Source

Between 1990 and 2006, the proportion of P&S syphilis cases reported from sources other than STD clinics increased from 25.6% to 65% (Figure 31, Table A2). Between 2001 and 2006, the number of cases among males reported from non-STD clinic sources increased sharply while the number from STD clinics remained stable (Figure 31).

P&S Syphilis by Age

In 2006, the rate of P&S syphilis was highest in persons in the 25- to 29-year-old age group (7.8 cases per 100,000 population) (Table 32).

P&S Syphilis by Race/Ethnicity

From 2005 to 2006, the rate of P&S syphilis increased in all racial and ethnic groups. The rate increased 5.6% among non-Hispanic whites (from 1.8 to 1.9), 16.5% among African Americans (from 9.7 to 11.3), 12.5% among Hispanics (from 3.2 to 3.6), 18.2% among Asian/Pacific Islanders (from 1.1 to 1.3), and 37.5% among American Indian/Alaska Natives (from 2.4 to 3.3) (Table 33B).

P&S Syphilis by Sex

The rate of P&S syphilis increased 11.8% among men (from 5.1 cases to 5.7 cases per 100,000 men) between 2005 and 2006 (Figure 27, Table 27). During this time, the rate increased 11.1% among women from 0.9 to 1.0 cases per 100,000 women (Figure 27, Table 26).

P&S Syphilis by Male-to-Female Rate Ratio

The male-to-female rate ratio for P&S syphilis has risen steadily since 1996 when

it was 1.2 (Figure 33), suggesting an increase in syphilis among MSM during this time. In 2006, the rate of syphilis in males was 5.7 times that in females.

Between 2005 and 2006, the male-to-female rate ratio for P&S syphilis increased among whites (from 11.0 to 11.7), African Americans (from 3.5 to 3.7), Hispanics (from 6.0 to 7.9), Asian/Pacific Islanders (from 11.0 to 25.0), and American Indians/Alaska Natives (from 2.1 to 2.5) (Table 33B).

An increase in the male-to-female rate ratio for P&S syphilis occurred in the District of Columbia, Puerto Rico, and in 20 of 34 states (59%) that reported at least 25 cases in 2006.

P&S Syphilis by Race/Ethnicity and Sex

From 2005 to 2006, the rate among non-Hispanic white males increased 6.1% (from 3.3 to 3.5), but remained the same among non-Hispanic white females (0.3). The rate increased 18.1% among African-American males (from 15.5 to 18.3) and 11.4% among African-American females (from 4.4 to 4.9). The rate increased 16.7% among Hispanic males (from 5.4 to 6.3), but decreased 11.1% among Hispanic females (from 0.9 to 0.8). The rate increased 13.6% among Asian/Pacific Island males (from 2.2 to 2.5), but decreased among Asian/Pacific Island females from 0.2 to 0.1. The rate increased 42.4% among American Indian/Alaska Native males (from 3.3 to 4.7) and 18.8% among American Indian/Alaska Native females (from 1.6 to 1.9) (Table 33B).

P&S Syphilis by Race/Ethnicity, Age, and Sex

In 2006, the rate of P&S syphilis among African Americans was highest among women aged 20 to 24 years (14.9) and among men aged 25 to 29 years (48.8). For non-Hispanic whites, the rate was highest among women aged 25 to 29 years (0.8) and among men aged 35 to 39 years (9.9). For Hispanics, the rate was highest among women aged 25 to 29 years (1.9) and among men aged 35 to 39 years (14.6). For Asian/Pacific Islanders, the rate was highest among women aged 30 to 34 years (0.5) and among men aged 25 to 29 years (6.2). For American Indian/Alaska Natives, the rate was highest among women aged 35 to 39 years (6.1) and among men aged 30 to 34 years (12.8) (Table 33B).

Congenital Syphilis - United States

After 14 years of decline in the United States, the rate of congenital syphilis increased 3.7% between 2005 and 2006 (from 8.2 to 8.5 cases per 100,000 live births) (Figure 38, Table 39). In 2006, 349 cases were reported, an increase from 339 in 2005. This small increase in the rate of congenital syphilis (Figure 38) may relate to the increase in the rate of P&S syphilis among women that has occurred in recent years (Figure 37).

Between 1996 and 2005, the average yearly percentage decrease in the congenital syphilis rate was 14.1% (Figure 38). Overall, there has been a 74.2% decrease in the rate of congenital syphilis since 1996.

Congenital Syphilis by State

In 2006, 26 states, the District of Columbia, and one outlying area had rates of congenital syphilis that exceeded the HP 2010 target of one case per 100,000 live births (Table 38).

Syphilis Among Special Populations

Additional information about syphilis and congenital syphilis in racial and ethnic minority populations, adolescents, MSM, and other at-risk populations can be found in the **Special Focus Profiles**.

Syphilis Summary

In recent years, MSM have accounted for an increasing number of estimated syphilis cases in the United States[9] and now account for 64% of syphilis in the United States based on information available from 29 states and Washington, D.C.[10] Given the recent request of CDC for states to collect and report gender of sex partners, it is expected that the availability and completeness of this information will increase. Despite the majority of U.S. syphilis cases occurring among MSM, heterosexual syphilis cases may be an emerging problem given the recent increases among women and infants.

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[1] Ingraham NR. The value of penicillin alone in the prevention and treatment of congenital syphilis. *Acta Derm Venereol* 1951, 31 (suppl 24):60-88.

[2] CDC. The National Plan to Eliminate Syphilis from the United States. Atlanta, GA: U.S. Department of Health and Human Services, May 2006.

[3] 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;48:773-777.

[4] Centers for Disease Control and Prevention. Outbreak of syphilis among men who have sex with men – Southern California, 2000. *MMWR* 2001;50(7):117-20.

[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] Chen SY, Gibson S, Katz MH, Klausner JD, Dilley JW, Schwarcz SK, Kellogg TA, McFarland W. Continuing increases in sexual risk behavior and sexually transmitted diseases among men who have sex with men: San Francisco, California, 1999–2001 [Letter]. *Am J Public Health* 2002;92:1387-8.

[7] D'Souza G, Lee JH, Paffel JM. Outbreak of syphilis among men who have sex with men in Houston, Texas. *Sexually Transmitted Diseases* 2003;30:872-3.

[8] Centers for Disease Control and Prevention. Primary and secondary syphilis – United States, 2003-2004. MMWR 2006;55:269-73.

[9] Heffelfinger JD, Swint EB, Berman SM, Weinstock HS. Trends in primary and secondary syphilis among men who have sex with men in the United States. *Am J Public Health* 2007;97:1076-1083.

[10] Beltrami JF, Weinstock H.S. Primary and secondary syphilis among men who have sex with men in the United States, 2006. In: program and abstracts of the 17th Biennial meeting of the ISSTDR, Seattle, WA, July 29-August 1, 2007 [abstract O-069].

[11] 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.

Figure 26. Syphilis — Reported cases by stage of infection: United States, 1941–2006

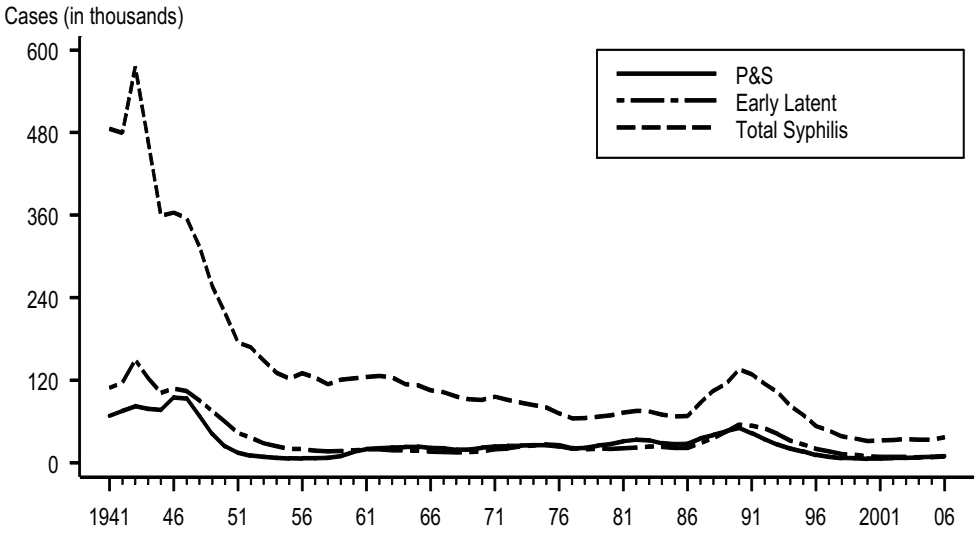
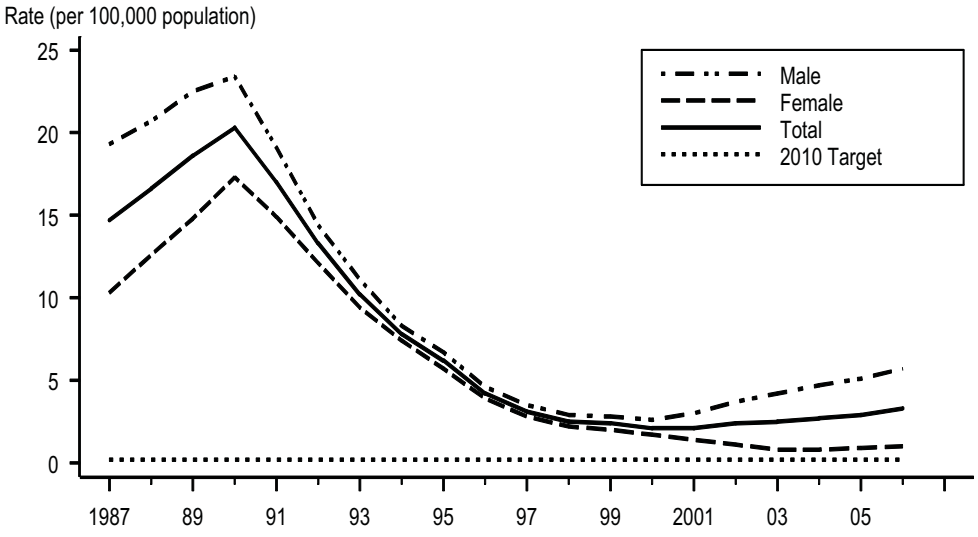
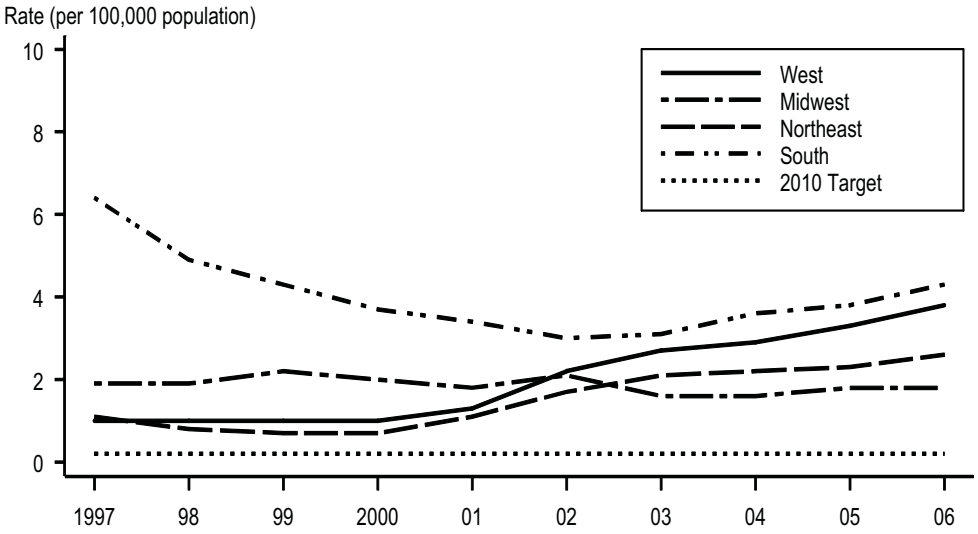


Figure 27. Primary and secondary syphilis — Rates: Total and by sex: United States, 1987–2006 and the Healthy People 2010 target



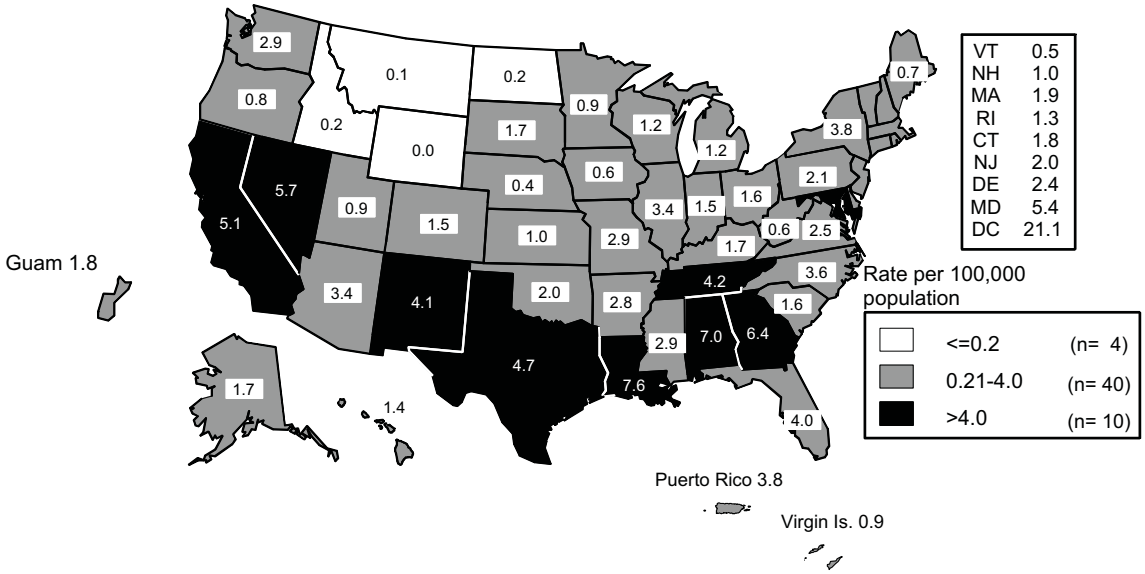
Note: The Healthy People 2010 target for P&S syphilis is 0.2 case per 100,000 population.

Figure 28. Primary and secondary syphilis — Rates by region: United States, 1997–2006 and the Healthy People 2010 target



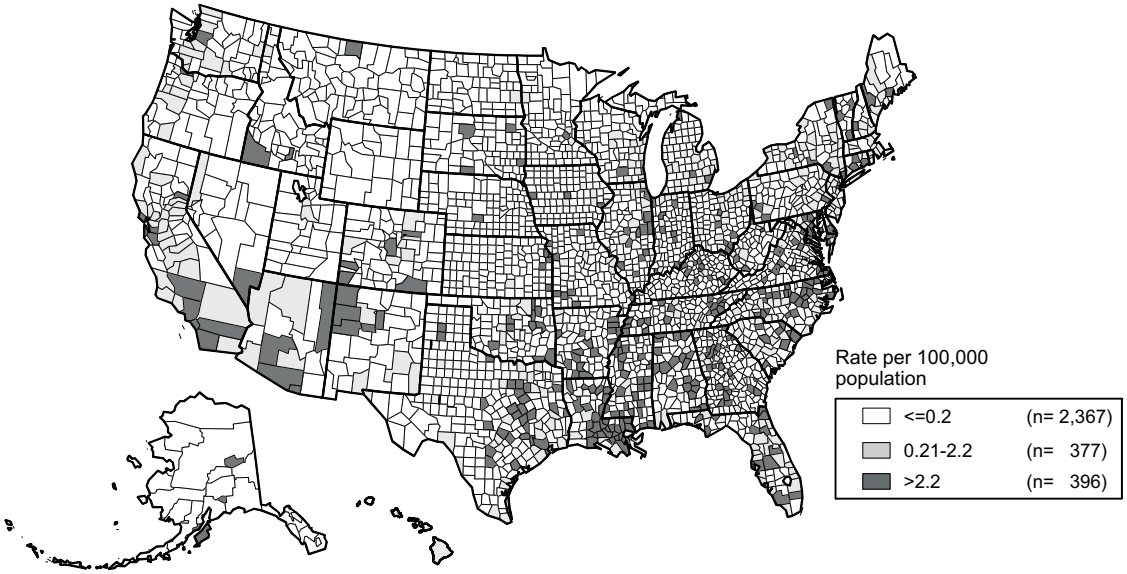
Note: The Healthy People 2010 target for P&S syphilis is 0.2 case per 100,000 population.

Figure 29. Primary and secondary syphilis — Rates by state: United States and outlying areas, 2006



Note: The total rate of P&S syphilis for the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 3.3 per 100,000 population. The Healthy People 2010 target is 0.2 case per 100,000 population.

Figure 30. Primary and secondary syphilis — Rates by county: United States, 2006



Note: The Healthy People 2010 target for P&S syphilis is 0.2 case per 100,000 population. In 2006, 2,360 (75.2%) of 3,140 counties in the U.S. reported no cases of P&S syphilis.

Figure 31. Primary and secondary syphilis — Cases by reporting source and sex: United States, 1997–2006

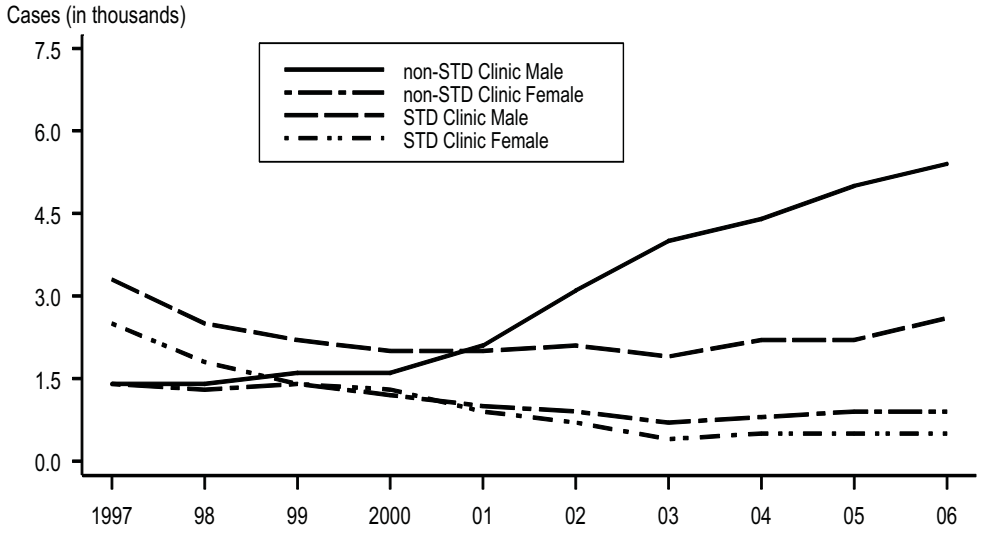


Figure 32. Primary and secondary syphilis — Rates by race/ethnicity: United States, 1997–2006

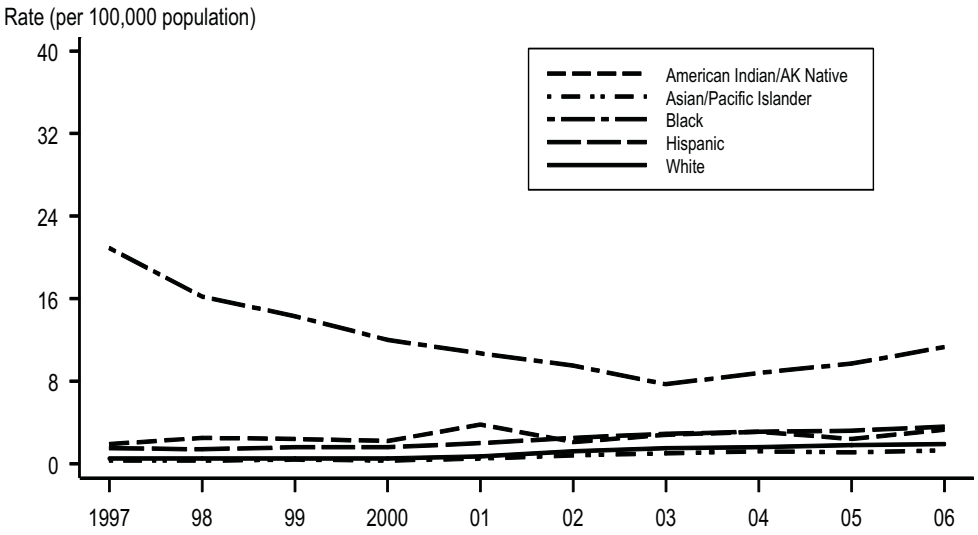


Figure 33. Primary and secondary syphilis — Male-to-female rate ratios: United States, 1997–2006

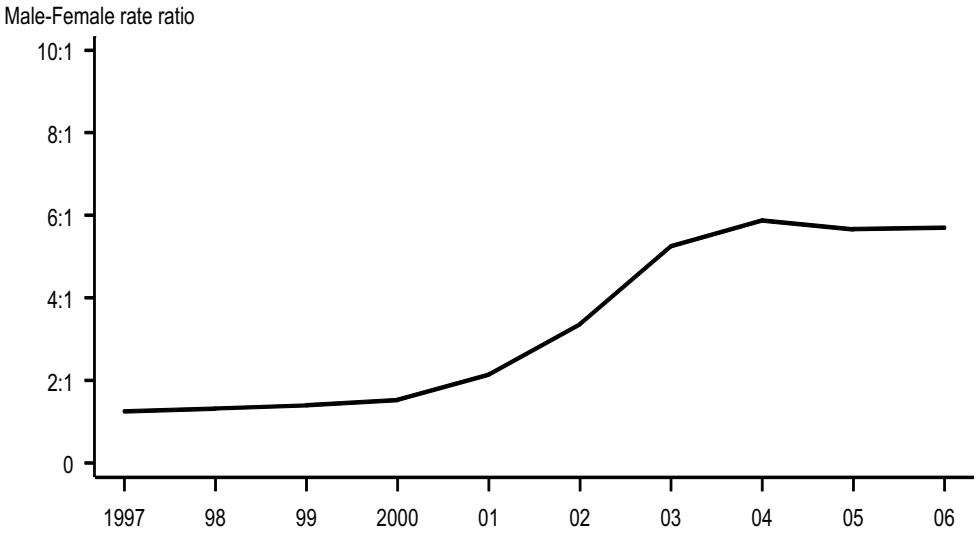


Figure 34. Primary and secondary syphilis — Age- and sex-specific rates: United States, 2006

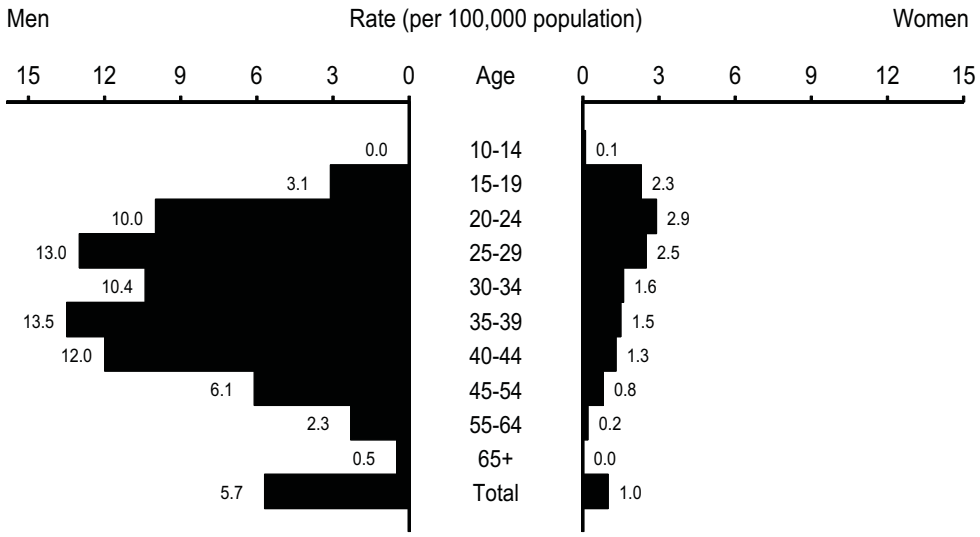


Figure 35. Primary and secondary syphilis — Age-specific rates among women 15 to 44 years of age: United States, 1997–2006

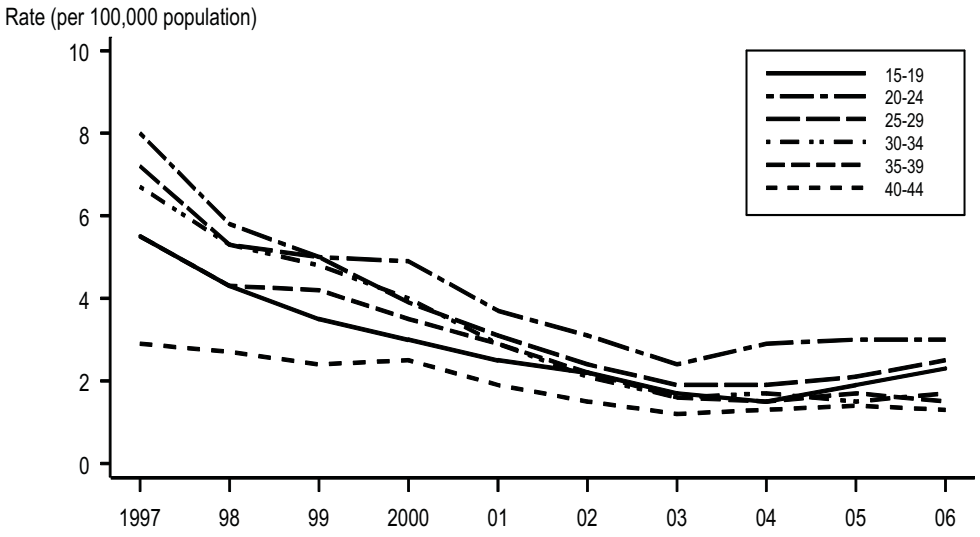


Figure 36. Primary and secondary syphilis — Age-specific rates among men 15 to 44 years of age: United States, 1997–2006

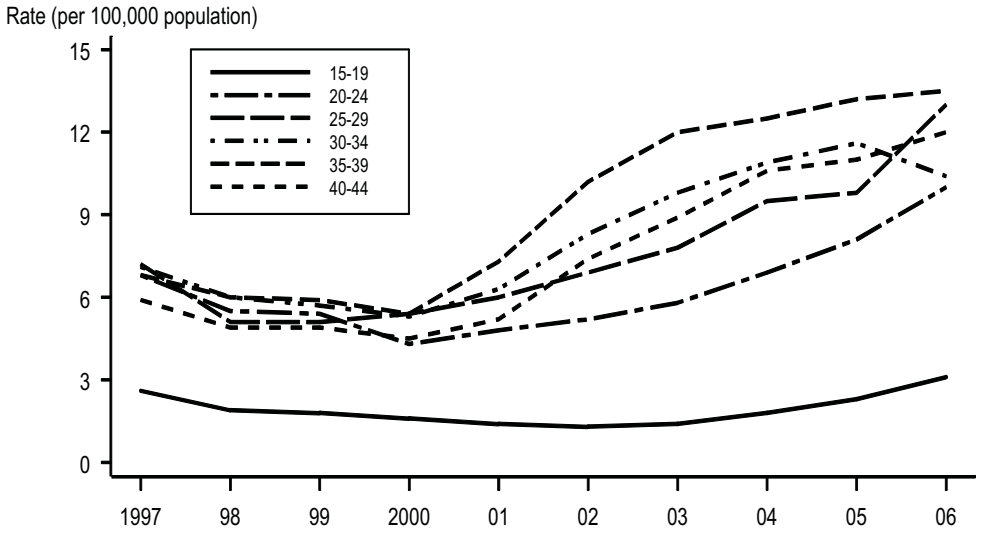


Figure 37. Congenital syphilis (CS) — Reported cases for infants < 1 year of age and rates of primary and secondary syphilis among women: United States, 1997–2006

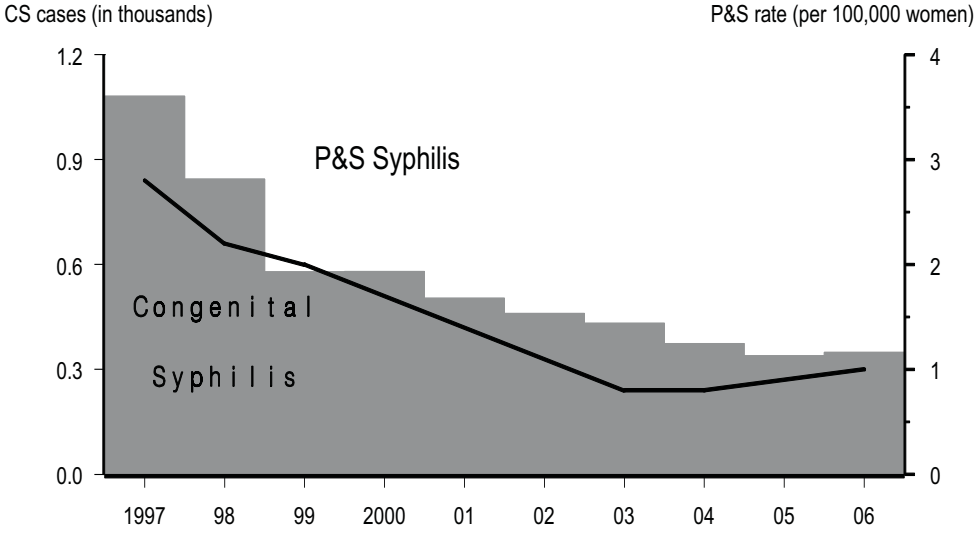
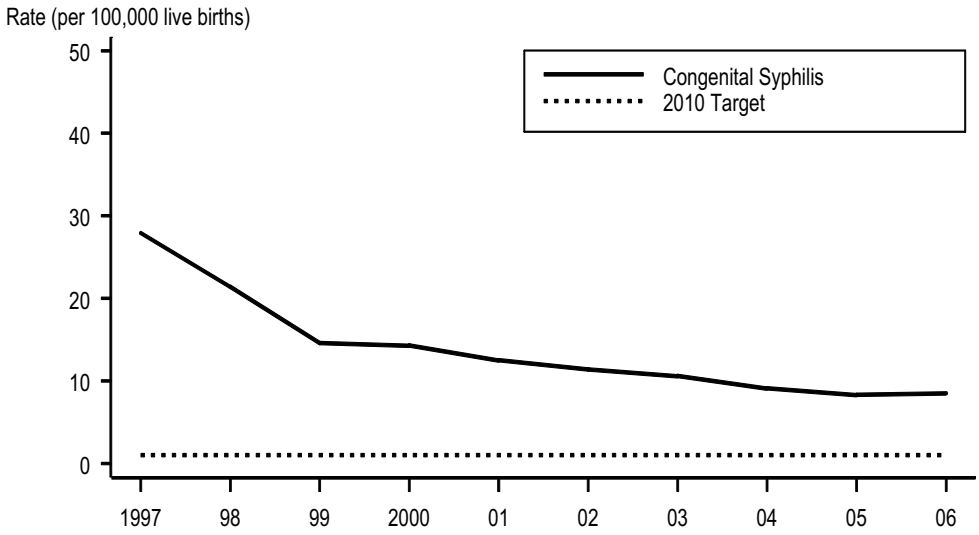


Figure 38. Congenital syphilis — Rates for infants < 1 year of age: United States, 1997–2006 and the Healthy People 2010 target



Note: The Healthy People 2010 target for congenital syphilis is 1.0 case per 100,000 live births.

Other Sexually Transmitted Diseases

Chancroid

Since 1987, reported cases of chancroid declined steadily until 2001 when 38 cases were reported (Figure 39, Table 1). In 2006, 33 cases of chancroid were reported in the United States. Only eight states reported one or more cases of chancroid in 2006 (Table 41). Although the overall decline in reported chancroid cases most likely reflects a decline in the incidence of this disease, these data should be interpreted with caution since *Haemophilus ducreyi*, the causative organism of chancroid, is difficult to culture and, as a result, this condition may be substantially under-diagnosed.[1,2]

Human Papillomavirus

Persistent infection with high risk human papillomavirus (HR-HPV) can lead to development of anogenital cancers (i.e. cervical cancer). In June 2006, a quadrivalent HPV vaccine was licensed for use in the United States. The vaccine provides protection against types 6, 11, 16, and 18. Types 6 and 11 are associated with genital warts while types 16 and 18 are high risk types associated with anogenital cancers.

Sentinel surveillance for cervical infection with high-risk human papillomavirus types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68 was conducted in 29 STD, family planning and primary care clinics in six locations (Boston, Baltimore, New Orleans, Denver, Seattle and Los Angeles) as part of an effort to estimate national burden of disease and inform prevention programs such as vaccine programs in the U.S.[3] Testing was performed using a commercially available test for HR-HPV DNA (Digene Hybrid Capture 2, Gaithersburg). Interim results from 2003–2004 document an overall HR-HPV prevalence of 22.5%. Prevalence in STD clinics was 28%, 24% in family planning clinics, and 16% in primary care clinics. Prevalence by age group was: 14 to 19 years 35%; 20 to 29 years 29%; 30 to 39 years 14%; 40 to 49 years 12%; and 50 to 65 years 6%.

PCR based typing provided estimates of prevalence for types 16 and 18. Overall prevalence of HPV 16/18 was 8%. Prevalence of HPV 16/18 by age group was: 16% in 14 to 19 year olds; 10% in 20 to 29 year olds; 3% in 30 to 39 year olds; 2% in 40 to 49 year olds and 1% in 50 to 65 year olds.[3,4]

In 2007, data were published from the National Health and Nutrition Examination Survey (NHANES) reporting prevalence of both HR-HPV and low-risk HPV (LR-HPV, which is associated with development of anogenital warts) in the civilian, non-institutionalized female population of the U.S., 2003-2004[5] (Figure 43). The overall HPV prevalence of high- and low-risk types was 26.8% (95% confidence interval [CI], 23.3%-30.9%) among US females aged 14 to 59 years (n = 1921). HPV prevalence was 24.5% (95% CI, 19.6%-30.5%) among females aged 14 to 19 years, 44.8% (95% CI, 36.3%-55.3%) among women aged 20 to 24 years, 27.4% (95% CI, 21.9%-34.2%) among women

aged 25 to 29 years, 27.5% (95% CI, 20.8%-36.4%) among women aged 30 to 39 years, 25.2% (95% CI, 19.7%-32.2%) among women aged 40 to 49 years, and 19.6% (95% CI, 14.3%-26.8%) among women aged 50 to 59 years. HPV vaccine types 6 and 11 (low-risk types) and 16 and 18 (high-risk types) were detected in 3.4% of female participants; HPV-6 was detected in 1.3% (95% CI, 0.8%-2.3%), HPV-11 in 0.1% (95% CI, 0.03%-0.3%), HPV-16 in 1.5% (95% CI, 0.9%-2.6%), and HPV-18 in 0.8% (95% CI, 0.4%-1.5%) of female participants.

Data from the National Disease and Therapeutic Index suggest that genital warts (Figure 41) as measured by initial visits to physicians' offices, may be increasing.

Pelvic Inflammatory Disease

For data on Pelvic Inflammatory Disease (PID), see the **Special Focus Profile** on Women and Infants.

Other Sexually Transmitted Diseases

Case reporting data for genital herpes simplex virus (HSV) are not available. Trend data are limited to estimates of the initial office visits in physicians' office practices for these conditions from the National Disease and Therapeutic Index (NDTI) (Figure 40 and Table 42). Despite reported declines in seroprevalence in HSV types 1 and 2,[6] genital herpes trends as measured through NDTI suggest possible recent increases.

Similarly, case reporting data are not available for trichomoniasis, and trend data for this infection is also limited to estimates of initial physician office visits from NDTI (Figure 42 and Table 42).

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[4] Datta SD, Koutsky L, Ratelle S, et al. Type-Specific High-Risk HPV Prevalence from the HPV Sentinel Surveillance Project, US, 2003-2005 [Abstract no. P-099]. In Program and abstracts of the International Human Papillomavirus Meeting, Prague, Czech Republic, September 2006.

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Figure 39. Chancroid — Reported cases: United States, 1981–2006

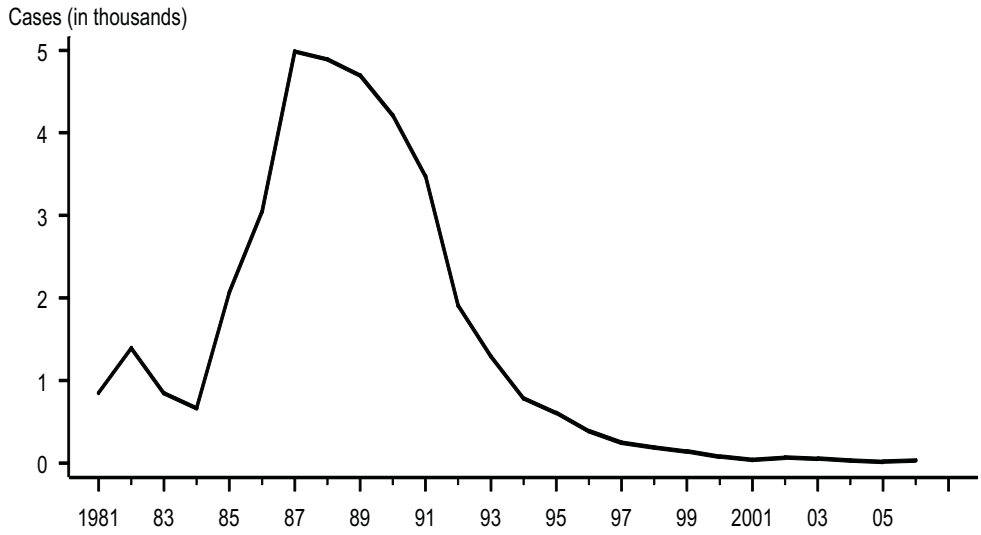
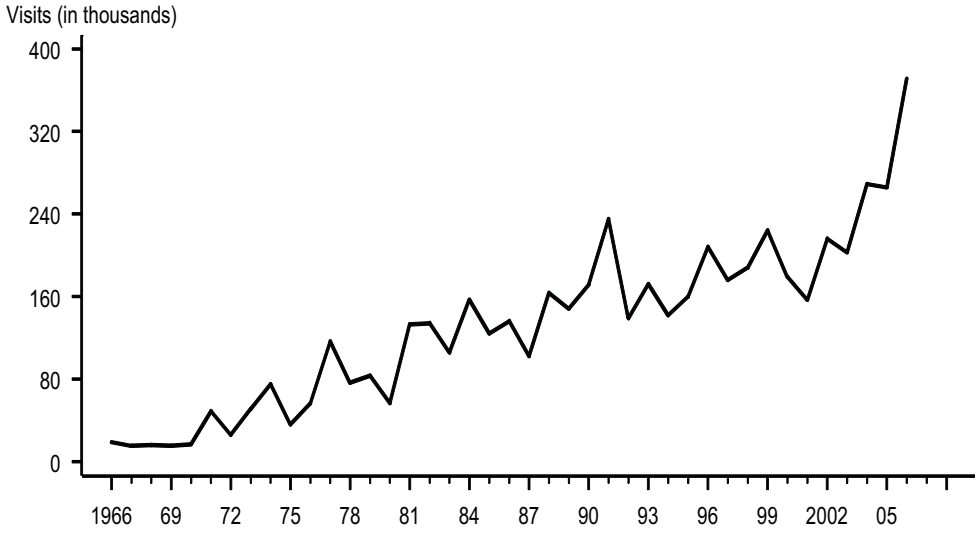


Figure 40. Genital herpes — Initial visits to physicians' offices: United States, 1966–2006



Note: See Appendix (Other Data Sources) and Table 42. The relative standard error for genital herpes estimates range from 20% to 30%.

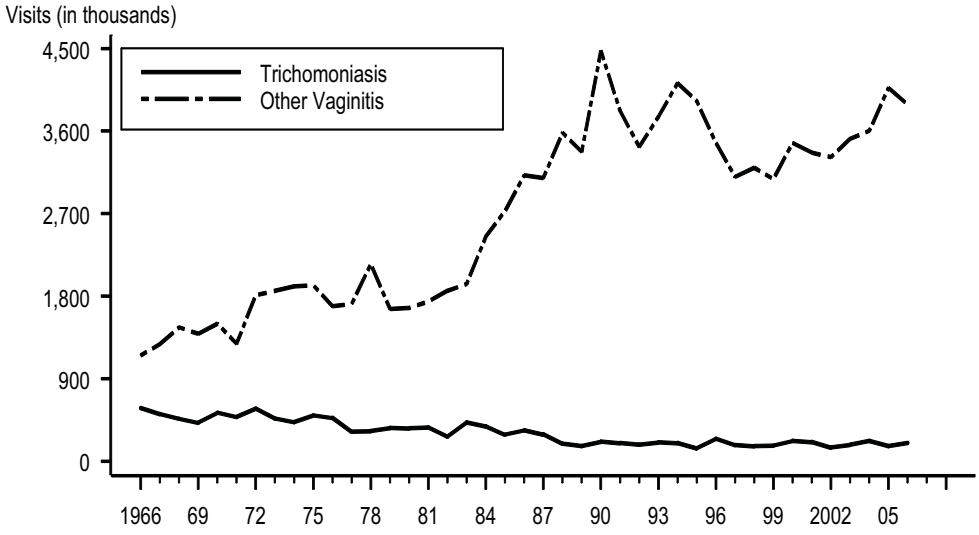
SOURCE: National Disease and Therapeutic Index (IMS Health)

Figure 41. Genital warts — Initial visits to physicians' offices: United States, 1966–2006

Note: See Appendix (Other Data Sources) and Table 42. The relative standard error for genital warts estimates range from 20% to 40%.

SOURCE: National Disease and Therapeutic Index (IMS Health)

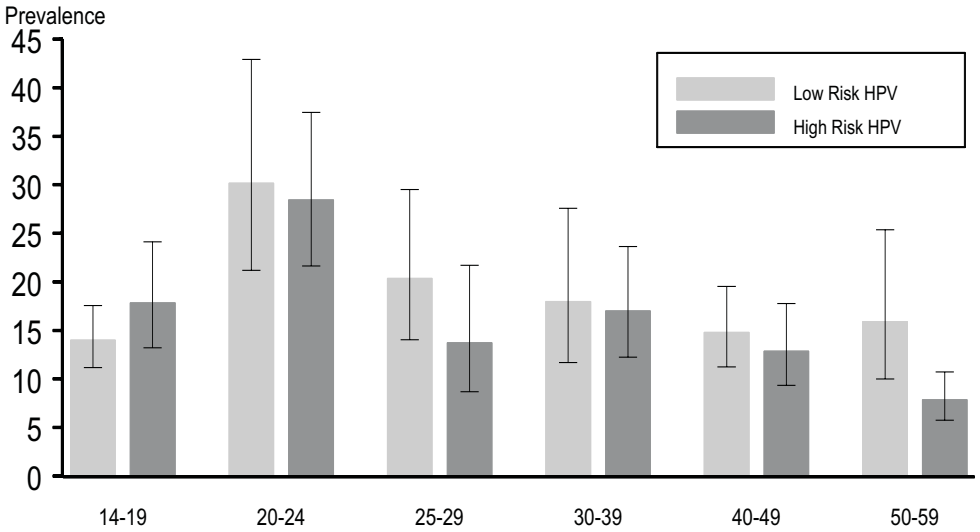
Figure 42. Trichomoniasis and other vaginal infections in women — Initial visits to physicians' offices: United States, 1966–2006



Note: See Appendix (Other Data Sources) and Table 42. The relative standard error for trichomoniasis estimates range from 16% to 30% and for other vaginitis estimates range from 9% to 13%.

SOURCE: National Disease and Therapeutic Index (IMS Health)

Figure 43. Prevalence of high-risk and low-risk human papillomavirus types among females aged 14 to 59 years, 2003-2004



Note: Error bars indicate 95% confidence intervals. Both high-risk and low-risk HPV types were detected in some females.

SOURCE: National Health and Nutrition Examination Survey

SPECIAL FOCUS PROFILES

SPECIAL FOCUS PROFILES

Special Focus Profiles

The **Special Focus Profiles** highlight trends and distribution of 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, 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-EE 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 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 chlamydia[1] and 10% to 40% of women infected with gonorrhea[2] may develop PID. Among women with PID, tubal scarring can cause involuntary infertility in 20%, ectopic pregnancy in 9%, and chronic pelvic pain in 18%.[3] Approximately 70% of chlamydial 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]

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 are causally related to cervical cancer; these types also cause Pap smear abnormalities. Other types cause genital warts, low grade Pap smear abnormalities and, rarely, recurrent respiratory papillomatosis in infants born to infected mothers.[9]

Direct Impact on Pregnancy

Gonorrhea and chlamydia can 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 gonococcal ophthalmia neonatorum, prevention of neonatal pneumonia requires prenatal detection and treatment.

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 – United States

Between 2005 and 2006, the rate of chlamydial infections in women increased from 492.2 to 515.8 per 100,000 females (Figure 1, Table 4). Chlamydia rates exceed gonorrhea rates among women in all states (Figures A and B, Tables 4 and 14).

Chlamydia – Infertility Prevention Program

Prenatal Clinics - In 2006, the median state-specific chlamydia test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 23 states, Puerto Rico, and the Virgin Islands was 8.1% (range 3.5% to 16.7%) (Figure E).

Family Planning Clinics - In 2006, 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 6.7% (range 2.8% to 16.9%) (Figures 8 and 9).

Gonorrhea – United States

Gonorrhea rates among women were higher than the overall HP 2010 target of 19.0 cases per 100,000 population[12] in 46 states, Washington D.C., and two outlying areas in 2006 (Figure B, Table 14).

Like chlamydia, gonorrhea is often asymptomatic in women. Gonorrhea screening, therefore, is an important strategy for the identification of gonorrhea among women. 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, and then reached a plateau (Figure 11). The gonorrhea rate for women (124.3 per 100,000 females) increased slightly in 2006 for the second consecutive year (Table 14).

Although the gonorrhea rate in men has historically been higher than the rate in women, the gonorrhea rate among women has been higher than the rate among men for six consecutive years (Figure 12 and Tables 14 and 15).

Gonorrhea – Infertility Prevention Program

Prenatal Clinics - In 2006, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 20 states, Puerto Rico, and the Virgin Islands was 1.0% (range 0.0% to 3.2%) (Figure F). Median gonorrhea positivity in prenatal clinics has shown minimal change in recent years.

Family Planning Clinics - In 2006, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected family planning clinics in 43 states, Puerto Rico, the District of Columbia, and the Virgin Islands was 1.1% (range 0.0%-4.8%) (Figure 21). Median gonorrhea positivity in family planning clinics has shown minimal change in recent years.

Primary and Secondary Syphilis by State

The HP 2010 target for primary and secondary (P&S) syphilis is 0.2 cases per 100,000 population. In 2006, 32 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 (Table 26).

Congenital Syphilis

The HP 2010 target for congenital syphilis is 1.0 case per 100,000 live births. In 2006, 26 states, the District of Columbia, and Puerto Rico had rates higher than this target (Table 38).

Trends in congenital syphilis usually follow trends in P&S syphilis among women, with a lag of one to two years (Figure 37). The congenital syphilis rate peaked in 1991 at 107.3 cases per 100,000 live births, and declined by 92.4% to 8.2 cases per 100,000 live births in 2005 (Figure 38, Table 39). The rate of P&S syphilis among

women declined 94.8% (from 17.3 to 0.9 cases per 100,000 females) during 1990–2005 (Figure 27).

After 14 years of decline in the United States, the rate of congenital syphilis increased 3.7% between 2005 and 2006 (from 8.2 to 8.5 cases per 100,000 live births) (Figure 38, Table 39).

The 2006 rate of congenital syphilis for the United States is currently 8.5 times higher than the HP 2010 target of 1.0 case per 100,000 live births (Table 38).

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 chlamydial infections are difficult to obtain. Definitive diagnoses of these conditions can be complex. Hospitalizations for PID have declined steadily throughout the 1980s and early 1990s,[14,15] but have remained relatively constant between 1995 and 2005 (Figure H).

The estimated number of initial visits to physicians' offices for PID from the National Disease and Therapeutic Index (NDTI) has generally declined from 1993 through 2006 (Figure I and Table 42).

In 2004, an estimated 170,076 cases of PID were diagnosed in emergency departments among women 15 to 44 years of age. In 2005 this estimate decreased to 147,642 (National Hospital Ambulatory Medical Care Survey, NCHS). As of the date of publication of this report, 2006 data are not available.

Racial disparities in diagnosed PID have been observed in both ambulatory and hospitalized settings. Black women had rates of disease that were two to three times those in white women. Because of the subjective methods by which PID is diagnosed, racial disparity data should be interpreted with caution.[15]

Ectopic Pregnancy

Evidence suggests that health care practices associated with clinical management of 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. From 1996 to 2005, hospitalizations for ectopic pregnancy have remained generally stable (Figure G). As of the date of publication of this report, 2006 data are not available. Data suggest that nearly half of all ectopic pregnancies are treated on an outpatient basis.[16]

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[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.

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[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.

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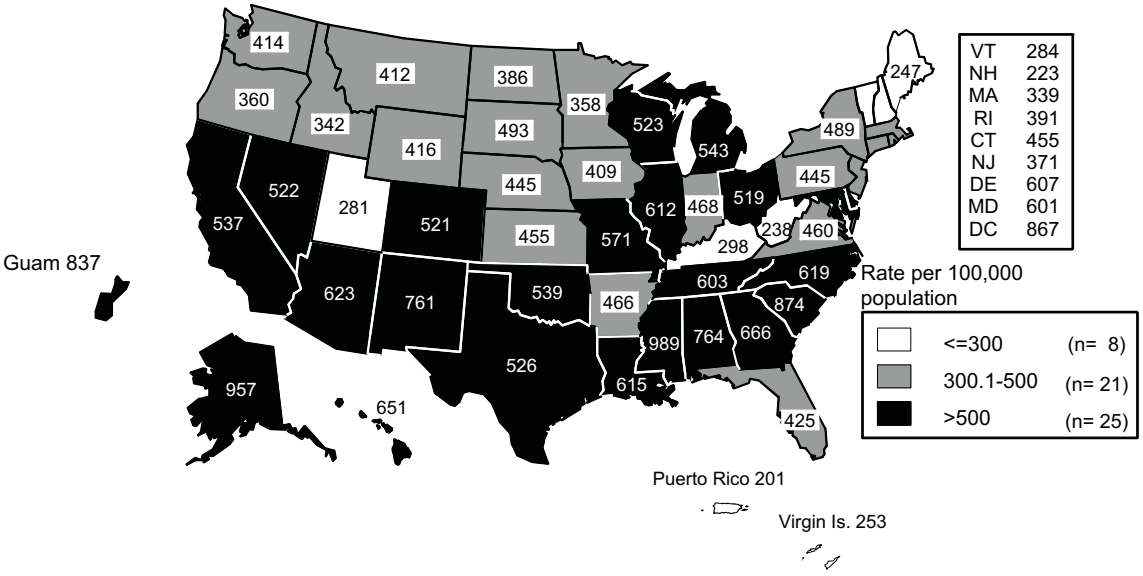
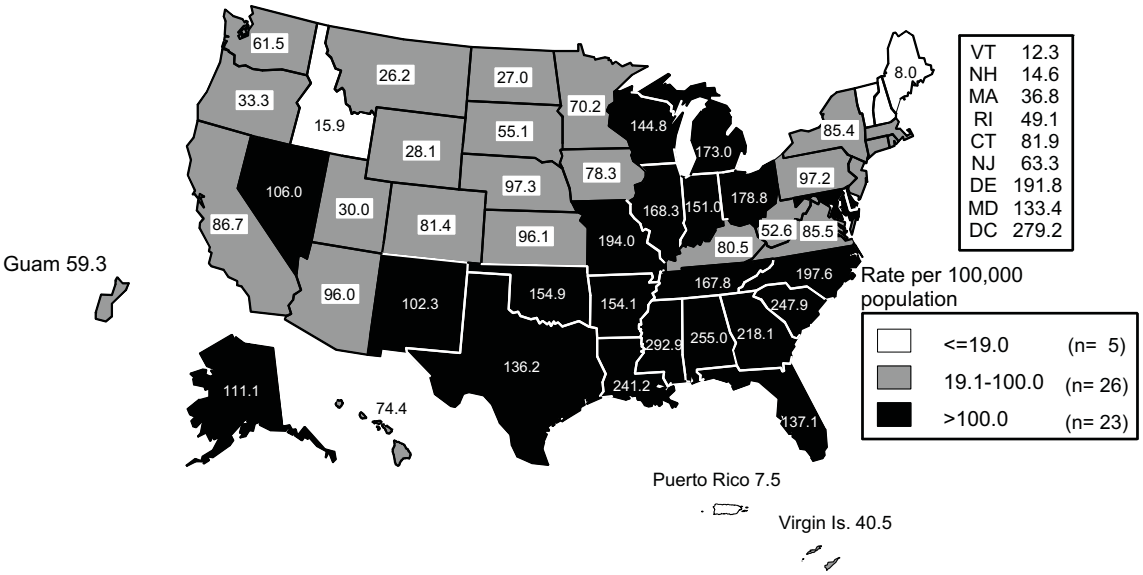
[16] Centers for Disease Control and Prevention. Ectopic pregnancy in the United States, 1990–1992. *MMWR* 1995;44:46-8

Figure A. Chlamydia — Rates among women by state: United States and outlying areas, 2006



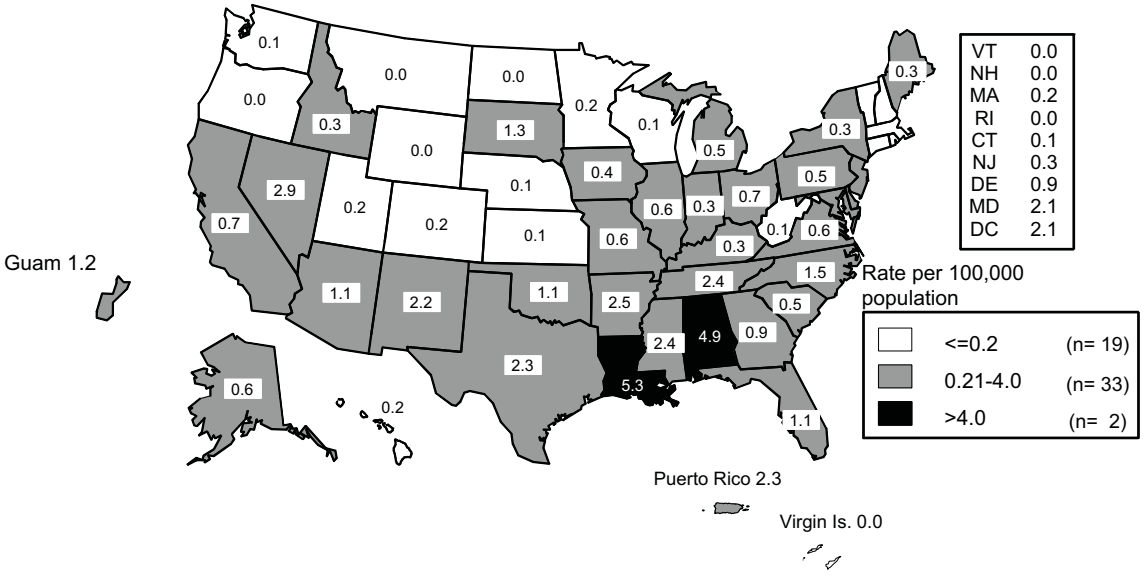
Note: The total chlamydial infection rate among women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 511.7 per 100,000 female population.

Figure B. Gonorrhea — Rates among women by state: United States and outlying areas, 2006



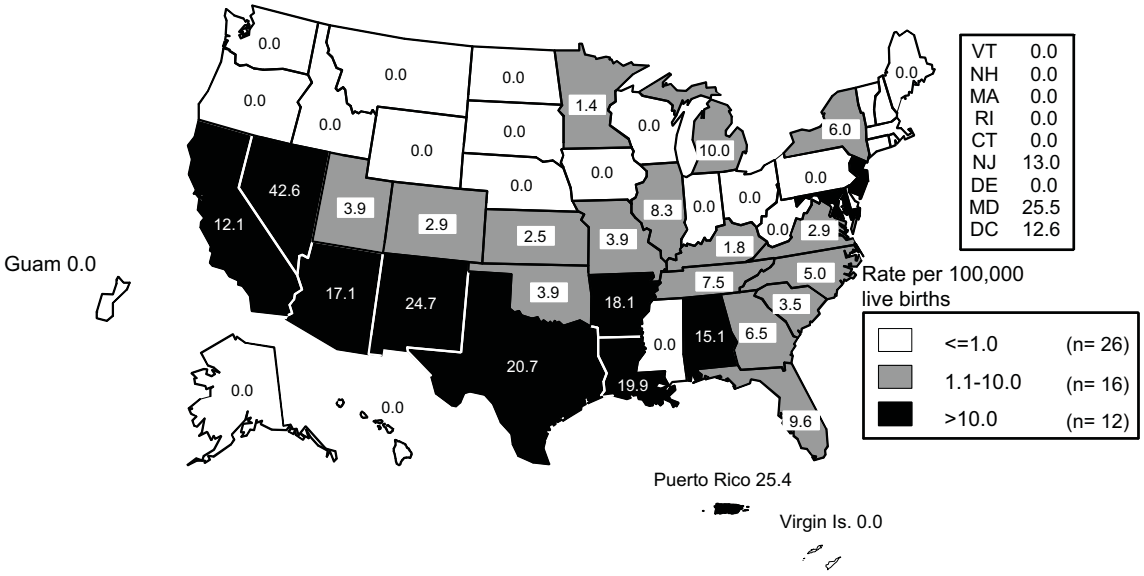
Note: The total gonorrhea infection rate among women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 122.7 per 100,000 female population.

Figure C. Primary and secondary syphilis — Rates among women by state: United States and outlying areas, 2006



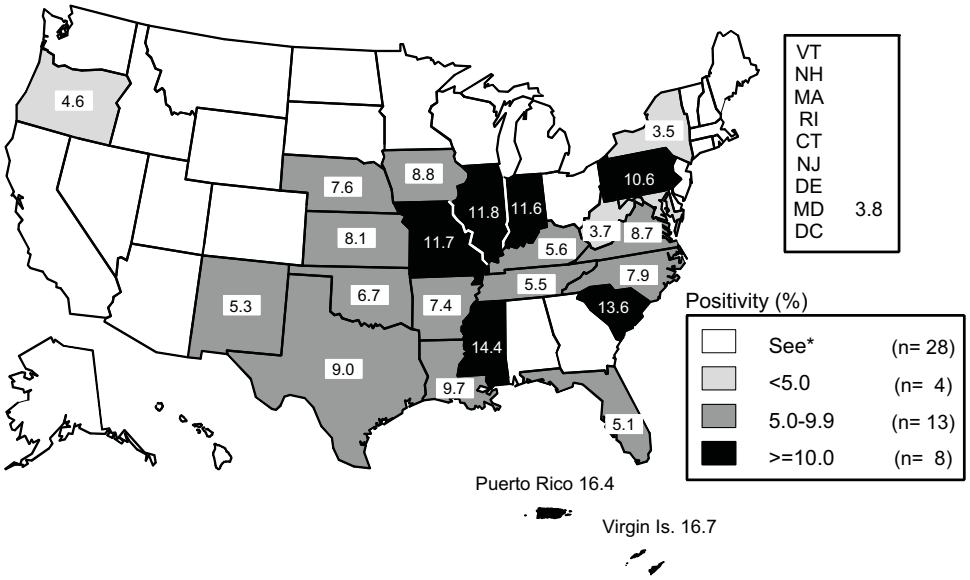
Note: The total rate of P&S syphilis among women in the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 1.0 per 100,000 female population.

Figure D. Congenital syphilis — Rates for infants < 1 year of age by state: United States and outlying areas, 2006



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 8.5 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, 2006

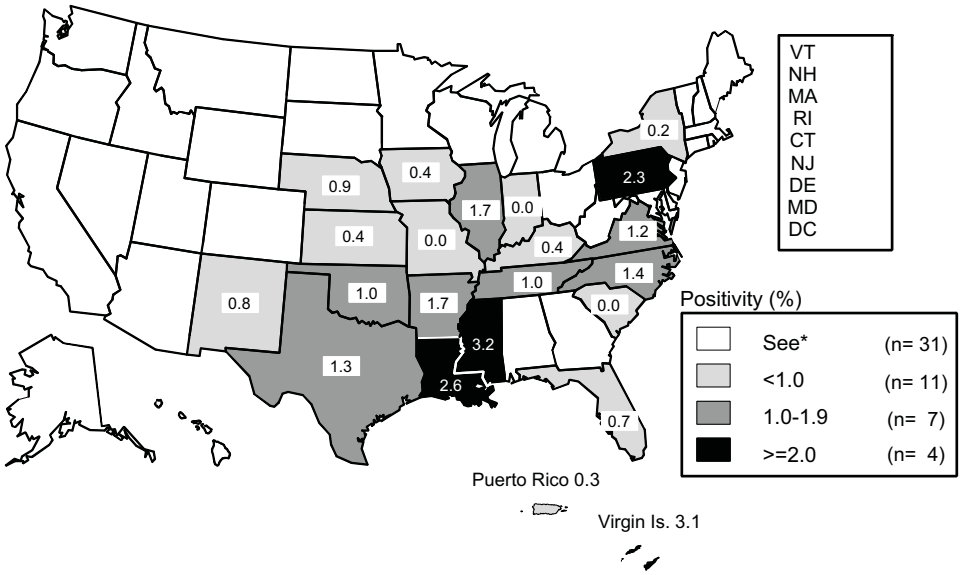


*States/areas not meeting minimum inclusion criteria in prenatal clinics.

Note: Includes states and outlying areas that reported chlamydia positivity data on at least 100 women aged 15 to 24 years during 2006.

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 in 15- to 24-year-old women tested in prenatal clinics by state: United States and outlying areas, 2006

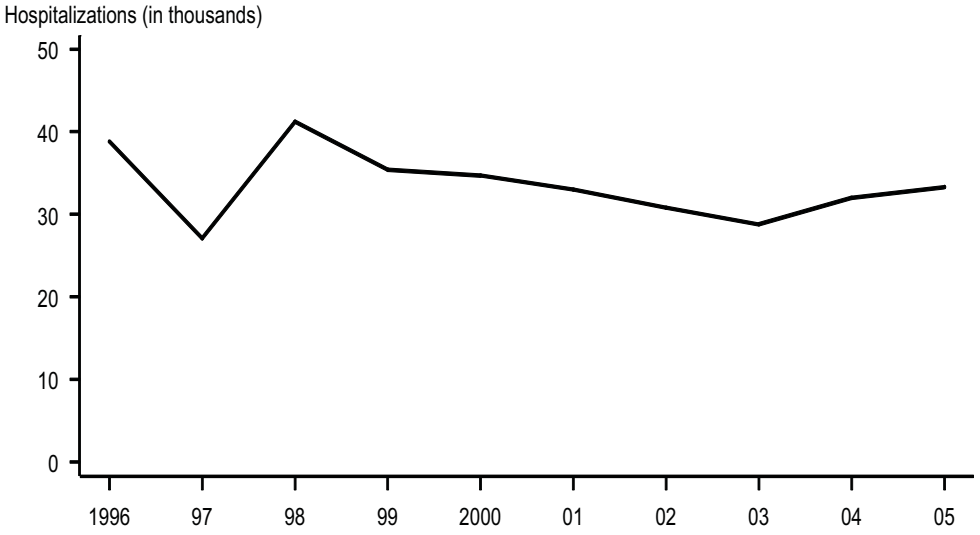


*States/areas not meeting minimum inclusion criteria in prenatal clinics.

Note: Includes states and outlying areas that reported gonorrhea positivity data on at least 100 women aged 15 to 24 years during 2006.

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

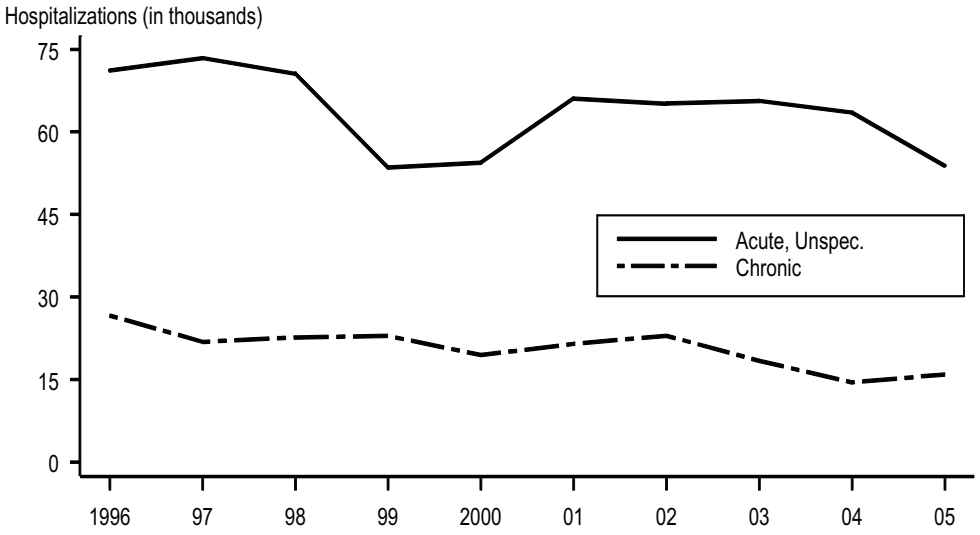
Figure G. Ectopic pregnancy — Hospitalizations of women 15 to 44 years of age: United States, 1996–2005



Note: The relative standard error for these estimates is 11.4%. Data only available through 2005.

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

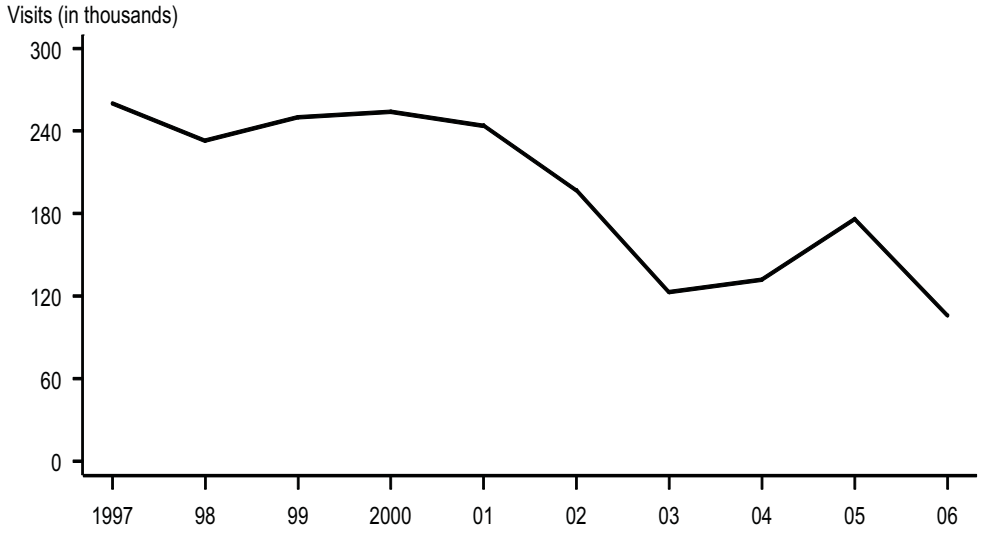
Figure H. Pelvic inflammatory disease — Hospitalizations of women 15 to 44 years of age: United States, 1996–2005



Note: The relative standard error for these estimates of the total number of acute unspecified PID cases ranges from 8% to 11%. The relative standard error for these estimates of the total number of chronic PID cases ranges from 11% to 18%. Data only available through 2005.

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, 1997–2006



Note: The relative standard error for these estimates range from 19% to 30%. See Appendix (Other Data Sources) and Table 42.

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 years of age and young adults 20 to 24 years of age 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 accessing 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 years of age acquire nearly half of all new STDs.[1]

Observations

Chlamydia

After adjusting trends in chlamydia positivity to account for changes in laboratory test methods and associated increases in test sensitivity (see **Appendix**), chlamydia test positivity in 15- to 19-year-old women decreased in two of 10 HHS regions between 2005 and 2006, increased in seven regions, and remained the same in one region (Figure J).

Numerous prevalence studies in various clinic populations have shown that sexually-active adolescents have high rates of chlamydial infection.[2,3] The Infertility Prevention Project (IPP) provides routine screening for detecting chlamydial infections among women attending family planning clinics. IPP prevalence data demonstrate that younger women consistently have higher positivity than older women, even when overall prevalence declines.

Gonorrhea

For the second consecutive year, gonorrhea rates for persons 15 to 19 and 20 to 24 years of age increased. Between 2005 and 2006, the increase for those 15 to 19 years of age was 6.3%, and for those 20 to 24 years of age was 4.4% (Table 20).

15- to 19-Year-Old Women - As in previous years, in 2006 15- to 19-year-old women had the highest rate of gonorrhea (647.9 per 100,000 population) compared to any other age/sex group (Figure 19 and Table 20).

20- to 24-Year-Old Women - In 2006, as in previous years, 20- to 24-year-old women had the second highest rate of gonorrhea (605.7 per 100,000 population) compared to any other age/sex group.

15- to 19-Year-Old Men - Gonorrhea rates for 15- to 19-year-old men increased 8.4% from 257.5 per 100,000 population in 2005 to 279.1 per 100,000 population in 2006 (Figure 20, Table 20).

20- to 24-Year-Old Men - As in previous years in 2006, 20- to 24-year old men had

the highest rate of gonorrhea (454.1 per 100,000 population).

Primary and Secondary Syphilis

Syphilis rates among 15- to 19- year old women have increased since 2004 from 1.5 cases per 100,000 population, to 1.9 in 2005 and to 2.3 in 2006. Rates in women have been the highest each year in the 20 to 24 year age group. In this age group there were 2.9 cases per 100,000 population in 2006 (Figure 34, Table 32).

In men, rates among those 15 to 19 years of age have increased since 2002 from 1.3 cases per 100,000 population in 2002 to 2.3 in 2005 and 3.1 in 2006. Rates in men have been the highest each year in the 35 to 39 year old age group. There were 13.5 cases per 100,000 population in 2006 (Figure 34, Table 32).

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 to 24 years of age.

Chlamydial infection is widespread geographically and highly prevalent among economically-disadvantaged young women and men in the National Job Training Program.[4-6] Specimens from at least 100 students from each state and outlying area were tested by a national contract laboratory.* Among women entering the program from 40 states, the District of Columbia, and Puerto Rico in 2006, based on their place of residence before program entry, the median state-specific chlamydia prevalence was 13.1% (range 4.9% to 20.0%) (Figure K). This reflects a substantial increase from 2005 when the median state-specific chlamydia prevalence was 9.2%, and it appears due to the use of more sensitive tests. Among men entering the program from 48 states, the District of Columbia, and Puerto Rico in 2006, the median state-specific chlamydia prevalence was 7.9% (range 1.8% to 12.4%) (Figure L), which is little change from the chlamydia prevalence of 8.1% in 2005. There was no change in the test types used among men.

Data from National Job Training Program centers that submit gonorrhea specimens from female students aged 16 to 24 years to a national contract laboratory indicated a high prevalence of gonococcal infection in this population. Specimens from at least 100 students from each state and outlying areas were tested by the contract laboratory. Among women entering the program from 36 states, the District of Columbia, and Puerto Rico the median state-specific gonorrhea prevalence was 2.4% (range 0.0% to 7.1%) in 2006 (Figure M). Among men entering the program from 20 states in 2006, the median state-specific gonorrhea prevalence was 3.6% (range 0.0% to 6.2%) (Figure N).

Juvenile Corrections Facilities

Among adolescent women attending juvenile corrections facilities, data from the Corrections STD Prevalence Monitoring Project identified a median chlamydia positivity of 14.2% (range 2.8% to 29.4%) (Table AA) and a median gonorrhea positivity of 3.8% (range 0.0% to 12.2%) (Table CC). *See* **Special Focus Profiles** (STDs in Persons Entering Corrections Facilities).

*Laboratory data are provided by the Center for Disease Detection, San Antonio, Texas.

[1] Weinstock, H, Berman, S, Cates, W, Jr. Sexually Transmitted Diseases among American Youth: Incidence and Prevalence Estimates, 2000. *Perspect Sex Reprod Health*, 2004:36(1):6-10.

[2] Centers for Disease Control and Prevention. Recommendations for the prevention and management of *Chlamydia trachomatis* infections, 1993. *MMWR* 1993;42(No. RR-12).

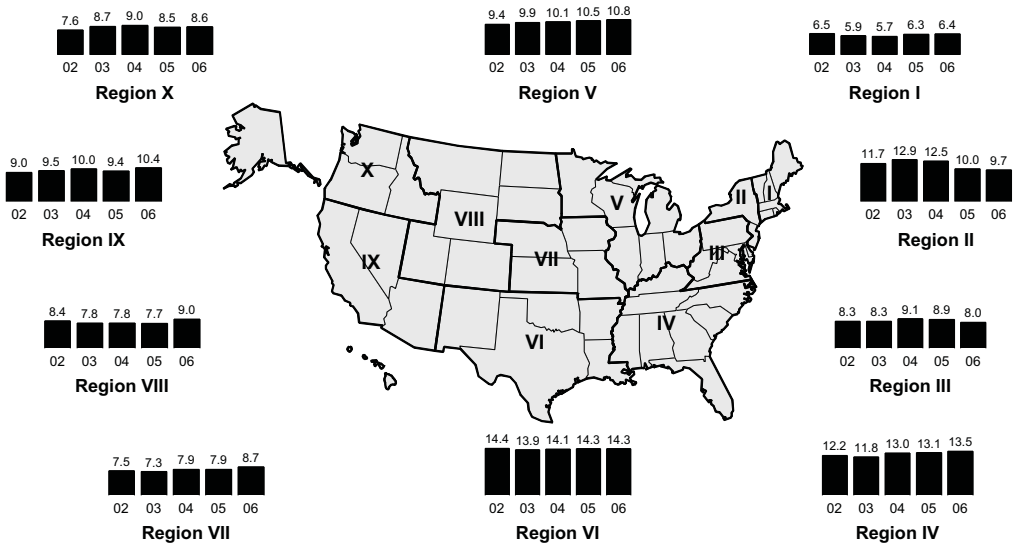
[3] Lossick J, DeLisle S, Fine D, Mosure DJ, Lee V, Smith C. Regional program for widespread screening for *Chlamydia trachomatis* in family planning clinics. In: Bowie WR, Caldwell HD, Jones RP, et al., eds. Chlamydial Infections: Proceedings of the Seventh International Symposium of Human Chlamydial 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.

[5] Joesoef MR, Mosure DJ. Prevalence of chlamydia in young men in the United States from newly implemented universal screening in a National Job Training Program. *Sexually Transmitted Diseases* 2006;33(10):636-639.

[6] Joesoef MR, Mosure DJ. Prevalence of chlamydia in young women entering the National Job Training Program 1998–2004. *Sexually Transmitted Diseases* 2006;33(9):571-575.

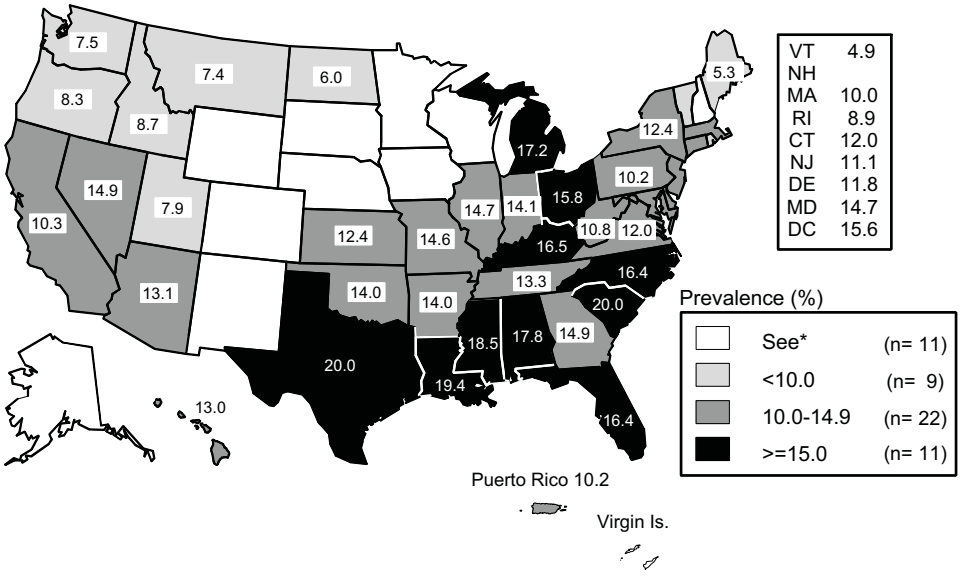
Figure J. Chlamydia — Trends in positivity among 15- to 19-year-old women tested in family planning clinics by HHS region, 2002–2006



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. See Appendix for definitions of Health and Human Services (HHS) regions.

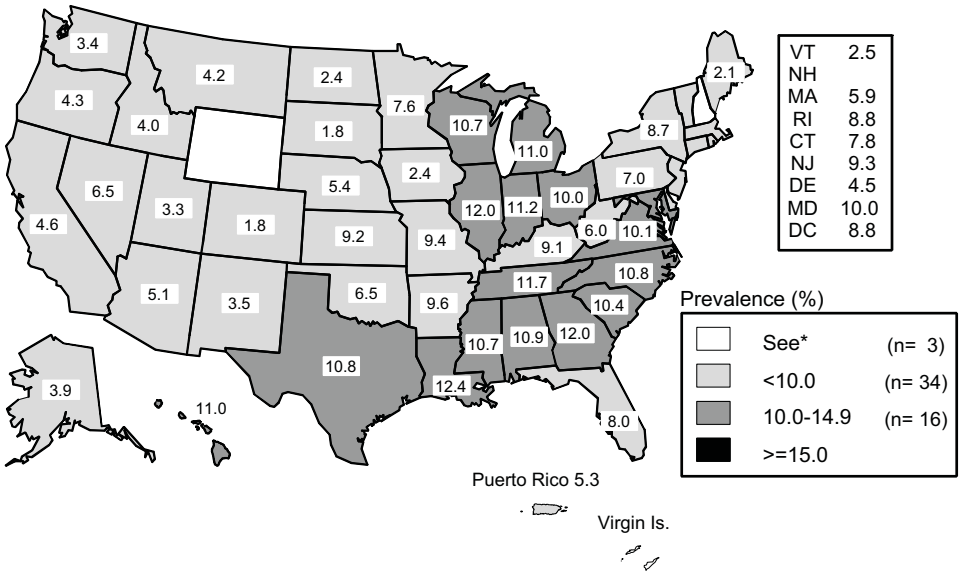
SOURCE: Regional Infertility Prevention Projects; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention

Figure K. Chlamydia — Prevalence among 16- to 24-year-old women entering the National Job Training Program by state of residence: United States and outlying areas, 2006



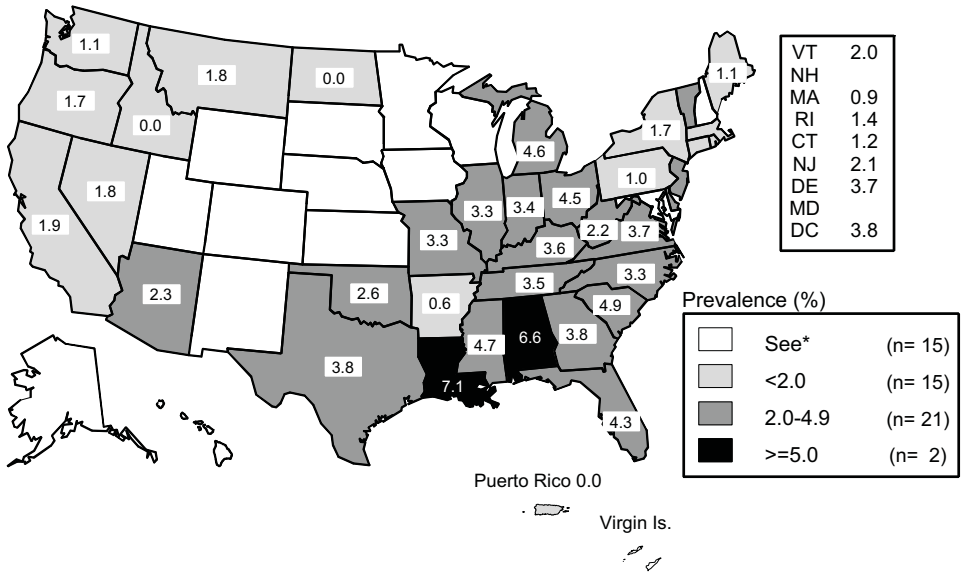
*Fewer than 100 women residing in these states/areas and entering the National Job Training Program were screened for chlamydia in 2006.

Figure L. Chlamydia — Prevalence among 16- to 24-year-old men entering the National Job Training Program by state of residence: United States and outlying areas, 2006



*Fewer than 100 men residing in these states/areas and entering the National Job Training Program were screened for chlamydia in 2006.

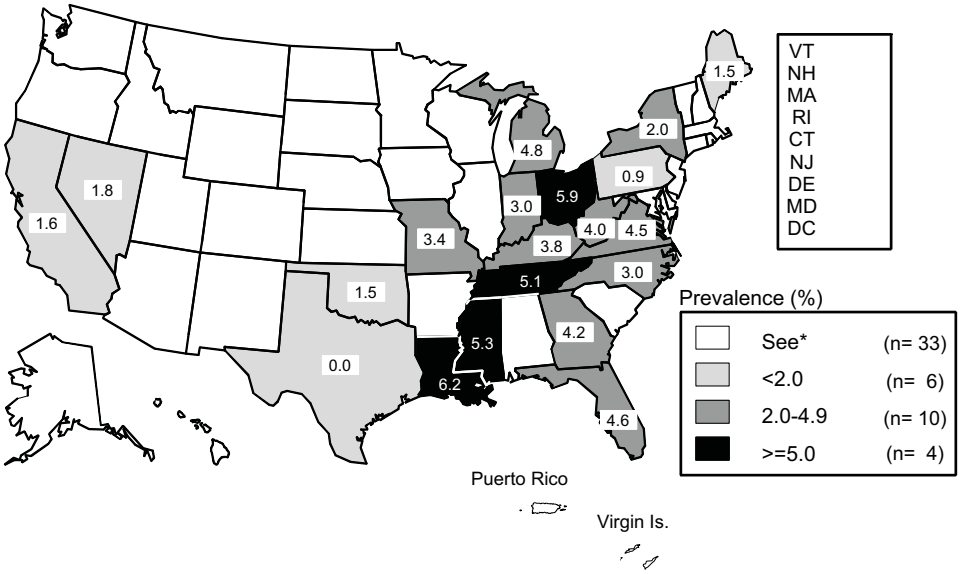
Figure M. Gonorrhea — Prevalence among 16- to 24-year-old women entering the National Job Training Program by state of residence: United States and outlying areas, 2006



*Fewer than 100 women residing in these states/areas and entering the National Job Training Program were screened for gonorrhea by the national contract laboratory in 2006.

Note: Many training centers test female students for gonorrhea using local laboratories; these results are not available to CDC. For this map, gonorrhea test results for students at centers submitting specimens to the national contract laboratory were included if the number of gonorrhea tests submitted was greater than 90% of the number of chlamydia tests submitted.

Figure N. Gonorrhea — Prevalence among 16- to 24-year-old men entering the National Job Training Program by state of residence: United States and outlying areas, 2006



*Fewer than 100 men residing in these states/areas and entering the National Job Training Program were screened for gonorrhea by the national contract laboratory in 2006.

Note: Many training centers test male students for gonorrhea using local laboratories; these results are not available to CDC. For this map, gonorrhea test results for students at centers submitting specimens to the national contract laboratory were included if the number of gonorrhea tests submitted was greater than 90% of the number of chlamydia tests submitted.

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.

STD Reporting Practices

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 thought to be 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. However, prevalence data from community-based surveys such as the National Health and Nutrition Exam Survey (NHANES) and AddHealth confirm the existence of marked STD disparities.[1,2]

Completeness of Race/Ethnicity Data

Chlamydia - In 2006, 26.3% of reports on chlamydia cases were missing race or ethnicity (Table A1).

Gonorrhea - In 2006, 21.6% of reports on gonorrhea cases were missing information on race or ethnicity (ranging by state from 0.0% to 46.8%).

Syphilis - In 2006, only 4.1% of reports on syphilis cases were missing information on race or ethnicity (ranging by state from 0.0% to 33.3%).

To adjust for missing data, cases for 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

All racial and ethnic groups except Asian/Pacific Islanders reported increases in chlamydia rates from 2005 to 2006. From 2002 to 2006, chlamydia rates increased by 17.2% among African Americans; 23.7% among American Indian/Alaska Natives; 12.7% among Hispanics; and 20.6 among whites (Table 11B). Rates decreased by 5.9% among Asian/Pacific Islanders.

African Americans - In 2006, approximately 47% of all chlamydia cases occurred among African Americans (Table 11A). Overall, the rate of chlamydia among African Americans in the United States was more than eight times that among whites. The rate of chlamydia among African-American women was more than seven times higher than the rate

among white women (1,760.9 and 237.0 per 100,000 population, respectively) (Figure O, Table 11B). The chlamydia rate among African American men was more than 11 times higher than that among white men (741.2 and 66.0 per 100,000 population, respectively).

American Indian/Alaska Natives - In 2006, the chlamydia rate among American Indian/Alaska Natives was 797.3 cases per 100,000 population, over five times higher than the rate among whites (153.1).

Asian/Pacific Islanders - In 2006, the chlamydia rate among Asian/Pacific Islanders was 132.1 cases per 100,000 population, a decrease from the 2005 rate of 148.4.

Hispanics - In 2006, the chlamydia rate among Hispanics was 477.0 cases per 100,000 population, three times higher than the rate among whites (153.1).

Gonorrhea

All racial and ethnic groups except Asian/Pacific Islanders saw slight increases in gonorrhea rates from 2005 to 2006. Despite this slight increase in 2006, between 2002 and 2006, the gonorrhea rate among African Americans declined by 7.7% (from 713.7 in 2002 to 658.4 cases per 100,000 population in 2006). During the same five year period, gonorrhea rates increased by 22.9% among American Indian/Alaska Natives,17.7% among whites, 11.8% among Hispanics, and decreased by 1.4% among Asian/Pacific Islanders (Table 21B).

From 2005 to 2006, gonorrhea rates among 15- to 19-year-old African-American women and men increased for the second consecutive year (Figures Q and R).

African Americans - In 2006, approximately 69% of the total number of reported cases of gonorrhea occurred among African Americans (Table 21A). In 2006, the rate of gonorrhea among African Americans was 658.4 cases per 100,000 population. Overall, the rate of gonorrhea among African Americans in the United States was 18 times greater than that among whites.

In 2006, the gonorrhea rate among African-American men was 25 times higher than that among white men; the gonorrhea rate among African-American women was 14 times higher than that among white women (Figure P).

In 2006, gonorrhea rates were highest for African Americans aged 15 to 19 and 20 to 24 years among all racial, ethnic, and age categories. African-American women aged 15 to 19 years had a gonorrhea rate of 2,898.1 cases per 100,000 women. This rate was 14 times greater than the 2006 rate among white women of similar age (208.7). African-American men in the 15- to 19-year-old age category had a 2006 gonorrhea rate of 1,503.8 cases per 100,000 men, which was 39 times higher than the rate among 15- to 19-year-old white men of 38.4 per 100,000. Among those aged 20 to 24 years, the gonorrhea rate among African Americans was 16 times greater than that among whites (2,560.7 and 165.0 cases per 100,000 population, respectively) (Table 21B).

American Indian/Alaska Natives - In 2006 the gonorrhea rate among American Indian/Alaska Natives was 138.3 which was four times higher than the rate among whites in 2006 of 36.5 cases per 100,000 population.

Asian/Pacific Islanders - In 2006 the gonorrhea rate among Asian/Pacific Islanders was 21.1 cases per 100,000 population which was nearly two times lower than the rate among whites.

Hispanics - In 2006, the gonorrhea rate among Hispanics was 77.4 which was two times higher than the rate among whites.

Primary and Secondary Syphilis

The syphilis epidemic in the late 1980s occurred primarily among heterosexual and minority populations.[3,4] During the 1990s, the rate of P&S syphilis declined among all racial and ethnic groups (Figure 32). Between 2002 and 2006, the rate of P&S syphilis increased among all racial and ethnic groups.

African Americans - Between 2005 and 2006, the rate of P&S syphilis among African Americans increased 16.5% (from 9.7 to 11.3). In 2006, 43.2% of all cases of P&S syphilis reported to CDC were among African Americans and 38.4% of all cases were among non-Hispanic whites (Table 33A). Compared to whites, the overall 2006 rate for African Americans was 5.9 times higher (Table 33B). In 2006, the P&S rate among African-American men was more than five times higher than that among white men; the rate among African-American women was more than 16 times higher than that among white women. In some age groups, particularly 15-19 year old African-American men, disparities have increased markedly in recent years as rates of disease have increased (Figure U).

American Indian/Alaska Natives - Between 2005 and 2006, the rate of P&S syphilis among American Indian/Alaska Natives increased 37.5% (from 2.4 to 3.3). In 2006, 0.8% of all cases of P&S syphilis reported to CDC were among American Indian/Alaska Natives (Table 33A). Compared to whites, the 2006 rate for American Indian/Alaska Natives was 1.7 times higher (Table 33B).

Asian/Pacific Islanders - Between 2005 and 2006, the rate of P&S syphilis among Asian/Pacific Islanders increased 18.2% (from 1.1 to 1.3). In 2006, 1.8% of all cases of P&S syphilis reported to CDC were among Asian/Pacific Islanders (Table 33A). Compared to whites, the 2006 rate for Asian/Pacific Islanders was 0.7 times higher (Table 33B).

Hispanics - Between 2005 and 2006, the rate of P&S syphilis among Hispanics increased 12.5% (from 3.2 to 3.6). In 2006, 15.8% of all cases of P&S syphilis reported to CDC were among Hispanics (Table 33A). Compared to whites, the 2006 rate for Hispanics was 1.9 times higher (Table 33B).

Congenital Syphilis

In 2006, the rate of congenital syphilis (based on the mother's race/ethnicity) was 24.2 cases per 100,000 live births among African Americans and 15.4 cases per 100,000 live births among Hispanics. These rates are 15.1 and 9.6 times higher, respectively, than the 2005 rate among whites (1.6 cases per 100,000 live births) (Figure V, Table 40).

---

[1] Datta SD, Sternberg M, Johnson RE, Berman S, Papp JR, McQuillan G, et al. Gonorrhea and chlamydia in the United States among persons 14 to 39 years of age, 1999 to 2002. Ann Intern Med 2007; 147(2):89-96.

[2] Miller WC, Ford CA, Morris M, Handcock MS, Schmitz JL, Hobbs MM et al. Prevalence of chlamydial and gonococcal infections among young adults in the United States. JAMA 2004; 291(18):2229-2236

[3] 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.

[4] Peterman TA, Heffelfinger JD, Swint EB, Groseclose SL. The changing epidemiology of syphilis. *Sex Transm Dis* 2005;32:S4-S10.

Figure O. Chlamydia — Rates by race/ethnicity and sex: United States, 2006

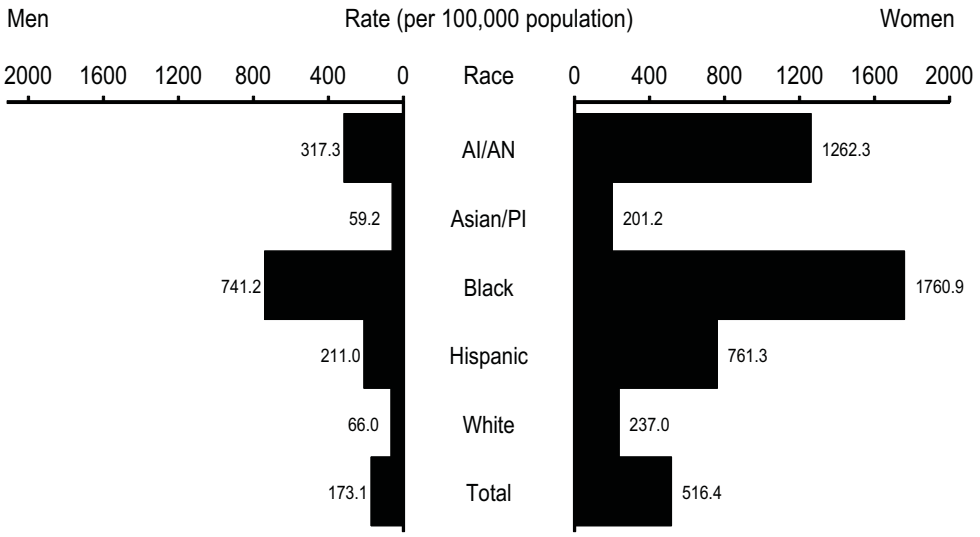


Figure P. Gonorrhea — Rates by race/ethnicity and sex: United States, 2006

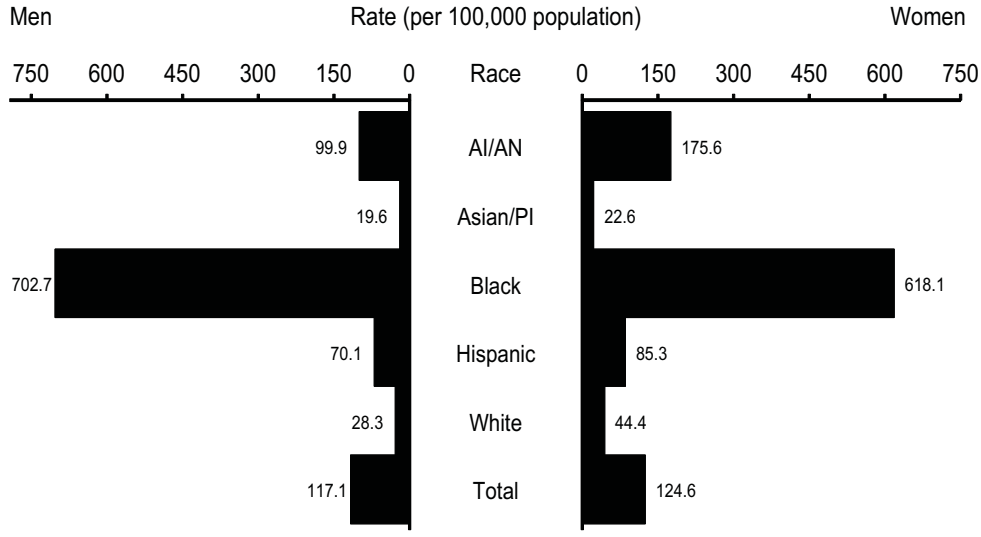


Figure Q. Gonorrhea — Rates among 15- to 19-year-old females by race/ethnicity: United States, 1997–2006

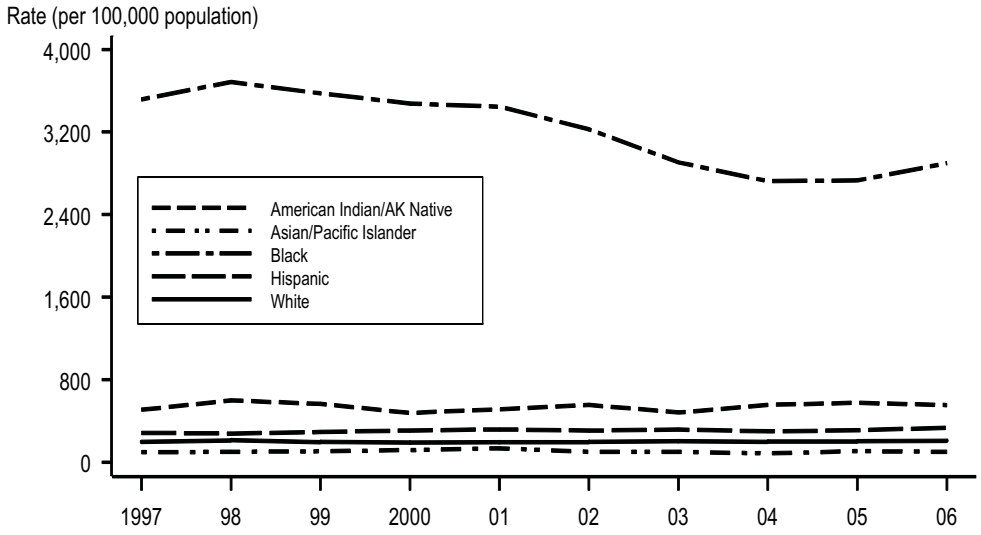


Figure R. Gonorrhea — Rates among 15- to 19-year-old males by race/ethnicity: United States, 1997–2006

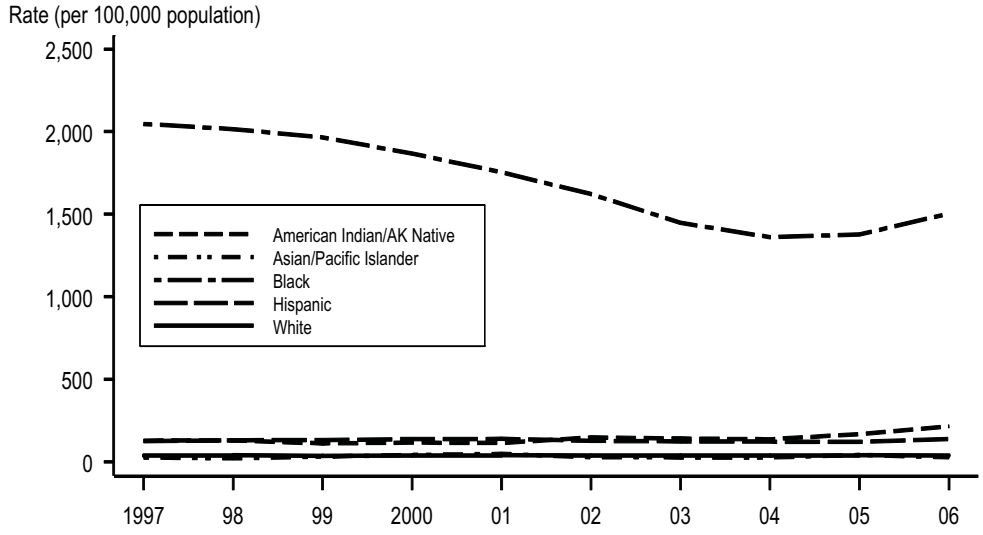


Figure S. Primary and secondary syphilis — Rates by race/ethnicity and sex: United States, 2006

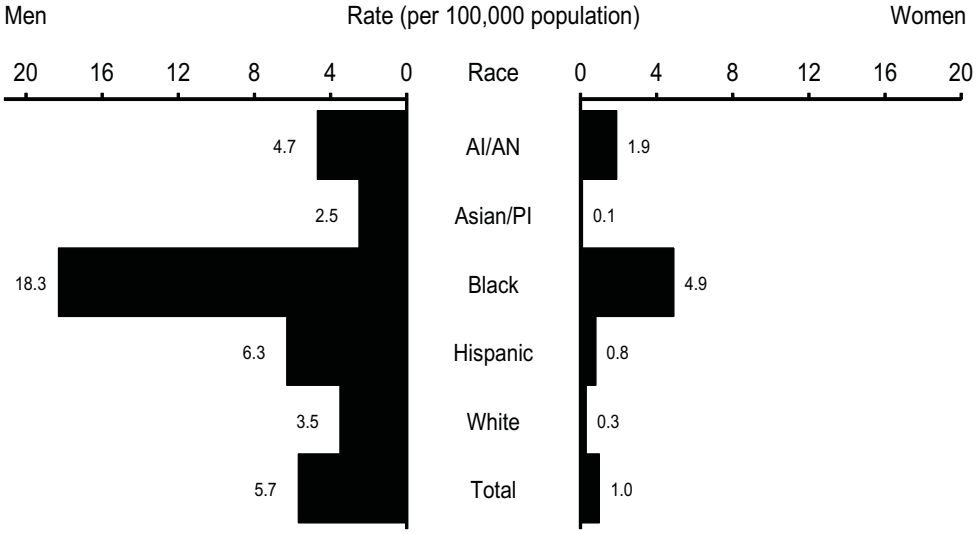


Figure T. Primary and secondary syphilis — Rates among 15- to 19-year-old females by race/ethnicity: United States, 1997–2006

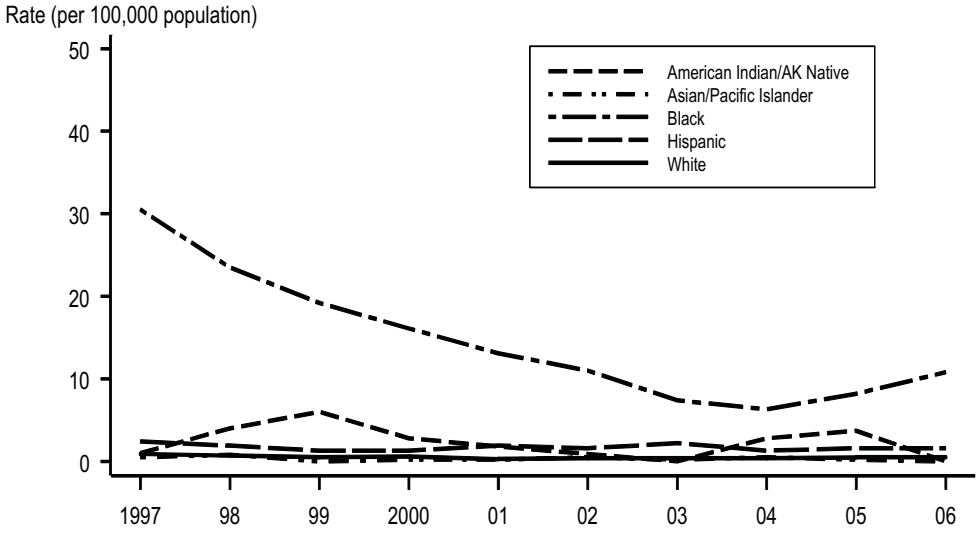


Figure U. Primary and secondary syphilis — Rates among 15- to 19-year-old males by race/ethnicity: United States, 1997–2006

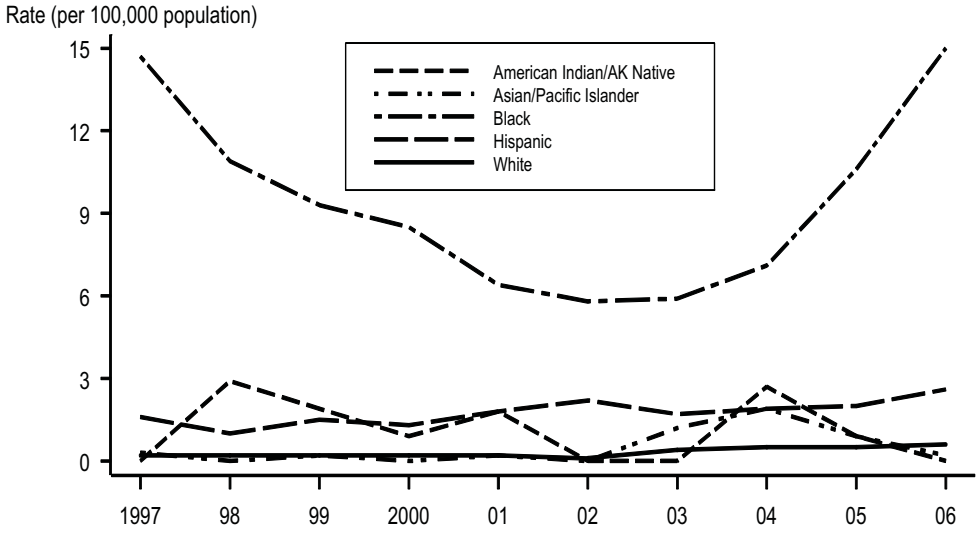
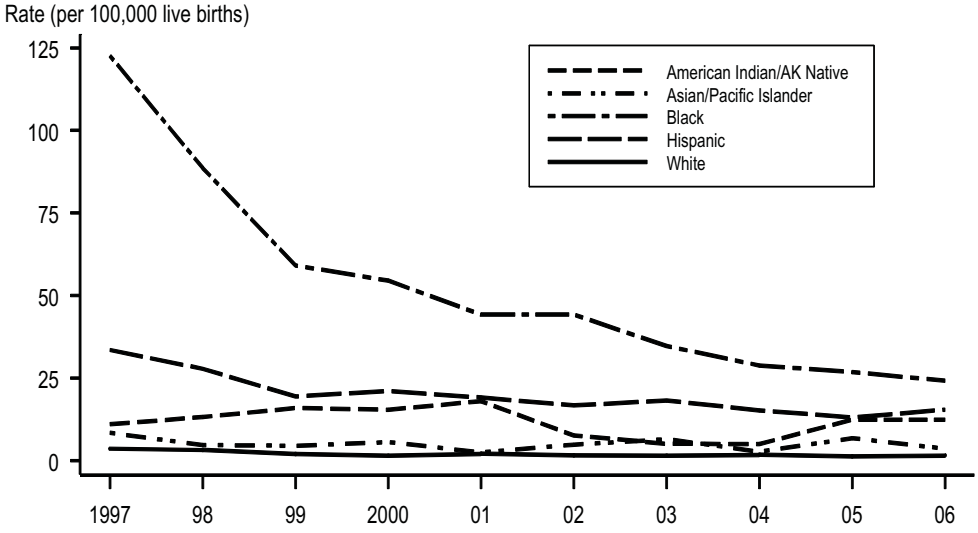


Figure V. Congenital syphilis — Rates among infants < 1 year of age by mother's race/ethnicity: United States, 1997–2006



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 maternal race/ethnicity information and were excluded.

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 GISP suggest that an increasing number of MSM are acquiring STDs.[1-7] Data also suggest that an increasing number of MSM engage in sexual behaviors that place them at risk for STDs and HIV infection.[8] Several factors may be contributing to this change, including the availability of highly active antiretroviral therapy (HAART) for HIV infection.[9] Because STDs and the behaviors associated with acquiring them increase the likelihood of acquiring and transmitting HIV infection,[10] the rise in STDs among MSM may be associated with an increase in HIV diagnoses among MSM.[11]

Observations

Most 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 currently available. Data from enhanced surveillance projects are presented in this section to provide information regarding STDs in MSM.

Monitoring Trends in Prevalence of STDs, HIV and Risk Behaviors among Men Who Have Sex with Men (MSM Prevalence Monitoring Project), STD Clinics, 1999-2006

From 1999 through 2006, eight U.S. cities participating in the MSM Prevalence Monitoring Project submitted syphilis, gonorrhea, chlamydia, and HIV test data to CDC from 120,164 MSM visits to STD clinics; data from 98,866 MSM visits were submitted from five public STD clinics (Denver, New York City, Philadelphia, San Francisco, and Seattle) and data from 21,298 MSM visits were submitted from three STD clinics in community-based, gay men's health clinics (Chicago, the District of Columbia, and Houston).

Changes in testing technology for gonorrhea and chlamydia have occurred in recent years with the advent of nucleic acid amplification tests (NAATs) which achieve greater sensitivity than traditional culture methods.[12,13] The MSM Prevalence Monitoring Project includes data from culture and non-culture tests collected during routine care and reflects testing practices at participating clinics. Tests for gonorrhea included culture, NAATs, or nucleic acid hybridization tests (DNA probes). Tests for chlamydia included culture, NAATs, DNA probes, or direct fluorescent antibody tests (DFAs). Nontreponemal syphilis tests included the Rapid Plasma Reagin (RPR) test and the Venereal Disease Research Laboratory (VDRL).

All statistics were based on data collected from clinic visits and may reflect multiple visits by a patient rather than individual patients. City-specific medians and ranges were calculated for the proportion of tests done and for STD and HIV test positivity.

Gonorrhea

Between 1999 and 2006 the number of gonorrhea tests for all anatomic sites combined increased in all eight cities. The trend in the number of positive gonorrhea tests for all anatomic sites varied by city. For all cities, the number of symptomatic positive gonorrhea tests accounts for the majority of the overall positive tests (Figure W).

In 2006, 75% (range: 56-94%) of MSM were tested for urethral gonorrhea, 40% (range: 3-61%) were tested for rectal gonorrhea, and 53% (range: 6-87%) were tested for pharyngeal gonorrhea.

In 2006, median clinic urethral gonorrhea positivity in MSM was 10% (range: 8-13%), median rectal gonorrhea positivity was 7% (range: 2-13%), and median pharyngeal gonorrhea positivity was 7% (range: 1-15%).

Chlamydia

In 2006, a median of 75% (range: 58-93%) of MSM visiting participating STD clinics were tested for urethral chlamydia, compared to 65% (range: 58-68%) in 1999. In 2006, the median urethral chlamydia positivity was 6% (range: 5-8%).

Syphilis

In 2006, 83% (range: 61-94%) of MSM visiting participating STD clinics had a nontreponemal serologic test for syphilis (RPR or VDRL) performed, compared with 69% (range: 54-93%) in 1999 (Figure X).

Overall, median seroreactivity among MSM tested for syphilis increased from 4% (range: 4-13%) in 1999 to 10% (range: 6-18%) in 2006.

Syphilis seroreactivity is used to estimate syphilis prevalence and is correlated with prevalence of P%S syphilis in this population.[14]

HIV Infection

Overall, the percent of MSM tested for HIV in STD clinics increased between 1999 and 2006. In 2006, a median of 73% (range: 28-85%) of MSM visiting STD clinics that were not previously known to be HIV-positive were tested for HIV, while 44% (range: 21-55%) were tested in 1999. In 2006, median HIV positivity in MSM was 4% (range: 2-7%) (Figure Y).

In 2006, median HIV prevalence among MSM, including persons previously known to be HIV-positive and persons testing HIV-positive at their current visit, was 12% (range: 10-16%).

HIV/STDs by Race/Ethnicity

HIV positivity varied by race/ethnicity, but was highest in African-American MSM. HIV positivity was 3% (range: 1-4%) in whites, 10% (range: 3-13%) in African Americans, and 4% (range: 2-6%) in Hispanics.

HIV prevalence was 11% (range: 7-16%) in whites, 21% (range: 15-25%) in African Americans, and 14% (range: 8-19%) in Hispanics.

In 2006, urethral gonorrhea positivity was 9% (range: 6-12%) in whites, 14% (range: 9-19) in African Americans, and 7% (range: 4-21%) in Hispanics. Rectal gonorrhea positivity was 8% (range: 3-11%) in whites, 10% (range: 2-12%) in African Americans, and 9% (range: 2-11%) in Hispanics. Pharyngeal gonorrhea positivity was 8% (range: 1-15%) in whites, 6% (range: 1-12%) in African Americans, and 7% (range: 1-28%) in Hispanics.

Urethral chlamydia was 5% (range: 3-8%) in whites; 7% (range: 5-13%) in African Americans, and 6% (range: 4-8%) in Hispanics.

Median syphilis seroreactivity was 7% (range: 6-11%) in whites; 15% (range:

8-26%) in African Americans, and 14% (range: 7-26%) in Hispanics.

STDs by HIV Status, STD Clinics, 2006

In 2006, urethral gonorrhea positivity was 14% (range: 12-31) in HIV-positive MSM and 8% (range: 7-12%) in MSM who were HIV-negative or of unknown HIV status; rectal gonorrhea positivity was 11% (range: 3-18%) in HIV-positive MSM and 6% (range: 2-14%) in MSM who were HIV-negative or of unknown HIV status; pharyngeal gonorrhea positivity was 6% (range: 1-19%) in HIV-positive MSM and 7% (range: 1-14%) in MSM who were HIV-negative or of unknown HIV status.

Median urethral chlamydia positivity was 7% (range: 5-9%) in HIV-positive MSM and 6% (range: 4-8%) in MSM who were HIV-negative or of unknown HIV status.

Median syphilis seroreactivity was 30% (range: 17-44%) in HIV-positive MSM and 7% (range: 5-13%) in MSM who were HIV-negative or of unknown HIV status.

Nationally Notifiable Syphilis Surveillance Data

P&S syphilis increased in the United States between 2002 and 2006, with a 54.1% increase in the number of P&S syphilis cases among men and a 9.1% decrease in the number of cases among women (Tables 26 and 27). In 2006, the rate of reported P&S syphilis among men (5.7 cases per 100,000 males) was 5.7 times greater than the rate among women (1.0 cases per 100,000 females) (Tables 26 and 27). Trends in the syphilis male-to-female rate ratio, which are assumed to reflect, in part, syphilis trends among MSM,[7] have been increasing in the United States during recent years (Figure 33). The overall male-to-female syphilis rate ratio has risen steadily from 3.4 in 2002 to 5.7 in 2006 (Figure 33, Tables 26 and 27). The increase in the male-to-female rate ratio occurred among all racial and ethnic groups between 2002 and 2006.

In recent years, MSM have accounted for an increasing number of estimated syphilis cases in the United States[15] and in 2006 accounted for 64% of P&S syphilis cases in the United States based on information reported from 29 states and Washington, D.C.[16]

Additional information on syphilis can be found in the Syphilis section (**National Profile**).

Gonococcal Isolate Surveillance Project (GISP)

The 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.[17,18]

GISP also reports the percentage of *N. gonorrhoeae* isolates obtained from MSM. Overall, the proportion of isolates from MSM in GISP clinics increased steadily from 4% in 1988 to 21.5% in 2006 (Figure Z). Additional information on GISP may be found in the Gonorrhea section (**National Profile**).

The proportion of isolates coming from MSM varies geographically with the largest percentage from the West Coast (Figure AA).

[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.

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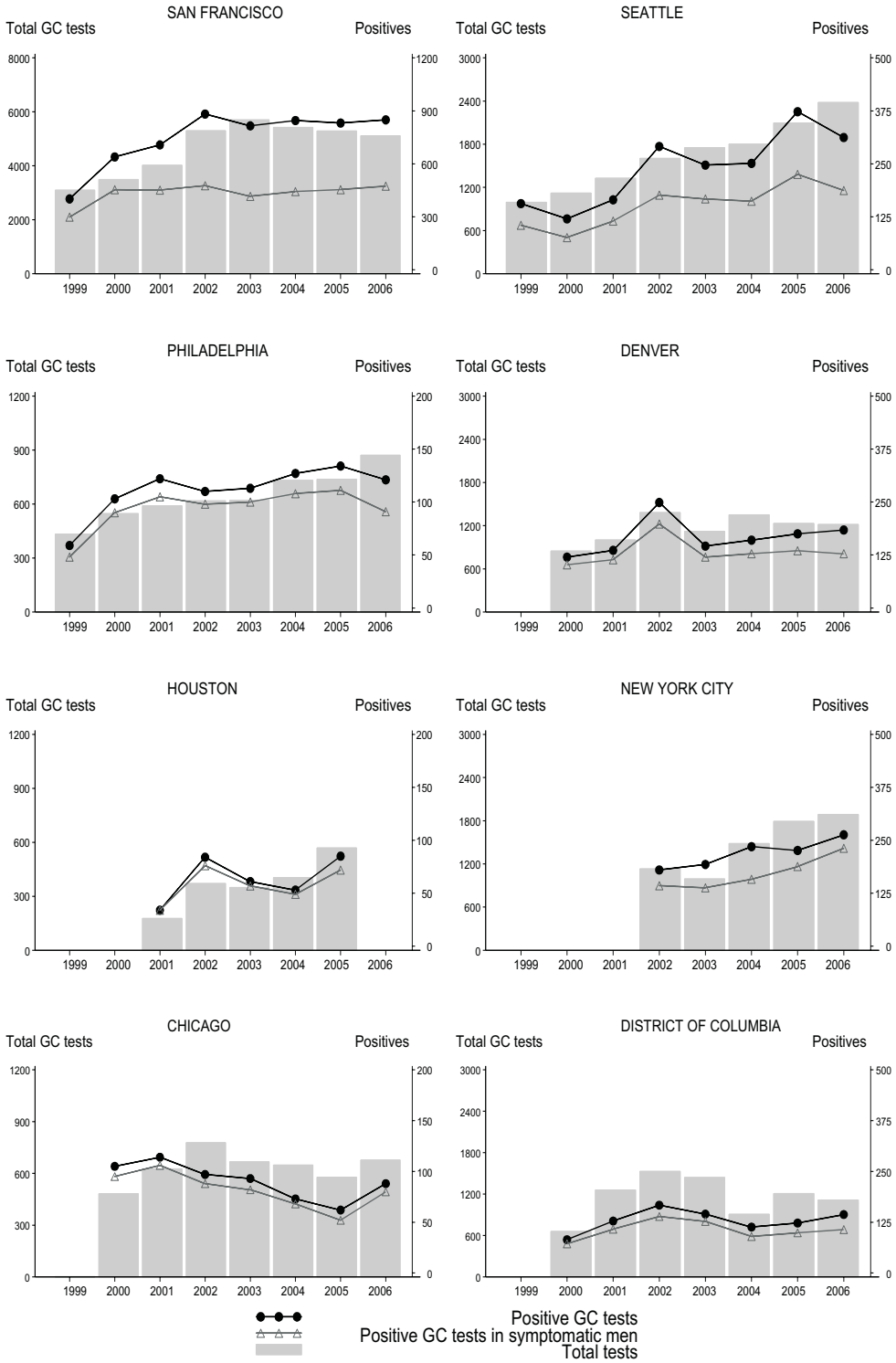
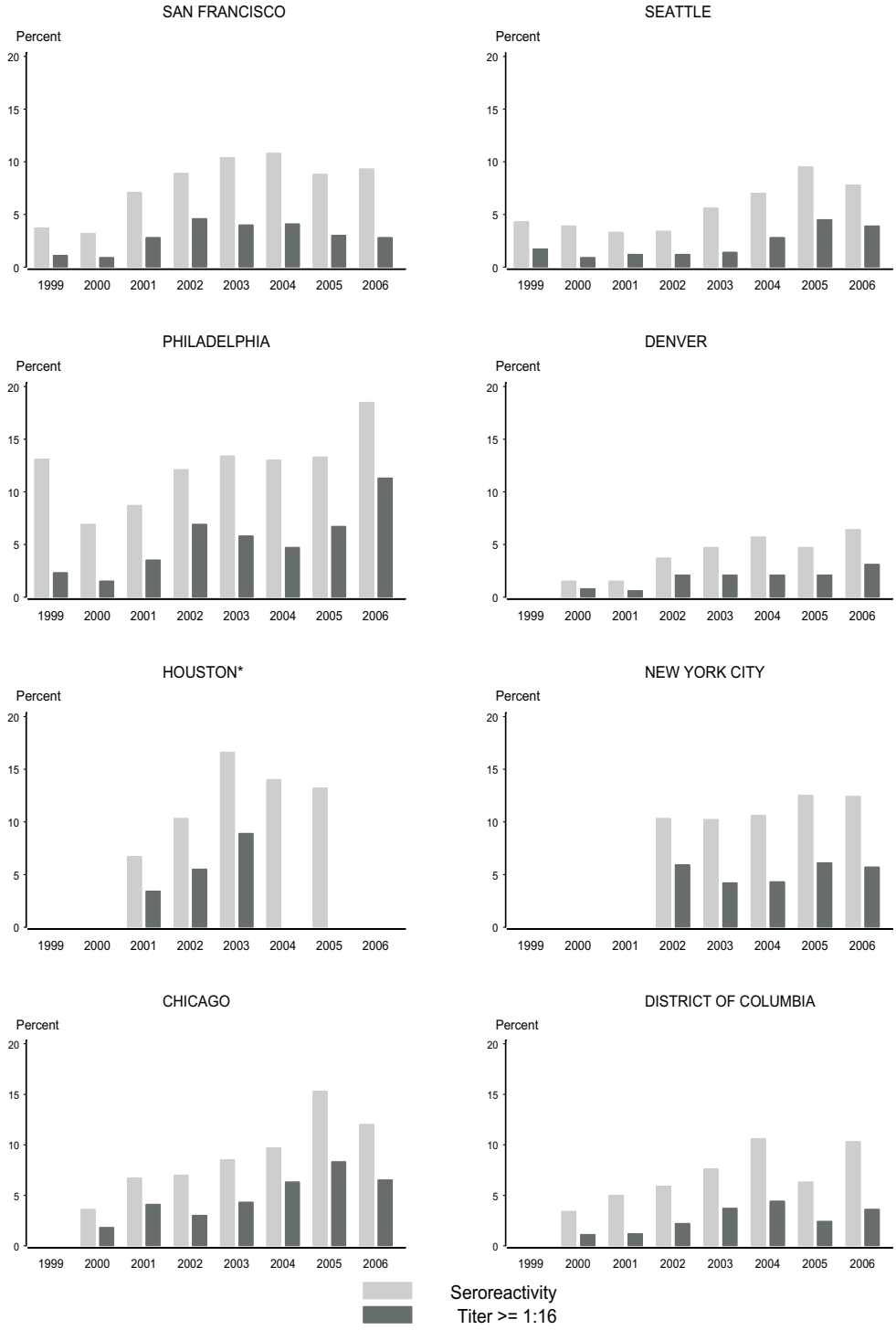
Figure W. MSM Prevalence Monitoring Project — Number of gonorrhea tests and number of positive tests in men who have sex with men, STD clinics, 1999–2006



Note: The bars represent the number of GC tests at all anatomic sites (pharyngeal, rectal, and urethral) each year. The scales on the left and right axis differ. The bar graphs use the scale on the left. The line graphs use the scale on the right.

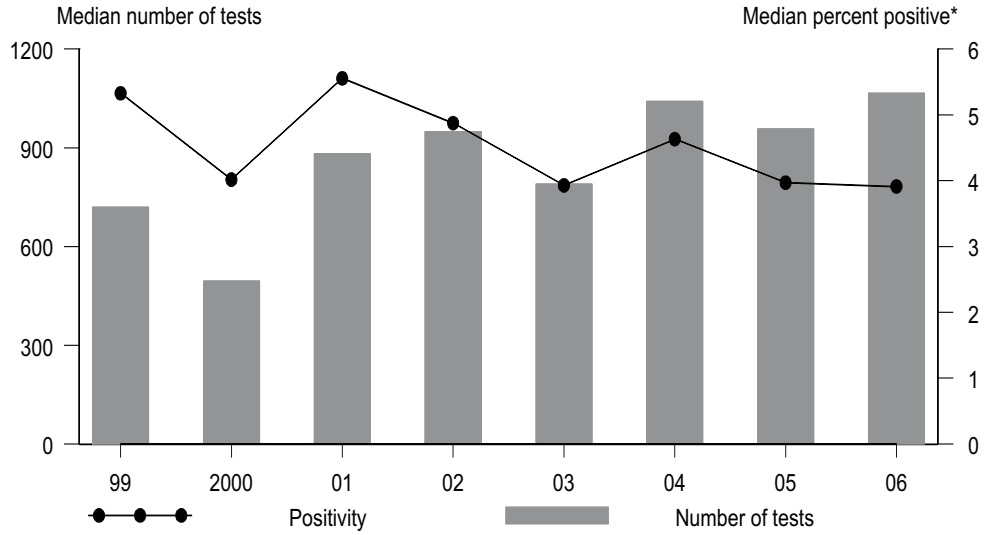
Figure X. MSM Prevalence Monitoring Project — Syphilis serologic reactivity among men who have sex with men, STD clinics, 1999–2006



*Data not reported in 2006.Titer data not reported in 2004 or 2005.

Note: Seroreactivity was based on nontreponemal tests results. All sites used the Rapid Plasma Reagin (RPR) test, with the exception of San Francisco where the Venereal Disease Research Laboratory (VDRL) test was used and Seattle where the type of test was changed from VDRL to RPR in 2004.

Figure Y. MSM Prevalence Monitoring Project — City-specific median number of HIV tests and positivity among men who have sex with men, STD clinics, 1999–2006



*Excludes persons previously known to be HIV-positive.

Note: The bar graph uses the scale on the left. The line graph uses the scale on the right.

Figure Z. Gonococcal Isolate Surveillance Project (GISP) — Percent of urethral *Neisseria gonorrhoeae* isolates obtained from men who have sex with men attending STD clinics, 1988–2006

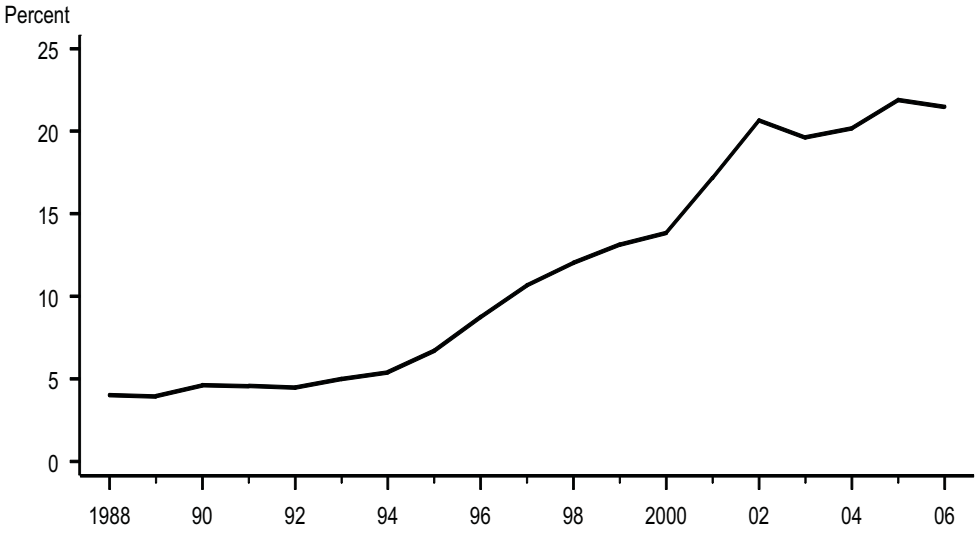
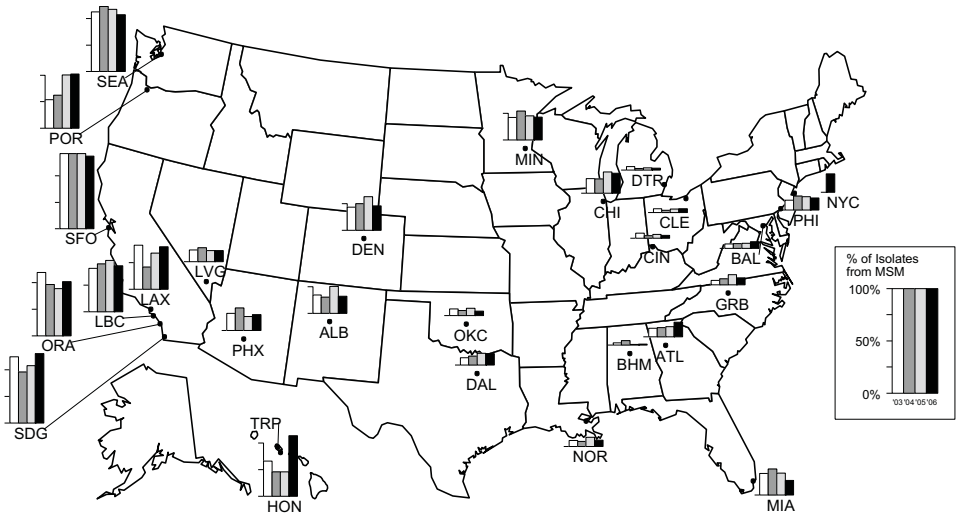


Figure AA. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates obtained from men who have sex with men attending STD clinics, 2003–2006



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; NYC=New York City, NY; OKC=Oklahoma City, OK; ORA=Orange County, CA; PHI=Philadelphia, PA; PHX=Phoenix, AZ; POR=Portland, OR; 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] The prevalence rates fro chlamydia and gonorrhea in these settings are consistently among the highest observed in any venue. 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, data from one study in a locale with high syphilis incidence suggested that screening and treatment of women inmates for syphilis may result in reduction of syphilis in the general community.[5] In some locations, 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.[3-4]

Description of Population

In 2006, STD screening data from corrections facilities were reported from 34 states for chlamydia, 30 states for gonorrhea, and 16 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 Infertility Prevention Project (IPP). IPP provided CDC with line-listed data for chlamydia and gonorrhea.

The figures and tables shown in this section represent 48,445 chlamydia tests in women and 124,201 in men; 39,688 gonorrhea tests in women and 106,088 in men; and 36,445 syphilis serologic tests in women and 155,054 in men entering corrections facilities during 2006.

Chlamydia

Overall, positivity was higher in women than in men for almost all age groups.

Adolescent Men - In adolescent men entering 83 juvenile corrections facilities, median chlamydia positivity by facility was 5.3% (range: 0.5% to 46.7%) (Table AA). In men 12 to 18 years of age entering these juvenile corrections facilities, the overall chlamydia positivity was 6.4% (Figure BB). Chlamydia positivity increased from 0.4% for adolescent men aged 12 years to 9.5% for those aged 18 years.

Adolescent Women - In adolescent women entering 57 juvenile corrections facilities, median chlamydia positivity by facility was 14.2% (range: 2.8% to 29.4%); positivity was greater than 10% in almost all facilities reporting data (Table AA). In women 12 to 18 years of age entering these juvenile corrections facilities, the overall chlamydia positivity was 14.3% (Figure BB). Positivity in women increased from 6.6% for those aged 12 years to 15.6% for those aged 16 years and, then, declined to 11.8% for those aged 18 years.

Men - In men entering 59 adult corrections facilities, the median chlamydia positivity by facility was 8.8% (range 0.9% to 26.7%) (Table BB). Positivity in young adult men (< 25 years) in these facilities was higher than that observed in adolescent men attending juvenile facilities (Figure CC). Chlamydia positivity decreased with age from 10.3% for those younger than 20 years of age to 2.5% for those older than 34 years.

Women - In women entering 39 adult corrections facilities, median positivity for chlamydia by facility was 8.3% (range: 1.3% to 22.3%) (Table BB). Overall, in women entering these adult corrections facilities, the chlamydia positivity was 9.3% (Figure CC). Chlamydia positivity decreased with age from 19.1% for those younger than 20 years to 3.8% for those older than 34 years. Chlamydia positivity in women entering adult correction facilities was significantly lower than that in women entering juvenile corrections facilities. However, chlamydia positivity in women younger than 20 years of age attending adult corrections facilities was higher than that in women attending juvenile corrections facilities.

Gonorrhea

Overall, positivity in women was uniformly higher than in men for all age groups.

Adolescent Men - The median positivity for gonorrhea by facility in men entering 62 juvenile corrections facilities was 0.9% (range: 0.0% to 4.5%) (Table CC). The overall positivity was 1.3% in men 12 to 18 years of age attending these facilities. (Figure DD) Gonorrhea positivity increased with age from 0.5% for those aged 12 years to 2.0% for those aged 18.

Adolescent Women - The median positivity for gonorrhea by facility in women entering 37 juvenile corrections facilities was 3.8% (range: 0.0% to 12.2%) (Table CC). In women 12 to 18 years of age entering these juvenile corrections facilities, the overall gonorrhea positivity was 5.2% (Figure DD). Gonorrhea positivity did not vary by age.

Men - In men entering 52 adult corrections facilities, the median gonorrhea positivity was 2.3% (range: 0.0% to 18.3%) (Table DD). Overall gonorrhea positivity for men attending these facilities was 2.1%. Gonorrhea positivity was highest in men aged 20 to 24 years at 2.7%, declining with age to 1.4% in men older than 34 years. Men aged younger than 20 years attending adult facilities had higher gonorrhea positivity than men attending juvenile detention facilities.

Women - In women entering 35 reporting adult facilities, the median positivity by facility was 4.2% (range: 0.0% to 10.9%) (Table DD). Overall, in women entering adult corrections facilities, the gonorrhea positivity was 4.5% (Figure EE). Gonorrhea positivity decreased with age from 8.4% for those younger than 20 years to 2.4% for those older than 34 years. Women younger than 20 years attending adult facilities had higher gonorrhea positivity than women attending juvenile detention facilities.

Syphilis

Adolescent Men - The median syphilis serologic positivity by facility was 0.0% (range: 0.0% to 3.5%) in adolescent men entering 15 juvenile corrections facilities (Table EE).

Adolescent Women - The median syphilis serologic positivity by facility was 1.4% (range: 0.4% to 1.8%) in adolescent women entering five juvenile corrections facilities (Table EE).

Men - In men entering 58 adult corrections facilities, the median syphilis serologic positivity by facility was 1.4% (range: 0.0% to 7.8%) (Table FF).

Women - In women entering 32 adult corrections facilities, the median serologic positivity by facility was 3.9% (range: 0.0% to 21.7%) (Table FF).

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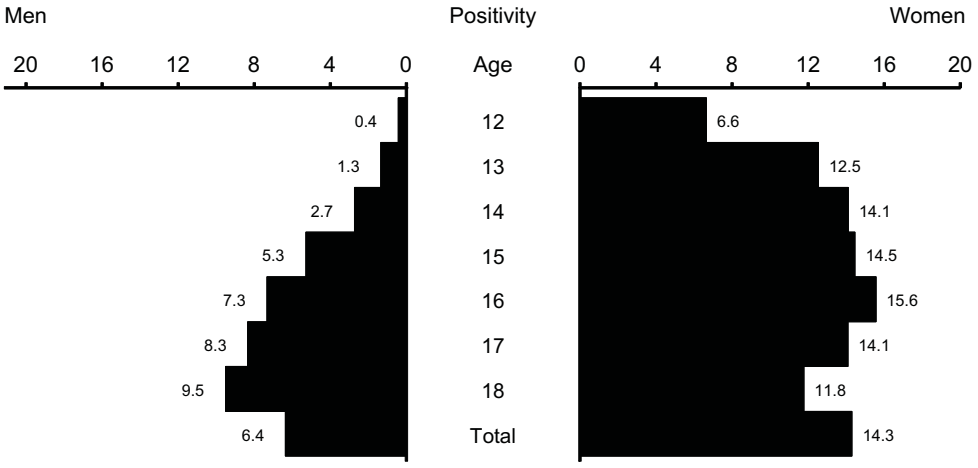
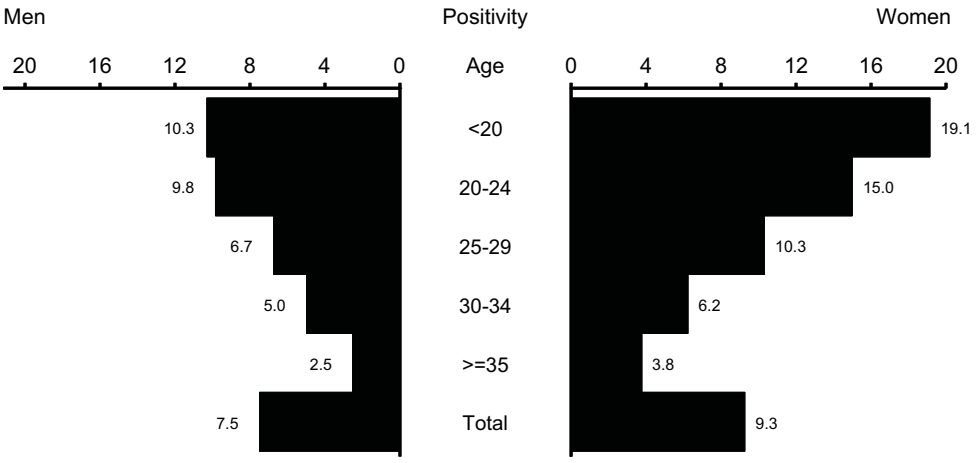
Figure BB. Chlamydia — Positivity by age, juvenile corrections facilities, 2006



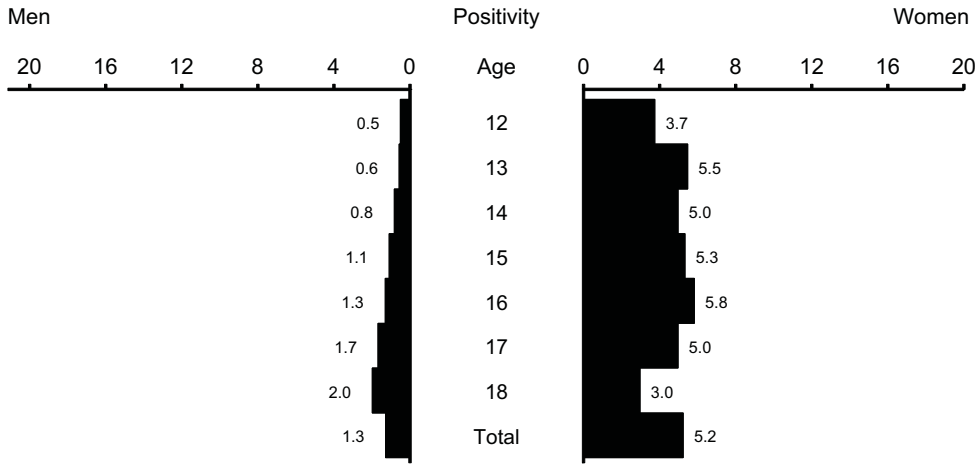
Note: Percent positivity is presented from facilities reporting > 100 test results.

Figure CC. Chlamydia — Positivity by age, adult corrections facilities, 2006



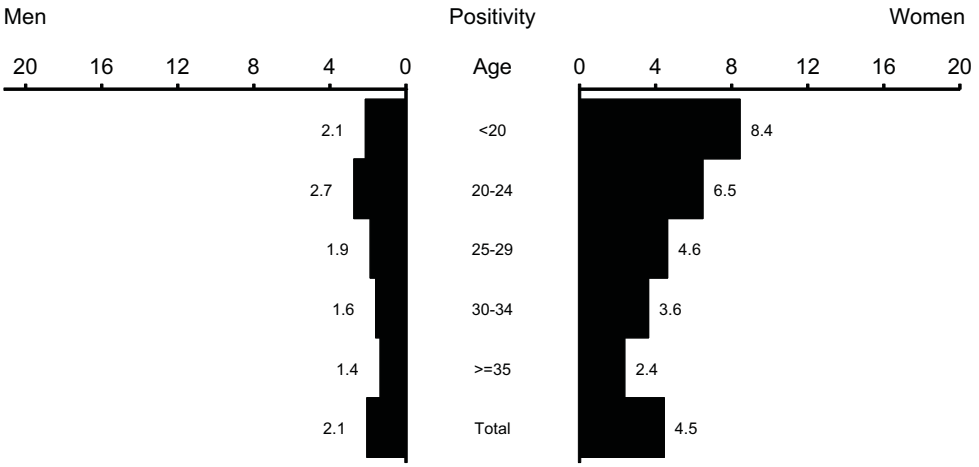
Note: Percent positivity is presented from facilities reporting > 100 test results.

Figure DD. Gonorrhea — Positivity by age, juvenile corrections facilities, 2006



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

Figure EE. Gonorrhea — Positivity by age, adult corrections facilities, 2006



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

Table AA. Chlamydia — Positivity among men and women in juvenile corrections facilities, 2006

	Men			Women		
State	No. of Facilities	No. of Tests	Median % Positivity (Range)	No. of Facilities	No. of Tests	Median % Positivity (Range)
Arizona	4	4,315	7.8 (5.2-9.6)	4	1,358	18.9 (2.8-20.5)
California*	19	26,939	5.2 (0.5-46.7)	23	11,846	12.2 (4.0-21.2)
Connecticut	2	537	3.2 (2.7-3.8)	1	111	14.4
Hawaii	1	126	7.1	–	–	–
Idaho	1	201	2.0	–	–	–
Illinois	4	5,158	8.0 (1.4-9.5)	1	578	20.9
Indiana	1	1,194	7.4	1	374	14.4
Kentucky	8	1,924	4.4 (1.9-9.5)	2	315	18.6 (15.0-22.2)
Maryland	4	2,034	4.2 (2.0-5.1)	2	567	13.9 (12.3-15.5)
Massachusetts	2	977	2.6 (2.6-2.7)	1	362	5.8
Michigan	1	426	8.7	1	159	17.0
Minnesota	1	191	9.4	–	–	–
Mississippi	–	–	–	1	143	13.3
Missouri	1	431	7.2	1	114	12.3
Nebraska	1	654	6.1	1	234	13.7
Nevada	2	1,404	7.4 (3.8-11.0)	2	374	22.4 (15.4-29.4)
New Jersey	4	3,144	9.8 (5.1-18.0)	1	206	19.9
New York	6	5,122	5.1 (2.0-10.3)	5	1,230	18.4 (13.4-22.0)
North Dakota	1	161	9.3	–	–	–
Ohio	3	3,132	10.1 (7.2-10.1)	3	789	19.7 (6.5-23.0)
Oregon	3	1,310	5.7 (4.0-12.3)	2	361	9.7 (7.4-12.0)
Pennsylvania	3	471	3.9 (2.3-11.9)	–	–	–
Tennessee	1	1,755	4.0	1	769	10.8
Utah	2	415	6.7 (5.8-7.6)	2	323	16.6 (12.9-20.4)
Virginia	1	728	10.2	–	–	–
Washington	4	889	4.6 (1.7-9.1)	2	273	13.3 (4.6-22.0)
West Virginia	1	132	3.8	–	–	–
Wisconsin	2	586	3.7 (2.5-5.0)	–	–	–
Total	83	64,356	5.3 (0.5-46.7)	57	20,486	14.2 (2.8-29.4)

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

Table BB. Chlamydia — Positivity among men and women in adult corrections facilities, 2006

State	Men			Women		
	No. of Facilities	*No. of Tests*	*Median % Positivity (Range)*	*No. of Facilities*	*No. of Tests*	*Median % Positivity (Range)*
Arizona	6	1,337	14.3 (3.6-17.0)	4	1,736	11.9 (8.9-12.9)
California*	7	4,416	5.5 (3.1-7.9)	5	7,264	10.3 (4.6-18.2)
Delaware	1	776	5.9	2	960	9.2 (7.3-11.1)
Hawaii	–	–	–	2	235	12.3 (4.5-20.0)
Illinois	6	15,688	9.8 (8.5-10.9)	3	8,676	7.8 (4.8-8.3)
Indiana	1	1,928	8.5	1	834	12.6
Iowa	3	986	12.5 (9.7-19.2)	2	657	9.2 (2.8-15.7)
Maryland	1	573	6.3	–	–	–
Massachusetts	2	2,964	6.4 (5.6-7.1)	2	746	4.7 (3.8-5.6)
Michigan	3	717	12.3 (11.6-21.6)	–	–	–
Missouri	1	3,785	6.6	1	824	4.9
Montana	–	–	–	1	191	2.6
Nebraska	3	1,593	6.6 (5.5-16.7)	1	234	10.3
Nevada	1	297	12.5	1	190	15.8
New Mexico	1	338	9.2	–	–	–
New York	2	8,866	6.2 (3.7-8.7)	1	317	5.0
North Dakota	1	649	7.1	–	–	–
Oregon	2	236	17.6 (15.9-19.2)	1	229	3.5
Pennsylvania	5	2,730	12.1 (4.8-23.1)	3	811	7.3 (2.4-9.2)
South Carolina	1	451	10.6	1	211	8.1
Texas	5	4,693	9.1 (1.3-26.7)	4	2,093	18.7 (17.0-22.3)
Utah	–	–	–	1	153	17.6
Washington	–	–	–	1	668	4.9
West Virginia	3	1,133	1.8 (0.9-2.1)	–	–	–
Wisconsin	5	5,897	10.8 (5.1-15.4)	3	1,045	4.8 (1.3-5.8)
Total	60	60,053	8.9 (0.9-26.7)	40	28,074	8.5 (1.3-22.3)

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

Table CC. Gonorrhea — Positivity among men and women in juvenile corrections facilities, 2006

State	Men			Women		
	No. of Facilities	*No. of Tests*	*Median % Positivity (Range)*	*No. of Facilities*	*No. of Tests*	*Median % Positivity (Range)*
Arizona	4	4,313	1.1 (0.6-1.9)	4	1,353	3.8 (1.9-6.2)
California*	7	17,889	0.6 (0.3-1.0)	7	5,313	5.0 (0.7-12.2)
Connecticut	2	538	0.0	1	111	1.8
Hawaii	1	126	0.0	–	–	–
Idaho	1	198	1.0	–	–	–
Illinois	4	5,160	2.1 (0.7-2.5)	1	578	9.9
Indiana	1	1,192	2.2	1	374	8.0
Kentucky	8	1,924	0.5 (0.0-3.4)	2	315	5.4 (2.4-8.3)
Maryland	4	2,075	0.2 (0.0-0.8)	2	575	4.3 (2.9-5.7)
Michigan	1	426	1.6	1	159	5.7
Minnesota	1	191	2.6	–	–	–
Mississippi	–	–	–	1	142	3.5
Missouri	1	432	1.4	1	114	3.5
Nebraska	1	654	1.2	1	234	3.8
Nevada	2	1,404	1.5 (0.5-2.5)	2	373	6.5 (2.9-10.1)
New Jersey	4	3,146	1.6 (0.7-4.5)	1	206	4.4
New York	4	4,511	1.4 (0.2-1.9)	4	1,058	3.4 (0.0-5.3)
Ohio	3	3,132	2.1 (1.1-3.4)	3	789	8.1 (2.2-9.1)
Pennsylvania	3	451	0.0	–	–	–
Tennessee	1	1,754	1.3	1	769	3.8
Utah	2	415	0.7 (0.0-1.3)	2	323	3.4 (2.4-4.4)
Washington	4	889	0.7 (0.4-1.6)	2	274	1.5 (0.0-3.0)
West Virginia	1	107	3.7	–	–	–
Wisconsin	2	585	0.5 (0.0-1.0)	–	–	–
Total	62	51,512	0.9 (0.0-4.5)	37	13,060	3.8 (0.0-12.2)

Note: The median positivity by facility 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, 2006

State	Men			Women		
	No. of Facilities	*No. of Tests*	*Median % Positivity (Range)*	*No. of Facilities*	*No. of Tests*	*Median % Positivity (Range)*
Arizona	6	1,336	10.3 (0.0-18.3)	4	1,736	7.0 (4.0-7.4)
California*	7	4,420	1.6 (1.3-3.1)	5	7,263	3.8 (1.6-8.6)
Delaware	1	746	1.1	2	923	6.1 (4.4-7.7)
Hawaii	–	–	–	2	235	3.6 (0.0-7.2)
Illinois	6	15,749	3.3 (1.0-6.6)	3	8,717	4.3 (1.0-6.8)
Indiana	1	1,928	2.7	1	834	8.6
Iowa	3	986	2.4 (0.8-3.4)	2	657	1.1 (0.6-1.7)
Maryland	1	578	1.0	–	–	–
Michigan	3	717	3.7 (2.1-13.8)	–	–	–
Missouri	1	3,786	1.6	1	825	3.2
Montana	–	–	–	1	190	0.0
Nebraska	3	1,593	1.5 (0.3-7.4)	1	234	5.1
Nevada	1	298	3.0	1	190	2.6
New Mexico	1	338	1.2	–	–	–
New York	1	8,131	0.5	–	–	–
Pennsylvania	4	2,285	5.2 (0.9-15.0)	3	778	3.1 (0.0-6.4)
South Carolina	1	450	3.1	1	211	3.8
Texas	5	4,691	1.7 (0.0-16.3)	4	2,094	9.0 (6.5-10.9)
Utah	–	–	–	1	152	7.2
Washington	–	–	–	1	667	1.3
West Virginia	3	862	2.2 (0.9-2.5)	–	–	–
Wisconsin	5	5,890	3.3 (0.3-7.0)	3	1,037	0.7 (0.1-3.4)
Total	53	54,784	2.3 (0.0-18.3)	36	26,743	4.1 (0.0-10.9)

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

Table EE. Syphilis— Positivity among men and women in juvenile corrections facilities, 2006

	Men			Women		
State	No. of Facilities	No. of Tests	Median % Positivity (Range)	No. of Facilities	No. of Tests	Median % Positivity (Range)
Arizona	2	2,536	0.4 (0.3-0.4)	1	615	1.5
California*	1	113	3.5	0	–	–
Illinois	1	2,895	0.7	1	527	1.3
Kentucky	1	405	0.3	0	–	–
Maryland	8	5,316	0.0 (0.0-0.1)	2	605	1.1 (0.4-1.8)
North Carolina	1	417	0.0	0	–	–
Texas	1	1,117	0.3	1	363	1.4
Total	15	12,799	0.0 (0.0-3.5)	5	2,110	1.4 (0.4-1.8)

Note: The median positivity by facility is presented from facilities reporting > 100 test results. *Includes San Francisco project area.

Table FF. Syphilis— Positivity among men and women in adult corrections facilities, 2006

	Men			Women		
State	No. of Facilities	No. of Tests	Median % Positivity (Range)	No. of Facilities	No. of Tests	Median % Positivity (Range)
Arizona	1	25,009	2.6	1	5,382	5.6
California*	1	679	5.3	2	3,364	4.0 (2.5-5.4)
Florida	5	6,463	3.4 (2.9-4.3)	1	229	12.2
Illinois	1	320	0.3	1	117	1.7
Indianapolis	1	1,276	1.2	1	605	1.8
Kentucky	1	1,215	0.3	1	360	0.3
Louisiana	0	–	–	1	926	21.7
Maryland	10	24,971	1.8 (0.6-3.1)	7	3,540	4.1 (0.0-10.4)
Massachusetts	18	18,773	0.9 (0.0-1.4)	4	3,919	1.8 (1.2-3.1)
Mississippi	3	895	3.4 (2.5-7.8)	0	–	–
Missouri	2	5,957	1.6 (1.0-2.1)	2	1,191	4.0 (1.6-6.3)
New York †	2	8,513	1.3 (1.1-1.4)	2	1,023	2.6 (1.6-3.6
North Carolina	5	3,969	1.4 (0.9-4.8)	3	1,544	7.8 (4.3-9.3)
Tennessee	2	9,695	3.3 (2.3-4.2)	1	5,275	9.4
Texas	5	33,863	3.3 (2.0-5.6)	4	6,654	6.9 (3.7-10.6)
Wisconsin	1	657	0.0	1	206	0.0
Total	58	142,255	1.4 (0.0-7.8)	32	34,335	3.9 (0.0-21.7)

Note: The median positivity by facility is presented from facilities reporting > 100 test results. *Includes San Francisco project area. †New York data is for confirmatory results.

TABLES

TABLES

Table 1. Cases of sexually transmitted diseases reported by state health departments and rates per 100,000 population: United States, 1941–2006

	Syphilis															
	All Stages		Primary and Secondary		Early Latent		Late and Late Latent[†]		Congenital		Chlamydia		Gonorrhea		Chancroid	
Year[*]	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate[§]	Cases	Rate	Cases	Rate	Cases	Rate
1941	485,560	368.2	68,231	51.7	109,018	82.6	202,984	153.9	17,600	651.1	NR	.	193,468	146.7	3,384	2.5
1942	479,601	363.4	75,312	57.0	116,245	88.0	202,064	153.1	16,918	566.0	NR	.	212,403	160.9	5,477	4.1
1943	575,593	447.0	82,204	63.8	149,390	116.0	251,958	195.7	16,164	520.7	NR	.	275,070	213.6	8,354	6.4
1944	467,755	367.9	78,443	61.6	123,038	96.7	202,848	159.6	13,578	462.0	NR	.	300,676	236.5	7,878	6.1
1945	359,114	282.3	77,007	60.5	101,719	79.9	142,187	111.8	12,339	431.7	NR	.	287,181	225.8	5,515	4.3
1946	363,647	271.7	94,957	70.9	107,924	80.6	125,248	93.6	12,106	354.9	NR	.	368,020	275.0	7,091	5.2
1947	355,592	252.3	93,545	66.4	104,124	73.9	122,089	86.6	12,200	319.6	NR	.	380,666	270.0	9,515	6.7
1948	314,313	218.2	68,174	47.3	90,598	62.9	123,312	85.6	13,931	383.0	NR	.	345,501	239.8	7,661	5.3
1949	256,463	175.3	41,942	28.7	75,045	51.3	116,397	79.5	13,952	382.4	NR	.	317,950	217.3	6,707	4.6
1950	217,558	146.0	23,939	16.7	59,256	39.7	113,569	70.2	13,377	368.3	NR	.	286,746	192.5	4,977	3.3
1951	174,924	116.1	14,485	9.6	43,316	28.7	98,311	65.2	11,094	290.4	NR	.	254,470	168.9	4,233	2.8
1952	167,762	110.2	10,449	6.9	36,454	24.0	105,238	69.1	8,553	218.8	NR	.	244,957	160.8	3,738	2.5
1953	148,573	95.9	8,637	5.6	28,295	18.3	98,870	63.8	7,675	193.9	NR	.	238,340	153.9	3,338	2.2
1954	130,687	82.9	7,147	4.5	23,861	15.1	89,123	56.5	6,676	164.0	NR	.	242,050	153.5	3,003	1.9
1955	122,392	76.2	6,454	4.0	20,054	12.5	86,526	53.8	5,354	130.7	NR	.	236,197	147.0	2,649	1.7
1956	130,201	78.7	6,392	3.9	19,783	12.0	95,097	57.5	5,491	130.4	NR	.	224,346	135.7	2,135	1.3
1957	123,758	73.5	6,576	3.9	17,796	10.6	91,309	54.2	5,288	123.0	NR	.	214,496	127.4	1,637	1.0
1958	113,884	66.4	7,176	4.2	16,556	9.7	83,027	48.4	4,866	114.6	NR	.	232,386	135.6	1,595	0.9
1959	120,824	69.2	9,799	5.6	17,025	9.8	86,740	49.7	5,130	119.7	NR	.	240,254	137.6	1,537	0.9
1960	122,538	68.8	16,145	9.1	18,017	10.1	81,798	45.9	4,416	103.7	NR	.	258,933	145.4	1,680	0.9
1961	124,658	68.8	19,851	11.0	19,486	10.8	79,304	43.8	4,163	97.5	NR	.	264,158	145.8	1,438	0.8
1962	126,245	68.7	21,067	11.5	19,585	10.7	79,533	43.3	4,070	97.7	NR	.	263,714	143.6	1,344	0.7
1963	124,137	66.5	22,251	11.9	18,235	9.8	78,076	41.8	4,031	98.4	NR	.	278,289	149.0	1,220	0.7
1964	114,325	60.4	22,969	12.1	17,781	9.4	68,629	36.3	3,516	87.3	NR	.	300,666	158.9	1,247	0.7
1965	112,842	58.9	23,338	12.2	17,458	9.1	67,317	35.1	3,564	94.8	NR	.	324,925	169.5	982	0.5
1966	105,159	54.2	21,414	11.0	15,950	8.2	63,541	32.7	3,170	87.9	NR	.	351,738	181.2	838	0.4
1967	102,581	52.2	21,053	10.7	15,554	7.9	61,975	31.5	2,894	82.2	NR	.	404,836	205.9	784	0.4
1968	96,271	48.4	19,019	9.6	15,150	7.6	58,564	29.4	2,381	68.0	NR	.	464,543	233.4	845	0.4
1969	92,162	45.7	19,130	9.5	15,402	7.6	54,587	27.1	2,074	57.6	NR	.	534,872	265.4	1,104	0.5
1970	91,382	44.8	21,982	10.8	16,311	8.0	50,348	24.7	1,953	52.3	NR	.	600,072	294.2	1,416	0.7
1971	95,997	46.4	23,783	11.5	19,417	9.4	49,993	24.2	2,052	57.7	NR	.	670,268	324.1	1,320	0.6
1972	91,149	43.6	24,429	11.7	20,784	9.9	43,456	20.8	1,758	54.0	NR	.	767,215	366.6	1,414	0.7
1973	87,469	41.4	24,825	11.7	23,584	11.2	37,054	17.5	1,527	48.7	NR	.	842,621	398.7	1,165	0.6
1974	83,771	39.3	25,385	11.9	25,124	11.8	31,854	14.9	1,138	36.0	NR	.	906,121	424.7	945	0.4
1975	80,356	37.3	25,561	11.9	26,569	12.3	27,096	12.6	916	29.1	NR	.	999,937	464.1	700	0.3
1976	71,761	33.0	23,731	10.9	25,363	11.7	21,905	10.1	626	19.8	NR	.	1,001,994	460.6	628	0.3
1977	64,621	29.4	20,399	9.3	21,329	9.7	22,313	10.2	463	13.9	NR	.	1,002,219	456.0	455	0.2
1978	64,875	29.2	21,656	9.8	19,628	8.8	23,038	10.4	434	13.0	NR	.	1,013,436	456.3	521	0.2
1979	67,049	29.9	24,874	11.1	20,459	9.1	21,301	9.5	332	9.5	NR	.	1,004,058	447.1	840	0.4
1980	68,832	30.3	27,204	12.0	20,297	8.9	20,979	9.2	277	7.7	NR	.	1,004,029	442.1	788	0.3
1981	72,799	31.7	31,266	13.6	21,033	9.2	20,168	8.8	287	7.9	NR	.	990,864	431.8	850	0.4
1982	75,579	32.6	33,613	14.5	21,894	9.5	19,799	8.5	259	7.0	NR	.	960,633	414.7	1,392	0.6
1983	74,637	31.9	32,698	14.0	23,738	10.2	17,896	7.7	239	6.6	NR	.	900,435	385.1	847	0.4
1984	69,872	29.6	28,607	12.1	23,131	9.8	17,829	7.6	305	8.3	7,594	6.5	878,556	372.5	665	0.3
1985	67,563	28.4	27,131	11.4	21,689	9.1	18,414	7.7	329	8.7	25,848	17.4	911,419	383.0	2,067	0.9

Table 1. Cases of sexually transmitted diseases reported by state health departments and rates per 100,000 population: United States, 1941–2006 (continued)

	Syphilis															
	All Stages		Primary and Secondary		Early Latent		Late and Late Latent[†]		Congenital		Chlamydia		Gonorrhea		Chancroid	
Year[*]	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate[§]	Cases	Rate	Cases	Rate	Cases	Rate
1986	67,779	28.2	27,667	11.5	21,656	9.0	18,046	7.5	410	10.9	58,001	35.2	892,229	371.5	3,045	1.3
1987	87,286	36.0	35,585	14.7	28,233	11.7	22,988	9.5	480	12.6	91,913	50.8	787,532	325.0	4,986	2.1
1988	104,546	42.8	40,474	16.6	35,968	14.7	27,363	11.2	741	19.0	157,854	87.1	738,160	301.9	4,891	2.0
1989	115,089	46.6	45,826	18.6	45,394	18.4	22,032	8.9	1,837	45.5	200,904	102.5	733,294	297.1	4,697	1.9
1990	135,590	54.3	50,578	20.3	55,397	22.2	25,750	10.3	3,865	92.9	323,663	160.2	690,042	276.4	4,212	1.7
1991	128,719	50.9	42,950	17.0	53,855	21.3	27,490	10.9	4,424	107.6	381,228	179.7	621,918	245.8	3,476	1.4
1992	114,730	44.7	34,009	13.3	49,929	19.5	26,725	10.4	4,067	100.0	409,694	182.3	502,858	196.0	1,906	0.7
1993	102,612	39.5	26,527	10.2	41,919	16.1	30,746	11.8	3,420	85.5	405,332	178.0	444,649	171.1	1,292	0.5
1994	82,713	31.4	20,641	7.8	32,017	12.2	27,603	10.5	2,452	62.0	451,785	192.5	419,602	163.9	782	0.3
1995	69,358	26.0	16,543	6.2	26,657	10.0	24,296	9.1	1,862	47.7	478,577	187.8	392,651	147.5	607	0.2
1996	53,240	19.8	11,405	4.2	20,187	7.5	20,366	7.6	1,282	32.9	492,631	190.6	328,169	121.8	386	0.1
1997	46,715	17.1	8,556	3.1	16,631	6.1	20,447	7.5	1,081	27.9	537,904	205.5	327,665	120.2	246	0.1
1998	38,290	13.9	7,007	2.5	12,696	4.6	17,743	6.4	844	21.4	614,250	231.8	356,492	129.2	189	0.1
1999	35,383	12.7	6,617	2.4	11,534	4.1	16,653	6.0	579	14.6	662,647	247.2	360,813	129.3	110	0.0
2000	31,618	11.2	5,979	2.1	9,465	3.4	15,594	5.5	580	14.3	709,452	251.4	363,136	128.7	78	0.0
2001	32,284	11.3	6,103	2.1	8,701	3.0	16,976	5.9	504	12.5	783,242	274.5	361,705	126.8	38	0.0
2002	32,919	11.4	6,862	2.4	8,429	2.9	17,168	6.0	460	11.4	834,555	289.4	351,852	122.0	48	0.0
2003	34,289	11.8	7,177	2.5	8,361	2.9	18,319	6.3	432	10.6	877,478	301.7	335,104	115.2	54	0.0
2004	33,422	11.4	7,980	2.7	7,768	2.6	17,300	5.9	374	9.1	929,462	316.5	330,132	112.4	30	0.0
2005	33,288	11.2	8,724	2.9	8,176	2.8	16,049	5.4	339	8.2	976,445	329.4	339,593	114.6	17	0.0
2006	36,935	12.5	9,756	3.3	9,186	3.1	17,644	6.0	349	8.5	1,030,911	347.8	358,366	120.9	33	0.0

[*]For 1941-1946, data were reported for the federal fiscal year ending June 30 of the year indicated. From 1947 to the present, data were reported for the calendar year ending December 31. For 1941-1958, data for Alaska and Hawaii were not included.

[†]Late and late latent syphilis includes late latent syphilis, latent syphilis of unknown duration, neurosyphilis, and late syphilis with clinical manifestations other than neurosyphilis.

[§]Rates include all cases of congenitally acquired syphilis per 100,000 live births. As of 1995, cases of congenital syphilis are obtained in hardcopy and electronic format based on case reporting form CDC 73.126.

Note: Adjustments to the number of cases reported from state health departments were made for hardcopy forms and for electronic data submissions through June 22, 2007 (see Appendix). The number of cases and the rates shown here supersede those published in previous reports. Cases and rates shown in this table exclude the outlying areas of Guam, Puerto Rico and Virgin Islands.

NR = No report.

Table 2. Chlamydia — Reported cases and rates by state, ranked by rates: United States, 2006

Rank[*]	*State*	*Cases*	*Rate per 100,000 Population*
1	Alaska	4,525	681.8
2	Mississippi	19,002	650.5
3	South Carolina	22,351	525.3
4	New Mexico	9,829	509.7
5	Alabama	22,915	502.8
6	Hawaii	5,548	435.1
7	Georgia	38,972	429.6
8	Delaware	3,615	428.6
9	Tennessee	25,320	424.6
10	Illinois	53,586	419.8
11	Arizona	24,090	405.6
12	Missouri	22,982	396.2
13	Louisiana	17,885	395.4
14	Maryland	21,859	390.3
15	North Carolina	33,615	387.1
16	California	135,827	375.9
17	Oklahoma	12,992	366.2
18	Wisconsin	20,190	364.7
19	Michigan	36,753	363.1
20	New York	68,720	356.9
21	Ohio	40,106	349.8
22	Colorado	16,313	349.7
	U.S. TOTAL[†]	**1,030,911**	**347.8**
23	Nevada	8,398	347.8
24	South Dakota	2,633	339.3
25	Texas	75,543	330.5
26	Virginia	24,087	318.3
27	Pennsylvania	39,487	317.7
28	Indiana	19,859	316.6
29	Connecticut	10,946	311.8
30	Nebraska	5,428	308.6
31	Arkansas	8,259	297.2
32	Rhode Island	3,142	292.0
33	North Dakota	1,820	285.9
34	Kansas	7,829	285.2
35	Washington	17,819	283.4
36	Montana	2,650	283.2
37	Iowa	8,390	282.8
38	Wyoming	1,422	279.2
39	Florida	48,955	275.2
40	Oregon	9,577	263.0
41	Minnesota	12,935	252.0
42	Massachusetts	15,394	240.6
43	Idaho	3,345	234.1
44	New Jersey	20,194	231.6
45	Kentucky	8,940	214.2
46	Utah	5,092	206.2
47	Vermont	1,191	191.2
48	Maine	2,306	174.5
49	West Virginia	2,910	160.2
50	New Hampshire	1,997	152.4

[*] States were ranked in descending order by rate, number of cases, and alphabetically by state.

[†] Total includes cases reported by the District of Columbia with 3,368 cases and a rate of 611.8, but excludes outlying areas (Guam with 832 cases and rate of 493.6, Puerto Rico with 5,102 cases and rate of 130.4, and Virgin Islands with 203 cases and rate of 186.7).

Table 3. Chlamydia — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Alabama	15,611	14,209	13,314	17,109	22,915	348.0	315.7	293.9	375.4	502.8
Alaska	3,806	3,900	3,954	4,355	4,525	591.2	601.1	603.3	656.2	681.8
Arizona	14,973	12,819	16,786	21,264	24,090	274.4	229.7	292.2	358.0	405.6
Arkansas	7,312	7,856	7,864	8,507	8,259	269.8	288.2	285.7	306.1	297.2
California	110,288	117,428	122,197	130,716	135,827	314.1	330.9	340.4	361.8	375.9
Colorado	14,028	13,039	14,151	15,432	16,313	311.3	286.5	307.5	330.8	349.7
Connecticut	9,808	9,393	9,552	11,039	10,946	283.4	269.7	272.6	314.5	311.8
Delaware	2,649	3,035	2,954	3,392	3,615	328.1	371.3	355.7	402.1	428.6
District of Columbia	3,305	3,168	3,493	3,678	3,368	578.9	561.4	631.0	668.1	611.8
Florida	42,058	42,382	42,554	43,372	48,955	251.6	249.0	244.6	243.8	275.2
Georgia	33,998	35,686	34,280	33,562	38,972	397.2	410.9	388.2	369.9	429.6
Hawaii	4,521	5,480	5,307	5,489	5,548	363.2	435.7	420.2	430.4	435.1
Idaho	2,503	2,366	2,784	2,799	3,345	186.6	173.2	199.8	195.9	234.1
Illinois	48,101	48,294	47,185	50,559	53,586	381.7	381.7	371.1	396.1	419.8
Indiana	17,100	17,075	18,440	20,063	19,859	277.6	275.6	295.6	319.9	316.6
Iowa	6,195	6,491	6,956	7,390	8,390	210.9	220.5	235.4	249.1	282.8
Kansas	6,784	7,249	7,493	7,419	7,829	249.8	266.2	273.9	270.3	285.2
Kentucky	8,756	7,981	6,470	8,351	8,940	213.9	193.8	156.1	200.1	214.2
Louisiana	18,442	20,970	21,837	17,227	17,885	411.4	466.4	483.6	380.8	395.4
Maine	1,805	2,030	2,113	2,254	2,306	139.4	155.5	160.4	170.6	174.5
Maryland	16,891	16,831	19,952	18,291	21,859	309.5	305.5	359.0	326.6	390.3
Massachusetts	10,914	11,301	13,242	14,411	15,394	169.8	175.7	206.4	225.2	240.6
Michigan	32,272	32,572	41,246	38,730	36,753	321.1	323.1	407.9	382.7	363.1
Minnesota	10,107	10,714	11,602	12,189	12,935	201.3	211.8	227.4	237.5	252.0
Mississippi	11,800	12,193	18,863	21,268	19,002	410.9	423.2	649.8	728.1	650.5
Missouri	16,181	18,570	21,319	22,371	22,982	285.2	325.5	370.5	385.7	396.2
Montana	2,475	2,547	2,608	2,400	2,650	272.1	277.6	281.4	256.5	283.2
Nebraska	4,779	4,739	5,238	5,098	5,428	276.4	272.5	299.8	289.9	308.6
Nevada	5,936	5,830	6,690	7,321	8,398	273.1	260.1	286.5	303.2	347.8
New Hampshire	1,557	1,616	1,736	1,842	1,997	122.1	125.5	133.6	140.6	152.4
New Jersey	14,164	16,169	17,448	19,152	20,194	164.9	187.2	200.6	219.7	231.6
New Mexico	7,417	7,480	9,035	8,456	9,829	399.8	399.0	474.7	438.5	509.7
New York	51,123	57,222	59,097	63,966	68,720	266.9	298.2	307.4	332.2	356.9
North Carolina	24,726	26,187	28,967	31,183	33,615	297.2	311.5	339.1	359.1	387.1
North Dakota	1,256	1,655	1,810	1,667	1,820	198.1	261.1	285.3	261.8	285.9
Ohio	38,032	42,522	39,379	43,806	40,106	333.0	371.8	343.7	382.1	349.8
Oklahoma	10,804	11,013	10,366	13,407	12,992	309.2	313.6	294.2	377.9	366.2
Oregon	7,009	7,688	8,690	9,018	9,577	199.0	216.0	241.8	247.7	263.0
Pennsylvania	31,791	37,291	38,025	37,261	39,487	257.7	301.6	306.5	299.8	317.7
Rhode Island	2,832	3,000	3,442	3,269	3,142	264.7	278.8	318.5	303.8	292.0
South Carolina	14,314	14,623	18,423	18,296	22,351	348.5	352.6	438.8	430.0	525.3
South Dakota	2,215	2,608	2,532	2,701	2,633	291.0	341.2	328.5	348.1	339.3
Tennessee	16,042	20,380	22,515	23,084	25,320	276.7	348.9	381.5	387.1	424.6
Texas	69,521	69,200	70,232	71,860	75,543	319.2	312.9	312.3	314.3	330.5
Utah	3,540	3,893	3,857	4,602	5,092	152.8	165.6	161.4	186.3	206.2
Vermont	954	1,060	1,137	957	1,191	154.7	171.2	183.0	153.6	191.2
Virginia	18,518	19,439	21,635	22,668	24,087	253.9	263.2	290.0	299.5	318.3
Washington	14,934	16,797	17,635	18,616	17,819	246.1	273.9	284.3	296.1	283.4
West Virginia	2,464	2,585	2,758	2,944	2,910	136.7	142.8	151.9	162.0	160.2
Wisconsin	17,000	17,942	19,217	20,461	20,190	312.4	327.9	348.8	369.6	364.7
Wyoming	944	960	1,082	1,173	1,422	189.3	191.5	213.6	230.3	279.2
U.S. TOTAL	834,555	877,478	929,462	976,445	1,030,911	289.4	301.7	316.5	329.4	347.8
Northeast	124,948	139,082	145,792	154,151	163,377	230.4	255.7	267.2	282.1	299.0
Midwest	200,022	210,431	222,417	232,454	232,511	307.1	321.7	338.4	352.4	352.4
South	317,211	327,738	346,477	358,199	390,588	306.9	313.5	327.0	333.2	363.3
West	192,374	200,227	214,776	231,641	244,435	293.0	301.2	318.6	339.2	357.9
Guam	550	554	748	807	832	341.5	338.6	450.4	478.7	493.6
Puerto Rico	2,999	2,746	3,588	3,714	5,102	77.7	70.8	92.1	94.9	130.4
Virgin Islands	207	416	303	235	203	188.1	382.3	278.6	216.2	186.7
OUTLYING AREAS	3,756	3,716	4,639	4,756	6,137	90.9	89.5	111.3	113.5	146.5
TOTAL	838,311	881,194	934,101	981,201	1,037,048	286.6	298.7	313.6	326.4	345.0

Table 4. Chlamydia — Women – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	13,988	12,977	11,685	14,532	17,915	603.6	559.0	500.6	619.4	763.6
Alaska	2,576	2,665	2,671	2,908	3,067	829.2	850.0	843.9	907.4	957.0
Arizona	11,665	10,043	12,896	16,201	18,485	427.2	360.1	449.3	546.2	623.2
Arkansas	5,817	6,284	6,252	6,823	6,604	419.8	451.5	445.3	481.8	466.3
California	81,218	85,967	88,439	93,646	97,170	461.5	483.7	491.9	517.8	537.2
Colorado	10,422	9,843	10,283	11,219	12,037	466.0	436.4	451.0	485.8	521.2
Connecticut	7,738	7,309	7,383	8,383	8,205	434.4	407.8	409.4	464.4	454.5
Delaware	2,034	2,155	2,140	2,493	2,625	490.1	513.9	502.7	576.8	607.3
District of Columbia	2,825	2,695	2,948	2,976	2,510	937.8	903.6	1,010.3	1,028.4	867.4
Florida	33,902	34,581	34,437	34,850	38,536	396.9	398.2	388.1	384.4	425.1
Georgia	27,494	28,992	27,656	26,317	30,546	633.2	659.2	619.5	574.0	666.2
Hawaii	3,445	4,113	4,019	4,093	4,161	554.9	655.9	635.1	640.1	650.7
Idaho	1,862	1,762	2,157	2,162	2,435	278.2	258.5	310.5	303.6	341.9
Illinois	34,154	36,284	35,996	37,672	39,705	531.7	563.1	556.3	580.3	611.6
Indiana	13,151	13,118	14,217	15,263	14,907	419.7	416.6	448.7	479.4	468.2
Iowa	4,680	4,915	5,208	5,400	6,157	313.1	328.5	347.1	358.7	408.9
Kansas	5,653	5,989	6,195	6,054	6,286	412.0	436.1	449.9	438.4	455.2
Kentucky	7,043	6,353	5,027	6,041	6,336	336.8	302.5	238.0	284.5	298.4
Louisiana	14,758	17,046	17,549	13,395	14,290	638.8	736.6	755.8	576.4	614.9
Maine	1,337	1,452	1,532	1,644	1,672	201.3	217.0	227.3	243.2	247.4
Maryland	13,851	13,746	16,108	14,653	17,339	491.3	483.5	561.8	507.5	600.6
Massachusetts	8,177	8,429	9,781	10,587	11,175	245.9	253.7	295.5	321.0	338.9
Michigan	25,129	25,903	32,624	30,079	27,915	491.2	505.1	634.2	584.6	542.6
Minnesota	7,352	7,866	8,521	8,820	9,243	290.3	308.4	331.7	341.3	357.6
Mississippi	10,274	10,536	15,097	16,684	14,853	692.8	709.5	1,010.4	1,110.4	988.6
Missouri	13,253	14,750	16,306	16,580	16,938	455.3	504.8	553.9	559.3	571.4
Montana	1,840	1,865	1,916	1,776	1,932	403.2	405.4	412.4	378.9	412.1
Nebraska	3,609	3,435	3,812	3,713	3,956	412.1	390.3	431.4	417.6	445.0
Nevada	4,365	4,268	4,857	5,362	6,185	409.3	388.3	423.8	452.3	521.8
New Hampshire	1,168	1,196	1,265	1,343	1,484	180.4	183.1	192.1	202.2	223.4
New Jersey	12,183	13,813	14,491	15,826	16,560	275.9	311.5	324.7	354.1	370.6
New Mexico	5,918	5,973	6,876	6,333	7,456	627.6	627.3	710.9	646.2	760.8
New York	41,202	43,907	44,975	45,391	48,568	415.9	442.9	453.3	457.2	489.2
North Carolina	20,384	21,807	23,916	25,702	27,301	480.9	509.9	550.8	582.6	618.8
North Dakota	826	1,087	1,206	1,091	1,231	260.1	342.8	379.6	342.1	386.0
Ohio	29,558	33,549	30,377	33,312	30,483	503.7	571.6	516.8	566.9	518.7
Oklahoma	8,764	8,990	8,237	10,608	9,678	494.1	505.0	461.9	591.1	539.3
Oregon	5,033	5,590	6,090	6,194	6,585	283.8	312.1	336.9	338.4	359.8
Pennsylvania	23,546	27,557	27,740	27,131	28,503	369.7	432.1	433.9	424.0	445.4
Rhode Island	2,057	2,232	2,502	2,396	2,175	370.6	400.2	447.3	430.7	390.9
South Carolina	12,468	12,745	15,925	15,694	19,055	590.4	598.8	739.7	719.6	873.7
South Dakota	1,608	1,864	1,824	1,924	1,923	419.7	484.9	470.5	492.9	492.7
Tennessee	12,625	14,669	16,237	16,453	18,352	424.9	490.7	538.6	540.8	603.2
Texas	57,438	57,549	57,470	58,668	60,327	524.4	518.0	509.1	511.4	525.9
Utah	2,494	2,787	2,720	3,081	3,457	216.0	238.0	228.6	250.6	281.2
Vermont	746	828	861	725	897	237.3	262.8	272.8	229.3	283.7
Virginia	15,102	15,535	16,578	16,805	17,682	406.8	413.8	437.6	437.2	460.0
Washington	11,003	12,341	12,835	13,471	13,021	361.2	401.4	412.8	427.8	413.5
West Virginia	2,072	2,102	2,105	2,272	2,208	224.0	226.6	226.8	244.9	238.0
Wisconsin	12,296	12,838	13,913	14,751	14,606	446.9	464.3	500.1	527.9	522.7
Wyoming	755	717	820	874	1,051	304.7	288.1	326.1	346.0	416.1
U.S. TOTAL	652,858	685,017	716,675	740,371	775,788	445.0	463.6	480.6	492.2	515.8
Northeast	98,154	106,723	110,530	113,426	119,239	350.8	380.7	393.4	403.5	424.2
Midwest	151,269	161,598	170,199	174,659	173,350	455.9	485.6	509.2	521.0	517.1
South	260,839	268,762	279,367	284,966	306,157	495.0	505.0	518.4	521.5	560.3
West	142,596	147,934	156,579	167,320	177,042	434.0	445.1	464.5	490.2	518.7
Guam	463	446	608	667	692	587.4	556.8	747.1	807.0	837.3
Puerto Rico	2,665	2,378	3,240	3,366	4,091	133.1	118.1	160.1	165.6	201.2
Virgin Islands	188	352	232	189	144	317.5	619.0	408.0	332.5	253.4
OUTLYING AREAS	3,316	3,176	4,080	4,222	4,927	154.9	147.6	188.8	194.4	226.8
TOTAL	656,174	688,193	720,755	744,593	780,715	440.8	459.0	476.4	488.0	511.7

Note: Cases reported with unknown sex are not included in this table.

Table 5. Chlamydia — Men – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	1,579	1,201	1,603	2,507	4,985	72.8	55.1	73.0	113.4	225.4
Alaska	1,230	1,235	1,283	1,447	1,458	369.2	368.3	378.6	421.6	424.8
Arizona	3,308	2,772	3,884	5,058	5,588	121.4	99.3	135.2	170.1	188.0
Arkansas	1,486	1,567	1,612	1,684	1,655	112.2	117.5	119.5	123.6	121.4
California	28,400	31,238	33,323	36,449	38,003	162.1	176.4	186.0	202.0	210.6
Colorado	3,604	3,196	3,855	4,213	4,276	158.8	139.2	166.1	178.8	181.5
Connecticut	2,070	2,084	2,168	2,656	2,741	123.3	123.2	127.5	155.8	160.8
Delaware	615	880	814	899	990	156.7	221.0	201.1	218.6	240.7
District of Columbia	459	450	529	681	819	170.2	169.1	202.1	260.8	313.6
Florida	8,156	7,801	8,117	8,522	10,410	99.8	93.6	95.2	97.7	119.3
Georgia	6,363	6,509	6,411	6,793	8,089	150.9	151.8	146.9	151.4	180.3
Hawaii	1,076	1,367	1,288	1,396	1,384	172.4	216.8	204.4	219.6	217.7
Idaho	641	604	617	616	895	95.4	88.2	88.3	85.9	124.8
Illinois	13,942	12,009	11,187	12,886	13,881	225.7	193.4	179.2	205.5	221.4
Indiana	3,845	3,803	4,080	4,703	4,849	127.1	124.8	132.9	152.3	157.0
Iowa	1,505	1,561	1,743	1,990	2,233	104.4	107.8	119.9	136.2	152.9
Kansas	1,131	1,260	1,298	1,365	1,543	84.2	93.3	95.6	100.1	113.2
Kentucky	1,706	1,613	1,433	2,285	2,580	85.2	79.9	70.5	111.5	125.8
Louisiana	3,525	3,808	4,016	3,583	3,372	162.3	174.5	183.0	162.9	153.3
Maine	468	577	581	606	634	74.3	90.6	90.3	93.9	98.2
Maryland	3,029	3,068	3,841	3,627	4,439	114.8	115.1	142.7	133.7	163.6
Massachusetts	2,724	2,848	3,449	3,809	4,193	87.8	91.6	111.0	122.8	135.2
Michigan	7,143	6,669	8,622	8,525	8,724	144.8	134.7	173.5	171.3	175.3
Minnesota	2,755	2,848	3,081	3,369	3,692	110.8	113.5	121.7	132.2	144.9
Mississippi	1,526	1,657	3,766	4,584	4,149	109.9	118.7	267.3	323.1	292.5
Missouri	2,928	3,820	5,013	5,791	6,044	106.0	137.3	178.3	204.2	213.1
Montana	625	679	685	619	709	137.9	148.4	148.2	132.6	151.9
Nebraska	1,128	1,244	1,391	1,378	1,401	132.2	144.8	161.1	158.4	161.1
Nevada	1,558	1,552	1,821	1,955	2,211	140.7	135.9	153.2	159.0	179.8
New Hampshire	389	420	471	499	513	62.0	66.2	73.5	77.3	79.4
New Jersey	1,962	2,332	2,945	3,323	3,606	47.0	55.5	69.5	78.2	84.9
New Mexico	1,464	1,485	2,151	2,121	2,368	160.5	161.0	229.8	223.6	249.7
New York	9,885	13,106	14,031	18,547	20,148	106.8	141.3	150.8	198.9	216.0
North Carolina	4,340	4,379	5,051	5,481	6,314	106.3	106.0	120.3	128.3	147.8
North Dakota	429	567	601	574	588	135.5	179.0	189.8	180.6	185.0
Ohio	7,926	8,215	8,189	9,139	9,039	142.7	147.6	146.7	163.6	161.8
Oklahoma	2,040	2,023	2,129	2,799	3,314	118.6	116.8	122.3	159.6	189.0
Oregon	1,976	2,098	2,600	2,824	2,992	113.1	118.6	145.5	155.9	165.2
Pennsylvania	8,244	9,682	10,282	10,128	10,981	138.2	161.7	171.0	168.0	182.1
Rhode Island	775	768	936	868	962	150.6	148.1	179.6	167.0	185.1
South Carolina	1,800	1,813	2,456	2,572	3,272	90.2	89.8	120.1	124.0	157.7
South Dakota	606	742	708	774	709	160.3	195.3	184.7	200.7	183.9
Tennessee	3,417	5,711	6,278	6,619	6,968	120.9	200.2	217.5	226.6	238.6
Texas	11,964	11,594	12,619	13,138	15,178	110.5	105.3	112.7	115.4	133.3
Utah	1,044	1,103	1,137	1,521	1,635	89.9	93.4	94.8	122.6	131.8
Vermont	208	232	276	232	294	68.8	76.3	90.3	75.6	95.8
Virginia	3,416	3,868	5,024	5,823	6,384	95.4	106.5	136.8	156.4	171.5
Washington	3,931	4,456	4,800	5,145	4,798	130.0	145.8	155.1	163.9	152.9
West Virginia	386	472	649	671	698	44.0	53.5	73.1	75.5	78.5
Wisconsin	4,669	5,015	5,290	5,688	5,551	173.6	185.2	194.0	207.5	202.5
Wyoming	189	243	262	299	371	75.3	96.3	102.7	116.5	144.5
U.S. TOTAL	179,585	190,244	210,396	232,781	252,630	126.8	133.0	145.6	159.4	173.0
Northeast	26,725	32,049	35,139	40,668	44,072	101.8	121.6	132.7	153.3	166.1
Midwest	48,007	47,753	51,203	56,182	58,254	150.2	148.6	158.5	173.2	179.5
South	55,807	58,414	66,348	72,268	83,616	110.2	113.8	127.4	136.7	158.2
West	49,046	52,028	57,706	63,663	66,688	149.5	156.6	171.2	186.4	195.2
Guam	87	108	140	140	140	105.8	129.4	165.3	162.9	162.9
Puerto Rico	334	368	348	348	1,007	18.0	19.7	18.6	18.5	53.6
Virgin Islands	19	64	71	46	55	37.4	123.2	136.8	88.7	106.0
OUTLYING AREAS	440	540	559	534	1,202	22.1	27.0	27.8	26.5	59.6
TOTAL	180,025	190,784	210,955	233,315	253,832	125.3	131.5	144.0	157.6	171.5

Note: Cases reported with unknown sex are not included in this table.

Table 6. Chlamydia — Counties and independent cities* ranked by number of reported cases: United States, 2006

Rank†	*County/Independent City*	*Cases*	*Rate per 100,000 Population*	*Cumulative Percent*
1	Los Angeles County, CA	42,943	432.2	4
2	Cook County, IL	31,757	598.8	7
3	Philadelphia County, PA	17,199	1,175.4	8
4	Maricopa County, AZ	14,579	401.0	10
5	Kings County, NY	13,915	559.7	11
6	Wayne County, MI	12,213	611.2	12
7	San Diego County, CA	11,980	408.4	14
8	Harris County, TX	11,872	321.5	15
9	Bronx County, NY	10,494	773.0	16
10	Milwaukee County, WI	9,999	1,084.9	17
11	Shelby County, TN	8,795	967.5	18
12	Dallas County, TX	8,521	369.6	18
13	San Bernardino County, CA	8,066	410.8	19
14	Queens County, NY	8,015	357.6	20
15	New York County, NY	7,997	501.9	21
16	Orange County, CA	7,970	266.7	21
17	Sacramento County, CA	7,688	563.9	22
18	Bexar County, TX	7,634	502.8	23
19	Fulton County, GA	6,882	751.6	24
20	Marion County, IN	6,807	788.6	24
21	Clark County, NV	6,592	385.4	25
22	Cuyahoga County, OH	6,573	492.2	26
23	Baltimore (City), MD	6,307	992.0	26
24	Hamilton County, OH	6,114	757.9	27
25	Alameda County, CA	5,922	408.7	27
26	Santa Clara County, CA	5,767	339.4	28
27	Tarrant County, TX	5,482	338.3	28
28	Prince George's County, MD	5,422	640.8	29
29	Travis County, TX	5,418	610.0	29
30	Fresno County, CA	5,341	608.6	30
31	King County, WA	5,244	292.4	30
32	Franklin County, OH	5,135	470.8	31
33	Miami-Dade County, FL	5,069	213.3	31
34	St Louis County, MO	4,876	485.3	32
35	Broward County, FL	4,870	274.0	32
36	Duval County, FL	4,816	582.7	33
37	Jackson County, MO	4,786	721.9	33
38	Essex County, NJ	4,682	591.9	34
39	De Kalb County, GA	4,676	689.7	34
40	Orange County, FL	4,593	449.0	35
41	St Louis (City), MO	4,581	1,330.3	35
42	Hennepin County, MN	4,576	408.8	36
43	Honolulu County, HI	4,462	492.9	36
44	Jefferson County, AL	4,447	676.6	36
45	Riverside County, CA	4,406	226.4	37
46	Kern County, CA	4,225	558.3	37
47	Erie County, NY	4,199	451.2	38
48	Bernalillo County, NM	4,195	695.0	38
49	Allegheny County, PA	4,193	339.3	39
50	San Francisco County, CA	4,091	553.3	39
51	Suffolk County, MA	4,085	624.2	39
52	Wake County, NC	3,942	526.4	40
53	Hillsborough County, FL	3,835	338.7	40
54	Pima County, AZ	3,744	404.9	40

*Accounting for 40% of reported chlamydia cases.
†Counties and independent cities were ranked in descending order by number of cases reported in 2006.

Table 7. Chlamydia — Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	16,564	18,135	17,068	16,748	20,979	365.7	393.4	362.5	340.6	426.6
Austin-Round Rock, TX	4,716	4,456	4,580	5,103	7,325	349.5	323.5	324.3	351.3	504.3
Baltimore-Towson, MD	9,598	10,044	10,959	11,071	11,617	368.9	383.9	415.2	416.9	437.4
Birmingham-Hoover, AL	4,173	3,189	3,905	4,720	5,338	390.7	297.3	360.8	433.0	489.7
Boston-Cambridge-Quincy, MA-NH	7,350	7,831	9,006	9,368	9,918	165.3	176.4	203.5	212.3	224.8
Buffalo-Cheektowaga-Tonawanda, NY	3,295	3,513	4,865	5,013	4,992	283.3	303.0	421.4	436.8	435.0
Charlotte-Gastonia-Concord, NC-SC	4,105	4,619	4,832	5,830	5,076	291.1	321.3	327.7	383.2	333.7
Chicago-Naperville-Joliet, IL-IN-WI	38,503	37,017	35,953	38,966	41,521	414.6	396.6	382.8	412.6	439.7
Cincinnati-Middletown, OH-KY-IN	6,408	6,789	6,438	8,516	8,616	314.0	331.6	312.8	411.3	416.1
Cleveland-Elyria-Mentor, OH	7,618	8,489	7,867	8,181	7,462	354.7	396.8	368.1	384.7	350.9
Columbus, OH	5,996	5,758	5,167	5,902	5,843	361.2	343.8	305.0	345.4	342.0
Dallas-Fort Worth-Arlington, TX	15,800	16,828	15,744	18,005	17,035	288.1	301.1	276.2	309.4	292.7
Denver-Aurora, CO	7,952	7,039	7,774	8,534	7,934	348.7	305.9	333.6	361.6	336.2
Detroit-Warren-Livonia, MI	16,518	16,071	21,378	20,497	17,201	368.4	358.4	475.8	456.7	383.2
Hartford-West Hartford-East Hartford, CT	3,535	3,224	3,040	3,815	3,799	302.6	273.7	256.6	321.1	319.7
Houston-Baytown-Sugar Land, TX	14,926	13,530	14,796	13,476	14,641	299.3	266.6	285.6	255.2	277.3
Indianapolis, IN	7,302	7,304	6,922	8,226	7,780	463.7	457.8	426.9	501.4	474.2
Jacksonville, FL	4,430	5,200	5,017	5,246	5,582	376.2	432.3	409.4	420.2	447.1
Kansas City, MO-KS	6,006	7,105	8,003	7,900	7,825	317.9	373.0	415.7	405.6	401.8
Las Vegas-Paradise, NV	4,446	4,379	5,065	5,623	6,592	292.1	277.8	306.8	328.7	385.4
Los Angeles-Long Beach-Santa Ana, CA	43,482	46,342	46,202	50,703	50,913	341.2	361.2	357.5	392.3	394.0
Louisville, KY-IN	2,796	2,775	2,396	3,143	3,319	236.4	233.2	199.5	260.1	274.6
Memphis, TN-MS-AR	6,381	7,362	8,927	9,457	10,224	518.5	594.0	714.0	750.0	810.8
Miami-Fort Lauderdale-Miami Beach, FL	10,867	11,024	11,781	10,403	12,142	207.7	208.4	219.7	191.9	223.9
Milwaukee-Waukesha-West Allis, WI	9,291	9,320	10,070	10,368	10,498	614.3	615.5	664.4	685.3	693.9
Minneapolis-St. Paul-Bloomington, MN-WI	7,678	8,081	8,139	8,513	9,271	251.4	262.1	261.2	270.9	295.0
Nashville-Davidson-Murfreesboro, TN	3,172	3,981	4,243	4,538	4,910	234.4	290.3	304.0	319.0	345.2
New Orleans-Metairie-Kenner, LA	6,258	7,116	6,858	4,761	3,401	475.8	540.1	519.7	360.9	257.8
New York-Newark-Edison, NY-NJ-PA	46,925	51,614	52,266	58,134	62,334	252.2	276.9	279.4	310.1	332.5
Oklahoma City, OK	4,149	4,124	3,939	4,798	4,627	370.0	364.1	344.2	414.8	400.0
Orlando, FL	4,323	4,673	4,888	5,862	6,579	246.7	259.2	262.6	303.2	340.3
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	20,989	25,347	25,285	24,913	27,417	364.9	439.1	435.9	427.8	470.8
Phoenix-Mesa-Scottsdale, AZ	NA	8,084	11,078	11,984	15,278	NA	225.0	298.2	310.1	395.3
Pittsburgh, PA	5,272	5,499	5,539	5,880	5,789	218.0	228.1	230.6	246.4	242.6
Portland-Vancouver-Beaverton, OR-WA	4,363	4,703	5,256	5,636	5,654	216.4	230.5	254.6	268.9	269.8
Providence-New Bedford-Fall River, RI-MA	3,574	3,714	4,269	4,316	4,197	221.6	228.8	262.1	266.0	258.7
Richmond, VA	4,384	4,472	4,923	4,710	5,044	389.3	392.9	426.5	400.6	429.0
Riverside-San Bernardino-Ontario, CA	10,077	10,688	10,913	12,179	12,472	286.7	293.4	287.7	311.5	319.0
Rochester, NY	2,453	4,142	4,040	3,850	4,168	235.2	397.8	387.9	370.5	401.1
Sacramento-Arden-Arcade-Roseville, CA	5,547	6,240	7,294	8,175	9,094	287.4	316.0	361.7	400.3	445.3
Salt Lake City, UT	2,160	2,264	2,223	2,642	2,910	216.6	225.2	218.2	255.4	281.3
San Antonio, TX	6,365	7,212	7,645	8,049	8,338	356.3	396.1	412.3	425.9	441.2
San Diego-Carlsbad-San Marcos, CA	10,286	10,432	10,876	11,520	11,980	353.9	355.9	371.0	392.7	408.4
San Francisco-Oakland-Fremont, CA	12,272	12,774	13,580	13,988	15,565	293.6	307.3	326.9	336.8	374.8
San Jose-Sunnyvale-Santa Clara, CA	4,465	4,796	5,697	5,374	5,898	256.7	276.5	327.1	306.2	336.1
Seattle-Tacoma-Bellevue, WA	8,497	9,457	9,655	10,588	9,778	271.8	301.0	304.9	330.5	305.2
St. Louis, MO-IL	9,218	10,081	11,856	13,328	13,509	337.8	368.5	428.9	479.7	486.2
Tampa-St. Petersburg-Clearwater, FL	6,322	6,002	5,996	6,315	7,475	253.9	237.1	231.7	238.5	282.3
Virginia Beach-Norfolk-Newport News, VA-NC	6,137	6,668	7,601	8,414	9,139	380.5	407.3	462.3	510.8	554.8
Washington-Arlington-Alexandria, DC-VA-MD-WV	11,715	11,230	14,046	12,827	15,456	233.1	220.6	273.3	246.0	296.4
U.S. MSA TOTAL	468,659	500,737	525,860	556,108	584,455	309.6	320.5	333.0	348.7	366.4

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 8. Chlamydia — Women – Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	13,071	14,519	13,756	12,995	16,165	570.8	624.4	580.4	524.8	652.8
Austin-Round Rock, TX	3,792	3,418	3,405	3,720	5,170	571.4	506.4	492.5	522.7	726.5
Baltimore-Towson, MD	8,091	8,412	9,051	8,927	9,344	599.7	620.5	662.1	649.4	679.8
Birmingham-Hoover, AL	3,321	2,825	3,095	3,709	4,277	599.2	508.3	552.6	657.7	758.4
Boston-Cambridge-Quincy, MA-NH	5,502	5,715	6,549	6,663	7,140	239.7	249.8	287.6	293.8	314.8
Buffalo-Cheektowaga-Tonawanda, NY	2,502	2,677	3,698	3,849	3,762	413.6	444.3	616.7	646.3	631.7
Charlotte-Gastonia-Concord, NC-SC	3,380	3,915	4,059	4,878	4,189	471.2	536.5	541.9	631.9	542.6
Chicago-Naperville-Joliet, IL-IN-WI	26,625	27,419	27,271	28,860	30,600	561.8	576.5	570.2	600.4	636.6
Cincinnati-Middletown, OH-KY-IN	5,244	5,458	5,108	6,580	6,871	500.5	520.2	484.6	621.4	648.9
Cleveland-Elyria-Mentor, OH	5,805	6,548	5,909	6,066	5,458	518.8	588.0	531.6	548.7	493.7
Columbus, OH	4,189	4,525	4,058	4,445	4,549	496.5	532.1	472.8	513.4	525.4
Dallas-Fort Worth-Arlington, TX	12,544	13,633	12,536	14,641	13,466	456.8	488.3	440.7	504.7	464.2
Denver-Aurora, CO	5,777	5,225	5,558	6,122	5,827	507.6	455.8	479.3	521.7	496.6
Detroit-Warren-Livonia, MI	12,883	13,008	17,145	16,172	13,096	559.6	565.6	744.1	703.4	569.6
Hartford-West Hartford-East Hartford, CT	2,749	2,510	2,331	2,842	2,786	456.8	413.6	381.9	464.3	455.1
Houston-Baytown-Sugar Land, TX	12,490	11,325	12,258	11,539	12,178	499.8	446.0	473.1	437.0	461.2
Indianapolis, IN	5,188	5,337	5,167	5,949	5,596	645.7	656.5	625.9	712.5	670.3
Jacksonville, FL	3,403	4,051	3,759	4,021	4,273	564.6	658.1	600.4	630.6	670.1
Kansas City, MO-KS	5,022	5,434	5,993	5,930	5,791	520.3	559.4	611.3	598.8	584.8
Las Vegas-Paradise, NV	3,363	3,318	3,820	4,319	5,014	449.5	428.5	471.0	513.8	596.5
Los Angeles-Long Beach-Santa Ana, CA	31,411	33,124	32,903	36,044	35,826	488.6	511.9	504.6	552.9	549.5
Louisville, KY-IN	2,245	2,144	1,817	2,232	2,344	369.1	351.2	295.1	360.6	378.7
Memphis, TN-MS-AR	5,258	5,650	6,816	7,150	7,935	823.5	880.2	1,053.0	1,098.1	1,218.6
Miami-Fort Lauderdale-Miami Beach, FL	8,647	9,027	9,610	8,492	9,553	320.4	331.4	347.8	304.2	342.2
Milwaukee-Waukesha-West Allis, WI	6,829	6,756	7,358	7,558	7,761	877.5	868.3	945.2	973.0	999.1
Minneapolis-St. Paul-Bloomington, MN-WI	5,441	5,792	5,892	6,022	6,462	352.2	371.9	374.8	380.0	407.7
Nashville-Davidson-Murfreesboro, TN	2,385	2,834	3,018	3,122	3,413	345.9	406.9	426.5	433.4	473.8
New Orleans-Metairie-Kenner, LA	4,870	5,736	5,433	3,563	2,673	710.6	836.7	791.6	519.8	390.0
New York-Newark-Edison, NY-NJ-PA	38,786	40,956	41,039	42,214	45,007	401.5	423.7	423.4	435.0	463.8
Oklahoma City, OK	3,224	3,301	3,057	3,744	3,394	565.2	573.5	527.5	638.7	579.0
Orlando, FL	3,521	3,852	3,993	4,667	5,326	396.6	421.9	424.0	477.4	544.9
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	15,523	18,707	18,369	18,236	19,813	520.2	625.3	611.6	605.3	657.6
Phoenix-Mesa-Scottsdale, AZ	NA	6,303	8,555	9,338	11,859	NA	353.6	464.3	487.7	619.4
Pittsburgh, PA	4,081	4,191	4,185	4,398	4,267	323.7	333.7	334.6	354.2	343.7
Portland-Vancouver-Beaverton, OR-WA	3,036	3,332	3,555	3,816	3,769	299.4	325.2	343.2	363.1	358.6
Providence-New Bedford-Fall River, RI-MA	2,621	2,784	3,138	3,225	2,967	313.0	331.0	372.1	384.3	353.5
Richmond, VA	3,532	3,421	3,573	3,425	3,617	607.0	582.6	601.2	566.7	598.5
Riverside-San Bernardino-Ontario, CA	7,827	8,122	8,252	9,257	9,426	445.7	445.9	435.4	474.3	483.0
Rochester, NY	1,876	2,990	2,869	2,670	2,890	350.2	558.8	536.9	501.5	542.8
Sacramento-Arden-Arcade-Roseville, CA	4,200	4,603	5,326	5,890	6,614	427.6	458.6	519.5	567.4	637.1
Salt Lake City, UT	1,473	1,574	1,501	1,709	1,941	298.1	316.8	298.1	334.4	379.8
San Antonio, TX	5,168	5,985	6,182	6,105	6,232	565.8	644.1	653.1	633.1	646.2
San Diego-Carlsbad-San Marcos, CA	7,285	7,694	7,908	8,210	8,620	504.0	528.8	542.6	565.1	593.3
San Francisco-Oakland-Fremont, CA	8,560	8,824	9,151	9,217	10,418	404.9	420.4	436.4	439.6	496.9
San Jose-Sunnyvale-Santa Clara, CA	3,239	3,465	4,038	3,752	4,128	377.2	406.0	471.7	435.6	479.3
Seattle-Tacoma-Bellevue, WA	5,946	6,606	6,775	7,411	6,915	379.0	419.5	427.2	462.5	431.5
St. Louis, MO-IL	7,411	8,179	9,086	9,804	9,952	524.3	577.7	636.1	683.2	693.5
Tampa-St. Petersburg-Clearwater, FL	5,138	4,846	4,920	5,184	5,936	399.4	371.1	369.1	380.8	436.1
Virginia Beach-Norfolk-Newport News, VA-NC	5,039	5,378	5,862	6,016	6,651	616.7	648.6	704.2	720.5	796.5
Washington-Arlington-Alexandria, DC-VA-MD-WV	9,490	9,065	11,170	10,086	11,722	368.3	347.6	424.8	378.3	439.7
U.S. MSA TOTAL	359,003	384,513	399,877	414,784	432,983	464.7	483.1	497.5	511.3	533.8

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 9. Chlamydia — Men – Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	3,411	3,526	3,187	3,463	4,574	152.3	154.3	136.3	141.8	187.3
Austin-Round Rock, TX	920	1,026	1,093	1,357	2,147	134.2	146.0	151.6	183.2	289.8
Baltimore-Towson, MD	1,505	1,627	1,908	2,139	2,250	120.1	129.1	150.0	167.0	175.6
Birmingham-Hoover, AL	850	361	810	1,005	1,058	165.4	69.8	155.1	191.0	201.1
Boston-Cambridge-Quincy, MA-NH	1,839	2,097	2,449	2,697	2,762	85.5	97.4	114.0	125.8	128.8
Buffalo-Cheektowaga-Tonawanda, NY	793	836	1,167	1,164	1,229	142.1	150.1	210.4	210.8	222.6
Charlotte-Gastonia-Concord, NC-SC	721	700	770	951	887	104.1	98.9	106.1	126.9	118.4
Chicago-Naperville-Joliet, IL-IN-WI	11,860	9,542	8,602	10,075	10,905	260.8	208.5	186.7	217.3	235.2
Cincinnati-Middletown, OH-KY-IN	1,117	1,268	1,239	1,746	1,691	112.5	127.0	123.4	172.6	167.2
Cleveland-Elyria-Mentor, OH	1,758	1,875	1,904	1,986	1,953	170.9	182.8	185.7	194.6	191.3
Columbus, OH	1,730	1,174	1,058	1,377	1,272	212.0	142.5	126.6	163.4	150.9
Dallas-Fort Worth-Arlington, TX	3,178	3,179	3,192	3,346	3,558	116.1	113.6	111.8	114.6	121.9
Denver-Aurora, CO	2,173	1,814	2,210	2,412	2,107	190.2	157.1	188.8	203.3	177.6
Detroit-Warren-Livonia, MI	3,635	3,063	4,233	4,256	4,027	166.6	140.3	193.4	194.4	183.9
Hartford-West Hartford-East Hartford, CT	786	714	708	973	1,013	138.8	125.0	123.3	168.9	175.8
Houston-Baytown-Sugar Land, TX	2,423	2,185	2,504	1,930	2,449	97.4	86.1	96.7	73.1	92.8
Indianapolis, IN	2,053	1,906	1,744	2,242	2,167	266.2	243.6	219.1	278.3	269.0
Jacksonville, FL	1,027	1,149	1,258	1,225	1,309	178.7	195.6	209.9	200.6	214.3
Kansas City, MO-KS	984	1,671	2,010	1,970	2,034	106.5	179.0	212.7	205.8	212.5
Las Vegas-Paradise, NV	1,081	1,051	1,233	1,301	1,576	139.7	131.0	146.9	149.6	181.2
Los Angeles-Long Beach-Santa Ana, CA	12,001	13,161	13,208	14,585	14,921	190.0	207.0	206.2	227.7	233.0
Louisville, KY-IN	546	626	572	909	961	95.0	108.0	97.8	154.2	163.0
Memphis, TN-MS-AR	1,123	1,712	2,111	2,307	2,289	189.7	286.6	350.1	378.3	375.4
Miami-Fort Lauderdale-Miami Beach, FL	2,220	1,997	2,171	1,911	2,588	87.6	77.9	83.5	72.6	98.4
Milwaukee-Waukesha-West Allis, WI	2,441	2,486	2,711	2,804	2,720	332.5	337.7	367.7	380.9	369.5
Minneapolis-St. Paul-Bloomington, MN-WI	2,237	2,289	2,247	2,491	2,809	148.2	150.0	145.5	159.9	180.3
Nashville-Davidson-Murfreesboro, TN	787	1,147	1,225	1,415	1,497	118.6	170.0	178.0	201.5	213.2
New Orleans-Metairie-Kenner, LA	1,317	1,355	1,327	1,100	676	209.1	214.4	209.6	173.5	106.6
New York-Newark-Edison, NY-NJ-PA	8,086	10,437	11,125	15,890	17,301	90.4	116.3	123.4	175.7	191.3
Oklahoma City, OK	925	823	882	1,054	1,233	167.9	147.7	156.2	184.7	216.1
Orlando, FL	802	821	895	1,195	1,252	92.8	92.3	97.3	125.0	131.0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	5,465	6,628	6,915	6,677	7,600	197.5	238.3	247.2	237.6	270.4
Phoenix-Mesa-Scottsdale, AZ	NA	1,779	2,521	2,646	3,410	NA	98.2	134.6	135.7	174.8
Pittsburgh, PA	1,191	1,296	1,353	1,482	1,522	102.9	112.3	117.6	129.5	133.0
Portland-Vancouver-Beaverton, OR-WA	1,327	1,371	1,701	1,820	1,885	132.4	135.0	165.4	174.2	180.4
Providence-New Bedford-Fall River, RI-MA	951	930	1,126	1,085	1,223	122.6	118.9	143.3	138.5	156.1
Richmond, VA	852	1,045	1,348	1,281	1,423	156.5	189.6	240.7	224.2	249.1
Riverside-San Bernardino-Ontario, CA	2,248	2,563	2,654	2,913	3,029	127.8	140.7	139.8	148.8	154.7
Rochester, NY	577	1,152	1,171	1,180	1,278	113.8	227.6	230.9	232.9	252.3
Sacramento-Arden-Arcade-Roseville, CA	1,299	1,588	1,901	2,220	2,431	137.0	163.5	191.7	221.1	242.1
Salt Lake City, UT	685	689	722	933	969	136.2	135.5	140.1	178.2	185.1
San Antonio, TX	1,193	1,225	1,460	1,942	2,104	136.6	137.4	160.9	209.8	227.3
San Diego-Carlsbad-San Marcos, CA	2,641	2,715	2,844	3,022	3,134	180.7	184.0	192.9	204.1	211.7
San Francisco-Oakland-Fremont, CA	3,638	3,908	4,370	4,686	5,058	176.2	189.9	212.4	227.9	246.0
San Jose-Sunnyvale-Santa Clara, CA	1,171	1,315	1,628	1,575	1,723	132.9	149.2	183.9	176.2	192.8
Seattle-Tacoma-Bellevue, WA	2,551	2,851	2,880	3,177	2,863	163.8	182.0	182.2	198.5	178.8
St. Louis, MO-IL	1,807	1,902	2,770	3,524	3,557	137.4	144.1	207.4	262.3	264.7
Tampa-St. Petersburg-Clearwater, FL	1,184	1,156	1,076	1,131	1,535	98.3	94.3	85.7	87.9	119.3
Virginia Beach-Norfolk-Newport News, VA-NC	1,098	1,276	1,724	2,375	2,481	138.0	157.9	212.4	292.4	305.4
Washington-Arlington-Alexandria, DC-VA-MD-WV	2,197	2,120	2,848	2,706	3,637	89.7	85.4	113.5	106.2	142.7
U.S. MSA TOTAL	108,404	115,127	124,765	139,651	150,077	146.3	150.2	160.9	178.2	191.5

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 10. Chlamydia — Reported cases and rates per 100,000 population by age group and sex: United States, 2002–2006

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
2002	10-14	15,294	1,076	14,218	72.4	9.9	137.9
	15-19	299,863	42,433	257,429	1,471.6	405.2	2,599.0
	20-24	305,400	66,991	238,408	1,510.9	647.3	2,417.1
	25-29	116,422	32,497	83,925	613.7	337.1	899.3
	30-34	50,339	16,847	33,492	240.2	159.5	322.2
	35-39	23,411	9,298	14,113	106.8	84.9	128.8
	40-44	11,405	5,122	6,283	49.6	44.9	54.2
	45-54	7,644	3,652	3,992	19.1	18.6	19.6
	55-64	1,451	746	705	5.5	5.8	5.1
	65+	812	296	516	2.3	2.0	2.5
	TOTAL	834,503	180,039	654,464	289.4	127.1	446.1
2003	10-14	14,911	1,061	13,849	70.4	9.8	134.0
	15-19	310,505	44,331	266,175	1,516.3	421.4	2,672.5
	20-24	324,411	71,476	252,936	1,565.1	670.3	2,513.3
	25-29	124,890	34,916	89,974	651.6	357.3	957.7
	30-34	53,572	17,810	35,762	258.7	170.4	348.7
	35-39	24,658	9,772	14,886	115.2	91.1	139.4
	40-44	12,287	5,675	6,612	53.5	49.8	57.2
	45-54	8,214	4,012	4,202	20.1	20.0	20.2
	55-64	1,653	883	770	5.9	6.6	5.3
	65+	776	323	453	2.2	2.2	2.2
	TOTAL	877,478	190,723	686,755	301.7	133.3	464.7
2004	10-14	14,817	1,172	13,646	70.1	10.8	132.3
	15-19	323,246	48,209	275,036	1,559.3	453.3	2,724.6
	20-24	344,159	79,410	264,749	1,641.1	735.1	2,603.7
	25-29	137,041	39,374	97,667	700.6	393.9	1,021.0
	30-34	56,759	19,353	37,406	277.3	187.1	369.3
	35-39	26,486	10,647	15,839	125.8	100.7	151.1
	40-44	13,626	6,397	7,229	59.1	55.8	62.4
	45-54	9,251	4,602	4,649	22.2	22.5	22.0
	55-64	1,885	993	892	6.5	7.1	5.9
	65+	755	335	420	2.1	2.2	2.0
	TOTAL	929,462	210,935	718,527	316.5	145.9	481.9
2005	10-14	14,124	1,200	12,924	67.7	11.2	127.0
	15-19	336,036	53,734	282,302	1,597.2	498.0	2,754.5
	20-24	360,574	86,931	273,643	1,713.9	800.7	2,687.8
	25-29	148,059	44,712	103,347	737.9	435.4	1,054.8
	30-34	60,065	21,102	38,964	299.2	207.8	392.6
	35-39	28,509	11,700	16,809	135.7	110.8	161.0
	40-44	14,397	6,940	7,458	63.0	61.0	64.9
	45-54	10,105	5,203	4,902	23.8	24.9	22.7
	55-64	2,191	1,169	1,021	7.2	8.0	6.5
	65+	885	402	483	2.4	2.6	2.3
	TOTAL	976,445	233,553	742,892	329.4	160.0	493.9
2006	10-14	13,601	1,238	12,364	65.2	11.6	121.5
	15-19	352,212	58,820	293,392	1,674.1	545.1	2,862.7
	20-24	377,798	93,035	284,763	1,795.8	856.9	2,797.0
	25-29	161,178	49,369	111,809	803.3	480.8	1,141.2
	30-34	63,810	22,558	41,252	317.8	222.2	415.7
	35-39	30,947	12,763	18,184	147.4	120.8	174.2
	40-44	15,329	7,410	7,919	67.1	65.1	69.0
	45-54	11,351	5,818	5,533	26.7	27.8	25.6
	55-64	2,411	1,334	1,077	7.9	9.1	6.8
	65+	894	424	469	2.4	2.8	2.2
	TOTAL	1,030,911	253,236	777,675	347.8	173.4	517.0

NOTE: **This table should be used only for age comparisons**. If age was not specified, cases were prorated according to the distribution of cases for which age was known. Differences between total cases from this table and others in the report are due to different reporting formats. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

Table 11A. Chlamydia — Reported cases by race/ethnicity, age group and sex: United States, 2002–2006

	Age Group	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
2002	10-14	3,349	94	3,255	8,245	665	7,580	2,308	234	2,074	160	6	153	291	13	278
	15-19	87,116	8,455	78,660	138,051	22,908	115,143	48,145	7,609	40,536	3,927	479	3,448	5,158	698	4,461
	20-24	91,120	17,951	73,169	130,338	31,430	98,908	56,493	12,380	44,113	5,821	1,137	4,684	5,089	847	4,242
	25-29	29,455	7,780	21,674	47,920	15,117	32,803	27,621	6,808	20,813	2,922	709	2,213	2,175	434	1,741
	30-34	11,867	3,978	7,889	20,437	8,111	12,326	12,636	3,259	9,377	1,621	446	1,176	1,067	214	853
	35-39	5,723	2,500	3,223	9,450	4,329	5,121	5,554	1,611	3,943	833	224	610	574	146	428
	40-44	2,892	1,422	1,469	4,821	2,503	2,319	2,350	740	1,609	446	114	332	332	89	243
	45-54	2,129	1,165	964	3,142	1,690	1,452	1,404	435	970	384	130	253	198	57	141
	55-64	410	282	128	580	309	271	269	88	182	82	23	59	36	10	26
	65+	226	68	158	376	166	210	141	37	104	20	7	13	10	4	7
	TOTAL	234,839	43,913	190,925	364,513	87,744	276,769	157,458	33,453	124,005	16,276	3,300	12,976	14,981	2,538	12,444
2003	10-14	3,336	116	3,219	8,320	721	7,600	2,210	166	2,044	145	7	139	302	19	283
	15-19	93,457	8,820	84,637	147,549	25,606	121,944	48,899	7,407	41,493	4,071	445	3,627	5,517	815	4,702
	20-24	103,138	20,467	82,671	138,950	34,080	104,871	58,996	12,572	46,424	6,046	1,156	4,890	5,428	1,001	4,427
	25-29	33,634	9,219	24,415	52,640	16,408	36,232	28,313	6,876	21,437	3,120	810	2,310	2,385	477	1,908
	30-34	13,149	4,309	8,839	22,401	8,645	13,756	13,001	3,502	9,499	1,830	493	1,337	1,066	238	828
	35-39	6,091	2,586	3,505	10,340	4,799	5,541	5,728	1,644	4,084	876	252	624	630	158	472
	40-44	3,331	1,689	1,642	5,339	2,859	2,480	2,355	733	1,622	434	124	310	339	75	264
	45-54	2,420	1,347	1,073	3,440	1,879	1,561	1,418	454	964	378	131	247	210	55	155
	55-64	524	326	198	635	361	273	293	113	180	89	33	56	51	15	36
	65+	277	112	165	301	144	158	130	37	93	22	14	8	17	3	14
	TOTAL	259,808	49,115	210,693	390,660	95,741	294,918	161,629	33,576	128,053	17,042	3,469	13,573	15,964	2,859	13,105
2004	10-14	3,199	122	3,076	8,504	759	7,745	2,152	222	1,929	135	5	130	266	31	236
	15-19	95,195	9,468	85,727	157,398	28,143	129,255	49,457	7,769	41,688	3,900	485	3,415	5,551	776	4,774
	20-24	109,590	22,268	87,322	149,743	38,420	111,322	59,885	13,482	46,403	6,232	1,291	4,941	5,820	1,176	4,644
	25-29	37,871	10,560	27,311	58,590	18,657	39,933	29,424	7,409	22,014	3,159	802	2,357	2,614	549	2,065
	30-34	13,869	4,596	9,273	24,171	9,671	14,499	13,326	3,572	9,754	1,863	502	1,361	1,209	287	922
	35-39	6,553	2,748	3,806	11,323	5,277	6,047	5,927	1,777	4,150	967	324	643	646	161	486
	40-44	3,815	1,947	1,868	5,900	3,148	2,753	2,532	829	1,703	499	164	335	332	90	242
	45-54	2,543	1,360	1,182	4,190	2,322	1,868	1,416	501	915	471	178	294	265	82	183
	55-64	593	363	231	790	444	346	292	118	174	88	26	62	40	8	33
	65+	253	116	137	281	140	140	118	37	81	27	9	17	19	7	12
	TOTAL	273,854	53,669	220,186	421,608	107,202	314,407	164,762	35,786	128,976	17,358	3,791	13,568	16,787	3,174	13,613
2005	10-14	2,986	126	2,860	7,355	723	6,631	2,069	183	1,886	112	14	98	332	24	309
	15-19	93,876	9,636	84,240	153,777	30,214	123,563	52,224	8,526	43,698	3,761	646	3,115	5,964	882	5,082
	20-24	114,066	24,303	89,763	142,156	39,355	102,801	64,259	14,772	49,487	6,315	1,416	4,899	6,148	1,295	4,853
	25-29	40,477	11,580	28,897	57,704	19,824	37,879	31,795	8,528	23,267	3,107	896	2,211	2,829	715	2,114
	30-34	14,600	4,739	9,861	23,142	9,740	13,402	14,349	4,132	10,217	1,849	638	1,211	1,177	270	906
	35-39	7,143	3,024	4,119	10,768	5,300	5,468	6,539	2,001	4,538	1,057	337	720	625	181	444
	40-44	3,986	2,045	1,941	5,662	3,148	2,515	2,656	908	1,748	559	213	346	345	92	254
	45-54	2,875	1,639	1,236	4,032	2,338	1,693	1,674	575	1,100	443	158	286	240	82	158
	55-64	657	408	250	791	467	324	334	123	211	148	47	101	50	21	30
	65+	253	123	130	345	168	177	141	53	87	35	18	17	15	4	12
	TOTAL	281,268	57,709	223,559	406,423	111,513	294,910	176,271	39,885	136,386	17,408	4,388	13,020	17,762	3,571	14,191
2006	10-14	2,732	84	2,648	8,187	891	7,296	2,088	233	1,856	98	3	95	309	18	290
	15-19	97,442	10,379	87,063	180,893	36,692	144,201	58,312	9,483	48,829	3,387	413	2,974	6,259	1,016	5,243
	20-24	120,835	26,260	94,575	164,045	45,448	118,597	71,991	16,675	55,316	5,836	1,129	4,707	6,646	1,309	5,337
	25-29	46,643	13,506	33,137	67,691	23,107	44,584	36,568	9,968	26,600	3,206	826	2,381	3,103	708	2,395
	30-34	16,327	5,518	10,809	26,296	11,044	15,253	16,281	4,596	11,685	1,876	523	1,354	1,421	329	1,092
	35-39	8,102	3,265	4,837	12,686	6,367	6,319	7,570	2,319	5,251	998	292	706	709	171	538
	40-44	4,253	2,131	2,122	6,436	3,639	2,797	3,211	1,157	2,054	633	197	437	413	106	307
	45-54	3,296	1,792	1,504	5,049	2,901	2,148	1,938	695	1,242	486	190	296	271	82	189
	55-64	796	474	322	943	588	355	392	157	234	133	47	86	64	16	48
	65+	285	147	139	337	177	161	176	56	119	26	14	12	28	6	22
	TOTAL	301,064	63,675	237,389	473,235	131,077	342,159	198,783	45,432	153,351	16,701	3,640	13,061	19,267	3,773	15,493

NOTE: These tables should be used only for race/ethnicity comparisons. **See Table 10 for age-specific cases and rates and Tables 3-5 for total and sex-specific cases and rates**. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. For the following years the states listed did not report age and/or race/ethnicity for most cases and their case data and population denominators were excluded: 2002 (MI, NJ); 2003 (CO, DC, NJ); 2004 (CO, DC, NJ); 2005 (CO, DC, GA, HI, NJ); 2006 (CO, HI). Differences between total cases from this table and others in the report are due to different reporting formats and above listed exclusions. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

Table 11B. Chlamydia — Rates per 100,000 population by race/ethnicity, age group and sex: United States, 2002–2006

Age Group	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
10-14	27.4	1.5	54.7	266.2	42.3	496.7	67.9	13.5	125.0	20.2	1.6	39.7	128.8	11.3	249.7	
15-19	715.7	135.2	1,329.6	4,887.6	1,595.0	8,294.0	1,566.1	475.4	2,751.1	489.7	117.4	875.6	2,356.2	624.1	4,164.2	
20-24	772.3	300.6	1,255.8	4,847.2	2,371.6	7,252.9	1,626.9	645.4	2,838.4	647.3	255.0	1,033.5	2,665.7	874.5	4,512.4	
25-29	274.7	144.0	407.6	2,066.4	1,365.9	2,706.0	765.5	343.7	1,278.6	281.0	141.1	411.8	1,346.7	534.8	2,167.7	
30-34	95.4	63.5	127.7	831.5	697.2	952.2	368.7	177.3	590.3	144.0	81.7	202.5	647.3	260.2	1,032.3	2002
35-39	41.9	36.5	47.3	367.6	358.1	376.1	184.3	101.5	276.4	81.9	45.4	116.3	329.7	171.2	482.5	
40-44	19.0	18.7	19.3	185.2	205.0	167.6	92.7	56.7	131.0	47.6	25.6	67.6	183.8	102.2	259.6	
45-54	7.6	8.4	6.9	75.3	87.7	64.7	40.2	24.9	55.4	24.4	17.9	30.0	66.5	39.6	91.2	
55-64	2.1	3.0	1.3	24.5	29.4	20.6	14.3	9.8	18.3	9.0	5.4	12.1	20.5	11.6	28.7	
65+	0.8	0.6	1.0	13.9	16.1	12.6	7.5	4.6	9.6	2.2	1.8	2.4	6.6	5.6	7.4	
TOTAL	126.9	48.4	202.2	1,087.8	550.3	1,575.9	423.4	174.3	688.8	140.4	59.1	216.0	644.8	221.6	1,056.2	
10-14	26.8	1.8	53.1	257.1	43.8	477.2	63.5	9.3	120.3	18.1	1.6	35.6	132.8	16.1	252.4	
15-19	747.8	137.3	1,393.3	5,004.5	1,711.0	8,399.4	1,586.1	463.0	2,797.2	502.0	106.7	919.6	2,472.4	717.0	4,295.6	
20-24	836.7	327.1	1,362.2	4,926.4	2,426.8	7,405.0	1,662.2	640.1	2,928.8	641.0	243.0	1,046.1	2,692.8	977.9	4,462.0	
25-29	305.2	165.7	447.3	2,176.4	1,414.5	2,878.6	788.7	347.7	1,329.4	293.1	154.6	427.0	1,440.8	573.2	2,318.3	
30-34	105.8	68.9	143.3	888.2	723.6	1,036.4	384.8	192.9	607.5	155.2	85.5	222.0	642.5	288.1	995.1	2003
35-39	45.0	38.1	52.0	400.5	395.1	405.2	191.4	103.6	290.4	84.2	49.7	116.9	369.1	188.7	543.4	
40-44	21.6	22.0	21.3	199.9	228.9	174.4	91.2	54.8	130.3	44.7	26.5	61.6	185.1	84.6	279.1	
45-54	8.4	9.4	7.4	77.8	92.0	65.6	39.4	25.2	53.6	23.0	17.2	28.1	67.8	37.3	95.8	
55-64	2.5	3.2	1.8	25.0	31.9	19.4	14.9	12.2	17.4	9.0	7.2	10.6	27.4	16.9	37.0	
65+	1.0	0.9	1.0	10.8	13.4	9.1	6.7	4.5	8.3	2.2	3.2	1.4	10.6	4.9	14.9	
TOTAL	136.7	52.7	217.4	1,122.3	577.4	1,617.9	428.2	172.3	701.5	141.6	59.4	219.1	672.2	244.4	1,087.2	
10-14	26.0	1.9	51.5	263.3	46.3	487.3	59.8	12.1	109.8	16.6	1.2	32.9	119.7	27.2	214.2	
15-19	757.4	146.7	1,402.3	5,217.4	1,840.6	8,687.4	1,562.2	474.9	2,725.0	475.0	114.9	856.3	2,467.3	677.8	4,323.7	
20-24	878.2	350.5	1,425.4	5,215.0	2,673.0	7,762.9	1,677.8	686.3	2,891.6	658.5	269.6	1,056.5	2,790.5	1,113.2	4,512.3	
25-29	337.6	186.4	491.8	2,351.1	1,553.3	3,093.3	794.8	361.4	1,332.5	294.5	152.1	432.4	1,541.8	641.3	2,459.7	
30-34	114.9	75.6	154.7	963.4	813.6	1,098.2	381.1	189.7	604.4	153.2	84.3	219.2	734.2	350.3	1,115.4	2004
35-39	49.9	41.7	58.2	447.4	442.3	452.0	191.9	108.1	287.2	89.7	61.7	116.4	389.7	196.4	578.0	
40-44	24.9	25.5	24.4	219.1	249.9	192.0	93.0	58.5	130.3	49.4	33.7	64.1	180.0	100.9	254.4	
45-54	8.7	9.4	8.0	92.2	110.6	76.4	37.3	26.3	48.4	27.7	22.3	32.4	83.8	54.0	111.0	
55-64	2.7	3.4	2.1	29.6	37.3	23.4	14.0	11.8	15.9	8.3	5.2	11.0	20.5	8.0	31.9	
65+	0.9	1.0	0.8	9.9	12.9	8.0	5.8	4.3	6.8	2.5	2.1	2.9	11.1	9.9	11.9	
TOTAL	143.6	57.4	226.7	1,196.6	638.4	1,704.8	421.4	177.1	682.4	139.8	62.9	212.3	699.9	268.8	1,117.9	
10-14	25.6	2.1	50.5	251.4	48.7	460.9	57.2	9.9	106.8	14.8	3.6	26.7	157.4	22.1	295.9	
15-19	766.1	153.2	1,412.8	5,348.8	2,073.2	8,716.3	1,613.2	511.2	2,784.1	492.4	164.2	840.9	2,665.3	775.9	4,617.5	
20-24	938.3	391.5	1,508.7	5,324.4	2,927.8	7,754.4	1,854.2	782.9	3,134.6	727.6	321.8	1,144.8	2,920.5	1,215.3	4,669.1	
25-29	364.1	206.5	524.5	2,432.2	1,722.3	3,101.1	855.5	414.0	1,404.5	307.6	180.5	430.5	1,635.7	817.9	2,472.6	
30-34	130.1	83.9	176.8	1,028.3	911.8	1,133.5	409.4	219.0	631.4	159.6	112.7	204.4	738.5	340.3	1,135.0	2005
35-39	57.1	48.1	66.2	467.7	487.3	450.1	208.5	119.9	309.5	100.7	65.9	133.7	390.9	229.4	548.5	
40-44	27.4	28.2	26.7	229.3	272.4	191.5	95.5	62.6	131.2	58.6	46.1	70.2	193.8	106.0	276.6	
45-54	10.0	11.5	8.5	93.1	116.9	72.8	42.2	28.7	55.9	27.5	20.9	33.4	75.5	54.2	94.9	
55-64	3.0	3.8	2.2	30.1	39.8	22.3	15.1	11.7	18.2	14.4	10.0	18.2	24.8	21.2	28.1	
65+	0.9	1.0	0.8	12.6	16.0	10.5	6.6	5.9	7.1	3.6	4.4	3.0	8.8	4.8	11.8	
TOTAL	151.7	63.4	236.7	1,234.3	709.9	1,712.6	444.5	194.9	710.5	148.4	77.0	215.9	747.0	305.3	1,174.6	
10-14	22.1	1.3	44.0	249.2	53.4	451.2	55.4	12.1	100.8	12.0	0.7	23.9	144.2	17.0	274.5	
15-19	750.5	155.7	1,378.4	5,617.5	2,249.7	9,073.9	1,725.0	544.1	2,981.6	413.1	97.8	748.3	2,759.8	881.1	4,703.1	
20-24	941.6	400.7	1,506.3	5,477.3	3,014.8	7,973.0	1,977.5	839.0	3,346.6	629.8	240.1	1,031.2	3,113.2	1,209.8	5,067.9	
25-29	397.0	227.9	569.1	2,515.0	1,772.2	3,212.8	930.8	456.3	1,525.5	295.6	154.9	431.4	1,765.0	795.5	2,758.1	
30-34	136.8	91.9	182.2	1,024.2	908.1	1,128.8	439.5	229.8	685.7	149.1	84.9	210.4	875.7	405.5	1,344.5	2006
35-39	60.8	48.7	72.9	483.9	515.1	456.1	228.4	131.1	339.6	87.4	52.5	120.8	434.9	212.0	652.8	
40-44	27.5	27.6	27.4	229.8	278.1	187.5	109.3	75.5	146.3	61.1	39.1	81.8	227.6	119.8	329.3	
45-54	10.8	11.8	9.8	103.6	129.0	81.9	46.4	33.0	60.1	28.0	23.3	32.1	83.6	53.2	111.3	
55-64	3.4	4.2	2.7	31.9	44.6	21.7	16.8	14.2	19.3	12.1	9.2	14.6	31.1	16.2	44.6	
65+	1.0	1.2	0.8	11.0	15.1	8.5	7.9	5.9	9.3	2.6	3.2	2.1	15.6	7.7	21.6	
TOTAL	153.1	66.0	237.0	1,275.0	741.2	1,760.9	477.0	211.0	761.3	132.1	59.2	201.2	797.3	317.3	1,262.3	

NOTE: These tables should be used only for race/ethnicity comparisons. **See Table 10 for age-specific cases and rates and Tables 3-5 for total and sex-specific cases and rates**. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. For the following years the states listed did not report age and/or race/ethnicity for most cases and their case data and population denominators were excluded: 2002 (MI, NJ); 2003 (CO, DC, NJ); 2004 (CO, DC, NJ); 2005 (CO, DC, GA, HI, NJ); 2006 (CO, HI). Differences between total rates from this table and others in the report are due to different reporting formats and above listed exclusions. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

Table 12. Gonorrhea — Reported cases and rates by state/area, ranked by rates: United States, 2006

Rank[*]	*State/Area*	*Cases*	*Rate per 100,000 Population*
1	Mississippi	7,511	257.1
2	South Carolina	10,320	242.5
3	Louisiana	10,883	240.6
4	Alabama	10,665	234.0
5	Georgia	19,669	216.8
6	North Carolina	17,312	199.4
7	Delaware	1,485	176.0
8	Missouri	10,204	175.9
9	Ohio	19,190	167.4
10	Tennessee	9,694	162.6
11	Illinois	20,186	158.2
12	Arkansas	4,306	154.9
13	Michigan	15,677	154.9
14	Oklahoma	4,951	139.5
15	Indiana	8,732	139.2
16	Florida	23,976	134.8
17	Texas	30,449	133.2
18	Maryland	7,328	130.8
19	Wisconsin	6,927	125.1
	U.S. TOTAL[†]	**358,366**	**120.9**
20	Nevada	2,791	115.6
21	Arizona	5,949	100.2
22	Alaska	630	94.9
23	California	33,740	93.4
24	Pennsylvania	11,466	92.2
25	New York	17,459	90.7
26	New Mexico	1,733	89.9
27	Virginia	6,476	85.6
28	Nebraska	1,433	81.5
29	Kansas	2,210	80.5
30	Colorado	3,695	79.2
31	Kentucky	3,277	78.5
32	Connecticut	2,610	74.4
33	Hawaii	885	69.4
34	Washington	4,231	67.3
35	Iowa	1,966	66.3
36	Minnesota	3,303	64.4
37	New Jersey	5,492	63.0
38	West Virginia	953	52.5
39	South Dakota	367	47.3
40	Rhode Island	508	47.2
41	Oregon	1,461	40.1
42	Massachusetts	2,429	38.0
43	Utah	888	36.0
44	North Dakota	153	24.0
45	Wyoming	120	23.6
46	Montana	194	20.7
	YEAR 2010 TARGET		**19.0**
47	Idaho	206	14.4
48	New Hampshire	180	13.7
49	Vermont	72	11.6
50	Maine	137	10.4

[*]States were ranked in descending order by rate, number of cases, and alphabetically by state.

[†]Total includes cases reported by the District of Columbia with 1,887 cases and a rate of 342.8, but excludes outlying areas (Guam with 98 cases and rate of 58.1, Puerto Rico with 302 cases and rate of 7.7, and Virgin Islands with 34 cases and rate of 31.3).

Table 13. Gonorrhea — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	10,118	9,303	8,206	9,406	10,665	225.5	206.7	181.1	206.4	234.0
Alaska	641	573	567	600	630	99.6	88.3	86.5	90.4	94.9
Arizona	3,795	3,580	4,065	4,951	5,949	69.6	64.1	70.8	83.4	100.2
Arkansas	4,584	4,251	4,137	4,476	4,306	169.1	156.0	150.3	161.1	154.9
California	24,606	25,963	30,155	34,338	33,740	70.1	73.2	84.0	95.0	93.4
Colorado	3,511	2,854	3,054	3,224	3,695	77.9	62.7	66.4	69.1	79.2
Connecticut	3,241	3,114	2,862	2,750	2,610	93.7	89.4	81.7	78.3	74.4
Delaware	1,576	1,128	894	913	1,485	195.2	138.0	107.7	108.2	176.0
District of Columbia	2,669	2,508	2,568	2,146	1,887	467.5	444.4	463.9	389.8	342.8
Florida	21,348	18,974	18,580	20,225	23,976	127.7	111.5	106.8	113.7	134.8
Georgia	18,383	17,686	15,783	15,860	19,669	214.7	203.6	178.8	174.8	216.8
Hawaii	740	1,263	1,193	1,024	885	59.4	100.4	94.5	80.3	69.4
Idaho	94	68	103	119	206	7.0	5.0	7.4	8.3	14.4
Illinois	24,026	21,817	20,597	20,019	20,186	190.7	172.4	162.0	156.8	158.2
Indiana	7,395	6,681	6,851	8,094	8,732	120.1	107.8	109.8	129.1	139.2
Iowa	1,480	1,554	1,249	1,606	1,966	50.4	52.8	42.3	54.1	66.3
Kansas	2,744	2,647	2,542	2,605	2,210	101.0	97.2	92.9	94.9	80.5
Kentucky	3,772	3,578	2,758	2,935	3,277	92.2	86.9	66.5	70.3	78.5
Louisiana	11,387	11,850	10,538	9,572	10,883	254.0	263.5	233.4	211.6	240.6
Maine	142	233	210	142	137	11.0	17.8	15.9	10.7	10.4
Maryland	9,355	8,032	8,297	7,035	7,328	171.4	145.8	149.3	125.6	130.8
Massachusetts	3,242	2,901	3,057	2,537	2,429	50.4	45.1	47.6	39.6	38.0
Michigan	14,770	13,965	17,376	17,684	15,677	147.0	138.5	171.8	174.7	154.9
Minnesota	3,049	3,202	2,957	3,482	3,303	60.7	63.3	58.0	67.8	64.4
Mississippi	6,875	6,328	7,163	7,171	7,511	239.4	219.6	246.7	245.5	257.1
Missouri	8,952	8,792	9,218	9,455	10,204	157.8	154.1	160.2	163.0	175.9
Montana	123	122	88	158	194	13.5	13.3	9.5	16.9	20.7
Nebraska	1,564	1,623	1,147	1,158	1,433	90.4	93.3	65.6	65.8	81.5
Nevada	1,988	2,221	3,078	2,880	2,791	91.5	99.1	131.8	119.3	115.6
New Hampshire	120	125	133	177	180	9.4	9.7	10.2	13.5	13.7
New Jersey	7,894	7,944	6,696	5,722	5,492	91.9	92.0	77.0	65.6	63.0
New Mexico	1,462	1,169	1,306	1,552	1,733	78.8	62.4	68.6	80.5	89.9
New York	21,841	22,166	18,737	17,717	17,459	114.0	115.5	97.5	92.0	90.7
North Carolina	15,531	15,116	15,194	15,072	17,312	186.7	179.8	177.9	173.6	199.4
North Dakota	72	103	110	128	153	11.4	16.3	17.3	20.1	24.0
Ohio	22,008	22,537	20,467	20,985	19,190	192.7	197.1	178.6	183.1	167.4
Oklahoma	4,661	4,552	4,453	5,228	4,951	133.4	129.6	126.4	147.4	139.5
Oregon	909	1,000	1,302	1,562	1,461	25.8	28.1	36.2	42.9	40.1
Pennsylvania	13,294	11,866	11,236	11,222	11,466	107.8	96.0	90.6	90.3	92.2
Rhode Island	900	973	816	438	508	84.1	90.4	75.5	40.7	47.2
South Carolina	9,152	8,518	9,171	8,561	10,320	222.8	205.4	218.5	201.2	242.5
South Dakota	263	226	304	351	367	34.6	29.6	39.4	45.2	47.3
Tennessee	9,348	8,519	8,475	8,605	9,694	161.2	145.8	143.6	144.3	162.6
Texas	26,988	24,595	24,371	26,110	30,449	123.9	111.2	108.4	114.2	133.2
Utah	374	412	603	727	888	16.1	17.5	25.2	29.4	36.0
Vermont	98	97	86	60	72	15.9	15.7	13.8	9.6	11.6
Virginia	10,462	9,066	8,565	8,346	6,476	143.4	122.7	114.8	110.3	85.6
Washington	2,925	2,753	2,810	3,739	4,231	48.2	44.9	45.3	59.5	67.3
West Virginia	974	847	892	770	953	54.1	46.8	49.1	42.4	52.5
Wisconsin	6,341	5,663	5,053	5,869	6,927	116.5	103.5	91.7	106.0	125.1
Wyoming	65	46	59	87	120	13.0	9.2	11.6	17.1	23.6
U.S. TOTAL	351,852	335,104	330,132	339,593	358,366	122.0	115.2	112.4	114.6	120.9
Northeast	50,772	49,419	43,833	40,765	40,353	93.6	90.8	80.3	74.6	73.8
Midwest	92,664	88,810	87,871	91,436	90,348	142.2	135.8	133.7	138.6	136.9
South	167,183	154,851	150,045	152,431	171,142	161.8	148.1	141.6	141.8	159.2
West	41,233	42,024	48,383	54,961	56,523	62.8	63.2	71.8	80.5	82.8
Guam	49	65	114	106	98	30.4	39.7	68.6	62.9	58.1
Puerto Rico	411	276	267	328	302	10.6	7.1	6.9	8.4	7.7
Virgin Islands	49	91	75	30	34	44.5	83.6	68.9	27.6	31.3
OUTLYING AREAS	509	432	456	464	434	12.3	10.4	10.9	11.1	10.4
TOTAL	352,361	335,536	330,588	340,057	358,800	120.5	113.8	111.0	113.1	119.4

Table 14. Gonorrhea — Women – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	4,974	4,583	3,673	4,494	5,983	214.6	197.4	157.4	191.5	255.0
Alaska	353	339	337	349	356	113.6	108.1	106.5	108.9	111.1
Arizona	1,659	1,636	1,787	2,338	2,847	60.8	58.7	62.3	78.8	96.0
Arkansas	2,388	2,108	2,032	2,252	2,182	172.4	151.5	144.7	159.0	154.1
California	10,857	11,912	13,620	15,827	15,688	61.7	67.0	75.8	87.5	86.7
Colorado	1,643	1,529	1,656	1,619	1,879	73.5	67.8	72.6	70.1	81.4
Connecticut	1,910	1,910	1,756	1,590	1,478	107.2	106.6	97.4	88.1	81.9
Delaware	858	602	508	515	829	206.7	143.5	119.3	119.2	191.8
District of Columbia	1,224	1,137	1,293	1,029	808	406.3	381.2	443.1	355.6	279.2
Florida	10,373	9,419	9,371	10,204	12,427	121.4	108.5	105.6	112.6	137.1
Georgia	9,306	9,137	8,119	7,819	10,002	214.3	207.8	181.9	170.5	218.1
Hawaii	394	723	680	619	476	63.5	115.3	107.5	96.8	74.4
Idaho	49	18	42	57	113	7.3	2.6	6.0	8.0	15.9
Illinois	12,273	11,624	11,510	10,998	10,926	191.1	180.4	177.9	169.4	168.3
Indiana	3,996	3,610	3,550	4,453	4,806	127.5	114.6	112.0	139.9	151.0
Iowa	821	869	736	885	1,179	54.9	58.1	49.1	58.8	78.3
Kansas	1,556	1,522	1,565	1,645	1,327	113.4	110.8	113.6	119.1	96.1
Kentucky	1,936	1,845	1,415	1,530	1,709	92.6	87.8	67.0	72.1	80.5
Louisiana	5,861	6,076	5,450	4,761	5,605	253.7	262.6	234.7	204.9	241.2
Maine	44	84	84	61	54	6.6	12.6	12.5	9.0	8.0
Maryland	4,592	4,166	4,327	3,620	3,850	162.9	146.5	150.9	125.4	133.4
Massachusetts	1,579	1,342	1,531	1,320	1,214	47.5	40.4	46.3	40.0	36.8
Michigan	7,974	7,823	9,614	10,161	8,900	155.9	152.5	186.9	197.5	173.0
Minnesota	1,688	1,784	1,712	1,909	1,814	66.7	70.0	66.6	73.9	70.2
Mississippi	4,201	3,757	4,362	4,234	4,400	283.3	253.0	291.9	281.8	292.9
Missouri	4,810	4,794	5,139	5,334	5,752	165.2	164.1	174.6	179.9	194.0
Montana	75	74	54	102	123	16.4	16.1	11.6	21.8	26.2
Nebraska	909	924	656	688	865	103.8	105.0	74.2	77.4	97.3
Nevada	965	1,062	1,417	1,343	1,257	90.5	96.6	123.7	113.3	106.0
New Hampshire	51	57	54	97	97	7.9	8.7	8.2	14.6	14.6
New Jersey	3,958	4,550	3,607	3,077	2,829	89.6	102.6	80.8	68.9	63.3
New Mexico	740	598	749	884	1,003	78.5	62.8	77.4	90.2	102.3
New York	11,141	11,296	9,720	9,031	8,479	112.5	113.9	98.0	91.0	85.4
North Carolina	7,585	7,383	7,384	7,545	8,718	178.9	172.6	170.0	171.0	197.6
North Dakota	40	59	72	76	86	12.6	18.6	22.7	23.8	27.0
Ohio	11,944	12,390	11,144	11,592	10,508	203.5	211.1	189.6	197.3	178.8
Oklahoma	2,566	2,562	2,471	3,018	2,780	144.7	143.9	138.6	168.2	154.9
Oregon	357	389	567	661	609	20.1	21.7	31.4	36.1	33.3
Pennsylvania	7,200	6,644	6,295	6,271	6,219	113.0	104.2	98.5	98.0	97.2
Rhode Island	484	517	478	227	273	87.2	92.7	85.4	40.8	49.1
South Carolina	4,357	4,369	5,007	4,601	5,406	206.3	205.3	232.6	211.0	247.9
South Dakota	148	133	178	196	215	38.6	34.6	45.9	50.2	55.1
Tennessee	4,564	4,263	4,327	4,395	5,104	153.6	142.6	143.5	144.5	167.8
Texas	14,075	12,643	12,433	13,827	15,619	128.5	113.8	110.1	120.5	136.2
Utah	150	153	266	319	369	13.0	13.1	22.4	25.9	30.0
Vermont	56	48	53	26	39	17.8	15.2	16.8	8.2	12.3
Virginia	5,445	4,809	4,650	4,402	3,287	146.7	128.1	122.7	114.5	85.5
Washington	1,197	1,167	1,229	1,622	1,938	39.3	38.0	39.5	51.5	61.5
West Virginia	567	464	470	427	488	61.3	50.0	50.6	46.0	52.6
Wisconsin	3,717	3,299	2,953	3,433	4,047	135.1	119.3	106.1	122.9	144.8
Wyoming	38	28	39	54	71	15.3	11.2	15.5	21.4	28.1
U.S. TOTAL	179,648	174,230	172,142	177,537	187,033	122.5	117.9	115.4	118.0	124.3
Northeast	26,423	26,448	23,578	21,700	20,682	94.4	94.3	83.9	77.2	73.6
Midwest	49,876	48,831	48,829	51,370	50,425	150.3	146.7	146.1	153.2	150.4
South	84,872	79,323	77,292	78,673	89,197	161.1	149.0	143.4	144.0	163.2
West	18,477	19,628	22,443	25,794	26,729	56.2	59.1	66.6	75.6	78.3
Guam	26	39	70	71	49	33.0	48.7	86.0	85.9	59.3
Puerto Rico	230	121	150	194	152	11.5	6.0	7.4	9.5	7.5
Virgin Islands	38	65	48	18	23	64.2	114.3	84.4	31.7	40.5
OUTLYING AREAS	294	225	268	283	224	13.7	10.5	12.4	13.0	10.3
TOTAL	179,942	174,455	172,410	177,820	187,257	120.9	116.4	114.0	116.5	122.7

NOTE: Cases reported with unknown sex are not included in this table.

Table 15. Gonorrhea — Men – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	5,131	4,705	4,526	4,892	4,678	236.5	215.9	206.1	221.2	211.5
Alaska	288	234	230	251	274	86.5	69.8	67.9	73.1	79.8
Arizona	2,136	1,942	2,274	2,610	3,097	78.4	69.6	79.1	87.8	104.2
Arkansas	2,194	2,141	2,104	2,223	2,122	165.6	160.5	156.0	163.1	155.7
California	13,586	13,965	16,440	18,348	17,856	77.6	78.8	91.8	101.7	99.0
Colorado	1,868	1,325	1,398	1,605	1,816	82.3	57.7	60.2	68.1	77.1
Connecticut	1,331	1,204	1,106	1,160	1,132	79.3	71.2	65.1	68.0	66.4
Delaware	718	526	386	398	656	183.0	132.1	95.4	96.8	159.5
District of Columbia	1,436	1,361	1,269	1,113	1,072	532.5	511.5	484.9	426.2	410.5
Florida	10,975	9,555	9,209	10,021	11,546	134.3	114.6	108.0	114.9	132.3
Georgia	9,013	8,487	7,596	7,885	9,510	213.7	198.0	174.0	175.7	211.9
Hawaii	346	540	513	405	409	55.4	85.6	81.4	63.7	64.3
Idaho	45	50	60	60	92	6.7	7.3	8.6	8.4	12.8
Illinois	11,750	10,192	9,087	9,020	9,260	190.2	164.1	145.5	143.8	147.7
Indiana	3,372	3,040	3,270	3,616	3,895	111.5	99.8	106.6	117.1	126.1
Iowa	658	680	511	721	787	45.6	47.0	35.1	49.4	53.9
Kansas	1,188	1,125	977	960	883	88.4	83.3	71.9	70.4	64.8
Kentucky	1,834	1,727	1,338	1,399	1,561	91.6	85.6	65.8	68.2	76.1
Louisiana	5,466	5,710	5,029	4,744	5,186	251.6	261.6	229.2	215.7	235.8
Maine	98	149	126	81	83	15.6	23.4	19.6	12.5	12.9
Maryland	4,756	3,858	3,969	3,410	3,461	180.2	144.7	147.5	125.7	127.6
Massachusetts	1,663	1,552	1,524	1,216	1,212	53.6	49.9	49.1	39.2	39.1
Michigan	6,796	6,141	7,762	7,468	6,738	137.7	124.0	156.2	150.1	135.4
Minnesota	1,361	1,418	1,245	1,573	1,489	54.7	56.5	49.2	61.7	58.4
Mississippi	2,674	2,571	2,801	2,937	3,111	192.5	184.1	198.8	207.0	219.3
Missouri	4,142	3,998	4,079	4,121	4,452	150.0	143.7	145.1	145.3	157.0
Montana	47	47	33	56	71	10.4	10.3	7.1	12.0	15.2
Nebraska	653	695	488	467	552	76.5	80.9	56.5	53.7	63.5
Nevada	1,022	1,158	1,658	1,535	1,533	92.3	101.4	139.5	124.9	124.7
New Hampshire	69	68	79	80	83	11.0	10.7	12.3	12.4	12.9
New Jersey	3,930	3,389	3,089	2,645	2,657	94.2	80.6	72.9	62.3	62.5
New Mexico	716	567	557	668	730	78.5	61.5	59.5	70.4	77.0
New York	10,688	10,813	8,985	8,680	8,976	115.5	116.6	96.6	93.1	96.2
North Carolina	7,942	7,733	7,810	7,527	8,594	194.6	187.2	186.0	176.2	201.2
North Dakota	32	44	38	52	67	10.1	13.9	12.0	16.4	21.1
Ohio	9,819	9,856	9,046	9,035	8,493	176.8	177.1	162.1	161.7	152.0
Oklahoma	2,095	1,990	1,982	2,210	2,171	121.8	114.9	113.9	126.0	123.8
Oregon	552	611	735	901	852	31.6	34.5	41.1	49.8	47.0
Pennsylvania	6,094	5,214	4,941	4,950	5,247	102.1	87.1	82.2	82.1	87.0
Rhode Island	416	456	338	211	235	80.8	88.0	64.8	40.6	45.2
South Carolina	4,766	4,118	4,136	3,925	4,899	238.9	204.0	202.2	189.2	236.2
South Dakota	115	93	126	155	152	30.4	24.5	32.9	40.2	39.4
Tennessee	4,784	4,256	4,148	4,209	4,590	169.3	149.2	143.7	144.1	157.2
Texas	12,884	11,932	11,902	12,269	14,812	119.0	108.4	106.3	107.7	130.1
Utah	223	259	337	408	519	19.2	21.9	28.1	32.9	41.8
Vermont	42	49	33	34	33	13.9	16.1	10.8	11.1	10.8
Virginia	5,017	4,237	3,904	3,939	3,187	140.1	116.7	106.3	105.8	85.6
Washington	1,728	1,586	1,581	2,117	2,293	57.2	51.9	51.1	67.4	73.0
West Virginia	406	380	421	343	465	46.3	43.0	47.4	38.6	52.3
Wisconsin	2,612	2,341	2,087	2,431	2,870	97.1	86.5	76.5	88.7	104.7
Wyoming	27	18	20	33	49	10.8	7.1	7.8	12.9	19.1
U.S. TOTAL	171,504	160,106	157,303	161,117	170,508	121.1	111.9	108.8	110.4	116.8
Northeast	24,331	22,894	20,221	19,057	19,658	92.7	86.8	76.4	71.8	74.1
Midwest	42,498	39,623	38,716	39,619	39,638	133.0	123.3	119.8	122.1	122.2
South	82,091	75,287	72,530	73,444	81,621	162.1	146.7	139.3	138.9	154.4
West	22,584	22,302	25,836	28,997	29,591	68.9	67.1	76.7	84.9	86.6
Guam	23	26	44	35	49	28.0	31.1	51.9	40.7	57.0
Puerto Rico	181	155	117	134	150	9.7	8.3	6.3	7.1	8.0
Virgin Islands	11	26	27	12	11	21.6	50.0	52.0	23.1	21.2
OUTLYING AREAS	215	207	188	181	210	10.8	10.3	9.4	9.0	10.4
TOTAL	171,719	160,313	157,491	161,298	170,718	119.5	110.5	107.5	109.0	115.3

NOTE: Cases reported with unknown sex are not included in this table.

Table 16. Gonorrhea — Counties and independent cities* ranked by number of reported cases: United States, 2006

Rank†	County/Independent City	Cases	Rate per 100,000 Population	Cumulative Percent
1	Cook County, IL	12,605	237.7	3
2	Los Angeles County, CA	11,162	112.3	6
3	Wayne County, MI	6,851	342.9	8
4	Harris County, TX	6,193	167.7	10
5	Philadelphia County, PA	5,218	356.6	11
6	Milwaukee County, WI	4,917	533.5	13
7	Dallas County, TX	4,649	201.7	14
8	Cuyahoga County, OH	4,347	325.5	15
9	Fulton County, GA	4,240	463.1	16
10	Marion County, IN	4,157	481.6	17
11	Shelby County, TN	4,113	452.5	19
12	Maricopa County, AZ	3,997	109.9	20
13	Kings County, NY	3,871	155.7	21
14	Baltimore (City), MD	3,332	524.1	22
15	Franklin County, OH	3,105	284.7	23
16	Hamilton County, OH	2,973	368.6	23
17	St Louis (City), MO	2,828	821.2	24
18	San Diego County, CA	2,767	94.3	25
19	Jackson County, MO	2,764	416.9	26
20	Tarrant County, TX	2,760	170.3	27
21	Duval County, FL	2,632	318.5	27
22	Bexar County, TX	2,572	169.4	28
23	De Kalb County, GA	2,571	379.2	29
24	San Francisco County, CA	2,500	338.1	29
25	Clark County, NV	2,478	144.9	30
26	Orange County, FL	2,450	239.5	31
27	New York County, NY	2,405	151.0	31
28	Broward County, FL	2,387	134.3	32
29	Alameda County, CA	2,269	156.6	33
30	St Louis County, MO	2,218	220.8	33
31	Bronx County, NY	2,135	157.3	34
32	Jefferson County, AL	2,122	322.9	35
33	San Bernardino County, CA	2,115	107.7	35
34	Sacramento County, CA	2,087	153.1	36
35	Mecklenburg County, NC	2,073	260.3	36
36	Oklahoma County, OK	2,042	298.3	37
37	Travis County, TX	2,018	227.2	37
38	King County, WA	1,937	108.0	38
39	Miami-Dade County, FL	1,892	79.6	38
40	Washington, DC	1,887	342.8	39
41	Mobile County, AL	1,808	450.4	40
42	Erie County, NY	1,791	192.4	40
43	Hillsborough County, FL	1,759	155.4	41
44	Queens County, NY	1,719	76.7	41
45	Hennepin County, MN	1,688	150.8	41
46	Pinellas County, FL	1,643	177.0	42
47	Genesee County, MI	1,619	364.7	42
48	Allegheny County, PA	1,619	131.0	43
49	Wake County, NC	1,615	215.7	43
50	East Baton Rouge County, LA	1,603	389.6	44
51	Essex County, NJ	1,556	196.7	44
52	Montgomery County, OH	1,510	275.8	45
53	Jefferson County, KY	1,489	212.8	45
54	Prince George's County, MD	1,486	175.6	45
55	Fresno County, CA	1,485	169.2	46
56	Caddo County, LA	1,435	571.0	46
57	Richland County, SC	1,415	416.1	47
58	Monroe County, NY	1,367	186.4	47
59	Davidson County, TN	1,312	228.1	47
60	Hinds County, MS	1,307	524.2	48
61	Kern County, CA	1,307	172.7	48
62	Kent County, MI	1,302	218.2	48
63	Montgomery County, AL	1,300	586.6	49
64	Charleston County, SC	1,295	392.0	49
65	Denver County, CO	1,281	229.6	50
66	Guilford County, NC	1,085	244.6	50
67	Pulaski County, AR	1,077	293.9	50
68	Palm Beach County, FL	1,077	84.9	50

*Accounting for 50% of reported gonorrhea cases.

†Counties and independent cities were ranked in descending order by number of cases reported in 2006.

Table 17. Gonorrhea — Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	8,731	8,825	7,355	7,838	10,223	192.8	191.4	156.2	159.4	207.9
Austin-Round Rock, TX	1,656	1,458	1,472	1,706	2,446	122.7	105.8	104.2	117.5	168.4
Baltimore-Towson, MD	6,213	5,382	5,256	4,779	4,653	238.8	205.7	199.2	180.0	175.2
Birmingham-Hoover, AL	2,693	2,212	2,377	2,381	2,444	252.1	206.2	219.6	218.4	224.2
Boston-Cambridge-Quincy, MA-NH	2,191	1,818	1,998	1,684	1,542	49.3	40.9	45.2	38.2	35.0
Buffalo-Cheektowaga-Tonawanda, NY	2,224	1,809	1,670	1,926	2,068	191.2	156.0	144.7	167.8	180.2
Charlotte-Gastonia-Concord, NC-SC	3,146	3,130	2,998	3,330	3,388	223.1	217.8	203.3	218.9	222.7
Chicago-Naperville-Joliet, IL-IN-WI	19,312	17,080	15,684	14,857	15,127	208.0	183.0	167.0	157.3	160.2
Cincinnati-Middletown, OH-KY-IN	4,065	4,206	3,455	3,927	3,862	199.2	205.4	167.9	189.7	186.5
Cleveland-Elyria-Mentor, OH	5,489	5,338	4,472	4,641	4,663	255.6	249.5	209.3	218.3	219.3
Columbus, OH	3,268	2,963	3,004	3,445	3,303	196.9	176.9	177.3	201.6	193.3
Dallas-Fort Worth-Arlington, TX	7,896	7,570	7,119	8,416	8,365	144.0	135.4	124.9	144.6	143.7
Denver-Aurora, CO	2,783	2,136	2,232	2,147	2,253	122.0	92.8	95.8	91.0	95.5
Detroit-Warren-Livonia, MI	8,622	7,173	9,299	10,766	8,535	192.3	160.0	207.0	239.9	190.2
Hartford-West Hartford-East Hartford, CT	1,281	1,030	933	993	988	109.7	87.4	78.8	83.6	83.1
Houston-Baytown-Sugar Land, TX	6,337	5,191	5,525	5,213	7,318	127.1	102.3	106.7	98.7	138.6
Indianapolis, IN	3,660	3,349	3,510	4,142	4,410	232.4	209.9	216.5	252.5	268.8
Jacksonville, FL	3,078	2,574	2,197	2,578	2,954	261.4	214.0	179.3	206.5	236.6
Kansas City, MO-KS	3,827	3,694	3,832	3,769	3,822	202.6	193.9	199.0	193.5	196.2
Las Vegas-Paradise, NV	1,757	1,968	2,645	2,487	2,478	115.4	124.8	160.2	145.4	144.9
Los Angeles-Long Beach-Santa Ana, CA	9,073	9,753	11,103	12,697	12,210	71.2	76.0	85.9	98.2	94.5
Louisville, KY-IN	1,517	1,617	1,484	1,551	1,749	128.3	135.9	123.6	128.3	144.7
Memphis, TN-MS-AR	4,623	3,764	3,832	3,782	4,665	375.7	303.7	306.5	299.9	370.0
Miami-Fort Lauderdale-Miami Beach, FL	4,816	4,455	4,622	4,497	5,356	92.0	84.2	86.2	82.9	98.8
Milwaukee-Waukesha-West Allis, WI	4,687	3,998	3,311	4,031	5,006	309.9	264.0	218.4	266.4	330.9
Minneapolis-St. Paul-Bloomington, MN-WI	2,738	2,781	2,439	2,920	2,780	89.6	90.2	78.3	92.9	88.5
Nashville-Davidson-Murfreesboro, TN	1,764	1,888	1,602	1,474	1,734	130.4	137.7	114.8	103.6	121.9
New Orleans-Metairie-Kenner, LA	3,679	3,956	3,316	2,609	1,962	279.7	300.3	251.3	197.7	148.7
New York-Newark-Edison, NY-NJ-PA	19,507	20,480	16,915	15,533	14,949	104.9	109.9	90.4	82.9	79.7
Oklahoma City, OK	2,090	2,050	2,153	2,548	2,315	186.4	181.0	188.1	220.3	200.1
Orlando, FL	2,502	2,165	2,285	2,848	3,393	142.8	120.1	122.7	147.3	175.5
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	10,087	8,502	7,818	7,719	8,163	175.4	147.3	134.8	132.6	140.2
Phoenix-Mesa-Scottsdale, AZ	NA	2,795	3,161	3,133	4,260	NA	77.8	85.1	81.1	110.2
Pittsburgh, PA	2,472	2,035	1,799	2,157	2,057	102.2	84.4	74.9	90.4	86.2
Portland-Vancouver-Beaverton, OR-WA	818	858	1,173	1,393	1,128	40.6	42.1	56.8	66.5	53.8
Providence-New Bedford-Fall River, RI-MA	1,052	1,136	1,048	650	693	65.2	70.0	64.3	40.1	42.7
Richmond, VA	2,746	2,319	2,160	2,361	1,778	243.8	203.7	187.1	200.8	151.2
Riverside-San Bernardino-Ontario, CA	2,245	2,512	2,631	3,012	2,994	63.9	69.0	69.4	77.0	76.6
Rochester, NY	1,821	1,897	1,900	1,899	1,457	174.6	182.2	182.4	182.8	140.2
Sacramento-Arden-Arcade-Roseville, CA	1,514	1,859	2,066	2,450	2,235	78.4	94.1	102.4	120.0	109.4
Salt Lake City, UT	261	276	371	460	623	26.2	27.5	36.4	44.5	60.2
San Antonio, TX	2,078	2,333	2,183	2,300	2,701	116.3	128.1	117.7	121.7	142.9
San Diego-Carlsbad-San Marcos, CA	2,132	2,007	2,379	2,695	2,767	73.3	68.5	81.1	91.9	94.3
San Francisco-Oakland-Fremont, CA	5,070	4,394	4,967	5,713	6,029	121.3	105.7	119.6	137.6	145.2
San Jose-Sunnyvale-Santa Clara, CA	516	740	1,084	1,055	1,065	29.7	42.7	62.2	60.1	60.7
Seattle-Tacoma-Bellevue, WA	2,288	2,027	1,883	2,704	3,079	73.2	64.5	59.5	84.4	96.1
St. Louis, MO-IL	5,797	5,600	5,719	6,391	6,547	212.4	204.7	206.9	230.0	235.6
Tampa-St. Petersburg-Clearwater, FL	3,679	3,160	2,801	2,910	3,667	147.7	124.8	108.2	109.9	138.5
Virginia Beach-Norfolk-Newport News, VA-NC	4,812	4,201	3,812	3,355	2,544	298.3	256.6	231.8	203.7	154.4
Washington-Arlington-Alexandria, DC-VA-MD-WV	5,977	5,262	5,803	4,497	4,358	118.9	103.4	112.9	86.2	83.6
U.S. MSA TOTAL	210,590	199,726	194,853	202,369	209,106	139.1	127.8	123.4	126.9	131.1

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 18. Gonorrhea — Women – Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	3,967	4,177	3,563	3,567	5,026	173.2	179.6	150.3	144.1	203.0
Austin-Round Rock, TX	815	644	692	830	1,134	122.8	95.4	100.1	116.6	159.4
Baltimore-Towson, MD	3,063	2,793	2,710	2,426	2,470	227.0	206.0	198.2	176.5	179.7
Birmingham-Hoover, AL	1,354	1,100	1,060	1,133	1,511	244.3	197.9	189.2	200.9	267.9
Boston-Cambridge-Quincy, MA-NH	1,017	771	937	793	728	44.3	33.7	41.2	35.0	32.1
Buffalo-Cheektowaga-Tonawanda, NY	1,167	974	920	1,079	1,153	192.9	161.7	153.4	181.2	193.6
Charlotte-Gastonia-Concord, NC-SC	1,461	1,492	1,413	1,604	1,584	203.7	204.4	188.6	207.8	205.2
Chicago-Naperville-Joliet, IL-IN-WI	9,585	8,804	8,546	7,948	7,853	202.3	185.1	178.7	165.3	163.4
Cincinnati-Middletown, OH-KY-IN	2,274	2,371	2,038	2,274	2,465	217.0	226.0	193.3	214.8	232.8
Cleveland-Elyria-Mentor, OH	2,688	2,620	2,192	2,264	2,277	240.2	235.3	197.2	204.8	206.0
Columbus, OH	1,746	1,569	1,475	1,896	1,758	206.9	184.5	171.8	219.0	203.1
Dallas-Fort Worth-Arlington, TX	3,979	3,822	3,547	4,135	4,129	144.9	136.9	124.7	142.6	142.3
Denver-Aurora, CO	1,251	1,091	1,144	996	1,044	109.9	95.2	98.7	84.9	89.0
Detroit-Warren-Livonia, MI	4,524	3,807	4,850	6,079	4,613	196.5	165.5	210.5	264.4	200.7
Hartford-West Hartford-East Hartford, CT	749	614	533	520	521	124.5	101.2	87.3	85.0	85.1
Houston-Baytown-Sugar Land, TX	3,189	2,509	2,813	3,016	3,806	127.6	98.8	108.6	114.2	144.1
Indianapolis, IN	1,847	1,659	1,698	2,163	2,297	229.9	204.1	205.7	259.1	275.1
Jacksonville, FL	1,413	1,201	1,083	1,240	1,506	234.4	195.1	173.0	194.5	236.2
Kansas City, MO-KS	1,917	1,890	2,027	2,035	2,099	198.6	194.6	206.8	205.5	212.0
Las Vegas-Paradise, NV	848	931	1,206	1,163	1,123	113.4	120.2	148.7	138.4	133.6
Los Angeles-Long Beach-Santa Ana, CA	3,879	4,371	4,997	5,687	5,657	60.3	67.6	76.6	87.2	86.8
Louisville, KY-IN	722	767	720	740	887	118.7	125.6	116.9	119.6	143.3
Memphis, TN-MS-AR	2,273	1,860	1,926	1,990	2,548	356.0	289.8	297.6	305.6	391.3
Miami-Fort Lauderdale-Miami Beach, FL	2,205	2,114	2,307	2,317	2,708	81.7	77.6	83.5	83.0	97.0
Milwaukee-Waukesha-West Allis, WI	2,713	2,295	1,906	2,298	2,923	348.6	295.0	244.9	295.8	376.3
Minneapolis-St. Paul-Bloomington, MN-WI	1,499	1,508	1,373	1,548	1,486	97.0	96.8	87.3	97.7	93.8
Nashville-Davidson-Murfreesboro, TN	781	873	742	661	794	113.3	125.4	104.9	91.8	110.2
New Orleans-Metairie-Kenner, LA	1,721	1,961	1,606	1,287	965	251.1	286.0	234.0	187.8	140.8
New York-Newark-Edison, NY-NJ-PA	9,755	10,650	8,821	7,784	7,015	101.0	110.2	91.0	80.2	72.3
Oklahoma City, OK	1,142	1,138	1,181	1,486	1,275	200.2	197.7	203.8	253.5	217.5
Orlando, FL	1,212	1,039	1,063	1,286	1,688	136.5	113.8	112.9	131.6	172.7
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	5,288	4,593	4,189	4,219	4,257	177.2	153.5	139.5	140.0	141.3
Phoenix-Mesa-Scottsdale, AZ	NA	1,254	1,373	1,456	2,014	NA	70.3	74.5	76.0	105.2
Pittsburgh, PA	1,454	1,192	1,063	1,216	1,174	115.3	94.9	85.0	97.9	94.6
Portland-Vancouver-Beaverton, OR-WA	315	331	491	551	436	31.1	32.3	47.4	52.4	41.5
Providence-New Bedford-Fall River, RI-MA	570	603	607	365	374	68.1	71.7	72.0	43.5	44.6
Richmond, VA	1,573	1,260	1,187	1,256	824	270.3	214.6	199.7	207.8	136.3
Riverside-San Bernardino-Ontario, CA	1,129	1,289	1,323	1,572	1,602	64.3	70.8	69.8	80.5	82.1
Rochester, NY	929	982	919	1,006	748	173.4	183.5	172.0	188.9	140.5
Sacramento-Arden-Arcade-Roseville, CA	811	942	1,049	1,307	1,164	82.6	93.9	102.3	125.9	112.1
Salt Lake City, UT	86	91	143	183	246	17.4	18.3	28.4	35.8	48.1
San Antonio, TX	1,083	1,152	1,109	1,155	1,412	118.6	124.0	117.2	119.8	146.4
San Diego-Carlsbad-San Marcos, CA	718	739	936	1,108	1,158	49.7	50.8	64.2	76.3	79.7
San Francisco-Oakland-Fremont, CA	1,857	1,578	1,580	2,052	2,122	87.8	75.2	75.4	97.9	101.2
San Jose-Sunnyvale-Santa Clara, CA	196	328	467	457	488	22.8	38.4	54.6	53.1	56.7
Seattle-Tacoma-Bellevue, WA	853	732	717	1,060	1,300	54.4	46.5	45.2	66.1	81.1
St. Louis, MO-IL	3,174	3,037	3,213	3,638	3,718	224.5	214.5	225.0	253.5	259.1
Tampa-St. Petersburg-Clearwater, FL	1,767	1,498	1,474	1,542	2,064	137.4	114.7	110.6	113.3	151.6
Virginia Beach-Norfolk-Newport News, VA-NC	2,287	2,111	1,990	1,717	1,305	279.9	254.6	239.1	205.6	156.3
Washington-Arlington-Alexandria, DC-VA-MD-WV	2,762	2,520	2,973	2,269	2,048	107.2	96.6	113.1	85.1	76.8
U.S. MSA TOTAL	103,608	99,647	97,892	102,374	105,497	134.1	125.2	121.8	126.2	130.1

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 19. Gonorrhea — Men – Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	4,729	4,616	3,750	4,183	5,083	211.2	202.0	160.4	171.3	208.2
Austin-Round Rock, TX	841	811	768	870	1,310	122.7	115.4	106.5	117.4	176.8
Baltimore-Towson, MD	3,148	2,588	2,546	2,352	2,180	251.3	205.3	200.1	183.6	170.2
Birmingham-Hoover, AL	1,338	1,108	1,316	1,243	932	260.4	214.4	252.1	236.2	177.1
Boston-Cambridge-Quincy, MA-NH	1,174	1,045	1,060	890	812	54.6	48.6	49.4	41.5	37.9
Buffalo-Cheektowaga-Tonawanda, NY	1,057	835	750	847	913	189.3	149.9	135.2	153.4	165.3
Charlotte-Gastonia-Concord, NC-SC	1,682	1,638	1,583	1,726	1,804	242.7	231.5	218.1	230.4	240.8
Chicago-Naperville-Joliet, IL-IN-WI	9,719	8,265	7,122	6,900	7,267	213.7	180.6	154.5	148.8	156.7
Cincinnati-Middletown, OH-KY-IN	1,759	1,804	1,375	1,616	1,373	177.1	180.8	136.9	159.7	135.7
Cleveland-Elyria-Mentor, OH	2,762	2,683	2,236	2,329	2,366	268.4	261.5	218.0	228.2	231.8
Columbus, OH	1,493	1,380	1,509	1,531	1,537	182.9	167.4	180.6	181.6	182.3
Dallas-Fort Worth-Arlington, TX	3,899	3,742	3,560	4,276	4,230	142.4	133.7	124.7	146.5	144.9
Denver-Aurora, CO	1,532	1,045	1,088	1,151	1,209	134.1	90.5	92.9	97.0	101.9
Detroit-Warren-Livonia, MI	4,098	3,365	4,449	4,657	3,890	187.8	154.1	203.2	212.7	177.7
Hartford-West Hartford-East Hartford, CT	532	416	400	473	467	93.9	72.8	69.7	82.1	81.1
Houston-Baytown-Sugar Land, TX	3,144	2,672	2,707	2,194	3,504	126.4	105.3	104.5	83.1	132.7
Indianapolis, IN	1,798	1,680	1,808	1,972	2,106	233.1	214.7	227.1	244.8	261.4
Jacksonville, FL	1,665	1,373	1,114	1,338	1,448	289.6	233.8	185.9	219.1	237.1
Kansas City, MO-KS	1,910	1,804	1,805	1,734	1,723	206.7	193.3	191.0	181.1	180.0
Las Vegas-Paradise, NV	909	1,036	1,436	1,322	1,354	117.4	129.1	171.0	152.0	155.6
Los Angeles-Long Beach-Santa Ana, CA	5,174	5,364	6,084	6,985	6,505	81.9	84.4	95.0	109.1	101.6
Louisville, KY-IN	794	848	761	811	858	138.2	146.3	130.0	137.6	145.5
Memphis, TN-MS-AR	2,350	1,904	1,906	1,792	2,117	396.9	318.7	316.1	293.9	347.2
Miami-Fort Lauderdale-Miami Beach, FL	2,611	2,341	2,315	2,180	2,648	103.1	91.3	89.1	82.9	100.7
Milwaukee-Waukesha-West Allis, WI	1,966	1,682	1,405	1,731	2,080	267.8	228.5	190.6	235.2	282.6
Minneapolis-St. Paul-Bloomington, MN-WI	1,239	1,273	1,066	1,372	1,294	82.1	83.4	69.0	88.1	83.1
Nashville-Davidson-Murfreesboro, TN	983	1,015	860	813	940	148.1	150.4	125.0	115.8	133.9
New Orleans-Metairie-Kenner, LA	1,946	1,988	1,684	1,299	981	308.9	314.6	265.9	204.9	154.8
New York-Newark-Edison, NY-NJ-PA	9,736	9,769	8,063	7,744	7,929	108.9	108.9	89.4	85.6	87.7
Oklahoma City, OK	948	912	972	1,062	1,040	172.1	163.7	172.1	186.1	182.3
Orlando, FL	1,290	1,126	1,222	1,562	1,704	149.2	126.5	132.8	163.4	178.3
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	4,799	3,907	3,629	3,500	3,904	173.4	140.5	129.7	124.5	138.9
Phoenix-Mesa-Scottsdale, AZ	NA	1,539	1,787	1,676	2,242	NA	85.0	95.4	85.9	114.9
Pittsburgh, PA	1,018	841	736	941	883	88.0	72.8	63.9	82.2	77.2
Portland-Vancouver-Beaverton, OR-WA	503	527	682	842	692	50.2	51.9	66.3	80.6	66.2
Providence-New Bedford-Fall River, RI-MA	482	532	441	285	318	62.1	68.0	56.1	36.4	40.6
Richmond, VA	1,173	1,054	971	1,105	954	215.5	191.3	173.4	193.4	167.0
Riverside-San Bernardino-Ontario, CA	1,116	1,221	1,308	1,440	1,390	63.4	67.1	68.9	73.5	71.0
Rochester, NY	892	915	981	893	709	175.9	180.8	193.4	176.3	140.0
Sacramento-Arden-Arcade-Roseville, CA	698	897	1,002	1,123	1,046	73.6	92.4	101.1	111.8	104.2
Salt Lake City, UT	174	185	228	277	377	34.6	36.4	44.2	52.9	72.0
San Antonio, TX	995	1,181	1,073	1,145	1,289	113.9	132.5	118.2	123.7	139.3
San Diego-Carlsbad-San Marcos, CA	1,336	1,256	1,417	1,500	1,531	91.4	85.1	96.1	101.3	103.4
San Francisco-Oakland-Fremont, CA	3,184	2,797	3,367	3,644	3,882	154.2	135.9	163.7	177.2	188.8
San Jose-Sunnyvale-Santa Clara, CA	310	408	617	597	570	35.2	46.3	69.7	66.8	63.8
Seattle-Tacoma-Bellevue, WA	1,435	1,295	1,166	1,644	1,779	92.2	82.6	73.8	102.7	111.1
St. Louis, MO-IL	2,623	2,563	2,506	2,753	2,829	199.4	194.1	187.6	204.9	210.6
Tampa-St. Petersburg-Clearwater, FL	1,912	1,662	1,327	1,368	1,602	158.8	135.5	105.7	106.3	124.5
Virginia Beach-Norfolk-Newport News, VA-NC	2,525	2,077	1,816	1,636	1,237	317.3	257.0	223.7	201.4	152.3
Washington-Arlington-Alexandria, DC-VA-MD-WV	3,200	2,724	2,822	2,220	2,291	130.7	109.7	112.4	87.1	89.9
U.S. MSA TOTAL	106,601	99,709	96,596	99,544	103,129	143.8	130.1	124.6	127.0	131.6

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 20. Gonorrhea — Reported cases and rates per 100,000 population by age group and sex: United States, 2002–2006

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
2002	10-14	5,449	784	4,665	25.8	7.2	45.2
	15-19	96,325	29,921	66,404	472.7	285.7	670.4
	20-24	112,449	52,130	60,318	556.3	503.7	611.5
	25-29	55,480	31,391	24,089	292.4	325.6	258.1
	30-34	32,081	20,560	11,521	153.1	194.6	110.8
	35-39	21,419	14,878	6,541	97.7	135.8	59.7
	40-44	13,791	10,254	3,536	60.0	89.8	30.5
	45-54	10,927	8,891	2,036	27.3	45.2	10.0
	55-64	2,284	2,019	266	8.6	15.8	1.9
	65+	791	631	159	2.2	4.3	0.8
	TOTAL	351,836	171,839	179,997	122.0	121.3	122.7
2003	10-14	4,929	725	4,204	23.3	6.7	40.7
	15-19	90,340	27,473	62,867	441.1	261.2	631.2
	20-24	106,930	48,222	58,709	515.9	452.2	583.4
	25-29	53,692	29,368	24,325	280.1	300.5	258.9
	30-34	30,528	19,004	11,524	147.4	181.9	112.4
	35-39	20,212	13,824	6,388	94.4	128.9	59.8
	40-44	13,722	10,079	3,644	59.8	88.4	31.5
	45-54	11,018	8,905	2,113	27.0	44.4	10.2
	55-64	2,316	2,012	303	8.3	15.0	2.1
	65+	745	617	128	2.1	4.1	0.6
	TOTAL	335,104	160,459	174,645	115.2	112.2	118.2
2004	10-14	4,447	630	3,817	21.0	5.8	37.0
	15-19	87,454	26,607	60,847	421.9	250.2	602.8
	20-24	103,187	45,917	57,269	492.0	425.0	563.2
	25-29	54,857	29,520	25,337	280.4	295.4	264.9
	30-34	30,372	18,664	11,708	148.4	180.5	115.6
	35-39	19,793	13,350	6,443	94.0	126.3	61.5
	40-44	14,026	10,220	3,806	60.8	89.2	32.8
	45-54	12,078	9,645	2,433	29.0	47.2	11.5
	55-64	2,653	2,286	367	9.1	16.3	2.4
	65+	745	615	130	2.1	4.1	0.6
	TOTAL	330,132	157,623	172,509	112.4	109.1	115.7
2005	10-14	4,278	646	3,631	20.5	6.0	35.7
	15-19	90,840	27,781	63,060	431.8	257.5	615.3
	20-24	106,280	47,187	59,093	505.2	434.6	580.4
	25-29	57,195	30,631	26,565	285.0	298.3	271.1
	30-34	30,044	18,244	11,800	149.6	179.7	118.9
	35-39	19,948	13,413	6,535	95.0	127.0	62.6
	40-44	14,346	10,406	3,940	62.8	91.5	34.3
	45-54	12,636	10,063	2,573	29.7	48.2	11.9
	55-64	2,777	2,399	378	9.1	16.4	2.4
	65+	763	631	132	2.1	4.1	0.6
	TOTAL	339,593	161,557	178,036	114.6	110.7	118.4
2006	10-14	4,250	675	3,574	20.4	6.3	35.1
	15-19	96,524	30,119	66,405	458.8	279.1	647.9
	20-24	110,969	49,304	61,665	527.5	454.1	605.7
	25-29	61,843	32,946	28,897	308.2	320.9	294.9
	30-34	31,313	18,858	12,455	156.0	185.7	125.5
	35-39	20,674	13,813	6,861	98.4	130.8	65.7
	40-44	14,534	10,636	3,898	63.6	93.5	33.9
	45-54	13,847	11,064	2,782	32.6	53.0	12.9
	55-64	3,137	2,686	451	10.3	18.4	2.9
	65+	800	648	152	2.2	4.2	0.7
	TOTAL	358,366	170,902	187,464	120.9	117.1	124.6

NOTE: **This table should be used only for age comparisons**. If age was not specified, cases were prorated according to the distribution of cases for which age was known. Differences between total cases from this table and others in the report are due to different reporting formats. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

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Table 21A. Gonorrhea — Reported cases by race/ethnicity, age group and sex: United States, 2002–2006

	Age Group	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
2002	10-14	786	50	736	4,181	665	3,516	412	57	355	28	4	24	41	7	34
	15-19	15,055	2,521	12,534	73,130	24,995	48,134	6,809	2,111	4,699	547	122	425	785	170	615
	20-24	18,044	5,714	12,330	84,159	41,703	42,456	8,648	4,176	4,473	772	304	468	843	244	599
	25-29	9,168	3,917	5,251	40,777	24,593	16,184	4,647	2,470	2,177	501	263	238	390	157	233
	30-34	6,450	3,628	2,822	22,223	14,951	7,271	2,820	1,656	1,164	322	207	115	260	117	143
	35-39	5,067	3,336	1,731	14,263	10,190	4,073	1,695	1,132	562	214	130	84	175	87	88
	40-44	3,386	2,393	993	9,226	7,098	2,128	957	637	320	109	66	44	109	58	51
	45-54	2,706	2,089	617	7,460	6,268	1,192	573	408	165	105	74	31	80	51	29
	55-64	664	574	90	1,467	1,336	132	125	95	29	23	10	13	4	3	2
	65+	196	155	41	523	428	95	50	35	15	18	11	7	3	3	0
	TOTAL	61,671	24,429	37,243	257,986	132,498	125,488	26,829	12,822	14,007	2,646	1,196	1,450	2,704	905	1,800
2003	10-14	789	51	739	3,662	594	3,068	390	71	320	31	3	28	55	7	49
	15-19	15,541	2,532	13,009	66,553	22,572	43,980	7,011	2,086	4,924	533	116	417	700	163	537
	20-24	19,132	6,097	13,035	77,129	37,552	39,577	9,080	4,085	4,994	840	270	570	767	229	539
	25-29	9,891	4,159	5,732	38,142	22,275	15,866	4,787	2,544	2,243	499	250	249	375	146	229
	30-34	6,648	3,512	3,136	20,459	13,498	6,961	2,821	1,704	1,117	381	206	175	214	83	131
	35-39	5,126	3,314	1,812	12,840	9,130	3,710	1,823	1,160	663	244	139	105	174	80	94
	40-44	3,835	2,634	1,201	8,642	6,626	2,016	981	654	327	145	95	49	118	70	48
	45-54	2,917	2,169	748	7,268	6,172	1,096	660	467	192	105	64	41	66	32	33
	55-64	713	588	125	1,439	1,301	138	123	98	25	31	19	13	8	7	2
	65+	239	196	43	443	379	64	44	29	15	11	7	4	8	6	2
	TOTAL	64,961	25,288	39,673	237,038	120,266	116,771	27,793	12,922	14,872	2,823	1,171	1,652	2,489	823	1,666
2004	10-14	678	44	634	3,336	526	2,811	366	48	318	28	5	23	38	7	31
	15-19	15,369	2,546	12,822	63,917	21,682	42,234	6,908	2,101	4,807	475	115	359	785	159	626
	20-24	19,129	5,909	13,220	73,374	35,351	38,023	8,891	4,017	4,874	868	329	538	939	319	620
	25-29	10,539	4,237	6,301	38,013	21,985	16,028	5,387	2,882	2,505	497	262	234	424	159	265
	30-34	6,751	3,459	3,293	20,027	13,180	6,847	2,956	1,726	1,230	384	200	184	249	99	150
	35-39	5,276	3,277	1,998	12,243	8,667	3,576	1,883	1,178	706	214	143	72	172	84	88
	40-44	4,021	2,713	1,307	8,710	6,653	2,058	1,060	736	324	116	75	40	116	40	76
	45-54	3,341	2,487	855	7,777	6,523	1,253	746	511	235	103	61	42	110	63	46
	55-64	831	695	136	1,615	1,457	158	159	116	43	35	12	23	12	7	5
	65+	219	174	45	472	404	68	42	29	14	3	1	2	8	6	2
	TOTAL	66,250	25,585	40,665	229,843	116,537	113,306	28,455	13,360	15,096	2,726	1,205	1,521	2,858	946	1,912
2005	10-14	691	35	655	3,154	549	2,604	355	52	304	25	1	23	45	8	37
	15-19	15,758	2,679	13,079	66,165	22,563	43,602	7,299	2,134	5,165	606	176	430	845	196	650
	20-24	20,892	6,509	14,383	73,365	35,373	37,991	9,742	4,438	5,303	960	418	542	1,012	344	668
	25-29	11,681	4,667	7,013	38,213	22,200	16,013	5,915	3,126	2,790	633	341	293	569	216	353
	30-34	6,790	3,405	3,385	19,172	12,540	6,632	3,248	1,830	1,418	405	281	124	314	137	177
	35-39	5,384	3,256	2,127	12,004	8,570	3,433	2,009	1,270	739	268	180	88	193	97	97
	40-44	4,255	2,863	1,392	8,606	6,593	2,012	1,153	776	377	146	93	53	119	44	75
	45-54	3,535	2,668	867	7,993	6,667	1,325	831	561	270	118	79	39	93	46	46
	55-64	853	721	132	1,653	1,490	163	191	134	57	44	28	16	24	17	6
	65+	242	203	39	452	386	66	55	36	19	8	4	4	3	1	2
	TOTAL	70,209	27,050	43,159	231,076	117,025	114,050	30,845	14,374	16,471	3,214	1,602	1,612	3,225	1,112	2,113
2006	10-14	596	53	543	3,227	549	2,678	367	70	297	23	1	21	36	1	34
	15-19	16,038	2,612	13,426	70,992	24,675	46,317	8,055	2,451	5,603	556	125	431	877	251	626
	20-24	21,590	6,684	14,906	77,200	37,200	40,000	10,340	4,739	5,601	809	335	474	1,045	356	689
	25-29	12,907	5,147	7,760	41,339	23,863	17,477	6,408	3,424	2,985	558	278	280	634	238	396
	30-34	6,948	3,313	3,636	20,334	13,363	6,971	3,340	1,861	1,478	365	207	157	325	114	211
	35-39	5,570	3,281	2,289	12,565	9,018	3,547	2,097	1,270	827	246	154	93	193	89	103
	40-44	4,231	2,800	1,432	8,798	6,831	1,967	1,241	843	398	144	102	42	117	59	59
	45-54	3,952	2,875	1,077	8,744	7,427	1,317	896	619	277	125	69	56	128	74	55
	55-64	1,019	836	183	1,886	1,699	187	172	116	55	32	14	18	27	19	8
	65+	269	226	44	450	370	80	65	44	21	8	3	5	8	6	2
	TOTAL	73,200	27,848	45,353	245,855	125,102	120,753	33,044	15,460	17,584	2,869	1,290	1,579	3,398	1,208	2,189

NOTE: These tables should be used only for race/ethnicity comparisons. **See Table 20 for age-specific cases and rates and Tables 13-15 for total and sex-specific cases and rates**. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. In 2005, HI did not report age and/or race/ethnicity for most cases and their case data and population denominators were excluded. Differences between total cases from this table and others in the report are due to different reporting formats. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

Table 21B. Gonorrhea — Rates per 100,000 population by race/ethnicity, age group and sex: United States, 2002–2006

Age Group	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
10-14	6.0	0.7	11.5	124.9	39.1	213.2	11.6	3.1	20.6	3.4	1.0	5.9	17.4	5.9	29.2	
15-19	115.2	37.5	197.3	2,410.6	1,621.2	3,226.2	213.0	126.8	306.6	64.2	28.1	101.6	346.9	147.5	555.1	
20-24	143.4	89.7	198.3	2,927.7	2,942.8	2,913.0	239.8	209.6	277.0	81.4	64.7	97.9	427.4	244.0	616.6	
25-29	80.1	67.9	92.6	1,631.8	2,062.7	1,238.6	123.8	119.9	128.5	45.1	49.0	41.5	233.3	186.1	281.2	
30-34	48.4	54.1	42.6	834.8	1,187.4	518.3	78.8	86.3	70.2	26.6	35.3	18.4	152.3	137.3	167.3	2002
35-39	34.4	45.3	23.6	514.3	781.9	277.1	53.7	68.2	37.6	19.5	24.4	14.9	96.9	97.9	96.0	
40-44	20.7	29.3	12.1	329.1	540.7	142.7	36.1	46.7	24.9	10.9	13.7	8.3	58.0	64.4	52.0	
45-54	9.0	14.1	4.1	165.7	301.7	49.2	15.7	22.4	9.0	6.3	9.6	3.4	26.0	34.4	18.1	
55-64	3.2	5.6	0.8	57.2	116.9	9.2	6.3	10.2	2.8	2.3	2.1	2.5	2.4	3.2	1.7	
65+	0.7	1.3	0.2	17.9	38.3	5.3	2.5	4.2	1.3	1.8	2.5	1.3	1.9	4.4	0.0	
TOTAL	31.0	25.1	36.7	713.7	770.7	662.1	69.2	64.1	74.6	21.4	20.0	22.6	112.5	76.3	147.6	
10-14	6.0	0.8	11.6	108.3	34.6	184.4	10.7	3.8	17.9	3.7	0.6	6.9	23.9	5.7	42.7	
15-19	118.9	37.7	204.7	2,165.6	1,447.2	2,905.9	215.9	123.8	315.1	62.2	26.3	100.1	307.6	140.7	481.1	
20-24	149.1	93.5	206.3	2,614.5	2,558.2	2,670.3	242.4	197.0	298.6	84.8	54.0	116.2	372.7	218.5	532.1	
25-29	85.8	71.4	100.4	1,504.2	1,831.3	1,202.6	126.0	121.6	131.5	44.2	45.1	43.4	220.8	170.4	272.0	
30-34	51.0	53.5	48.4	771.9	1,074.6	499.2	78.8	88.6	67.4	30.3	33.4	27.3	125.6	98.0	153.2	2003
35-39	36.0	46.4	25.5	472.6	713.9	258.0	57.4	69.0	44.4	22.0	25.8	18.4	99.4	92.8	105.8	
40-44	23.7	32.6	14.8	308.0	504.5	135.1	35.8	46.0	24.7	14.0	19.2	9.2	62.8	76.8	49.7	
45-54	9.6	14.4	4.9	156.6	287.9	43.9	17.3	24.5	10.1	6.0	7.8	4.4	20.7	21.4	20.0	
55-64	3.3	5.5	1.1	53.6	108.9	9.3	5.9	9.8	2.3	3.0	3.9	2.3	4.4	7.3	1.8	
65+	0.8	1.6	0.2	15.0	33.5	3.5	2.2	3.4	1.3	1.1	1.6	0.6	4.6	8.1	2.0	
TOTAL	32.6	25.9	39.1	649.3	691.8	610.6	69.7	62.7	77.1	22.1	18.9	25.2	102.5	68.8	135.2	
10-14	5.3	0.7	10.1	98.8	30.7	169.2	9.7	2.5	17.2	3.3	1.2	5.5	16.6	5.8	27.7	
15-19	116.8	37.7	200.4	2,032.9	1,360.8	2,723.6	207.3	122.0	298.4	54.7	25.8	85.3	342.3	136.3	556.1	
20-24	147.1	89.3	207.1	2,449.7	2,357.1	2,542.6	236.2	193.8	288.0	87.2	65.4	109.4	440.7	295.1	590.4	
25-29	89.9	71.6	108.6	1,457.9	1,748.9	1,187.0	137.6	132.9	143.4	43.7	47.0	40.5	243.5	180.3	308.0	
30-34	53.3	54.2	52.3	761.0	1,056.8	494.6	79.9	86.6	72.0	29.5	31.4	27.7	147.4	117.7	177.0	2004
35-39	38.2	47.3	29.1	460.3	690.9	254.4	57.6	67.7	46.1	18.6	25.4	12.1	101.3	100.0	102.5	
40-44	25.0	33.8	16.2	308.0	502.7	136.7	36.7	49.1	23.3	10.7	14.5	7.2	61.5	44.2	77.7	
45-54	10.9	16.3	5.5	163.2	296.5	48.9	18.5	25.3	11.7	5.7	7.2	4.3	33.8	40.8	27.3	
55-64	3.7	6.3	1.2	57.4	116.2	10.1	7.2	11.0	3.7	3.1	2.3	3.9	5.7	6.8	4.7	
65+	0.7	1.4	0.3	15.7	35.1	3.7	2.0	3.1	1.1	0.3	0.3	0.3	4.4	7.6	2.0	
TOTAL	33.2	26.1	40.0	622.5	662.5	586.2	68.9	62.6	75.6	20.7	18.8	22.4	116.5	78.3	153.6	
10-14	5.5	0.5	10.7	95.5	32.8	160.2	9.2	2.6	16.1	3.0	0.3	5.8	20.9	7.4	34.7	
15-19	119.3	39.5	203.6	2,044.5	1,376.4	2,730.3	211.5	119.9	308.9	73.1	41.2	107.1	367.8	167.5	575.2	
20-24	160.0	97.6	225.1	2,437.0	2,333.5	2,542.0	261.7	218.3	314.0	102.5	88.0	117.4	466.7	312.9	625.0	
25-29	97.5	77.2	118.1	1,412.1	1,692.4	1,148.5	147.1	139.7	156.5	57.7	63.1	52.4	317.6	238.4	398.8	
30-34	55.7	55.5	55.9	742.3	1,024.0	488.3	85.7	89.3	81.4	31.8	45.1	19.0	189.8	165.9	213.7	2005
35-39	39.7	47.7	31.5	455.3	688.7	246.6	59.4	70.3	46.9	23.2	31.9	14.9	116.5	117.7	115.3	
40-44	27.1	36.5	17.7	305.6	500.6	134.3	38.5	49.6	26.3	13.9	18.3	9.9	64.6	49.5	79.0	
45-54	11.4	17.3	5.5	163.3	294.9	50.3	19.5	26.1	12.8	6.7	9.6	4.2	28.2	29.5	26.9	
55-64	3.6	6.3	1.1	55.7	112.7	9.9	8.1	11.9	4.6	3.9	5.4	2.6	11.3	17.2	5.8	
65+	0.8	1.6	0.2	14.7	32.8	3.5	2.4	3.7	1.5	0.8	1.0	0.7	1.9	1.8	1.9	
TOTAL	35.1	27.6	42.4	619.4	658.0	584.2	72.4	65.3	80.1	25.2	25.8	24.6	131.5	92.1	169.7	
10-14	4.7	0.8	8.9	97.6	32.7	164.6	9.5	3.5	15.8	2.6	0.3	5.0	16.5	1.3	32.1	
15-19	121.2	38.4	208.7	2,191.8	1,503.8	2,898.1	232.7	137.4	334.2	63.1	27.6	100.8	381.0	214.6	553.3	
20-24	165.0	99.9	232.9	2,560.7	2,449.5	2,673.6	277.1	232.5	330.7	82.0	66.9	97.6	481.2	323.5	643.7	
25-29	107.5	85.0	130.5	1,525.7	1,816.4	1,252.1	159.1	152.7	167.0	48.8	49.5	48.2	353.6	262.3	447.4	
30-34	56.9	53.9	60.0	786.3	1,089.4	512.8	87.9	90.7	84.7	27.6	32.1	23.3	196.2	137.8	254.6	2006
35-39	41.0	48.0	33.8	476.0	723.6	254.6	61.9	70.2	52.4	20.4	26.1	15.0	115.9	108.6	123.0	
40-44	26.9	35.6	18.2	312.2	518.1	131.1	41.3	53.8	27.7	13.0	19.0	7.3	63.4	65.3	61.7	
45-54	12.7	18.6	6.9	178.5	328.2	50.0	21.0	28.7	13.1	6.7	7.8	5.7	38.9	46.8	31.7	
55-64	4.3	7.3	1.5	63.5	128.4	11.4	7.2	10.2	4.5	2.6	2.4	2.8	13.0	19.1	7.4	
65+	0.9	1.8	0.3	14.6	31.4	4.2	2.8	4.5	1.6	0.6	0.6	0.7	4.5	7.5	2.2	
TOTAL	36.5	28.3	44.4	658.4	702.7	618.1	77.4	70.1	85.3	21.1	19.6	22.6	138.3	99.9	175.6	

NOTE: These tables should be used only for race/ethnicity comparisons. **See Table 20 for age-specific cases and rates and Tables 13-15 for total and sex-specific cases and rates**. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. In 2005, HI did not report age and/or race/ethnicity for most cases and their case data and population denominators were excluded. Differences between total cases from this table and others in the report are due to different reporting formats. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

Table 22. All stages of syphilis* — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	700	567	639	551	931	15.6	12.6	14.1	12.1	20.4
Alaska	9	8	15	22	25	1.4	1.2	2.3	3.3	3.8
Arizona	1,086	1,106	974	792	926	19.9	19.8	17.0	13.3	15.6
Arkansas	219	296	249	231	243	8.1	10.9	9.0	8.3	8.7
California	3,917	4,207	4,589	5,340	6,043	11.2	11.9	12.8	14.8	16.7
Colorado	174	144	179	144	182	3.9	3.2	3.9	3.1	3.9
Connecticut	188	207	169	166	197	5.4	5.9	4.8	4.7	5.6
Delaware	62	47	61	35	74	7.7	5.7	7.3	4.1	8.8
District of Columbia	431	330	357	365	314	75.5	58.5	64.5	66.3	57.0
Florida	3,280	3,283	2,964	2,888	2,945	19.6	19.3	17.0	16.2	16.6
Georgia	1,896	2,152	1,589	1,924	1,933	22.1	24.8	18.0	21.2	21.3
Hawaii	59	61	36	57	66	4.7	4.9	2.9	4.5	5.2
Idaho	23	45	78	54	12	1.7	3.3	5.6	3.8	0.8
Illinois	1,593	1,377	1,348	1,608	1,473	12.6	10.9	10.6	12.6	11.5
Indiana	320	367	273	288	250	5.2	5.9	4.4	4.6	4.0
Iowa	54	46	36	28	68	1.8	1.6	1.2	0.9	2.3
Kansas	77	77	87	88	87	2.8	2.8	3.2	3.2	3.2
Kentucky	212	160	151	129	188	5.2	3.9	3.6	3.1	4.5
Louisiana	776	1,581	1,646	1,239	1,387	17.3	35.2	36.5	27.4	30.7
Maine	9	21	7	6	22	0.7	1.6	0.5	0.5	1.7
Maryland	843	975	1,002	1,005	1,038	15.4	17.7	18.0	17.9	18.5
Massachusetts	541	644	517	398	378	8.4	10.0	8.1	6.2	5.9
Michigan	1,184	860	806	488	384	11.8	8.5	8.0	4.8	3.8
Minnesota	148	195	145	208	189	2.9	3.9	2.8	4.1	3.7
Mississippi	451	435	404	371	520	15.7	15.1	13.9	12.7	17.8
Missouri	204	207	269	372	430	3.6	3.6	4.7	6.4	7.4
Montana	5	0	4	7	2	0.5	0.0	0.4	0.7	0.2
Nebraska	25	27	15	18	34	1.4	1.6	0.9	1.0	1.9
Nevada	113	149	254	343	388	5.2	6.6	10.9	14.2	16.1
New Hampshire	24	37	26	33	35	1.9	2.9	2.0	2.5	2.7
New Jersey	1,062	1,089	826	813	799	12.4	12.6	9.5	9.3	9.2
New Mexico	117	205	251	183	237	6.3	10.9	13.2	9.5	12.3
New York	3,885	4,360	4,472	3,853	4,577	20.3	22.7	23.3	20.0	23.8
North Carolina	1,052	850	747	713	961	12.6	10.1	8.7	8.2	11.1
North Dakota	0	2	0	1	3	0.0	0.3	0.0	0.2	0.5
Ohio	351	481	571	502	491	3.1	4.2	5.0	4.4	4.3
Oklahoma	287	353	168	159	251	8.2	10.1	4.8	4.5	7.1
Oregon	75	118	108	109	99	2.1	3.3	3.0	3.0	2.7
Pennsylvania	689	706	574	712	885	5.6	5.7	4.6	5.7	7.1
Rhode Island	67	90	104	64	71	6.3	8.4	9.6	5.9	6.6
South Carolina	620	552	524	549	397	15.1	13.3	12.5	12.9	9.3
South Dakota	0	5	0	4	29	0.0	0.7	0.0	0.5	3.7
Tennessee	1,082	881	804	917	1,015	18.7	15.1	13.6	15.4	17.0
Texas	4,109	3,996	4,205	4,289	4,956	18.9	18.1	18.7	18.8	21.7
Utah	71	72	78	50	68	3.1	3.1	3.3	2.0	2.8
Vermont	2	1	3	1	7	0.3	0.2	0.5	0.2	1.1
Virginia	528	552	610	655	701	7.2	7.5	8.2	8.7	9.3
Washington	158	239	336	359	423	2.6	3.9	5.4	5.7	6.7
West Virginia	5	11	18	18	30	0.3	0.6	1.0	1.0	1.7
Wisconsin	135	111	128	138	170	2.5	2.0	2.3	2.5	3.1
Wyoming	1	4	6	1	1	0.2	0.8	1.2	0.2	0.2
U.S. TOTAL	32,919	34,289	33,422	33,288	36,935	11.4	11.8	11.4	11.2	12.5
Northeast	6,467	7,155	6,698	6,046	6,971	11.9	13.2	12.3	11.1	12.8
Midwest	4,091	3,755	3,678	3,743	3,608	6.3	5.7	5.6	5.7	5.5
South	16,553	17,021	16,138	16,038	17,884	16.0	16.3	15.2	14.9	16.6
West	5,808	6,358	6,908	7,461	8,472	8.8	9.6	10.2	10.9	12.4
Guam	19	16	13	19	13	11.8	9.8	7.8	11.3	7.7
Puerto Rico	1,394	1,357	1,154	1,223	1,066	36.1	35.0	29.6	31.3	27.2
Virgin Islands	4	14	17	13	5	3.6	12.9	15.6	12.0	4.6
OUTLYING AREAS	1,417	1,387	1,184	1,255	1,084	34.3	33.4	28.4	30.0	25.9
TOTAL	34,336	35,676	34,606	34,543	38,019	11.7	12.1	11.6	11.5	12.6

*See Appendix (Syphilis Morbidity Reporting) for definition.

Table 23. All stages of syphilis* — Reported cases and rates in selected metropolitan statistical areas† (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	1,430	1,702	1,315	1,626	1,641	31.6	36.9	27.9	33.1	33.4
Austin-Round Rock, TX	111	152	200	193	212	8.2	11.0	14.2	13.3	14.6
Baltimore-Towson, MD	549	648	647	679	642	21.1	24.8	24.5	25.6	24.2
Birmingham-Hoover, AL	147	122	117	243	561	13.8	11.4	10.8	22.3	51.5
Boston-Cambridge-Quincy, MA-NH	478	568	410	339	329	10.8	12.8	9.3	7.7	7.5
Buffalo-Cheektowaga-Tonawanda, NY	12	11	24	14	40	1.0	0.9	2.1	1.2	3.5
Charlotte-Gastonia-Concord, NC-SC	163	167	154	235	303	11.6	11.6	10.4	15.4	19.9
Chicago-Naperville-Joliet, IL-IN-WI	1,493	1,341	1,296	1,541	1,386	16.1	14.4	13.8	16.3	14.7
Cincinnati-Middletown, OH-KY-IN	35	18	54	55	58	1.7	0.9	2.6	2.7	2.8
Cleveland-Elyria-Mentor, OH	39	62	84	52	53	1.8	2.9	3.9	2.4	2.5
Columbus, OH	214	266	254	227	229	12.9	15.9	15.0	13.3	13.4
Dallas-Fort Worth-Arlington, TX	1,515	1,505	1,374	1,495	1,678	27.6	26.9	24.1	25.7	28.8
Denver-Aurora, CO	141	116	135	111	141	6.2	5.0	5.8	4.7	6.0
Detroit-Warren-Livonia, MI	1,083	751	679	390	284	24.2	16.7	15.1	8.7	6.3
Hartford-West Hartford-East Hartford, CT	68	70	46	57	65	5.8	5.9	3.9	4.8	5.5
Houston-Baytown-Sugar Land, TX	1,158	1,256	1,289	1,188	1,570	23.2	24.7	24.9	22.5	29.7
Indianapolis, IN	148	142	128	134	121	9.4	8.9	7.9	8.2	7.4
Jacksonville, FL	81	135	218	151	165	6.9	11.2	17.8	12.1	13.2
Kansas City, MO-KS	74	118	101	193	228	3.9	6.2	5.2	9.9	11.7
Las Vegas-Paradise, NV	81	123	225	300	354	5.3	7.8	13.6	17.5	20.7
Los Angeles-Long Beach-Santa Ana, CA	2,104	2,166	2,482	3,159	3,594	16.5	16.9	19.2	24.4	27.8
Louisville, KY-IN	161	126	115	102	101	13.6	10.6	9.6	8.4	8.4
Memphis, TN-MS-AR	632	547	519	585	612	51.4	44.1	41.5	46.4	48.5
Miami-Fort Lauderdale-Miami Beach, FL	1,933	1,911	1,687	1,444	1,455	36.9	36.1	31.5	26.6	26.8
Milwaukee-Waukesha-West Allis, WI	100	74	85	77	100	6.6	4.9	5.6	5.1	6.6
Minneapolis-St. Paul-Bloomington, MN-WI	131	173	125	187	161	4.3	5.6	4.0	6.0	5.1
Nashville-Davidson-Murfreesboro, TN	338	220	194	189	194	25.0	16.0	13.9	13.3	13.6
New Orleans-Metairie-Kenner, LA	130	264	449	350	352	9.9	20.0	34.0	26.5	26.7
New York-Newark-Edison, NY-NJ-PA	4,672	5,101	4,918	4,318	4,917	25.1	27.4	26.3	23.0	26.2
Oklahoma City, OK	210	253	110	87	116	18.7	22.3	9.6	7.5	10.0
Orlando, FL	402	318	267	413	403	22.9	17.6	14.3	21.4	20.8
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	721	785	678	583	771	12.5	13.6	11.7	10.0	13.2
Phoenix-Mesa-Scottsdale, AZ	NA	914	754	595	757	NA	25.4	20.3	15.4	19.6
Pittsburgh, PA	52	57	32	112	152	2.2	2.4	1.3	4.7	6.4
Portland-Vancouver-Beaverton, OR-WA	66	103	84	94	74	3.3	5.0	4.1	4.5	3.5
Providence-New Bedford-Fall River, RI-MA	90	127	137	75	92	5.6	7.8	8.4	4.6	5.7
Richmond, VA	85	114	85	87	106	7.5	10.0	7.4	7.4	9.0
Riverside-San Bernardino-Ontario, CA	275	313	319	399	376	7.8	8.6	8.4	10.2	9.6
Rochester, NY	19	33	41	36	90	1.8	3.2	3.9	3.5	8.7
Sacramento-Arden-Arcade-Roseville, CA	48	35	64	39	136	2.5	1.8	3.2	1.9	6.7
Salt Lake City, UT	50	43	53	35	41	5.0	4.3	5.2	3.4	4.0
San Antonio, TX	322	231	361	458	473	18.0	12.7	19.5	24.2	25.0
San Diego-Carlsbad-San Marcos, CA	162	299	356	448	571	5.6	10.2	12.1	15.3	19.5
San Francisco-Oakland-Fremont, CA	870	901	917	719	740	20.8	21.7	22.1	17.3	17.8
San Jose-Sunnyvale-Santa Clara, CA	94	137	113	121	94	5.4	7.9	6.5	6.9	5.4
Seattle-Tacoma-Bellevue, WA	127	174	273	285	356	4.1	5.5	8.6	8.9	11.1
St. Louis, MO-IL	160	150	189	173	186	5.9	5.5	6.8	6.2	6.7
Tampa-St. Petersburg-Clearwater, FL	316	407	303	326	428	12.7	16.1	11.7	12.3	16.2
Virginia Beach-Norfolk-Newport News, VA-NC	185	148	198	246	245	11.5	9.0	12.0	14.9	14.9
Washington-Arlington-Alexandria, DC-VA-MD-WV	871	836	896	894	928	17.3	16.4	17.4	17.1	17.8
U.S. MSA TOTAL	24,346	26,233	25,554	25,859	28,681	16.1	16.8	16.2	16.2	18.0

*See Appendix (Reporting of Syphilis Cases) for definition.

†Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 24. Primary and secondary syphilis — Reported cases and rates by state, ranked by rates: United States, 2006

Rank[*]	*State*	*Cases*	*Rate per 100,000 Population*
1	Louisiana	342	7.6
2	Alabama	319	7.0
3	Georgia	581	6.4
4	Nevada	137	5.7
5	Maryland	300	5.4
6	California	1,835	5.1
7	Texas	1,064	4.7
8	Tennessee	249	4.2
9	New Mexico	79	4.1
10	Florida	719	4.0
11	New York	736	3.8
12	North Carolina	309	3.6
13	Arizona	203	3.4
14	Illinois	431	3.4
	U.S. TOTAL[†]	**9,756**	**3.3**
15	Mississippi	86	2.9
16	Missouri	168	2.9
17	Washington	182	2.9
18	Arkansas	77	2.8
19	Virginia	190	2.5
20	Delaware	20	2.4
21	Pennsylvania	264	2.1
22	New Jersey	173	2.0
23	Oklahoma	70	2.0
24	Massachusetts	124	1.9
25	Connecticut	64	1.8
26	Kentucky	73	1.7
27	South Dakota	13	1.7
28	Alaska	11	1.7
29	Ohio	184	1.6
30	South Carolina	66	1.6
31	Indiana	93	1.5
32	Colorado	69	1.5
33	Hawaii	18	1.4
34	Rhode Island	14	1.3
35	Wisconsin	68	1.2
36	Michigan	118	1.2
37	New Hampshire	13	1.0
38	Kansas	27	1.0
39	Minnesota	47	0.9
40	Utah	21	0.9
41	Oregon	29	0.8
42	Maine	9	0.7
43	Iowa	19	0.6
44	West Virginia	11	0.6
45	Vermont	3	0.5
46	Nebraska	7	0.4
47	Idaho	3	0.2
	YEAR 2010 TARGET		**0.2**
48	North Dakota	1	0.2
49	Montana	1	0.1
	Wyoming	0	0.0

[*]States were ranked in descending order by rate, number of cases, and alphabetically by state. States with no cases were not ranked.

[†]Total includes cases reported by the District of Columbia with 116 cases and a rate of 21.1, but excludes outlying areas (Guam with 3 cases and rate of 1.8, Puerto Rico with 150 cases and rate of 3.8, and Virgin Islands with 1 case and rate of 0.9).

Table 25. Primary and secondary syphilis — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	149	114	165	169	319	3.3	2.5	3.6	3.7	7.0
Alaska	0	1	8	9	11	0.0	0.2	1.2	1.4	1.7
Arizona	200	186	157	175	203	3.7	3.3	2.7	2.9	3.4
Arkansas	34	51	47	52	77	1.3	1.9	1.7	1.9	2.8
California	1,033	1,299	1,356	1,585	1,835	2.9	3.7	3.8	4.4	5.1
Colorado	64	39	63	46	69	1.4	0.9	1.4	1.0	1.5
Connecticut	28	30	45	58	64	0.8	0.9	1.3	1.7	1.8
Delaware	11	7	9	11	20	1.4	0.9	1.1	1.3	2.4
District of Columbia	58	48	69	114	116	10.2	8.5	12.5	20.7	21.1
Florida	617	658	728	724	719	3.7	3.9	4.2	4.1	4.0
Georgia	439	585	549	645	581	5.1	6.7	6.2	7.1	6.4
Hawaii	11	14	8	11	18	0.9	1.1	0.6	0.9	1.4
Idaho	8	15	24	20	3	0.6	1.1	1.7	1.4	0.2
Illinois	479	374	386	525	431	3.8	3.0	3.0	4.1	3.4
Indiana	62	50	60	62	93	1.0	0.8	1.0	1.0	1.5
Iowa	8	12	5	9	19	0.3	0.4	0.2	0.3	0.6
Kansas	20	25	24	19	27	0.7	0.9	0.9	0.7	1.0
Kentucky	88	33	47	52	73	2.2	0.8	1.1	1.2	1.7
Louisiana	152	183	332	278	342	3.4	4.1	7.4	6.1	7.6
Maine	2	8	2	1	9	0.2	0.6	0.2	0.1	0.7
Maryland	228	312	380	313	300	4.2	5.7	6.8	5.6	5.4
Massachusetts	99	133	114	125	124	1.5	2.1	1.8	2.0	1.9
Michigan	486	249	192	105	118	4.8	2.5	1.9	1.0	1.2
Minnesota	59	47	27	70	47	1.2	0.9	0.5	1.4	0.9
Mississippi	49	40	59	49	86	1.7	1.4	2.0	1.7	2.9
Missouri	34	61	94	147	168	0.6	1.1	1.6	2.5	2.9
Montana	0	0	4	7	1	0.0	0.0	0.4	0.7	0.1
Nebraska	6	10	7	4	7	0.3	0.6	0.4	0.2	0.4
Nevada	15	12	40	109	137	0.7	0.5	1.7	4.5	5.7
New Hampshire	8	19	5	16	13	0.6	1.5	0.4	1.2	1.0
New Jersey	169	170	150	133	173	2.0	2.0	1.7	1.5	2.0
New Mexico	39	71	82	56	79	2.1	3.8	4.3	2.9	4.1
New York	478	584	727	705	736	2.5	3.0	3.8	3.7	3.8
North Carolina	279	152	192	274	309	3.4	1.8	2.2	3.2	3.6
North Dakota	0	2	0	1	1	0.0	0.3	0.0	0.2	0.2
Ohio	159	197	237	211	184	1.4	1.7	2.1	1.8	1.6
Oklahoma	72	64	25	44	70	2.1	1.8	0.7	1.2	2.0
Oregon	28	48	29	41	29	0.8	1.3	0.8	1.1	0.8
Pennsylvania	105	159	118	199	264	0.9	1.3	1.0	1.6	2.1
Rhode Island	13	33	26	24	14	1.2	3.1	2.4	2.2	1.3
South Carolina	134	94	116	84	66	3.3	2.3	2.8	2.0	1.6
South Dakota	0	2	0	2	13	0.0	0.3	0.0	0.3	1.7
Tennessee	168	135	130	217	249	2.9	2.3	2.2	3.6	4.2
Texas	589	654	827	873	1,064	2.7	3.0	3.7	3.8	4.7
Utah	7	14	13	10	21	0.3	0.6	0.5	0.4	0.9
Vermont	2	1	1	1	3	0.3	0.2	0.2	0.2	0.5
Virginia	71	82	116	143	190	1.0	1.1	1.6	1.9	2.5
Washington	70	82	150	152	182	1.2	1.3	2.4	2.4	2.9
West Virginia	2	2	3	3	11	0.1	0.1	0.2	0.2	0.6
Wisconsin	30	16	29	41	68	0.6	0.3	0.5	0.7	1.2
Wyoming	0	0	3	0	0	0.0	0.0	0.6	0.0	0.0
U.S. TOTAL	6,862	7,177	7,980	8,724	9,756	2.4	2.5	2.7	2.9	3.3
Northeast	904	1,137	1,188	1,262	1,400	1.7	2.1	2.2	2.3	2.6
Midwest	1,343	1,045	1,061	1,196	1,176	2.1	1.6	1.6	1.8	1.8
South	3,140	3,214	3,794	4,045	4,592	3.0	3.1	3.6	3.8	4.3
West	1,475	1,781	1,937	2,221	2,588	2.2	2.7	2.9	3.3	3.8
Guam	6	1	0	2	3	3.7	0.6	0.0	1.2	1.8
Puerto Rico	270	202	182	224	150	7.0	5.2	4.7	5.7	3.8
Virgin Islands	1	3	5	1	1	0.9	2.8	4.6	0.9	0.9
OUTLYING AREAS	277	206	187	227	154	6.7	5.0	4.5	5.4	3.7
TOTAL	7,139	7,383	8,167	8,951	9,910	2.4	2.5	2.7	3.0	3.3

Table 26. Primary and secondary syphilis — Women – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	63	49	52	69	116	2.7	2.1	2.2	2.9	4.9
Alaska	0	0	0	1	2	0.0	0.0	0.0	0.3	0.6
Arizona	74	66	42	49	33	2.7	2.4	1.5	1.7	1.1
Arkansas	18	16	18	21	35	1.3	1.1	1.3	1.5	2.5
California	39	52	63	121	128	0.2	0.3	0.4	0.7	0.7
Colorado	2	5	7	2	5	0.1	0.2	0.3	0.1	0.2
Connecticut	3	3	3	2	2	0.2	0.2	0.2	0.1	0.1
Delaware	4	2	1	2	4	1.0	0.5	0.2	0.5	0.9
District of Columbia	9	3	4	11	6	3.0	1.0	1.4	3.8	2.1
Florida	108	73	98	100	98	1.3	0.8	1.1	1.1	1.1
Georgia	98	68	45	47	41	2.3	1.5	1.0	1.0	0.9
Hawaii	2	0	0	0	1	0.3	0.0	0.0	0.0	0.2
Idaho	4	5	11	6	2	0.6	0.7	1.6	0.8	0.3
Illinois	81	48	55	47	37	1.3	0.7	0.9	0.7	0.6
Indiana	18	16	6	10	10	0.6	0.5	0.2	0.3	0.3
Iowa	4	2	1	1	6	0.3	0.1	0.1	0.1	0.4
Kansas	6	13	7	2	2	0.4	0.9	0.5	0.1	0.1
Kentucky	43	13	6	3	7	2.1	0.6	0.3	0.1	0.3
Louisiana	76	79	123	112	123	3.3	3.4	5.3	4.8	5.3
Maine	0	0	0	0	2	0.0	0.0	0.0	0.0	0.3
Maryland	53	74	92	88	61	1.9	2.6	3.2	3.0	2.1
Massachusetts	12	3	5	4	7	0.4	0.1	0.2	0.1	0.2
Michigan	192	93	61	20	26	3.8	1.8	1.2	0.4	0.5
Minnesota	4	4	3	2	4	0.2	0.2	0.1	0.1	0.2
Mississippi	31	20	19	12	36	2.1	1.3	1.3	0.8	2.4
Missouri	10	14	12	12	19	0.3	0.5	0.4	0.4	0.6
Montana	0	0	1	1	0	0.0	0.0	0.2	0.2	0.0
Nebraska	2	1	4	0	1	0.2	0.1	0.5	0.0	0.1
Nevada	1	3	8	24	34	0.1	0.3	0.7	2.0	2.9
New Hampshire	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Jersey	48	49	38	17	12	1.1	1.1	0.9	0.4	0.3
New Mexico	12	23	36	16	22	1.3	2.4	3.7	1.6	2.2
New York	26	26	32	28	29	0.3	0.3	0.3	0.3	0.3
North Carolina	115	47	48	58	67	2.7	1.1	1.1	1.3	1.5
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	27	40	61	40	43	0.5	0.7	1.0	0.7	0.7
Oklahoma	20	20	9	17	19	1.1	1.1	0.5	0.9	1.1
Oregon	8	3	1	2	0	0.5	0.2	0.1	0.1	0.0
Pennsylvania	22	33	16	34	34	0.3	0.5	0.3	0.5	0.5
Rhode Island	2	8	10	6	0	0.4	1.4	1.8	1.1	0.0
South Carolina	58	24	25	17	11	2.7	1.1	1.2	0.8	0.5
South Dakota	0	0	0	0	5	0.0	0.0	0.0	0.0	1.3
Tennessee	82	40	34	64	73	2.8	1.3	1.1	2.1	2.4
Texas	192	162	179	243	261	1.8	1.5	1.6	2.1	2.3
Utah	0	3	3	1	3	0.0	0.3	0.3	0.1	0.2
Vermont	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Virginia	17	7	6	19	23	0.5	0.2	0.2	0.5	0.6
Washington	1	4	6	5	4	0.0	0.1	0.2	0.2	0.1
West Virginia	1	2	1	0	1	0.1	0.2	0.1	0.0	0.1
Wisconsin	6	1	2	3	3	0.2	0.0	0.1	0.1	0.1
Wyoming	0	0	1	0	0	0.0	0.0	0.4	0.0	0.0
U.S. TOTAL	1,594	1,217	1,255	1,339	1,458	1.1	0.8	0.8	0.9	1.0
Northeast	113	122	104	91	86	0.4	0.4	0.4	0.3	0.3
Midwest	350	232	212	137	156	1.1	0.7	0.6	0.4	0.5
South	988	699	760	883	982	1.9	1.3	1.4	1.6	1.8
West	143	164	179	228	234	0.4	0.5	0.5	0.7	0.7
Guam	2	0	0	1	1	2.5	0.0	0.0	1.2	1.2
Puerto Rico	123	93	62	81	46	6.1	4.6	3.1	4.0	2.3
Virgin Islands	0	2	3	0	0	0.0	3.5	5.3	0.0	0.0
OUTLYING AREAS	125	95	65	82	47	5.8	4.4	3.0	3.8	2.2
TOTAL	1,719	1,312	1,320	1,421	1,505	1.2	0.9	0.9	0.9	1.0

NOTE: Cases reported with unknown sex are not included in this table.

Table 27. Primary and secondary syphilis — Men – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	86	65	113	100	203	4.0	3.0	5.1	4.5	9.2
Alaska	0	1	8	8	9	0.0	0.3	2.4	2.3	2.6
Arizona	126	120	115	125	166	4.6	4.3	4.0	4.2	5.6
Arkansas	16	35	29	31	42	1.2	2.6	2.2	2.3	3.1
California	994	1,245	1,291	1,463	1,706	5.7	7.0	7.2	8.1	9.5
Colorado	62	34	56	44	64	2.7	1.5	2.4	1.9	2.7
Connecticut	25	27	42	56	62	1.5	1.6	2.5	3.3	3.6
Delaware	7	5	8	9	16	1.8	1.3	2.0	2.2	3.9
District of Columbia	49	45	65	103	110	18.2	16.9	24.8	39.4	42.1
Florida	509	585	630	624	621	6.2	7.0	7.4	7.2	7.1
Georgia	340	517	504	598	540	8.1	12.1	11.5	13.3	12.0
Hawaii	9	14	8	11	17	1.4	2.2	1.3	1.7	2.7
Idaho	4	10	13	14	1	0.6	1.5	1.9	2.0	0.1
Illinois	398	326	331	478	394	6.4	5.2	5.3	7.6	6.3
Indiana	44	34	54	52	83	1.5	1.1	1.8	1.7	2.7
Iowa	4	10	3	8	13	0.3	0.7	0.2	0.5	0.9
Kansas	14	12	17	17	25	1.0	0.9	1.3	1.2	1.8
Kentucky	45	19	41	49	66	2.2	0.9	2.0	2.4	3.2
Louisiana	76	104	209	166	219	3.5	4.8	9.5	7.5	10.0
Maine	2	8	2	1	7	0.3	1.3	0.3	0.2	1.1
Maryland	175	238	288	225	239	6.6	8.9	10.7	8.3	8.8
Massachusetts	87	129	109	121	117	2.8	4.1	3.5	3.9	3.8
Michigan	294	156	131	85	92	6.0	3.2	2.6	1.7	1.8
Minnesota	55	43	24	68	43	2.2	1.7	0.9	2.7	1.7
Mississippi	18	20	40	37	50	1.3	1.4	2.8	2.6	3.5
Missouri	24	47	82	135	149	0.9	1.7	2.9	4.8	5.3
Montana	0	0	3	6	1	0.0	0.0	0.6	1.3	0.2
Nebraska	4	9	3	4	6	0.5	1.0	0.3	0.5	0.7
Nevada	14	9	32	85	103	1.3	0.8	2.7	6.9	8.4
New Hampshire	8	19	5	16	13	1.3	3.0	0.8	2.5	2.0
New Jersey	121	121	112	116	161	2.9	2.9	2.6	2.7	3.8
New Mexico	27	48	46	40	57	3.0	5.2	4.9	4.2	6.0
New York	452	558	695	677	707	4.9	6.0	7.5	7.3	7.6
North Carolina	164	105	144	216	242	4.0	2.5	3.4	5.1	5.7
North Dakota	0	2	0	1	1	0.0	0.6	0.0	0.3	0.3
Ohio	132	157	176	171	141	2.4	2.8	3.2	3.1	2.5
Oklahoma	52	44	16	27	51	3.0	2.5	0.9	1.5	2.9
Oregon	20	45	28	39	29	1.1	2.5	1.6	2.2	1.6
Pennsylvania	83	126	102	165	230	1.4	2.1	1.7	2.7	3.8
Rhode Island	11	25	16	18	14	2.1	4.8	3.1	3.5	2.7
South Carolina	76	70	91	67	55	3.8	3.5	4.4	3.2	2.7
South Dakota	0	2	0	2	8	0.0	0.5	0.0	0.5	2.1
Tennessee	86	95	96	153	176	3.0	3.3	3.3	5.2	6.0
Texas	397	492	648	630	803	3.7	4.5	5.8	5.5	7.1
Utah	7	11	10	9	18	0.6	0.9	0.8	0.7	1.5
Vermont	2	1	1	1	3	0.7	0.3	0.3	0.3	1.0
Virginia	54	75	110	124	167	1.5	2.1	3.0	3.3	4.5
Washington	69	78	144	147	178	2.3	2.6	4.7	4.7	5.7
West Virginia	1	0	2	3	10	0.1	0.0	0.2	0.3	1.1
Wisconsin	24	15	27	38	65	0.9	0.6	1.0	1.4	2.4
Wyoming	0	0	2	0	0	0.0	0.0	0.8	0.0	0.0
U.S. TOTAL	5,267	5,956	6,722	7,383	8,293	3.7	4.2	4.7	5.1	5.7
Northeast	791	1,014	1,084	1,171	1,314	3.0	3.8	4.1	4.4	5.0
Midwest	993	813	848	1,059	1,020	3.1	2.5	2.6	3.3	3.1
South	2,151	2,514	3,034	3,162	3,610	4.2	4.9	5.8	6.0	6.8
West	1,332	1,615	1,756	1,991	2,349	4.1	4.9	5.2	5.8	6.9
Guam	4	1	0	1	2	4.9	1.2	0.0	1.2	2.3
Puerto Rico	147	109	120	143	104	7.9	5.8	6.4	7.6	5.5
Virgin Islands	1	1	2	1	1	2.0	1.9	3.9	1.9	1.9
OUTLYING AREAS	152	111	122	145	107	7.6	5.5	6.1	7.2	5.3
TOTAL	5,419	6,067	6,844	7,528	8,400	3.8	4.2	4.7	5.1	5.7

NOTE: Cases reported with unknown sex are not included in this table.

Table 28. Primary and secondary syphilis — Counties and independent cities* ranked by number of reported cases: United States, 2006

Rank†	County/Independent City	Cases	Rate per 100,000 Population	Cumulative Percent
1	Los Angeles County, CA	866	8.7	8
2	Harris County, TX	374	10.1	12
3	Cook County, IL	349	6.6	16
4	San Francisco County, CA	244	33.0	18
5	Fulton County, GA	242	26.4	21
6	New York County, NY	240	15.1	23
7	Jefferson County, AL	238	36.2	26
8	San Diego County, CA	235	8.0	28
9	Dallas County, TX	206	8.9	30
10	Miami-Dade County, FL	203	8.5	32
11	De Kalb County, GA	182	26.8	34
12	Baltimore (City), MD	159	25.0	36
13	Kings County, NY	159	6.4	37
14	Maricopa County, AZ	156	4.3	39
15	Broward County, FL	155	8.7	41
16	King County, WA	147	8.2	42
17	Shelby County, TN	132	14.5	43
18	Clark County, NV	132	7.7	45
19	Bexar County, TX	131	8.6	46
20	Philadelphia County, PA	125	8.5	47
21	Washington, DC	116	21.1	49
22	Mecklenburg County, NC	104	13.1	50
23	Bronx County, NY	101	7.4	51
24	Franklin County, OH	100	9.2	52
25	East Baton Rouge County, LA	97	23.6	53
26	Jackson County, MO	85	12.8	54
27	Tarrant County, TX	84	5.2	54
28	Travis County, TX	81	9.1	55
29	Orange County, FL	81	7.9	56
30	Riverside County, CA	80	4.1	57
31	Orange County, CA	79	2.6	58
32	Queens County, NY	77	3.4	59
33	Allegheny County, PA	71	5.7	59
34	Alameda County, CA	71	4.9	60
35	Wayne County, MI	69	3.5	61
36	Hillsborough County, FL	68	6.0	61
37	Suffolk County, MA	66	10.1	62
38	Prince George's County, MD	60	7.1	63
39	Hudson County, NJ	55	9.1	63
40	Orleans County, LA	54	11.9	64
41	Santa Clara County, CA	52	3.1	64
42	Essex County, NJ	44	5.6	65
43	Marion County, IN	43	5.0	65
44	Pinellas County, FL	38	4.1	66
45	Denver County, CO	37	6.6	66
46	Milwaukee County, WI	37	4.0	66
47	St Louis (City), MO	36	10.5	67
48	Jefferson County, KY	35	5.0	67
49	Gwinnett County, GA	35	4.8	67
50	Wake County, NC	35	4.7	68
51	Duval County, FL	35	4.2	68
52	Pima County, AZ	35	3.8	69
53	Hennepin County, MN	35	3.1	69
54	Davidson County, TN	34	5.9	69
55	Cobb County, GA	34	5.1	70
56	Knox County, TN	33	8.1	70
57	Norfolk (City), VA	32	13.8	70

*Accounting for 70% of reported primary and secondary syphilis cases.
†Counties and independent cities were ranked in descending order by number of cases reported in 2006.

Table 29. Primary and secondary syphilis — Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	378	516	508	598	529	8.3	11.2	10.8	12.2	10.8
Austin-Round Rock, TX	23	31	56	44	84	1.7	2.3	4.0	3.0	5.8
Baltimore-Towson, MD	163	224	276	244	213	6.3	8.6	10.5	9.2	8.0
Birmingham-Hoover, AL	13	23	33	101	244	1.2	2.1	3.0	9.3	22.4
Boston-Cambridge-Quincy, MA-NH	84	121	84	106	117	1.9	2.7	1.9	2.4	2.7
Buffalo-Cheektowaga-Tonawanda, NY	3	2	9	7	18	0.3	0.2	0.8	0.6	1.6
Charlotte-Gastonia-Concord, NC-SC	45	23	46	103	121	3.2	1.6	3.1	6.8	8.0
Chicago-Naperville-Joliet, IL-IN-WI	433	346	373	510	416	4.7	3.7	4.0	5.4	4.4
Cincinnati-Middletown, OH-KY-IN	7	2	22	24	13	0.3	0.1	1.1	1.2	0.6
Cleveland-Elyria-Mentor, OH	14	32	40	22	18	0.7	1.5	1.9	1.0	0.8
Columbus, OH	107	120	109	109	107	6.4	7.2	6.4	6.4	6.3
Dallas-Fort Worth-Arlington, TX	309	265	279	305	320	5.6	4.7	4.9	5.2	5.5
Denver-Aurora, CO	55	32	55	38	56	2.4	1.4	2.4	1.6	2.4
Detroit-Warren-Livonia, MI	466	218	153	77	82	10.4	4.9	3.4	1.7	1.8
Hartford-West Hartford-East Hartford, CT	11	16	13	14	23	0.9	1.4	1.1	1.2	1.9
Houston-Baytown-Sugar Land, TX	124	227	235	279	396	2.5	4.5	4.5	5.3	7.5
Indianapolis, IN	39	25	34	35	47	2.5	1.6	2.1	2.1	2.9
Jacksonville, FL	18	21	72	50	41	1.5	1.7	5.9	4.0	3.3
Kansas City, MO-KS	17	43	35	89	112	0.9	2.3	1.8	4.6	5.8
Las Vegas-Paradise, NV	7	8	38	103	132	0.5	0.5	2.3	6.0	7.7
Los Angeles-Long Beach-Santa Ana, CA	433	562	551	806	945	3.4	4.4	4.3	6.2	7.3
Louisville, KY-IN	83	28	38	46	41	7.0	2.4	3.2	3.8	3.4
Memphis, TN-MS-AR	111	90	99	138	145	9.0	7.3	7.9	10.9	11.5
Miami-Fort Lauderdale-Miami Beach, FL	391	409	434	395	369	7.5	7.7	8.1	7.3	6.8
Milwaukee-Waukesha-West Allis, WI	23	11	19	22	38	1.5	0.7	1.3	1.5	2.5
Minneapolis-St. Paul-Bloomington, MN-WI	55	43	26	68	43	1.8	1.4	0.8	2.2	1.4
Nashville-Davidson-Murfreesboro, TN	33	26	17	34	40	2.4	1.9	1.2	2.4	2.8
New Orleans-Metairie-Kenner, LA	13	28	101	88	90	1.0	2.1	7.7	6.7	6.8
New York-Newark-Edison, NY-NJ-PA	602	709	816	773	811	3.2	3.8	4.4	4.1	4.3
Oklahoma City, OK	65	56	20	23	24	5.8	4.9	1.7	2.0	2.1
Orlando, FL	67	70	69	106	94	3.8	3.9	3.7	5.5	4.9
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	103	135	95	127	173	1.8	2.3	1.6	2.2	3.0
Phoenix-Mesa-Scottsdale, AZ	NA	134	106	113	157	NA	3.7	2.9	2.9	4.1
Pittsburgh, PA	24	38	22	69	91	1.0	1.6	0.9	2.9	3.8
Portland-Vancouver-Beaverton, OR-WA	28	47	26	39	25	1.4	2.3	1.3	1.9	1.2
Providence-New Bedford-Fall River, RI-MA	20	42	30	28	18	1.2	2.6	1.8	1.7	1.1
Richmond, VA	9	12	11	13	28	0.8	1.1	1.0	1.1	2.4
Riverside-San Bernardino-Ontario, CA	64	91	103	121	108	1.8	2.5	2.7	3.1	2.8
Rochester, NY	6	7	12	6	14	0.6	0.7	1.2	0.6	1.3
Sacramento-Arden-Arcade-Roseville, CA	14	19	19	16	32	0.7	1.0	0.9	0.8	1.6
Salt Lake City, UT	7	6	5	9	15	0.7	0.6	0.5	0.9	1.4
San Antonio, TX	48	52	116	129	136	2.7	2.9	6.3	6.8	7.2
San Diego-Carlsbad-San Marcos, CA	37	111	138	194	235	1.3	3.8	4.7	6.6	8.0
San Francisco-Oakland-Fremont, CA	399	406	422	331	363	9.5	9.8	10.2	8.0	8.7
San Jose-Sunnyvale-Santa Clara, CA	30	56	56	44	52	1.7	3.2	3.2	2.5	3.0
Seattle-Tacoma-Bellevue, WA	59	70	138	125	160	1.9	2.2	4.4	3.9	5.0
St. Louis, MO-IL	32	51	71	50	65	1.2	1.9	2.6	1.8	2.3
Tampa-St. Petersburg-Clearwater, FL	57	96	89	85	110	2.3	3.8	3.4	3.2	4.2
Virginia Beach-Norfolk-Newport News, VA-NC	31	23	50	60	84	1.9	1.4	3.0	3.6	5.1
Washington-Arlington-Alexandria, DC-VA-MD-WV	139	168	199	233	250	2.8	3.3	3.9	4.5	4.8
U.S. MSA TOTAL	5,299	5,891	6,368	7,149	7,845	3.5	3.8	4.0	4.5	4.9

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 30. Primary and secondary syphilis — Women – Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	74	57	36	36	33	3.2	2.5	1.5	1.5	1.3
Austin-Round Rock, TX	3	2	3	3	11	0.5	0.3	0.4	0.4	1.5
Baltimore-Towson, MD	47	63	70	84	53	3.5	4.6	5.1	6.1	3.9
Birmingham-Hoover, AL	7	4	11	35	94	1.3	0.7	2.0	6.2	16.7
Boston-Cambridge-Quincy, MA-NH	8	2	5	1	7	0.3	0.1	0.2	0.0	0.3
Buffalo-Cheektowaga-Tonawanda, NY	0	1	1	0	2	0.0	0.2	0.2	0.0	0.3
Charlotte-Gastonia-Concord, NC-SC	22	3	12	20	28	3.1	0.4	1.6	2.6	3.6
Chicago-Naperville-Joliet, IL-IN-WI	62	44	55	50	43	1.3	0.9	1.1	1.0	0.9
Cincinnati-Middletown, OH-KY-IN	2	0	2	0	5	0.2	0.0	0.2	0.0	0.5
Cleveland-Elyria-Mentor, OH	4	13	3	1	2	0.4	1.2	0.3	0.1	0.2
Columbus, OH	11	17	31	22	30	1.3	2.0	3.6	2.5	3.5
Dallas-Fort Worth-Arlington, TX	123	99	73	100	112	4.5	3.5	2.6	3.4	3.9
Denver-Aurora, CO	0	3	6	1	3	0.0	0.3	0.5	0.1	0.3
Detroit-Warren-Livonia, MI	188	81	49	17	20	8.2	3.5	2.1	0.7	0.9
Hartford-West Hartford-East Hartford, CT	1	3	0	0	1	0.2	0.5	0.0	0.0	0.2
Houston-Baytown-Sugar Land, TX	19	26	39	61	65	0.8	1.0	1.5	2.3	2.5
Indianapolis, IN	11	7	2	4	1	1.4	0.9	0.2	0.5	0.1
Jacksonville, FL	8	9	32	20	11	1.3	1.5	5.1	3.1	1.7
Kansas City, MO-KS	3	20	5	5	17	0.3	2.1	0.5	0.5	1.7
Las Vegas-Paradise, NV	0	1	8	21	32	0.0	0.1	1.0	2.5	3.8
Los Angeles-Long Beach-Santa Ana, CA	19	28	40	63	72	0.3	0.4	0.6	1.0	1.1
Louisville, KY-IN	42	13	6	3	3	6.9	2.1	1.0	0.5	0.5
Memphis, TN-MS-AR	62	30	33	50	52	9.7	4.7	5.1	7.7	8.0
Miami-Fort Lauderdale-Miami Beach, FL	48	33	41	43	40	1.8	1.2	1.5	1.5	1.4
Milwaukee-Waukesha-West Allis, WI	5	1	1	1	2	0.6	0.1	0.1	0.1	0.3
Minneapolis-St. Paul-Bloomington, MN-WI	3	3	3	3	3	0.2	0.2	0.2	0.2	0.2
Nashville-Davidson-Murfreesboro, TN	13	6	2	2	2	1.9	0.9	0.3	0.3	0.3
New Orleans-Metairie-Kenner, LA	4	10	27	23	25	0.6	1.5	3.9	3.4	3.6
New York-Newark-Edison, NY-NJ-PA	65	65	58	37	31	0.7	0.7	0.6	0.4	0.3
Oklahoma City, OK	15	19	7	9	6	2.6	3.3	1.2	1.5	1.0
Orlando, FL	22	17	10	14	14	2.5	1.9	1.1	1.4	1.4
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	22	23	16	13	6	0.7	0.8	0.5	0.4	0.2
Phoenix-Mesa-Scottsdale, AZ	NA	45	25	23	18	NA	2.5	1.4	1.2	0.9
Pittsburgh, PA	8	17	7	25	28	0.6	1.4	0.6	2.0	2.3
Portland-Vancouver-Beaverton, OR-WA	8	2	0	0	0	0.8	0.2	0.0	0.0	0.0
Providence-New Bedford-Fall River, RI-MA	5	9	10	7	0	0.6	1.1	1.2	0.8	0.0
Richmond, VA	2	2	1	1	1	0.3	0.3	0.2	0.2	0.2
Riverside-San Bernardino-Ontario, CA	2	5	1	12	10	0.1	0.3	0.1	0.6	0.5
Rochester, NY	1	1	0	1	0	0.2	0.2	0.0	0.2	0.0
Sacramento-Arden-Arcade-Roseville, CA	0	1	0	0	3	0.0	0.1	0.0	0.0	0.3
Salt Lake City, UT	0	1	1	1	1	0.0	0.2	0.2	0.2	0.2
San Antonio, TX	12	6	20	34	32	1.3	0.6	2.1	3.5	3.3
San Diego-Carlsbad-San Marcos, CA	6	4	10	25	12	0.4	0.3	0.7	1.7	0.8
San Francisco-Oakland-Fremont, CA	6	4	2	8	7	0.3	0.2	0.1	0.4	0.3
San Jose-Sunnyvale-Santa Clara, CA	1	4	4	2	7	0.1	0.5	0.5	0.2	0.8
Seattle-Tacoma-Bellevue, WA	0	2	6	4	2	0.0	0.1	0.4	0.2	0.1
St. Louis, MO-IL	12	12	9	5	3	0.8	0.8	0.6	0.3	0.2
Tampa-St. Petersburg-Clearwater, FL	10	6	3	8	15	0.8	0.5	0.2	0.6	1.1
Virginia Beach-Norfolk-Newport News, VA-NC	12	3	4	15	18	1.5	0.4	0.5	1.8	2.2
Washington-Arlington-Alexandria, DC-VA-MD-WV	15	13	16	13	11	0.6	0.5	0.6	0.5	0.4
U.S. MSA TOTAL	1,013	840	806	926	994	1.3	1.1	1.0	1.1	1.2

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 31. Primary and secondary syphilis — Men – Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	303	459	472	562	496	13.5	20.1	20.2	23.0	20.3
Austin-Round Rock, TX	20	29	53	41	73	2.9	4.1	7.4	5.5	9.9
Baltimore-Towson, MD	116	161	206	160	160	9.3	12.8	16.2	12.5	12.5
Birmingham-Hoover, AL	6	19	22	66	150	1.2	3.7	4.2	12.5	28.5
Boston-Cambridge-Quincy, MA-NH	76	119	79	105	110	3.5	5.5	3.7	4.9	5.1
Buffalo-Cheektowaga-Tonawanda, NY	3	1	8	7	16	0.5	0.2	1.4	1.3	2.9
Charlotte-Gastonia-Concord, NC-SC	23	20	34	83	93	3.3	2.8	4.7	11.1	12.4
Chicago-Naperville-Joliet, IL-IN-WI	371	302	318	460	373	8.2	6.6	6.9	9.9	8.0
Cincinnati-Middletown, OH-KY-IN	5	2	20	24	8	0.5	0.2	2.0	2.4	0.8
Cleveland-Elyria-Mentor, OH	10	19	37	21	16	1.0	1.9	3.6	2.1	1.6
Columbus, OH	96	103	78	87	77	11.8	12.5	9.3	10.3	9.1
Dallas-Fort Worth-Arlington, TX	186	166	206	205	208	6.8	5.9	7.2	7.0	7.1
Denver-Aurora, CO	55	29	49	37	53	4.8	2.5	4.2	3.1	4.5
Detroit-Warren-Livonia, MI	278	137	104	60	62	12.7	6.3	4.8	2.7	2.8
Hartford-West Hartford-East Hartford, CT	10	13	13	14	22	1.8	2.3	2.3	2.4	3.8
Houston-Baytown-Sugar Land, TX	105	201	196	218	331	4.2	7.9	7.6	8.3	12.5
Indianapolis, IN	28	18	32	31	46	3.6	2.3	4.0	3.8	5.7
Jacksonville, FL	10	12	40	30	30	1.7	2.0	6.7	4.9	4.9
Kansas City, MO-KS	14	23	30	84	95	1.5	2.5	3.2	8.8	9.9
Las Vegas-Paradise, NV	7	7	30	82	100	0.9	0.9	3.6	9.4	11.5
Los Angeles-Long Beach-Santa Ana, CA	414	533	511	743	873	6.6	8.4	8.0	11.6	13.6
Louisville, KY-IN	41	14	32	43	38	7.1	2.4	5.5	7.3	6.4
Memphis, TN-MS-AR	49	60	66	88	93	8.3	10.0	10.9	14.4	15.3
Miami-Fort Lauderdale-Miami Beach, FL	343	376	393	352	329	13.5	14.7	15.1	13.4	12.5
Milwaukee-Waukesha-West Allis, WI	18	10	18	21	36	2.5	1.4	2.4	2.9	4.9
Minneapolis-St. Paul-Bloomington, MN-WI	52	40	23	65	40	3.4	2.6	1.5	4.2	2.6
Nashville-Davidson-Murfreesboro, TN	20	20	15	32	38	3.0	3.0	2.2	4.6	5.4
New Orleans-Metairie-Kenner, LA	9	18	74	65	65	1.4	2.8	11.7	10.3	10.3
New York-Newark-Edison, NY-NJ-PA	537	644	758	736	780	6.0	7.2	8.4	8.1	8.6
Oklahoma City, OK	50	37	13	14	18	9.1	6.6	2.3	2.5	3.2
Orlando, FL	45	53	59	92	80	5.2	6.0	6.4	9.6	8.4
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	81	112	79	114	167	2.9	4.0	2.8	4.1	5.9
Phoenix-Mesa-Scottsdale, AZ	NA	89	81	89	136	NA	4.9	4.3	4.6	7.0
Pittsburgh, PA	16	21	15	44	63	1.4	1.8	1.3	3.8	5.5
Portland-Vancouver-Beaverton, OR-WA	20	45	26	39	25	2.0	4.4	2.5	3.7	2.4
Providence-New Bedford-Fall River, RI-MA	15	33	20	21	18	1.9	4.2	2.5	2.7	2.3
Richmond, VA	7	10	10	12	27	1.3	1.8	1.8	2.1	4.7
Riverside-San Bernardino-Ontario, CA	62	86	102	108	98	3.5	4.7	5.4	5.5	5.0
Rochester, NY	5	6	12	5	14	1.0	1.2	2.4	1.0	2.8
Sacramento-Arden-Arcade-Roseville, CA	14	18	19	16	29	1.5	1.9	1.9	1.6	2.9
Salt Lake City, UT	7	5	4	8	14	1.4	1.0	0.8	1.5	2.7
San Antonio, TX	36	46	96	95	104	4.1	5.2	10.6	10.3	11.2
San Diego-Carlsbad-San Marcos, CA	31	107	128	169	223	2.1	7.3	8.7	11.4	15.1
San Francisco-Oakland-Fremont, CA	393	401	419	323	355	19.0	19.5	20.4	15.7	17.3
San Jose-Sunnyvale-Santa Clara, CA	29	52	52	42	45	3.3	5.9	5.9	4.7	5.0
Seattle-Tacoma-Bellevue, WA	59	68	132	121	158	3.8	4.3	8.3	7.6	9.9
St. Louis, MO-IL	20	39	62	45	62	1.5	3.0	4.6	3.3	4.6
Tampa-St. Petersburg-Clearwater, FL	47	90	86	77	95	3.9	7.3	6.9	6.0	7.4
Virginia Beach-Norfolk-Newport News, VA-NC	19	20	46	45	66	2.4	2.5	5.7	5.5	8.1
Washington-Arlington-Alexandria, DC-VA-MD-WV	124	155	183	220	239	5.1	6.2	7.3	8.6	9.4
U.S. MSA TOTAL	4,285	5,048	5,561	6,221	6,847	5.8	6.6	7.2	7.9	8.7

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 32. Primary and secondary syphilis — Reported cases and rates per 100,000 population by age group and sex: United States, 2002–2006

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
2002	10-14	15	4	11	0.1	0.0	0.1
	15-19	351	135	216	1.7	1.3	2.2
	20-24	842	533	309	4.2	5.2	3.1
	25-29	895	668	227	4.7	6.9	2.4
	30-34	1,097	877	220	5.2	8.3	2.1
	35-39	1,367	1,121	246	6.2	10.2	2.2
	40-44	1,023	845	178	4.4	7.4	1.5
	45-54	982	825	157	2.5	4.2	0.8
	55-64	217	196	21	0.8	1.5	0.2
	65+	67	59	8	0.2	0.4	0.0
	TOTAL	6,862	5,268	1,594	2.4	3.7	1.1
2003	10-14	11	1	10	0.1	0.0	0.1
	15-19	322	150	172	1.6	1.4	1.7
	20-24	860	620	240	4.2	5.8	2.4
	25-29	941	760	181	4.9	7.8	1.9
	30-34	1,187	1,023	164	5.7	9.8	1.6
	35-39	1,460	1,290	170	6.8	12.0	1.6
	40-44	1,157	1,021	136	5.0	8.9	1.2
	45-54	991	871	119	2.4	4.3	0.6
	55-64	205	187	18	0.7	1.4	0.1
	65+	42	36	6	0.1	0.2	0.0
	TOTAL	7,177	5,959	1,218	2.5	4.2	0.8
2004	10-14	9	2	7	0.0	0.0	0.1
	15-19	339	191	148	1.7	1.8	1.5
	20-24	1,029	735	294	5.0	6.9	2.9
	25-29	1,125	943	182	5.8	9.5	1.9
	30-34	1,282	1,116	166	6.3	10.9	1.7
	35-39	1,467	1,313	154	7.0	12.5	1.5
	40-44	1,344	1,198	146	5.9	10.6	1.3
	45-54	1,035	915	120	2.5	4.5	0.6
	55-64	281	249	32	1.0	1.8	0.2
	65+	55	54	1	0.2	0.4	0.0
	TOTAL	7,975	6,721	1,254	2.7	4.7	0.8
2005	10-14	10	2	8	0.0	0.0	0.1
	15-19	443	251	192	2.1	2.3	1.9
	20-24	1,181	875	306	5.6	8.1	3.0
	25-29	1,214	1,008	206	6.0	9.8	2.1
	30-34	1,329	1,178	150	6.6	11.6	1.5
	35-39	1,574	1,394	179	7.5	13.2	1.7
	40-44	1,418	1,253	164	6.2	11.0	1.4
	45-54	1,192	1,080	111	2.8	5.2	0.5
	55-64	304	284	20	1.0	1.9	0.1
	65+	59	57	2	0.2	0.4	0.0
	TOTAL	8,724	7,385	1,339	2.9	5.1	0.9
2006	10-14	13	2	11	0.1	0.0	0.1
	15-19	565	332	233	2.7	3.1	2.3
	20-24	1,382	1,083	299	6.6	10.0	2.9
	25-29	1,574	1,333	241	7.8	13.0	2.5
	30-34	1,221	1,058	163	6.1	10.4	1.6
	35-39	1,581	1,427	154	7.5	13.5	1.5
	40-44	1,516	1,363	153	6.6	12.0	1.3
	45-54	1,443	1,278	165	3.4	6.1	0.8
	55-64	375	340	35	1.2	2.3	0.2
	65+	81	79	2	0.2	0.5	0.0
	TOTAL	9,756	8,297	1,459	3.3	5.7	1.0

NOTE: **This table should be used only for age comparisons**. If age was not specified, cases were prorated according to the distribution of cases for which age was known. Differences between total cases from this table and others in the report are due to different reporting formats. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

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Table 33A. Primary and secondary syphilis — Reported cases by race/ethnicity, age group and sex: United States, 2002–2006

	Age Group	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
2002	10-14	2	1	1	10	2	8	2	1	1	1	0	1	0	0	0
	15-19	33	9	24	253	89	164	62	37	25	2	0	2	1	0	1
	20-24	129	89	40	546	313	233	146	117	29	13	9	4	8	5	3
	25-29	224	189	36	485	323	163	165	138	26	17	16	1	4	3	1
	30-34	404	373	31	476	310	166	192	172	20	22	21	1	3	1	2
	35-39	576	541	35	568	385	183	200	178	22	15	14	1	8	3	5
	40-44	452	429	23	448	305	142	102	93	8	15	14	1	7	4	3
	45-54	393	370	23	482	370	112	83	69	15	8	8	0	16	8	7
	55-64	95	91	4	110	94	16	10	10	0	0	0	0	2	1	1
	65+	15	15	0	42	35	7	9	8	1	0	0	0	1	1	0
	TOTAL	2,325	2,108	217	3,421	2,226	1,195	971	823	147	94	83	11	51	27	24
2003	10-14	0	0	0	5	1	4	5	0	5	0	0	0	1	0	1
	15-19	48	24	24	205	93	112	63	28	35	6	5	1	0	0	0
	20-24	195	154	41	471	309	161	178	142	36	13	11	2	3	3	0
	25-29	301	265	36	408	293	115	195	173	23	28	25	3	8	4	4
	30-34	524	485	39	416	316	100	213	190	23	20	20	0	14	12	2
	35-39	743	703	40	451	335	116	222	211	11	28	28	0	16	14	2
	40-44	588	563	26	382	288	94	158	146	12	20	19	1	9	5	3
	45-54	489	472	17	373	287	86	107	97	9	10	8	1	13	6	6
	55-64	104	100	4	81	68	13	13	12	1	2	2	0	4	4	0
	65+	17	16	1	18	16	2	5	2	3	0	0	0	1	1	0
	TOTAL	3,010	2,783	227	2,811	2,005	805	1,160	1,001	159	127	119	8	69	50	19
2004	10-14	0	0	0	8	2	6	1	0	1	0	0	0	0	0	0
	15-19	56	33	23	211	113	98	55	33	22	11	9	2	6	3	3
	20-24	242	185	57	573	375	198	188	156	32	19	16	3	8	4	4
	25-29	317	281	36	534	421	113	237	213	24	28	25	3	11	5	5
	30-34	512	470	41	496	402	95	238	215	23	29	28	1	10	3	6
	35-39	675	640	35	489	392	98	249	235	14	36	35	1	18	12	6
	40-44	684	655	29	455	353	102	179	169	9	18	18	0	10	4	5
	45-54	525	503	23	379	295	84	110	98	12	11	11	0	10	9	1
	55-64	155	145	10	101	83	18	20	20	0	2	1	1	4	1	3
	65+	36	35	1	16	16	0	3	3	0	0	0	0	0	0	0
	TOTAL	3,203	2,947	256	3,266	2,452	814	1,280	1,142	138	153	142	11	77	42	35
2005	10-14	0	0	0	9	1	8	1	1	0	0	0	0	0	0	0
	15-19	67	36	30	304	173	131	62	36	26	5	4	1	5	1	4
	20-24	281	230	51	660	459	201	216	167	49	15	11	4	8	7	1
	25-29	331	299	32	612	480	132	236	198	38	27	25	2	8	6	2
	30-34	491	456	35	554	455	99	230	216	14	43	42	1	12	10	2
	35-39	761	712	49	518	415	103	268	244	24	19	19	0	8	4	4
	40-44	741	700	40	446	350	97	193	172	21	26	24	2	12	7	4
	45-54	660	631	29	385	320	65	126	111	14	15	14	1	6	4	2
	55-64	167	162	5	102	90	13	30	28	2	4	4	0	0	0	0
	65+	26	26	0	23	21	2	8	8	0	2	2	0	0	0	0
	TOTAL	3,524	3,254	270	3,615	2,764	850	1,370	1,182	188	156	145	11	60	40	20
2006	10-14	1	0	1	11	2	9	0	0	0	0	0	0	1	0	1
	15-19	71	39	33	419	246	173	74	46	28	1	1	0	0	0	0
	20-24	291	247	44	853	630	223	218	187	31	12	11	1	8	7	1
	25-29	431	381	50	795	641	154	304	271	34	37	35	2	7	6	1
	30-34	433	395	38	497	398	99	243	223	20	34	31	3	14	11	3
	35-39	720	676	44	532	447	85	282	263	18	33	32	1	14	9	5
	40-44	802	756	46	443	356	87	227	213	14	30	29	1	15	10	5
	45-54	766	729	38	500	394	107	143	129	14	24	22	2	9	5	4
	55-64	194	186	8	139	115	24	35	33	2	2	2	0	5	4	1
	65+	34	34	0	25	23	2	17	17	0	0	0	0	5	5	0
	TOTAL	3,744	3,443	301	4,215	3,253	962	1,543	1,381	162	173	163	10	80	57	24

NOTE: These tables should be used only for race/ethnicity comparisons. **See Table 32 for age-specific cases and rates and Tables 25-27 for total and sex-specific cases and rates**. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. Differences between total cases from this table and others in the report are due to different reporting formats and above listed exclusion. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

Table 33B. Primary and secondary syphilis — Rates per 100,000 population by race/ethnicity, age group and sex: United States, 2002–2006

Age Group	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
10-14	0.0	0.0	0.0	0.3	0.1	0.5	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.0	2002
15-19	0.3	0.1	0.4	8.3	5.8	11.0	1.9	2.2	1.6	0.2	0.0	0.5	0.4	0.0	0.9	
20-24	1.0	1.4	0.6	19.0	22.1	16.0	4.0	5.9	1.8	1.4	2.0	0.9	4.2	5.2	3.2	
25-29	2.0	3.3	0.6	19.4	27.1	12.5	4.4	6.7	1.6	1.5	2.9	0.2	2.5	3.8	1.2	
30-34	3.0	5.6	0.5	17.9	24.6	11.8	5.4	9.0	1.2	1.8	3.5	0.2	1.9	1.3	2.4	
35-39	3.9	7.3	0.5	20.5	29.5	12.5	6.3	10.7	1.5	1.4	2.7	0.2	4.6	3.7	5.5	
40-44	2.8	5.3	0.3	16.0	23.2	9.6	3.8	6.8	0.7	1.5	2.8	0.2	3.9	4.6	3.2	
45-54	1.3	2.5	0.2	10.7	17.8	4.6	2.3	3.8	0.8	0.5	1.1	0.0	5.1	5.7	4.5	
55-64	0.5	0.9	0.0	4.3	8.2	1.1	0.5	1.1	0.0	0.0	0.0	0.0	1.1	1.2	1.1	
65+	0.0	0.1	0.0	1.4	3.1	0.4	0.5	1.0	0.1	0.0	0.0	0.0	0.7	1.5	0.0	
TOTAL	1.2	2.2	0.2	9.5	13.0	6.3	2.5	4.1	0.8	0.8	1.4	0.2	2.1	2.3	1.9	
10-14	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.9	2003
15-19	0.4	0.4	0.4	6.7	5.9	7.4	1.9	1.7	2.2	0.7	1.2	0.2	0.0	0.0	0.0	
20-24	1.5	2.4	0.6	16.0	21.1	10.9	4.8	6.8	2.2	1.4	2.3	0.4	1.5	3.0	0.0	
25-29	2.6	4.6	0.6	16.1	24.1	8.7	5.1	8.3	1.3	2.5	4.4	0.5	4.9	5.0	4.9	
30-34	4.0	7.4	0.6	15.7	25.2	7.2	5.9	9.9	1.4	1.6	3.3	0.0	8.1	13.8	2.4	
35-39	5.2	9.8	0.6	16.6	26.2	8.1	7.0	12.5	0.8	2.6	5.3	0.0	9.0	15.9	2.3	
40-44	3.6	7.0	0.3	13.6	21.9	6.3	5.8	10.3	0.9	1.9	3.7	0.2	4.5	6.0	3.2	
45-54	1.6	3.1	0.1	8.0	13.4	3.4	2.8	5.1	0.5	0.5	1.0	0.1	4.0	4.2	3.8	
55-64	0.5	0.9	0.0	3.0	5.7	0.9	0.6	1.2	0.1	0.2	0.5	0.0	2.3	4.8	0.0	
65+	0.1	0.1	0.0	0.6	1.4	0.1	0.3	0.3	0.3	0.0	0.0	0.0	0.7	1.5	0.0	
TOTAL	1.5	2.8	0.2	7.7	11.5	4.2	2.9	4.9	0.8	1.0	1.9	0.1	2.8	4.2	1.5	
10-14	0.0	0.0	0.0	0.2	0.1	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2004
15-19	0.4	0.5	0.4	6.7	7.1	6.3	1.6	1.9	1.3	1.2	1.9	0.5	2.7	2.7	2.8	
20-24	1.9	2.8	0.9	19.1	25.0	13.2	5.0	7.5	1.9	1.9	3.1	0.6	3.9	3.9	3.9	
25-29	2.7	4.7	0.6	20.5	33.5	8.4	6.1	9.8	1.4	2.4	4.4	0.5	6.1	6.1	6.0	
30-34	4.0	7.4	0.7	18.9	32.2	6.8	6.4	10.8	1.4	2.3	4.4	0.2	5.7	3.9	7.5	
35-39	4.9	9.2	0.5	18.4	31.2	6.9	7.6	13.5	0.9	3.1	6.2	0.2	10.6	14.1	7.1	
40-44	4.3	8.2	0.4	16.1	26.7	6.8	6.2	11.3	0.7	1.7	3.6	0.0	5.1	4.7	5.4	
45-54	1.7	3.3	0.1	8.0	13.4	3.3	2.7	4.8	0.6	0.6	1.3	0.0	3.0	5.6	0.6	
55-64	0.7	1.3	0.1	3.6	6.6	1.2	0.9	1.9	0.0	0.2	0.2	0.2	2.0	1.1	2.9	
65+	0.1	0.3	0.0	0.5	1.4	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	1.6	3.0	0.3	8.8	13.9	4.2	3.1	5.4	0.7	1.2	2.2	0.2	3.1	3.5	2.8	
10-14	0.0	0.0	0.0	0.3	0.1	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2005
15-19	0.5	0.5	0.5	9.4	10.6	8.2	1.8	2.0	1.6	0.6	0.9	0.2	2.3	0.9	3.7	
20-24	2.1	3.4	0.8	21.9	30.2	13.5	5.8	8.2	2.9	1.6	2.3	0.8	3.8	6.6	0.9	
25-29	2.8	4.9	0.5	22.6	36.5	9.5	5.8	8.8	2.1	2.4	4.5	0.4	4.6	6.6	2.6	
30-34	4.0	7.4	0.6	21.4	37.1	7.3	6.0	10.5	0.8	3.2	6.5	0.2	7.1	11.6	2.5	
35-39	5.6	10.4	0.7	19.6	33.3	7.4	7.9	13.5	1.5	1.5	3.2	0.0	5.1	5.3	4.9	
40-44	4.7	8.9	0.5	15.8	26.5	6.4	6.4	11.0	1.5	2.3	4.4	0.4	6.2	8.3	4.3	
45-54	2.1	4.1	0.2	7.9	14.1	2.5	2.9	5.2	0.7	0.8	1.6	0.1	1.9	2.7	1.2	
55-64	0.7	1.4	0.0	3.5	6.8	0.8	1.3	2.5	0.2	0.3	0.7	0.0	0.0	0.0	0.0	
65+	0.1	0.2	0.0	0.7	1.8	0.1	0.4	0.9	0.0	0.2	0.4	0.0	0.0	0.0	0.0	
TOTAL	1.8	3.3	0.3	9.7	15.5	4.4	3.2	5.4	0.9	1.1	2.2	0.2	2.4	3.3	1.6	
10-14	0.0	0.0	0.0	0.3	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.9	2006
15-19	0.5	0.6	0.5	12.9	15.0	10.8	2.1	2.6	1.6	0.1	0.2	0.0	0.0	0.0	0.0	
20-24	2.2	3.7	0.7	28.3	41.5	14.9	5.8	9.2	1.8	1.3	2.3	0.2	3.8	6.4	1.1	
25-29	3.6	6.3	0.8	29.3	48.8	11.0	7.6	12.1	1.9	3.2	6.2	0.4	4.1	6.9	1.2	
30-34	3.5	6.4	0.6	19.2	32.5	7.3	6.4	10.9	1.2	2.6	4.8	0.5	8.2	12.8	3.7	
35-39	5.3	9.9	0.7	20.2	35.9	6.1	8.3	14.6	1.2	2.8	5.5	0.2	8.3	10.5	6.1	
40-44	5.1	9.6	0.6	15.7	27.0	5.8	7.6	13.6	1.0	2.7	5.4	0.2	7.9	10.7	5.4	
45-54	2.5	4.7	0.2	10.2	17.4	4.0	3.3	6.0	0.7	1.3	2.5	0.2	2.8	3.3	2.4	
55-64	0.8	1.6	0.1	4.7	8.7	1.4	1.5	2.9	0.2	0.2	0.4	0.0	2.5	4.2	0.9	
65+	0.1	0.3	0.0	0.8	1.9	0.1	0.7	1.7	0.0	0.0	0.0	0.0	2.9	6.6	0.0	
TOTAL	1.9	3.5	0.3	11.3	18.3	4.9	3.6	6.3	0.8	1.3	2.5	0.1	3.3	4.7	1.9	

NOTE: These tables should be used only for race/ethnicity comparisons. **See Table 32 for age-specific cases and rates and Tables 25-27 for total and sex-specific cases and rates**. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. Differences between total rates from this table and others in the report are due to different reporting formats and above listed exclusion. The 0 to 9 year age group is not shown because some of these cases may not be due to sexual transmission; however, they are included in the totals.

Table 34. Early latent syphilis — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	211	140	231	184	341	4.7	3.1	5.1	4.0	7.5
Alaska	1	0	1	8	6	0.2	0.0	0.2	1.2	0.9
Arizona	200	232	219	134	186	3.7	4.2	3.8	2.3	3.1
Arkansas	51	71	56	48	67	1.9	2.6	2.0	1.7	2.4
California	716	820	873	1,153	1,369	2.0	2.3	2.4	3.2	3.8
Colorado	22	20	24	27	38	0.5	0.4	0.5	0.6	0.8
Connecticut	13	13	16	19	27	0.4	0.4	0.5	0.5	0.8
Delaware	9	11	25	9	16	1.1	1.3	3.0	1.1	1.9
District of Columbia	192	152	113	103	77	33.6	26.9	20.4	18.7	14.0
Florida	949	988	856	726	760	5.7	5.8	4.9	4.1	4.3
Georgia	701	720	333	380	366	8.2	8.3	3.8	4.2	4.0
Hawaii	21	6	3	4	2	1.7	0.5	0.2	0.3	0.2
Idaho	4	8	26	13	3	0.3	0.6	1.9	0.9	0.2
Illinois	528	350	322	397	267	4.2	2.8	2.5	3.1	2.1
Indiana	53	58	45	42	46	0.9	0.9	0.7	0.7	0.7
Iowa	8	5	12	6	6	0.3	0.2	0.4	0.2	0.2
Kansas	13	19	12	18	18	0.5	0.7	0.4	0.7	0.7
Kentucky	49	43	24	23	36	1.2	1.0	0.6	0.6	0.9
Louisiana	183	197	316	252	481	4.1	4.4	7.0	5.6	10.6
Maine	1	7	0	2	7	0.1	0.5	0.0	0.2	0.5
Maryland	181	211	213	289	193	3.3	3.8	3.8	5.2	3.4
Massachusetts	95	136	96	105	82	1.5	2.1	1.5	1.6	1.3
Michigan	255	122	121	69	43	2.5	1.2	1.2	0.7	0.4
Minnesota	23	45	21	46	58	0.5	0.9	0.4	0.9	1.1
Mississippi	149	173	130	162	197	5.2	6.0	4.5	5.5	6.7
Missouri	51	46	58	108	93	0.9	0.8	1.0	1.9	1.6
Montana	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nebraska	0	1	0	2	1	0.0	0.1	0.0	0.1	0.1
Nevada	12	35	24	64	119	0.6	1.6	1.0	2.7	4.9
New Hampshire	1	4	0	0	2	0.1	0.3	0.0	0.0	0.2
New Jersey	220	326	344	289	314	2.6	3.8	4.0	3.3	3.6
New Mexico	23	53	69	53	85	1.2	2.8	3.6	2.7	4.4
New York	756	1,019	744	1,084	993	3.9	5.3	3.9	5.6	5.2
North Carolina	333	261	261	215	294	4.0	3.1	3.1	2.5	3.4
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	84	92	184	136	115	0.7	0.8	1.6	1.2	1.0
Oklahoma	124	77	62	64	121	3.5	2.2	1.8	1.8	3.4
Oregon	18	27	29	16	19	0.5	0.8	0.8	0.4	0.5
Pennsylvania	237	216	183	204	286	1.9	1.7	1.5	1.6	2.3
Rhode Island	9	7	15	5	6	0.8	0.7	1.4	0.5	0.6
South Carolina	202	180	204	222	174	4.9	4.3	4.9	5.2	4.1
South Dakota	0	3	0	0	6	0.0	0.4	0.0	0.0	0.8
Tennessee	390	228	206	203	233	6.7	3.9	3.5	3.4	3.9
Texas	1,149	1,065	1,069	1,013	1,312	5.3	4.8	4.8	4.4	5.7
Utah	8	7	5	7	7	0.3	0.3	0.2	0.3	0.3
Vermont	0	0	0	0	2	0.0	0.0	0.0	0.0	0.3
Virginia	94	74	108	148	165	1.3	1.0	1.4	2.0	2.2
Washington	23	36	51	63	81	0.4	0.6	0.8	1.0	1.3
West Virginia	1	2	9	3	6	0.1	0.1	0.5	0.2	0.3
Wisconsin	66	54	55	58	60	1.2	1.0	1.0	1.0	1.1
Wyoming	0	1	0	0	0	0.0	0.2	0.0	0.0	0.0
U.S. TOTAL	8,429	8,361	7,768	8,176	9,186	2.9	2.9	2.6	2.8	3.1
Northeast	1,332	1,728	1,398	1,708	1,719	2.5	3.2	2.6	3.1	3.1
Midwest	1,081	795	830	882	713	1.7	1.2	1.3	1.3	1.1
South	4,968	4,593	4,216	4,044	4,839	4.8	4.4	4.0	3.8	4.5
West	1,048	1,245	1,324	1,542	1,915	1.6	1.9	2.0	2.3	2.8
Guam	3	1	0	0	3	1.9	0.6	0.0	0.0	1.8
Puerto Rico	702	748	353	432	368	18.2	19.3	9.1	11.0	9.4
Virgin Islands	1	6	8	7	0	0.9	5.5	7.4	6.4	0.0
OUTLYING AREAS	706	755	361	439	371	17.1	18.2	8.7	10.5	8.9
TOTAL	9,135	9,116	8,129	8,615	9,557	3.1	3.1	2.7	2.9	3.2

Table 35. Early latent syphilis — Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	585	614	281	314	293	12.9	13.3	6.0	6.4	6.0
Austin-Round Rock, TX	25	42	59	59	51	1.9	3.0	4.2	4.1	3.5
Baltimore-Towson, MD	151	189	167	211	136	5.8	7.2	6.3	7.9	5.1
Birmingham-Hoover, AL	33	24	42	82	220	3.1	2.2	3.9	7.5	20.2
Boston-Cambridge-Quincy, MA-NH	81	117	70	84	65	1.8	2.6	1.6	1.9	1.5
Buffalo-Cheektowaga-Tonawanda, NY	2	2	4	3	14	0.2	0.2	0.3	0.3	1.2
Charlotte-Gastonia-Concord, NC-SC	49	51	58	71	98	3.5	3.5	3.9	4.7	6.4
Chicago-Naperville-Joliet, IL-IN-WI	510	344	322	395	269	5.5	3.7	3.4	4.2	2.8
Cincinnati-Middletown, OH-KY-IN	1	0	8	13	7	0.0	0.0	0.4	0.6	0.3
Cleveland-Elyria-Mentor, OH	13	7	33	21	11	0.6	0.3	1.5	1.0	0.5
Columbus, OH	55	44	72	41	55	3.3	2.6	4.3	2.4	3.2
Dallas-Fort Worth-Arlington, TX	508	488	380	381	532	9.3	8.7	6.7	6.5	9.1
Denver-Aurora, CO	19	17	22	22	32	0.8	0.7	0.9	0.9	1.4
Detroit-Warren-Livonia, MI	228	112	103	59	34	5.1	2.5	2.3	1.3	0.8
Hartford-West Hartford-East Hartford, CT	7	2	5	7	10	0.6	0.2	0.4	0.6	0.8
Houston-Baytown-Sugar Land, TX	198	237	246	207	291	4.0	4.7	4.7	3.9	5.5
Indianapolis, IN	31	23	24	19	18	2.0	1.4	1.5	1.2	1.1
Jacksonville, FL	27	40	75	56	56	2.3	3.3	6.1	4.5	4.5
Kansas City, MO-KS	12	31	23	51	41	0.6	1.6	1.2	2.6	2.1
Las Vegas-Paradise, NV	7	28	19	57	112	0.5	1.8	1.2	3.3	6.5
Los Angeles-Long Beach-Santa Ana, CA	390	434	445	666	851	3.1	3.4	3.4	5.2	6.6
Louisville, KY-IN	36	34	16	16	18	3.0	2.9	1.3	1.3	1.5
Memphis, TN-MS-AR	239	177	170	171	174	19.4	14.3	13.6	13.6	13.8
Miami-Fort Lauderdale-Miami Beach, FL	516	578	477	302	304	9.9	10.9	8.9	5.6	5.6
Milwaukee-Waukesha-West Allis, WI	53	41	37	36	46	3.5	2.7	2.4	2.4	3.0
Minneapolis-St. Paul-Bloomington, MN-WI	23	41	19	43	52	0.8	1.3	0.6	1.4	1.7
Nashville-Davidson-Murfreesboro, TN	127	31	30	29	42	9.4	2.3	2.1	2.0	3.0
New Orleans-Metairie-Kenner, LA	45	48	85	68	127	3.4	3.6	6.4	5.2	9.6
New York-Newark-Edison, NY-NJ-PA	903	1,259	1,012	1,281	1,178	4.9	6.8	5.4	6.8	6.3
Oklahoma City, OK	81	62	47	36	74	7.2	5.5	4.1	3.1	6.4
Orlando, FL	172	117	90	124	91	9.8	6.5	4.8	6.4	4.7
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	263	256	220	171	280	4.6	4.4	3.8	2.9	4.8
Phoenix-Mesa-Scottsdale, AZ	NA	165	165	97	166	NA	4.6	4.4	2.5	4.3
Pittsburgh, PA	15	11	8	28	43	0.6	0.5	0.3	1.2	1.8
Portland-Vancouver-Beaverton, OR-WA	19	22	23	12	9	0.9	1.1	1.1	0.6	0.4
Providence-New Bedford-Fall River, RI-MA	12	11	25	10	9	0.7	0.7	1.5	0.6	0.6
Richmond, VA	17	24	18	24	29	1.5	2.1	1.6	2.0	2.5
Riverside-San Bernardino-Ontario, CA	43	34	40	64	64	1.2	0.9	1.1	1.6	1.6
Rochester, NY	2	8	4	13	8	0.2	0.8	0.4	1.3	0.8
Sacramento-Arden-Arcade-Roseville, CA	8	5	11	11	23	0.4	0.3	0.5	0.5	1.1
Salt Lake City, UT	7	4	5	3	5	0.7	0.4	0.5	0.3	0.5
San Antonio, TX	108	66	79	144	172	6.0	3.6	4.3	7.6	9.1
San Diego-Carlsbad-San Marcos, CA	34	41	84	117	123	1.2	1.4	2.9	4.0	4.2
San Francisco-Oakland-Fremont, CA	203	230	235	220	220	4.9	5.5	5.7	5.3	5.3
San Jose-Sunnyvale-Santa Clara, CA	11	20	13	18	18	0.6	1.2	0.7	1.0	1.0
Seattle-Tacoma-Bellevue, WA	18	30	42	60	74	0.6	1.0	1.3	1.9	2.3
St. Louis, MO-IL	40	28	31	34	30	1.5	1.0	1.1	1.2	1.1
Tampa-St. Petersburg-Clearwater, FL	80	142	103	101	177	3.2	5.6	4.0	3.8	6.7
Virginia Beach-Norfolk-Newport News, VA-NC	35	21	45	78	74	2.2	1.3	2.7	4.7	4.5
Washington-Arlington-Alexandria, DC-VA-MD-WV	243	195	182	208	171	4.8	3.8	3.5	4.0	3.3
U.S. MSA TOTAL	6,285	6,547	5,774	6,338	6,997	4.2	4.2	3.7	4.0	4.4

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 36. Late and late latent syphilis — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	334	309	232	193	262	7.4	6.9	5.1	4.2	5.7
Alaska	8	7	6	5	8	1.2	1.1	0.9	0.8	1.2
Arizona	666	659	572	455	521	12.2	11.8	10.0	7.7	8.8
Arkansas	124	172	142	124	92	4.6	6.3	5.2	4.5	3.3
California	2,107	2,024	2,293	2,527	2,773	6.0	5.7	6.4	7.0	7.7
Colorado	86	82	90	70	73	1.9	1.8	2.0	1.5	1.6
Connecticut	147	163	108	88	106	4.2	4.7	3.1	2.5	3.0
Delaware	42	29	26	15	38	5.2	3.5	3.1	1.8	4.5
District of Columbia	180	129	174	148	120	31.5	22.9	31.4	26.9	21.8
Florida	1,686	1,610	1,364	1,422	1,445	10.1	9.5	7.8	8.0	8.1
Georgia	743	836	701	898	977	8.7	9.6	7.9	9.9	10.8
Hawaii	27	39	25	42	46	2.2	3.1	2.0	3.3	3.6
Idaho	11	18	25	21	6	0.8	1.3	1.8	1.5	0.4
Illinois	546	633	614	663	760	4.3	5.0	4.8	5.2	6.0
Indiana	196	252	164	182	111	3.2	4.1	2.6	2.9	1.8
Iowa	38	29	19	13	43	1.3	1.0	0.6	0.4	1.4
Kansas	44	32	49	51	41	1.6	1.2	1.8	1.9	1.5
Kentucky	72	83	79	54	78	1.8	2.0	1.9	1.3	1.9
Louisiana	439	1,195	979	696	551	9.8	26.6	21.7	15.4	12.2
Maine	6	6	5	3	6	0.5	0.5	0.4	0.2	0.5
Maryland	415	443	399	387	526	7.6	8.0	7.2	6.9	9.4
Massachusetts	346	375	307	168	172	5.4	5.8	4.8	2.6	2.7
Michigan	408	451	470	297	210	4.1	4.5	4.6	2.9	2.1
Minnesota	65	103	96	89	83	1.3	2.0	1.9	1.7	1.6
Mississippi	247	220	212	160	237	8.6	7.6	7.3	5.5	8.1
Missouri	118	96	114	114	166	2.1	1.7	2.0	2.0	2.9
Montana	4	0	0	0	1	0.4	0.0	0.0	0.0	0.1
Nebraska	19	15	8	12	26	1.1	0.9	0.5	0.7	1.5
Nevada	86	102	189	169	117	4.0	4.6	8.1	7.0	4.8
New Hampshire	15	14	21	17	20	1.2	1.1	1.6	1.3	1.5
New Jersey	637	572	319	375	297	7.4	6.6	3.7	4.3	3.4
New Mexico	48	75	97	68	66	2.6	4.0	5.1	3.5	3.4
New York	2,620	2,715	2,979	2,054	2,833	13.7	14.1	15.5	10.7	14.7
North Carolina	424	417	285	213	352	5.1	5.0	3.3	2.5	4.1
North Dakota	0	0	0	0	2	0.0	0.0	0.0	0.0	0.3
Ohio	105	189	148	153	192	0.9	1.7	1.3	1.3	1.7
Oklahoma	89	211	79	50	58	2.5	6.0	2.2	1.4	1.6
Oregon	29	43	50	52	51	0.8	1.2	1.4	1.4	1.4
Pennsylvania	342	329	273	308	335	2.8	2.7	2.2	2.5	2.7
Rhode Island	45	50	62	35	51	4.2	4.6	5.7	3.3	4.7
South Carolina	269	263	194	239	155	6.5	6.3	4.6	5.6	3.6
South Dakota	0	0	0	2	10	0.0	0.0	0.0	0.3	1.3
Tennessee	514	511	459	493	527	8.9	8.7	7.8	8.3	8.8
Texas	2,299	2,200	2,244	2,336	2,501	10.6	9.9	10.0	10.2	10.9
Utah	56	51	59	33	38	2.4	2.2	2.5	1.3	1.5
Vermont	0	0	2	0	2	0.0	0.0	0.3	0.0	0.3
Virginia	362	395	380	361	343	5.0	5.3	5.1	4.8	4.5
Washington	63	121	135	144	160	1.0	2.0	2.2	2.3	2.5
West Virginia	2	7	6	12	13	0.1	0.4	0.3	0.7	0.7
Wisconsin	38	41	43	37	42	0.7	0.7	0.8	0.7	0.8
Wyoming	1	3	3	1	1	0.2	0.6	0.6	0.2	0.2
U.S. TOTAL	17,168	18,319	17,300	16,049	17,644	6.0	6.3	5.9	5.4	6.0
Northeast	4,158	4,224	4,076	3,048	3,822	7.7	7.8	7.5	5.6	7.0
Midwest	1,577	1,841	1,725	1,613	1,686	2.4	2.8	2.6	2.4	2.6
South	8,241	9,030	7,955	7,801	8,275	8.0	8.6	7.5	7.3	7.7
West	3,192	3,224	3,544	3,587	3,861	4.9	4.9	5.3	5.3	5.7
Guam	9	13	13	16	7	5.6	7.9	7.8	9.5	4.2
Puerto Rico	398	390	608	554	535	10.3	10.1	15.6	14.2	13.7
Virgin Islands	2	5	4	5	4	1.8	4.6	3.7	4.6	3.7
OUTLYING AREAS	409	408	625	575	546	9.9	9.8	15.0	13.7	13.0
TOTAL	17,577	18,727	17,925	16,624	18,190	6.0	6.3	6.0	5.5	6.1

Table 37. Late and late latent syphilis — Reported cases and rates in selected metropolitan statistical areas* (MSAs) listed in alphabetical order: United States, 2002–2006

	Cases					Rates per 100,000 Population				
Metropolitan Statistical Area	*2002*	*2003*	*2004*	*2005*	*2006*	*2002*	*2003*	*2004*	*2005*	*2006*
Atlanta-Sandy Springs-Marietta, GA	460	566	522	714	814	10.2	12.3	11.1	14.5	16.6
Austin-Round Rock, TX	59	78	85	89	74	4.4	5.7	6.0	6.1	5.1
Baltimore-Towson, MD	222	229	195	209	283	8.5	8.8	7.4	7.9	10.7
Birmingham-Hoover, AL	99	74	40	57	94	9.3	6.9	3.7	5.2	8.6
Boston-Cambridge-Quincy, MA-NH	312	330	256	149	147	7.0	7.4	5.8	3.4	3.3
Buffalo-Cheektowaga-Tonawanda, NY	7	7	11	4	7	0.6	0.6	1.0	0.3	0.6
Charlotte-Gastonia-Concord, NC-SC	66	87	45	61	83	4.7	6.1	3.1	4.0	5.5
Chicago-Naperville-Joliet, IL-IN-WI	512	630	576	611	687	5.5	6.7	6.1	6.5	7.3
Cincinnati-Middletown, OH-KY-IN	24	16	24	18	37	1.2	0.8	1.2	0.9	1.8
Cleveland-Elyria-Mentor, OH	10	23	11	9	24	0.5	1.1	0.5	0.4	1.1
Columbus, OH	52	102	72	76	67	3.1	6.1	4.3	4.4	3.9
Dallas-Fort Worth-Arlington, TX	683	735	701	792	809	12.5	13.1	12.3	13.6	13.9
Denver-Aurora, CO	66	64	56	51	51	2.9	2.8	2.4	2.2	2.2
Detroit-Warren-Livonia, MI	356	383	400	238	155	7.9	8.5	8.9	5.3	3.5
Hartford-West Hartford-East Hartford, CT	50	52	28	35	32	4.3	4.4	2.4	2.9	2.7
Houston-Baytown-Sugar Land, TX	796	768	783	685	856	16.0	15.1	15.1	13.0	16.2
Indianapolis, IN	74	93	68	80	56	4.7	5.8	4.2	4.9	3.4
Jacksonville, FL	36	73	70	41	63	3.1	6.1	5.7	3.3	5.0
Kansas City, MO-KS	45	41	40	53	75	2.4	2.2	2.1	2.7	3.9
Las Vegas-Paradise, NV	67	87	167	139	95	4.4	5.5	10.1	8.1	5.6
Los Angeles-Long Beach-Santa Ana, CA	1,245	1,137	1,451	1,649	1,759	9.8	8.9	11.2	12.8	13.6
Louisville, KY-IN	42	63	60	40	42	3.6	5.3	5.0	3.3	3.5
Memphis, TN-MS-AR	276	278	242	272	287	22.4	22.4	19.4	21.6	22.8
Miami-Fort Lauderdale-Miami Beach, FL	1,012	909	769	742	773	19.3	17.2	14.3	13.7	14.3
Milwaukee-Waukesha-West Allis, WI	24	22	28	18	16	1.6	1.5	1.8	1.2	1.1
Minneapolis-St. Paul-Bloomington, MN-WI	52	89	79	74	65	1.7	2.9	2.5	2.4	2.1
Nashville-Davidson-Murfreesboro, TN	172	158	145	126	112	12.7	11.5	10.4	8.9	7.9
New Orleans-Metairie-Kenner, LA	71	187	259	190	133	5.4	14.2	19.6	14.4	10.1
New York-Newark-Edison, NY-NJ-PA	3,111	3,077	3,058	2,241	2,905	16.7	16.5	16.3	12.0	15.5
Oklahoma City, OK	63	135	42	28	18	5.6	11.9	3.7	2.4	1.6
Orlando, FL	159	129	106	183	217	9.1	7.2	5.7	9.5	11.2
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	345	392	361	284	315	6.0	6.8	6.2	4.9	5.4
Phoenix-Mesa-Scottsdale, AZ	NA	589	468	363	424	NA	16.4	12.6	9.4	11.0
Pittsburgh, PA	13	8	2	15	18	0.5	0.3	0.1	0.6	0.8
Portland-Vancouver-Beaverton, OR-WA	19	34	35	43	40	0.9	1.7	1.7	2.1	1.9
Providence-New Bedford-Fall River, RI-MA	58	74	81	37	65	3.6	4.6	5.0	2.3	4.0
Richmond, VA	59	77	56	50	49	5.2	6.8	4.9	4.3	4.2
Riverside-San Bernardino-Ontario, CA	166	184	174	208	203	4.7	5.1	4.6	5.3	5.2
Rochester, NY	10	18	25	17	68	1.0	1.7	2.4	1.6	6.5
Sacramento-Arden-Arcade-Roseville, CA	26	11	33	8	78	1.3	0.6	1.6	0.4	3.8
Salt Lake City, UT	36	33	42	23	21	3.6	3.3	4.1	2.2	2.0
San Antonio, TX	165	109	164	178	156	9.2	6.0	8.8	9.4	8.3
San Diego-Carlsbad-San Marcos, CA	87	139	124	133	202	3.0	4.7	4.2	4.5	6.9
San Francisco-Oakland-Fremont, CA	266	260	258	165	156	6.4	6.3	6.2	4.0	3.8
San Jose-Sunnyvale-Santa Clara, CA	48	57	39	56	22	2.8	3.3	2.2	3.2	1.3
Seattle-Tacoma-Bellevue, WA	50	74	93	100	122	1.6	2.4	2.9	3.1	3.8
St. Louis, MO-IL	84	69	85	86	89	3.1	2.5	3.1	3.1	3.2
Tampa-St. Petersburg-Clearwater, FL	177	166	110	139	140	7.1	6.6	4.3	5.2	5.3
Virginia Beach-Norfolk-Newport News, VA-NC	118	104	100	105	85	7.3	6.4	6.1	6.4	5.2
Washington-Arlington-Alexandria, DC-VA-MD-WV	483	470	511	453	496	9.6	9.2	9.9	8.7	9.5
U.S. MSA TOTAL	12,433	13,490	13,150	12,137	13,585	8.2	8.6	8.3	7.6	8.5

*Data are presented for 50 MSAs with the largest population based on 2000 U.S. census. NA = Not available. STD morbidity reporting methods do not allow MSA-specific case counts and rates to be determined for some jurisdictions for some years.

Table 38. Congenital syphilis — Reported cases and rates in infants < 1 year of age by state, ranked by rates: United States, 2006

Rank[*]	*State*[†]	*Cases*	*Rate per 100,000 Live Births*
1	Nevada	15	42.6
2	Maryland	19	25.5
3	New Mexico	7	24.7
4	Texas	79	20.7
5	Louisiana	13	19.9
6	Arkansas	7	18.1
7	Arizona	16	17.1
8	Alabama	9	15.1
9	New Jersey	15	13.0
10	California	66	12.1
11	Michigan	13	10.0
12	Florida	21	9.6
	U.S. TOTAL[§]	**349**	**8.5**
13	Illinois	15	8.3
14	Tennessee	6	7.5
15	Georgia	9	6.5
16	New York	15	6.0
17	North Carolina	6	5.0
18	Utah	2	3.9
19	Oklahoma	2	3.9
20	Missouri	3	3.9
21	South Carolina	2	3.5
22	Colorado	2	2.9
23	Virginia	3	2.9
24	Kansas	1	2.5
25	Kentucky	1	1.8
26	Minnesota	1	1.4
	YEAR 2010 TARGET		**1.0**
	Alaska	0	0.0
	Connecticut	0	0.0
	Delaware	0	0.0
	Hawaii	0	0.0
	Idaho	0	0.0
	Indiana	0	0.0
	Iowa	0	0.0
	Maine	0	0.0
	Massachusetts	0	0.0
	Mississippi	0	0.0
	Montana	0	0.0
	Nebraska	0	0.0
	New Hampshire	0	0.0
	North Dakota	0	0.0
	Ohio	0	0.0
	Oregon	0	0.0
	Pennsylvania	0	0.0
	Rhode Island	0	0.0
	South Dakota	0	0.0
	Vermont	0	0.0
	Washington	0	0.0
	West Virginia	0	0.0
	Wisconsin	0	0.0
	Wyoming	0	0.0

[*]States were ranked in descending order by rate, number of cases, and alphabetically by state. States with no cases were not ranked.
[†]Mother's state of residence used to assign case.
[§]Total includes cases reported by the District of Columbia with 1 case and a rate of 12.6, but excludes outlying areas (Guam with 0 cases and rate of 0.0, Puerto Rico with 13 cases and rate of 25.4, and Virgin Islands with 0 cases and rate of 0.0).

Table 39. Congenital syphilis — Reported cases and rates in infants < 1 year of age by state/area and region listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Live Births				
State/Area*	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	6	4	11	5	9	10.2	6.7	18.5	8.4	15.1
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	20	29	26	28	16	22.8	31.9	27.8	29.9	17.1
Arkansas	10	2	4	7	7	26.7	5.3	10.4	18.1	18.1
California	61	64	67	75	66	11.5	11.8	12.3	13.8	12.1
Colorado	2	3	2	1	2	2.9	4.3	2.9	1.5	2.9
Connecticut	0	1	0	1	0	0.0	2.3	0.0	2.4	0.0
Delaware	0	0	1	0	0	0.0	0.0	8.8	0.0	0.0
District of Columbia	1	1	1	0	1	13.3	13.1	12.6	0.0	12.6
Florida	28	27	16	16	21	13.6	12.7	7.3	7.3	9.6
Georgia	13	11	6	1	9	9.8	8.1	4.3	0.7	6.5
Hawaii	0	2	0	0	0	0.0	11.0	0.0	0.0	0.0
Idaho	0	4	3	0	0	0.0	18.3	13.3	0.0	0.0
Illinois	40	20	26	23	15	22.1	11.0	14.4	12.7	8.3
Indiana	9	7	4	2	0	10.6	8.1	4.6	2.3	0.0
Iowa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas	0	1	2	0	1	0.0	2.5	5.0	0.0	2.5
Kentucky	3	1	1	0	1	5.5	1.8	1.8	0.0	1.8
Louisiana	2	6	19	13	13	3.1	9.2	29.1	19.9	19.9
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	19	9	10	16	19	25.9	12.0	13.4	21.4	25.5
Massachusetts	1	0	0	0	0	1.2	0.0	0.0	0.0	0.0
Michigan	35	38	23	17	13	26.9	29.0	17.7	13.1	10.0
Minnesota	1	0	1	3	1	1.5	0.0	1.4	4.2	1.4
Mississippi	6	2	3	0	0	14.5	4.7	7.0	0.0	0.0
Missouri	1	4	3	3	3	1.3	5.2	3.9	3.9	3.9
Montana	1	0	0	0	0	9.1	0.0	0.0	0.0	0.0
Nebraska	0	1	0	0	0	0.0	3.9	0.0	0.0	0.0
Nevada	0	0	1	1	15	0.0	0.0	2.8	2.8	42.6
New Hampshire	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Jersey	36	21	13	16	15	31.4	18.0	11.3	13.9	13.0
New Mexico	7	6	3	6	7	25.2	21.6	10.6	21.1	24.7
New York	31	42	22	10	15	12.3	16.6	8.8	4.0	6.0
North Carolina	16	20	9	11	6	13.6	16.9	7.5	9.2	5.0
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	3	3	2	2	0	2.0	2.0	1.3	1.3	0.0
Oklahoma	2	1	2	1	2	4.0	2.0	3.9	1.9	3.9
Oregon	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Pennsylvania	5	2	0	1	0	3.5	1.4	0.0	0.7	0.0
Rhode Island	0	0	1	0	0	0.0	0.0	7.8	0.0	0.0
South Carolina	15	15	10	4	2	27.5	27.0	17.7	7.1	3.5
South Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tennessee	10	7	9	4	6	12.9	8.9	11.3	5.0	7.5
Texas	72	77	65	67	79	19.3	20.4	17.0	17.6	20.7
Utah	0	0	1	0	2	0.0	0.0	2.0	0.0	3.9
Vermont	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Virginia	1	1	6	3	3	1.0	1.0	5.8	2.9	2.9
Washington	2	0	0	0	0	2.5	0.0	0.0	0.0	0.0
West Virginia	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Wisconsin	1	0	1	2	0	1.5	0.0	1.4	2.9	0.0
Wyoming	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
U.S. TOTAL	460	432	374	339	349	11.4	10.6	9.1	8.2	8.5
Northeast	73	66	36	28	30	10.8	9.6	5.3	4.1	4.4
Midwest	90	74	62	52	33	10.3	8.3	7.0	5.8	3.7
South	204	184	173	148	178	13.8	12.2	11.3	9.7	11.7
West	93	108	103	111	108	9.4	10.7	10.1	10.9	10.6
Guam	1	1	0	1	0	31.1	30.5	0.0	29.3	0.0
Puerto Rico	24	17	11	13	13	45.5	33.5	21.5	25.4	25.4
Virgin Islands	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
OUTLYING AREAS	25	18	11	14	13	43.4	32.4	19.6	24.9	23.2
TOTAL	485	450	385	353	362	11.9	10.9	9.2	8.5	8.7

*Mother's state of residence used to assign case.

Table 40. Congenital syphilis — Reported cases and rates in infants < 1 year of age by race/ethnicity of mother: United States, 2002–2006

Year of Birth	*Race/Ethnicity*	*Cases*	*Rate per 100,000 Live Births*
2002	White/Non-Hispanic	36	1.6
	Black/Non-Hispanic	257	44.2
	Hispanic	146	16.7
	Asian/Pacific Islander	10	4.8
	Native American/Alaskan Native	3	7.6
	Other	1	NA
	Unknown	7	NA
	Total	460	11.4
2003	White/Non-Hispanic	35	1.5
	Black/Non-Hispanic	201	34.7
	Hispanic	166	18.2
	Asian/Pacific Islander	14	6.5
	Native American/Alaskan Native	2	5.1
	Other	3	NA
	Unknown	11	NA
	Total	432	10.6
2004	White/Non-Hispanic	41	1.8
	Black/Non-Hispanic	168	28.8
	Hispanic	144	15.2
	Asian/Pacific Islander	6	2.7
	Native American/Alaskan Native	2	5.0
	Other	1	NA
	Unknown	12	NA
	Total	374	9.1
2005	White/Non-Hispanic	31	1.3
	Black/Non-Hispanic	156	26.8
	Hispanic	124	13.1
	Asian/Pacific Islander	15	6.8
	Native American/Alaskan Native	5	12.4
	Other	2	NA
	Unknown	6	NA
	Total	339	8.2
2006	White/Non-Hispanic	38	1.6
	Black/Non-Hispanic	141	24.2
	Hispanic	146	15.4
	Asian/Pacific Islander	8	3.6
	Native American/Alaskan Native	5	12.4
	Other	4	NA
	Unknown	7	NA
	Total	349	8.5

NA = Not applicable

Table 41. Chancroid — Reported cases and rates by state/area listed in alphabetical order: United States and outlying areas, 2002–2006

	Cases					Rates per 100,000 Population				
State/Area	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Alabama	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	0	2	2	1	0	0.0	0.0	0.0	0.0	0.0
Arkansas	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
California	2	0	1	1	0	0.0	0.0	0.0	0.0	0.0
Colorado	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Connecticut	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Delaware	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
District of Columbia	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Florida	7	2	1	1	1	0.0	0.0	0.0	0.0	0.0
Georgia	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Hawaii	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Idaho	0	0	2	0	0	0.0	0.0	0.1	0.0	0.0
Illinois	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Indiana	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Iowa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kentucky	0	1	0	0	0	0.0	0.0	0.0	0.0	0.0
Louisiana	2	0	2	4	1	0.0	0.0	0.0	0.1	0.0
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	0	1	0	0	0	0.0	0.0	0.0	0.0	0.0
Massachusetts	3	3	3	1	0	0.0	0.0	0.0	0.0	0.0
Michigan	0	0	2	0	1	0.0	0.0	0.0	0.0	0.0
Minnesota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Mississippi	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Missouri	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Montana	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nebraska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nevada	0	0	1	0	0	0.0	0.0	0.0	0.0	0.0
New Hampshire	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Jersey	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Mexico	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New York	2	10	4	1	5	0.0	0.1	0.0	0.0	0.0
North Carolina	0	2	1	5	5	0.0	0.0	0.0	0.1	0.1
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	0	0	0	1	0	0.0	0.0	0.0	0.0	0.0
Oklahoma	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Oregon	0	2	1	0	0	0.0	0.1	0.0	0.0	0.0
Pennsylvania	0	1	1	0	0	0.0	0.0	0.0	0.0	0.0
Rhode Island	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
South Carolina	24	24	4	0	14	0.6	0.6	0.1	0.0	0.3
South Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tennessee	0	0	1	0	0	0.0	0.0	0.0	0.0	0.0
Texas	5	3	3	1	5	0.0	0.0	0.0	0.0	0.0
Utah	0	2	1	0	0	0.0	0.1	0.0	0.0	0.0
Vermont	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Virginia	1	0	0	0	1	0.0	0.0	0.0	0.0	0.0
Washington	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0
West Virginia	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Wisconsin	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Wyoming	0	1	0	1	0	0.0	0.2	0.0	0.2	0.0
U.S. TOTAL	48	54	30	17	33	0.0	0.0	0.0	0.0	0.0
Guam	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Puerto Rico	2	4	1	3	0	0.1	0.1	0.0	0.1	0.0
Virgin Islands	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
OUTLYING AREAS	2	4	1	3	0	0.0	0.1	0.0	0.1	0.0
TOTAL	50	58	31	20	33	0.0	0.0	0.0	0.0	0.0

Table 42. Selected STDs and complications — Initial visits to physicians' offices, National Disease and Therapeutic Index: United States, 1966–2006

Year	Genital Herpes	Genital Warts	Vaginal Trichomoniasis*	Other Vaginitis*	Pelvic Inflammatory Disease†
1966	19,000	56,000	579,000	1,155,000	NA
1967	15,000	72,000	515,000	1,277,000	NA
1968	16,000	87,000	463,000	1,460,000	NA
1969	15,000	61,000	421,000	1,390,000	NA
1970	17,000	119,000	529,000	1,500,000	NA
1971	49,000	128,000	484,000	1,281,000	NA
1972	26,000	165,000	574,000	1,810,000	NA
1973	51,000	198,000	466,000	1,858,000	NA
1974	75,000	202,000	427,000	1,907,000	NA
1975	36,000	181,000	500,000	1,919,000	NA
1976	57,000	217,000	473,000	1,690,000	NA
1977	116,000	221,000	324,000	1,713,000	NA
1978	76,000	269,000	329,000	2,149,000	NA
1979	83,000	200,000	363,000	1,662,000	NA
1980	57,000	218,000	358,000	1,670,000	423,000
1981	133,000	191,000	369,000	1,742,000	283,000
1982	134,000	256,000	268,000	1,859,000	374,000
1983	106,000	203,000	424,000	1,932,000	424,000
1984	157,000	224,000	381,000	2,450,000	381,000
1985	124,000	263,000	291,000	2,728,000	425,000
1986	136,000	275,000	338,000	3,118,000	457,000
1987	102,000	351,000	293,000	3,087,000	403,000
1988	163,000	290,000	191,000	3,583,000	431,000
1989	148,000	220,000	165,000	3,374,000	413,000
1990	172,000	275,000	213,000	4,474,000	358,000
1991	235,000	282,000	198,000	3,822,000	377,000
1992	139,000	218,000	182,000	3,428,000	335,000
1993	172,000	167,000	207,000	3,755,000	407,000
1994	142,000	239,000	199,000	4,123,000	332,000
1995	160,000	253,000	141,000	3,927,000	262,000
1996	208,000	191,000	245,000	3,472,000	286,000
1997	176,000	145,000	176,000	3,100,000	260,000
1998	188,000	211,000	164,000	3,200,000	233,000
1999	224,000	240,000	171,000	3,077,000	250,000
2000	179,000	220,000	222,000	3,470,000	254,000
2001	157,000	233,000	210,000	3,365,000	244,000
2002	216,000	266,000	150,000	3,315,000	197,000
2003	203,000	264,000	179,000	3,516,000	123,000
2004	269,000	316,000	221,000	3,602,000	132,000
2005	266,000	357,000	165,000	4,071,000	176,000
2006	371,000	422,000	200,000	3,891,000	106,000

*Women only.

†Women 15-44 only. NA = Not available.

NOTE: Standard errors for estimates under 100,000 are not available. The relative standard error for estimates 100,000-300,000 are between 20% and 30%; 300,000–600,000 are between 16% and 20%; 600,000–1,000,000 are 13% and 15%; and 1,000,000–5,000,000 are between 9% and 13%.

SOURCE: National Disease and Therapeutic Index (IMS Health). See Appendix (Other Data Sources) for more information.

APPENDIX

APPENDIX

Interpreting STD Surveillance Data

Sexually Transmitted Disease Surveillance, 2006 presents surveillance information derived from the official statistics for the reported occurrence of nationally notifiable sexually transmitted diseases in the United States, test positivity and prevalence data from numerous prevalence monitoring initiatives, sentinel surveillance of gonococcal antimicrobial resistance, and national health care services surveys.

Nationally Notifiable STD Surveillance

Nationally notifiable STD surveillance data are collected and compiled from reports sent by the STD control programs and health departments in the 50 states, the District of Columbia, selected cities, U.S. dependencies and possessions, and independent nations in free association with the United States to the Division of STD Prevention (DSTDP), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), Centers for Disease Control and Prevention (CDC). Included among the dependencies, possessions, and independent nations are Guam, Puerto Rico, and the Virgin Islands. These entities are identified as "outlying areas" of the United States in selected figures and tables.

Reporting Formats

STD morbidity data presented in this report are compiled from a combination of data reported on standardized hardcopy report forms and electronic data received via the National Electronic Telecommunications System for Surveillance (NETSS).

Summary Report Forms (hardcopy format)

The following hardcopy forms were used to report national STD morbidity data:

1. FORM CDC 73.998: *Monthly Surveillance Report of Early Syphilis*. This monthly hardcopy reporting form was used from 1984 to 2002 to report summary data for P&S syphilis and early latent syphilis by county and state.

2. FORM CDC 73.688: *Sexually Transmitted Disease Morbidity Report*. This quarterly hardcopy reporting form was used from 1963 to 2002 to report summary data for all stages of syphilis, congenital syphilis, gonorrhea, chancroid, chlamydia, and other STDs by sex and source of report (private vs. public) for the 50 states, Washington, D.C., and 64 selected cities (including San Juan, Puerto Rico) and outlying areas of the United States. Note: genital chlamydial infection became a nationally notifiable condition in 1996, and the form was modified to support reporting of chlamydia that year. Congenital syphilis was dropped from this aggregate form in 1995 and replaced by the case-specific CDC 73.126 form listed below.

3. FORM CDC 73.2638: *Report of Civilian Cases of Primary & Secondary Syphilis, Gonorrhea, and Chlamydia by Reporting Source, Sex, Race/Ethnicity, and Age Group*. This annual hardcopy form was used from 1981 to 2002 to report summary data for P&S syphilis, gonorrhea, and chlamydia by age, race, sex and source (public vs. private) for all states and seven large cities (Baltimore, Chicago, New York City, Los Angeles, Philadelphia, San

Francisco, and Washington, D.C.), and outlying areas of the United States. Note: genital chlamydial infection became a nationally notifiable condition in 1996 and the form was modified to support reporting of chlamydia that year.

4. FORM CDC 73.126: *Congenital Syphilis (CS) Case Investigation and Report*. This case-specific hardcopy form was first used in 1983 and continues to be used to report detailed case-specific data for congenital syphilis in some reporting areas.

National Electronic Telecommunications System for Surveillance (NETSS, electronic format)

Notifiable STD data reported electronically through NETSS comprise the nationally notifiable disease information that is published in the *Morbidity and Mortality Weekly Report (MMWR)*.

As of December 31, 2003, all 50 states and Washington, D.C. had converted from summary hardcopy reporting to electronic submission of line-listed (i.e., case-specific) STD data via NETSS (41 reporting areas are submitting congenital syphilis surveillance data via NETSS). Puerto Rico converted to electronic reporting in 2006. Guam and the Virgin Islands continue to report using summary hardcopy forms.

Jurisdictions differ in their ability to resolve differences in total cases derived from summary hardcopy monthly, quarterly, and annual reports (as well as electronically submitted line-listed data). Thus, depending on the database used, there may be discrepancies in the total number of cases among the figures and tables for earlier years. In most instances, these discrepancies are less than 5% of total reported cases and have minimal impact on national case totals and rates. However, for a specific jurisdiction, the discrepancies may be larger.

Surveillance data and updates sent to CDC on hardcopy forms and for NETSS electronic data through June 22, 2007 have been included in this report. Data received after this date will appear in subsequent annual *Surveillance Reports*. The data presented in the figures and tables in this document supersede those in all earlier publications.

Population Denominators and Rate Calculations

2000–2006 Rates and Population

Crude incidence rates (new cases/population) were calculated on an annual basis per 100,000 population. In this report, the 2006 rates for the United States, all states, counties, metropolitan statistical areas (MSAs), and outlying areas were calculated by dividing the number of cases reported from each area in 2006 by the estimated area-specific 2005 population (the most current detailed population file available at time of publication).

The National Center for Health Statistics released bridged race population counts for 2000–2005 resident population based on the Census 2000 counts. These estimates resulted from bridging the 31 race categories used in Census 2000, as specified in the 1997 Office of Management and Budget (OMB) standards, to the five race/ethnicity groups specified under the 1977 OMB standards.

From 2001 to 2002, population estimates for Guam were obtained from the Guam Bureau of Statistics and Plans; estimates for Puerto Rico were obtained from the Bureau of Census; and estimates for the Virgin Islands were obtained from the University of the Virgin Islands. After 2002, population estimates for all outlying areas were obtained from the Bureau of Census web site **http://www.census.gov/ipc/www/idb/tables.html**. The 2005–2006 rates for

outlying areas were calculated using the 2005 population estimates.

Due to use of the updated population data, rates for the period 2000–2005 may be different from prior *Surveillance Reports*.

1990–1999 Rates and Population

The population counts for 1990–1999 incorporated the bridged single-race estimates of the April 1, 2000 resident population. These files were prepared by the U.S. Census Bureau with support from the National Cancer Institute.

1981–1989 Rates and Population

For the United States, rates were calculated using Bureau of the Census population estimates for 1981 through 1989 (Bureau of the Census; United States Population Estimates by Age, Sex and Race:1980–1989 [Series P-25, No. 1045]; Washington: U.S. Government Printing Office, 1990; and United States Population Estimates by Age, Sex and Race: 1989 [Series P-25, No. 1057]; Washington: U.S. Government Printing Office, 1990.

1941–1980 Rates and Population

Rates for 1941–1980 are based on population estimates from the Bureau of Census and currently maintained by the Division of STD Prevention.

1941–2006 Congenital Syphilis Rates and Live Births

Congenital syphilis (CS) data in Table 1 of *Sexually Transmitted Disease Surveillance 2006* present the number of congenital syphilis cases per 100,000 live births for all years during the period 1941 through 2006. Previous publications presented congenital syphilis rates per 100,000 population for 1941-1994 and for cases diagnosed at < 1 year of age per 100,000 live births. To allow for trends in CS rates to be compared over time, beginning in 2006 live births will be used as the denominator for CS and case counts will no longer be limited to those diagnosed within the first year of life. CS morbidity (cases) are assigned to their year of birth. Rates of congenital syphilis for 1963–1988 were calculated using published live birth data (NCHS; Vital Statistics Report, United States, 1988 [Vol.1-Natality]). Congenital syphilis rates for 1989–2003 were calculated using live births from the National Center for Health Statistics (NCHS) (Vital Statistics: Natality Tapes 1989–2002 or Vital Statistics Reports, United States 1999, Vol. 48 No.10-Natality). Race-specific rates for 2004–2006 were calculated using live birth data for 2004.

Reporting Practices

Although most areas generally adhere to the national notifiable STD case definitions collaboratively developed by the Council of State and Territorial Epidemiologists (CSTE) and CDC, there may be differences in the policies and systems for collecting surveillance data. Thus, comparisons of case numbers and rates between jurisdictions should be interpreted with caution. However, since case definitions and surveillance activities within a given area remain relatively stable over time, trends should be minimally affected by these differences. In many areas, the reporting from publicly supported institutions (e.g., STD clinics) has been more complete than from other sources (e.g., private practitioners). Thus, trends may not be representative of all segments of the population.

Reporting of Metropolitan Statistical Area-specific Surveillance Data

Sexually Transmitted Disease Surveillance, 2006 continues the presentation of STD incidence data and rates for the fifty Metropolitan Statistical Areas (MSAs) with the largest populations based on 2000 U.S.

Census data. *Sexually Transmitted Disease Surveillance* reports prior to 2005 presented data by selected cities which estimated city-specific morbidity and were derived from county data. Since county data were used to estimate city-specific morbidity and current STD project areas' reporting practices do not support direct identification of city-specific morbidity reports, MSAs (described below) were chosen as a geographic unit smaller than a state or territory for presentation of STD morbidity data.

Metropolitan Statistical Areas are defined by the Office of Management and Budget to provide nationally consistent definitions for collecting, tabulating, and publishing federal statistics for a set of geographic areas.[1] An MSA is associated with at least one urbanized area that has a population of at least 50,000. The MSA comprises the central county or counties containing the core, plus adjacent outlying counties having a high degree of social and economic integration with the central county as measured through commuting. The title of an MSA includes the name of its principal city with the largest Census 2000 population. If there are multiple principal cities, the names of the second largest and third largest principal cities appear in the title in order of descending population size.

The MSA concept has been used as a statistical representation of the social and economic linkages between urban cores and outlying, integrated areas. However, MSAs do not equate to an urban-rural classification; all counties included in MSAs and many other counties contain both urban and rural territory and populations. Programs that treat all parts of an MSA as if they were as urban as the densely settled core ignore the rural conditions that may exist in some parts of the area. In short, MSAs are not designed as a general purpose geographic framework for nonstatistical activities or for use in program funding formulas.

For more information on MSA definitions used in this report, please visit this web site: **http://www.census.gov/population/estimates/metro-city/03mfips.txt**

Management of Unknown, Missing or Invalid Age Group, Race/Ethnicity, and Sex Data

The percentage of unknown, missing or invalid data for age group, race/ethnicity, and sex varies from year to year, state to state, and by disease for reported STDs (Table A1).

When the percentage of unknown, missing, or invalid data for the variables - age group, race/ethnicity, and sex - exceeds 50% for any state, the state's incidence data and population data are excluded from the tables presenting data stratified by one or more of these variables. For those states reporting > 50% valid data for these variables, unknown, missing or invalid data are redistributed based on the state's distribution of known age group, race/ethnicity, and sex data, respectively. As a result of this procedure, incidence and rate data stratified by one or more of the variables - age group, race/ethnicity, and sex – may not accurately reflect total national incidence or rates.

Classification of STD Morbidity Reporting Sources

Prior to 1996, states classified the source of case reports as either private source (including private physicians, and private hospitals and institutions) or public (clinic) source (primarily STD clinics). As states began reporting morbidity data electronically in 1996, the classification categories for source of case reports expanded to include the following data sources: STD clinics, HIV counseling and testing sites, drug treatment clinics, family planning clinics, prenatal/obstetrics clinics, tuberculosis clinics, private physicians/HMOs, hospitals (inpatient),

emergency rooms, correctional facilities, laboratories, blood banks, National Job Training Program, school-based clinics, mental health providers, military, Indian Health Service, and other unspecified sources. Analysis of the data reported electronically after 1996 confirmed that the new STD clinic source of report data corresponded to the earlier reporting source category, public (clinic) source. Therefore, source of case report data for the period 1984–2006 are presented as STD clinic or non-STD clinic only (Table A2).

Definition of DHHS Regions

The ten U.S. Department of Health and Human Services (DHHS) regions referred to in the text and figures include the following jurisdictions: Region I = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Region II = New Jersey, New York, Puerto Rico, and U.S. Virgin Islands; Region III = Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; Region IV = Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; Region V= Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Region VI = Arkansas, Louisiana, New Mexico, Oklahoma, and Texas; Region VII = Iowa, Kansas, Missouri, and Nebraska; Region VIII = Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; Region IX = Arizona, California, Guam, Hawaii, and Nevada; and Region X = Alaska, Idaho, Oregon, and Washington.

Chlamydia Morbidity Reporting

Trends in chlamydia morbidity reporting from many areas are more reflective of changes in diagnosis, screening, and reporting practices than of actual trends in disease incidence. As areas develop chlamydia prevention and control programs, including improved surveillance systems to monitor trends, the data should improve and become more representative of true trends in disease.

Syphilis Morbidity Reporting

"Total syphilis" or "all stages of syphilis" includes primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestations other than neurosyphilis), and congenital syphilis.

In 1996, the syphilis stage, "late syphilis with clinical manifestations other than neurosyphilis (late benign and cardiovascular syphilis)", was added to the syphilis case definition (see STD Case Definitions in this **Appendix**).

While neurosyphilis can occur at almost any stage of syphilis, between 1996 and 2005, it was classified and reported as one of several mutually exclusive stages of syphilis. Beginning in 2005, neurosyphilis was no longer classified or reported as a distinct stage of syphilis. The Division of STD Prevention is reviewing these data collection and reporting changes to determine their impact on syphilis surveillance case definitions.

Congenital Syphilis Morbidity Reporting

In 1988, the surveillance case definition for congenital syphilis was changed. This case definition has greater sensitivity than the former definition.[2] In addition, many areas have greatly enhanced active case finding for congenital syphilis since 1988. For these reasons, the number of reported cases increased dramatically during 1989–1991. All reporting areas had implemented the new case definition for reporting congenital syphilis by January 1, 1992.

In addition to changing the case definition for congenital syphilis, CDC introduced a new data collection form (CDC 73.126) in 1990 (revised October 2003). Since 1995,

the data collected on this form have been used for reporting congenital syphilis cases and associated rates. This form is used to collect individual case information which allows more thorough analysis of case characteristics. For the purpose of analyses by race/ethnicity, if either the race or ethnicity question was answered, the case was included. For example, if "white" race was marked, but ethnicity was left blank, the individual was counted as "non-Hispanic white". Congenital syphilis cases were reported by state and city of residence of the mother for the period 1995 through 2006.

Chlamydia, Gonorrhea, and Syphilis Prevalence Monitoring

Chlamydia and gonorrhea test positivity and syphilis seroreactivity were calculated for the following: women attending family planning clinics and prenatal clinics, men and women entering the National Job Training Program, men attending STD clinics and primary care clinics participating in the MSM Prevalence Monitoring Project, and men and women entering corrections facilities. Positivity was calculated by dividing the number of positive tests for chlamydia, gonorrhea, or syphilis (numerator) by the total number of positive and negative tests for each disease (denominator) and was expressed as a percentage. Except for the National Job Training Program screening data, these data sources may include more than one test from the same individual if that person was tested more than once during a year.

To increase the stability of the annual National Job Training Program prevalence estimates, chlamydia or gonorrhea prevalence data are presented when valid test results for 100 or more students per year are available for the population subgroup and state. The majority of the National Job Training Program's chlamydia screening tests are tested by a single national contract laboratory which provides those data to CDC. Gonorrhea screening tests for male and female students in many training centers are tested by local laboratories; these data are not available to CDC. To insure that state-specific gonorrhea screening data presented here are representative of all students entering training centers, gonorrhea test results for students at centers submitting specimens to the national contract laboratory are included only if the number of gonorrhea tests submitted is greater than 90% of the number of chlamydia tests submitted from the same center for the same time period.

Various laboratory test methods were used for all of these data sources except the National Job Training Program. For most of the figures presenting test positivity or prevalence data, no adjustments of test positivity based on laboratory test type and sensitivity were made. However, for Figure 10 and Figure J, the chlamydia test results for each test type were weighted to reflect the sensitivity of the test used.[3] The weights used in this adjustment are the reciprocals of the sensitivities of the laboratory test methods used. These test type-specific sensitivities were estimates derived from published evaluations of chlamydia screening tests.[4,5] Limitations of this adjustment include: unknown dates when laboratories changed tests, missing information on the test method, variation of test sensitivity within a technology type, and no adjustment for supplemental testing such as negative grey zone testing. For more details on chlamydia prevalence, refer to the following annual publication: Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2006 Supplement: Chlamydia Prevalence Monitoring Project Annual Report 2006*. Atlanta, GA: U.S. Department of Health and Human Services (available first quarter 2008).

In the MSM Prevalence Monitoring Project the syphilis seroreactivity data in most instances do not reflect confirmatory testing

and thus biologic false positive test results were not systematically excluded. The extent to which these data reflect prevalence of active syphilis infection varies by site. Similarly, in the Corrections Prevalence Monitoring Project, syphilis seroreactivity test results were not confirmed. Only a few juvenile corrections sites submitted data to CDC, making overall interpretation difficult due to the small sample size. Because only selected corrections facilities participated in the Corrections Prevalence Monitoring Project, state-specific positivity for syphilis, chlamydia, and gonorrhea may not be representative of all corrections facilities in the state.

Prevalence data for region- and state-specific figures were published with permission from the Regional Infertility Prevention Program, selected state STD prevention programs, and the National Job Training Program.

Gonococcal Isolate Surveillance Project (GISP)

Data on antimicrobial susceptibility in *Neisseria gonorrhoeae* were collected through the Gonococcal Isolate Surveillance Project (GISP), a sentinel system of 28 STD clinics and five regional laboratories located throughout the United States. For more details on findings from GISP gonorrhea surveillance activities, refer to the following annual publication: Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2006 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2006*. Atlanta, GA: U.S. Department of Health and Human Services (available first quarter 2008).

Other Surveillance Data Sources

National Disease and Therapeutic Index (NDTI)

The information on the number of initial visits to private physicians' offices for sexually transmitted diseases was based on analysis of data from the National Disease and Therapeutic Index (NDTI) (machine-readable files or summary statistics for the period 1966 through 2006).The NDTI is a probability sample survey of private physicians' clinical management practices. For more information on this database, contact IMS Health, 660 W. Germantown Pike, Plymouth Meeting, PA 19462; Telephone: (800) 523-5333.

National Hospital Discharge Survey (NHDS)

The information on patients hospitalized for pelvic inflammatory disease or ectopic pregnancy was based on analysis of data from the National Hospital Discharge Survey (machine-readable files for years 1980–2005), an ongoing nation wide sample survey of medical records of patients discharged from acute care hospitals in the United States, conducted by the National Center for Health Statistics. For more information, see *Graves EJ; 1988 Summary: National Hospital Discharge Survey; Advance data No. 185; Hyattsville (MD): National Center for Health Statistics,1990*.

National Hospital Ambulatory Medical Care Survey (NHAMCS-ER)

The National Hospital Ambulatory Medical Care Survey (NHAMCS-ER) (machine-readable files for 1995–2005) was used to obtain estimates of the number of emergency room visits for pelvic inflammatory disease among women ages 15 to 44 years. The estimates generated using these data sources (NHDS and

NHAMCS-ER) are based on statistical surveys and therefore have sampling variability associated with the estimates.

Healthy People 2010 Objectives

Healthy People 2010[6] is a set of health objectives for the U.S. to achieve over the first decade of the new century. It is used by people, States, communities, professional organizations, and others to help develop programs to improve health. *HP2010* builds on initiatives pursued over the past two decades. The 1979 Surgeon General's Report, *Healthy People, and Healthy People 2000: National Health Promotion and Disease Prevention Objectives* established national health objectives and served as the basis for the development of State and community plans. Like its predecessors, *Healthy People 2010* was developed through a broad consultation process, built on the best scientific knowledge and designed to measure programs over time. *Healthy People 2010* is organized into 28 focus areas, each with objectives and measures designed to drive action that will support two overarching goals: 1) increasing the quality and years of healthy life and 2) eliminating health disparities.

Focus area 25 of *Healthy People 2010* –Sexually Transmitted Diseases, – contains objectives and measures related to STDs. The baselines, *HP2010* targets and annual progress toward the targets are reported in Table A3. The year 2010 targets for the diseases addressed in this report are: primary and secondary syphilis–0.2 case per 100,000 population; congenital syphilis–1.0 case per 100,000 live births; and gonorrhea–19.0 cases per 100,000 population. An additional target established in the *HP2010* objectives is to reduce the *Chlamydia trachomatis* test positivity to 3% among females aged 15 to 24 years who attend family planning and STD clinics and among males aged 15 to 24 who attend STD clinics.

Government Performance and Results Act of 1993 (GPRA) Goals

The Government Performance and Results Act of 1993 (GPRA) was enacted by Congress to increase the confidence of citizens in the capability of the federal government, to increase the effectiveness and accountability of federal programs, to improve service delivery, to provide agencies a uniform tool for internal management and to assist Congressional decision making. GPRA requires each agency to have a performance plan with long-term outcomes and annual, measurable performance goals and to report on these plans annually, comparing results with annual goals. There are two STD GPRA goals: 1) reduction in pelvic inflammatory disease (PID) and 2) elimination of syphilis. Each of these goals has measures. The long-term goals and measures of progress are reported in Table A4.

[1] Office of Management and Budget. Standards for Defining Metropolitan and Micropolitan Statistical Areas: Notice Federal Register December 27, 2000; 65(249): 82228-38

[2] Kaufman RE, Jones OG, Blount JH, Wiesner PJ. Questionnaire survey of reported early congenital syphilis: problems in diagnosis, prevention, and treatment. *Sexually Transmitted Diseases* 1977;4:135-9.

[3] Webster Dicker L, Mosure DJ, Levine WC,Black CM, Berman SM. The impact of switching laboratory tests on reported trends in *Chlamydia trachomatis* infections. *Am J Epidemiol* 2000;151:430-435.

[4] Newhall WJ, DeLisle S, Fine D, et al. Head-to-head evaluation of five different non-culture chlamydia tests relative to a quality-assured culture standard. *Sexually Transmitted Diseases* 1994;21:S165-6.

[5] Black CM, Marrazzo J, Johnson RE, *et* al. Head-to-head multi center comparision of DNA probe and nucleic acid amplification tests for *Chlamydia trachomatis* infection in women performed with an improved reference standard. *J Clin Micro* 2002;40:3757-3763.

[6] 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.

Table A1. Selected STDs — Percentage of unknown, missing, or invalid values for selected variables by state and by nationally notifiable STD, 2006

State	*Primary and Secondary Syphilis*				*Gonorrhea*			*Chlamydia*		
	Percent Unknown Race/ Ethnicity	*Percent Unknown Age*	*Percent Unknown Sex*	*Percent Unknown Sex of Partners*	*Percent Unknown Race/ Ethnicity*	*Percent Unknown Age*	*Percent Unknown Sex*	*Percent Unknown Race/ Ethnicity*	*Percent Unknown Age*	*Percent Unknown Sex*
Alabama	3.1	0.0	0.0	23.8	28.9	1.0	0.0	31.3	0.6	0.1
Alaska	0.0	0.0	0.0	100.0	0.2	0.0	0.0	0.0	0.0	0.0
Arizona	14.8	0.0	2.0	35.5	24.5	0.0	0.1	30.3	0.0	0.1
Arkansas	0.0	0.0	0.0	36.4	3.4	0.3	0.0	4.2	0.5	0.0
California	3.4	0.3	0.1	11.4	33.4	0.7	0.6	34.1	0.5	0.5
Colorado	5.8	0.0	0.0	8.7	27.1	0.0	0.0	42.0	0.4	0.0
Connecticut	1.6	0.0	0.0	0.0	25.9	0.3	0.0	34.1	1.1	0.0
Delaware	0.0	0.0	0.0	100.0	1.0	0.0	0.0	1.9	0.0	0.0
District of Columbia	0.9	0.0	0.0	18.1	22.3	0.8	0.4	46.5	0.6	1.2
Florida	4.2	0.0	0.0	39.6	9.8	0.2	0.0	14.2	0.3	0.0
Georgia	2.9	0.2	0.0	21.3	38.6	1.3	0.8	50.2	1.4	0.9
Hawaii	0.0	0.0	0.0	22.2	41.2	0.3	0.0	49.6	0.3	0.1
Idaho*	33.3	0.0	0.0	33.3	24.8	0.0	0.5	21.5	0.1	0.4
Illinois	3.7	0.0	0.0	9.7	12.8	0.0	0.0	15.8	0.0	0.0
Indiana	2.2	0.0	0.0	7.5	13.4	0.4	0.4	16.9	0.7	0.5
Iowa	0.0	0.0	0.0	42.1	9.3	0.1	0.0	11.9	0.2	0.0
Kansas	0.0	0.0	0.0	18.5	22.7	0.2	0.0	28.9	0.2	0.0
Kentucky	4.1	1.4	0.0	21.9	22.0	0.5	0.2	26.5	0.3	0.3
Louisiana	0.9	0.0	0.0	100.0	16.0	0.4	0.8	25.0	0.6	1.2
Maine*	0.0	0.0	0.0	0.0	10.9	0.0	0.0	20.0	0.4	0.0
Maryland	0.7	0.0	0.0	9.7	25.9	0.4	0.2	36.5	0.5	0.4
Massachusetts	4.8	0.0	0.0	8.9	31.4	0.3	0.1	39.5	0.5	0.2
Michigan	0.8	0.0	0.0	100.0	46.8	0.2	0.2	47.3	0.2	0.3
Minnesota	6.4	0.0	0.0	0.0	14.4	0.0	0.0	15.4	0.0	0.0
Mississippi	3.5	0.0	0.0	5.8	15.2	0.1	0.0	17.8	0.1	0.0
Missouri	0.0	0.0	0.0	4.8	17.1	0.1	0.0	22.9	0.1	0.0
Montana*	0.0	0.0	0.0	0.0	24.7	0.0	0.0	17.2	0.6	0.3
Nebraska*	0.0	0.0	0.0	28.6	25.9	0.2	1.1	24.2	0.4	1.3
Nevada	17.5	0.0	0.0	2.9	31.1	0.5	0.0	38.8	0.3	0.0
New Hampshire	0.0	0.0	0.0	0.0	12.2	0.0	0.0	8.9	0.0	0.0
New Jersey	2.9	0.0	0.0	12.1	37.9	0.7	0.1	46.2	1.0	0.1
New Mexico	3.8	0.0	0.0	10.1	8.5	0.2	0.0	7.6	0.3	0.1
New York	19.8	0.0	0.0	38.5	38.2	0.4	0.0	42.7	0.5	0.0
North Carolina	0.3	0.0	0.0	100.0	1.2	0.0	0.0	1.5	0.0	0.0
North Dakota*	0.0	0.0	0.0	100.0	3.9	0.0	0.0	9.3	0.0	0.1
Ohio	2.2	0.0	0.0	7.6	29.0	2.0	1.0	34.7	2.7	1.5
Oklahoma	1.4	0.0	0.0	5.7	2.4	0.0	0.0	2.6	0.0	0.0
Oregon	3.4	0.0	0.0	100.0	6.3	0.0	0.0	11.0	0.0	0.0
Pennsylvania	1.9	0.0	0.0	2.3	22.6	0.4	0.0	24.5	0.1	0.0
Rhode Island	0.0	0.0	0.0	7.1	10.4	0.0	0.0	24.9	0.1	0.2
South Carolina	0.0	0.0	0.0	16.7	29.1	0.9	0.1	37.6	0.6	0.1
South Dakota	0.0	0.0	0.0	7.7	0.0	0.8	0.0	0.3	1.6	0.0
Tennessee	0.0	0.0	0.0	2.4	13.5	0.1	0.0	17.7	0.1	0.0
Texas	0.2	0.0	0.0	2.4	9.2	0.3	0.1	8.6	0.2	0.1
Utah	0.0	0.0	0.0	14.3	3.9	0.0	0.0	4.9	0.1	0.0
Vermont*	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.3	0.0	0.0
Virginia	0.0	0.0	0.0	3.2	3.0	0.1	0.0	10.3	0.1	0.1
Washington	4.9	0.0	0.0	14.8	20.4	0.9	0.0	20.1	1.0	0.0
West Virginia	18.2	0.0	0.0	9.1	11.0	0.1	0.0	11.5	0.3	0.1
Wisconsin	0.0	0.0	0.0	4.4	23.5	0.0	0.1	27.1	0.0	0.2
Wyoming*	0.0	0.0	0.0	0.0	13.3	4.2	0.0	25.2	1.3	0.0
U.S. TOTAL	4.1	0.1	0.1	22.7	21.6	0.5	0.2	26.3	0.5	0.2

*Percentages for P&S syphilis are based on less than 10 cases.

NOTE: "Unknown" includes unknown, missing, or invalid data values.

Table A2. Reported cases of sexually transmitted disease reporting source and by sex: United States, 2006

	Non-STD Clinic			STD Clinic			Total*		
Disease	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*
Chlamydia	156,390	629,883	787,878	82,638	93,169	175,977	252,630	775,788	1,030,911
Gonorrhea	93,744	139,217	233,429	64,582	31,238	95,923	170,508	187,033	358,366
Primary Syphilis	1,418	141	1,559	917	132	1,049	2,400	278	2,678
Secondary Syphilis	4,029	749	4,781	1,713	399	2,114	5,893	1,180	7,078
Early Latent Syphilis	4,280	1,623	5,906	2,129	915	3,047	6,581	2,599	9,186
Late and Late Latent Syphilis†	8,030	4,929	12,972	2,682	1,637	4,319	10,915	6,716	17,644
Chancroid	7	7	14	5	12	17	12	21	33

*Totals include unknown sex and reporting source.

†Late and late latent syphilis includes late latent syphilis, latent syphilis of unknown duration, neurosyphilis, and late syphilis with clinical manifestations other than neurosyphilis.

See Appendix (Classification of STD Morbidity Reporting Source).

Table A3. Healthy People 2010 Sexually Transmitted Diseases Objective Status

	HP 2010 Objectives	Baseline Year	Baseline	2002	2003	2004	2005	2006	HP 2010 Target
25-1	**Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections**								
	a. Females aged 15 to 24 years attending family planning clinics	1997	5.0%	6.0%*	6.4%*	6.9%*	6.9%*	7.1%*	3.0%
	b. Females aged 15 to 24 years attending STD clinics	1997	12.2%	13.5%*	14.1%*	15.3%*	15.4%*	14.8%*	3.0%
	c. Males aged 15 to 24 years attending STD clinics	1997	15.7%	17.5%*	19.3%*	20.8%*	20.5%*	20.8%*	3.0%
25-2	**Reduce gonorrhea (cases per 100,000 population)**	1997	123.0	122.0	115.2	112.4	114.6	120.9	19.0
25-3	**Eliminate sustained domestic transmission of primary and secondary syphilis (cases per 100,000 population)**	1997	3.2	2.4	2.5	2.7	2.9	3.3	0.2
25-4	**Reduce the proportion of adults aged 20 to 29 years with genital herpes infection**	1988-94	17.0%	11.0%	NA	NA	NA	NA	14.0%
25-6	**Reduce the proportion of females aged 15 to 44 years who have ever required treatment for pelvic inflammatory disease (PID)**	1995	8.0%	5.0%	NA	NA	NA	NA	5.0%
25-7	**Reduce the proportion of childless females with fertility problems who have had a sexually transmitted disease or who have required treatment for pelvic inflammatory disease (PID)**	1995	27.0%	22.0%	NA	NA	NA	NA	15.0%
25-9	**Reduce congenital syphilis (cases per 100,000 live births)**	1997	27.0	11.4	10.6	9.1	8.2	8.5	1.0

HP 2010 Objective	Data Source
25-1	STD Surveillance System (STDSS), CDC, NCHHSTP.
25-2	STD Surveillance System (STDSS), CDC, NCHHSTP.
25-3	STD Surveillance System (STDSS), CDC, NCHHSTP.
25-4	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
25-6	National Survey of Family Growth (NSFG), CDC, NCHS.
25-7	National Survey of Family Growth (NSFG), CDC, NCHS.
25-9	STD Surveillance System (STDSS), CDC, NCHHSTP.

*Overall positivity not adjusted for changes in laboratory test method and associated increases in test sensitivity.

NOTE: Healthy People 2010 developmental objectives are not addressed in this report.

NA=Not available.

Table A4. Government Performance Results Act (GPRA) Sexually Transmitted Diseases Goals and Measures

GPRA Goals	*Baseline*	*Actual Performance*		*Long-Term Goal*
	2002	*2005*	*2006*	*2010*
Goal 1: Reduction in PID (as measured by initial visits to physicians in women 15-44 years of age)	**197,000**	**176,000**	**106,000**	**168,000**
a. Prevalence of Chlamydia in high-risk women ≤ 25 years	10.1%*	9.2%*	13.1%*	8.6%*
b. Prevalence of Chlamydia in women ≤ 25 years in family planning clinics	5.6%*	6.3%*	6.7%*	4.9%*
c. Incidence of Gonorrhea/100,000 population in women 15-44 years of age	279	275	290	237
Goal 2: Elimination of Syphilis (as measured by incidence of P&S Syphilis/100,000 population)	**2.4**	**2.9**	**3.3**	**2.2**
a. Incidence of P&S Syphilis/100,000 population - men	3.8	5.1	5.7	4.2
b. Incidence of P&S Syphilis/100,000 population - women	1.1	0.9	1.0	0.38
c. Incidence of Congenital Syphilis/100,000 live births	10.2	8.2	8.5	3.9
d. Black:white rate ratio of P&S Syphilis	8:1	5.4:1	5.9:1	3:1

GPRA Goals	*Data Source*
1	National Disease and Therapeutic Index (IMS Health).
1-a	National Job Training Program.
1-b	Regional Infertility Prevention Projects (IPP)
1-c	STD Surveillance System (STDSS), CDC, NCHHSTP.
2	STD Surveillance System (STDSS), CDC, NCHHSTP.
2-a	STD Surveillance System (STDSS), CDC, NCHHSTP.
2-b	STD Surveillance System (STDSS), CDC, NCHHSTP.
2-c	STD Surveillance System (STDSS), CDC, NCHHSTP.
2-d	STD Surveillance System (STDSS), CDC, NCHHSTP.

*Median state-specific chlamydia prevalence among women was not adjusted for changes in laboratory test method and associated increases in test sensitivity.

STD Surveillance Case Definitions

PART 1. CASE DEFINITIONS[1] FOR NATIONALLY NOTIFIABLE INFECTIOUS DISEASES

Chancroid (Revised 9/96)

Clinical description

A sexually transmitted disease characterized by painful genital ulceration and inflammatory inguinal adenopathy. The disease is caused by infection with *Haemophilus ducreyi*.

Laboratory criteria for diagnosis

- Isolation of *H. ducreyi* from a clinical specimen

Case classification

Probable: a clinically compatible case with both a) no evidence of *Treponema pallidum* infection by darkfield microscopic examination of ulcer exudate or by a serologic test for syphilis performed ≥7 days after onset of ulcers and b) either a clinical presentation of the ulcer(s) not typical of disease caused by herpes simplex virus (HSV) or a culture negative for HSV.

Confirmed: a clinically compatible case that is laboratory confirmed

Chlamydia trachomatis, Genital Infections (Revised 9/96)

Clinical description

Infection with *Chlamydia trachomatis* may result in urethritis, epididymitis, cervicitis, acute salpingitis, or other syndromes when sexually transmitted; however, the infection is often asymptomatic in women. Perinatal infections may result in inclusion conjunctivitis and pneumonia in newborns. Other syndromes caused by *C. trachomatis* include lymphogranuloma venereum (see Lymphogranuloma Venereum) and trachoma.

Laboratory criteria for diagnosis

- Isolation of *C. trachomatis* by culture or
- Demonstration of *C. trachomatis* in a clinical specimen by detection of antigen or nucleic acid

Case classification

Confirmed: a case that is laboratory confirmed

Gonorrhea (Revised 9/96)

Clinical description

A sexually transmitted infection commonly manifested by urethritis, cervicitis, or salpingitis. Infection may be asymptomatic.

Laboratory criteria for diagnosis

- Isolation of typical gram-negative, oxidase-positive diplococci (presumptive *Neisseria gonorrhoeae*) from a clinical specimen, or

- Demonstration of *N. gonorrhoeae* in a clinical specimen by detection of antigen or nucleic acid, or
- Observation of gram-negative intracellular diplococci in a urethral smear obtained from a male

Case classification

Probable: a) demonstration of gram-negative intracellular diplococci in an endocervical smear obtained from a female or b) a written morbidity report of gonorrhea submitted by a physician

Confirmed: a case that is laboratory confirmed

Syphilis (All Definitions Revised 9/96)

Syphilis is a complex sexually transmitted disease that has a highly variable clinical course. Classification by a clinician with expertise in syphilis may take precedence over the following case definitions developed for surveillance purposes.

Syphilis, primary

Clinical description

A stage of infection with *Treponema pallidum* characterized by one or more chancres (ulcers); chancres might differ considerably in clinical appearance.

Laboratory criteria for diagnosis

- Demonstration of *T. pallidum* in clinical specimens by darkfield microscopy, direct fluorescent antibody (DFA-TP), or equivalent methods

Case classification

Probable: a clinically compatible case with one or more ulcers (chancres) consistent with primary syphilis and a reactive serologic test (nontreponemal: Venereal Disease Research Laboratory [VDRL] or rapid plasma reagin [RPR]; treponemal: fluorescent treponemal antibody absorbed [FTA-ABS] or microhemagglutination assay for antibody to *T. pallidum* [MHA-TP])

Confirmed: a clinically compatible case that is laboratory confirmed

Syphilis, secondary

Clinical description

A stage of infection caused by *T. pallidum* and characterized by localized or diffuse mucocutaneous lesions, often with generalized lymphadenopathy. The primary chancre may still be present.

Laboratory criteria for diagnosis

- Demonstration of *T. pallidum* in clinical specimens by darkfield microscopy, DFATP, or equivalent methods

Case classification

Probable: a clinically compatible case with a nontreponemal (VDRL or RPR) titer ≥4

Confirmed: a clinically compatible case that is laboratory confirmed

Syphilis, latent

Clinical description

A stage of infection caused by *T. pallidum* in which organisms persist in the body of the infected person without causing symptoms or signs. Latent syphilis is subdivided into early, late, and unknown categories based on the duration of infection.

Case classification

Probable: no clinical signs or symptoms of syphilis and the presence of one of the following:

- No past diagnosis of syphilis, a reactive nontreponemal test (i.e., VDRL or RPR), and a reactive treponemal test (i.e., FTA-ABS or MHA-TP)
- A past history of syphilis therapy and a current nontreponemal test titer demonstrating fourfold or greater increase from the last nontreponemal test titer

Syphilis, early latent

Clinical description

A subcategory of latent syphilis. When initial infection has occurred within the previous 12 months, latent syphilis is classified as early latent.

Case classification

Probable: latent syphilis (see Syphilis, latent) in a person who has evidence of having acquired the infection within the previous 12 months based on one or more of the following criteria:

- Documented seroconversion or fourfold or greater increase in titer of a nontreponemal test during the previous 12 months
- A history of symptoms consistent with primary or secondary syphilis during the previous 12 months
- A history of sexual exposure to a partner who had confirmed or probable primary or secondary syphilis or probable early latent syphilis (documented independently as duration < 1 year)
- Reactive nontreponemal and treponemal tests from a person whose only possible exposure occurred within the preceding 12 months

Syphilis, late latent

Clinical description

A subcategory of latent syphilis. When initial infection has occurred > 1 year previously, latent syphilis is classified as late latent.

Case classification

Probable: latent syphilis (see Syphilis, latent) in a patient who has no evidence of having acquired the disease within the preceding 12 months (see Syphilis, early latent) and whose age and titer do not meet the criteria specified for latent syphilis of unknown duration.

Syphilis, latent, of unknown duration

Clinical description

A subcategory of latent syphilis. When the date of initial infection cannot be established as having occurred within the previous year and the patient's age and titer meet criteria described below, latent syphilis is classified as latent syphilis of unknown duration.

Case classification

Probable: latent syphilis (see Syphilis, latent) that does not meet the criteria for early latent syphilis, and the patient is aged 13–35 years and has a nontreponemal titer ≥ 32

Neurosyphilis

Clinical description

Evidence of central nervous system infection with *T. pallidum*

Laboratory criteria for diagnosis

- A reactive serologic test for syphilis and reactive VDRL in cerebrospinal fluid (CSF)

Case classification

Probable: syphilis of any stage, a negative VDRL in CSF, and both the following:

- Elevated CSF protein or leukocyte count in the absence of other known causes of these abnormalities
- Clinical symptoms or signs consistent with neurosyphilis without other known causes for these clinical abnormalities

Confirmed: syphilis of any stage that meets the laboratory criteria for neurosyphilis

Syphilis, late, with clinical manifestations other than neurosyphilis (late benign syphilis and cardiovascular syphilis)

Clinical description

Clinical manifestations of late syphilis other than neurosyphilis may include inflammatory lesions of the cardiovascular system, skin, and bone. Rarely, other structures (e.g., the upper and lower respiratory tracts, mouth, eye, abdominal organs, reproductive organs, lymph nodes, and skeletal muscle) may be involved. Late syphilis usually becomes clinically manifest only after a period of 15–30 years of untreated infection.

Laboratory criteria for diagnosis

Demonstration of *T. pallidum* in late lesions by fluorescent antibody or special stains (although organisms are rarely visualized in late lesions)

Case classification

Probable: characteristic abnormalities or lesions of the cardiovascular system, skin, bone, or other structures with a reactive treponemal test, in the absence of other known causes of these abnormalities, and without CSF abnormalities and clinical symptoms or signs consistent with neurosyphilis

Confirmed: a clinically compatible case that is laboratory confirmed

Comment

Analysis of CSF for evidence of neurosyphilis is necessary in the evaluation of late syphilis with clinical manifestations.

Syphilitic Stillbirth

Clinical description

A fetal death that occurs after a 20-week gestation or in which the fetus weighs > 500 g and the mother had untreated or inadequately treated* syphilis at delivery

Comment

For reporting purposes, syphilitic stillbirths should be reported as cases of congenital syphilis.

Syphilis, Congenital (Revised 9/96)

Clinical description

A condition caused by infection in utero with *Treponema pallidum*. A wide spectrum of severity exists, and only severe cases are clinically apparent at birth. An infant or child (aged < 2 years) may have signs such as hepatosplenomegaly, rash, condyloma lata, snuffles, jaundice (nonviral hepatitis), pseudoparalysis, anemia, or edema (nephrotic syndrome and/or malnutrition). An older child may have stigmata (e.g., interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades, or Clutton joints).

Laboratory criteria for diagnosis

Demonstration of *T. pallidum* by darkfield microscopy, fluorescent antibody, or other specific stains in specimens from lesions, placenta, umbilical cord, or autopsy material

Case classification

Probable: a condition affecting an infant whose mother had untreated or inadequately treated* syphilis at delivery, regardless of signs in the infant, or an infant or child who has a reactive treponemal test for syphilis and any one of the following:

- Any evidence of congenital syphilis on physical examination
- Any evidence of congenital syphilis on radiographs of long bones
- A reactive cerebrospinal fluid (CSF) venereal disease research laboratory (VDRL)
- An elevated CSF cell count or protein (without other cause)
- A reactive fluorescent treponemal antibody absorbed—19S-IgM antibody test or IgM enzyme-linked immunosorbent assay

Confirmed: a case that is laboratory confirmed

Comment

Congenital and acquired syphilis may be difficult to distinguish when a child is seropositive after infancy. Signs of congenital syphilis may not be obvious, and stigmata may not yet have developed. Abnormal values for CSF VDRL, cell count, and protein, as well as IgM antibodies, may be found in either congenital or acquired syphilis. Findings on radiographs of long bones may help because radiographic changes in the metaphysis and epiphysis are considered classic signs of congenitally acquired syphilis. The decision may ultimately be based on maternal history and clinical judgment. In a young child, the possibility of sexual abuse should be considered as a cause of acquired rather than congenital syphilis, depending on the clinical picture. For reporting purposes, congenital syphilis includes cases of congenitally acquired syphilis among infants and children as well as syphilitic stillbirths.

*Inadequate treatment consists of any nonpenicillin therapy or penicillin administered < 30 days before delivery.

PART 2. CASE DEFINITIONS[1] FOR NON-NOTIFIABLE INFECTIOUS DISEASES

Genital Herpes (Herpes Simplex Virus) (Revised 9/96)

Clinical description

A condition characterized by visible, painful genital or anal lesions

Laboratory criteria for diagnosis

- Isolation of herpes simplex virus from cervix, urethra, or anogenital lesion, or
- Demonstration of virus by antigen detection technique in clinical specimens from cervix, urethra, or anogenital lesion, or
- Demonstration of multinucleated giant cells on a Tzanck smear of scrapings from an anogenital lesion

Case classification

Probable: a clinically compatible case (in which primary and secondary syphilis have been excluded by appropriate serologic tests and darkfield microscopy, when available) with either a diagnosis of genital herpes based on clinical presentation (without laboratory confirmation) or a history of one or more previous episodes of similar genital lesions

Confirmed: a clinically compatible case that is laboratory confirmed

Comment

Genital herpes should be reported only once per patient. The first diagnosis for a patient with no previous diagnosis should be reported.

Genital Warts (Revised 9/96)

Clinical description

An infection characterized by the presence of visible, exophytic (raised) growths on the internal or external genitalia, perineum, or perianal region

Laboratory criteria for diagnosis

- Histopathologic changes characteristic of human papillomavirus infection in specimens obtained by biopsy or exfoliative cytology or
- Demonstration of virus by antigen or nucleic acid detection in a lesion biopsy

Case classification

Probable: a clinically compatible case without histopathologic diagnosis and without microscopic or serologic evidence that the growth is the result of secondary syphilis

Confirmed: a clinically compatible case that is laboratory confirmed

Comment

Genital warts should be reported only once per patient. The first diagnosis for a patient with no previous diagnosis should be reported.

Granuloma Inguinale

Clinical description

A slowly progressive ulcerative disease of the skin and lymphatics of the genital and perianal area caused by infection with *Calymmatobacterium granulomatis*. A clinically compatible case would have one or more painless or minimally painful granulomatous lesions in the anogenital area.

Laboratory criteria for diagnosis

- Demonstration of intracytoplasmic Donovan bodies in Wright or Giemsa-stained smears or biopsies of granulation tissue

Case classification

Confirmed: a clinically compatible case that is laboratory confirmed

Lymphogranuloma Venereum

Clinical description

Infection with L1, L2, or, L3 serovars of *Chlamydia trachomatis* may result in a disease characterized by genital lesions, suppurative regional lymphadenopathy, or hemorrhagic proctitis. The infection is usually sexually transmitted.

Laboratory criteria for diagnosis

- Isolation of *C. trachomatis*, serotype L1, L2, or L3 from clinical specimen, or
- Demonstration by immunofluorescence of inclusion bodies in leukocytes of an inguinal lymph node (bubo) aspirate, or
- Positive microimmunofluorescent serologic test for a lymphogranuloma venereum strain of *C. trachomatis*

Case classification

Probable: a clinically compatible case with one or more tender fluctuant inguinal lymph nodes or characteristic proctogenital lesions with supportive laboratory findings of a single *C. trachomatis* complement fixation titer of > 64

Confirmed: a clinically compatible case that is laboratory confirmed

Mucopurulent Cervicitis (Revised 9/96)

Clinical description

Cervical inflammation that is not the result of infection with *Neisseria gonorrhoeae* or *Trichomonas vaginalis*. Cervical inflammation is defined by the presence of one of the following criteria:

- Mucopurulent secretion (from the endocervix) that is yellow or green when viewed on a white, cotton-tipped swab (positive swab test)
- Induced endocervical bleeding (bleeding when the first swab is placed in the endocervix)

Laboratory criteria for diagnosis

- No evidence of *N. gonorrhoeae* by culture, Gram stain, or antigen or nucleic acid detection, and no evidence of *T. vaginalis* on wet mount

Case classification

Confirmed: a clinically compatible case in a female who does not have either gonorrhea or trichomoniasis

Comment

Mucopurulent cervicitis (MPC) is a clinical diagnosis of exclusion. The syndrome may result from infection with any of several agents (see *Chlamydia trachomatis*, Genital Infections). If gonorrhea, trichomoniasis, and chlamydia are excluded, a clinically compatible illness should be classified as

MPC. An illness in a female that meets the case definition of MPC and *C. trachomatis* infection should be classified as chlamydia.

Nongonococcal Urethritis (Revised 9/96)

Clinical description

Urethral inflammation that is not the result of infection with *Neisseria gonorrhoeae*. Urethral inflammation may be diagnosed by the presence of one of the following criteria:

- A visible abnormal urethral discharge, or
- A positive leukocyte esterase test from a male aged < 60 years who does not have a history of kidney disease or bladder infection, prostate enlargement, urogenital anatomic anomaly, or recent urinary tract instrumentation, or
- Microscopic evidence of urethritis (≥ 5 white blood cells per high-power field) on a Gram stain of a urethral smear

Laboratory criteria for diagnosis

- No evidence of *N. gonorrhoeae* infection by culture, Gram stain, or antigen or nucleic acid detection

Case classification

Confirmed: a clinically compatible case in a male in whom gonorrhea is not found, either by culture, Gram stain, or antigen or nucleic acid detection

Comment

Nongonococcal urethritis (NGU) is a clinical diagnosis of exclusion. The syndrome may result from infection with any of several agents (see *Chlamydia trachomatis*, Genital Infection). If gonorrhea and chlamydia are excluded, a clinically compatible illness should be classified as NGU. An illness in a male that meets the case definition of NGU and *C. trachomatis* infection should be classified as chlamydia.

Pelvic Inflammatory Disease (Revised 9/96)

Clinical case definition

A clinical syndrome resulting from the ascending spread of microorganisms from the vagina and endocervix to the endometrium, fallopian tubes, and/or contiguous structures. In a female who has lower abdominal pain and who has not been diagnosed as having an established cause other than pelvic inflammatory disease (PID) (e.g., ectopic pregnancy, acute appendicitis, and functional pain), all the following clinical criteria must be present:

- Lower abdominal tenderness, and
- Tenderness with motion of the cervix, and
- Adnexal tenderness

In addition to the preceding criteria, at least one of the following findings must also be present:

- Meets the surveillance case definition of *C. trachomatis* infection or gonorrhea
- Temperature > 100.4 F (> 38.0 C)
- Leukocytosis > 10,000 white blood cells/mm^3
- Purulent material in the peritoneal cavity obtained by culdocentesis or laparoscopy

- Pelvic abscess or inflammatory complex detected by bimanual examination or by sonography
- Patient is a sexual contact of a person known to have gonorrhea, chlamydia, or nongonococcal urethritis

Case classification

Confirmed: a case that meets the clinical case definition

Comment

For reporting purposes, a clinician's report of PID should be counted as a case.

[1] Centers for Disease Control and Prevention. Case definitions for infectious conditions under public health surveillance, 1997. *MMWR* 1997;46(No. RR-10;1).

STD Project Directors, STD Program Managers, and State and Territorial Epidemiologists

We gratefully acknowledge the contributions of state STD project directors, STD program managers, and state and territorial epidemiologists to this report. The persons listed were in the positions shown as of September 14, 2007.

	STD Project Directors	STD Program Managers	State Epidemiologists
Alabama	Charles H. Woernle	Sandra Langston	John Lofgren
Alaska	Wendy Crator	Donna Cecere	Joe McLaughlin
Arizona	Judy Norton	Alfonso Urquidi	Kenneth Komatsu
Arkansas	Gary Horton	Mark Barnes	Jim Phillips
California	Gail Bolan	Romni Neiman	Gilberto Chavez
Los Angeles	Peter Kerndt	Mary Hayes	Gilberto Chavez
San Francisco	Jeffrey Klausner	Wendy Wolf	Gilberto Chavez
Colorado	Maureen Bush	Bob Bongiovanni	Ken Gershman
Connecticut	James L. Hadler	Heidi Jenkins	James L. Hadler
Delaware	James C. Welch	Catherine Mosley	Paula Eggers
District of Columbia	Karyn Berry	John Heath	John Davies-Cole
Florida	Russell Eggert	Karla Schmitt	John Middaugh
Georgia	Linda Smart-Smith	Russ Cantrell	Susan Lance
Hawaii	Peter Whiticar	Roy Ohye	Paul Effler
Idaho	Richard Armstrong	Vacant	Christine G. Hahn
Illinois	Charlie Rabins	Ed Renier	Craig Conover (Acting)
Chicago	Will Wong	John Paffel	Craig Conover (Acting)
Indiana	Jerry Burkman	Jim Beall	Robert Teclaw
Iowa	Julie McMahon	Karen Thompson	Patricia Quinlisk
Kansas	Brenda Walker	R. Allen Mayer	Gail Hansen
Kentucky	Robert Brawley	David Raines	Kraig Humbaugh
Louisiana	Lisa Ann Longfellow	Lisa Ann Longfellow	Raoult Ratard
Maine	Bob Woods	Jennah Godo	Kathleen F. Gensheimer
Maryland	Barbara Conrad	Glen Oltoff	David Blythe
Baltimore	Laura Herrera	Victoria Stovall	David Blythe
Massachusetts	Thomas Bertrand	Thomas Bertrand	Alfred DeMaria
Michigan	Mark Miller	Mark A. Miller	Corrine Miller
Minnesota	Julia Ashley	Julia Ashley	Ruth Lynfield
Mississippi	Craig Thompson	Craig Thompson	Lovetta Brown
Missouri	Herbert Michael	Vacant	Bao-Ping Zhu
Montana	Laurie Kops	Vacant	Todd A. Damrow
Nebraska	Phil Medina	Phil Medina	Thomas J. Safranek
Nevada	Richard Whitley	Bill Hill	Ishan Azzam
New Hampshire	Denise Rondeau	Drew Thomits	Jose Montero
New Jersey	Janet DeGraaf	Jerry Carolina	Eddy A. Bresnitz
New Mexico	Daryl Smith	Jaime Vega-Hernandez	C. Mack Sewell
New York	F. Bruce Coles	Dennis Murphy	Perry F. Smith
New York City	Susan Blank	Steve Rubin	Marcelle Layton
North Carolina	Evelyn M. Foust	Evelyn M. Foust	Jeffrey Engel
North Dakota	Kimberly Weis	Kimberly Weis	Kirby Kruger
Ohio	Barbara Bradley	Amy LaGesse	Forrest W. Smith
Oklahoma	Michael Harmon	Chang Lee	Kristy Bradley
Oregon	Vada Latin	Doug Harger	Melvin Kohn
Pennsylvania	Weston Ruhrig	Steve Kowalewski	Veronica Urdaneta
Philadelphia	Caroline Johnson	Vacant	Veronica Urdaneta
Rhode Island	Utpala Bandy	Michael Gosciminski	Utpala Bandy
South Carolina	Dorothy Waln (Acting)	Robert Ray	James J. Gibson
South Dakota	Laurie Gill	David Morgan	Lon Kightlinger
Tennessee	Jeanece Seals	Robert Burke	Allen Craig
Texas	Felipe Rocha	Jim Lee	Vincent Fonseca
Utah	Jennifer Brown	Tim Lane	Robert T. Rolfs
Vermont	Daniel Daltry	Daniel Daltry	Cortland Lohff
Virginia	Kathryn Hafford	Kathryn Hafford (Acting)	Carl Armstrong
Washington	Larry Klopfenstein	Larry Klopfenstein	Marcia Goldoft
West Virginia	Loretta E. Haddy	Susan Hall	Loretta E. Haddy
Wisconsin	Sandra Breitborde	Anthony Wade	Jeffrey Davis
Wyoming	Brownen Anderson	Vacant	Tracy Murphy
American Samoa	Utoofili Asofaafeta Maga	Sarona Maae	Joseph Roth
Federated States of Micronesia	Nena S. Nena	Johnny Hebel	Nena S. Nena
Government of the Marshall Islands	Justina Langidrik	Zachraias Zachraias	James Hosfschneider
Guam	Josie O'Mallan	Bernadette Schumann	Robert L. Haddock
Puerto Rico	Greduvel Duran-Guzman	Trinidad Garcia	Enid Garcia
Republic of Palau	Victor Yano	Johana Ngiruchelbad	Julie Erb-Alvarez3
Virgin Islands	Darlene Carty	Taetia Phillips-Dorsett	Darlene Carty