

Sexually Transmitted Disease Surveillance 2002

**Division of STD Prevention
September 2003**

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This report is also available by Internet via the CDC home page at: **<http://www.cdc.gov/std/stats/>**

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, 2002 presents statistics and trends for sexually transmitted diseases (STDs) in the United States through 2002. 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 the STD project areas; (2) prevalence data from the Regional Infertility Prevention Projects, the National Job Training Program (formerly the Job Corps), the Jail STD Prevalence Monitoring Projects, the Adolescent Women Reproductive Health Monitoring Project, the Men Who Have Sex With Men (MSM) Prevalence Monitoring Project, and the Indian Health Service; (3) sentinel surveillance of gonococcal antimicrobial resistance from the Gonococcal Isolate Surveillance Project (GISP); and (4) national sample 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, are the sources of many of the figures and all 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 among the United States population.

Sexually Transmitted Disease Surveillance, 2002 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 state, county, city, and national levels. The **Appendix** includes the sources and limitations of the data used to produce this report.

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 A1 displays progress made towards the HP2010 objectives for STDs. These objectives are used as reference points throughout this edition of *Sexually Transmitted Disease Surveillance, 2002*.

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, STD, and TB Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road, Mailstop E-02, Atlanta, Georgia, 30333.

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.

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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, the Regional Infertility Prevention Projects, the U.S. Department of Labor and the Indian Health Service, which provided surveillance data to the Centers for Disease Control and Prevention.

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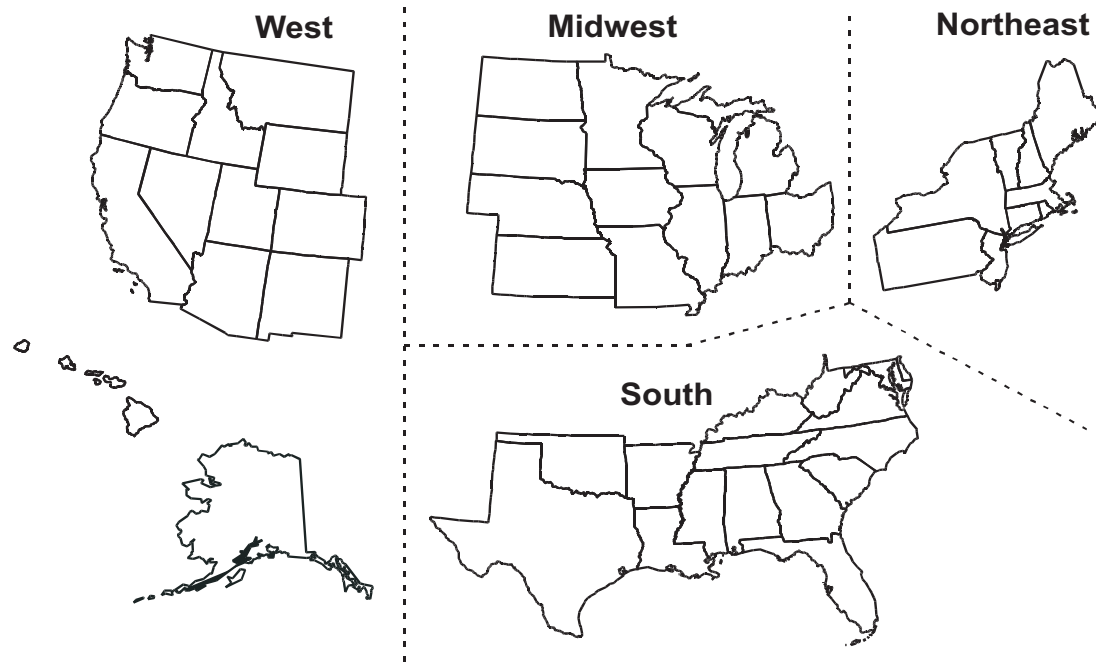
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Sources and Limitations of CDC Surveillance Data

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Geographic Divisions of the United States



West

Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

Midwest

Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

South

Alabama
Arkansas
Delaware
District of Columbia
Florida
Georgia
Kentucky
Louisiana
Maryland
Mississippi
North Carolina
Oklahoma
South Carolina
Tennessee
Texas
Virginia
West Virginia

Northeast

Connecticut
Maine
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

National Overview of Sexually Transmitted Diseases, 2002

The logo on the cover of *Sexually Transmitted Disease Surveillance, 2002* 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 is the key to reducing STDs and their related health burdens in our population. 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 diseases for which there are federally-funded control programs: chlamydia, gonorrhea, and syphilis. Several observations for 2002 are worthy of note.

Chlamydia

In 2002, 834,555 cases of genital *Chlamydia trachomatis* infection were reported to CDC (Table 1). This case count corresponds to a rate of 296.5 cases per 100,000 population, an increase of 6.5% compared with the rate of 278.3 in 2001. 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. Chlamydia screening and reporting are likely to expand further in response to the recently implemented Health Plan Employer Data and Information Set (HEDIS) measure for chlamydia screening of sexually active women 15 to 25 years of age who are provided medical care through managed care organizations.² The increase in chlamydia case reports in 2002 most likely represents a continued increase in screening for this infection and also increased use of more sensitive chlamydia screening tests than used in prior years.

In 2002, the overall rate of chlamydial infection in the U.S. among women (455.4 cases per 100,000 females) was over three times the rate among men (130.1 cases per 100,000 males), reflecting the large number of women screened for this disease (Tables 5 and 6). However, with the increased availability of urine testing, men are increasingly being tested for chlamydial infection. From 1998 to 2002, the reported chlamydial infection rate in men increased by 54.7% (from 84.1 to 130.1 cases per 100,000 males) compared with a 19.6% increase in women over this period (from 380.8 to 455.4 cases per 100,000 females).

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 2002, the median state-specific chlamydia test positivity among women 15 to 24 years who were screened at selected family planning clinics in all states, the District of Columbia, Puerto Rico, and the Virgin Islands was 5.6% (range 3.0% to 14.2%) (Figure 8), and at selected prenatal clinics in 26 states and the Virgin Islands was 7.4% (range 1.5% to 14.4%) (Figure F). For

economically-disadvantaged women 16 to 24 years of age who entered the National Job Training Program in 2002, from 28 states and Puerto Rico, the median state-specific prevalence was 10.1% (range 4.4% to 16.8%) (Figure L). For women 15 to 30 years of age screened at Indian Health Service (IHS) clinics in 3 IHS areas, the prevalence ranged from 7.4% to 9.7% by area (Figure U). For adolescent women entering juvenile detention centers, the median chlamydia positivity by facility was 16.7% (range 6.3% to 28.3%) (Figure II). It was 13.2% among women attending school-based clinics and 9.7% in female street youth (Figure M). For adolescent men entering juvenile detention centers, the median chlamydia positivity was 6.0% by facility (range 0.6% to 15.7%) (Figure JJ). 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.

In parts of the United States where large scale chlamydia screening programs have been instituted, prevalence of infection has declined. During 1988-2002, among 15-to 44-year-old women participating in the screening programs in Health and Human Services (HHS) Region X family planning clinics, chlamydia test positivity declined 55.4% (from 13.0% to 5.8%) (Figure 9). After adjusting trends in chlamydia positivity to account for changes in laboratory test methods and associated increases in test sensitivity, chlamydia test positivity decreased in 6 of 10 HHS regions from 2001 to 2002 and increased in 4 regions. Although chlamydia positivity has declined in the past year in some regions, most likely due to the effectiveness of screening and treating women, continued expansion of screening programs to populations with higher prevalence of disease may have contributed to the increases in positivity seen in other regions. See the **Appendix** (Sources and Limitations of Data) for the composition of the HHS regions.

Gonorrhea

Following a 73.8% decline in the rate of reported gonorrhea from 1975 (467.7 cases per 100,000 population) to 1997 (122.4 cases per 100,000 population), overall rates increased in 1998 (131.9 per 100,000 population) and have been declining slightly since 1999 (Table 1). The gonorrhea rate for 2002 (125.0 cases per 100,000 population) was slightly lower than rates in 2001 (128.5 cases per 100,000 population) and 2000 (129.0 per 100,000 population) (Table 1). The 2002 rate for gonorrhea considerably exceeds the Healthy People 2010 (HP2010) objective of 19 cases per 100,000 population.

The gonorrhea rate in the U.S. among women in 2002 was slightly lower than the rate in 2001 (125.3 and 128.2 cases per 100,000 women, respectively) (Table 15). As in 2001, there were minimal differences between sexes in gonorrhea rates in 2002 (Tables 15 and 16). Since 1998, the rate of gonorrhea among 15- to 19-year-olds has decreased by 12.2%. As with chlamydia, rates of gonorrhea in women are particularly high in 15- to 19-year-olds, and in men, are highest in the 20- to 24-year age group (Table 21).

In 2002, 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. Among 15- to 24-year-old women attending selected family planning clinics in 35 states, the District of Columbia, Puerto Rico, and the Virgin Islands, the median state-specific gonorrhea prevalence was 0.9% (range 0.1% to 2.8%) (Figure 17). For women in this age group attending selected prenatal clinics in 20 states and the Virgin Islands, the median prevalence was 0.9% (range 0.0% to 5.7%) (Figure G). However, for 16- to 24-year-old women entering

the National Job Training Program in 21 states in 2002, the median state-specific gonorrhea prevalence was 2.9% (range 0.0% to 6.8%) (Figure O).

Antimicrobial resistance in *Neisseria gonorrhoeae* remains a continuing concern. In the mid- to late 1990s, the prevalence of fluoroquinolone-resistant *N. gonorrhoeae* infections increased substantially in Asia and the Pacific Islands, including Hawaii; in 2002, increased numbers of fluoroquinolone-resistant *N. gonorrhoeae* infections were identified in California. Nationally in 2002, 2.2% of *N. gonorrhoeae* isolates tested through the Gonococcal Isolate Surveillance Project (GISP) demonstrated resistance to ciprofloxacin, compared to 0.7% in 2001 and 0.4% in 2000. There is considerable geographic variation in the prevalence of fluoroquinolone-resistance within the U.S. Outside of Hawaii and California, 0.4% demonstrated resistance. In Honolulu, the proportion of GISP isolates that were resistant to ciprofloxacin remained high in 2002 at 11.7%, although this was lower than in the previous two years (20.3% in 2001 and 14.3% in 2000). Also, in 2002, increased numbers of GISP isolates resistant to ciprofloxacin were identified in all four California GISP sites (7.2% in Long Beach, 11.4% in Orange County, 16.5% in San Diego, and 6.7% in San Francisco). As a result of these data, the 2002 CDC STD Treatment Guidelines³ recommend that fluoroquinolones not be used for treatment of gonorrhea acquired in Asia, the Pacific Islands, including Hawaii, or in other areas with high levels of resistance such as California. See **Appendix** for a further description of GISP.

Data on characteristics of patients in the GISP sample have been used to describe trends in the sexual orientation of male STD clinic patients with gonorrhea. In 2002, there was a marked increase in the proportion of GISP isolates from men who have sex with men (MSM), with 21.0% of isolates from MSM compared with 17.2% in 2001 and 13.9% in 2000 (Figure EE). In 1988, only 4.0% of isolates were from MSM. The proportional increase in MSM in GISP has corresponded to an absolute increase in gonorrhea cases among MSM at STD clinics in several large cities that participate in GISP.

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 October 1999.⁴ The rate of P&S syphilis in the United States declined by 89.2% from 1990 through 2000. However, the rate of P&S syphilis increased slightly in 2001 and more substantially in 2002; these increases were observed only in men.

Despite continued national progress toward syphilis elimination among women and African-Americans, syphilis remains an important problem in the South and, increasingly, in some urban areas with large populations of MSM. Recently, outbreaks of syphilis among MSM have been reported, possibly reflecting increases in risky behavior in this population.

P&S syphilis cases reported to CDC increased 12.4% from 6,103 in 2001 to 6,862 in 2002. The overall rate of P&S syphilis in the United States in 2002 (2.4 cases per 100,000 population) was slightly above the rate reported in 2001 (2.2 cases per 100,000), and was considerably higher than the Healthy People 2010 (HP2010) objective of 0.2 case per 100,000 population (Figure 23, Table 1). The rate of P&S syphilis among women decreased from 1.4 cases per 100,000 population in 2001

to 1.1 cases per 100,000 population in 2002; among men, the rate increased from 3.0 to 3.8 cases per 100,000 population (Tables 28 and 29).

One factor that may facilitate syphilis elimination efforts is that this disease continues to be primarily reported only in specific areas of the country. In 2002, 2,534 (80.7%) of the 3,139 counties in the United States reported no cases of P&S syphilis (see **Appendix** for details on county coding). Half of all the P&S syphilis cases were reported from only 16 counties and 1 city (0.5% of total number of U.S. counties) (Table 26). However, the 2002 P&S syphilis rates were greater than the HP2010 objective in 595 counties (19.0% of the total number of U.S. counties). These 595 counties accounted for more than 99.9% of all reported P&S syphilis cases.

Between 2001 and 2002, the national rate of congenital syphilis decreased by 16.4%, from 12.2 to 10.2 cases per 100,000 live births (Table 42). The continuing reduction in congenital syphilis rates, occurring since the early 1990s, reflects the substantial and continuing reduction in the rate of P&S syphilis among women over the same period. In 2002, approximately one half of the states and outlying areas had a rate of congenital syphilis that was greater than the HP2010 objective of 1.0 case per 100,000 live births (Table 41).

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 five years. The P&S syphilis rate for 2002 among African-Americans was 8 times the rate among whites, reflecting a substantial decline from 1998, when the rate among African-Americans was 34 times greater than that among whites (Table 35B). While this reflects decreasing rates among African-Americans, in the past two years, it also reflects significant increases among whites.

While syphilis elimination efforts have successfully focused on heterosexual minority populations at risk for syphilis, recent increases in syphilis among MSM 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 National Committee for Quality Assurance (NCQA). *HEDIS 2000: Technical Specifications*, Washington, DC, 1999, pp. 68-70, 285-286.

³ Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines 2002. *MMWR* 2002;51 (No. RR-6).

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, 1999.

NATIONAL PROFILE

National Profile

The **National Profile** section contains figures showing trends and the distribution of sexually transmitted diseases (STDs) by age, sex, race/ethnicity, and location for the United States. Where relevant, the figures illustrate progress towards specific objectives* for the nation published in 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.

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

Chlamydia

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). 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 suggest that such screening programs can lead to a reduction in the incidence of PID by as much as 60%.¹ 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.

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, and improvements in the information systems for reporting. However, many women who are at risk are still not being tested, reflecting, in part, lack of awareness among some health care providers and the limited resources available to support screening. Chlamydia screening and reporting are likely to expand further in response to the recently implemented Health Plan Employer Data and Information Set (HEDIS) measure for chlamydia screening of sexually active women 15 through 25 years of age who receive medical care through managed care organizations.² 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.³ In parts of the United States where large scale chlamydia screening programs have been instituted, prevalence of the infection has declined.

- In 2000, for the first time, all 50 states and the District of Columbia had regulations requiring the reporting of chlamydia cases to CDC (Figure 1, Table 4).
- In 2002, 834,555 chlamydial infections were reported to CDC from 50 states and the District of Columbia (Table 1). This case count corresponds to a rate of 296.5 cases per 100,000 population, an increase of 6.5% compared with the rate of 278.3 in 2001. The reported number of chlamydial infections was more than twice the number of reported cases of gonorrhea (351,852 gonorrhea cases were reported in 2002) (Table 1).
- From 1987 through 2002, the rates of reported chlamydial infection increased from 50.8 to 296.5 cases per 100,000 population (Figure 2, Table 1). The continuing increase in reported cases likely represents the further expansion of screening for this infection, the development and use of more sensitive screening tests, and more complete national reporting.
- For the years 1998-2002, the chlamydia rates in the Southern region of the United States were higher than the rates in any other region of the country (Figures 3-5, Table 4). Before 1996, chlamydia rates were highest in the West and

Midwest, where substantial public resources had been committed for screening programs in family planning clinics. Rates have remained lowest in the Northeast.

- In 2002, the overall rate of reported chlamydial infection among women in the U.S. (455.4 cases per 100,000 females) was over 3 times higher than the rate among men (130.1 cases per 100,000 males), likely reflecting a greater number of women screened for this infection (Figure 6, Tables 5 and 6). The lower rates among men suggest that many of the sex partners of women with chlamydia are not diagnosed or reported. 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 1998 to 2002, the chlamydial infection rate in males increased by 54.7% (from 84.1 to 130.1 cases per 100,000 males) compared with a 19.6% increase in women over this period (from 380.8 to 455.4 cases per 100,000 females) (Tables 5 and 6).
- For women, the highest age-specific rates of reported chlamydia in 2002 were among 15- to 19-year-olds (2,619.1 per 100,000 females) and 20- to 24-year-olds (2,570.1 per 100,000 females). Age-specific rates among men, while substantially lower than the rates in women, were highest in the 20- to 24-year-olds (Figure 7, Table 11).
- In 2002, the rate of chlamydia among African-American females in the U.S. was 8 times higher than the rate among white females (1,638.3 and 202.5 per 100,000, respectively) (Table 12B). The chlamydia rate among African-American males was 12 times higher than that among white males (573.7 and 48.6 per 100,000 respectively).
- Chlamydia screening and prevalence monitoring activities were initiated in Health and Human Services (HHS) Region X 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.
- In 2002, 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 5.6% (range 3.0% to 14.2%) (Figure 8). In nearly all states chlamydia positivity was greater than the HP2010 objective of 3.0%.⁴
- The effectiveness of large-scale screening programs in reducing chlamydia prevalence in women has been well documented in areas where this intervention has been in place for several years. For example, from 1988 to 2002, the screening programs in HHS Region X (Alaska, Idaho, Oregon, Washington) family planning clinics demonstrated a 55.4% decline in chlamydia positivity from 13.0% to 5.8% among 15- to 44-year-old women (Figure 9); chlamydia positivity was adjusted for changes in laboratory test methods and associated test sensitivity.^{5,6} See **Appendix** (Chlamydia, Gonorrhea, and Syphilis Prevalence Monitoring) for details.
- 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 decreased in 6 of 10 HHS regions from 2001 to 2002,

and increased in 4 regions (Figure 9). Although chlamydia positivity has declined in the past year in some regions due to the effectiveness of screening and treatment of women, continued expansion of screening programs to populations with higher prevalence of disease may have contributed to increases in positivity in other regions.

- 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**.

¹ Scholes D, Stergachis A, Heidrich FE, Andrilla H, Holmes KK, Stamm WE. Prevention of pelvic inflammatory disease by screening for cervical chlamydial infection. *NEngl J Med* 1996;34(21): 1362-66.

² National Committee for Quality Assurance (NCQA). *HEDIS 2000: Technical Specifications*, Washington, DC, 1999, pp. 68-70, 285-286.

³ Dicker LW, Mosure d, Levine W. Chlamydia positivity versus prevalence: what's the difference? *Sex Transm Dis* 1998;25:251-3.

⁴ 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.

⁵ 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.

⁶ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2002 Supplement: Chlamydia Prevalence Monitoring Project Annual Report 2002*. Atlanta, GA: U.S. Department of Health and Human Services (in press).

Figure 1. Chlamydia — Number of states that require reporting of *Chlamydia trachomatis* infections: United States, 1987–2002

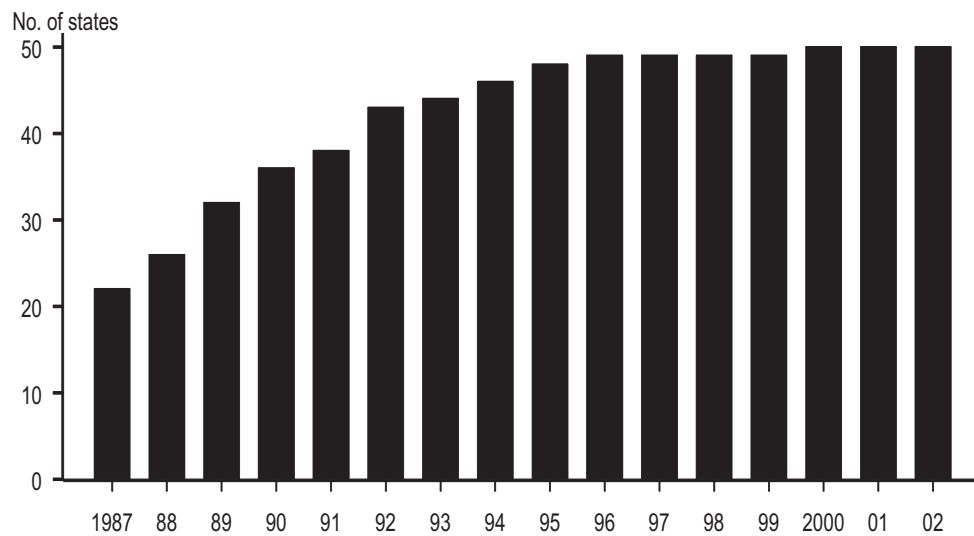


Figure 2. Chlamydia — Rates: United States, 1984–2002

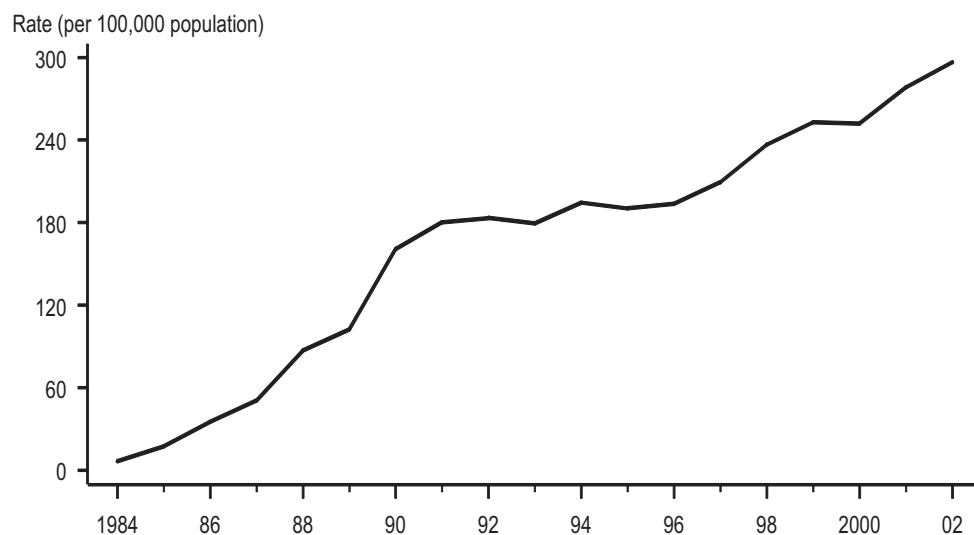
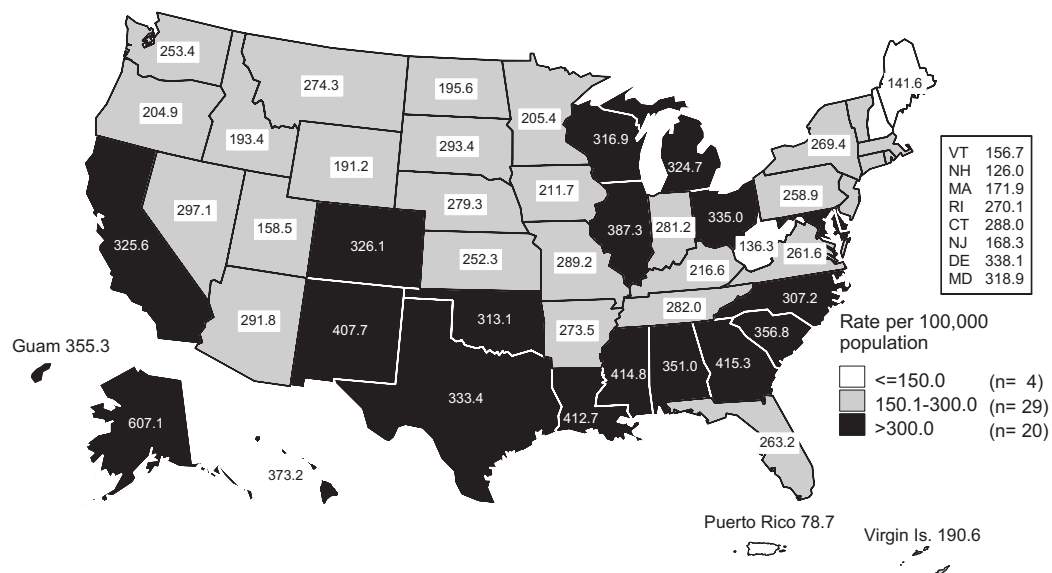


Figure 3. Chlamydia — Rates by state: United States and outlying areas, 2002



Note: The total rate of chlamydia for the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 293.6 per 100,000 population. For further information on chlamydia reporting, see Appendix (Reporting of Chlamydia Cases).

Figure 4. Chlamydia — Rates by county: United States, 2002

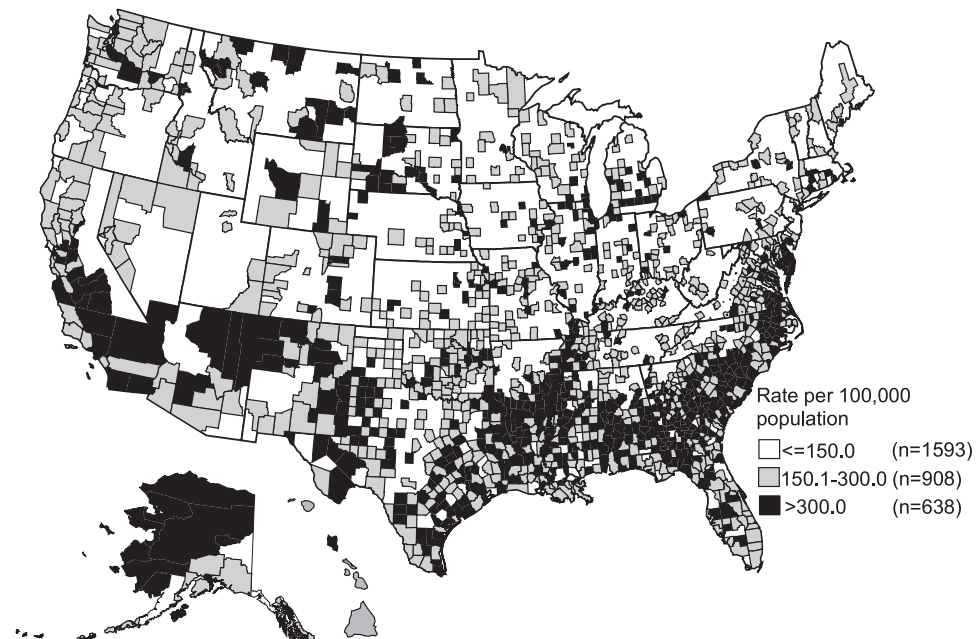


Figure 5. Chlamydia — Rates by region: United States, 1984–2002

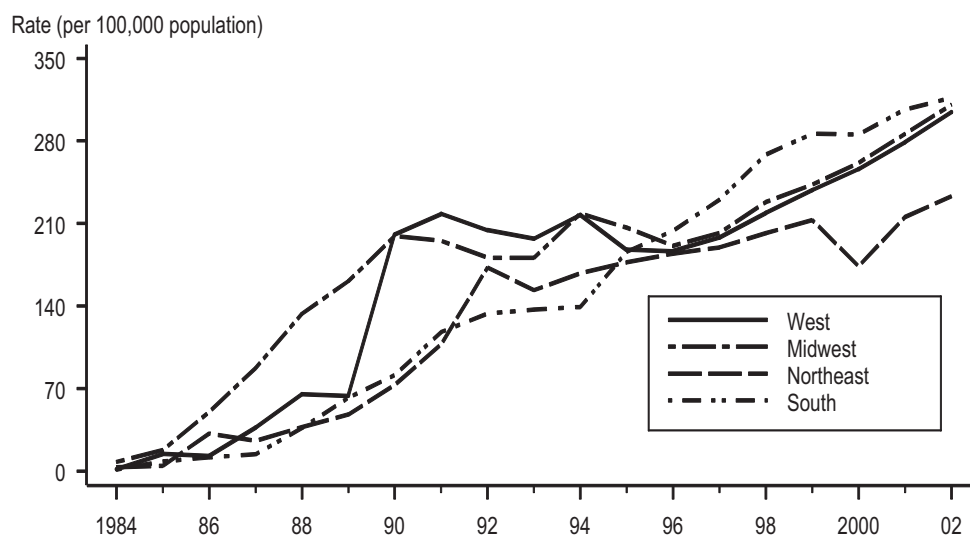


Figure 6. Chlamydia — Rates by sex: United States, 1984–2002

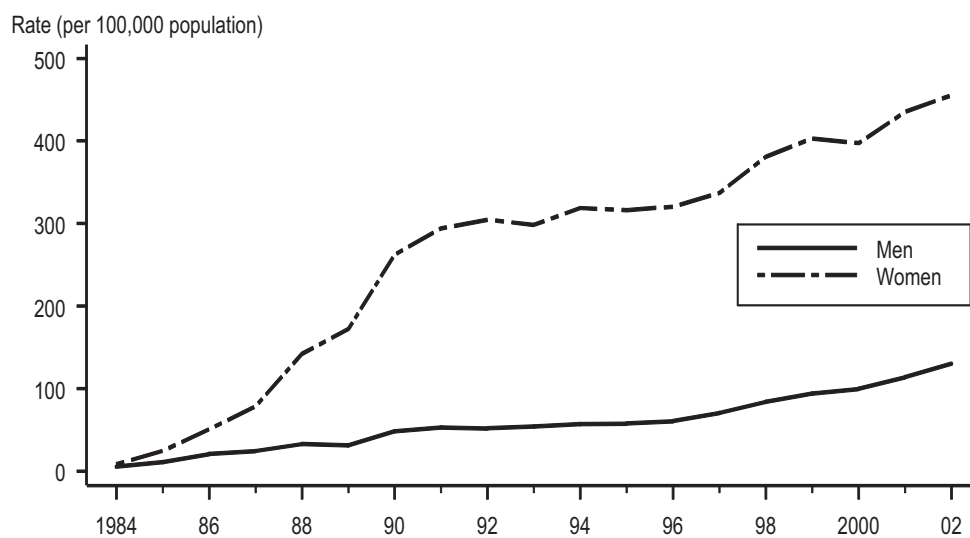
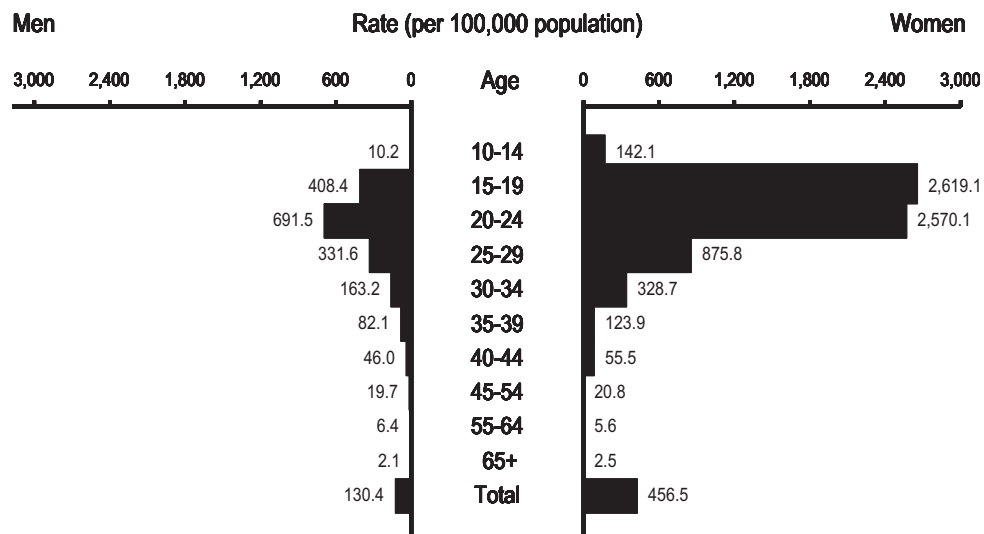
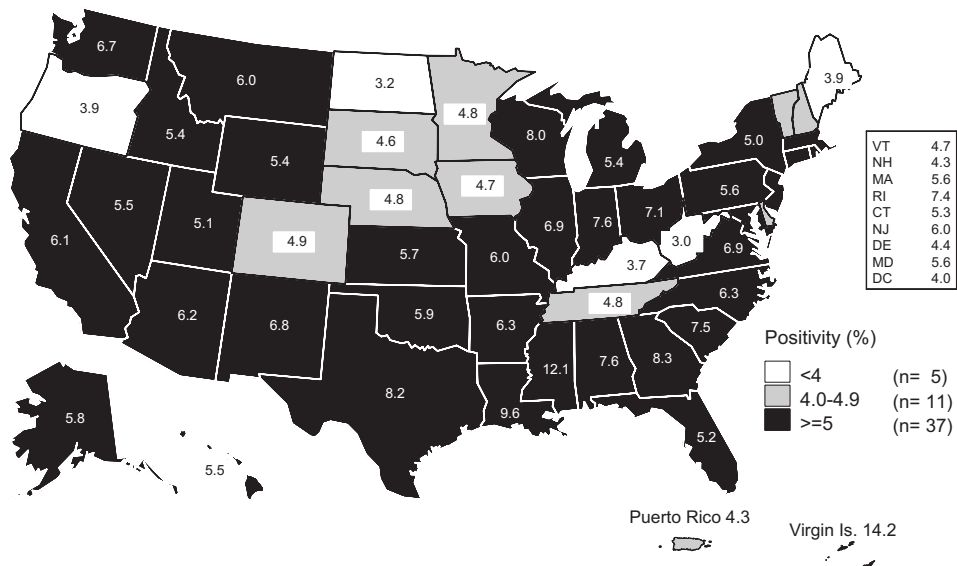


Figure 7. Chlamydia — Age- and sex-specific rates: United States, 2002



Note: See Table 11 and Appendix (Reporting of Chlamydia Cases) for more information.

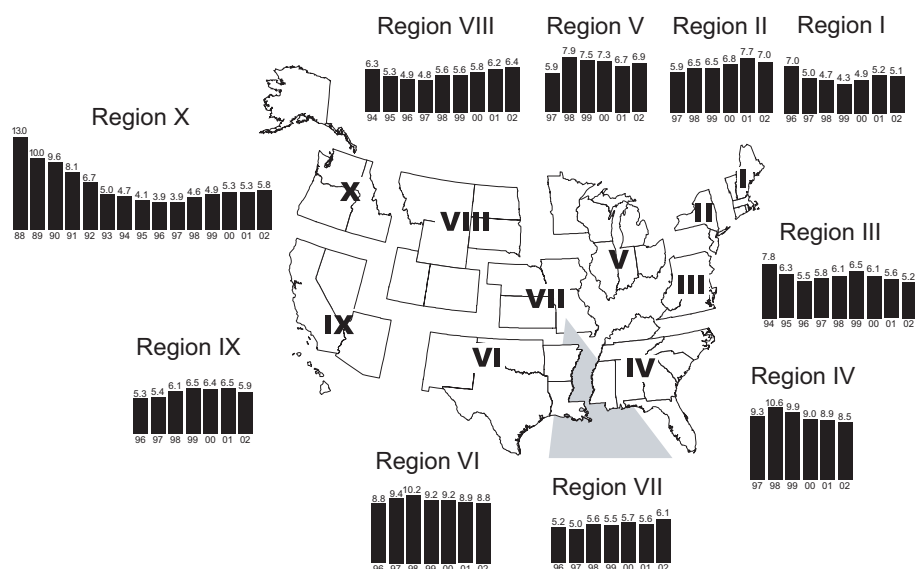
Figure 8. Chlamydia — Positivity among 15-24 year old women tested in family planning clinics by state: United States and outlying areas, 2002



Note: States reported chlamydia positivity data on at least 500 women aged 15-24 years screened during 2002, except for New York State Project Area which submitted chlamydia positivity data for January - July 2002 only.

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

Figure 9. Chlamydia — Trends in positivity among 15-44 year old women tested in family planning clinics by HHS regions, 1988–2002



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

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

Gonorrhea

Gonorrhea is the second most commonly reported notifiable disease in the U.S. Infections due to *Neisseria gonorrhoeae*, like those resulting from *Chlamydia trachomatis*, are a major cause of pelvic inflammatory disease (PID) in the United States. PID can lead to serious outcomes 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 73.8% following implementation of the national gonorrhea control program in the mid-1970s (Table 1). After a small increase in 1998, the gonorrhea rate has decreased slightly since 1999 (Figure 10 and Table 1). True increases or decreases may be masked by changes in screening practices (affected by simultaneous testing for chlamydia), use of diagnostic tests with different sensitivities, and changes in reporting practices.²

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.³ In addition, reporting practices for gonococcal infections may have been biased towards reporting of infections in persons of minority race or ethnicity, who are more likely to attend public STD clinics.^{2,4} In 2002, 35.2% of gonorrhea cases were reported by STD clinics (Table 2). For such reasons, supplemental data on gonorrhea prevalence in persons screened in a variety of different settings are useful in assessing disease burden in selected populations.

- In 2002, 351,852 cases of gonorrhea were reported in the United States (Table 1).
- The rate of reported gonorrhea in the United States was 125.0 cases per 100,000 population in 2002, which was lower than rates for the previous four years (128.5 in 2001, 129.0 in 2000, 132.3 in 1999, and 131.9 in 1998 (Tables 1 and 14).
- As in 2000 and 2001, only 8 states and 1 outlying area had gonorrhea rates below the Healthy People 2010 (HP2010) national objective of 19 cases per 100,000 population⁵ for 2002 (Figure 11 and Table 13).
- In 2002, 1,376 (43.9%) of 3,139 counties in the United States had gonorrhea rates at or below the HP2010 national objective of 19 cases per 100,000 population. Rates per 100,000 population were between 19 and 100 in 1,029 counties (32.8%), and greater than 100 in 730 counties (23.3%). The majority of counties with greater than 100 cases per 100,000 population were located in the South (Figure 12).
- As in previous years, in 2002 the South had the highest gonorrhea rate among the four regions of the country. In 2002, the gonorrhea rate in the South declined by 6.1% from a rate of 177.6 per 100,000 population in 2001 to 166.8. The gonorrhea rate in the Northeast also declined by 3.3% from 97.9 in 2001 to 94.7 in 2002. Meanwhile, the gonorrhea rate in the Midwest remained essentially unchanged at

143.9 in 2002. It was 143.4 in 2001. The gonorrhea rate in the West experienced a 6.0% increase over this time period from 61.5 to 65.2 (Figure 13 and Table 14).

- Although rates of gonorrhea among men prior to 1997 were higher than rates among women, rates among men and women have been similar since 1997 (Figure 14). In 2002 the gonorrhea rate among women (125.3 cases per 100,000 females) was similar to the rate among men (124.2 cases per 100,000 males) (Tables 15 and 16).
- The overall gonorrhea rate in selected large cities with populations over 200,000 persons was 220.2 cases per 100,000 population in 2002. This rate has decreased slightly each year since 1998 when it was 241.4 cases per 100,000 population (Table 18). All of these cities had rates higher than the HP2010 objective of 19 cases per 100,000 population. In 2002, 46.1% of gonorrhea cases were reported by these selected cities (Table 17). Similar to previous years, in 2002 the total gonorrhea rate among males in these selected large cities (231.5) remained higher than that among females (208.7) (Tables 19 and 20).
- When examined by age, in 2002 the gonorrhea rate was highest for 20- to 24-year-olds (593.0 per 100,000). Among women in 2002, 15- to 19- and 20- to 24-year-olds had the highest rates of gonorrhea (675.6 and 650.3, per 100,000, respectively); among men, 20- to 24-year-olds had the highest rate (538.1 per 100,000) (Figure 16 and Table 21). Since 1998 there has been a 12.2% decrease in the rate of gonorrhea among 15- to 19-year olds, 10.2% among women and 16.4% among men (Table 21).
- Changes in gonorrhea rates from 2001 to 2002 differed by racial/ethnic group. Gonorrhea rates increased in 2002 for three of the five racial/ethnic groups. The rates among American Indian/Alaska Natives (114.4 per 100,000 in 2001 and 126.8 in 2002), Hispanics (74.2 in 2001 and 76.0 in 2002), and whites (29.4 in 2001 and 31.1 in 2002) increased by 10.8%, 2.4%, and 5.8%, respectively, during this time period. The gonorrhea rate among Asian/Pacific Islanders declined 9.7% in 2002 compared to 2001 (from 26.7 down to 24.1). The rate among African-Americans declined 5.1% from 782.3 in 2001 to 742.3 in 2002, but still remained higher than that among other race/ethnicities (Figure 15 and Table 22B). In 2002, the gonorrhea rate among African-Americans was about 24 times greater than the rate for whites, down from 27 times greater in 2001. The 2002 gonorrhea rates for all racial/ethnic groups were above the HP2010 objective of 19 per 100,000 population.
- Increases in gonorrhea were largest in white men aged 30- to 44-years-old between 1998 and 2002. For white men, rates increased 24.1% in 30- to 34-year-olds, 38.3% in 35- to 39-year-olds and 65.5% in 40- to 44-year-olds (Table 22B).
- As in recent years, the highest rates of gonorrhea were seen among 15- to 19-year-old African-American women (3,307.7 per 100,000), and 20- to 24-year-old African American men (3,256.2 per 100,000) (Table 22B).
- In 2002, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected family planning clinics in 35 states, Puerto Rico, District of Columbia, and the Virgin Islands was 0.9% (range 0.1% to 2.8%) (Figure 17). In other settings, gonorrhea test positivity has been much higher. See **Special Focus Profiles**.

- Antimicrobial resistance remains an important consideration in the treatment of gonorrhea. Overall, 18.0% of isolates collected in 2002 in 27 STD clinics by the Gonococcal Isolate Surveillance Project (GISP) were resistant to penicillin, tetracycline, or both (Figures 18 and 19).
- Resistance to ciprofloxacin was first identified in GISP in 1991. From 1991 to 1998, fewer than nine ciprofloxacin-resistant isolates were identified each year and such isolates were identified in only a few GISP clinics. In 2000, similar to 1999, 19 (0.4%) ciprofloxacin-resistant GISP isolates were identified in 7 GISP clinics. In 2001, 38 (0.7%) ciprofloxacin-resistant GISP isolates were identified in 6 clinics and in 2002, 116 (2.2%) such isolates were identified in 13 clinics (Figure 20).
- In Honolulu, the proportion of GISP isolates that were resistant to ciprofloxacin remained high in 2002 at 11.7%, although this was lower than in the previous two years (20.3% in 2001 and 14.3% in 2000). This high proportion of ciprofloxacin-resistant isolates in Hawaii continues to reinforce the recommendation made by CDC in 2000 that fluoroquinolones not be used to treat gonorrhea acquired in Hawaii.⁶
- In California, significant increases in the proportions of GISP isolates resistant to ciprofloxacin were identified in all 4 California GISP sites (for Long Beach, 7.2% in 2002 compared with 3.0% in 2001; for Orange County, 11.4% in 2002 compared with 2.3% in 2001; for San Diego, 16.5% in 2002 compared with 2.1%; for San Francisco, 6.7% in 2002 compared with 3.4% in 2001). In 2002, the California STD Program recommended that fluoroquinolones no longer be used for gonorrhea treatment in California.
- The proportion of GISP isolates that were ciprofloxacin-resistant at other GISP clinics where such isolates were identified in 2002 were: Anchorage, AL – 3.7%; Seattle, WA – 3.0%; Portland, OR – 1.7%; Philadelphia, PA – 1.0%; Minneapolis, MN – 0.5%; Cincinnati, OH – 0.4%; Miami, FL – 0.4%; Phoenix, AZ – 0.3%. Overall, outside of Hawaii and California, 0.4% of isolates were ciprofloxacin-resistant. Additional information on both GISP data and non-GISP antimicrobial susceptibility data from health departments may be found in the 2002 GISP report⁷ and the GISP website (<http://www.cdc.gov/std/gisp>).
- In 2002, no GISP isolates had decreased susceptibility to cefixime or to ceftriaxone. The proportion of GISP isolates demonstrating decreased susceptibility to ceftriaxone or cefixime has remained very low over time. To date, cephalosporin resistance has not been identified in GISP. 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 has not previously been identified in the United States.⁹
- 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 1992, 0.9% of GISP isolates had azithromycin MIC ≥ 0.5 $\mu\text{g/ml}$ compared with 3.1% in 2002. In 1992, there were no isolates with azithromycin MIC ≥ 1.0 $\mu\text{g/ml}$ but in 2002, there were 33 such isolates.

- From GISP data, the percentage of men with gonorrhea who were reported to have had a gonorrhea infection in the previous year has remained essentially unchanged between 1992 (21.5%) and 2002 (22.5%) (Figure 21).
- Additional information about gonorrhea in racial and ethnic minority populations, adolescents, men who have sex with men, and other at risk populations can be found in the **Special Focus Profiles**.

¹ Cohen MS, Hoffman IF, Royce RA, et al. Reduction of concentration of HIV-1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV-1. *Lancet* 1997;349:1868-73.

² Centers for Disease Control and Prevention. Gonorrhea – United States, 1998. *MMWR* 2000;49:538-42.

³ 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.

⁴ Fox KK, Whittington W, Levine WC, Moran JS, Zaidi AA, Nakashima AN. Gonorrhea in the United States, 1981-1996: demographic and geographic trends. *Sex Transm Dis* 1998;25(7):386-93.

⁵ 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.

⁶ Centers for Disease Control and Prevention. Fluoroquinolone-resistance in *Neisseria gonorrhoeae*, Hawaii, 1999, and decreased susceptibility to azithromycin in *N. gonorrhoeae*, Missouri, 1999. *MMWR* 2000;49:833-837.

⁷ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2002 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2002*. Atlanta, GA: U.S. Department of Health and Human Services (in press).

⁸ Centers for Disease Control and Prevention. Increases in fluoroquinolone-resistant *Neisseria gonorrhoeae*—Hawaii and California, 2001 *MMWR* 2002;51:1041-1044.

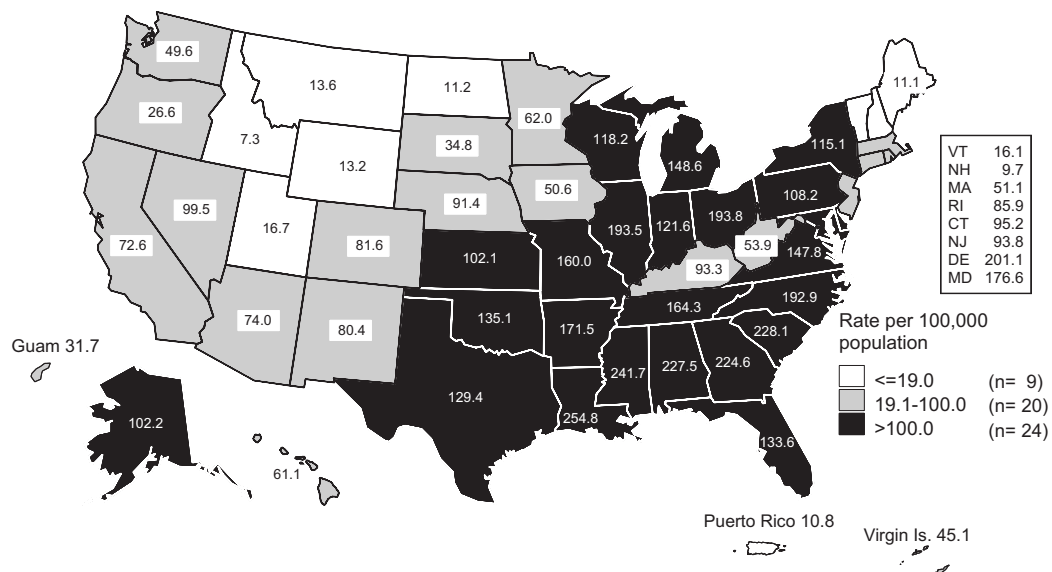
⁹ Wang SA, Lee MV, Iverson CJ, O'Connor N, Ohye RG, Hale JA, Knapp JS, Effler PV, Weinstock HS. Multi-drug resistant *Neisseria gonorrhoeae* with decreased susceptibility to cefixime, Hawaii, 2001. [Abstract] International Conference on Emerging Infectious Diseases, Atlanta, Georgia, March 25, 2002.

Figure 10. Gonorrhea — Rates: United States, 1970–2002 and the Healthy People 2010 objective



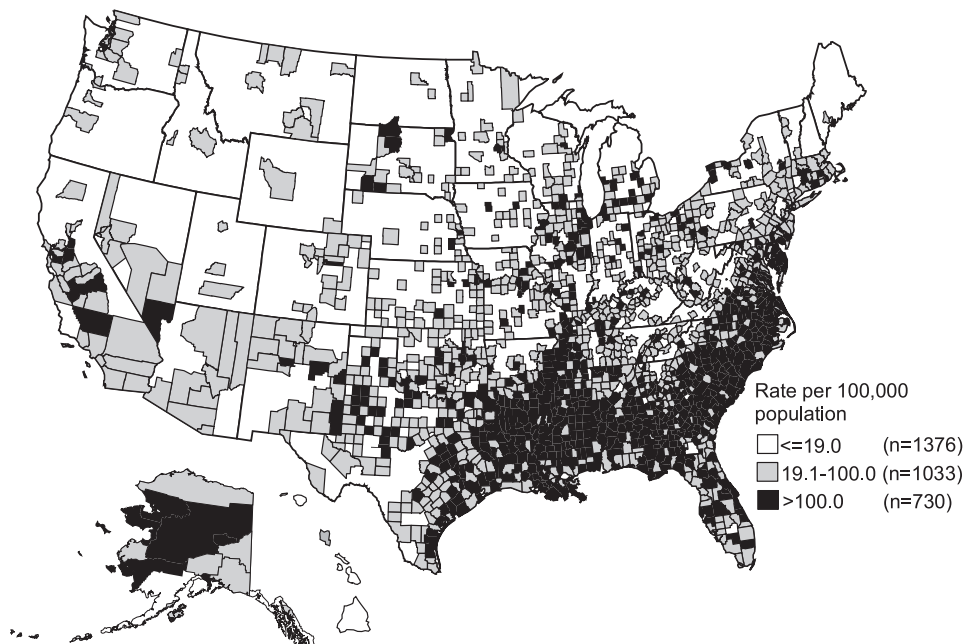
Note: The Healthy People 2010 objective for gonorrhea is 19.0 cases per 100,000 population.

Figure 11. Gonorrhea — Rates by state: United States and outlying areas, 2002



Note: The total rate of gonorrhea for the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 123.4 per 100,000 population. The Healthy People 2010 objective is 19.0 cases per 100,000 population.

Figure 12. Gonorrhea — Rates by county: United States, 2002



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

Figure 13. Gonorrhea — Rates by region: United States, 1981–2002 and the Healthy People 2010 objective

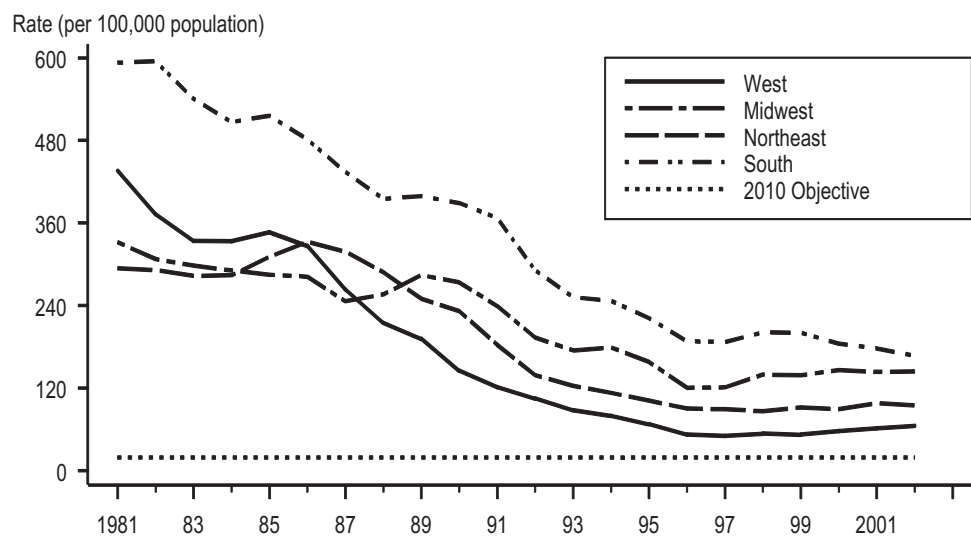


Figure 14. Gonorrhea — Rates by sex: United States, 1981–2002 and the Healthy People 2010 objective

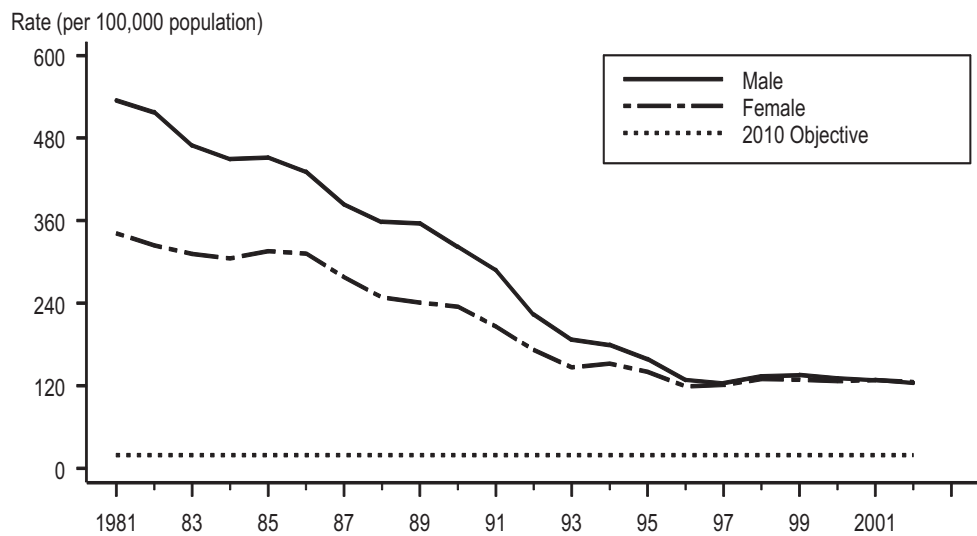


Figure 15. Gonorrhea — Rates by race and ethnicity: United States, 1981–2002 and the Healthy People 2010 objective

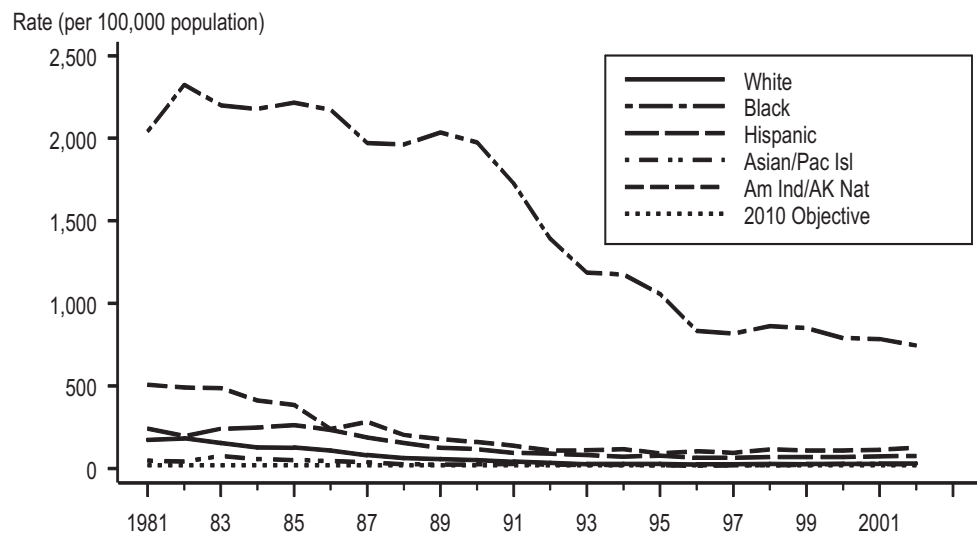
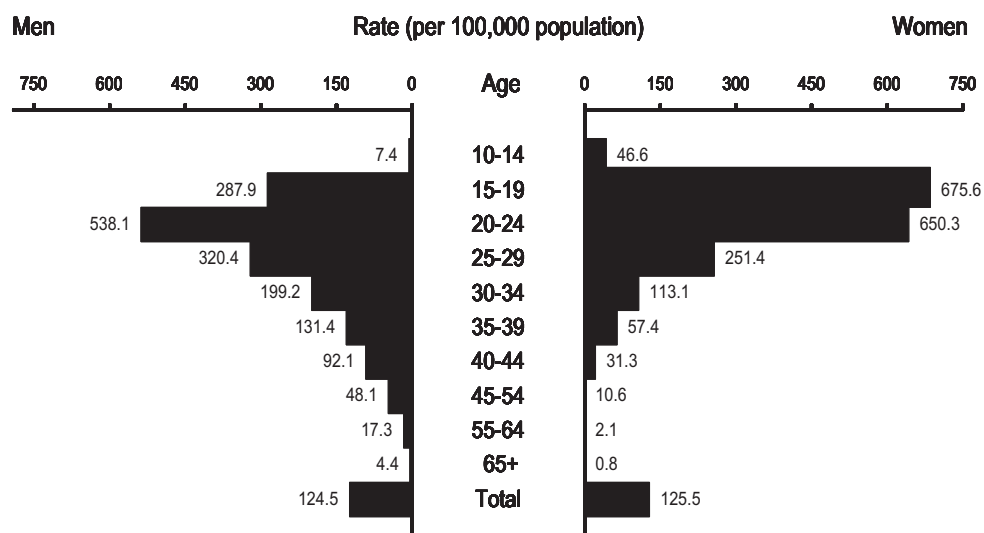
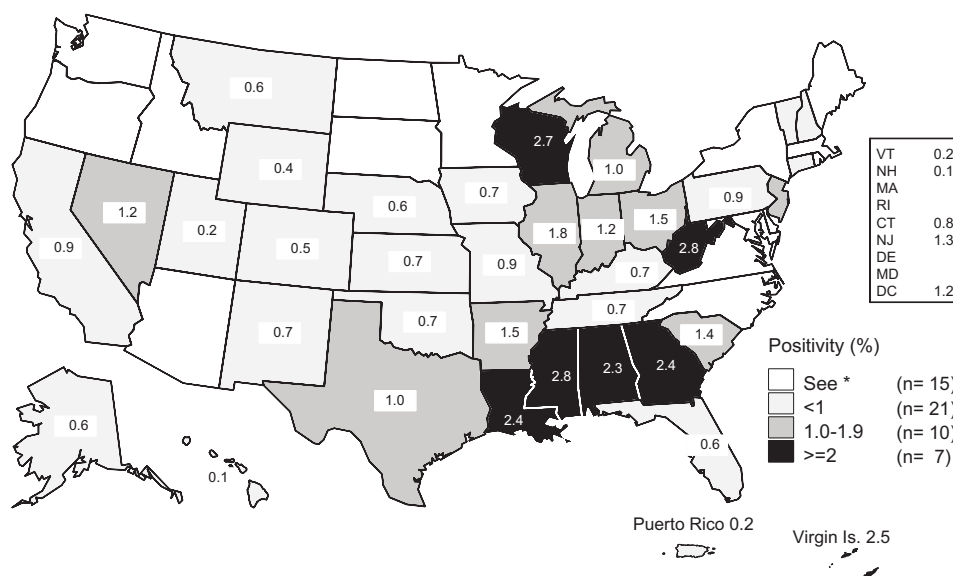


Figure 16. Gonorrhea — Age- and sex-specific rates: United States, 2002



Note: See Table 21.

Figure 17. Gonorrhea — Positivity among 15-24 year old women tested in family planning clinics by state: United States and outlying areas, 2002



*States reported gonorrhea positivity data on less than 500 women aged 15-24 years during 2002, except for Pennsylvania and Puerto Rico which submitted gonorrhea positivity data for April - December 2002 only.

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

Figure 18. Gonococcal Isolate Surveillance Project (GISP) — Location of participating clinics and regional laboratories: United States, 2002

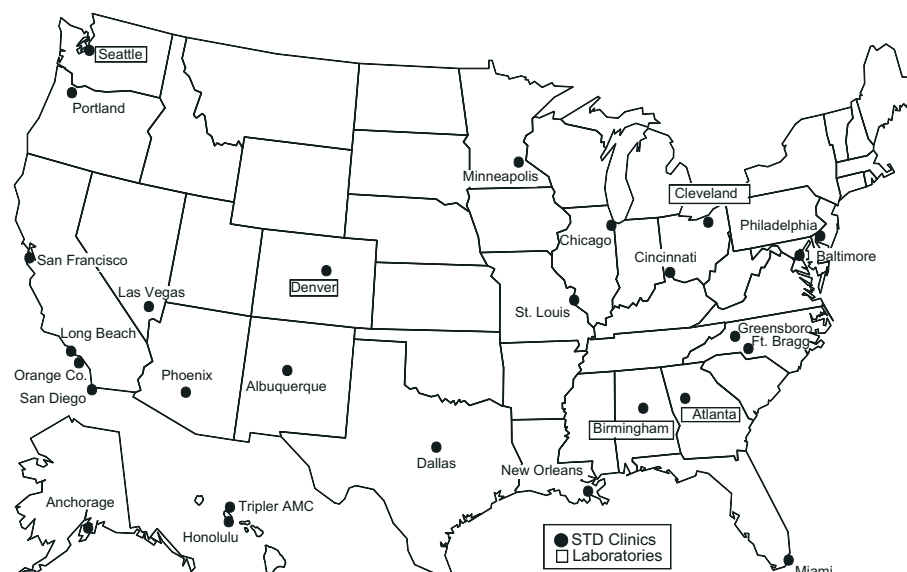
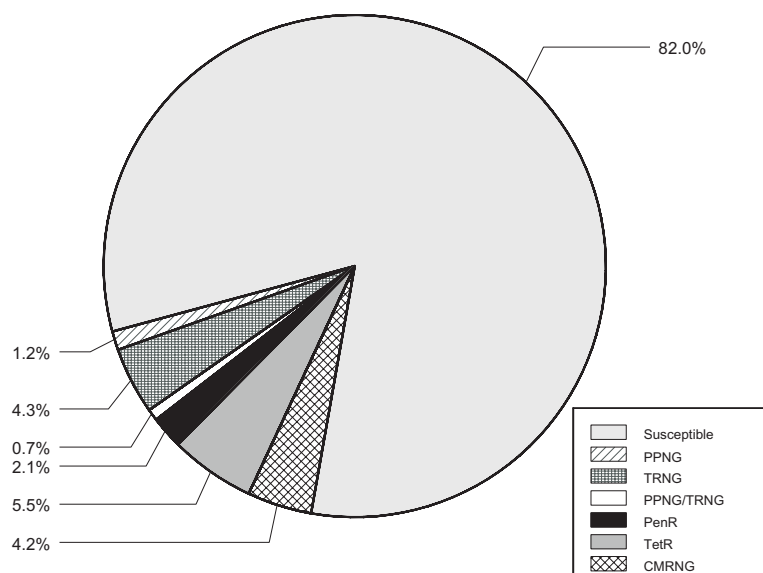
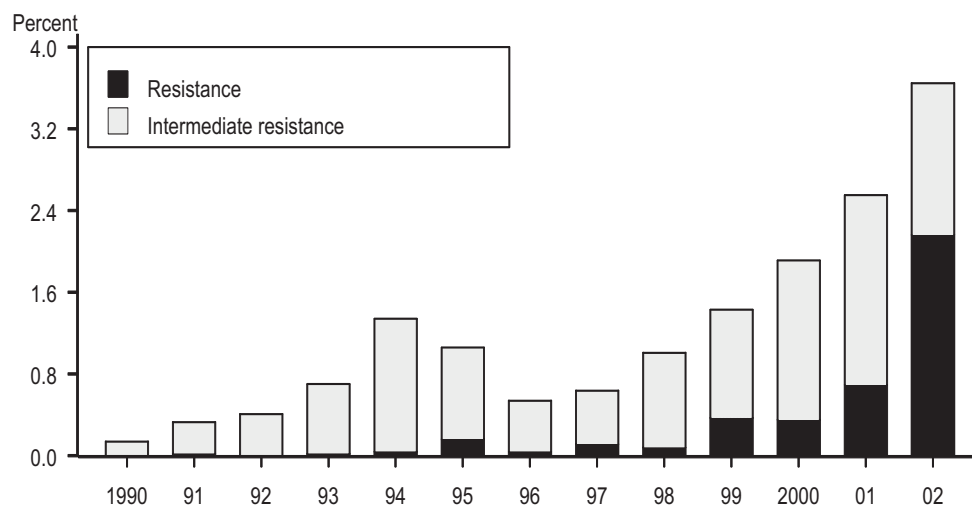


Figure 19. Gonococcal Isolate Surveillance Project (GISP) — Penicillin and tetracycline resistance among GISP isolates, 2002



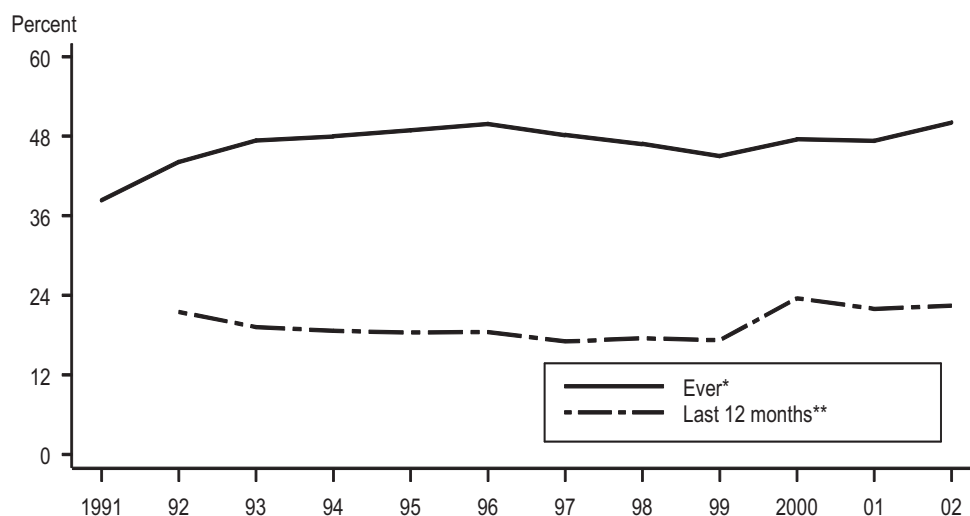
Note: PPNG=penicillinase-producing *N. gonorrhoeae*; TRNG=plasmid-mediated tetracycline resistant *N. gonorrhoeae*; PPNG-TRNG=plasmid-mediated penicillin and tetracycline resistant *N. gonorrhoeae*; PenR=chromosomally mediated penicillin resistant *N. gonorrhoeae*; TetR=chromosomally mediated tetracycline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

Figure 20. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates with resistance or intermediate resistance to ciprofloxacin, 1990–2002



Note: Resistant isolates have ciprofloxacin MICs ≥ 1 $\mu\text{g/ml}$. Isolates with intermediate resistance have ciprofloxacin MICs of 0.125 - 0.5 $\mu\text{g/ml}$. Susceptibility to ciprofloxacin was first measured in GISP in 1990.

Figure 21. Gonococcal Isolate Surveillance Project (GISP) — Percent of men with gonorrhea who had a previous gonorrhea infection, 1991–2002



*Data first collected in 1991.

**Data first collected in 1992.

Syphilis

Syphilis, a genital ulcerative disease, facilitates the transmission of HIV and may be important in contributing to HIV transmission in those parts of the country where rates of both infections are high. 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 over 70% of cases.¹

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 (Figure 22). 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 1999.² Collaboration with diverse organizations, public health professionals, the private medical community, and other partners working in STD and HIV is essential for the successful elimination of syphilis in the U.S.³

Although the rate of P&S syphilis in the United States declined by 89.7% from 1990 to 2000, the rate of P&S syphilis increased in 2001 and 2002; these increases were observed only in men.

Despite national progress toward syphilis elimination, particularly among African-Americans and among women, syphilis remains an important problem in the South and in some urban areas in other regions of the country. Outbreaks of syphilis occurring among men who have sex with men (MSM) have been reported which have been characterized by high rates of HIV co-infection and high-risk sexual behavior.⁴⁻⁹

- In 2002, P&S syphilis cases reported to CDC increased to 6,862 from 6,103 in 2001, an increase of 12.4%. The reported rate of P&S syphilis in the United States in 2002 (2.4 cases per 100,000 population) was 9.1% higher than the reported rate in 2001 (2.2 cases per 100,000 population), and it is significantly greater than the Healthy People 2010 (HP2010) objective of 0.2 case per 100,000 population (Figure 23, Table 1).¹⁰
- From 2001 to 2002, the number of cases of early latent syphilis reported to CDC decreased 3.1% (from 8,701 to 8,429) (Table 36) while the number of cases of late and late latent syphilis increased 1.1% (from 16,976 to 17,168) (Table 38). The total number of cases of syphilis (P&S, early latent, late and late latent, and congenital syphilis) reported to CDC increased 1.9% (from 32,272 to 32,871) from 2001 to 2002 (Table 23).
- Between 2001 and 2002, the rate of P&S syphilis increased 26.7% among men (from 3.0 cases to 3.8 cases per 100,000 men) (Figure 27, Table 29). During this period, the rate declined 21.4% among women (from 1.4 to 1.1 cases per 100,000 women) (Figure 27, Table 28).

- The male-to-female rate ratio for P&S syphilis has risen steadily since 1996 when it was 1.1 (Figure 29). The male-to-female rate ratio in 2001 was 2.1 and in 2002, the rate ratio was 3.5 suggesting an increase in syphilis among men who have sex with men.
- An increase in the male-to-female rate ratio for P&S syphilis occurred among whites, African-Americans, and Hispanics from 2001 to 2002. The male-to-female rate ratio for P&S syphilis increased from 6.0 to 11.0 among whites, from 1.7 to 2.1 among African-Americans, and from 3.7 to 5.0 among Hispanics; the male-to-female rate ratio declined from 10.0 to 8.0 among Asian/Pacific Islanders and the rate ratio remained at 1.2 among American Indian/Alaska Natives (Table 35B).
- An increase in the male-to-female rate ratio for P&S syphilis occurred in 25 (71.9%) of 32 states, the District of Columbia, and 1 outlying area that reported 25 or more cases in 2002 (Tables 28, 29, 32, and 33).
- African-Americans accounted for 49.8% of cases of P&S syphilis in 2002 and 62.5% in 2001. During 2001 to 2002, the rate of P&S syphilis declined 10.9% among African-Americans, reflecting a 2.6% decrease in the number of cases among men (from 2,286 to 2,226) but a 21.7% decrease among women (from 1,527 to 1,195). The rate among whites increased 71.4%; cases among men increased 85.2% (from 1,138 to 2,108), and cases among women decreased 12.8% (from 249 to 217). The rate among Hispanics increased 28.6%; cases among men increased 35.6% (from 607 to 823), and cases among women increased very slightly from 146 to 147. The rate among Asians/Pacific Islanders increased 80.0%; cases increased among men (from 51 to 83) and women (from 4 to 11). The rate among American Indian/Alaska Natives decreased 42.9%; cases decreased among men (from 49 to 27) and among women (from 41 to 24). (Figure 28, Tables 35A and 35B).
- In 2002, the rate of P&S syphilis among African-Americans (9.8 cases per 100,000 population) was eight times greater than the rate among whites (1.2 cases per 100,000 population). This differential was substantially less than that in 2001, when the rate of P&S syphilis among African-Americans was 16 times greater than the rate among whites. In 1998, the rate among African-Americans was 34 times greater than that among whites (Table 35B). The decline in the difference in rates between African-Americans and whites is due to significant decreases in rates among African-Americans in conjunction with increases in rates among whites.
- The incidence of P&S syphilis was highest among women aged 20-24 years (3.3 cases per 100,000 population) and among men aged 35-39 (9.9 cases per 100,000 population) in 2002 (Figure 30, Table 34).
- The South accounted for 45.8% of P&S syphilis in 2002 down from 56.2% in 2001. From 2001 to 2002, the rate decreased 8.8% in the South (from 3.4 to 3.1 cases per 100,000 population) but increased 16.7% in the Midwest (from 1.8 to 2.1), 54.6% in the Northeast (from 1.1 to 1.7), and 64.3% in the West (from 1.4 to 2.3). The 2002 rates in all regions were greater than the HP2010 objective of 0.2 case per 100,000 population (Figure 26, Table 27).
- In 2002, P&S syphilis rates in seven states were less than or equal to the HP2010 national objective of 0.2 case per 100,000 population (Figure 24, Table 25). Eight

states and one outlying area reported five or fewer cases of P&S syphilis in 2002 (Tables 25 and 27).

- In 2002, 2,534 (80.7%) of 3,139 counties in the United States reported no cases of P&S syphilis compared with 2,516 (80.2%) counties reporting no cases in 2001. For 605 counties reporting at least 1 case of P&S syphilis in 2002, 10 (1.7%) counties had rates at or below the HP2010 objective of 0.2 case per 100,000 population. Rates of P&S syphilis were above the HP2010 objective for 595 counties in 2002 (Figure 25). These 595 counties (19.0% of the total number of counties in the U.S.) accounted for 99.9% (6,853) of the 6,862 P&S syphilis cases reported in 2002.
- In 2002, half of the total number of P&S syphilis cases were reported from 16 counties and the city of Baltimore, MD (Table 26).
- The overall rate of P&S syphilis in 2002 for selected large U.S. cities with populations of at least 200,000 persons (5.8 cases per 100,000 population) was higher than the rate in 2001 (4.8 cases per 100,000 population). Rates exceeded the HP2010 objective of 0.2 case per 100,000 population in all 63 cities in 2002 (Tables 30 and 31).
- Between 2001 and 2002, the overall rate of congenital syphilis decreased by 16.4% in the U.S., from 12.2 to 10.2 cases per 100,000 live births (Figure 32, Table 40). There were 412 cases reported in 2002, down from 492 in 2001. Among the 17 states and 1 outlying area with 5 or more reported cases of congenital syphilis in 2002, 13 of these areas had rates that decreased from 2001 to 2002. Eight of these states had rate decreases of 30% or more between 2001 and 2002 (Table 42).
- The continuing decline in the rate of congenital syphilis (Figure 32) likely reflects the substantial reduction in the rate of P&S syphilis among women that has occurred during the last decade (Figure 31).^{11,12} During 1992-2002, the average yearly percentage decrease in the congenital syphilis rate was 19.2% (Table 40). The average yearly percentage decrease in the rate of P&S syphilis reported among women during 1992-2002 was 21.2%.
- In 2002, 27 states, the District of Columbia, and 1 outlying area had rates of congenital syphilis that exceeded the HP2010 objective of 1.0 case per 100,000 live births (Tables 41 and 43).
- Twenty-nine (46.0%) of the 63 selected cities in the U.S. with populations of 200,000 persons or more had congenital syphilis rates greater than the HP2010 objective of 1.0 case per 100,000 live births in 2002 (Table 43). All of these cities had rates that were more than four times the HP2010 objective.
- Additional information on syphilis and congenital syphilis can be found in the **Special Focus Profiles**.

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

² 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, 1999.

- ³ Centers for Disease Control and Prevention. Primary and secondary syphilis—United States, 1999. *MMWR* 2000;50:113-117.
- ⁴ 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.
- ⁵ 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.
- ⁶ Bronzan R, Echavarria L, Hermida J, Trepka M, Burns T, Fox, K. Syphilis among men who have sex with men (MSM) in Miami-Dade County, Florida [Abstract no. P135]. In: Program and abstracts of the 2002 National STD Prevention Conference, San Diego, California, March 4-7, 2002.
- ⁷ 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.
- ⁸ 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.
- ⁹ Ciesielski CA, Boghani S. HIV infection among men with infectious syphilis in Chicago, 1998-2000 [Abstract no. 12]. In: Program and abstracts of the 9th Conference on Retroviruses and Opportunistic Infections, Seattle, Washington, February 24-28, 2002.
- ¹⁰ 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.
- ¹¹ Centers for Disease Control and Prevention. Congenital syphilis—United States, 2000. *MMWR* 2001;50(27):573-7.
- ¹² Centers for Disease Control and Prevention. Primary and secondary syphilis—United States, 2000 – 2001. *MMWR* 2002;51(43):971-3.

Figure 22. Syphilis — Reported cases by stage of infection: United States, 1941–2002

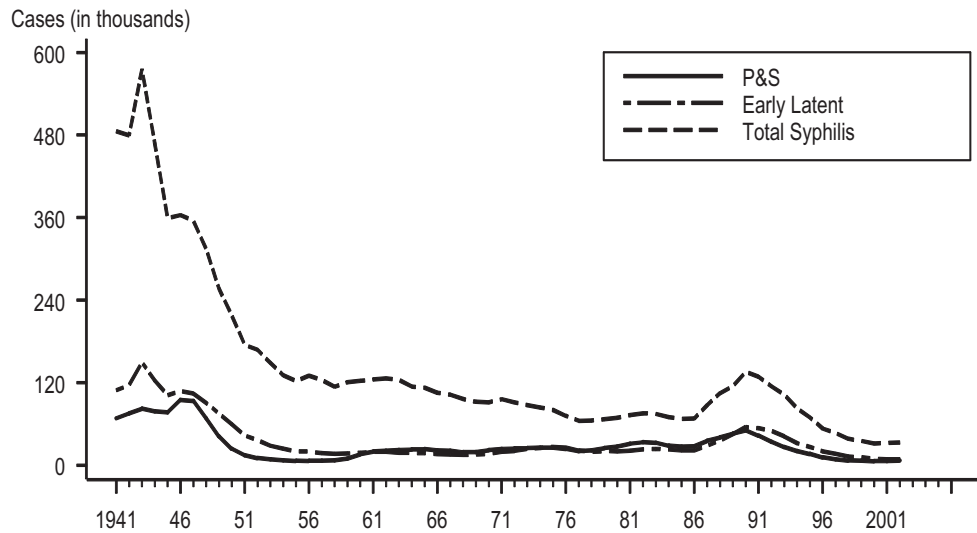
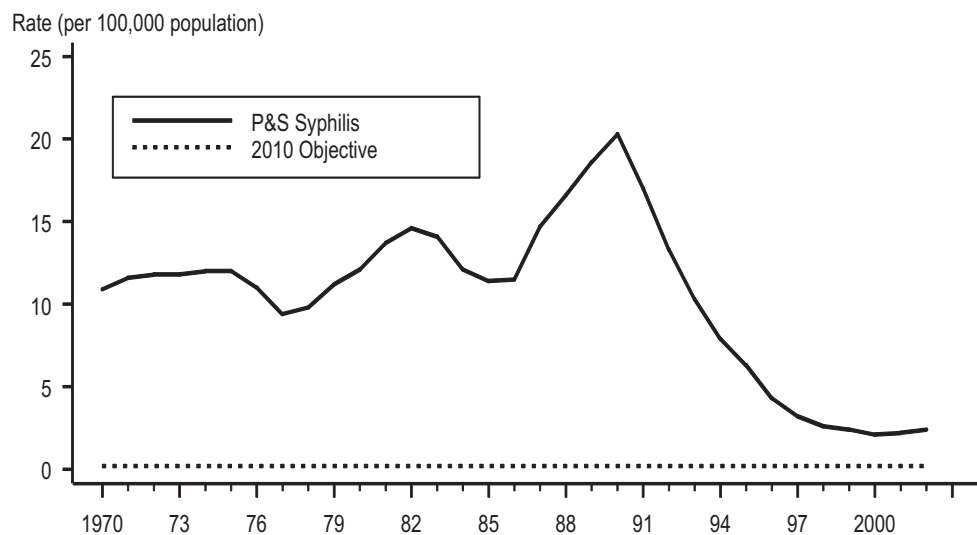
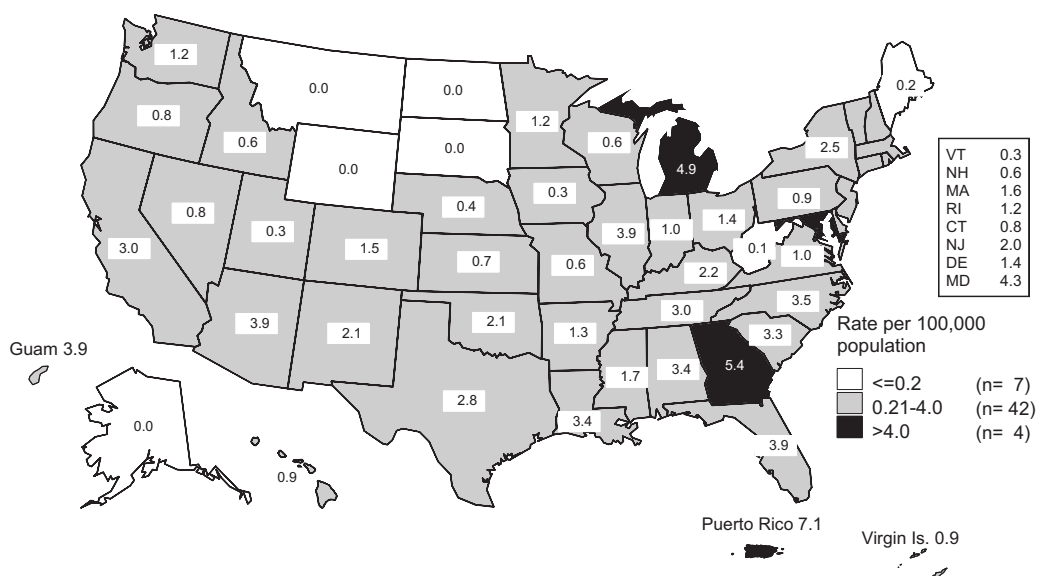


Figure 23. Primary and secondary syphilis — Rates: United States, 1970–2002 and the Healthy People 2010 objective



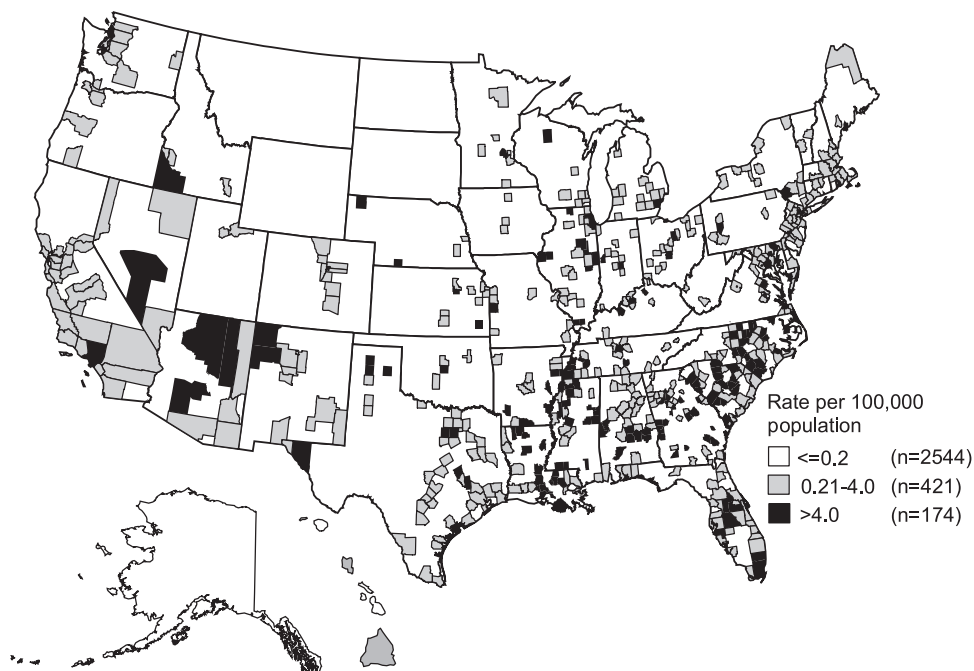
Note: The Healthy People 2010 objective for primary and secondary syphilis is 0.2 case per 100,000 population.

Figure 24. Primary and secondary syphilis — Rates by state: United States and outlying areas, 2002



Note: The total rate of primary and secondary syphilis for the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 2.5 per 100,000 population. The Healthy People 2010 objective is 0.2 case per 100,000 population.

Figure 25. Primary and secondary syphilis — Rates by county: United States, 2002



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

Figure 26. Primary and secondary syphilis — Rates by region: United States, 1981–2002 and the Healthy People 2010 objective

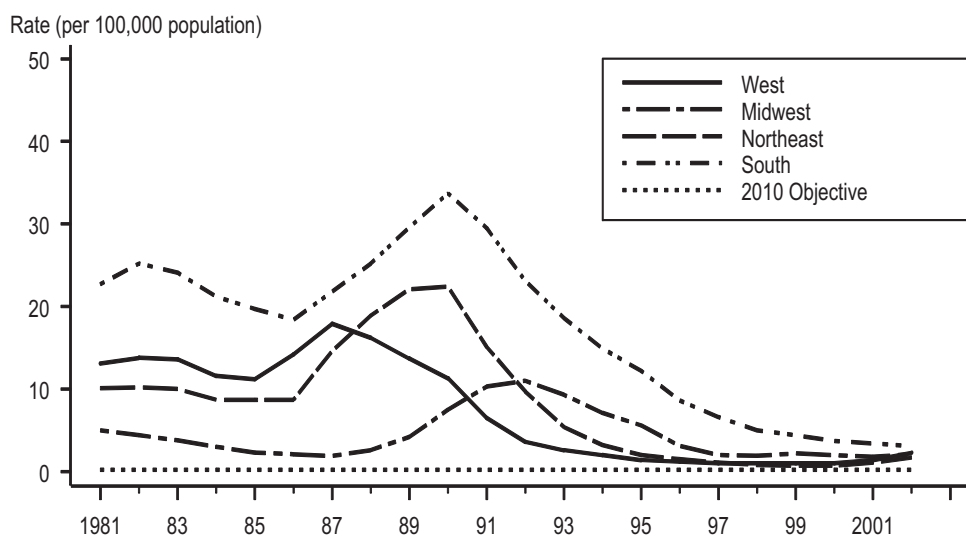


Figure 27. Primary and secondary syphilis — Rates by sex: United States, 1981–2002 and the Healthy People 2010 objective

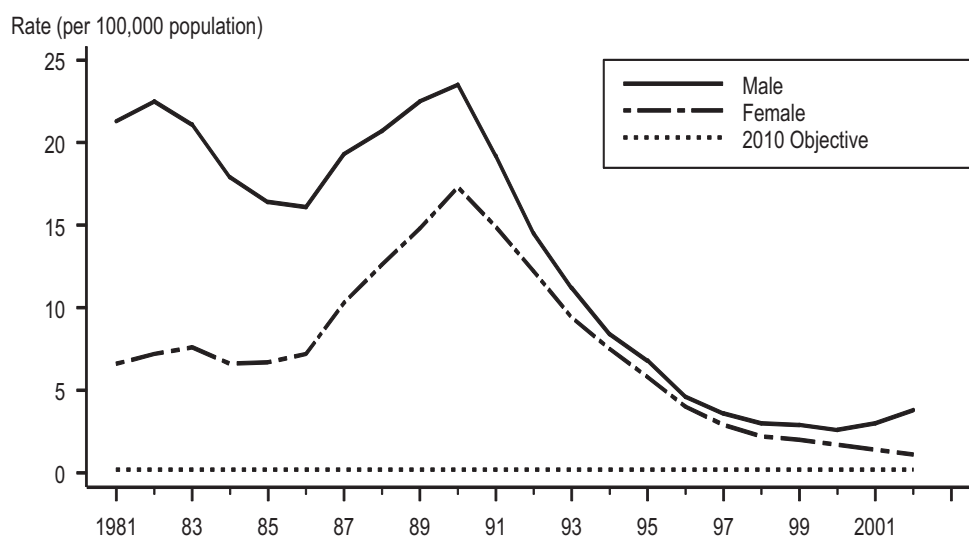


Figure 28. Primary and secondary syphilis — Rates by race and ethnicity: United States, 1981–2002 and the Healthy People 2010 objective

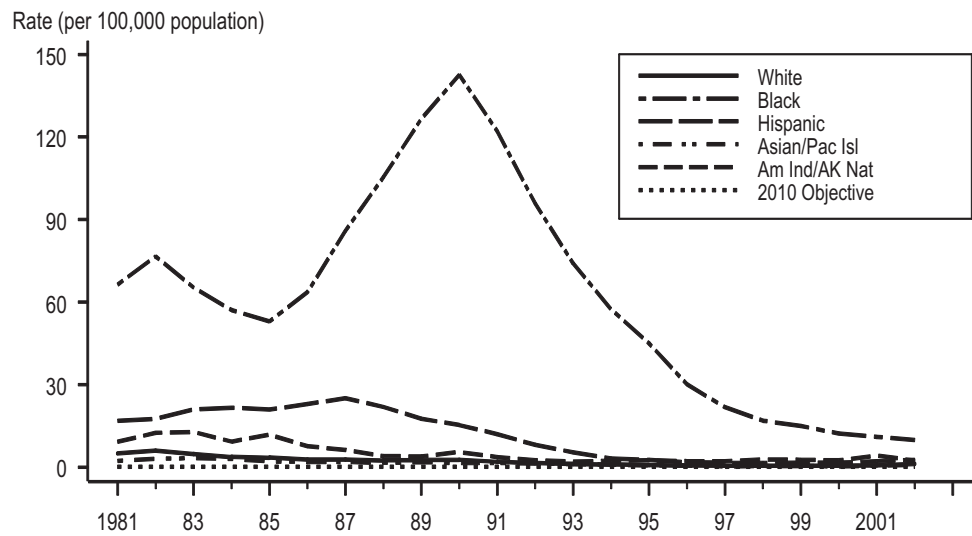


Figure 29. Primary and secondary syphilis — Male to female rate ratios: United States, 1981–2002

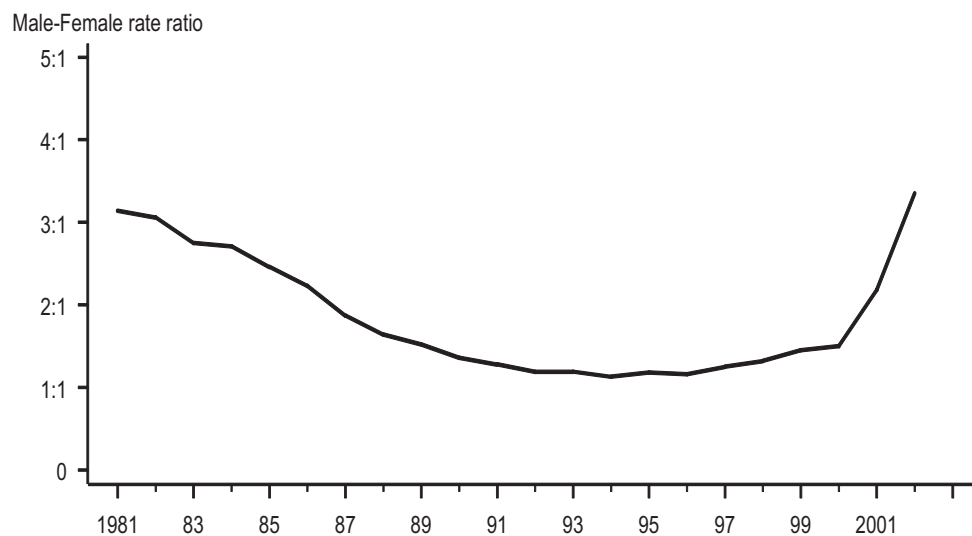
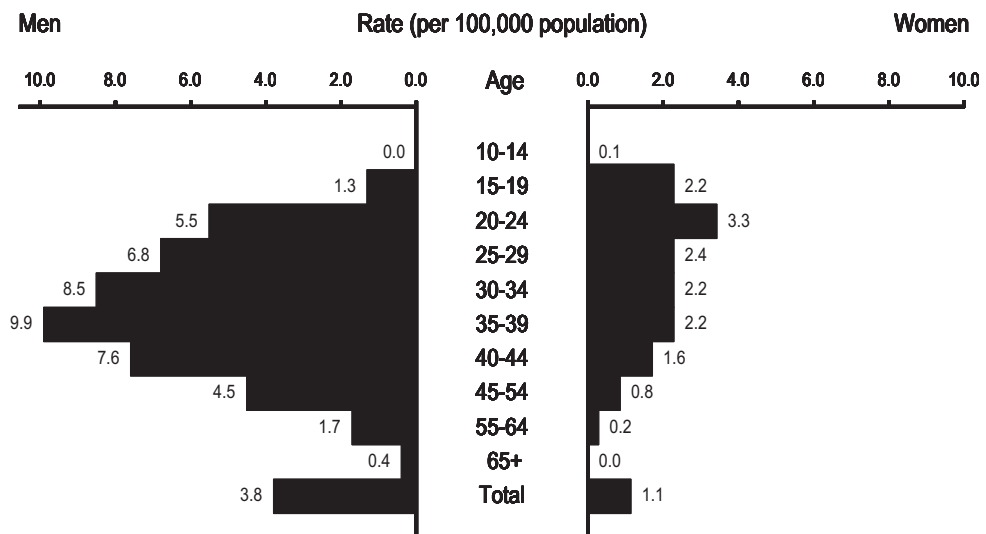
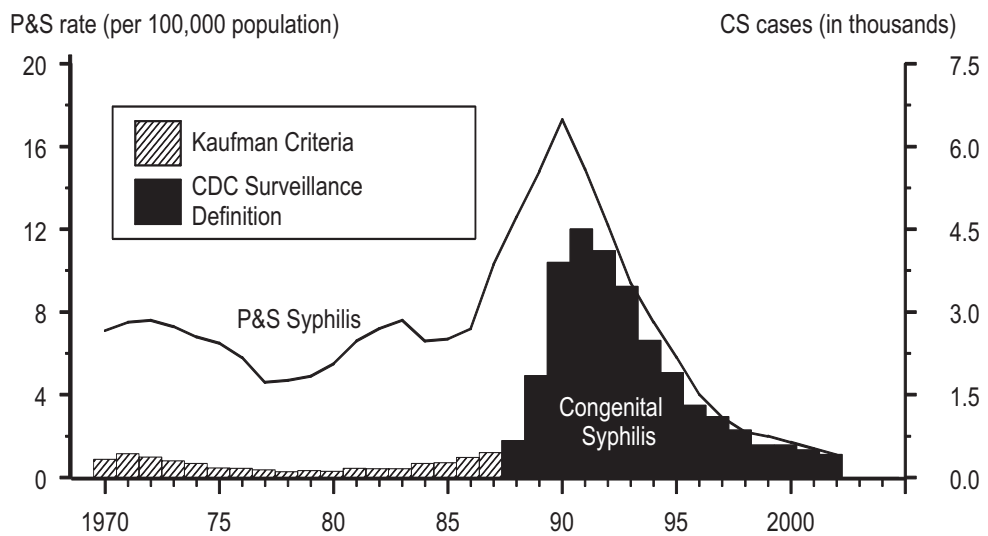


Figure 30. Primary and secondary syphilis — Age- and sex-specific rates: United States, 2002



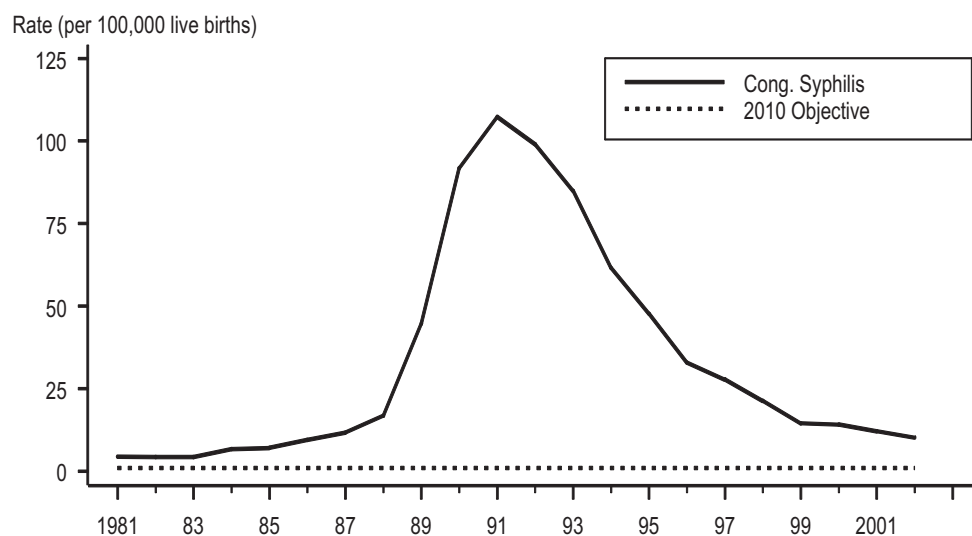
Note: See Table 34.

Figure 31. Congenital syphilis — Reported cases for infants <1 year of age and rates of primary and secondary syphilis among women: United States, 1970–2002



Note: The surveillance case definition for congenital syphilis changed in 1988. See Appendix (Reporting of Congenital Syphilis Cases). Case counts for congenital syphilis shown in this graph correspond to those listed in Table 40.

Figure 32. Congenital syphilis — Rates for infants <1 year of age: United States, 1981–2002 and the Healthy People 2010 objective



Note: The Healthy People 2010 objective for congenital syphilis is 1.0 case per 100,000 live births. The surveillance case definition for congenital syphilis changed in 1988. See Appendix (Reporting of Congenital Syphilis Cases).

Other Sexually Transmitted Diseases

Since 1987, reported cases of chancroid have declined steadily until 2001 when 38 cases were reported (Figure 33, Table 1). In 2002, a modest increase occurred with 67 cases of chancroid reported in the United States. Only ten states and one outlying area reported one or more cases of chancroid in 2002 and one of these states (South Carolina) accounted for 43 (64.2%) of the 67 reported cases in 2002. South Carolina had the most notable increase in cases between 2001 and 2002 (15 to 43 cases) (Table 46). 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 in view of the fact that *Haemophilus ducreyi*, the causative organism of chancroid, is difficult to culture and, as a result, this condition may be substantially under diagnosed.^{1,2}

Case reporting data for genital herpes simplex virus (HSV), genital warts or other human papillomavirus infections, and trichomoniasis are not available. Trend data are limited to estimates of the office visits in physicians' office practices provided by the National Disease and Therapeutic Index (NDTI) (Figures 34 and 36-37).

Serious consequences of genital herpes simplex virus infection include lifelong recurrent episodes of painful genital lesions, increased likelihood of HIV transmission and acquisition, and, for women who acquire genital herpes in pregnancy, potentially fatal neonatal infection.³ Data on herpes simplex virus type 2 (HSV-2) seroprevalence among the non-institutionalized U.S. population are available from the National Health and Nutrition Examination Survey (NHANES). In NHANES III (1988-1994), HSV-2 seroprevalence among persons at least 12 years of age was 21.9%, a prevalence which was 30% higher than the age-adjusted HSV-2 seroprevalence from NHANES II (1976-1980). Statistically significant increases in seroprevalence were concentrated in 3 of the youngest age groups which include persons aged 12 to 39 years (Figure 35).⁴ Women had a higher seroprevalence than men regardless of age or race/ethnicity.⁵

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

¹ Schulte JM, Martich FA, Schmid GP. Chancroid in the United States, 1981-1990: Evidence for underreporting of cases. *MMWR* 1992;41(no. SS-3):57-61.

² Mertz KJ, Trees D, Levine WC, et al. Etiology of genital ulcers and prevalence of human immunodeficiency virus coinfection in 10 US cities. *J Infect Dis* 1998;178:1795-8.

³ Handsfield HH, Stone KM, Wasserheit JN. Prevention agenda for genital herpes. *Sex Transm Dis* 1999; 26:228-231.

⁴ Fleming DT, McQuillan GM, Johnson RE, et al. Herpes simplex virus type 2 in the United States, 1976 to 1994. *N Engl J Med* 1997;337:1105-11.

⁵ Xu F, Schillinger JA, Sternberg MR, et al. Seroprevalence and coinfection with herpes virus type 1 and type 2 in the United States, 1988-1994. *J Infect Dis* 2002;185:1019-24.

Figure 33. Chancroid — Reported cases: United States, 1981–2002

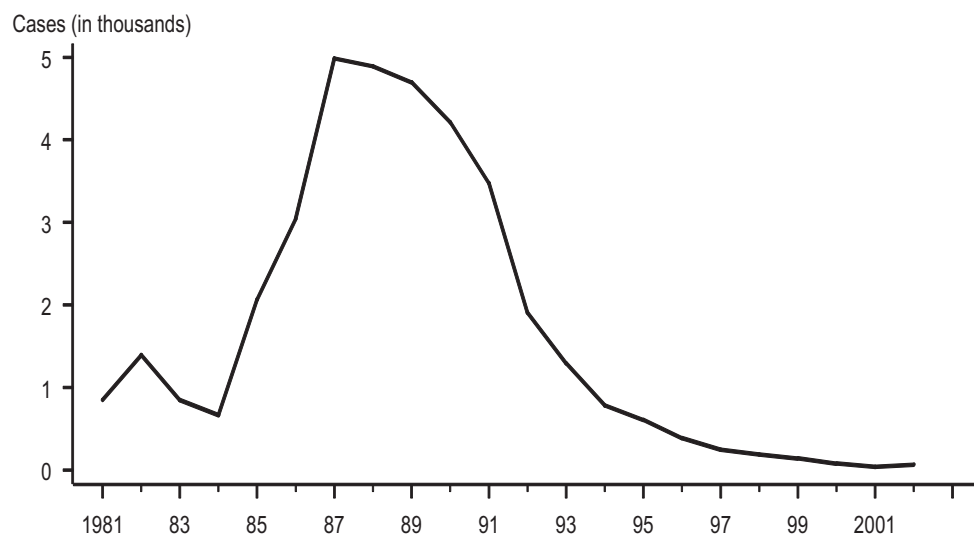
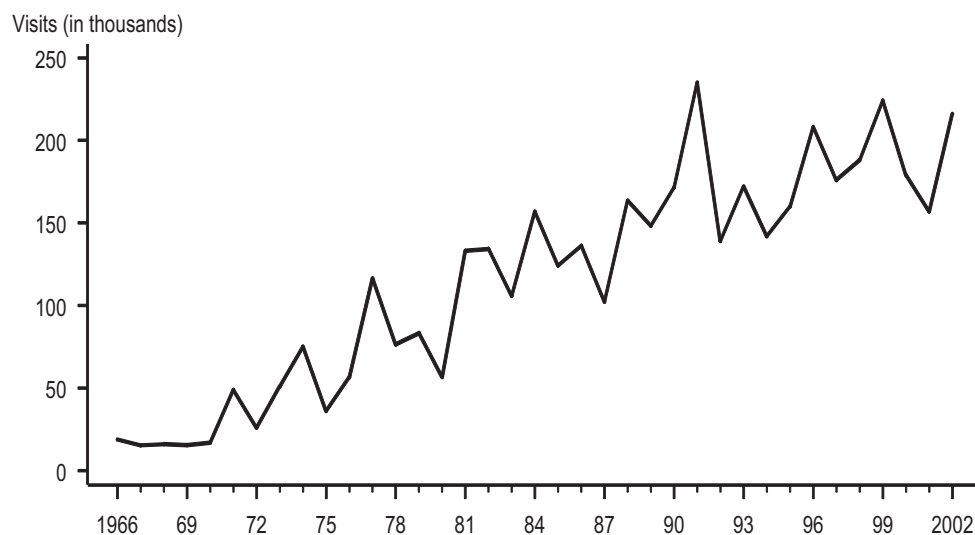


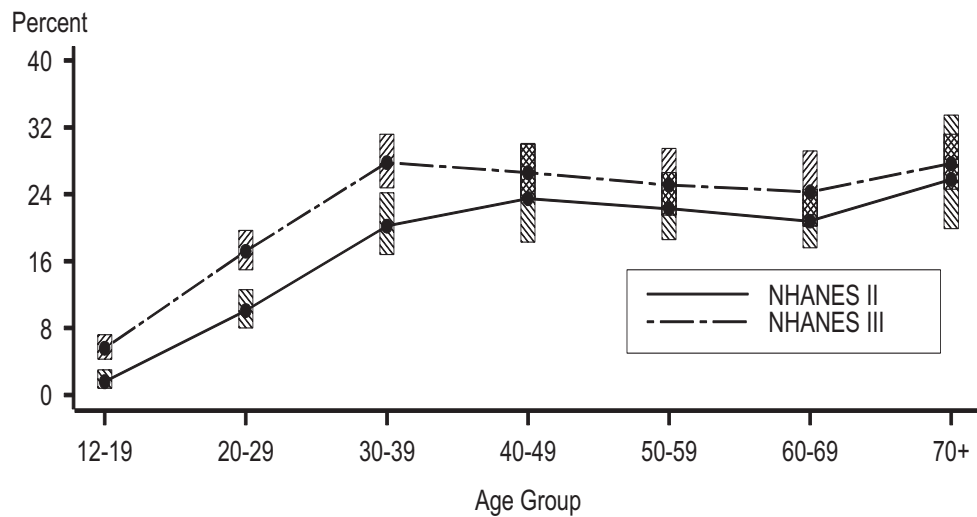
Figure 34. Genital herpes — Initial visits to physicians' offices: United States, 1966–2002



Note: See Appendix (Other Data Sources).

SOURCE: National Disease and Therapeutic Index (IMS America, Ltd.)

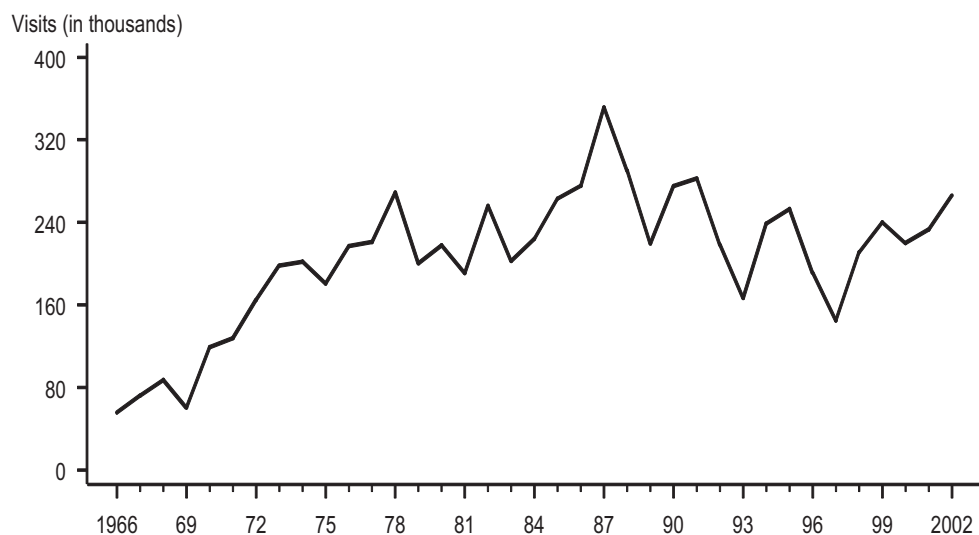
Figure 35. Herpes simplex virus type 2 infections — Percent seroprevalence according to age in NHANES II (1976-1980) and NHANES III (1988-1994)



Note: Bars indicate 95% confidence intervals.

SOURCE: National Health and Nutrition Examination Survey (NHANES)

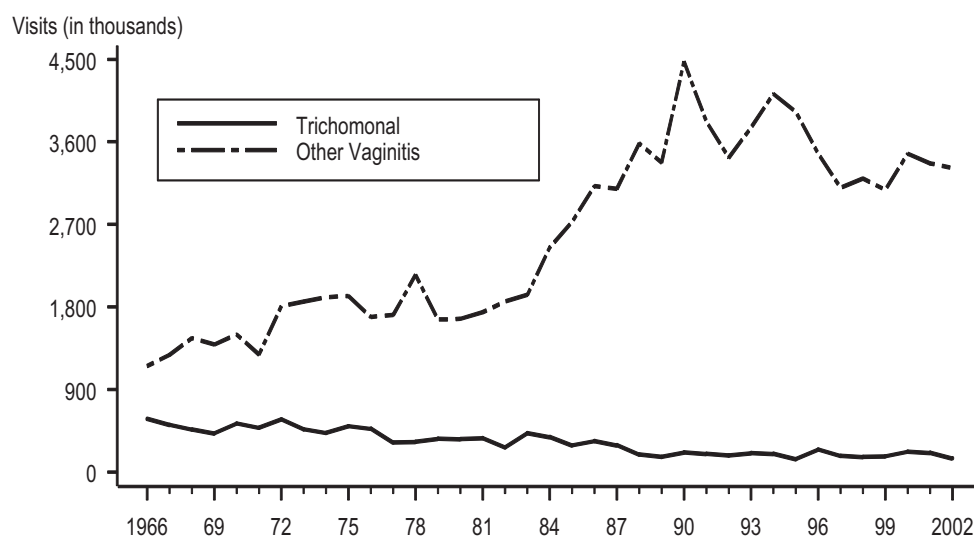
Figure 36. Genital warts — Initial visits to physicians' offices: United States, 1966-2002



Note: See Appendix (Other Data Sources).

SOURCE: National Disease and Therapeutic Index (IMS America, Ltd.)

Figure 37. Trichomoniasis and other vaginal infections — Initial visits to physicians' offices: United States, 1966–2002



Note: See Appendix (Other Data Sources).

SOURCE: National Disease and Therapeutic Index (IMS America, Ltd.)

SPECIAL FOCUS PROFILES

Special Focus Profiles

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

STDs in Women and Infants

Public Health Impact

Women and infants disproportionately bear the long term consequences of STDs. Women infected with *Neisseria gonorrhoeae* or *Chlamydia trachomatis* can develop pelvic inflammatory disease (PID), which, in turn, may lead to reproductive system morbidity such as ectopic pregnancy and tubal factor infertility. If not adequately treated, 20% to 40% of women infected with chlamydia¹ and 10% to 40% of women infected with gonorrhea² may develop PID. Among women with PID, tubal scarring will cause involuntary infertility in 20%, ectopic pregnancy in 9%, and chronic pelvic pain in 18%.³ Approximately 70% of 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

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

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

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

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

Observations

- Between 2001 and 2002, the reported case rate of chlamydial infections in women increased from 435.2 to 455.4 per 100,000 females (Figure 6, Table 5).

Chlamydia rates exceed gonorrhea rates among women in all states (Figures A and B, Tables 5 and 15).

- In 2002, the median state-specific chlamydia test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 26 states and the Virgin Islands was 7.4% (range 1.5% to 14.4%) (Figure F).
- In 2002, 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 5.6% (range 3.0% to 14.2%) (Figure 8).
- Gonorrhea rates among women were higher than the overall HP 2010 objective of 19.0 cases per 100,000 population¹² in 42 states and two outlying areas in 2002 (Figure B, Table 15). As in previous years, the highest rates of gonorrhea among women in 2002 occurred in the South (Figure B).
- Like chlamydia, gonorrhea is often asymptomatic in women and can only be identified through screening. Large-scale screening programs for gonorrhea in women began in the late 1970s. After an initial increase in cases detected through screening, gonorrhea rates for both women and men declined steadily throughout the 1980s and early 1990s (Figure 14, Tables 15 and 16). The gonorrhea rate for women in 2002 (125.3 per 100,000 females) showed a slight decline since 1998. In 2002, the gonorrhea rate among males declined to 124.2 per 100,000 males, similar to the female gonorrhea rate (Figure 14).
- In 2002, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 20 states and the Virgin Islands was 0.9% (range 0.0% to 5.7%) (Figure G).
- The HP2010 objective for primary and secondary (P&S) syphilis is 0.2 case per 100,000 population. In 2002, 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 (Figure C, Table 28).
- The HP2010 objective for congenital syphilis is 1.0 case per 100,000 live births. In 2002, 27 states, the District of Columbia, and one outlying area had rates higher than this objective (Figure D, Tables 41 and 42).
- The rate of congenital syphilis closely follows the trend of P&S syphilis among women (Figure E). Peaks in congenital syphilis usually occur one year after peaks in P&S syphilis among women. The congenital syphilis rate peaked in 1991 at 107.3 cases per 100,000 live births, and declined by 90.5% to 10.2 cases per 100,000 live births in 2002 (Figure 32, Table 40). The rate of P&S syphilis among women declined 93.6% (from 17.3 to 1.1 cases per 100,000 females) from 1990 to 2002 (Figure 31).
- While most cases of congenital syphilis occur among infants whose mothers have had some prenatal care (Figure E), late or limited prenatal care has been associated with congenital syphilis. Failure of health care providers to adhere to maternal syphilis screening recommendations also may contribute to the occurrence of congenital syphilis.¹³
- Accurate estimates of pelvic inflammatory disease (PID) and tubal factor infertility resulting from gonococcal and chlamydial infections are difficult to obtain. Definitive diagnosis of these conditions can be complex. Hospitalizations for PID have declined steadily throughout the 1980s and early 1990s, but have remained

relatively constant between 1995 and 2001 (Figure I). These trends may reflect changes in the etiology of PID (with increasing proportions of more indolent chlamydial infection) as well as changes in the clinical diagnosis and management of PID rather than true trends in disease. A greater proportion of women diagnosed with PID in the 1990s have been treated in outpatient instead of inpatient settings when compared to women diagnosed with PID in the 1980s.¹⁴

- The reported number of initial visits to physicians' offices for PID through the National Disease and Therapeutic Index (NDTI) has generally declined from 1993 through 2002 (Figure J). In 2000, an estimated 337,053 cases of PID were diagnosed in emergency departments among women 15- to 44-years of age (National Hospital Ambulatory Medical Care Survey, NCHS).
- Evidence suggests that health care practices associated with ectopic pregnancy changed in the late 1980s and early 1990s. Before that time, treatment of ectopic pregnancy usually required admission to a hospital. Hospitalization statistics were therefore useful for monitoring trends in ectopic pregnancy. Beginning in 1989, hospitalizations for ectopic pregnancy have generally declined over time (Figure H). Data suggest that nearly half of all ectopic pregnancies are treated on an outpatient basis.¹⁵

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

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

³ Westrom L, Joesoef R, Reynolds G, et al. Pelvic inflammatory disease and fertility: a cohort study of 1,844 women with laparoscopically verified disease and 657 control women with normal laparoscopy. *Sex Transm Dis* 1992;9:185-92.

⁴ Hook EW III, Handsfield HH. Gonococcal infections in the adult. In: Holmes KK, Mardh PA, Sparling PF, et al, eds. *Sexually Transmitted Diseases*, 2nd edition. New York City: McGraw-Hill, Inc, 1990:149-65.

⁵ Stamm WE, Holmes KK. *Chlamydia trachomatis* infections in the adult. In: Holmes KK, Mardh PA, Sparling PF, et al, eds. *Sexually Transmitted Diseases*, 2nd edition. New York City: McGraw-Hill, Inc, 1990:181-93.

⁶ Zimmerman HL, Potterat JJ, Dukes RL, et al. Epidemiologic differences between chlamydia and gonorrhea. *Am J Public Health* 1990;80:1338-42.

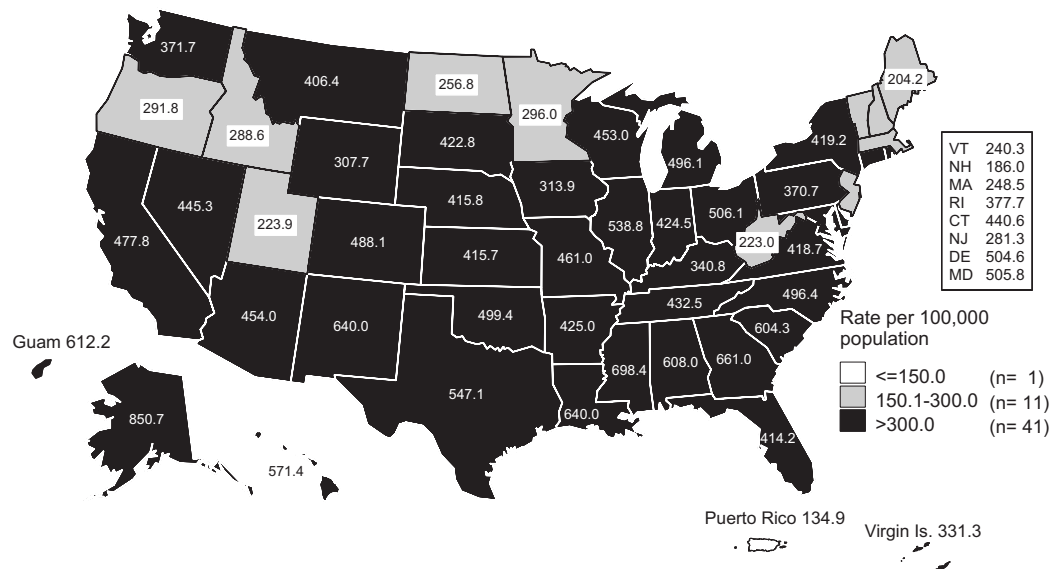
⁷ Hillis SD, Joesoef R, Marchbanks PA, et al. Delayed care of pelvic inflammatory disease as a risk factor for impaired fertility. *Am J Obstet Gynecol* 1993;168:1503-9.

⁸ Scholes D, Stergachis A, Heidrich FE, Andrilla H, Holmes KK, Stamm WE. Prevention of pelvic inflammatory disease by screening for cervical chlamydial infection. *N Engl J Med* 1996;34(21):1362-6.

⁹ Division of STD Prevention. *Prevention of Genital HPV Infection and Sequelae: Report of an External Consultants' Meeting*. National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, December 1999.

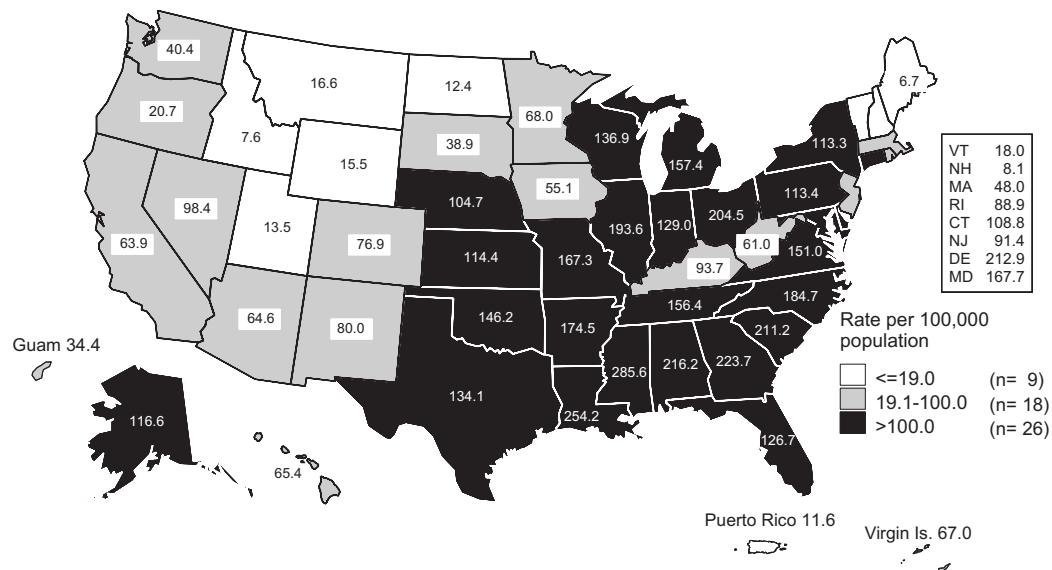
- ¹⁰Handsfield HH, Stone KM, Wasserheit JN. Prevention agenda for genital herpes. *Sex Transm Dis* 1999;26:228-231.
- ¹¹Centers for Disease Control. Guidelines for prevention and control of congenital syphilis. *MMWR* 1988;37(No.S-1).
- ¹²U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
- ¹³Centers for Disease Control and Prevention. Congenital syphilis—United States, 2000. *MMWR* 2001;50:573-77.
- ¹⁴Rolfs RT, Galaid EI, Zaidi AA. Pelvic inflammatory disease: trends in hospitalization and office visits, 1979 through 1988. *Am J Obstet Gynecol* 1992;166:983-90.
- ¹⁵Centers for Disease Control and Prevention. Ectopic pregnancy in the United States, 1990-1992. *MMWR* 1995;44:46-8.

Figure A. Chlamydia — Rates for women by state: United States and outlying areas, 2002



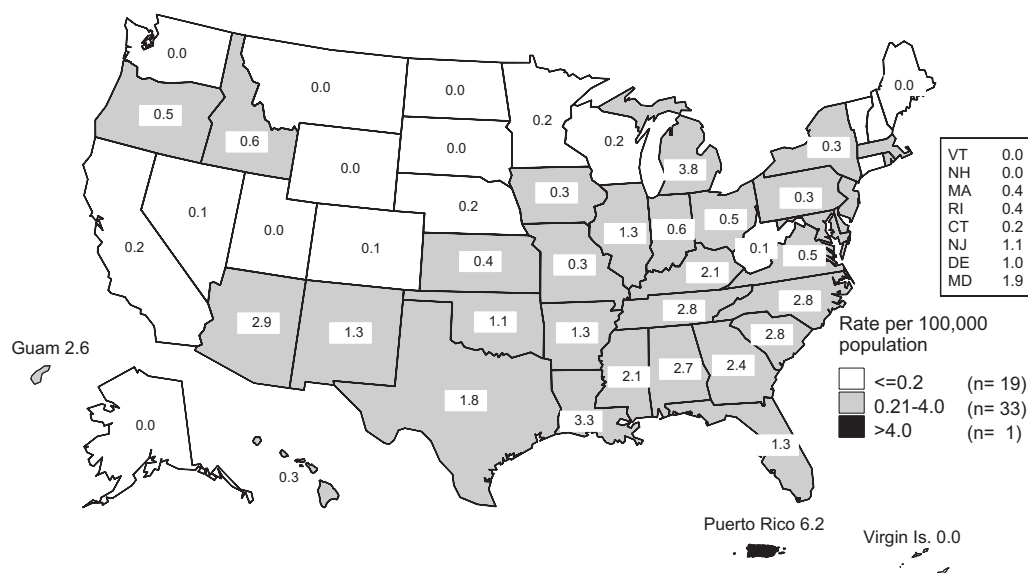
Note: The total rate of chlamydia for women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 451.1 per 100,000 female population.

Figure B. Gonorrhea — Rates for women by state: United States and outlying areas, 2002



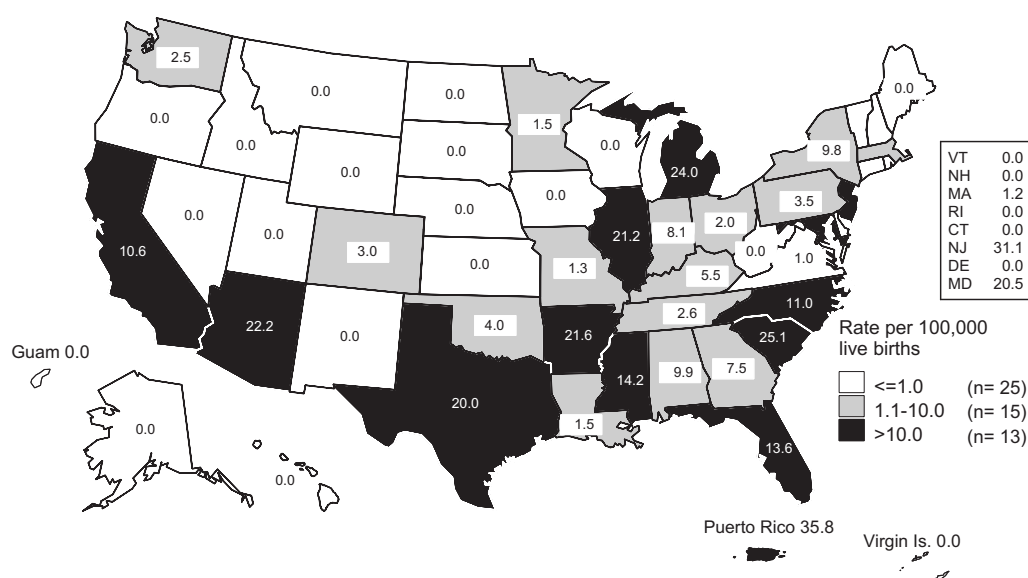
Note: The total rate of gonorrhea for women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 123.7 per 100,000 female population.

Figure C. Primary and secondary syphilis — Rates for women by state: United States and outlying areas, 2002



Note: The total rate of primary and secondary syphilis for women in the United States and outlying areas (Guam, Puerto Rico and Virgin Islands) was 1.2 per 100,000 female population.

Figure D. Congenital syphilis — Rates for infants <1 year of age by state: United States and outlying areas, 2002



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 10.6 per 100,000 live births. The Healthy People 2010 objective is 1.0 case per 100,000 live births.

Figure E. Congenital syphilis — Cases by prenatal care utilization: United States, 1995-2002

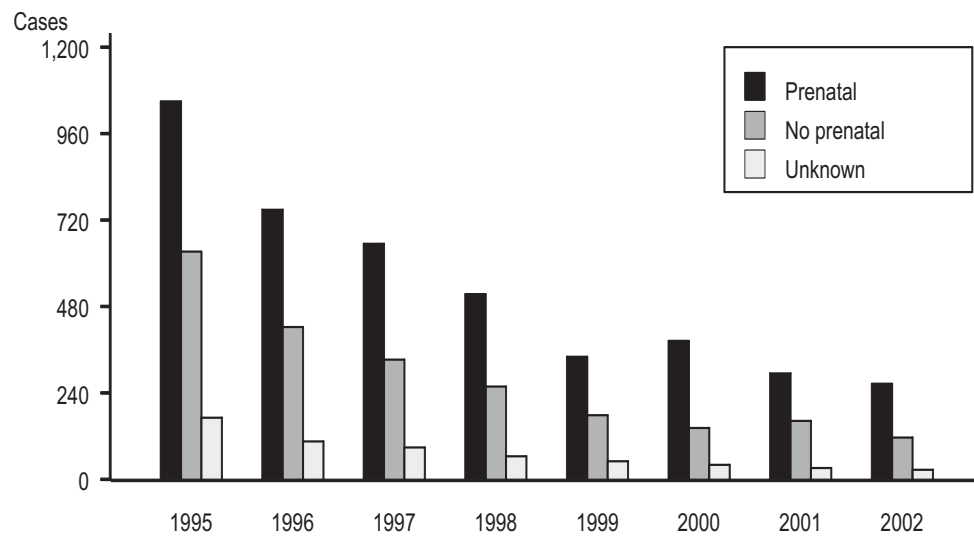
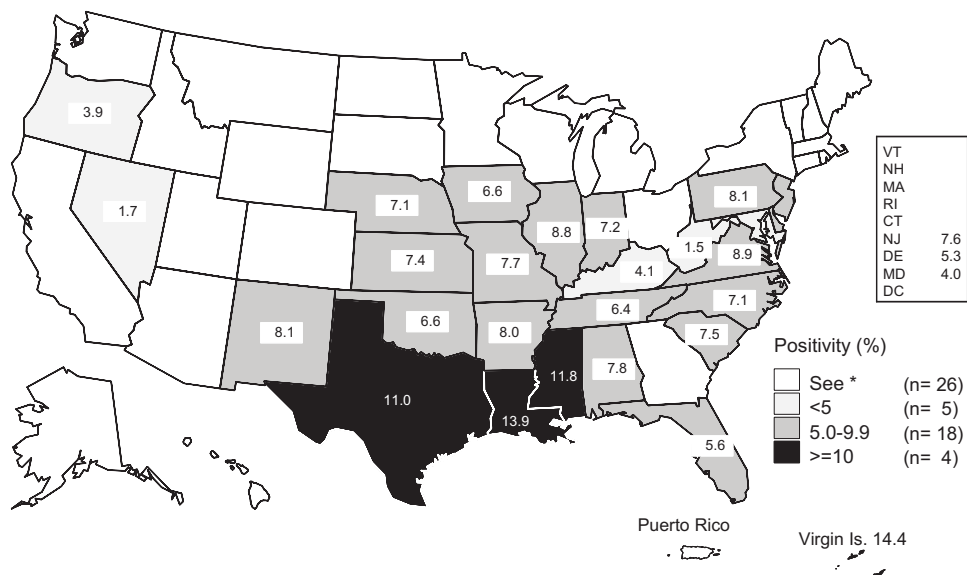


Figure F. Chlamydia — Positivity among 15-24 year old women tested in prenatal clinics by state: United States and outlying areas, 2002

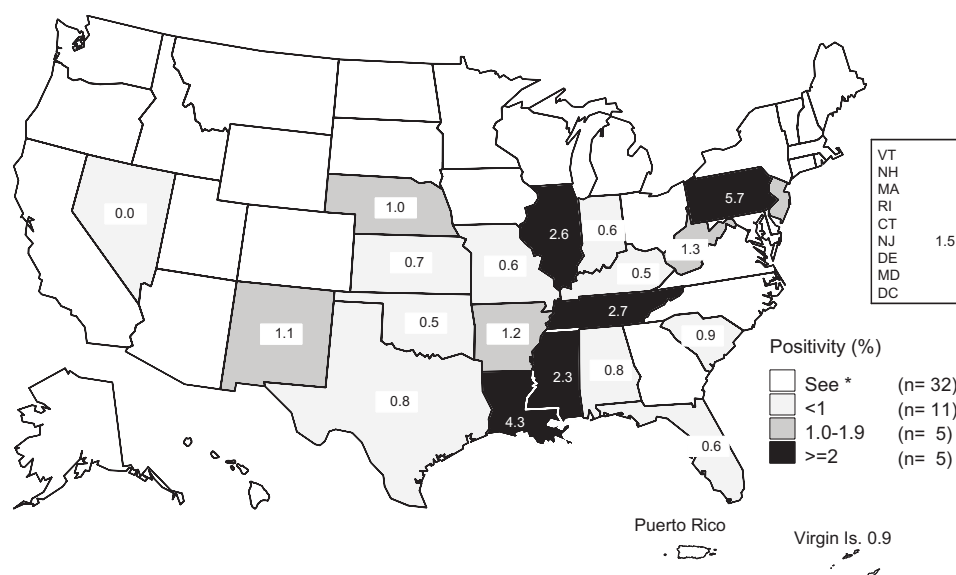


*States not reporting chlamydia positivity data in prenatal clinics.

Note: States reported chlamydia positivity data on at least 100 women aged 15-24 years during 2002.

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

Figure G. Gonorrhea — Positivity among 15-24 year old women tested in prenatal clinics by state: United States and outlying areas, 2002

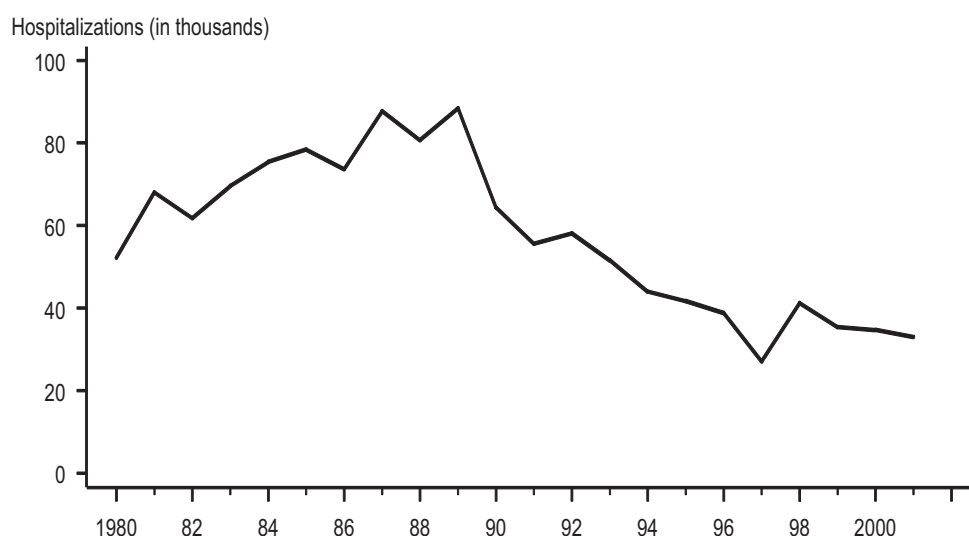


*States not reporting gonorrhea positivity data in prenatal clinics.

Note: States reported gonorrhea positivity data on at least 100 women aged 15-24 years during 2002.

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

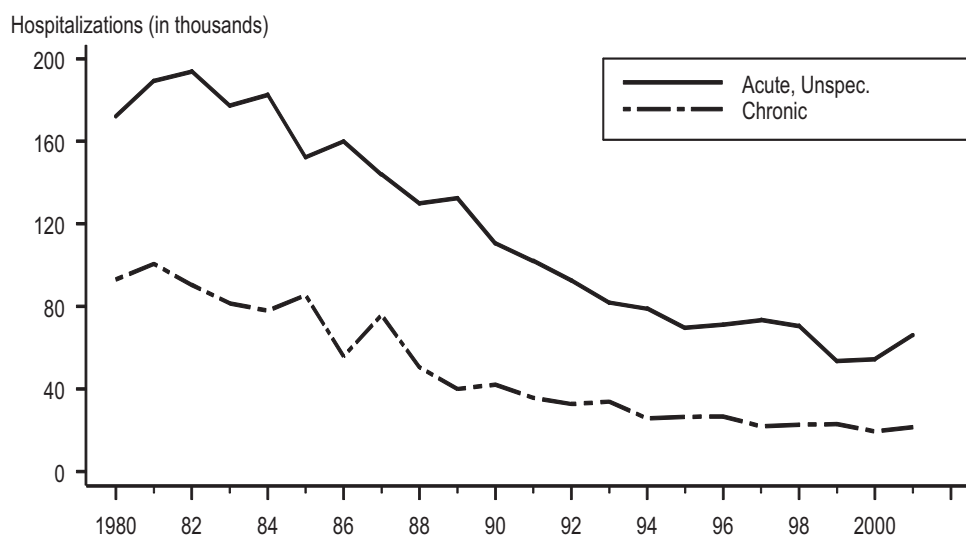
Figure H. Ectopic pregnancy — Hospitalizations of women 15-44 years of age: United States, 1980-2001



Note: Some variations in 1981 and 1988 numbers may be due to changes in sampling procedures. The relative standard error for these estimates ranges from 8% to 11%.

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

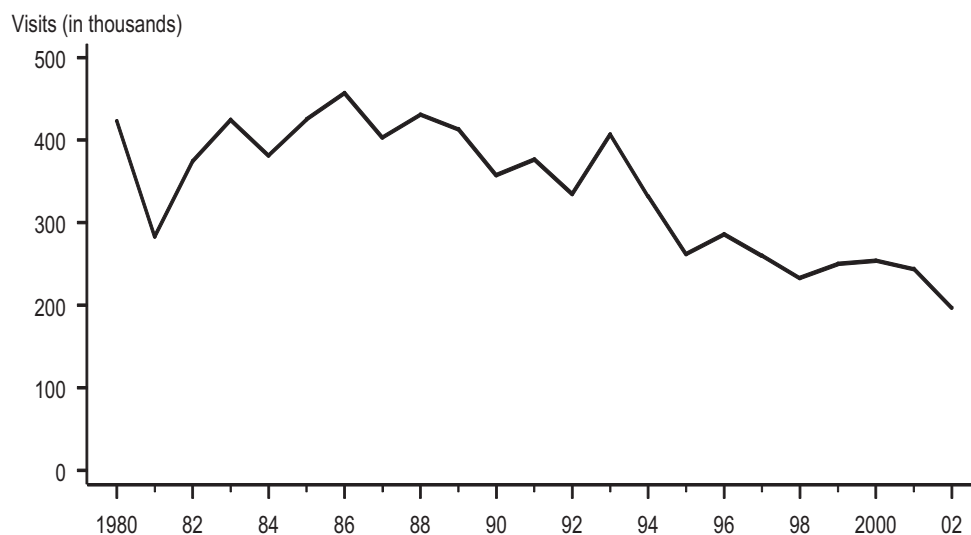
Figure I. Pelvic inflammatory disease — Hospitalizations of women 15-44 years of age: United States, 1980–2001



Note: The relative standard error for the estimates of the overall total number of PID cases range from 6% to 15%.

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

Figure J. Pelvic inflammatory disease — Initial visits to physicians' offices by women 15-44 years of age: United States, 1980–2002



Note: See Appendix (Other Data Sources).

SOURCE: National Disease and Therapeutic Index (IMS America, Ltd.)

STDs in Adolescents and Young Adults

Public Health Impact

Compared to older adults, adolescents (10- to 19-year-olds) and young adults (20- to 24-year-olds) are at higher risk for acquiring STDs for a number of reasons. For example, they may be more likely to have multiple (sequential or concurrent) sexual partners rather than a single, long-term relationship. In addition, for some STDs, for example *Chlamydia trachomatis*, adolescent women may have a physiologically increased susceptibility to infection due to increased cervical ectopy.

The higher prevalence of STDs among adolescents also reflects multiple barriers to quality STD prevention services, including lack of insurance or other ability to pay, lack of transportation, discomfort with facilities and services designed for adults, and concerns about confidentiality.

Observations

- Numerous prevalence studies in various clinic populations have shown that sexually active adolescents have high rates of chlamydial infection. The Regional Infertility Prevention Projects that routinely perform large scale screening for detecting chlamydial infections among women attending family planning clinics demonstrate that younger women consistently have higher positivity than older women, even when prevalence declines. An example is the Region X Chlamydia Project, which has screened women in family planning clinics since 1988 (Figure K).
- Among women in 2002, as in previous years, 15- to 24-year-olds had the highest rates of gonorrhea compared to women in all other age categories (Figure P and Table 21). In addition, 20- to 29-year-old women had the highest rates of primary and secondary syphilis in 2002 (Figure R and Table 34). Among men, 20- to 24-year-olds had the highest rate of gonorrhea and 30- to 39-year-olds had the highest rate of primary and secondary syphilis (Figures Q and S and Tables 21 and 34).
- Gonorrhea rates among 15- to 19-year-olds have decreased 12.2% from 542.4 per 100,000 population in 1998 to 476.4 per 100,000 population in 2002.
- In 15- to 19-year-old women, the 2002 gonorrhea rate of 675.6 cases per 100,000 females was a 3.9% decrease from the 2001 rate of 703.2. Among young women in the 20- to 24-year-old group, the rate of gonorrhea in 2002 was 650.3, a 2.1% decrease from 664.1 in 2001. Since 1998, the rates in these two age groups have been converging (Figure P, Table 21).
- Rates of gonorrhea among male adolescents generally decreased between the years 1991 and 2002 (Figure Q). In the 15- to 19-year-old group, the gonorrhea rate declined for the fourth year in a row, from 344.4 cases per 100,000 males in

1998 to 287.9 cases per 100,000 males in 2002 (a 16.4% decline) among young men in the 20- to 24-year-old group. After declining in the early 1990s, the gonorrhea rate has remained relatively unchanged since 1997 (537.1 cases per 100,000 males in 1997 and 538.1 cases per 100,000 males in 2002).

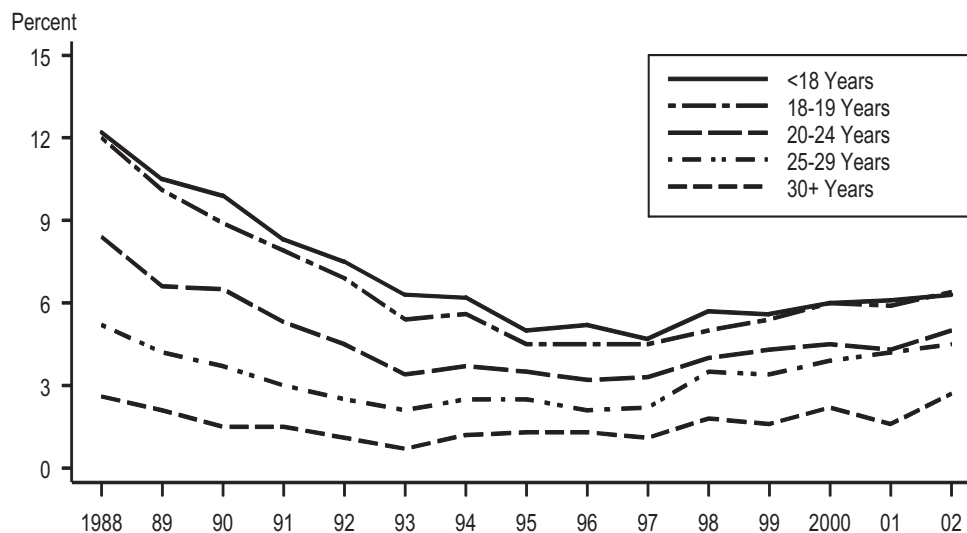
- Since 1990, approximately 20,000 female National Job Training Program entrants have been screened each year for chlamydia. This program, administered by the U.S. Department of Labor at more than 100 sites throughout the country, is a job training program for economically-disadvantaged youth aged 16 through 24 years.
- Chlamydial infection is widespread geographically and highly prevalent among economically-disadvantaged young women in the National Job Training Program.³ Among women entering the program from 28 states and Puerto Rico in 2002, based on their place of residence before program entry, the median state-specific chlamydia prevalence was 10.1% (range 4.4% to 16.8%) (Figure L).
- Data from National Job Training Program centers that submit gonorrhea specimens from female students aged 16 to 24 years to a national contract laboratory indicate a high prevalence of gonococcal infection in this population. Specimens from at least 100 students from each of 21 states were tested by the contract laboratory; the median state-specific gonorrhea prevalence was 2.9% (range 0.0% to 6.8%) in 2002 (Figure O).
- The Adolescent Women Reproductive Health Monitoring Project was established in 1999 to monitor STD prevalence and reproductive health measures among adolescent women (less than 20 years old) in non-traditional venues, including school-based clinics, juvenile corrections facilities, drug treatment centers, and organizations serving street youth. In 2002, results from this screening project, that uses urine-based tests, identified a median site-specific chlamydia positivity of 13.2% (range 7.9% to 15.9%) at 19 school-based clinics and 9.7% (range 5.2% to 39.1%) at 14 organizations serving street youth (Figure M). Median site-specific gonorrhea positivity was 4.3% (range 1.6% to 8.5%) at school-based clinics and 1.7% (range 0.0% to 13.9%) at organizations serving street youth (Figure N).
- Among adolescent women attending juvenile corrections facilities, data from the Adolescent Women Reproductive Health Monitoring Project and the Jail STD Prevalence Monitoring Project identified a median chlamydia positivity of 16.7% (range 6.3% to 28.3%) (Figure II) and a median gonorrhea positivity of 5.6% (range 0.6% to 12.4%) (Figure KK). See **Special Focus Profiles** (STDs in Persons Entering Corrections Facilities).

¹ Centers for Disease Control and Prevention. Recommendations for the prevention and management of *Chlamydia trachomatis* infections, 1993. *MMWR* 1993;42(No. RR-12).

² Lossick J, Delisle S, Fine D, Mosure D, 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.

³ Mertz, KJ, Ransom RL, St. Louis ME, Groseclose SL, Hadgu A, Levine WC, Hayman C. Decline in the prevalence of genital chlamydia infection in young women entering a National Job Training Program, 1990-1997. *Am J Pub Health* 2001;91(8):1287-1290.

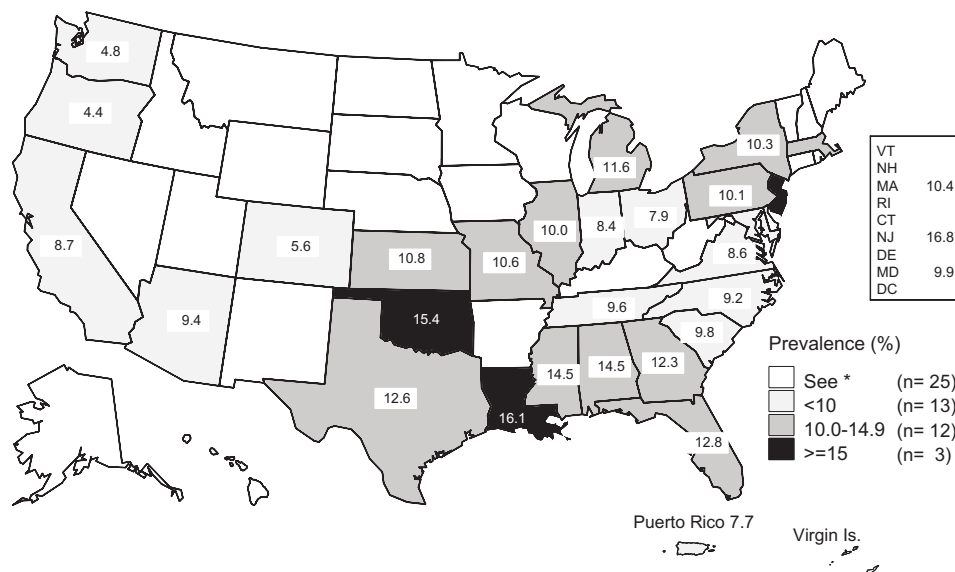
Figure K. Chlamydia — Positivity among women tested in family planning clinics by age group: Region X, 1988–2002



Note: Women who met screening criteria were tested. Trends not adjusted for changes in laboratory test method and associated increases in test sensitivity in 1994 and 1999–2002.

SOURCE: Regional Infertility Prevention Projects: Region X Chlamydia Project

Figure L. Chlamydia — Prevalence among 16-24 year-old women entering the National Job Training Program by state of residence: United States and outlying areas, 2002

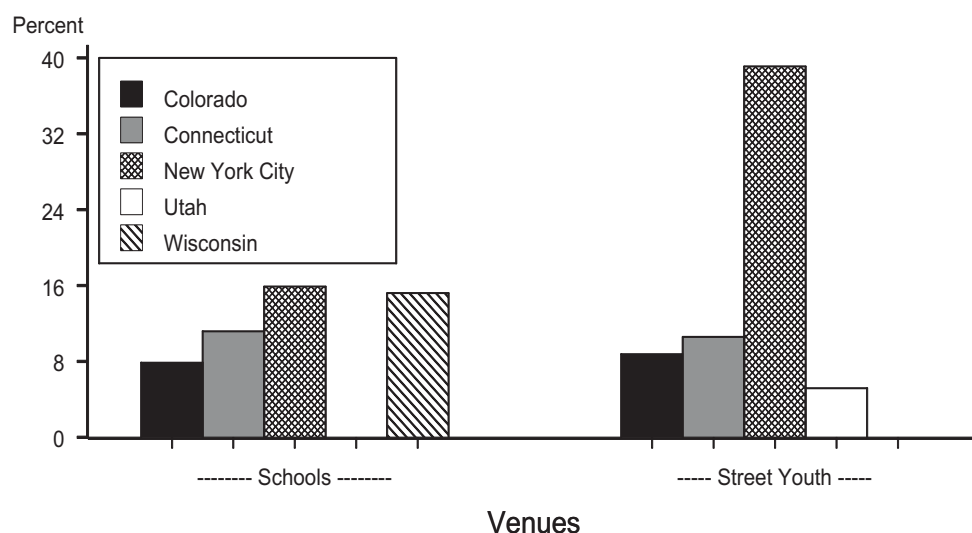


*Fewer than 100 women residing in these states and entering the National Job Training Program were screened for chlamydia in 2002.

Note: The overall chlamydia prevalence among female students entering the National Job Training Program in 2002 was 10.5%.

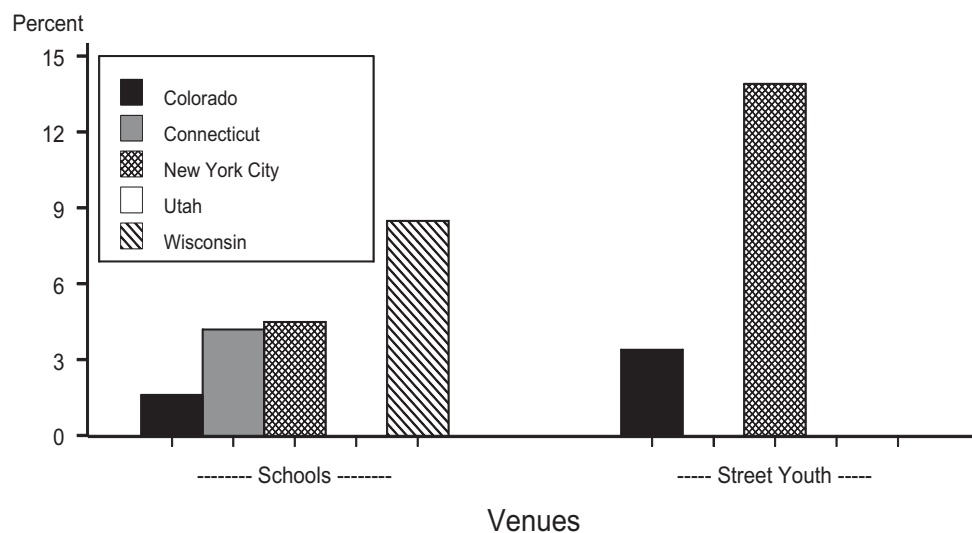
SOURCE: U.S. Department of Labor

Figure M. Chlamydia — Adolescent Women Reproductive Health Monitoring Project
chlamydia positivity by venue and project area, 2002



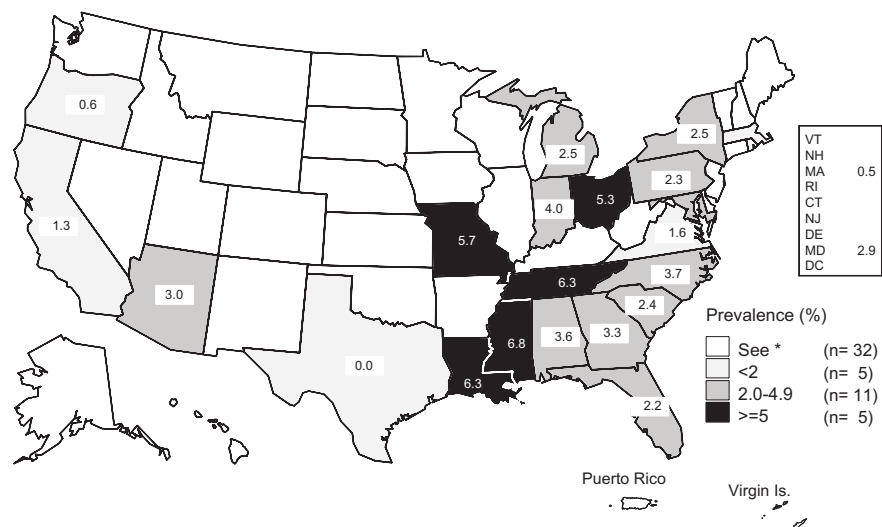
Note: Where data are missing for project areas and venues, no testing or fewer than 50 chlamydia tests were performed at the missing location in 2002.

Figure N. Gonorrhea — Adolescent Women Reproductive Health Monitoring Project
gonorrhea positivity by venue and project area, 2002



Note: Where data are missing for project areas and venues, no testing or fewer than 50 gonorrhea tests were performed in 2002.

Figure O. Gonorrhea — Prevalence among 16-24 year-old women entering the National Job Training Program by state of residence: United States and outlying areas, 2002



*Fewer than 100 women residing in these states and entering the National Job Training Program were screened for gonorrhea by the national contract laboratory in 2002.

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. The overall gonorrhea prevalence among female students entering the National Job Training Program in 2002 was 2.9%.

SOURCE: U.S. Department of Labor

Figure P. Gonorrhea — Age-specific rates among women 10-44 years of age: United States, 1981-2002

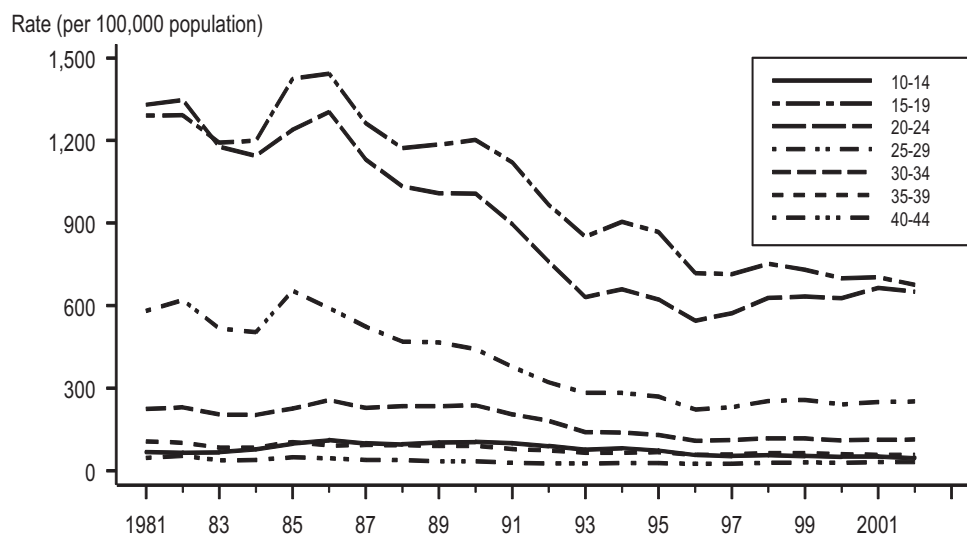


Figure Q. Gonorrhea — Age-specific rates among men 10-44 years of age: United States, 1981–2002

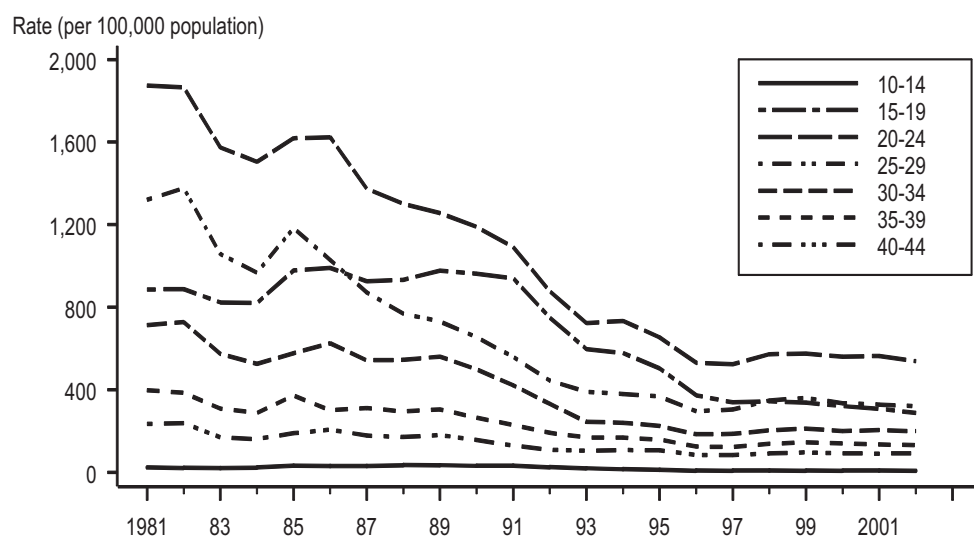


Figure R. Primary and secondary syphilis — Age-specific rates among women 10-44 years of age: United States, 1981–2002

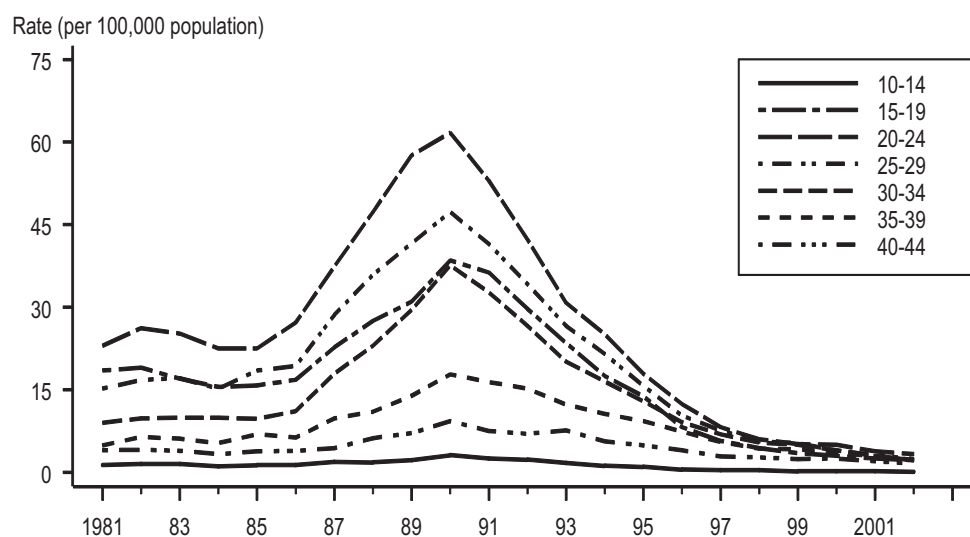
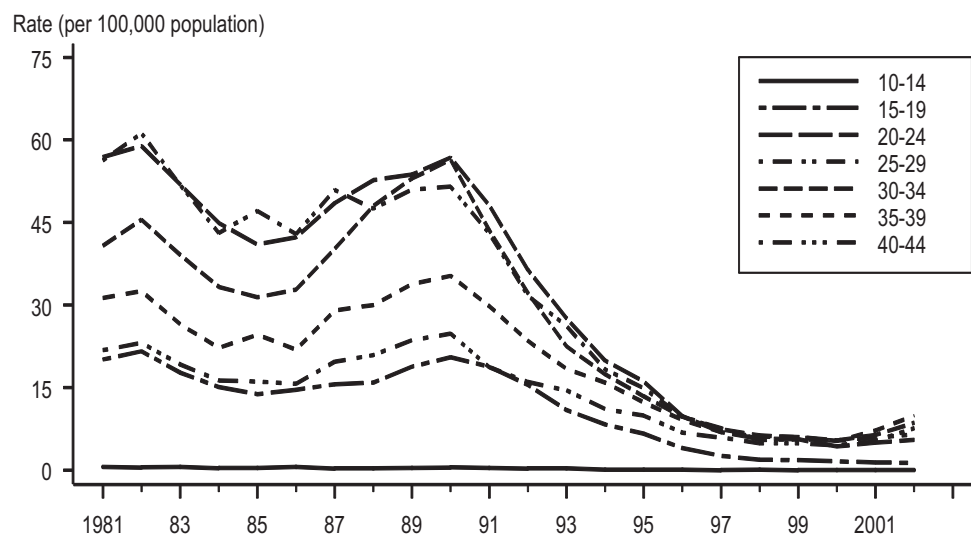


Figure S. Primary and secondary syphilis — Age-specific rates among men 10-44 years of age: United States, 1981–2002



STDs in Racial and Ethnic Minorities

Public Health Impact

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

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

Observations

- Although chlamydia is a widely distributed STD among all racial and ethnic groups, trends in positivity in women screened in HHS Region X show consistently higher chlamydia positivity among minorities (Figure T).
- In 2002, chlamydia positivity among sexually active 15- to 30-year-old women screened at clinics of the Indian Health Service (IHS) in three IHS areas ranged from 7.4% to 9.7% (Figure U).
- In 2002, 73.3% of the total number of cases of gonorrhea reported to CDC occurred among African-Americans (Table 22A). In 2002, the rate of gonorrhea among African-Americans was 742.3 cases per 100,000 population, among American Indian/Alaska Natives the rate was 126.8, and among Hispanics the rate was 76.0 (Table 22B). These rates are 24, 4, and 2 times higher, respectively, than the rate among whites in 2002 of 31.1 cases per 100,000 population (Figure 15, Table 22B). The reported rate of gonorrhea among Asian/Pacific Islanders in 2002 was 24.1 cases per 100,000 population.
- Gonorrhea rates in 2002 were highest for African-Americans aged 15- to 24-years among all racial, ethnic, and age categories. In 2002, African-American women aged 15- to 19-years had a gonorrhea rate of 3,307.7 cases per 100,000 females. This rate is 17 times greater than the 2002 rate among white females of similar age (196.1). African-American men in the 15- to 19-year-old age category had a 2002 gonorrhea rate of 1680.1 cases per 100,000 males, which was 45 times higher than the rate among 15- to 19-year-old white males of 37.7 (Table 22B). Among 20- to 24-year-olds in 2002, the gonorrhea rate among African-Americans

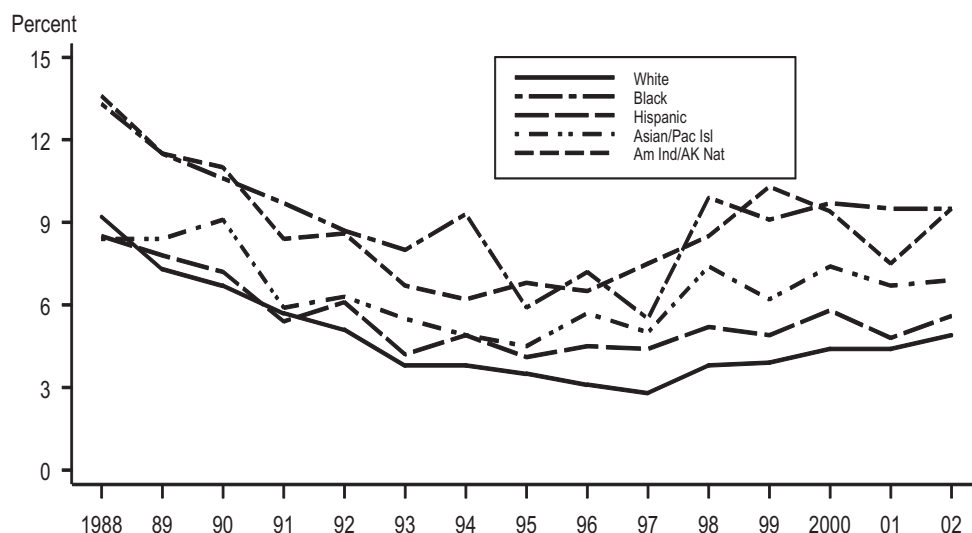
was 21 times greater than that among whites (3,197.6 and 152.0 cases per 100,000 population, respectively) (Table 22B).

- Although gonorrhea rates declined for most age and race/ethnic groups during the 1980s, they did not decline for African-American adolescents. African-American females aged 15 to 19 did not show a decline in rates until 1991 (Figure V). Declines among African-American males aged 15- to 19-years did not begin until 1992 (Figure W). From 2001 to 2002 gonorrhea rates among African-Americans declined by 5.1% (782.3 and 742.3 cases per 100,000 population, respectively). In 2002, rates decreased among Asian/Pacific Islanders by 9.7%. During the same period, gonorrhea rates increased by 10.8% among American Indian/Alaska Natives, 2.4% among Hispanics and 5.4% among whites (Table 22B).
- The syphilis epidemic in the late 1980s occurred primarily among heterosexual, minority populations.¹ During the 1990s, the rates of primary and secondary (P&S) syphilis declined among all racial and ethnic groups (Figure 28 and Table 35B). During 2000 to 2002, the rate continued to decline among African-Americans, but the overall rate of P&S syphilis and rates among whites, Hispanics, and Asian/Pacific Islanders increased; increases in P&S syphilis occurred only among men and the most rapid rate of increase occurred among white men during this time. Despite recent changes in the demographics of syphilis infection, the rates of P&S syphilis continue to be higher among African-Americans and Hispanics than among whites.
- In 2002, 49.8% of all cases of P&S syphilis reported to CDC occurred among African-Americans (Table 35A). Although the rate of P&S syphilis among African-Americans declined from 11.0 to 9.8 cases per 100,000 population between 2001 and 2002, the 2002 rate was 8 times greater than the rate among whites (1.2 cases per 100,000 population) (Table 35B).
- The incidence of P&S syphilis in African-Americans was highest among women aged 20-24 years (17.2 cases per 100,000 population) and highest among men aged 35-39 (29.0 cases per 100,000 population) in 2002 (Table 35B).
- Between 2001 and 2002, P&S syphilis rates for African-Americans aged 15-19 years declined 13.1%; rates declined 15.0% among African-American females and 7.7% among African-American males in this age group (Figures X and Y, Table 35B). The P&S syphilis rate among young African-American adults aged 20- to 24-years declined 3.3% between 2001 and 2002; rates declined 12.7% among African-American females but increased 5.6% among African-American males in this age group (Table 35B).
- In 2002, 14.2% of all cases of P&S syphilis reported to CDC occurred among Hispanics (Table 35A). The rate of P&S syphilis among Hispanics increased 28.6% (from 2.1 to 2.7 cases per 100,000 population) between 2001 and 2002. The rate among Hispanics in 2002 was more than two times greater than the rate among whites (1.2 cases per 100,000 population) (Table 35B).
- The incidence of P&S syphilis among Hispanics was highest among women aged 20-24 years (1.9 cases per 100,000 population) and among men aged 35-39 (12.1 cases per 100,000 population) in 2002 (Table 35B).
- In 2002, the rate of congenital syphilis (based on the mother's race/ethnicity) was 39.8 cases per 100,000 live births among African-Americans and 14.8 cases per 100,000 live births among Hispanics (Table 45). These rates are 28 and 11 times

greater than the 2002 rate among whites (1.4 cases per 100,000 live births), (Figure Z, Table 45). During 2001 to 2002, the rate of congenital syphilis decreased by 9.3% among African-Americans and 21.7% among Hispanics.

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

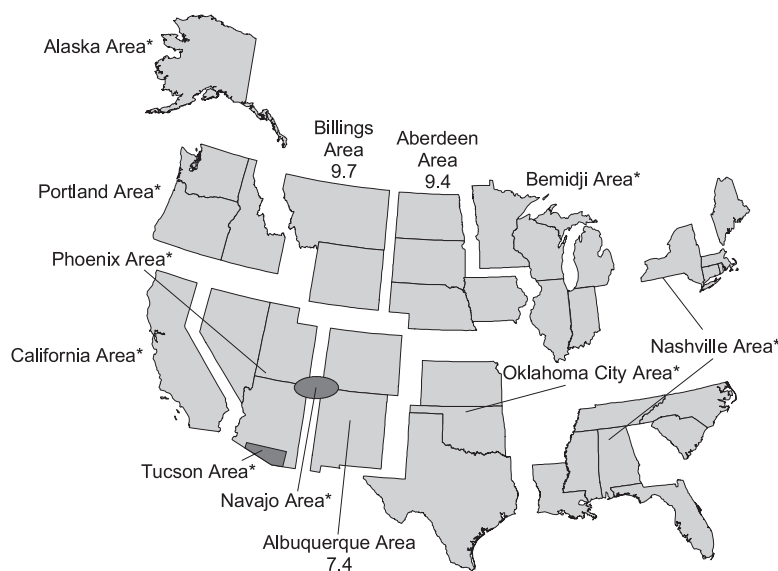
Figure T. Chlamydia — Positivity among women tested in family planning clinics by race and ethnicity: Region X, 1988–2002



Note: Women who met screening criteria were tested. Trends not adjusted for changes in laboratory test method and associated increases in test sensitivity in 1994, and 1999–2002.

SOURCE: Regional Infertility Prevention Projects: Region X Chlamydia Project

Figure U. Chlamydia — Positivity among 15-30 year old women tested in Indian Health Service Clinics by IHS areas, 2002



*IHS areas not reporting chlamydia positivity data during 2002. See Appendix for definitions of IHS areas.

SOURCE: Indian Health Service

Figure V. Gonorrhea — Rates for 15-19 year old females by race and ethnicity: United States, 1981–2002

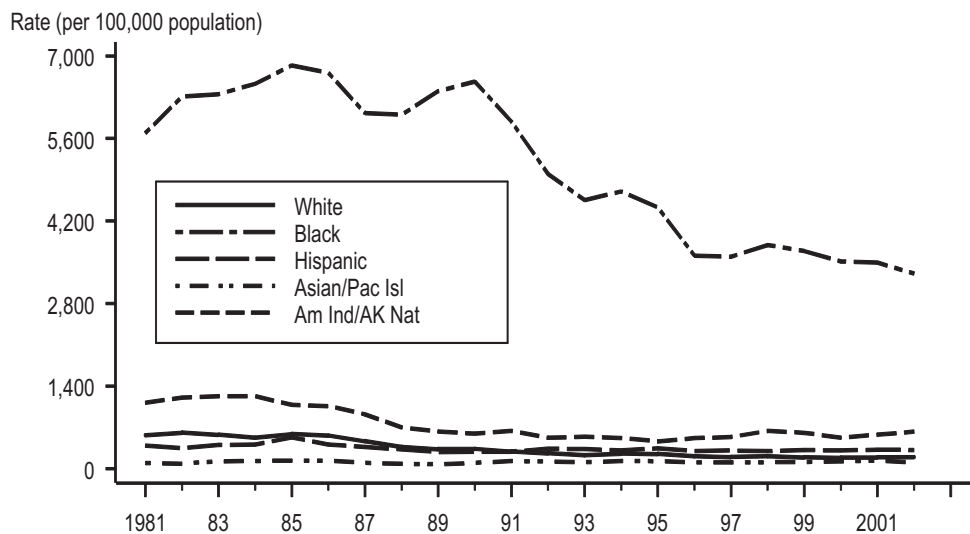


Figure W. Gonorrhea — Rates for 15-19 year old males by race and ethnicity: United States, 1981–2002

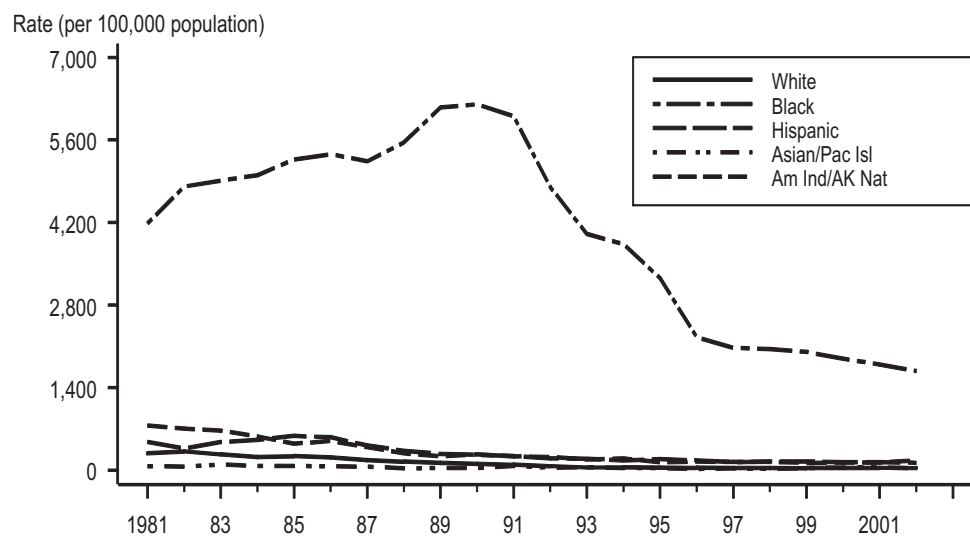


Figure X. Primary and secondary syphilis — Rates for 15-19 year old females by race and ethnicity: United States, 1981–2002

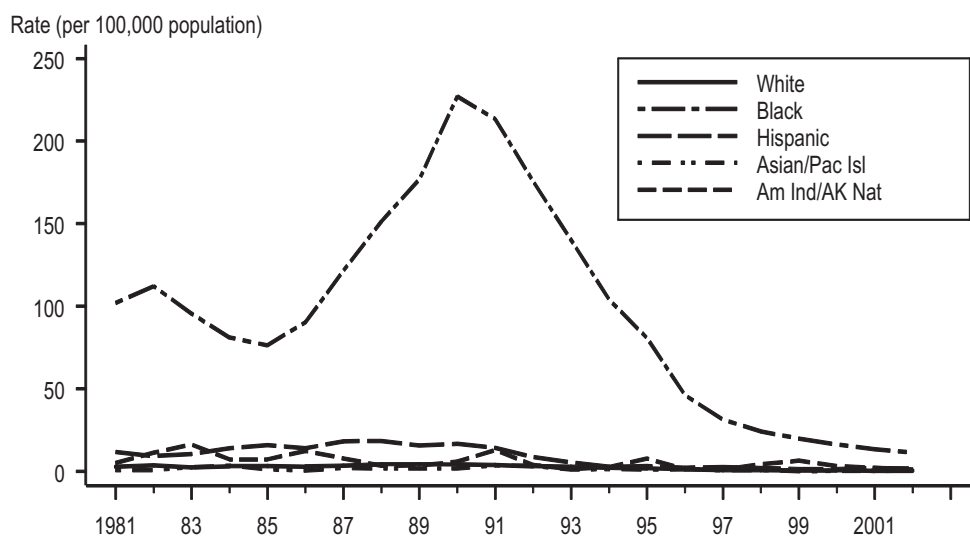


Figure Y. Primary and secondary syphilis — Rates for 15-19 year old males by race and ethnicity: United States, 1981–2002

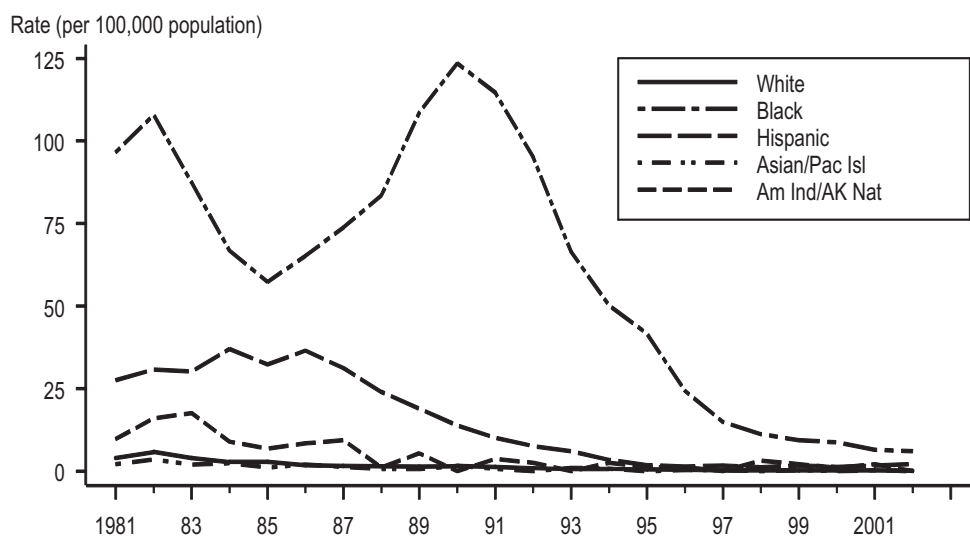
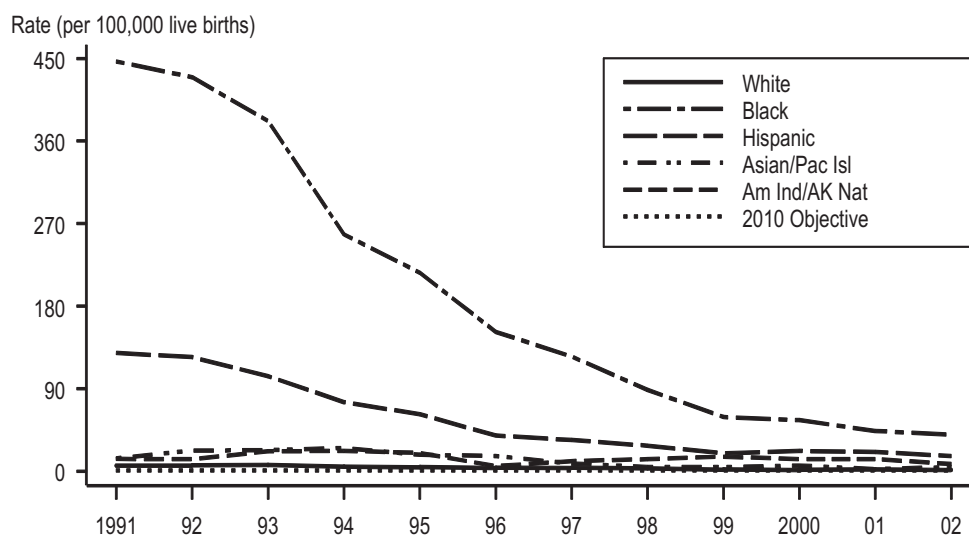


Figure Z. Congenital syphilis — Rates for infants <1 year of age by mother's race and ethnicity: United States, 1991–2002 and the Healthy People 2010 objective



Note: Less than 5% of cases had missing race/ethnicity information and were excluded.

STDs in Men Who Have Sex with Men

Public Health Impact

Data from syphilis surveillance, the Gonococcal Isolate Surveillance Project (GISP), and several U.S. cities indicate that since 1993, an increasing number of MSM are acquiring STDs.¹⁻⁵ Increases in STDs among MSM are consistent with behavioral data suggesting that an increasing number of MSM are participating in sexual behavior that places them at risk for STDs and HIV infection.⁶ Several factors may have contributed to this change, including the availability of highly active antiretroviral therapy (HAART).⁷ Because STDs and the behaviors associated with them increase the likelihood of acquiring and transmitting HIV infection,⁸ the rise in STDs among MSM may signal an increase in HIV incidence among MSM.

Observations

- National notifiable STD surveillance data reported to CDC does not include information regarding sexual behaviors, and, therefore, overall STD trends among MSM in the U.S. are not available. Data from special projects and analyses are presented to provide information regarding STDs among MSM.

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

- In 2002, eight U.S. cities (Chicago, Denver, the District of Columbia, Houston, Long Beach, Philadelphia, San Francisco, and Seattle) participating in the MSM Prevalence Monitoring Project submitted syphilis, gonorrhea, chlamydia, and HIV test data to CDC based on 16,336 visits by MSM to STD clinics. The MSM Prevalence Monitoring Project includes data collected during routine care and reflects testing practices at participating clinics. Medians and city-specific ranges were calculated for the proportion of tests done and STD and HIV test positivity.
- Median positivity among MSM for syphilis nontreponemal serologic testing was 8.0% (range 3.6-12.1%) (Figure AA).
- Median positivity among MSM for gonorrhea overall was 17.1% (range 11.4-23.0%). Median positivity among MSM for urethral gonorrhea was 13.5% (range 8.3-36.1%); median positivity for rectal gonorrhea was 5.7% (range 4.6-10.0%), and median positivity for pharyngeal gonorrhea was 4.2% (range 0.6-10.4%) (Figure BB).
- Median positivity for urethral chlamydia among MSM was 7.2% (range 4.7-11.9%).
- STD and HIV positivity varied by race and ethnicity, but tended to be highest among African-American MSM. Median positivity for HIV, excluding persons previously known to be HIV-positive, was 7.4% (range 1.0-17.0%) for

African-Americans, 3.9% (range 2.2-6.7%) for Hispanics; and 2.4% (range 2.0-3.7%) for whites (Figure CC).

- Median positivity for gonorrhea was higher among MSM who were HIV-positive compared with MSM who were HIV-negative or of unknown HIV status. Median positivity for urethral gonorrhea was 21.0% for men who were HIV-positive and 12.5% for men who were HIV-negative or of unknown HIV status. For rectal gonorrhea, positivity was 10.3% and 5.5%, respectively, and for pharyngeal gonorrhea, 7.7% and 3.9%, respectively. Median positivity for urethral chlamydia was 7.7% among HIV-positive MSM and 6.7% among MSM who were HIV-negative or of unknown HIV status (Figure DD).
- Seventy-eight percent (range 63-89%) of MSM attending these STD clinics had a nontreponemal serologic test for syphilis (STS) performed, 73% (range 19-95%) were tested for urethral gonorrhea, 33% (range 1-61%) were tested for rectal gonorrhea, and 59% (range 2-83%) were tested for pharyngeal gonorrhea. Among MSM not previously HIV-positive, 60% (range 1-69%) were tested for HIV.
- Median HIV prevalence among MSM, including persons known to be HIV-positive, was 18.6% for African-Americans (range 9.9-26.7%), 10.6% (range 8.7-18.2%) for Hispanics, and 9.9% (range 7.3-13.4%) for whites.

Nationally Reported Syphilis Surveillance Data

- Primary and secondary (P&S) syphilis increased in the U.S. in 2002, and this increase occurred only among men. Syphilis male-to-female rate ratios, which may reflect trends among MSM, have been increasing in the U.S. during recent years (Figure 29). The increase in these ratios has been particularly marked in cities with outbreaks of syphilis among MSM.
- In 2002, the rate of P&S syphilis among men (3.8 cases per 100,000 males) was over three times greater than the rate among women (1.1 cases per 100,000 females) (Tables 28 and 29). The overall male-to-female rate ratio has risen steadily since 1996 when it was 1.2. During 2001 to 2002, an increase in the male-to-female rate ratio occurred among whites, African-Americans, and Hispanics; the male-to-female rate ratio did not change among American Indian/Alaska Natives, and it declined among Asian/Pacific Islanders. Additional information on syphilis can be found in the **Syphilis** section.

Gonococcal Isolate Surveillance Project (GISP)

- The Gonococcal Isolate Surveillance Project (GISP), a collaborative project among selected sexually transmitted disease clinics, was established in 1986 to monitor trends in antimicrobial susceptibilities of strains of *N. gonorrhoeae* in the U.S.
- GISP also reports the percentage of *Neisseria gonorrhoeae* isolates obtained from MSM.⁹ Overall, the proportion of isolates coming from MSM increased from 4% in 1988 to 21% in 2002 in GISP clinics, with most of the increase occurring after 1993 (Figure EE). The number of GISP clinics having greater than 5% of GISP isolates from MSM rose from 7 clinics in 1990 to 17 clinics in 2002. Among the 17

GISP clinics with greater than 5% of isolates coming from MSM in 2002, the percentage of patients who were MSM ranged from 7% to 75%, with a median of 20% (Figure FF). Additional information on GISP may be found in the **Gonorrhea** section.

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- ¹ 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.
 - ² Centers for Disease Control and Prevention. Outbreak of syphilis among men who have sex with men—Southern California, 2000. *MMWR* 2001;50:117-20.
 - ³ 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.
 - ⁴ Fox KK, del Rio C, Holmes K, et. al. Gonorrhea in the HIV era: A reversal in trends among men who have sex with men. *Am J Public Health* 2001;91:959-964.
 - ⁵ Centers for Disease Control and Prevention. Primary and secondary syphilis among men who have sex with men—New York City, 2001. *MMWR* 2002;51:853-6.
 - ⁶ Stall R, Hays R, Waldo C, Ekstrand M, McFarland W. The gay '90s: a review of research in the 1990s on sexual behavior and HIV risk among men who have sex with men. *AIDS* 2000;14:S1-S14.
 - ⁷ Scheer S, Chu PL, Klausner JD, Katz MH, Schwarcz SK. Effect of highly active antiretroviral therapy on diagnoses of sexually transmitted diseases in people with AIDS. *Lancet* 2001;357:432-5.
 - ⁸ Fleming DT, Wasserheit JN. From epidemiologic synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect* 1999;75:3-17.
 - ⁹ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2002 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2002*. Atlanta, GA: U.S. Department of Health and Human Services (in press).

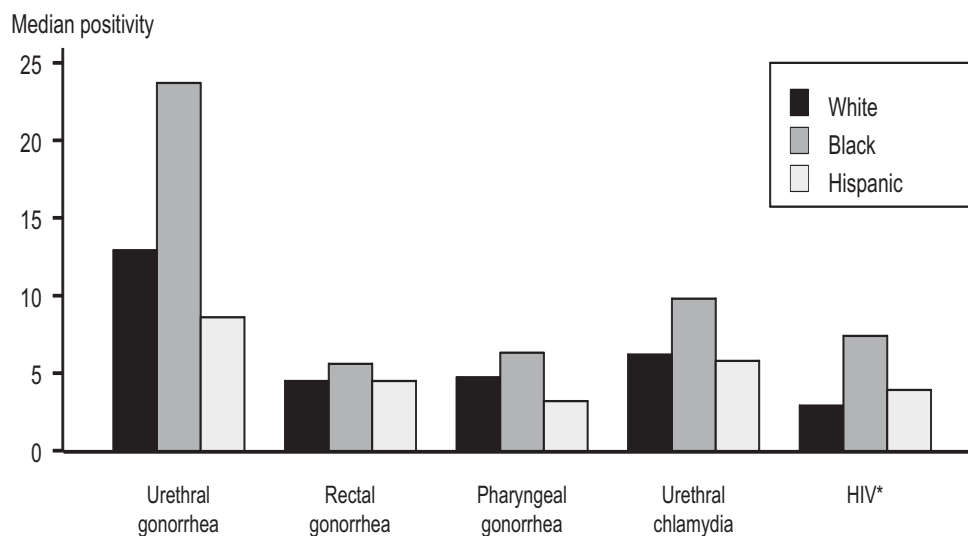
Figure AA. MSM Prevalence Monitoring Project — Syphilis serologic reactivity among men who have sex with men, STD clinics, 2002



Figure BB. MSM Prevalence Monitoring Project — Gonorrhea positivity among men who have sex with men, STD clinics, 2002



Figure CC. MSM Prevalence Monitoring Project — Median clinic test positivity for gonorrhea, chlamydia, and HIV among men who have sex with men by race/ethnicity in participating STD clinics, 2002



*Excludes persons previously known to be HIV-positive.

Figure DD. MSM Prevalence Monitoring Project — Median clinic test positivity for gonorrhea and chlamydia among men who have sex with men by HIV status in participating STD clinics, 2002

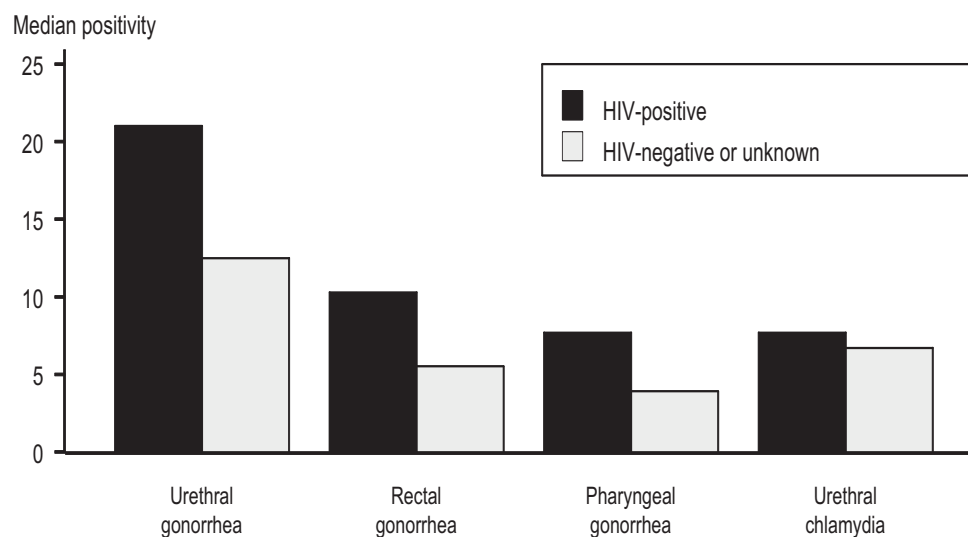


Figure EE. Gonococcal Isolate Surveillance Project (GISP) — Percent of gonorrhea cases that occurred among MSM, 1988-2002

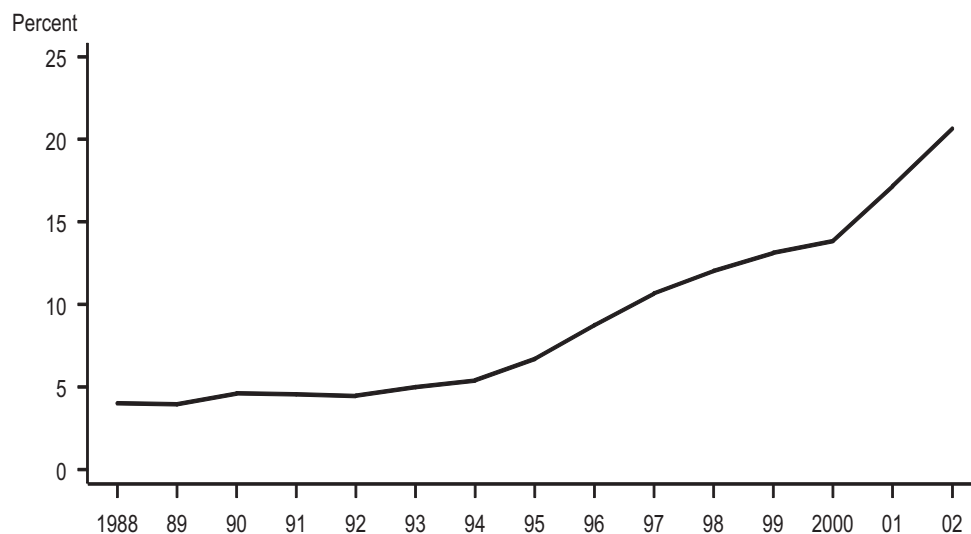
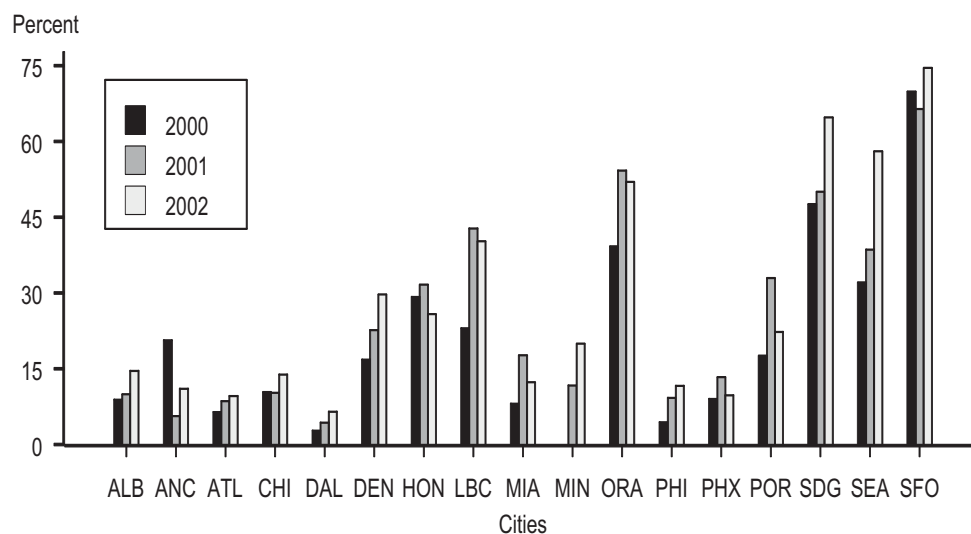


Figure FF. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates obtained from MSM attending STD clinics in 17 cities, 2000, 2001, and 2002



Note: In 2002, these 17 clinics reported 96.2% (1,028/1,069) of GISP gonorrhea cases among men who have sex with men (MSM). Clinics include: ALB=Albuquerque, NM; ANC=Anchorage, AK; ATL=Atlanta, GA; CHI=Chicago, IL; DAL=Dallas, TX; DEN=Denver, CO; HON=Honolulu, HI; LBC=Long Beach, CA; MIA=Miami, FL; MIN=Minneapolis, MN; ORA=Orange County, CA; PHI=Philadelphia, PA; PHX=Phoenix, AZ; POR=Portland, OR; SDG=San Diego, CA; SEA=Seattle, WA; and SFO=San Francisco, CA.

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. Screening for chlamydia, gonorrhea, and syphilis at intake offers an opportunity to identify infections, prevent complications, and reduce transmission in the community. In cities where routine syphilis screening in jails occurs, a substantial percentage of all reported cases is identified in jails.⁴ Collecting positivity data and analyzing trends in STD prevalence in this population can provide one method for monitoring trends in STD prevalence in the community.⁴

Observations

- In 2002, seven states reported syphilis screening data from corrections facilities to CDC. Twenty-eight states reported chlamydia screening data and nineteen states reported gonorrhea screening data from corrections facilities. These data were reported as part of either the Jail STD Prevalence Monitoring Project, the Adolescent Women Reproductive Health Monitoring Project, the Syphilis Elimination Initiative, the Regional Infertility Prevention Program, or in response to CDC's request for data.
- The maps shown in this section represent approximately 170,000 syphilis tests in men and 31,000 in women; 150,000 chlamydia tests in men and 44,000 in women; and 123,000 gonorrhea tests in men and 37,000 in women.
- The median percentage of reactive syphilis tests by facility was 7.1% (range 0.6% to 19.0%) for women entering 10 adult corrections facilities and 1.0% for adolescent women entering 1 juvenile corrections facility (Figure GG); it was 3.4% (range 0.9% to 5.2%) among men at 10 adult corrections facilities and 0.1% in men at 1 juvenile facility (Figure HH). The percentage of reactive syphilis tests representing cases of syphilis varied from facility to facility.
- Chlamydia positivity was higher in women screened in juvenile corrections facilities than in adult corrections facilities. In adolescent women entering juvenile corrections facilities, the median facility positivity for chlamydia was 16.7% (range 6.3% to 28.3%); positivity was greater than 10% in 31 of 32 facilities reporting data (Figure II). In adult women entering 17 corrections facilities, the median positivity for chlamydia was 3.2% (range 0.8% to 14.5%).
- The median chlamydia positivity in adolescent men entering 42 juvenile corrections facilities was 6.0% (range 0.6% to 15.7%) (Figure JJ). In adult men entering 6 corrections facilities, the median positivity was 5.3% (range 3.5% to 8.0%).
- The median positivity for gonorrhea in women entering 22 juvenile corrections facilities was 5.6% (range 0.6% to 12.4%); positivity was greater than 4% in 16 of

22 juvenile corrections facilities (Figure KK). In adult women entering 14 corrections facilities, the median positivity for gonorrhea was 2.3% (range 0.2% to 6.2%).

- The median positivity for gonorrhea in adolescent men entering 25 juvenile corrections facilities was 1.7% (range 0.3% to 4.5%) (Figure LL). In adult men entering six facilities, the median positivity was also 1.7% (range 0.7% to 3.0%).

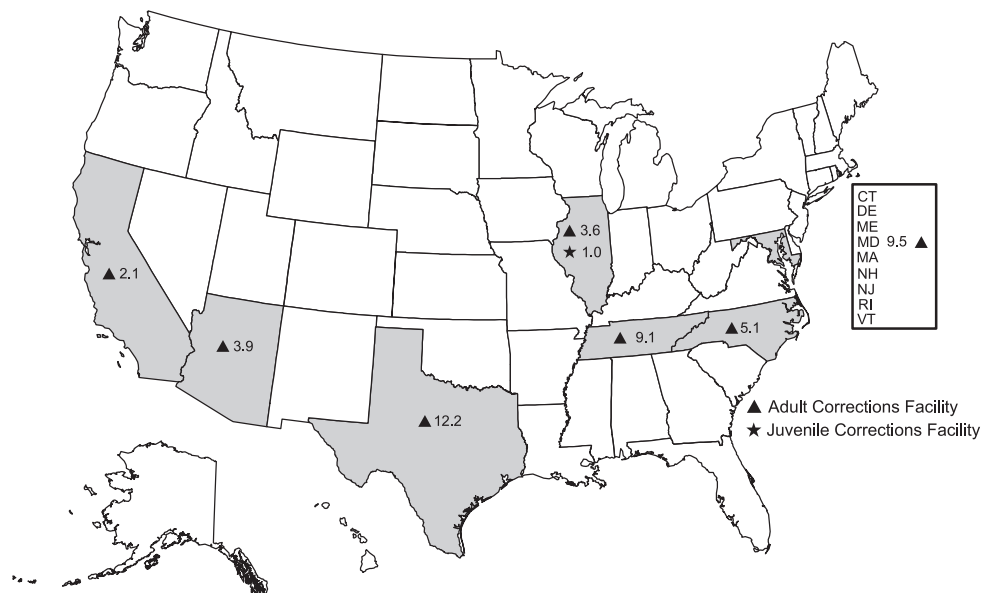
¹ Heimberger TS, Chang HG, Birkhead GS, DiFerdinando GD, Greenberg AJ, Gunn R, Morse DL. High prevalence of syphilis detected through a jail screening program. A potential public health measure to address the syphilis epidemic. *Arch Intern Med* 1993;153:1799-1804.

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

³ Mertz KJ, Schwebke JR, Gaydos CA, Beideinger HA, Tulloch SD, Levine WC. Screening women in jails for chlamydial and gonococcal infection using urine tests: Feasibility, acceptability, prevalence and treatment rates. *Sex Transm Dis* 2002;29:271-276.

⁴ Kahn RH, Scholl DT, Shane SM, Lemoine AL, Farley TA. Screening for syphilis in arrestees: Usefulness for community-wide syphilis surveillance and control. *Sex Transm Dis* 2002;29:150-156.

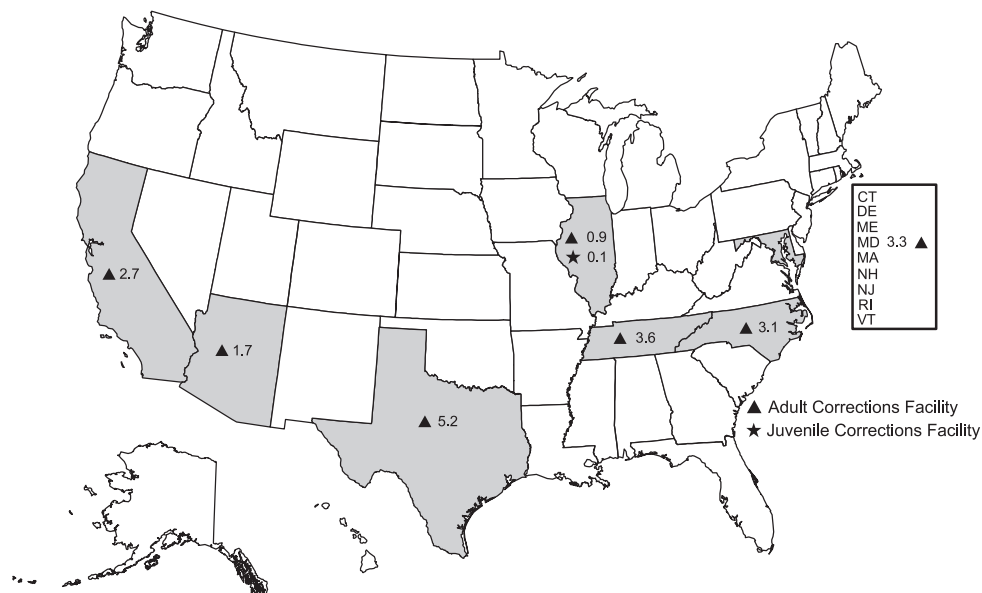
Figure GG. Syphilis serologic tests — Percent seroreactivity in women entering juvenile and adult corrections facilities, 2002



Note: The median positivity is presented from facilities reporting >100 test results. Texas submitted data from more than one adult corrections facility.

SOURCE: Jail STD Prevalence Monitoring Project; Local and State STD Control Programs; Centers for Disease Control and Prevention

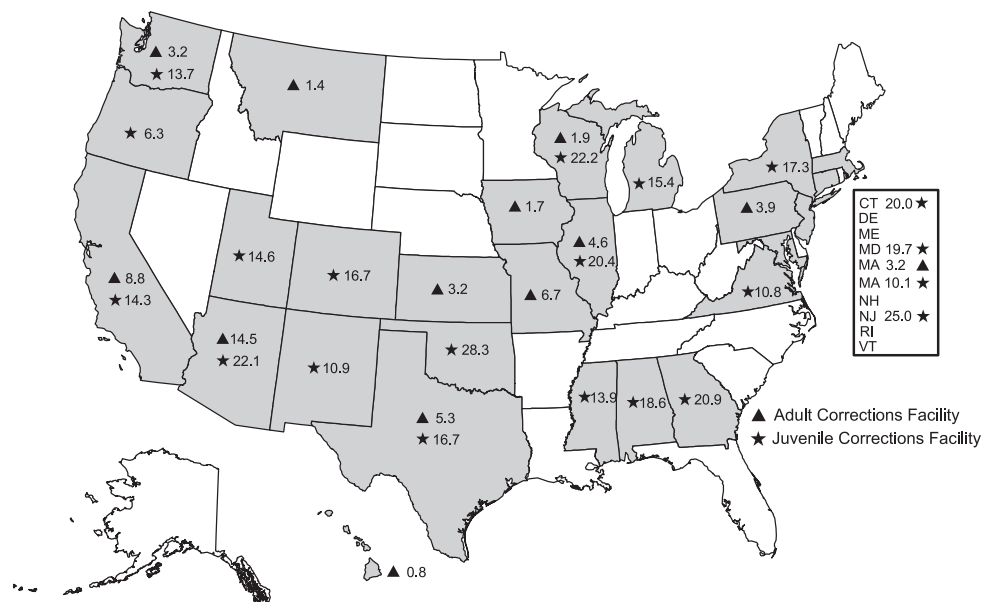
Figure HH. Syphilis serologic tests — Percent seroreactivity in men entering juvenile and adult corrections facilities, 2002



Note: The median positivity is presented from facilities reporting >100 test results. Texas submitted data from more than one adult corrections facility.

SOURCE: Jail STD Prevalence Monitoring Project; Local and State STD Control Programs; Centers for Disease Control and Prevention

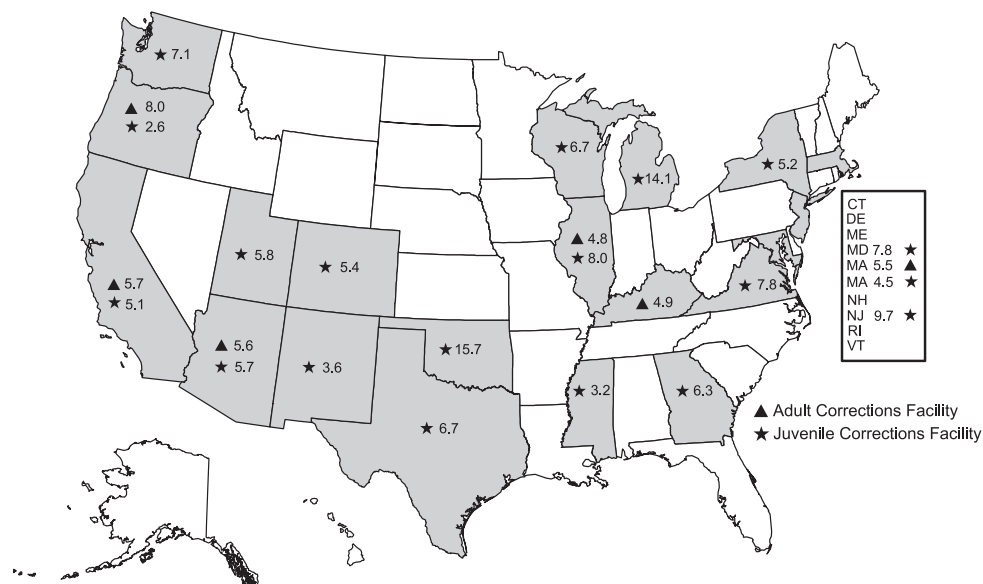
Figure II. Chlamydia — Positivity in women entering juvenile and adult corrections facilities, 2002



Note: The median positivity is presented from facilities reporting >100 test results. California, Pennsylvania, Massachusetts, and Texas submitted data from more than one adult corrections facility. Arizona, California, Massachusetts, Texas and Washington submitted data from more than one juvenile corrections facility.

SOURCE: Jail STD Prevalence Monitoring Project; Adolescent Women Reproductive Health Monitoring Project; Regional Infertility Prevention Projects; Local and State STD Control Programs; Centers for Disease Control and Prevention

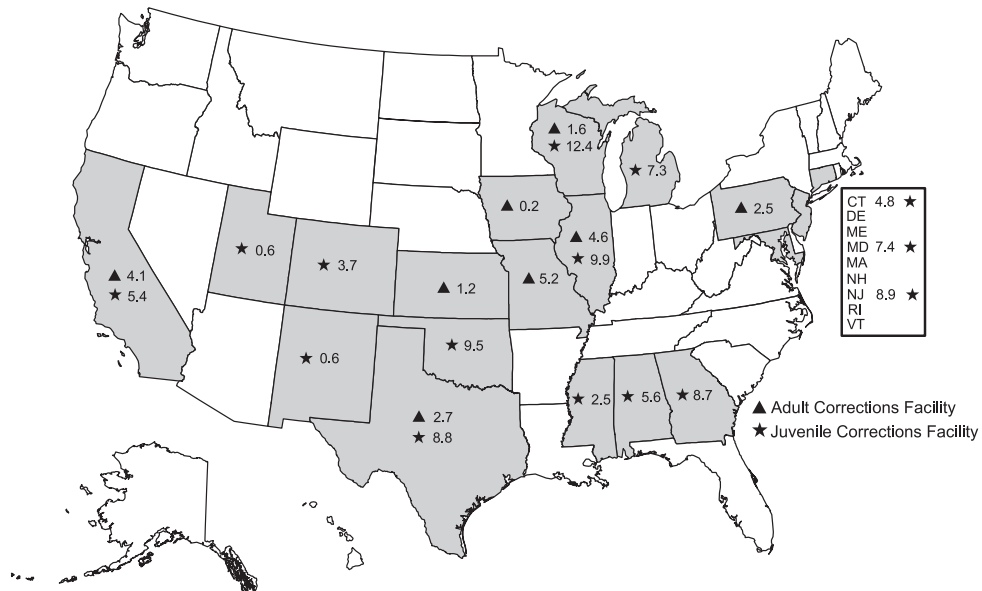
Figure JJ. Chlamydia — Positivity in men entering juvenile and adult corrections facilities, 2002



Note: The median positivity is presented from facilities reporting >100 test results. Massachusetts submitted data from more than one adult corrections facility. Arizona, California, Illinois, Maryland, Massachusetts, Texas, Utah, Washington and Wisconsin submitted data from more than one juvenile corrections facility.

SOURCE: Jail STD Prevalence Monitoring Project; Regional Infertility Prevention Projects; Local and State STD Control Programs; Centers for Disease Control and Prevention

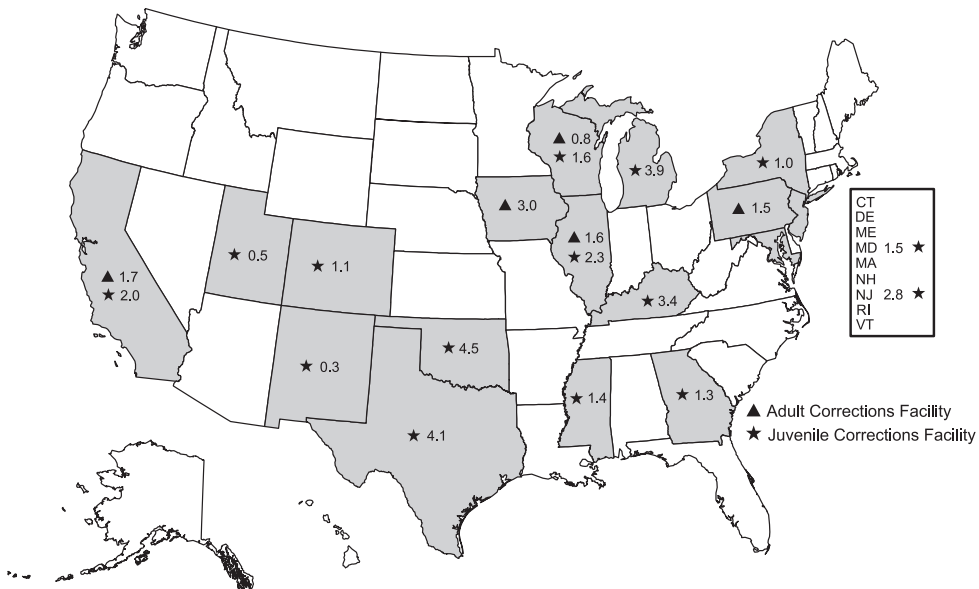
Figure KK. Gonorrhea — Positivity in women entering juvenile and adult corrections facilities, 2002



Note: The median positivity is presented from facilities reporting >100 test results. California, Pennsylvania, Texas and Wisconsin submitted data from more than one adult corrections facility. California and Texas submitted data from more than one juvenile corrections facility.

SOURCE: Jail STD Prevalence Monitoring Project; Adolescent Women Reproductive Health Monitoring Project; Regional Infertility Prevention Projects; Local and State STD Control Programs; Centers for Disease Control and Prevention

Figure LL. Gonorrhea — Positivity in men entering juvenile and adult corrections facilities, 2002



Note: The median positivity is presented from facilities reporting >100 test results. Wisconsin submitted data from more than one adult corrections facility. California, Illinois, Maryland and New Jersey submitted data from more than one juvenile corrections facility.

SOURCE: Jail STD Prevalence Monitoring Project; Regional Infertility Prevention Projects; Local and State STD Control Programs; Centers for Disease Control and Prevention

TABLES

Table 1. Cases of sexually transmitted diseases reported by state health departments and rates per 100,000 civilian population: United States, 1941–2002

Year*	Syphilis										Chlamydia		Gonorrhea		Chancroid		Granuloma Inguinale		Lympho-granuloma Venereum	
	All Stages		Primary and Secondary		Early Latent		Late and Late Latent		Congenital											
	Cases	Rate	Cases	Rate	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	13.4	NR	.	193,468	146.7	3,384	2.5	639	0.4	1,381	1.0
1942	479,601	363.4	75,312	57.0	116,245	88.0	202,064	153.1	16,918	12.8	NR	.	212,403	160.9	5,477	4.1	1,278	0.9	1,888	1.4
1943	575,593	447.0	82,204	63.8	149,390	116.0	251,958	195.7	16,164	12.6	NR	.	275,070	213.6	8,354	6.4	1,748	1.3	2,593	2.0
1944	467,755	367.9	78,443	61.6	123,038	96.7	202,848	159.6	13,578	10.7	NR	.	300,676	236.5	7,878	6.1	1,759	1.3	2,858	2.2
1945	359,114	282.3	77,007	60.5	101,719	79.9	142,187	111.8	12,339	9.7	NR	.	287,181	225.8	5,515	4.3	1,857	1.4	2,631	2.0
1946	363,647	271.7	94,957	70.9	107,924	80.6	125,248	93.6	12,106	9.0	NR	.	368,020	275.0	7,091	5.2	2,232	1.6	2,603	1.9
1947	355,592	252.3	93,545	66.4	104,124	73.9	122,089	86.6	12,200	8.7	NR	.	380,666	270.0	9,515	6.7	2,330	1.7	2,526	1.8
1948	314,313	218.2	68,174	47.3	90,598	62.9	123,312	85.6	13,931	9.7	NR	.	345,501	239.8	7,661	5.3	2,469	1.7	2,429	1.7
1949	256,463	175.3	41,942	28.7	75,045	51.3	116,397	79.5	13,952	9.5	NR	.	317,950	217.3	6,707	4.6	2,402	1.6	1,925	1.3
1950	217,558	146.0	23,939	16.7	59,256	39.7	113,569	70.2	13,377	9.0	NR	.	286,746	192.5	4,977	3.3	1,783	1.2	1,427	1.0
1951	174,924	116.1	14,485	9.6	43,316	28.7	98,311	65.2	11,094	7.4	NR	.	254,470	168.9	4,233	2.8	1,352	0.9	1,300	0.9
1952	167,762	110.2	10,449	6.9	36,454	24.0	105,238	69.1	8,553	5.6	NR	.	244,957	160.8	3,738	2.5	951	0.6	1,200	0.8
1953	148,573	95.9	8,637	5.6	28,295	18.3	98,870	63.8	7,675	5.0	NR	.	238,340	153.9	3,338	2.2	667	0.4	983	0.6
1954	130,687	82.9	7,147	4.5	23,861	15.1	89,123	56.5	6,676	4.2	NR	.	242,050	153.5	3,003	1.9	618	0.4	875	0.6
1955	122,392	76.2	6,454	4.0	20,054	12.5	86,526	53.8	5,354	3.3	NR	.	236,197	147.0	2,649	1.7	490	0.3	762	0.5
1956	130,201	78.7	6,392	3.9	19,783	12.0	95,097	57.5	5,491	3.3	NR	.	224,346	135.7	2,135	1.3	357	0.2	500	0.3
1957	123,758	73.5	6,576	3.9	17,796	10.6	91,309	54.2	5,288	3.1	NR	.	214,496	127.4	1,637	1.0	348	0.2	448	0.3
1958	113,884	66.4	7,176	4.2	16,556	9.7	83,027	48.4	4,866	2.8	NR	.	232,386	135.6	1,595	0.9	314	0.2	434	0.3
1959	120,824	69.2	9,799	5.6	17,025	9.8	86,740	49.7	5,130	2.9	NR	.	240,254	137.6	1,537	0.9	265	0.2	604	0.3
1960	122,538	68.8	16,145	9.1	18,017	10.1	81,798	45.9	4,416	2.5	NR	.	258,933	145.4	1,680	0.9	296	0.2	835	0.5
1961	124,658	68.8	19,851	11.0	19,486	10.8	79,304	43.8	4,163	2.3	NR	.	264,158	145.8	1,438	0.8	241	0.1	787	0.4
1962	126,245	68.7	21,067	11.5	19,585	10.7	79,533	43.3	4,070	2.2	NR	.	263,714	143.6	1,344	0.7	207	0.1	590	0.3
1963	124,137	66.6	22,251	11.9	18,235	9.8	78,076	41.9	4,031	2.2	NR	.	278,289	149.2	1,220	0.7	173	0.1	586	0.3
1964	114,325	60.4	22,969	12.1	17,781	9.4	68,629	36.3	3,516	1.9	NR	.	300,666	159.0	1,247	0.7	135	0.1	732	0.4
1965	112,842	58.9	23,338	12.2	17,458	9.1	67,317	35.1	3,564	1.9	NR	.	324,925	169.6	982	0.5	155	0.1	878	0.5
1966	105,159	54.4	21,414	11.1	15,950	8.2	63,541	32.9	3,170	1.6	NR	.	351,738	181.9	838	0.4	148	0.1	308	0.2
1967	102,581	52.5	21,053	10.8	15,554	8.0	61,975	31.7	2,894	1.5	NR	.	404,836	207.3	784	0.4	154	0.1	371	0.2
1968	96,271	48.8	19,019	9.6	15,150	7.7	58,564	29.7	2,381	1.2	NR	.	464,543	235.7	845	0.4	156	0.1	485	0.2
1969	92,162	46.3	19,130	9.6	15,402	7.7	54,587	27.4	2,074	1.0	NR	.	534,872	268.6	1,104	0.6	154	0.1	520	0.3
1970	91,382	45.3	21,982	10.9	16,311	8.1	50,348	24.9	1,953	1.0	NR	.	600,072	297.2	1,416	0.7	124	0.1	612	0.3
1971	95,997	46.9	23,783	11.6	19,417	9.5	49,993	24.4	2,052	1.0	NR	.	670,268	327.2	1,320	0.6	89	0.0	692	0.3
1972	91,149	43.9	24,429	11.8	20,784	10.0	43,456	20.9	1,758	0.8	NR	.	767,215	369.7	1,414	0.7	81	0.0	756	0.4
1973	87,469	41.7	24,825	11.8	23,584	11.3	37,054	17.7	1,527	0.7	NR	.	842,621	402.0	1,165	0.6	62	0.0	408	0.2
1974	83,771	39.6	25,385	12.0	25,124	11.9	31,854	15.1	1,138	0.5	NR	.	906,121	428.2	945	0.4	47	0.0	394	0.2
1975	80,356	37.6	25,561	12.0	26,569	12.4	27,096	12.7	916	0.4	NR	.	999,937	467.7	700	0.3	60	0.0	353	0.2
1976	71,761	33.2	23,731	11.0	25,363	11.7	21,905	10.1	626	0.3	NR	.	1001994	464.1	628	0.3	71	0.0	365	0.2
1977	64,621	29.6	20,399	9.4	21,329	9.8	22,313	10.2	463	0.2	NR	.	1002219	459.5	455	0.2	75	0.0	348	0.2
1978	64,875	29.4	21,656	9.8	19,628	8.9	23,038	10.4	434	0.2	NR	.	1013436	459.7	521	0.2	72	0.0	284	0.1
1979	67,049	30.1	24,874	11.2	20,459	9.2	21,301	9.6	332	0.1	NR	.	1004058	450.3	840	0.4	76	0.0	250	0.1
1980	68,832	30.5	27,204	12.1	20,297	9.0	20,979	9.3	277	0.1	NR	.	1004029	445.1	788	0.3	51	0.0	199	0.1
1981	72,799	32.0	31,266	13.7	21,033	9.2	20,168	8.9	287	0.1	NR	.	990,864	435.2	850	0.4	66	0.0	263	0.1
1982	75,579	32.9	33,613	14.6	21,894	9.5	19,799	8.6	259	0.1	NR	.	960,633	417.9	1,392	0.6	17	0.0	235	0.1
1983	74,637	32.1	32,698	14.1	23,738	10.2	17,896	7.7	239	0.1	NR	.	900,435	387.6	847	0.4	24	0.0	335	0.1
1984	69,872	29.6	28,607	12.1	23,131	9.8	17,829	7.6	305	0.1	7,594	6.5	878,556	372.5	665	0.3	30	0.0	170	0.1
1985	67,563	28.4	27,131	11.4	21,689	9.1	18,414	7.7	329	0.1	25,848	17.4	911,419	383.0	2,067	0.9	44	0.0	226	0.1

Table 1. Cases of sexually transmitted diseases reported by state health departments and rates per 100,000 civilian population: United States, 1941–2002 (continued)

	Syphilis																					
	All Stages		Primary and Secondary		Early Latent		Late and Late Latent		Congenital													
Year*	Cases	Rate	Cases	Rate	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	0.2	58,001	35.2	892,229	371.5	3,045	1.3	48	0.0	307	0.1		
1987	87,286	36.0	35,585	14.7	28,233	11.7	22,988	9.5	480	0.2	91,913	50.8	787,532	325.0	4,986	2.1	22	0.0	302	0.1		
1988	104,546	42.8	40,474	16.6	35,968	14.7	27,363	11.2	741	0.3	157,854	87.1	738,160	301.9	4,891	2.0	11	0.0	194	0.1		
1989	115,089	46.6	45,826	18.6	45,394	18.4	22,032	8.9	1,837	0.7	200,904	102.5	733,294	297.1	4,697	1.9	7	0.0	182	0.1		
1990	135,590	54.5	50,578	20.3	55,397	22.3	25,750	10.4	3,865	1.6	323,663	160.8	690,042	277.4	4,212	1.7	97	0.0	277	0.1		
1991	128,719	51.1	42,950	17.0	53,855	21.4	27,490	10.9	4,424	1.8	381,228	180.3	621,918	246.7	3,476	1.4	29	0.0	471	0.2		
1992	114,730	45.0	34,009	13.3	49,929	19.6	26,725	10.5	4,067	1.6	409,694	183.4	502,858	197.2	1,906	0.7	6	0.0	299	0.1		
1993	102,612	39.8	26,527	10.3	41,919	16.3	30,746	11.9	3,420	1.3	405,332	179.5	444,649	172.5	1,292	0.5	19	0.0	292	0.1		
1994	82,713	31.8	20,641	7.9	32,017	12.3	27,603	10.6	2,452	0.9	451,785	194.5	424,657	167.7	782	0.3	3	0.0	235	0.1		
1995	69,356	26.4	16,543	6.3	26,657	10.1	24,296	9.2	1,860	0.7	478,577	190.4	392,651	149.4	607	0.2	NR	0.0	188	0.1		
1996	53,238	20.1	11,405	4.3	20,187	7.6	20,366	7.7	1,280	0.5	492,631	193.7	328,169	123.8	386	0.1	10	0.0	72	0.0		
1997	46,713	17.5	8,556	3.2	16,631	6.2	20,447	7.6	1,079	0.4	537,904	209.4	327,665	122.4	246	0.1	8	0.0	114	0.0		
1998	38,286	14.2	7,007	2.6	12,696	4.7	17,743	6.6	840	0.3	614,250	236.7	356,492	131.9	189	0.1	3	0.0	86	0.0		
1999	35,379	13.0	6,617	2.4	11,534	4.2	16,653	6.1	575	0.2	662,647	253.0	360,813	132.3	142	0.1	19	0.0	63	0.0		
2000	31,612	11.2	5,979	2.1	9,465	3.4	15,594	5.5	574	0.2	709,452	252.1	363,136	129.0	78	0.0	4	0.0	42	0.0		
2001	32,272	11.5	6,103	2.2	8,701	3.1	16,976	6.0	492	0.2	783,242	278.3	361,705	128.5	38	0.0	7	0.0	25	0.0		
2002	32,871	11.7	6,862	2.4	8,429	3.0	17,168	6.1	412	0.1	834,555	296.5	351,852	125.0	67	0.0	9	0.0	19	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.

†For 1941-1994, rates include all cases of congenitally acquired syphilis per 100,000 population. As of 1995, rates of congenital syphilis <1 year of age per 100,000 population are reported. **For rates of congenital syphilis <1 year of age per 100,000 live births see Tables 40, 41 and 42.** As of 1995, cases of congenital syphilis <1 year of age 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 May 2, 2003 (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. Reported cases of sexually transmitted disease by sex and reporting source: United States, 2002

<i>Disease</i>	<i>Non-STD Clinic</i>			<i>STD Clinic</i>			<i>Total*</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Total <i>Chlamydia Trachomatis</i>	111,178	539,393	652,192	68,407	113,465	182,363	179,585	652,858	834,555
Chlamydial PID [†]	NA	2,688	2,691	NA	324	335	NA	3,012	3,026
Ophthalmia Neonatorum	126	133	260	18	17	36	144	150	296
Total Gonorrhea	89,333	138,203	228,047	82,171	41,445	123,805	171,504	179,648	351,852
Gonococcal PID	NA	2,381	2,383	NA	308	313	NA	2,689	2,696
Ophthalmia Neonatorum	21	15	36	3	5	8	24	20	44
Total Syphilis	NA	NA	NA	NA	NA	NA	20,534	12,271	32,871
Primary	861	120	981	920	151	1,071	1,781	271	2,052
Secondary	2,271	749	3,020	1,215	574	1,790	3,486	1,323	4,810
Early Latent	3,176	1,760	4,939	2,172	1,316	3,490	5,348	3,076	8,429
Late and Late Latent [§]	6,245	4,879	11,155	3,477	2,525	6,013	9,722	7,404	17,168
Neurosyphilis [¶]	272	84	356	27	4	31	299	88	387
Congenital <1 year ^{**}	NR	NR	NR	NR	NR	NR	197	197	412
Chancroid	6	7	14	18	35	53	24	42	67
Granuloma Inguinale	1	0	1	6	2	8	7	2	9
Lymphogranuloma Venereum	4	1	5	13	1	14	17	2	19

*Totals include unknown sex and reporting source.

[†]PID = Pelvic inflammatory disease.

[§]Cases of unknown duration for syphilis are included in late and late latent syphilis.

[¶]Neurosyphilis cases are not included with Total Syphilis cases but are included in the late and late latent syphilis cases.

^{**}Cases of congenital syphilis <1 year of age are obtained using reporting form CDC 73.126. Clinic reporting source is not available from that form.

NA = Not applicable

NR = No report

Table 3. Chlamydia — Reported cases and rates by state/area, ranked by rates: United States, 2002

<i>Rank</i> [*]	<i>State/Area</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Alaska	3,806	607.1
2	Georgia	33,998	415.3
3	Mississippi	11,800	414.8
4	Louisiana	18,442	412.7
5	New Mexico	7,417	407.7
6	Illinois	48,101	387.3
7	Hawaii	4,521	373.2
8	South Carolina	14,314	356.8
9	Alabama	15,611	351.0
10	Delaware	2,649	338.1
11	Ohio	38,032	335.0
12	Texas	69,521	333.4
13	Colorado	14,028	326.1
14	California	110,288	325.6
15	Michigan	32,272	324.7
16	Maryland	16,891	318.9
17	Wisconsin	17,000	316.9
18	Oklahoma	10,804	313.1
19	North Carolina	24,726	307.2
20	Nevada	5,936	297.1
	U.S. TOTAL[†]	834,555	296.5
21	South Dakota	2,215	293.4
22	Arizona	14,973	291.8
23	Missouri	16,181	289.2
24	Connecticut	9,808	288.0
25	Tennessee	16,042	282.0
26	Indiana	17,100	281.2
27	Nebraska	4,779	279.3
28	Montana	2,475	274.3
29	Arkansas	7,312	273.5
30	Rhode Island	2,832	270.1
31	New York	51,123	269.4
32	Florida	42,058	263.2
33	Virginia	18,518	261.6
34	Pennsylvania	31,791	258.9
35	Washington	14,934	253.4
36	Kansas	6,784	252.3
37	Kentucky	8,756	216.6
38	Iowa	6,195	211.7
39	Minnesota	10,107	205.4
40	Oregon	7,009	204.9
41	North Dakota	1,256	195.6
42	Idaho	2,503	193.4
43	Wyoming	944	191.2
44	Massachusetts	10,914	171.9
45	New Jersey	14,164	168.3
46	Utah	3,540	158.5
47	Vermont	954	156.7
48	Maine	1,805	141.6
49	West Virginia	2,464	136.3
50	New Hampshire	1,557	126.0

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

[†]Total includes cases reported by Washington, D.C., but excludes outlying areas (Guam with 550 cases and rate of 355.3, Puerto Rico with 2,999 cases and rate of 78.7, and Virgin Islands with 207 cases and rate of 190.6).

Table 4. Chlamydia — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	10,065	12,375	15,323	14,524	15,611	231.3	283.2	344.6	326.6	351.0
Alaska	1,907	1,886	2,569	2,744	3,806	310.6	304.4	409.8	437.7	607.1
Arizona	11,489	12,111	12,591	14,346	14,973	246.1	253.5	245.4	279.6	291.8
Arkansas	4,123	5,865	6,219	7,280	7,312	162.4	229.9	232.6	272.3	273.5
California	76,519	85,156	95,392	101,944	110,288	234.2	256.9	281.6	301.0	325.6
Colorado*	9,113	10,848	12,000	13,239	14,028	229.5	267.4	279.0	307.8	326.1
Connecticut	6,977	7,422	7,604	7,718	9,808	213.1	226.1	223.3	226.6	288.0
Delaware	2,608	2,761	2,856	2,793	2,649	350.7	366.4	364.5	356.4	338.1
Florida	24,949	31,410	33,390	37,625	42,058	167.3	207.9	208.9	235.4	263.2
Georgia	25,250	30,368	29,359	33,840	33,998	330.4	389.9	358.6	413.4	415.3
Hawaii	2,604	3,165	3,547	4,031	4,521	218.3	267.0	292.8	332.7	373.2
Idaho	2,035	1,778	1,907	2,023	2,503	165.6	142.0	147.4	156.3	193.4
Illinois	32,861	36,409	40,350	43,716	48,101	272.8	300.2	324.9	352.0	387.3
Indiana	10,801	11,734	14,063	15,258	17,100	183.1	197.4	231.3	250.9	281.2
Iowa	5,174	5,511	5,987	5,699	6,195	180.8	192.1	204.6	194.7	211.7
Kansas	5,587	6,093	6,056	6,050	6,784	212.5	229.6	225.3	225.0	252.3
Kentucky	6,441	7,378	8,063	8,881	8,756	163.6	186.3	199.5	219.7	216.6
Louisiana	15,188	16,635	17,846	17,840	18,442	347.6	380.5	399.3	399.2	412.7
Maine	1,073	1,220	1,474	1,338	1,805	86.2	97.4	115.6	104.9	141.6
Maryland	13,097	13,568	14,533	15,640	16,891	255.1	262.4	274.4	295.3	318.9
Massachusetts	8,363	8,776	10,967	10,402	10,914	136.0	142.1	172.7	163.8	171.9
Michigan	22,156	23,107	26,237	31,090	32,272	225.7	234.3	264.0	312.8	324.7
Minnesota	6,970	7,450	8,102	8,323	10,107	147.5	156.0	164.7	169.2	205.4
Mississippi	10,614	11,545	12,697	11,793	11,800	385.7	417.0	446.3	414.6	414.8
Missouri	12,670	13,355	13,448	13,949	16,181	233.0	244.2	240.3	249.3	289.2
Montana	1,412	1,584	1,469	1,919	2,475	160.4	179.4	162.8	212.7	274.3
Nebraska	2,911	3,616	3,791	3,206	4,779	175.1	217.0	221.5	187.3	279.3
Nevada	3,320	3,086	4,019	4,831	5,936	190.1	170.6	201.1	241.8	297.1
New Hampshire	960	976	1,130	1,383	1,557	81.0	81.3	91.4	111.9	126.0
New Jersey	11,686	12,424	10,814	16,312	14,164	144.0	152.6	128.5	193.9	168.3
New Mexico	3,793	5,017	5,204	6,254	7,417	218.4	288.4	286.1	343.8	407.7
New York†	26,218	26,766	31,494	46,393	51,123	353.3	360.3	166.0	244.5	269.4
North Carolina	22,197	21,812	21,985	22,101	24,726	294.1	285.1	273.1	274.6	307.2
North Dakota	1,036	947	909	1,062	1,256	162.3	149.4	141.5	165.4	195.6
Ohio	27,786	29,398	31,190	37,653	38,032	247.9	261.2	274.7	331.7	335.0
Oklahoma	9,393	8,195	9,331	10,478	10,804	280.7	244.0	270.4	303.7	313.1
Oregon	5,855	6,127	7,107	7,454	7,009	178.4	184.8	207.7	217.9	204.9
Pennsylvania	24,629	27,019	26,475	28,371	31,791	205.2	225.3	215.6	231.0	258.9
Rhode Island	2,307	2,345	2,632	2,912	2,832	233.4	236.7	251.1	277.8	270.1
South Carolina	18,510	18,499	9,950	15,329	14,314	482.5	476.1	248.0	382.1	356.8
South Dakota	1,572	1,544	1,834	1,821	2,215	213.0	210.6	243.0	241.2	293.4
Tennessee	13,717	14,216	15,069	15,560	16,042	252.6	259.2	264.9	273.5	282.0
Texas	60,436	62,958	68,814	69,752	69,521	305.9	314.1	330.0	334.5	333.4
Utah	2,209	2,219	2,190	3,004	3,540	105.2	104.2	98.1	134.5	158.5
Vermont	413	485	526	638	954	69.9	81.7	86.4	104.8	156.7
Virginia	13,561	13,735	15,352	18,337	18,518	199.7	199.8	216.9	259.1	261.6
Washington	10,998	11,964	13,066	13,631	14,934	193.3	207.8	221.7	231.3	253.4
West Virginia	2,791	1,820	2,144	2,346	2,464	154.1	100.7	118.6	129.7	136.3
Wisconsin	13,999	14,462	16,365	16,284	17,000	268.0	275.4	305.1	303.6	316.9
Wyoming	725	787	807	839	944	150.8	164.1	163.4	169.9	191.2
U.S. TOTAL‡	614,250	662,647	709,452	783,242	834,555	236.7	253.0	252.1	278.3	296.5
Northeast	82,626	87,433	93,116	115,467	124,948	201.7	212.9	173.7	215.4	233.1
Midwest	143,523	153,626	168,332	184,111	200,022	228.2	242.9	261.4	285.9	310.6
South	256,122	275,860	286,136	307,405	317,211	268.4	286.0	285.5	306.7	316.5
West	131,979	145,728	161,868	176,259	192,374	219.0	238.3	256.1	278.9	304.4
Guam	410	497	525	431	550	256.5	303.9	339.1	278.4	355.3
Puerto Rico	1,685	1,445	2,695	2,748	2,999	43.7	37.2	70.8	72.2	78.7
Virgin Islands	10	136	131	131	207	9.1	120.5	120.6	120.6	190.6
OUTLYING AREAS	2,105	2,078	3,351	3,310	3,756	51.0	49.9	82.3	81.3	92.2
TOTAL	616,355	664,725	712,803	786,552	838,311	233.8	249.8	249.7	275.5	293.6

*The number of chlamydia cases occurring in the fourth quarter of 2000 for the State of Colorado was projected based on case counts from the first three quarters.

†New York City has been reporting chlamydia cases since 1984. The State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. The number of chlamydia cases reported from 1998–2000 by the state of New York may be incomplete and the rate for New York State is underestimated. See Appendix (Reporting of Chlamydia Cases).

‡Includes cases reported by Washington, D.C., and rates exclude population of states that did not report.

Table 5. Chlamydia — Women – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	9,197	11,524	13,746	13,375	13,988	406.2	507.1	597.5	581.4	608.0
Alaska	1,479	1,456	1,863	1,981	2,576	506.9	494.5	615.2	654.2	850.7
Arizona	9,015	9,497	10,008	11,193	11,665	382.0	393.4	389.5	435.6	454.0
Arkansas	3,850	4,618	5,015	5,949	5,817	293.4	350.3	366.4	434.6	425.0
California	59,747	66,334	72,178	76,261	81,218	365.6	400.4	424.7	448.7	477.8
Colorado*	6,979	8,172	8,748	9,894	10,422	348.5	399.5	409.7	463.4	488.1
Connecticut	5,828	6,053	6,238	6,260	7,738	345.8	358.3	355.2	356.4	440.6
Delaware	2,117	2,268	2,271	2,125	2,034	554.2	585.6	563.4	527.2	504.6
Florida	20,171	25,957	27,562	30,647	33,902	262.7	333.6	336.8	374.4	414.2
Georgia	21,156	24,685	24,067	27,905	27,494	539.2	617.6	578.6	670.9	661.0
Hawaii	2,209	2,557	2,757	3,053	3,445	371.4	430.9	457.3	506.4	571.4
Idaho	1,553	1,308	1,435	1,469	1,862	252.3	208.5	222.4	227.6	288.6
Illinois	26,112	28,758	31,771	33,124	34,154	423.1	462.9	501.2	522.5	538.8
Indiana	8,823	9,410	10,935	11,668	13,151	291.3	308.4	353.0	376.6	424.5
Iowa	4,077	4,208	4,480	4,295	4,680	277.6	285.8	300.5	288.1	313.9
Kansas	4,649	5,034	4,973	4,977	5,653	347.8	373.3	365.7	366.0	415.7
Kentucky	5,126	5,891	6,466	7,081	7,043	253.0	289.2	312.9	342.7	340.8
Louisiana	12,169	13,247	14,099	14,416	14,758	536.5	584.0	611.4	625.1	640.0
Maine	899	991	1,143	1,040	1,337	141.0	154.5	174.6	158.9	204.2
Maryland	11,093	11,351	12,099	12,863	13,851	420.2	427.0	441.8	469.7	505.8
Massachusetts	6,812	6,959	8,452	7,897	8,177	214.0	217.7	256.9	240.0	248.5
Michigan	18,769	18,869	20,905	24,550	25,129	372.4	372.6	412.7	484.7	496.1
Minnesota	5,119	5,469	5,856	6,010	7,352	213.5	225.8	235.8	242.0	296.0
Mississippi	9,185	9,953	11,005	10,258	10,274	640.9	690.3	748.1	697.3	698.4
Missouri	11,063	11,515	11,525	11,854	13,253	394.4	408.5	400.9	412.3	461.0
Montana	1,131	1,192	1,097	1,466	1,840	255.4	268.5	242.3	323.8	406.4
Nebraska	2,390	2,903	3,018	2,521	3,609	281.4	341.0	347.7	290.5	415.8
Nevada	2,820	2,500	3,124	3,586	4,365	328.8	281.5	318.7	365.8	445.3
New Hampshire	726	769	889	1,042	1,168	120.6	126.0	141.5	165.9	186.0
New Jersey	10,735	11,123	9,486	14,352	12,183	256.6	265.0	219.0	331.3	281.3
New Mexico	3,204	4,177	4,171	4,891	5,918	363.1	472.6	451.1	528.9	640.0
New York†	23,449	23,896	26,928	38,297	41,202	596.4	607.9	273.9	389.6	419.2
North Carolina	18,646	18,416	18,625	18,628	20,384	479.8	467.3	453.5	453.6	496.4
North Dakota	755	680	663	716	826	235.5	213.5	206.1	222.6	256.8
Ohio	23,248	23,380	25,105	29,521	29,558	401.4	402.0	429.8	505.4	506.1
Oklahoma	7,696	6,737	7,715	8,600	8,764	449.4	392.0	439.7	490.1	499.4
Oregon	4,307	4,462	5,192	5,442	5,033	259.3	265.8	301.0	315.5	291.8
Pennsylvania	20,878	22,470	21,389	22,521	23,546	335.0	360.8	336.8	354.6	370.7
Rhode Island	1,779	1,769	1,969	2,197	2,057	346.5	343.8	361.5	403.4	377.7
South Carolina	16,489	16,669	8,721	13,528	12,468	829.7	829.0	422.7	655.7	604.3
South Dakota	1,171	1,194	1,308	1,311	1,608	312.2	320.4	344.0	344.7	422.8
Tennessee	10,552	11,084	11,648	12,105	12,625	375.5	390.7	399.0	414.7	432.5
Texas	49,940	52,071	56,817	57,611	57,438	498.7	512.7	541.2	548.7	547.1
Utah	1,616	1,618	1,610	2,119	2,494	153.0	151.0	144.5	190.2	223.9
Vermont	357	414	432	523	746	118.9	137.3	139.1	168.4	240.3
Virginia	11,567	11,556	12,976	15,177	15,102	332.9	328.8	359.8	420.8	418.7
Washington	8,377	8,880	9,583	10,159	11,003	292.8	306.8	323.8	343.2	371.7
West Virginia	2,340	1,585	1,790	1,969	2,072	249.3	169.2	192.6	211.9	223.0
Wisconsin	10,846	11,225	12,352	12,045	12,296	408.2	420.4	455.0	443.7	453.0
Wyoming	595	649	667	679	755	248.8	271.9	271.8	276.7	307.7
U.S. TOTAL‡	505,533	539,894	569,658	623,958	652,858	380.8	403.1	397.3	435.2	455.4
Northeast	71,463	74,444	76,926	94,129	98,154	336.0	349.3	277.7	339.9	354.4
Midwest	117,022	122,645	132,891	142,592	151,269	362.9	378.3	404.7	434.2	460.7
South	214,016	230,003	237,408	255,044	260,839	436.5	464.2	463.9	498.3	509.7
West	103,032	112,802	122,433	132,193	142,596	341.1	368.2	386.8	417.6	450.5
Guam	351	432	430	347	463	467.3	562.1	568.6	458.8	612.2
Puerto Rico	1,327	1,147	2,226	2,313	2,665	66.1	56.7	112.7	117.1	134.9
Virgin Islands	10	113	108	116	188	17.4	219.1	190.3	204.4	331.3
OUTLYING AREAS	1,688	1,692	2,764	2,776	3,316	78.9	78.7	131.2	131.7	157.3
TOTAL	507,221	541,586	572,422	626,734	656,174	376.0	398.0	393.5	430.8	451.1

*The number of chlamydia cases occurring in the fourth quarter of 2000 for the State of Colorado was projected based on case counts from the first three quarters.

†New York City has been reporting chlamydia cases since 1984. The State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. The number of chlamydia cases reported from 1998–2000 by the state of New York may be incomplete and the rate for New York State is underestimated. See Appendix (Reporting of Chlamydia Cases).

‡Includes cases reported by Washington, D.C., and rates exclude population of states that did not report. Cases reported with unknown sex are not included in this table.

Table 6. Chlamydia — Men — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	844	795	1,432	1,124	1,579	40.4	37.9	66.7	52.4	73.6
Alaska	428	430	706	763	1,230	132.8	132.3	217.8	235.4	379.5
Arizona	2,474	2,614	2,583	3,153	3,308	107.1	110.6	100.9	123.1	129.2
Arkansas	267	1,247	1,204	1,325	1,486	21.8	101.1	92.3	101.6	113.9
California	16,525	18,236	22,759	24,930	28,400	101.2	110.0	134.9	147.7	168.3
Colorado*	2,115	2,666	3,251	3,328	3,604	107.5	132.6	150.1	153.6	166.4
Connecticut	1,149	1,369	1,366	1,445	2,070	72.3	85.9	82.8	87.6	125.5
Delaware	491	493	585	668	615	135.8	134.6	153.7	175.5	161.6
Florida	4,363	5,341	5,828	6,967	8,156	60.3	72.9	74.7	89.3	104.6
Georgia	3,932	5,462	5,102	5,926	6,363	105.7	144.1	126.7	147.2	158.0
Hawaii	395	583	777	977	1,076	66.0	98.5	127.7	160.5	176.8
Idaho	482	446	462	528	641	78.6	71.4	71.2	81.4	98.8
Illinois	6,749	7,642	8,578	10,588	13,942	114.9	129.2	141.1	174.1	229.3
Indiana	1,968	2,313	3,093	3,555	3,845	68.6	80.0	103.7	119.2	128.9
Iowa	1,096	1,302	1,505	1,401	1,505	78.6	93.2	104.8	97.6	104.8
Kansas	938	1,059	1,083	1,073	1,131	72.6	81.1	81.5	80.8	85.1
Kentucky	1,093	1,328	1,513	1,779	1,706	57.2	69.0	76.6	90.1	86.4
Louisiana	3,019	3,388	3,747	3,424	3,525	143.7	161.0	173.2	158.3	163.0
Maine	174	229	331	297	468	28.7	37.5	53.4	47.9	75.4
Maryland	1,973	2,196	2,379	2,777	3,029	79.1	87.4	93.0	108.6	118.4
Massachusetts	1,551	1,817	2,515	2,502	2,724	52.3	61.0	82.2	81.8	89.1
Michigan	3,387	4,237	5,331	6,540	7,143	70.9	88.3	109.4	134.2	146.6
Minnesota	1,851	1,981	2,246	2,313	2,755	79.5	84.2	92.2	95.0	113.1
Mississippi	1,355	1,450	1,647	1,535	1,526	102.7	109.3	119.9	111.8	111.1
Missouri	1,607	1,840	1,923	2,095	2,928	61.0	69.4	70.7	77.0	107.6
Montana	281	392	371	449	625	64.2	89.3	82.5	99.9	139.0
Nebraska	520	712	769	680	1,128	63.9	87.4	91.2	80.6	133.8
Nevada	498	586	893	1,239	1,558	56.0	63.6	87.7	121.7	153.0
New Hampshire	234	207	241	341	389	40.1	35.0	39.7	56.1	64.0
New Jersey	944	1,281	1,279	1,948	1,962	24.0	32.5	31.3	47.7	48.1
New Mexico	589	839	1,001	1,237	1,464	68.9	98.0	111.9	138.3	163.7
New York†	2,669	2,846	4,436	8,042	9,885	76.5	81.4	48.5	87.9	108.1
North Carolina	3,551	3,396	3,359	3,473	4,340	97.0	91.5	85.2	88.1	110.1
North Dakota	281	267	246	346	429	88.5	84.7	76.7	107.9	133.8
Ohio	4,211	5,604	5,819	7,603	7,926	77.7	103.0	105.6	137.9	143.8
Oklahoma	1,697	1,458	1,616	1,878	2,040	103.8	88.9	95.3	110.7	120.3
Oregon	1,548	1,665	1,915	2,012	1,976	95.5	101.7	112.9	118.6	116.5
Pennsylvania	3,751	4,549	5,086	5,850	8,244	65.0	78.9	85.8	98.7	139.0
Rhode Island	528	576	663	715	775	111.1	120.9	131.6	142.0	153.9
South Carolina	1,837	1,679	1,127	1,731	1,800	99.4	89.5	57.8	88.8	92.4
South Dakota	400	348	523	510	606	110.2	96.5	139.6	136.2	161.8
Tennessee	3,165	3,132	3,421	3,455	3,417	120.8	118.3	123.5	124.7	123.3
Texas	10,301	10,597	11,829	12,033	11,964	105.7	107.2	114.3	116.2	115.6
Utah	593	601	580	882	1,044	56.8	56.8	51.8	78.8	93.3
Vermont	56	71	94	115	208	19.3	24.3	31.5	38.5	69.7
Virginia	1,988	2,177	2,359	3,107	3,416	59.9	64.8	67.9	89.5	98.4
Washington	2,621	3,084	3,483	3,472	3,931	92.7	107.8	118.7	118.3	134.0
West Virginia	448	233	350	371	386	51.3	26.8	39.8	42.2	43.9
Wisconsin	3,144	3,212	4,006	4,191	4,669	122.5	124.5	151.2	158.2	176.3
Wyoming	130	138	140	160	189	53.8	57.3	56.4	64.4	76.1
U.S. TOTAL§	106,671	120,430	137,957	157,304	179,585	84.1	94.1	99.9	113.9	130.1
Northeast	11,056	12,945	16,011	21,255	26,725	56.1	65.5	61.8	82.1	103.2
Midwest	26,152	30,517	35,122	40,895	48,007	85.3	99.0	111.3	129.6	152.1
South	40,784	44,688	47,903	52,024	55,807	87.9	95.3	97.6	106.0	113.8
West	28,679	32,280	38,921	43,130	49,046	95.4	105.8	123.4	136.7	155.5
Guam	59	65	95	84	87	69.7	75.0	120.0	106.1	109.9
Puerto Rico	358	298	469	435	334	19.3	16.0	25.6	23.7	18.2
Virgin Islands	0	23	23	15	19	.	37.5	44.3	28.9	36.6
OUTLYING AREAS	417	386	587	534	440	21.5	19.2	29.9	27.2	22.4
TOTAL	107,088	120,816	138,544	157,838	180,025	83.2	92.9	98.9	112.7	128.6

*The number of chlamydia cases occurring in the fourth quarter of 2000 for the State of Colorado was projected based on case counts from the first three quarters.

†New York City has been reporting chlamydia cases since 1984. The State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. The number of chlamydia cases reported from 1998–2000 by the state of New York may be incomplete and the rate for New York State is underestimated. See Appendix (Reporting of Chlamydia Cases).

§Includes cases reported by Washington, D.C., and rates exclude population of states that did not report. Cases reported with unknown sex are not included in this table.

Table 7. Chlamydia — Reported cases and rates in selected cities of >200,000 population, ranked by rates: United States, 2002

<i>Rank*</i>	<i>City†</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Detroit, MI	11,374	1,195.7
2	Richmond, VA	2,108	1,065.8
3	Baltimore, MD	6,267	962.4
4	Philadelphia, PA	14,458	952.7
5	St Louis, MO	3,206	920.8
6	Milwaukee, WI	8,553	909.7
7	New Orleans, LA	4,340	895.4
8	Denver, CO	4,546	819.6
9	Chicago, IL	24,673	799.4
10	Indianapolis, IN	6,593	766.2
11	Minneapolis, MN	2,868	746.9
12	Kansas City, MO	3,348	740.9
13	Newark, NJ	2,092	695.5
14	Buffalo, NY§	2,217	688.2
15	Atlanta, GA	5,560	681.4
16	Rochester, NY§	1,625	657.7
17	Albuquerque, NM	3,531	634.3
18	St Paul, MN	1,798	631.7
19	Memphis, TN	5,548	618.2
20	Oklahoma City, OK	2,622	616.5
21	Washington, DC	3,305	577.7
22	Norfolk, VA	1,350	575.9
23	Boston, MA	3,320	555.1
24	Birmingham, AL	3,650	551.3
25	Toledo, OH	2,465	541.7
26	Cincinnati, OH	4,566	540.2
27	Jacksonville, FL	3,926	504.1
28	Omaha, NE	2,312	498.7
29	Tulsa, OK	1,885	478.1
30	Corpus Christi, TX	1,433	456.9
31	Austin, TX	3,678	452.8
32	Portland, OR	2,272	436.0
33	Honolulu, HI	3,801	433.8
34	Dallas, TX	9,561	430.9
35	San Francisco, CA	3,345	430.6
36	Columbus, OH	4,581	428.5
37	San Antonio, TX	5,777	414.7
38	New York City, NY	33,063	412.9
39	Charlotte, NC	2,778	399.5
40	Los Angeles, CA	35,544	398.9
41	Sacramento, CA	4,749	388.1
42	Nashville, TN	2,157	378.5
43	San Diego, CA	10,286	365.6
44	Wichita, KS	1,602	353.7
45	Cleveland, OH	4,924	353.2
46	Des Moines, IA	1,322	352.9
47	Houston, TX	11,768	346.1
48	Tampa, FL	3,407	341.1
49	El Paso, TX	2,287	336.5
50	Pittsburgh, PA	4,145	323.4
51	Oakland, CA	4,623	320.2
52	Phoenix, AZ	9,697	315.6
53	Louisville, KY	2,176	313.7
54	Dayton, OH	1,723	308.2
55	Tucson, AZ	2,580	305.8
56	Jersey City, NJ	678	281.9
57	Fort Worth, TX	4,005	276.9
58	San Jose, CA	4,360	259.1
59	Seattle, WA	4,469	257.3
60	St Petersburg, FL	2,294	248.9
61	Akron, OH	1,249	230.1
62	Yonkers, NY§	456	229.7
63	Miami, FL	4,711	209.1

*Excludes outlying areas (San Juan, PR with 1,058 cases and rate of 103.7).

†Cities were ranked in descending order by rate, number of cases, and alphabetically by state.

§New York City has been reporting chlamydia cases since 1984. The State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. The number of chlamydia cases reported from 1998-2000 by the state of New York (including the cities of Buffalo, Rochester and Yonkers) may be incomplete and the rate for New York State is underestimated. See Appendix (Reporting of Chlamydia Cases).

Table 8. Chlamydia — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	859	841	990	1,162	1,249	159.7	156.4	182.4	214.0	230.1
Albuquerque, NM	1,715	1,674	2,368	3,139	3,531	326.1	319.8	425.4	563.9	634.3
Atlanta, GA	5,276	5,572	5,558	6,426	5,560	713.6	748.1	681.1	787.5	681.4
Austin, TX	3,030	2,795	3,113	3,317	3,678	426.4	384.4	383.2	408.4	452.8
Baltimore, MD	5,663	5,286	5,433	5,405	6,267	877.2	835.5	834.4	830.1	962.4
Birmingham, AL	2,476	2,209	3,601	2,957	3,650	375.4	336.0	543.9	446.6	551.3
Boston, MA	2,588	2,680	3,229	2,935	3,320	465.2	481.7	539.9	490.8	555.1
Buffalo, NY*	NR	NR	722	2,379	2,217	.	.	224.1	738.5	688.2
Charlotte, NC	1,695	1,669	1,873	1,936	2,778	268.7	257.4	269.3	278.4	399.5
Chicago, IL	17,023	18,125	19,792	22,420	24,673	571.5	608.1	641.3	726.4	799.4
Cincinnati, OH	4,840	3,801	4,715	4,594	4,566	571.2	452.3	557.8	543.5	540.2
Cleveland, OH	3,650	3,446	3,961	4,811	4,924	264.4	251.2	284.2	345.1	353.2
Columbus, OH	3,854	3,997	4,298	4,850	4,581	377.4	388.9	402.1	453.7	428.5
Corpus Christi, TX	1,220	1,158	1,525	1,458	1,433	385.7	367.1	486.2	464.9	456.9
Dallas, TX	8,893	9,355	9,976	10,249	9,561	433.6	453.7	449.6	461.9	430.9
Dayton, OH	929	1,256	1,176	2,066	1,723	166.4	222.0	210.4	369.5	308.2
Denver, CO	2,834	3,371	3,164	4,186	4,546	567.9	674.5	570.5	754.7	819.6
Des Moines, IA	743	922	1,075	1,122	1,322	206.5	252.8	287.0	299.5	352.9
Detroit, MI	7,351	7,753	9,989	11,552	11,374	583.3	618.6	1,050.1	1,214.4	1,195.7
El Paso, TX	1,697	1,898	2,225	2,356	2,287	241.4	270.4	327.4	346.7	336.5
Fort Worth, TX	4,089	3,752	4,214	4,142	4,005	301.7	271.4	291.4	286.4	276.9
Honolulu, HI	2,205	2,631	2,932	3,473	3,801	252.7	304.3	334.6	396.4	433.8
Houston, TX	11,561	10,511	12,213	11,289	11,768	360.6	323.4	359.1	332.0	346.1
Indianapolis, IN	4,584	4,641	5,506	6,611	6,593	563.6	572.3	639.9	768.3	766.2
Jacksonville, FL	1,913	2,703	3,501	3,551	3,926	260.0	366.0	449.5	455.9	504.1
Jersey City, NJ	678	724	624	893	678	308.1	331.6	259.4	371.2	281.9
Kansas City, MO	3,105	2,738	3,128	2,747	3,348	687.0	606.3	692.2	607.9	740.9
Los Angeles, CA	24,160	27,614	31,074	32,706	35,544	280.2	316.2	348.8	367.1	398.9
Louisville, KY	1,253	1,447	1,656	1,952	2,176	186.4	215.0	238.8	281.4	313.7
Memphis, TN	4,791	5,025	4,967	5,418	5,548	551.4	575.6	553.4	603.7	618.2
Miami, FL	3,486	4,010	3,032	3,800	4,711	162.0	184.3	134.6	168.6	209.1
Milwaukee, WI	7,758	7,641	9,018	8,224	8,553	850.9	843.1	959.2	874.7	909.7
Minneapolis, MN	2,555	2,584	2,652	2,614	2,868	700.9	705.7	690.7	680.8	746.9
Nashville, TN	1,981	2,202	2,403	2,086	2,157	371.0	415.4	421.7	366.0	378.5
New Orleans, LA	3,331	3,651	3,817	3,871	4,340	715.5	792.1	787.5	798.7	895.4
New York City, NY	26,218	26,766	26,170	29,649	33,063	353.3	360.3	326.8	370.2	412.9
Newark, NJ	1,725	1,881	1,567	2,408	2,092	606.6	664.1	521.0	800.6	695.5
Norfolk, VA	954	920	1,093	1,475	1,350	443.3	407.3	466.3	629.3	575.9
Oakland, CA	3,651	4,111	4,975	4,682	4,623	285.3	317.7	344.6	324.3	320.2
Oklahoma City, OK	2,008	1,768	2,060	2,444	2,622	492.6	431.3	484.3	574.6	616.5
Omaha, NE	1,410	1,808	1,935	1,719	2,312	317.7	405.1	417.4	370.8	498.7
Philadelphia, PA	11,763	12,660	13,584	13,628	14,458	819.0	893.1	895.1	898.0	952.7
Phoenix, AZ	7,549	7,660	7,987	8,953	9,697	271.1	267.7	260.0	291.4	315.6
Pittsburgh, PA	2,980	2,879	2,885	3,444	4,145	234.9	229.1	225.1	268.7	323.4
Portland, OR	2,128	2,018	2,306	2,355	2,272	427.4	403.9	442.5	451.9	436.0
Richmond, VA	1,619	1,972	2,230	2,082	2,108	833.8	1,039.5	1,127.5	1,052.6	1,065.8
Rochester, NY*	NR	NR	115	1,064	1,625	.	.	46.5	430.6	657.7
Sacramento, CA	4,005	4,469	4,599	4,442	4,749	350.0	377.3	375.9	363.1	388.1
San Antonio, TX	5,909	5,731	5,871	5,749	5,777	436.7	417.4	421.5	412.7	414.7
San Diego, CA	7,044	7,591	8,591	9,166	10,286	253.3	269.1	305.3	325.7	365.6
San Francisco, CA	2,616	2,718	3,093	3,030	3,345	350.8	364.0	398.2	390.1	430.6
San Jose, CA	3,349	3,428	3,908	4,118	4,360	204.1	208.1	232.3	244.7	259.1
Seattle, WA	3,486	3,949	4,495	4,295	4,469	210.7	237.2	258.8	247.3	257.3
St Louis, MO	2,921	3,090	2,711	3,195	3,206	860.8	925.3	778.6	917.6	920.8
St Paul, MN	1,233	1,349	1,639	1,506	1,798	455.8	498.1	575.8	529.1	631.7
St Petersburg, FL	1,692	1,760	1,834	1,884	2,294	192.7	200.3	199.0	204.5	248.9
Tampa, FL	2,240	2,757	2,714	2,535	3,407	242.1	293.1	271.7	253.8	341.1
Toledo, OH	780	1,043	1,646	2,244	2,465	173.9	233.6	361.7	493.1	541.7
Tucson, AZ	1,610	1,908	1,786	2,700	2,580	203.6	237.4	211.7	320.0	305.8
Tulsa, OK	1,782	1,636	1,770	1,720	1,885	468.4	426.3	448.9	436.2	478.1
Washington, DC	3,182	2,720	3,205	3,286	3,305	608.3	524.1	560.3	574.4	577.7
Wichita, KS	861	1,532	1,457	1,465	1,602	192.2	339.2	321.7	323.5	353.7
Yonkers, NY*	NR	NR	379	373	456	.	.	190.9	187.9	229.7
U.S. CITY TOTAL[†]	258,501	269,806	296,125	318,308	339,607	370.4	384.2	401.8	431.9	460.8
San Juan, PR	615	501	966	1,076	1,058	58.8	47.6	94.7	105.5	103.7
TOTAL	259,116	270,307	297,091	319,384	340,665	365.8	379.2	397.6	427.4	455.9

*New York City has been reporting chlamydia cases since 1984. The State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. The number of chlamydia cases reported from 1998–2000 by the state of New York (including the cities of Buffalo, Rochester and Yonkers) may be incomplete and the rate for New York State is underestimated. See Appendix (Reporting of Chlamydia Cases).

[†]Rates exclude population of cities that did not report. NR=No report

Table 9. Chlamydia — Women — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	697	653	769	916	963	249.1	233.1	273.2	325.5	342.2
Albuquerque, NM	1,437	1,401	1,815	2,368	2,788	532.6	521.4	637.3	831.5	979.0
Atlanta, GA	4,217	4,287	4,468	5,152	4,349	1,090.7	1,101.3	1,078.5	1,243.6	1,049.8
Austin, TX	2,463	2,367	2,432	2,633	2,923	689.4	647.6	613.6	664.3	737.4
Baltimore, MD	5,066	4,700	4,828	4,825	5,490	1,470.5	1,393.0	1,389.5	1,388.6	1,580.0
Birmingham, AL	2,352	2,086	2,792	2,524	2,833	668.6	595.2	797.8	721.2	809.5
Boston, MA	1,920	2,107	2,360	2,086	2,423	665.9	731.6	762.2	673.7	782.5
Buffalo, NY*	NR	NR	528	1,731	1,637	.	.	314.1	1,029.8	973.9
Charlotte, NC	1,395	1,373	1,498	1,484	2,179	426.3	408.0	423.2	419.2	615.5
Chicago, IL	13,424	14,377	15,631	16,756	16,589	867.6	928.2	982.0	1,052.6	1,042.1
Cincinnati, OH	4,122	3,211	3,938	3,740	3,711	923.7	724.9	890.3	845.5	839.0
Cleveland, OH	3,173	2,955	3,183	3,635	3,718	433.7	406.3	432.8	494.2	505.5
Columbus, OH	3,027	2,907	3,185	3,336	3,127	571.6	545.0	579.4	606.9	568.9
Corpus Christi, TX	1,031	999	1,292	1,233	1,210	634.1	615.9	806.7	769.8	755.5
Dallas, TX	6,699	7,143	7,726	8,083	7,529	642.4	681.6	695.6	727.7	677.9
Dayton, OH	729	834	863	1,595	1,244	250.2	282.2	296.9	548.7	427.9
Denver, CO	2,146	2,468	2,190	2,962	3,181	837.9	962.3	798.0	1,079.3	1,159.1
Des Moines, IA	581	660	789	814	968	309.6	347.1	409.1	422.1	501.9
Detroit, MI	6,491	6,343	7,716	9,137	8,976	978.8	961.0	1,534.0	1,816.6	1,784.6
El Paso, TX	1,421	1,599	1,881	1,936	1,966	387.8	435.6	534.6	550.2	558.8
Fort Worth, TX	3,278	2,933	3,317	3,277	3,179	477.7	419.6	454.2	448.8	435.3
Honolulu, HI	1,850	2,102	2,239	2,574	2,829	423.8	484.8	514.0	590.9	649.4
Houston, TX	9,912	8,740	10,222	9,473	9,777	612.8	533.4	598.9	555.0	572.9
Indianapolis, IN	3,472	3,481	3,896	4,552	4,633	814.3	818.2	876.6	1,024.2	1,042.4
Jacksonville, FL	1,368	2,091	2,809	2,865	2,984	359.9	546.9	700.3	714.3	744.0
Jersey City, NJ	657	681	605	818	618	577.2	603.0	494.2	668.2	504.8
Kansas City, MO	2,785	2,413	2,763	2,396	2,773	1,175.9	1,020.1	1,179.7	1,023.0	1,184.0
Los Angeles, CA	18,930	21,564	23,056	24,358	25,587	435.2	489.4	511.6	540.4	567.7
Louisville, KY	985	1,136	1,301	1,511	1,696	277.8	319.8	359.4	417.4	468.5
Memphis, TN	3,786	4,020	3,943	4,378	4,546	830.3	877.4	841.0	933.8	969.7
Miami, FL	2,799	3,282	2,449	3,079	3,804	248.6	288.0	210.3	264.4	326.7
Milwaukee, WI	6,219	6,076	7,077	6,308	6,323	1,298.3	1,271.8	1,445.5	1,288.4	1,291.5
Minneapolis, MN	1,762	1,756	1,759	1,716	1,907	938.6	931.3	902.4	880.4	978.3
Nashville, TN	1,426	1,628	1,758	1,537	1,604	507.9	584.4	597.9	522.7	545.5
New Orleans, LA	2,574	2,794	2,772	2,958	3,305	1,029.3	1,129.3	1,076.2	1,148.4	1,283.1
New York City, NY	23,449	23,896	22,663	25,118	27,177	596.4	607.9	537.8	596.1	644.9
Newark, NJ	1,632	1,684	1,330	2,117	1,724	1,090.5	1,130.3	843.4	1,342.4	1,093.2
Norfolk, VA	826	795	964	1,251	1,172	754.7	727.4	841.4	1,091.9	1,022.9
Oakland, CA	2,942	3,212	3,851	3,562	3,562	452.9	490.0	524.3	485.0	485.0
Oklahoma City, OK	1,585	1,449	1,686	1,941	2,007	747.8	680.5	770.0	886.4	916.5
Omaha, NE	1,139	1,437	1,516	1,346	1,738	495.6	622.2	640.1	568.3	733.8
Philadelphia, PA	10,182	10,479	10,724	10,833	10,308	1,321.5	1,377.2	1,320.0	1,333.4	1,268.8
Phoenix, AZ	5,653	5,787	6,195	6,841	7,509	401.2	399.9	403.4	445.5	489.0
Pittsburgh, PA	2,415	2,380	2,398	2,798	3,204	358.2	356.2	355.4	414.7	474.9
Portland, OR	1,453	1,379	1,597	1,651	1,527	571.4	540.5	606.7	627.3	580.1
Richmond, VA	1,452	1,713	1,900	1,752	1,723	1,360.3	1,643.0	1,797.2	1,657.2	1,629.7
Rochester, NY*	NR	NR	86	807	1,218	.	.	67.2	630.4	951.4
Sacramento, CA	3,069	3,452	3,391	3,279	3,583	526.0	571.9	542.8	524.9	573.6
San Antonio, TX	4,854	4,697	4,767	4,632	4,654	692.0	661.0	666.3	647.5	650.6
San Diego, CA	5,394	5,839	6,371	6,510	7,285	388.1	417.0	455.5	465.4	520.8
San Francisco, CA	1,541	1,541	1,819	1,723	1,827	409.3	408.9	476.3	451.2	478.4
San Jose, CA	2,594	2,636	2,948	3,017	3,150	318.7	322.6	355.3	363.7	379.7
Seattle, WA	2,430	2,654	3,006	2,905	2,994	289.5	314.5	344.5	332.9	343.1
St Louis, MO	2,630	2,736	2,362	2,787	2,665	1,430.9	1,512.5	1,279.4	1,509.6	1,443.5
St Paul, MN	897	972	1,154	1,098	1,318	635.4	687.3	782.6	744.6	893.8
St Petersburg, FL	1,391	1,446	1,511	1,522	1,844	299.0	310.9	313.1	315.4	382.2
Tampa, FL	1,851	2,380	2,319	2,112	2,774	389.7	492.8	454.5	414.0	543.7
Toledo, OH	630	815	1,348	1,801	1,944	269.0	349.4	570.5	762.2	822.7
Tucson, AZ	1,299	1,531	1,411	2,058	1,927	321.3	372.6	327.2	477.3	446.9
Tulsa, OK	1,467	1,331	1,485	1,406	1,561	744.0	670.1	731.4	692.4	768.8
Washington, DC	2,722	2,391	2,786	2,807	2,825	978.9	866.4	920.4	927.3	933.3
Wichita, KS	665	1,218	1,134	1,166	1,315	290.5	528.1	495.2	509.2	574.2
Yonkers, NY*	NR	NR	327	326	380	.	.	315.7	314.8	366.9
U.S. CITY TOTAL†	210,356	217,017	232,899	247,912	258,284	584.0	599.1	616.6	656.3	683.8
San Juan, PR	445	385	761	901	925	81.8	70.4	143.4	169.8	174.3
TOTAL	210,801	217,402	233,660	248,813	259,209	576.5	591.2	610.0	649.6	676.7

*New York City has been reporting chlamydia cases since 1984. The State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. The number of chlamydia cases reported from 1998–2000 by the state of New York (including the cities of Buffalo, Rochester and Yonkers) may be incomplete and the rate for New York State is underestimated. See Appendix (Reporting of Chlamydia Cases).

†Rates exclude population of cities that did not report. Cases reported with unknown sex are not included in this table. NR = No report

Table 10. Chlamydia — Men — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	161	183	216	243	271	62.4	71.0	82.6	92.9	103.6
Albuquerque, NM	278	272	521	654	723	108.5	106.8	191.6	240.5	265.9
Atlanta, GA	1,038	1,262	1,079	1,273	1,185	294.3	354.9	268.6	316.9	295.0
Austin, TX	564	428	676	683	751	159.6	118.4	162.5	164.2	180.6
Baltimore, MD	566	565	550	580	777	188.0	191.3	181.1	191.0	255.9
Birmingham, AL	123	117	700	433	815	40.0	38.1	224.3	138.7	261.1
Boston, MA	668	573	869	849	896	249.2	213.5	301.3	294.4	310.6
Buffalo, NY*	NR	NR	194	648	580	.	.	125.9	420.7	376.5
Charlotte, NC	300	296	375	452	599	98.8	94.9	109.8	132.4	175.4
Chicago, IL	3,599	3,744	4,160	5,660	8,084	251.4	261.5	278.4	378.7	540.9
Cincinnati, OH	688	552	748	818	820	171.5	138.9	185.6	203.0	203.5
Cleveland, OH	463	469	748	1,145	1,179	71.3	72.8	113.6	173.9	179.0
Columbus, OH	812	1,053	1,071	1,434	1,396	165.2	213.0	206.2	276.1	268.8
Corpus Christi, TX	188	158	233	225	223	122.3	103.1	151.8	146.6	145.3
Dallas, TX	2,156	2,156	2,151	2,105	2,001	213.9	212.6	194.1	189.9	180.6
Dayton, OH	198	415	302	460	475	74.1	153.5	112.5	171.4	177.0
Denver, CO	676	898	974	1,219	1,363	278.3	369.1	347.6	435.0	486.4
Des Moines, IA	162	262	286	307	351	94.1	150.1	157.4	168.9	193.1
Detroit, MI	860	1,410	2,273	2,415	2,398	144.0	237.6	507.0	538.7	534.9
El Paso, TX	273	296	343	420	320	81.1	88.4	104.6	128.1	97.6
Fort Worth, TX	763	778	888	858	813	114.0	113.8	124.0	119.8	113.5
Honolulu, HI	355	515	683	898	972	81.4	119.5	155.0	203.9	220.6
Houston, TX	1,648	1,634	1,971	1,804	1,981	103.7	101.4	116.4	106.5	117.0
Indianapolis, IN	1,112	1,157	1,604	2,045	1,909	287.3	300.1	385.6	491.6	458.9
Jacksonville, FL	544	612	692	686	942	153.0	171.8	183.2	181.6	249.4
Jersey City, NJ	21	43	19	72	58	19.8	40.8	16.1	60.9	49.1
Kansas City, MO	320	325	365	351	575	148.8	151.1	167.7	161.3	264.2
Los Angeles, CA	5,230	6,020	8,000	8,307	9,910	122.4	139.1	181.7	188.7	225.1
Louisville, KY	260	307	352	439	477	81.9	96.6	106.2	132.4	143.8
Memphis, TN	1,005	1,005	1,024	1,040	1,002	243.4	242.3	238.9	242.6	233.8
Miami, FL	685	717	583	721	907	66.7	69.2	53.5	66.2	83.3
Milwaukee, WI	1,532	1,556	1,935	1,881	2,210	354.1	363.1	429.5	417.5	490.5
Minneapolis, MN	793	828	893	898	961	448.5	466.2	472.4	475.0	508.3
Nashville, TN	555	574	645	549	553	219.2	228.3	233.8	199.0	200.5
New Orleans, LA	757	857	1,045	913	972	351.3	401.4	460.2	402.0	428.0
New York City, NY	2,669	2,846	3,377	4,477	5,850	76.5	81.4	89.0	118.0	154.2
Newark, NJ	93	194	234	291	366	69.0	144.5	163.5	203.4	255.8
Norfolk, VA	128	125	129	222	178	121.0	107.2	107.7	185.3	148.5
Oakland, CA	698	759	1,075	1,080	1,050	110.7	118.9	151.6	152.3	148.0
Oklahoma City, OK	423	319	374	503	615	216.2	161.9	181.2	243.8	298.0
Omaha, NE	270	370	416	373	569	126.2	171.8	183.5	164.5	251.0
Philadelphia, PA	1,581	2,181	2,860	2,795	4,150	237.5	332.1	405.6	396.4	588.6
Phoenix, AZ	1,896	1,873	1,792	2,112	2,188	137.9	132.4	116.6	137.5	142.4
Pittsburgh, PA	565	499	487	646	941	95.1	84.8	80.2	106.4	155.0
Portland, OR	675	639	709	704	745	277.1	261.4	274.9	273.0	288.9
Richmond, VA	167	259	329	329	385	191.0	303.1	357.3	357.3	418.2
Rochester, NY*	NR	NR	29	257	407	.	.	24.4	215.9	341.9
Sacramento, CA	907	987	1,171	1,101	1,137	161.7	169.9	195.6	183.9	189.9
San Antonio, TX	1,048	1,032	1,096	1,110	1,121	160.8	155.8	161.8	163.8	165.5
San Diego, CA	1,583	1,704	2,072	2,232	2,641	113.8	119.9	146.4	157.7	186.6
San Francisco, CA	1,075	1,177	1,274	1,307	1,499	291.1	318.2	322.7	331.0	379.7
San Jose, CA	717	761	937	1,065	1,155	86.7	91.6	109.9	124.9	135.4
Seattle, WA	1,056	1,295	1,489	1,390	1,475	129.5	157.7	172.2	160.8	170.6
St Louis, MO	291	354	349	408	541	187.1	231.3	213.4	249.4	330.8
St Paul, MN	336	377	485	408	480	259.8	291.3	353.5	297.4	349.9
St Petersburg, FL	294	314	323	362	450	71.2	76.0	73.6	82.5	102.5
Tampa, FL	353	377	395	423	633	78.4	82.4	80.8	86.5	129.5
Toledo, OH	144	222	288	430	509	67.2	104.1	131.6	196.6	232.7
Tucson, AZ	311	377	375	642	653	80.5	96.0	90.9	155.6	158.3
Tulsa, OK	315	305	285	314	324	171.8	164.7	149.0	164.2	169.4
Washington, DC	460	316	405	451	459	187.7	130.0	150.4	167.4	170.4
Wichita, KS	196	314	323	299	287	89.5	142.1	144.3	133.6	128.2
Yonkers, NY*	NR	NR	52	47	76	.	.	54.8	49.5	80.0
U.S. CITY TOTAL†	47,604	52,013	62,298	69,263	80,333	141.0	153.0	173.4	192.8	223.6
San Juan, PR	170	116	205	175	133	33.8	23.0	41.9	35.7	27.2
TOTAL	47,774	52,129	62,503	69,438	80,466	139.4	151.1	171.6	190.7	220.9

*New York City has been reporting chlamydia cases since 1984. The State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. The number of chlamydia cases reported from 1998–2000 by the state of New York (including the cities of Buffalo, Rochester and Yonkers) may be incomplete and the rate for New York State is underestimated. See Appendix (Reporting of Chlamydia Cases).

†Rates exclude population of cities that did not report. Cases reported with unknown sex are not included in this table. NR = No report

Table 11. Chlamydia — Reported cases and rates per 100,000 population by age and sex: United States, 1998–2002

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
1998	10-14	14,011	713	13,298	72.8	7.2	141.7
	15-19	247,339	28,545	218,794	1,265.9	284.2	2,304.6
	20-24	204,567	37,123	167,444	1,157.4	412.7	1,929.5
	25-29	79,872	18,831	61,041	429.7	203.6	653.5
	30-34	31,830	9,131	22,700	157.7	91.2	223.0
	35-39	15,622	5,132	10,490	69.0	45.6	92.3
	40-44	6,630	2,408	4,221	30.3	22.2	38.2
	45-54	4,114	1,654	2,459	11.9	9.8	13.9
	55-64	907	396	512	4.0	3.7	4.3
	65+	1,228	294	935	3.6	2.1	4.6
	TOTAL	608,490	104,912	503,578	225.1	79.5	364.2
1999	10-14	13,870	824	13,046	71.0	8.2	136.8
	15-19	259,742	32,366	227,376	1,315.3	318.8	2,369.3
	20-24	228,069	43,011	185,058	1,265.3	468.4	2,092.8
	25-29	88,114	21,548	66,566	483.9	238.0	727.2
	30-34	35,248	10,289	24,959	178.7	105.3	250.7
	35-39	17,269	5,957	11,312	76.6	53.1	99.9
	40-44	7,606	2,987	4,619	34.2	27.1	41.1
	45-54	4,661	2,036	2,625	13.0	11.6	14.3
	55-64	1,006	480	526	4.3	4.3	4.3
	65+	915	302	613	2.6	2.1	3.0
	TOTAL	658,711	120,468	538,243	241.6	90.4	386.1
2000	10-14	14,468	931	13,537	70.5	8.9	135.3
	15-19	266,583	35,415	231,167	1,318.4	340.8	2,351.9
	20-24	249,360	50,103	199,257	1,314.9	517.2	2,148.0
	25-29	94,263	24,507	69,756	486.4	250.1	727.9
	30-34	39,509	12,216	27,292	192.6	118.4	267.9
	35-39	18,935	6,791	12,144	83.4	60.0	106.6
	40-44	8,442	3,318	5,123	37.6	29.8	45.3
	45-54	5,601	2,499	3,102	14.9	13.5	16.2
	55-64	1,110	494	617	4.6	4.2	4.9
	65+	997	339	658	2.8	2.4	3.2
	TOTAL	701,339	137,233	564,106	249.2	99.4	393.5
2001	10-14	15,031	1,042	13,989	73.2	9.9	139.8
	15-19	288,333	39,064	249,269	1,426.0	375.9	2,536.1
	20-24	285,589	58,597	226,992	1,506.0	604.9	2,447.0
	25-29	106,914	27,896	79,018	551.6	284.7	824.6
	30-34	45,255	14,493	30,763	220.6	140.4	301.9
	35-39	21,516	7,953	13,563	94.8	70.3	119.1
	40-44	9,940	4,124	5,816	44.3	37.1	51.4
	45-54	6,415	2,943	3,472	17.0	15.9	18.1
	55-64	1,282	638	644	5.3	5.5	5.1
	65+	919	313	606	2.6	2.2	2.9
	TOTAL	783,127	157,623	625,504	278.3	114.2	436.3
2002	10-14	15,294	1,076	14,218	74.5	10.2	142.1
	15-19	299,863	42,433	257,429	1,483.0	408.4	2,619.1
	20-24	305,400	66,991	238,408	1,610.4	691.5	2,570.1
	25-29	116,422	32,497	83,925	600.7	331.6	875.8
	30-34	50,339	16,847	33,492	245.4	163.2	328.7
	35-39	23,411	9,298	14,113	103.1	82.1	123.9
	40-44	11,405	5,122	6,283	50.8	46.0	55.5
	45-54	7,644	3,652	3,992	20.3	19.7	20.8
	55-64	1,451	746	705	6.0	6.4	5.6
	65+	812	296	516	2.3	2.1	2.5
	TOTAL	834,503	180,039	654,464	296.5	130.4	456.5

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 forms and above listed exclusions. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

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Table 12A. Chlamydia — Reported cases by age, sex, and race/ethnicity: United States, 1998–2002

Age	Total			White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Asian/Pacific Islander			American Indian/ Alaska Native			
	Group	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1998	10-14	11,223	617	10,605	2,967	90	2,878	6,188	376	5,812	1,641	128	1,513	137	11	127	289	13	276
	15-19	199,119	24,352	174,767	63,688	5,206	58,482	97,844	13,952	83,892	30,569	4,380	26,189	3,010	361	2,649	4,008	453	3,555
	20-24	164,920	31,692	133,228	50,696	8,197	42,499	77,651	16,481	61,170	30,193	6,008	24,185	3,107	524	2,583	3,273	483	2,790
	25-29	64,316	15,979	48,337	17,503	3,936	13,567	29,671	8,363	21,308	14,137	3,154	10,983	1,627	334	1,293	1,378	191	1,187
	30-34	25,578	7,711	17,867	6,611	2,025	4,586	11,540	3,961	7,578	5,964	1,484	4,480	740	152	588	723	88	635
	35-39	12,564	4,367	8,197	3,370	1,075	2,295	5,784	2,377	3,407	2,598	710	1,888	433	124	309	380	81	298
	40-44	5,297	2,029	3,268	1,521	570	952	2,421	1,135	1,286	974	247	727	201	41	160	179	36	143
	45-54	3,172	1,340	1,832	996	430	566	1,405	725	680	534	135	399	111	37	74	126	13	113
	55-64	661	305	356	171	82	89	320	174	147	116	34	82	29	9	20	24	6	18
	65+	1,032	246	786	299	86	213	550	119	430	147	36	111	22	5	17	15	0	15
TOTAL	489,760	89,183	400,577	148,314	21,851	126,463	234,279	47,912	186,367	87,276	16,438	70,838	9,448	1,606	7,843	10,443	1,377	9,065	
1999	10-14	12,553	752	11,801	3,180	114	3,066	7,050	449	6,601	1,885	163	1,721	159	12	147	279	13	266
	15-19	232,381	29,730	202,651	72,649	6,302	66,347	116,293	17,281	99,012	35,455	5,184	30,271	3,601	447	3,154	4,382	516	3,867
	20-24	201,730	39,032	162,698	61,460	10,419	51,041	96,754	20,598	76,156	36,102	6,894	29,207	3,879	629	3,250	3,536	492	3,044
	25-29	77,066	19,369	57,697	20,236	4,671	15,565	36,134	10,266	25,868	17,025	3,704	13,321	2,084	473	1,611	1,587	256	1,331
	30-34	30,339	9,169	21,170	7,427	2,256	5,170	13,979	4,832	9,147	7,316	1,741	5,575	929	205	724	688	135	553
	35-39	14,823	5,311	9,511	3,926	1,397	2,528	6,773	2,887	3,886	3,264	823	2,441	470	121	349	389	83	307
	40-44	6,458	2,683	3,775	1,834	776	1,058	2,917	1,448	1,468	1,262	341	921	246	77	169	200	41	159
	45-54	3,948	1,804	2,144	1,098	517	580	1,746	969	777	787	228	560	171	60	110	146	30	116
	55-64	818	416	402	239	152	87	373	194	179	129	44	85	42	11	31	34	15	20
	65+	775	264	511	255	98	157	300	104	196	113	24	88	28	15	13	80	23	57
TOTAL	582,845	109,127	473,718	172,815	26,857	145,958	283,370	59,335	224,035	103,667	19,264	84,403	11,648	2,063	9,585	11,345	1,609	9,736	
2000	10-14	13,081	865	12,216	3,140	110	3,031	7,428	536	6,892	2,044	194	1,850	180	13	167	288	12	276
	15-19	240,404	32,329	208,075	74,657	6,965	67,691	117,722	18,296	99,426	39,526	5,986	33,540	3,865	484	3,381	4,634	597	4,037
	20-24	224,162	45,293	178,869	67,922	12,108	55,814	104,067	22,997	81,070	43,525	8,741	34,785	4,379	820	3,559	4,268	627	3,641
	25-29	83,755	21,967	61,788	21,679	5,274	16,406	37,556	11,151	26,404	20,619	4,694	15,925	2,117	535	1,582	1,784	313	1,470
	30-34	34,614	10,831	23,783	8,389	2,523	5,867	15,044	5,620	9,424	9,168	2,237	6,931	1,141	270	871	872	181	690
	35-39	16,584	6,027	10,557	4,249	1,621	2,628	7,423	3,105	4,318	3,782	1,024	2,758	633	172	461	497	105	393
	40-44	7,398	2,992	4,407	2,090	862	1,228	3,234	1,512	1,723	1,544	468	1,076	283	93	190	247	57	189
	45-54	4,833	2,235	2,598	1,385	689	696	2,068	1,140	927	968	279	689	231	86	145	183	41	141
	55-64	937	442	495	313	167	146	372	193	178	153	46	107	54	22	32	45	14	31
	65+	855	307	549	295	114	181	378	131	247	137	39	99	31	21	10	14	2	12
TOTAL	628,449	123,826	504,623	184,555	30,554	154,001	296,248	64,943	231,306	121,849	23,840	98,009	12,932	2,522	10,410	12,865	1,967	10,898	
2001	10-14	13,028	889	12,139	3,203	122	3,081	7,271	523	6,748	2,176	225	1,951	134	7	127	245	12	233
	15-19	254,176	34,931	219,244	79,923	7,591	72,331	122,896	19,374	103,522	42,630	6,852	35,778	3,907	514	3,393	4,820	601	4,220
	20-24	252,425	52,857	199,568	79,134	14,649	64,485	115,191	26,365	88,827	49,029	10,255	38,774	4,815	905	3,910	4,255	683	3,572
	25-29	93,776	25,080	68,696	24,529	6,214	18,315	41,444	12,463	28,981	23,461	5,493	17,968	2,364	536	1,828	1,978	373	1,605
	30-34	39,053	12,830	26,224	9,779	3,137	6,642	16,909	6,553	10,356	10,347	2,698	7,649	1,140	291	848	878	150	728
	35-39	18,453	6,995	11,458	4,814	1,909	2,905	8,034	3,577	4,457	4,478	1,193	3,285	639	213	426	488	102	385
	40-44	8,531	3,640	4,891	2,369	1,057	1,311	3,795	1,904	1,892	1,833	536	1,297	286	85	202	247	59	189
	45-54	5,479	2,594	2,884	1,631	831	800	2,492	1,352	1,140	962	299	663	209	61	149	184	52	132
	55-64	1,088	569	519	371	191	179	479	291	188	169	62	107	44	17	28	24	8	17
	65+	748	272	476	199	63	136	371	149	222	143	43	100	29	13	16	6	4	2
TOTAL	688,385	141,138	547,247	206,348	35,882	170,467	319,667	72,769	246,898	135,617	27,792	107,824	13,590	2,646	10,943	13,164	2,049	11,115	
2002	10-14	14,353	1,013	13,340	3,349	94	3,255	8,245	665	7,580	2,308	234	2,074	160	6	153	291	13	278
	15-19	282,397	40,149	242,248	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	288,860	63,745	225,115	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	110,092	30,848	79,244	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	47,628	16,008	31,620	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	22,133	8,809	13,324	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	10,841	4,868	5,973	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	7,257	3,477	3,780	2,129	1,165	964	3,142	1,690	1,452	1,404	435	970	384	130	253	198	57	141
	55-64	1,378	712	666	410	282	128	580	309	271	269	88	182	82	23	59	36	10	26
	65+	773	282	492	226	68	158	376	166	210	141	37	104	20	7	13	10	4	7
TOTAL	788,067	170,948	617,119	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	

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. 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 were excluded: 1998 (CO, DC, MI, NJ, NY, OH, SC); 1999 (CO, DC, MI, NJ, NY); 2000 (CO, DC, MI, NY); 2001 (CO, DC, MD, NJ, NY); 2002 (MI, NJ). Cases and population denominators have been excluded for these states/areas. Differences between total cases from this table and others in the report are due to different reporting forms and above listed exclusions. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 12B. Chlamydia — Rates per 100,000 population by age, sex, and race/ethnicity: United States, 1998–2002

Age Group	Total			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	Total	Male	Female
10-14	73.0	7.8	141.4	29.2	1.7	58.3	284.6	34.1	542.8	73.0	11.1	137.8	22.3	3.4	42.2	154.4	13.9	299.2
15-19	1,271.2	302.0	2,299.3	615.8	97.7	1,166.4	4,406.3	1,235.1	7,690.1	1,320.8	362.6	2,366.4	492.1	116.5	877.4	2,284.4	515.9	4,059.1
20-24	1,163.9	438.0	1,921.5	545.0	172.0	937.0	4,046.3	1,733.8	6,316.1	1,356.8	518.2	2,268.7	534.9	181.4	884.6	2,291.4	673.5	3,921.0
25-29	434.5	216.3	651.9	176.3	79.2	273.5	1,582.1	933.2	2,175.9	654.2	279.9	1,062.4	233.8	103.4	347.2	960.0	260.7	1,690.2
30-34	160.1	97.1	222.3	60.3	37.0	83.5	592.2	434.2	731.3	267.5	127.4	420.7	104.7	46.2	155.5	537.5	131.5	942.7
35-39	70.1	48.9	91.2	26.1	16.6	35.7	278.7	244.2	309.1	124.5	65.7	187.7	61.0	36.8	83.1	270.3	117.5	419.2
40-44	30.6	23.6	37.5	11.8	8.8	14.8	125.1	125.1	125.2	56.6	28.2	86.1	30.0	13.1	45.1	136.8	56.5	212.0
45-54	11.6	10.0	13.2	4.7	4.1	5.3	52.9	59.8	47.1	23.7	12.2	34.8	11.2	8.1	13.8	64.9	13.9	111.9
55-64	3.7	3.6	3.8	1.2	1.2	1.2	20.1	25.1	16.3	9.0	5.6	12.0	5.1	3.5	6.5	21.0	11.3	29.5
65+	3.8	2.2	4.9	1.3	0.9	1.6	27.2	15.0	35.1	10.1	5.7	13.3	3.5	1.9	4.7	11.2	0.0	19.4
TOTAL	228.2	84.8	365.7	96.0	28.9	160.4	948.0	407.8	1,437.4	342.1	127.3	562.3	116.7	41.4	185.9	573.4	153.9	978.8
10-14	75.1	8.8	144.8	28.8	2.0	57.0	286.7	36.0	545.4	79.8	13.5	149.0	24.7	3.6	47.0	144.3	13.3	279.4
15-19	1,369.2	340.6	2,458.7	644.2	108.5	1,212.9	4,738.9	1,384.9	8,208.9	1,470.3	412.6	2,620.8	556.8	136.8	986.3	2,406.1	565.6	4,250.4
20-24	1,302.9	494.0	2,145.9	599.7	198.5	1,020.8	4,490.2	1,933.7	6,989.5	1,548.2	567.3	2,616.0	647.4	211.3	1,077.5	2,378.2	660.2	4,104.4
25-29	495.8	250.2	739.6	194.1	89.5	298.9	1,759.3	1,046.3	2,411.5	768.7	324.0	1,243.0	296.1	144.5	427.7	1,083.2	343.3	1,847.7
30-34	181.9	110.8	251.8	64.8	39.5	89.9	672.1	496.5	826.7	322.1	147.2	512.1	126.8	60.5	184.0	507.6	198.2	820.5
35-39	77.7	55.9	99.3	28.6	20.3	36.9	297.2	270.3	320.9	148.9	72.6	230.6	63.5	34.4	89.8	273.0	117.0	426.7
40-44	34.2	28.6	39.8	13.1	11.0	15.1	133.7	141.7	126.7	69.0	36.6	102.6	34.9	23.3	45.3	148.0	62.7	228.8
45-54	13.0	12.2	13.9	4.7	4.4	4.9	56.6	68.9	46.3	32.5	19.1	45.5	15.8	12.1	19.1	71.4	30.6	109.1
55-64	4.1	4.4	3.9	1.5	2.0	1.1	20.6	24.7	17.5	9.4	6.8	11.6	7.0	4.1	9.6	28.3	25.5	30.7
65+	2.6	2.2	3.0	1.0	1.0	1.1	13.3	11.6	14.3	7.3	3.7	10.0	4.3	5.5	3.4	58.8	39.3	73.0
TOTAL	251.3	96.1	400.1	103.3	32.8	171.0	1,030.7	454.4	1,552.1	387.8	142.6	638.4	137.2	50.8	216.5	605.2	174.6	1,021.4
10-14	72.2	9.3	138.4	26.9	1.8	53.3	272.9	38.8	514.0	72.3	13.4	133.9	27.0	3.8	51.5	144.2	11.5	282.5
15-19	1,345.5	352.1	2,395.9	645.6	117.8	1,197.9	4,600.0	1,413.3	7,862.0	1,394.6	396.1	2,535.2	535.2	131.6	954.4	2,465.4	622.6	4,385.4
20-24	1,340.9	529.5	2,191.0	648.1	228.3	1,078.2	4,563.3	2,067.8	6,938.5	1,432.2	521.0	2,555.1	573.3	214.4	933.4	2,766.8	800.6	4,791.8
25-29	491.6	254.6	734.9	201.1	97.1	306.9	1,713.9	1,066.5	2,304.6	683.4	287.4	1,150.6	233.7	119.9	344.1	1,237.6	434.0	2,043.8
30-34	192.6	119.6	266.8	70.3	42.0	98.9	671.2	527.9	800.9	330.8	150.6	539.0	130.9	63.7	194.6	604.8	252.7	954.0
35-39	83.2	60.6	105.6	30.3	23.1	37.5	305.3	271.1	335.9	151.4	78.2	232.1	75.5	42.6	106.1	310.2	134.0	477.4
40-44	37.5	30.6	44.4	14.5	12.0	17.0	138.8	137.9	139.6	76.0	44.8	109.0	36.3	25.4	46.0	161.2	77.8	238.2
45-54	14.6	13.8	15.4	5.5	5.5	5.4	59.2	70.3	49.6	35.4	20.5	50.1	18.2	14.7	21.2	76.7	35.8	115.0
55-64	4.4	4.3	4.5	1.8	2.0	1.7	18.7	21.6	16.3	10.4	6.6	13.7	7.6	6.6	8.5	33.2	21.8	43.9
65+	2.8	2.4	3.0	1.1	1.1	1.2	15.9	14.4	16.8	9.0	6.0	11.3	4.2	6.8	2.2	12.0	4.2	17.8
TOTAL	253.8	101.8	400.4	105.6	35.7	172.5	991.8	456.3	1,479.2	388.9	147.4	646.5	134.8	54.4	209.8	645.5	199.8	1,080.6
10-14	72.9	9.7	139.3	27.5	2.0	54.4	276.7	39.2	521.4	79.1	16.0	145.2	21.1	2.0	41.2	120.7	11.5	234.6
15-19	1,435.5	383.9	2,547.2	689.0	128.0	1,275.9	4,975.3	1,550.2	8,482.9	1,547.1	466.3	2,782.4	567.1	146.4	1,003.3	2,522.4	615.9	4,508.8
20-24	1,523.6	623.5	2,466.9	751.7	275.0	1,240.0	5,223.1	2,449.3	7,867.6	1,664.4	630.3	2,940.6	658.1	246.7	1,071.9	2,714.0	859.0	4,621.5
25-29	558.1	294.4	829.1	227.9	114.4	343.4	1,959.8	1,233.5	2,624.4	803.9	347.6	1,342.9	274.6	126.4	418.5	1,349.4	508.0	2,193.9
30-34	221.6	144.3	300.3	82.5	52.5	112.9	792.9	645.6	926.7	387.8	188.4	618.8	138.8	72.9	201.3	598.5	204.9	989.3
35-39	94.5	71.7	117.1	34.7	27.5	41.9	349.0	329.4	366.5	186.8	94.8	288.4	81.5	56.5	104.7	299.7	129.1	461.7
40-44	44.1	37.9	50.2	16.6	14.8	18.3	170.7	181.8	160.9	93.9	53.3	137.0	39.3	24.9	52.1	159.4	78.7	234.1
45-54	16.8	16.2	17.5	6.5	6.7	6.3	74.6	86.8	64.0	36.6	22.8	50.3	17.6	11.1	23.1	76.1	44.3	106.0
55-64	5.2	5.6	4.8	2.2	2.3	2.1	25.4	34.3	18.1	12.0	9.3	14.4	6.6	5.4	7.7	17.8	11.5	23.6
65+	2.5	2.2	2.7	0.8	0.6	0.9	16.2	16.9	15.7	9.8	6.9	11.9	4.0	4.3	3.8	5.0	7.3	3.3
TOTAL	282.3	117.8	441.2	118.7	42.2	192.3	1,114.5	531.8	1,646.1	447.4	177.5	735.9	149.9	60.5	233.3	650.8	205.0	1,086.1
10-14	74.8	10.3	142.6	27.2	1.5	54.4	282.9	44.9	527.8	75.8	15.1	139.4	22.5	1.8	44.5	141.2	12.3	275.8
15-19	1,488.3	411.7	2,626.4	713.2	135.3	1,318.3	5,032.2	1,651.7	8,488.6	1,578.6	468.6	2,842.7	507.6	121.5	908.9	2,659.6	705.1	4,696.4
20-24	1,619.2	699.1	2,581.2	819.2	319.0	1,331.4	5,321.1	2,636.3	7,867.0	1,726.2	687.7	2,996.0	697.1	272.3	1,122.2	3,180.9	1,044.3	5,380.3
25-29	605.5	335.4	882.1	257.3	134.9	381.6	2,036.7	1,351.3	2,657.9	850.6	388.5	1,392.0	297.3	146.6	443.2	1,451.3	578.6	2,326.7
30-34	248.6	165.9	332.5	93.7	62.4	125.5	845.5	708.6	968.8	422.4	203.9	673.0	172.7	97.6	243.8	711.0	286.1	1,132.6
35-39	104.4	83.4	125.4	38.7	33.8	43.6	360.0	350.8	368.2	205.7	114.2	305.7	92.5	51.4	130.8	344.1	179.9	500.3
40-44	51.8	46.9	56.6	19.0	18.7	19.3	192.2	212.4	174.2	106.7	65.7	149.7	53.2	28.8	74.9	209.0	116.3	294.9
45-54	20.6	20.1	21.1	8.0	8.8	7.1	83.3	96.7	71.6	46.9	29.3	64.1	28.1	20.7	34.5	80.0	47.3	110.6
55-64	6.1	6.5	5.6	2.3	3.2	1.4	26.6	31.8	22.4	16.5	11.4	21.0	10.7	6.3	14.5	25.6	14.5	36.0
65+	2.4	2.1	2.6	0.8	0.6	1.0	14.4	16.8	13.0	8.5	5.3	10.8	2.5	2.2	2.8	8.3	7.0	9.3
TOTAL	299.6	132.4	460.6	127.2	48.6	202.5	1,132.5	573.7	1,638.3	465.0	192.0	754.3	157.8	66.1	243.7	724.9	248.6	1,190.0

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. 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 were excluded: 1998 (CO, DC, MI, NJ, NY, OH, SC); 1999 (CO, DC, MI, NJ, NY); 2000 (CO, DC, MI, NY); 2001 (CO, DC, MD, NJ, NY); 2002 (MI, NJ). Cases and population denominators have been excluded for these states/areas. Differences between total rates from this table and others in the report are due to different reporting forms and above listed exclusions. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 13. Gonorrhea — Reported cases and rates by state/area, ranked by rates: United States, 2002

<i>Rank*</i>	<i>State/Area</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Louisiana	11,387	254.8
2	Mississippi	6,875	241.7
3	South Carolina	9,152	228.1
4	Alabama	10,118	227.5
5	Georgia	18,383	224.6
6	Delaware	1,576	201.1
7	Ohio	22,008	193.8
8	Illinois	24,026	193.5
9	North Carolina	15,531	192.9
10	Maryland	9,355	176.6
11	Arkansas	4,584	171.5
12	Tennessee	9,348	164.3
13	Missouri	8,952	160.0
14	Michigan	14,770	148.6
15	Virginia	10,462	147.8
16	Oklahoma	4,661	135.1
17	Florida	21,348	133.6
18	Texas	26,988	129.4
	U.S. TOTAL[†]	351,852	125.0
19	Indiana	7,395	121.6
20	Wisconsin	6,341	118.2
21	New York	21,841	115.1
22	Pennsylvania	13,294	108.2
23	Alaska	641	102.2
24	Kansas	2,744	102.1
25	Nevada	1,988	99.5
26	Connecticut	3,241	95.2
27	New Jersey	7,894	93.8
28	Kentucky	3,772	93.3
29	Nebraska	1,564	91.4
30	Rhode Island	900	85.9
31	Colorado	3,511	81.6
32	New Mexico	1,462	80.4
33	Arizona	3,795	74.0
34	California	24,606	72.6
35	Minnesota	3,049	62.0
36	Hawaii	740	61.1
37	West Virginia	974	53.9
38	Massachusetts	3,242	51.1
39	Iowa	1,480	50.6
40	Washington	2,925	49.6
41	South Dakota	263	34.8
42	Oregon	909	26.6
	YEAR 2010 OBJECTIVE		19.0
43	Utah	374	16.7
44	Vermont	98	16.1
45	Montana	123	13.6
46	Wyoming	65	13.2
47	North Dakota	72	11.2
48	Maine	142	11.1
49	New Hampshire	120	9.7
50	Idaho	94	7.3

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

[†]Total includes cases reported by Washington, D.C., but excludes outlying areas (Guam with 49 cases and rate of 31.7, Puerto Rico with 411 cases and rate of 10.8, and Virgin Islands with 49 cases and rate of 45.1).

Table 14. Gonorrhea — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	12,737	10,888	12,063	11,182	10,118	292.7	249.2	271.3	251.4	227.5
Alaska	331	302	361	457	641	53.9	48.7	57.6	72.9	102.2
Arizona	4,213	4,293	4,130	3,920	3,795	90.2	89.8	80.5	76.4	74.0
Arkansas	3,953	3,226	3,642	4,604	4,584	155.7	126.4	136.2	172.2	171.5
California	19,590	18,672	21,619	23,296	24,606	60.0	56.3	63.8	68.8	72.6
Colorado	2,033	2,526	3,112	3,190	3,511	51.2	62.3	72.4	74.2	81.6
Connecticut	3,177	3,321	2,912	2,546	3,241	97.0	101.2	85.5	74.8	95.2
Delaware	1,556	1,662	1,735	1,733	1,576	209.3	220.6	221.4	221.2	201.1
Florida	19,080	22,794	22,781	21,531	21,348	127.9	150.8	142.5	134.7	133.6
Georgia	20,666	21,244	20,265	18,920	18,383	270.4	272.8	247.5	231.1	224.6
Hawaii	506	463	483	604	740	42.4	39.1	39.9	49.9	61.1
Idaho	182	89	98	76	94	14.8	7.1	7.6	5.9	7.3
Illinois	22,499	24,136	24,812	24,025	24,026	186.8	199.0	199.8	193.4	193.5
Indiana	6,307	6,092	6,525	6,972	7,395	106.9	102.5	107.3	114.7	121.6
Iowa	1,616	1,365	1,392	1,418	1,480	56.5	47.6	47.6	48.5	50.6
Kansas	2,622	2,665	2,795	2,669	2,744	99.7	100.4	104.0	99.3	102.1
Kentucky	3,813	3,349	3,502	3,588	3,772	96.9	84.6	86.6	88.8	93.3
Louisiana	12,499	13,189	13,245	12,253	11,387	286.1	301.7	296.4	274.2	254.8
Maine	67	83	90	141	142	5.4	6.6	7.1	11.1	11.1
Maryland	11,254	10,430	9,837	9,427	9,355	219.2	201.7	185.7	178.0	176.6
Massachusetts	2,258	2,453	3,045	3,214	3,242	36.7	39.7	48.0	50.6	51.1
Michigan	16,359	15,907	18,182	17,120	14,770	166.6	161.3	182.9	172.3	148.6
Minnesota	2,708	2,830	3,160	2,701	3,049	57.3	59.3	64.2	54.9	62.0
Mississippi	10,689	10,411	9,217	7,759	6,875	388.4	376.0	324.0	272.8	241.7
Missouri	9,463	8,187	8,883	8,723	8,952	174.0	149.7	158.8	155.9	160.0
Montana	55	53	60	104	123	6.2	6.0	6.7	11.5	13.6
Nebraska	1,204	1,471	1,534	1,189	1,564	72.4	88.3	89.6	69.5	91.4
Nevada	1,445	1,303	1,553	1,756	1,988	82.7	72.0	77.7	87.9	99.5
New Hampshire	91	115	110	176	120	7.7	9.6	8.9	14.2	9.7
New Jersey	7,858	7,852	7,232	8,921	7,894	96.8	96.4	85.9	106.0	93.8
New Mexico	957	974	1,152	1,040	1,462	55.1	56.0	63.3	57.2	80.4
New York	19,062	19,826	20,114	22,299	21,841	104.9	109.0	106.0	117.5	115.1
North Carolina	19,230	19,428	17,823	16,583	15,531	254.8	253.9	221.4	206.0	192.9
North Dakota	80	83	73	56	72	12.5	13.1	11.4	8.7	11.2
Ohio	18,275	18,141	19,303	21,163	22,008	163.0	161.2	170.0	186.4	193.8
Oklahoma	5,243	4,021	4,229	4,784	4,661	156.7	119.7	122.6	138.6	135.1
Oregon	880	903	1,038	1,144	909	26.8	27.2	30.3	33.4	26.6
Pennsylvania	11,719	13,295	13,607	14,244	13,294	97.6	110.8	110.8	116.0	108.2
Rhode Island	430	601	661	830	900	43.5	60.7	63.1	79.2	85.9
South Carolina	11,575	15,037	8,383	10,805	9,152	301.7	387.0	208.9	269.3	228.1
South Dakota	221	192	277	289	263	29.9	26.2	36.7	38.3	34.8
Tennessee	11,840	11,366	11,876	10,145	9,348	218.0	207.3	208.7	178.3	164.3
Texas	32,833	32,910	32,919	30,024	26,988	166.2	164.2	157.9	144.0	129.4
Utah	236	254	231	219	374	11.2	11.9	10.3	9.8	16.7
Vermont	38	52	65	76	98	6.4	8.8	10.7	12.5	16.1
Virginia	9,265	9,402	10,175	11,095	10,462	136.4	136.8	143.7	156.7	147.8
Washington	1,948	2,132	2,418	2,991	2,925	34.2	37.0	41.0	50.7	49.6
West Virginia	920	584	645	732	974	50.8	32.3	35.7	40.5	53.9
Wisconsin	6,365	6,662	7,013	6,011	6,341	121.9	126.9	130.7	112.1	118.2
Wyoming	36	43	53	77	65	7.5	9.0	10.7	15.6	13.2
U.S. TOTAL*	356,492	360,813	363,136	361,705	351,852	131.9	132.3	129.0	128.5	125.0
Northeast	44,700	47,598	47,836	52,447	50,772	86.4	91.8	89.3	97.9	94.7
Midwest	87,719	87,731	93,949	92,336	92,664	139.5	138.7	145.9	143.4	143.9
South	191,661	193,477	185,043	178,048	167,183	200.8	200.6	184.6	177.6	166.8
West	32,412	32,007	36,308	38,874	41,233	53.8	52.3	57.5	61.5	65.2
Guam	72	59	62	48	49	45.0	36.1	40.1	31.0	31.7
Puerto Rico	400	321	527	589	411	10.4	8.3	13.8	15.5	10.8
Virgin Islands	39	51	24	34	49	35.6	45.2	22.1	31.3	45.1
OUTLYING AREAS	511	431	613	671	509	12.4	10.3	15.1	16.5	12.5
TOTAL	357,003	361,244	363,749	362,376	352,361	130.1	130.5	127.4	126.9	123.4

*Includes cases reported by Washington, D.C.

Table 15. Gonorrhea — Women – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	6,313	5,460	5,984	5,712	4,974	278.8	240.3	260.1	248.3	216.2
Alaska	181	153	198	244	353	62.0	52.0	65.4	80.6	116.6
Arizona	1,730	1,760	1,754	1,700	1,659	73.3	72.9	68.3	66.2	64.6
Arkansas	1,919	1,576	1,807	2,404	2,388	146.2	119.5	132.0	175.6	174.5
California	9,345	8,903	9,624	10,448	10,857	57.2	53.7	56.6	61.5	63.9
Colorado	1,055	1,271	1,544	1,588	1,643	52.7	62.1	72.3	74.4	76.9
Connecticut	1,714	1,796	1,621	1,411	1,910	101.7	106.3	92.3	80.3	108.8
Delaware	855	912	987	1,002	858	223.8	235.5	244.9	248.6	212.9
Florida	8,923	10,960	10,862	10,380	10,373	116.2	140.9	132.7	126.8	126.7
Georgia	10,056	10,092	9,844	9,590	9,306	256.3	252.5	236.7	230.6	223.7
Hawaii	278	251	240	292	394	46.7	42.3	39.8	48.4	65.4
Idaho	74	42	51	39	49	12.0	6.7	7.9	6.0	7.6
Illinois	10,737	11,563	11,829	12,178	12,273	174.0	186.1	186.6	192.1	193.6
Indiana	3,308	3,254	3,446	3,792	3,996	109.2	106.6	111.2	122.4	129.0
Iowa	895	759	740	766	821	60.9	51.6	49.6	51.4	55.1
Kansas	1,454	1,573	1,496	1,468	1,556	108.8	116.6	110.0	107.9	114.4
Kentucky	1,866	1,626	1,725	1,812	1,936	92.1	79.8	83.5	87.7	93.7
Louisiana	6,143	6,697	6,471	6,056	5,861	270.8	295.3	280.6	262.6	254.2
Maine	31	40	29	55	44	4.9	6.2	4.4	8.4	6.7
Maryland	5,391	4,749	4,577	4,591	4,592	204.2	178.6	167.1	167.6	167.7
Massachusetts	1,155	1,207	1,568	1,591	1,579	36.3	37.8	47.7	48.4	48.0
Michigan	8,265	7,771	9,190	9,057	7,974	164.0	153.5	181.4	178.8	157.4
Minnesota	1,443	1,495	1,681	1,461	1,688	60.2	61.7	67.7	58.8	68.0
Mississippi	5,973	6,137	5,603	4,663	4,201	416.8	425.6	380.9	317.0	285.6
Missouri	4,924	4,459	4,489	4,540	4,810	175.5	158.2	156.1	157.9	167.3
Montana	33	35	38	57	75	7.5	7.9	8.4	12.6	16.6
Nebraska	683	814	849	671	909	80.4	95.6	97.8	77.3	104.7
Nevada	591	480	618	761	965	68.9	54.0	63.0	77.6	98.4
New Hampshire	47	61	53	96	51	7.8	10.0	8.4	15.3	8.1
New Jersey	3,763	3,824	3,571	4,522	3,958	89.9	91.1	82.4	104.4	91.4
New Mexico	530	528	573	472	740	60.1	59.7	62.0	51.0	80.0
New York	10,586	10,639	10,691	11,873	11,141	112.2	112.9	108.8	120.8	113.3
North Carolina	9,129	9,089	8,468	7,810	7,585	234.9	230.6	206.2	190.2	184.7
North Dakota	56	46	36	30	40	17.5	14.4	11.2	9.3	12.4
Ohio	10,117	9,707	10,311	11,257	11,944	174.7	166.9	176.5	192.7	204.5
Oklahoma	2,932	2,240	2,433	2,670	2,566	171.2	130.3	138.7	152.2	146.2
Oregon	430	433	486	448	357	25.9	25.8	28.2	26.0	20.7
Pennsylvania	6,472	7,356	7,371	7,872	7,200	103.9	118.1	116.1	123.9	113.4
Rhode Island	258	371	381	488	484	50.3	72.1	69.9	89.6	88.9
South Carolina	5,730	5,874	4,057	5,126	4,357	288.3	292.1	196.6	248.5	211.2
South Dakota	124	117	165	166	148	33.1	31.4	43.4	43.7	38.9
Tennessee	5,263	4,965	5,343	4,808	4,564	187.3	175.0	183.0	164.7	156.4
Texas	16,704	16,819	16,932	15,599	14,075	166.8	165.6	161.3	148.6	134.1
Utah	70	100	99	95	150	6.6	9.3	8.9	8.5	13.5
Vermont	22	22	33	42	56	7.3	7.3	10.6	13.5	18.0
Virginia	4,543	4,566	4,856	5,485	5,445	130.7	129.9	134.6	152.1	151.0
Washington	863	1,009	1,078	1,301	1,197	30.2	34.9	36.4	44.0	40.4
West Virginia	549	357	375	418	567	58.5	38.1	40.4	45.0	61.0
Wisconsin	3,754	3,826	4,189	3,672	3,717	141.3	143.3	154.3	135.3	136.9
Wyoming	23	26	31	43	38	9.6	10.9	12.6	17.5	15.5
U.S. TOTAL*	179,204	179,319	181,668	183,863	179,648	129.6	128.6	126.7	128.2	125.3
Northeast	24,048	25,316	25,318	27,950	26,423	89.8	94.4	91.4	100.9	95.4
Midwest	45,760	45,384	48,421	49,058	49,876	141.9	140.0	147.5	149.4	151.9
South	94,193	93,628	91,595	89,367	84,872	192.1	188.9	179.0	174.6	165.8
West	15,203	14,991	16,334	17,488	18,477	50.3	48.9	51.6	55.2	58.4
Guam	25	28	23	22	26	33.3	36.4	30.4	29.1	34.4
Puerto Rico	163	132	238	279	230	8.1	6.5	12.1	14.1	11.6
Virgin Islands	16	38	14	20	38	27.8	73.7	24.7	35.2	67.0
OUTLYING AREAS	204	198	275	321	294	9.5	9.2	13.0	15.2	14.0
TOTAL	179,408	179,517	181,943	184,184	179,942	127.8	126.8	125.1	126.6	123.7

*Includes cases reported by Washington, D.C.

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

Table 16. Gonorrhea — Men — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	6,411	5,399	6,039	5,457	5,131	307.1	257.4	281.3	254.2	239.0
Alaska	150	149	163	213	288	46.6	45.8	50.3	65.7	88.9
Arizona	2,483	2,533	2,376	2,220	2,136	107.5	107.1	92.8	86.7	83.4
Arkansas	2,029	1,650	1,832	2,191	2,194	165.5	133.8	140.4	167.9	168.2
California	10,192	9,618	11,896	12,701	13,586	62.4	58.0	70.5	75.3	80.5
Colorado	978	1,255	1,568	1,602	1,868	49.7	62.4	72.4	74.0	86.2
Connecticut	1,463	1,525	1,291	1,132	1,331	92.1	95.7	78.3	68.6	80.7
Delaware	701	750	748	731	718	193.9	204.8	196.6	192.1	188.7
Florida	10,054	11,797	11,919	11,149	10,975	138.9	160.9	152.9	143.0	140.7
Georgia	10,525	11,039	10,309	9,325	9,013	283.1	291.2	256.0	231.6	223.8
Hawaii	228	211	243	312	346	38.1	35.6	39.9	51.3	56.8
Idaho	108	46	47	35	45	17.6	7.4	7.2	5.4	6.9
Illinois	11,761	12,559	12,981	11,845	11,750	200.2	212.3	213.5	194.8	193.2
Indiana	2,991	2,836	3,069	3,169	3,372	104.2	98.1	102.9	106.3	113.1
Iowa	721	606	652	652	658	51.7	43.4	45.4	45.4	45.8
Kansas	1,168	1,092	1,299	1,201	1,188	90.4	83.7	97.8	90.4	89.4
Kentucky	1,887	1,669	1,751	1,769	1,834	98.8	86.8	88.6	89.6	92.8
Louisiana	6,356	6,492	6,774	6,197	5,466	302.6	308.6	313.2	286.5	252.7
Maine	36	43	61	86	98	5.9	7.0	9.8	13.9	15.8
Maryland	5,846	5,669	5,196	4,836	4,756	234.3	225.6	203.1	189.1	185.9
Massachusetts	1,103	1,246	1,477	1,622	1,663	37.2	41.8	48.3	53.0	54.4
Michigan	8,094	8,136	8,992	8,063	6,796	169.5	169.5	184.5	165.5	139.5
Minnesota	1,265	1,335	1,479	1,240	1,361	54.3	56.7	60.7	50.9	55.9
Mississippi	4,653	4,184	3,586	3,096	2,674	352.8	315.4	261.1	225.4	194.7
Missouri	4,539	3,728	4,394	4,183	4,142	172.4	140.7	161.5	153.8	152.3
Montana	22	18	22	47	47	5.0	4.1	4.9	10.5	10.5
Nebraska	520	657	681	516	653	63.9	80.6	80.7	61.2	77.4
Nevada	854	822	935	993	1,022	96.1	89.2	91.8	97.5	100.4
New Hampshire	44	54	57	80	69	7.5	9.1	9.4	13.2	11.4
New Jersey	4,094	4,019	3,654	4,391	3,930	104.2	101.8	89.5	107.5	96.3
New Mexico	427	445	572	555	716	50.0	52.0	64.0	62.1	80.1
New York	8,476	9,176	9,378	10,397	10,688	96.9	104.6	102.5	113.7	116.9
North Carolina	10,101	10,339	9,354	8,772	7,942	276.0	278.7	237.2	222.5	201.4
North Dakota	24	37	37	26	32	7.6	11.7	11.5	8.1	10.0
Ohio	8,023	8,245	8,837	9,679	9,819	148.1	151.5	160.3	175.6	178.1
Oklahoma	2,311	1,781	1,796	2,114	2,095	141.4	108.6	105.9	124.7	123.5
Oregon	450	470	552	696	552	27.8	28.7	32.5	41.0	32.5
Pennsylvania	5,247	5,939	6,236	6,372	6,094	90.9	103.0	105.2	107.5	102.8
Rhode Island	172	230	280	342	416	36.2	48.3	55.6	67.9	82.6
South Carolina	5,769	9,052	4,256	5,640	4,766	312.1	482.8	218.4	289.4	244.5
South Dakota	97	75	111	123	115	26.7	20.8	29.6	32.8	30.7
Tennessee	6,577	6,401	6,533	5,337	4,784	251.0	241.8	235.8	192.7	172.7
Texas	15,995	15,973	15,919	14,370	12,884	164.1	161.5	153.8	138.8	124.4
Utah	166	154	132	124	223	15.9	14.5	11.8	11.1	19.9
Vermont	16	30	32	34	42	5.5	10.3	10.7	11.4	14.1
Virginia	4,720	4,832	5,307	5,574	5,017	142.3	143.9	152.9	160.5	144.5
Washington	1,085	1,123	1,340	1,690	1,728	38.4	39.2	45.7	57.6	58.9
West Virginia	369	227	269	313	406	42.3	26.1	30.6	35.6	46.2
Wisconsin	2,611	2,827	2,817	2,321	2,612	101.7	109.6	106.3	87.6	98.6
Wyoming	13	17	22	34	27	5.4	7.1	8.9	13.7	10.9
U.S. TOTAL*	176,529	180,524	180,701	177,194	171,504	133.7	135.5	130.9	128.4	124.2
Northeast	20,651	22,262	22,466	24,456	24,331	82.8	89.0	86.8	94.4	94.0
Midwest	41,814	42,133	45,349	43,018	42,498	136.4	136.7	143.7	136.3	134.7
South	96,908	99,268	93,018	88,498	82,091	208.9	211.6	189.6	180.4	167.3
West	17,156	16,861	19,868	21,222	22,584	57.1	55.3	63.0	67.3	71.6
Guam	47	31	39	26	23	55.5	35.8	49.3	32.8	29.0
Puerto Rico	237	189	289	310	181	12.8	10.1	15.8	16.9	9.9
Virgin Islands	23	13	10	14	11	43.2	21.2	19.3	27.0	21.2
OUTLYING AREAS	307	233	338	350	215	15.4	11.6	17.2	17.8	10.9
TOTAL	176,836	180,757	181,039	177,544	171,719	131.9	133.6	129.3	126.8	122.6

*Includes cases reported by Washington, D.C.

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

Table 17. Gonorrhea — Reported cases and rates in selected cities of >200,000 population, ranked by rates: United States, 2002

<i>Rank*</i>	<i>City†</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	St Louis, MO	2,737	786.1
2	Richmond, VA	1,507	761.9
3	Baltimore, MD	4,873	748.4
4	Detroit, MI	6,845	719.6
5	Rochester, NY	1,581	639.9
6	Norfolk, VA	1,463	624.1
7	Kansas City, MO	2,625	580.9
8	New Orleans, LA	2,685	554.0
9	Newark, NJ	1,573	523.0
10	Buffalo, NY	1,653	513.1
11	Milwaukee, WI	4,497	478.3
12	Atlanta, GA	3,810	466.9
13	Washington, DC	2,669	466.6
14	Philadelphia, PA	7,006	461.7
15	Memphis, TN	4,074	453.9
16	Chicago, IL	13,814	447.6
17	Indianapolis, IN	3,510	407.9
18	Cincinnati, OH	3,426	405.3
19	Birmingham, AL	2,489	376.0
20	Oklahoma City, OK	1,594	374.8
21	Jacksonville, FL	2,895	371.7
22	Minneapolis, MN	1,366	355.8
23	Toledo, OH	1,519	333.8
24	Denver, CO	1,812	326.7
25	Charlotte, NC	2,264	325.5
26	Cleveland, OH	4,115	295.2
27	Tulsa, OK	1,123	284.8
28	San Francisco, CA	2,136	275.0
29	Dayton, OH	1,505	269.2
30	Columbus, OH	2,844	266.0
31	Omaha, NE	1,149	247.9
32	Nashville, TN	1,409	247.2
33	Dallas, TX	5,263	237.2
34	Boston, MA	1,404	234.8
35	St Paul, MN	584	205.2
36	Louisville, KY	1,361	196.2
37	Tampa, FL	1,912	191.4
38	Wichita, KS	852	188.1
39	Akron, OH	937	172.6
40	Austin, TX	1,401	172.5
41	Pittsburgh, PA	2,133	166.4
42	St Petersburg, FL	1,527	165.7
43	New York City, NY	12,727	158.9
44	Jersey City, NJ	380	158.0
45	Houston, TX	5,235	153.9
46	Corpus Christi, TX	466	148.6
47	Albuquerque, NM	805	144.6
48	San Antonio, TX	1,944	139.6
49	Fort Worth, TX	1,967	136.0
50	Oakland, CA	1,949	135.0
51	Sacramento, CA	1,442	117.9
52	Portland, OR	546	104.8
53	Phoenix, AZ	2,991	97.4
54	Des Moines, IA	359	95.8
55	Miami, FL	2,047	90.8
56	Los Angeles, CA	7,765	87.1
57	Seattle, WA	1,462	84.2
58	Yonkers, NY	160	80.6
59	Honolulu, HI	685	78.2
60	San Diego, CA	2,132	75.8
61	Tucson, AZ	458	54.3
62	El Paso, TX	336	49.4
63	San Jose, CA	502	29.8
YEAR 2010 OBJECTIVE			19.0

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

†Excludes outlying areas (San Juan, PR, with 194 cases and rate of 19.0).

Table 18. Gonorrhea — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	823	848	913	962	937	153.1	157.7	168.2	177.2	172.6
Albuquerque, NM	570	472	697	647	805	108.4	90.2	125.2	116.2	144.6
Atlanta, GA	5,599	5,631	3,456	4,621	3,810	757.3	756.0	423.5	566.3	466.9
Austin, TX	1,803	1,562	1,518	1,536	1,401	253.7	214.8	186.9	189.1	172.5
Baltimore, MD	6,989	6,124	5,603	5,014	4,873	1,082.6	967.9	860.5	770.0	748.4
Birmingham, AL	3,172	2,492	3,018	2,600	2,489	481.0	379.1	455.9	392.7	376.0
Boston, MA	982	900	1,229	1,332	1,404	176.5	161.8	205.5	222.7	234.8
Buffalo, NY	1,108	1,233	1,572	2,194	1,653	349.8	392.8	488.0	681.1	513.1
Charlotte, NC	1,911	1,908	1,758	2,014	2,264	302.9	294.3	252.8	289.6	325.5
Chicago, IL	14,143	15,169	14,872	14,326	13,814	474.8	509.0	481.9	464.2	447.6
Cincinnati, OH	3,583	2,814	3,227	3,178	3,426	422.8	334.8	381.8	376.0	405.3
Cleveland, OH	3,030	3,391	3,497	3,854	4,115	219.5	247.2	250.9	276.5	295.2
Columbus, OH	3,082	3,120	3,386	3,349	2,844	301.8	303.6	316.8	313.3	266.0
Corpus Christi, TX	449	524	775	667	466	141.9	166.1	247.1	212.7	148.6
Dallas, TX	7,421	7,476	7,315	6,166	5,263	361.8	362.5	329.7	277.9	237.2
Dayton, OH	1,092	932	1,015	1,428	1,505	195.5	164.7	181.6	255.4	269.2
Denver, CO	973	1,157	1,594	1,618	1,812	195.0	231.5	287.4	291.7	326.7
Des Moines, IA	371	333	380	270	359	103.1	91.3	101.4	72.1	95.8
Detroit, MI	8,459	7,900	9,610	8,220	6,845	671.2	630.3	1,010.2	864.1	719.6
El Paso, TX	252	156	209	291	336	35.8	22.2	30.8	42.8	49.4
Fort Worth, TX	3,310	2,847	2,787	2,291	1,967	244.2	205.9	192.7	158.4	136.0
Honolulu, HI	481	430	433	557	685	55.1	49.7	49.4	63.6	78.2
Houston, TX	7,226	5,939	5,918	5,489	5,235	225.4	182.7	174.0	161.4	153.9
Indianapolis, IN	3,071	3,045	3,206	3,383	3,510	377.5	375.5	372.6	393.2	407.9
Jacksonville, FL	2,463	2,972	3,640	2,731	2,895	334.8	402.4	467.3	350.6	371.7
Jersey City, NJ	491	490	465	489	380	223.1	224.4	193.3	203.3	158.0
Kansas City, MO	2,538	1,956	2,688	2,161	2,625	561.6	433.1	594.9	478.2	580.9
Los Angeles, CA	5,986	6,054	7,307	7,747	7,765	69.4	69.3	82.0	86.9	87.1
Louisville, KY	1,462	1,195	1,200	1,436	1,361	217.5	177.6	173.0	207.0	196.2
Memphis, TN	5,235	5,038	4,941	4,420	4,074	602.5	577.1	550.5	492.5	453.9
Miami, FL	2,573	2,775	1,995	1,964	2,047	119.5	127.5	88.5	87.2	90.8
Milwaukee, WI	4,856	4,884	5,146	4,150	4,497	532.6	538.9	547.4	441.4	478.3
Minneapolis, MN	1,562	1,558	1,577	1,295	1,366	428.5	425.5	410.7	337.3	355.8
Nashville, TN	1,777	1,785	2,404	1,625	1,409	332.8	336.8	421.8	285.1	247.2
New Orleans, LA	2,691	2,687	3,015	3,160	2,685	578.0	583.0	622.1	652.0	554.0
New York City, NY	12,097	12,210	11,669	12,614	12,727	163.0	164.4	145.7	157.5	158.9
Newark, NJ	1,781	1,741	1,558	1,798	1,573	626.3	614.7	518.0	597.8	523.0
Norfolk, VA	1,415	1,291	1,490	1,450	1,463	657.5	571.6	635.7	618.6	624.1
Oakland, CA	1,742	1,700	1,793	2,039	1,949	136.1	131.4	124.2	141.2	135.0
Oklahoma City, OK	1,571	1,351	1,434	1,617	1,594	385.4	329.6	337.2	380.2	374.8
Omaha, NE	871	1,000	1,161	934	1,149	196.3	224.1	250.4	201.5	247.9
Philadelphia, PA	7,271	7,775	8,198	8,096	7,006	506.2	548.5	540.2	533.5	461.7
Phoenix, AZ	3,543	3,586	3,195	2,826	2,991	127.3	125.3	104.0	92.0	97.4
Pittsburgh, PA	1,351	1,573	1,494	1,916	2,133	106.5	125.2	116.6	149.5	166.4
Portland, OR	527	540	681	743	546	105.8	108.1	130.7	142.6	104.8
Richmond, VA	1,527	1,827	1,752	2,109	1,507	786.4	963.1	885.8	1,066.3	761.9
Rochester, NY	1,992	2,037	2,142	1,769	1,581	827.9	851.0	866.9	716.0	639.9
Sacramento, CA	1,546	1,236	1,295	1,171	1,442	135.1	104.3	105.8	95.7	117.9
San Antonio, TX	1,862	2,087	2,298	2,140	1,944	137.6	152.0	165.0	153.6	139.6
San Diego, CA	1,595	1,561	1,798	1,878	2,132	57.4	55.3	63.9	66.7	75.8
San Francisco, CA	1,858	1,606	2,161	2,053	2,136	249.1	215.1	278.2	264.3	275.0
San Jose, CA	453	418	446	547	502	27.6	25.4	26.5	32.5	29.8
Seattle, WA	975	922	1,221	1,556	1,462	58.9	55.4	70.3	89.6	84.2
St Louis, MO	3,652	2,876	2,879	3,185	2,737	1,076.3	861.2	826.8	914.7	786.1
St Paul, MN	519	545	703	560	584	191.9	201.2	247.0	196.7	205.2
St Petersburg, FL	1,468	1,835	1,542	1,391	1,527	167.2	208.9	167.3	151.0	165.7
Tampa, FL	1,696	1,783	1,653	1,517	1,912	183.3	189.6	165.5	151.9	191.4
Toledo, OH	655	624	864	1,187	1,519	146.0	139.8	189.9	260.8	333.8
Tucson, AZ	403	415	591	748	458	51.0	51.6	70.0	88.7	54.3
Tulsa, OK	1,308	964	892	1,014	1,123	343.8	251.2	226.2	257.2	284.8
Washington, DC	4,508	3,536	2,706	2,883	2,669	861.7	681.3	473.0	504.0	466.6
Wichita, KS	466	771	675	837	852	104.0	170.7	149.0	184.8	188.1
Yonkers, NY	105	102	109	143	160	54.4	52.4	54.9	72.0	80.6
U.S. CITY TOTAL	170,291	165,709	170,766	167,906	162,300	241.4	233.5	231.7	227.8	220.2
San Juan, PR	227	179	270	281	194	21.7	17.0	26.5	27.5	19.0
TOTAL	170,518	165,888	171,036	168,187	162,494	238.2	230.3	228.9	225.1	217.5

Table 19. Gonorrhea — Women — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	435	413	463	484	493	155.4	147.5	164.5	172.0	175.2
Albuquerque, NM	308	234	323	254	375	114.2	87.1	113.4	89.2	131.7
Atlanta, GA	2,462	2,443	1,543	2,110	1,679	636.8	627.6	372.5	509.3	405.3
Austin, TX	894	768	712	722	670	250.2	210.1	179.6	182.1	169.0
Baltimore, MD	3,258	2,702	2,578	2,423	2,374	945.7	800.8	741.9	697.3	683.2
Birmingham, AL	1,555	1,229	1,552	1,420	1,231	442.0	350.6	443.5	405.8	351.8
Boston, MA	477	410	618	623	664	165.4	142.4	199.6	201.2	214.4
Buffalo, NY	682	725	914	1,212	872	412.8	443.9	543.7	721.0	518.8
Charlotte, NC	830	754	748	830	980	253.7	224.0	211.3	234.5	276.8
Chicago, IL	6,345	6,821	6,525	6,924	6,604	410.1	440.4	409.9	435.0	414.9
Cincinnati, OH	2,044	1,600	1,868	1,743	1,882	458.0	361.2	422.3	394.0	425.5
Cleveland, OH	1,672	1,779	1,697	1,816	1,976	228.6	244.6	230.7	246.9	268.7
Columbus, OH	1,584	1,575	1,798	1,696	1,505	299.1	295.3	327.1	308.5	273.8
Corpus Christi, TX	181	224	355	349	229	111.3	138.1	221.7	217.9	143.0
Dallas, TX	3,591	3,616	3,494	3,103	2,610	344.4	345.1	314.6	279.4	235.0
Dayton, OH	490	393	430	722	757	168.2	133.0	147.9	248.4	260.4
Denver, CO	463	515	714	717	756	180.8	200.8	260.2	261.3	275.5
Des Moines, IA	189	161	200	144	205	100.7	84.7	103.7	74.7	106.3
Detroit, MI	4,147	3,706	4,737	4,336	3,618	625.4	561.5	941.8	862.1	719.3
El Paso, TX	123	78	96	148	167	33.6	21.2	27.3	42.1	47.5
Fort Worth, TX	1,743	1,405	1,346	1,153	1,025	254.0	201.0	184.3	157.9	140.4
Honolulu, HI	262	231	217	269	365	60.0	53.3	49.8	61.7	83.8
Houston, TX	3,285	2,699	2,986	2,674	2,526	203.1	164.7	175.0	156.7	148.0
Indianapolis, IN	1,532	1,601	1,516	1,751	1,776	359.3	376.3	341.1	394.0	399.6
Jacksonville, FL	898	1,238	1,599	1,200	1,316	236.3	323.8	398.7	299.2	328.1
Jersey City, NJ	231	228	211	234	176	202.9	201.9	172.4	191.2	143.8
Kansas City, MO	1,382	1,045	1,242	1,039	1,283	583.5	441.8	530.3	443.6	547.8
Los Angeles, CA	2,792	2,835	3,072	3,469	3,401	64.2	64.3	68.2	77.0	75.5
Louisville, KY	624	494	510	640	632	176.0	139.1	140.9	176.8	174.6
Memphis, TN	2,259	2,163	2,225	2,070	1,963	495.4	472.1	474.6	441.5	418.7
Miami, FL	1,053	1,152	750	775	855	93.5	101.1	64.4	66.6	73.4
Milwaukee, WI	2,862	2,783	3,057	2,540	2,612	597.5	582.5	624.4	518.8	533.5
Minneapolis, MN	806	781	725	625	662	429.4	414.2	371.9	320.6	339.6
Nashville, TN	718	736	1,016	752	621	255.8	264.2	345.5	255.8	211.2
New Orleans, LA	1,158	1,198	1,325	1,310	1,211	463.1	484.2	514.4	508.6	470.1
New York City, NY	6,791	6,402	6,051	6,671	6,418	172.7	162.9	143.6	158.3	152.3
Newark, NJ	794	806	692	881	716	530.5	541.0	438.8	558.6	454.0
Norfolk, VA	593	542	646	662	670	541.8	495.9	563.8	577.8	584.8
Oakland, CA	987	950	992	1,062	999	151.9	144.9	135.1	144.6	136.0
Oklahoma City, OK	839	721	839	909	861	395.8	338.6	383.2	415.1	393.2
Omaha, NE	494	546	626	518	672	215.0	236.4	264.3	218.7	283.7
Philadelphia, PA	3,938	4,179	4,288	4,421	3,609	511.1	549.2	527.8	544.2	444.2
Phoenix, AZ	1,415	1,434	1,325	1,169	1,261	100.4	99.1	86.3	76.1	82.1
Pittsburgh, PA	788	920	826	1,045	1,243	116.9	137.7	122.4	154.9	184.2
Portland, OR	246	250	303	268	184	96.7	98.0	115.1	101.8	69.9
Richmond, VA	752	956	783	1,016	895	704.5	916.9	740.6	961.0	846.6
Rochester, NY	1,031	1,047	1,102	947	802	827.4	845.9	860.8	739.7	626.5
Sacramento, CA	869	692	702	619	777	148.9	114.6	112.4	99.1	124.4
San Antonio, TX	1,012	1,113	1,187	1,124	1,009	144.3	156.6	165.9	157.1	141.0
San Diego, CA	688	653	702	685	718	49.5	46.6	50.2	49.0	51.3
San Francisco, CA	402	381	412	360	374	106.8	101.1	107.9	94.3	97.9
San Jose, CA	224	190	174	198	189	27.5	23.3	21.0	23.9	22.8
Seattle, WA	324	331	448	572	438	38.6	39.2	51.3	65.6	50.2
St Louis, MO	1,685	1,510	1,426	1,620	1,415	916.7	834.8	772.4	877.5	766.4
St Paul, MN	278	276	411	335	343	196.9	195.2	278.7	227.2	232.6
St Petersburg, FL	738	942	739	651	782	158.7	202.5	153.2	134.9	162.1
Tampa, FL	886	942	823	758	859	186.5	195.1	161.3	148.6	168.4
Toledo, OH	350	388	487	713	899	149.5	166.3	206.1	301.7	380.5
Tucson, AZ	175	179	257	346	204	43.3	43.6	59.6	80.2	47.3
Tulsa, OK	728	527	494	503	588	369.2	265.3	243.3	247.7	289.6
Washington, DC	1,904	1,509	1,271	1,241	1,224	684.7	546.8	419.9	410.0	404.4
Wichita, KS	243	452	358	473	508	106.1	196.0	156.3	206.6	221.8
Yonkers, NY	55	73	64	81	90	54.3	71.7	61.8	78.2	86.9
U.S. CITY TOTAL*	82,564	79,646	81,590	82,125	78,818	226.8	217.5	216.0	217.4	208.7
San Juan, PR	85	73	105	114	89	15.6	13.3	19.8	21.5	16.8
TOTAL	82,649	79,719	81,695	82,239	78,907	223.7	214.5	213.3	214.7	206.0

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

Table 20. Gonorrhea — Men – Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	380	429	446	474	435	147.4	166.4	170.6	181.3	166.4
Albuquerque, NM	262	237	367	380	427	102.3	93.0	135.0	139.8	157.0
Atlanta, GA	3,118	3,172	1,910	2,510	2,126	884.0	892.2	475.4	624.8	529.2
Austin, TX	905	792	804	814	731	256.1	219.1	193.3	195.7	175.8
Baltimore, MD	3,714	3,410	2,961	2,591	2,499	1,233.5	1,154.8	975.0	853.2	822.9
Birmingham, AL	1,614	1,258	1,439	1,177	1,257	524.5	409.9	461.1	377.1	402.8
Boston, MA	505	490	611	709	740	188.4	182.6	211.8	245.8	256.6
Buffalo, NY	426	508	658	982	781	281.1	337.4	427.1	637.5	507.0
Charlotte, NC	1,081	1,154	1,010	1,184	1,283	356.0	370.0	295.8	346.7	375.7
Chicago, IL	7,797	8,338	8,346	7,400	7,208	544.6	582.5	558.5	495.2	482.3
Cincinnati, OH	1,518	1,193	1,343	1,417	1,514	378.4	300.1	333.3	351.6	375.7
Cleveland, OH	1,347	1,589	1,777	2,019	2,109	207.5	246.6	269.9	306.6	320.3
Columbus, OH	1,488	1,523	1,561	1,618	1,317	302.6	308.1	300.6	311.6	253.6
Corpus Christi, TX	268	300	420	318	237	174.3	195.7	273.6	207.2	154.4
Dallas, TX	3,814	3,834	3,775	3,028	2,642	378.3	378.1	340.6	273.2	238.4
Dayton, OH	601	539	578	699	743	225.1	199.4	215.4	260.5	276.9
Denver, CO	510	642	880	901	1,056	209.9	263.9	314.1	321.5	376.9
Des Moines, IA	182	172	180	126	153	105.7	98.6	99.0	69.3	84.2
Detroit, MI	4,312	4,194	4,873	3,884	3,227	722.1	706.8	1,087.0	866.4	719.9
El Paso, TX	129	78	113	143	169	38.3	23.3	34.5	43.6	51.6
Fort Worth, TX	1,537	1,425	1,433	1,133	939	229.7	208.5	200.1	158.2	131.1
Honolulu, HI	219	199	216	288	320	50.2	46.2	49.0	65.4	72.6
Houston, TX	3,937	3,193	2,928	2,809	2,705	247.8	198.1	172.9	165.8	159.7
Indianapolis, IN	1,539	1,443	1,687	1,630	1,720	397.7	374.3	405.5	391.8	413.5
Jacksonville, FL	1,564	1,734	2,041	1,531	1,579	439.7	486.8	540.3	405.3	418.0
Jersey City, NJ	260	262	254	255	203	244.7	248.5	215.0	215.9	171.8
Kansas City, MO	1,156	911	1,446	1,122	1,342	537.4	423.6	664.4	515.5	616.6
Los Angeles, CA	3,194	3,218	4,228	4,264	4,350	74.7	74.4	96.0	96.8	98.8
Louisville, KY	831	699	688	793	728	261.7	220.0	207.5	239.1	219.5
Memphis, TN	2,976	2,875	2,716	2,350	2,111	720.8	693.0	633.6	548.2	492.5
Miami, FL	1,518	1,618	1,245	1,189	1,192	147.9	156.2	114.3	109.2	109.5
Milwaukee, WI	1,994	2,098	2,084	1,596	1,877	460.8	489.6	462.5	354.2	416.6
Minneapolis, MN	756	777	852	670	704	427.6	437.5	450.7	354.4	372.4
Nashville, TN	1,059	1,049	1,388	873	788	418.2	417.2	503.1	316.5	285.6
New Orleans, LA	1,533	1,489	1,690	1,850	1,463	711.5	697.4	744.2	814.6	644.2
New York City, NY	5,306	5,797	5,573	5,914	6,297	152.1	165.8	146.9	155.9	166.0
Newark, NJ	987	935	866	917	857	732.8	696.4	605.2	640.9	598.9
Norfolk, VA	822	749	841	783	793	777.2	642.5	701.8	653.4	661.8
Oakland, CA	749	667	783	960	945	118.8	104.5	110.4	135.3	133.2
Oklahoma City, OK	732	630	595	708	733	374.1	319.8	288.3	343.1	355.2
Omaha, NE	376	454	531	415	475	175.7	210.8	234.2	183.0	209.5
Philadelphia, PA	3,333	3,596	3,910	3,675	3,397	500.6	547.6	554.5	521.2	481.8
Phoenix, AZ	2,128	2,152	1,870	1,657	1,730	154.8	152.2	121.7	107.8	112.6
Pittsburgh, PA	563	653	668	871	890	94.7	110.9	110.0	143.5	146.6
Portland, OR	281	290	378	475	362	115.3	118.6	146.6	184.2	140.4
Richmond, VA	775	870	968	1,083	612	886.4	1,018.3	1,051.4	1,176.3	664.7
Rochester, NY	961	990	1,040	822	779	828.5	856.4	873.6	690.4	654.3
Sacramento, CA	673	534	581	543	660	120.0	91.9	97.0	90.7	110.2
San Antonio, TX	846	974	1,110	1,015	935	129.8	147.1	163.8	149.8	138.0
San Diego, CA	883	896	1,066	1,109	1,336	63.5	63.1	75.3	78.4	94.4
San Francisco, CA	1,456	1,225	1,749	1,693	1,749	394.3	331.2	443.0	428.8	443.0
San Jose, CA	227	224	270	349	303	27.4	27.0	31.7	40.9	35.5
Seattle, WA	651	591	773	984	1,024	79.8	72.0	89.4	113.8	118.5
St Louis, MO	1,967	1,366	1,453	1,565	1,322	1,264.8	892.4	888.3	956.8	808.2
St Paul, MN	241	269	292	225	241	186.4	207.8	212.9	164.0	175.7
St Petersburg, FL	728	893	803	740	745	176.2	216.0	182.9	168.6	169.7
Tampa, FL	800	841	830	759	1,053	177.7	183.8	169.8	155.3	215.4
Toledo, OH	305	235	370	466	613	142.3	110.2	169.1	213.0	280.2
Tucson, AZ	228	236	334	402	254	59.0	60.1	81.0	97.4	61.6
Tulsa, OK	580	437	398	511	535	316.4	236.0	208.1	267.2	279.7
Washington, DC	2,604	2,014	1,430	1,627	1,436	1,062.7	828.7	530.9	604.0	533.1
Wichita, KS	223	319	317	364	344	101.8	144.3	141.6	162.6	153.7
Yonkers, NY	50	29	45	62	70	54.4	31.2	47.4	65.3	73.7
U.S. CITY TOTAL*	87,519	85,708	88,792	85,421	83,165	256.5	249.4	247.1	237.8	231.5
San Juan, PR	142	106	165	167	105	28.3	21.0	33.7	34.1	21.4
TOTAL	87,661	85,814	88,957	85,588	83,270	253.1	246.1	244.3	235.0	228.6

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

Table 21. Gonorrhea — Reported cases and rates per 100,000 population by age and sex: United States, 1998–2002

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
1998	10-14	6,143	823	5,320	31.9	8.4	56.7
	15-19	105,987	34,595	71,392	542.4	344.4	752.0
	20-24	105,999	51,501	54,498	599.7	572.5	628.0
	25-29	55,908	32,206	23,702	300.8	348.3	253.7
	30-34	32,307	20,301	12,006	160.0	202.9	117.9
	35-39	22,874	15,578	7,296	101.1	138.4	64.2
	40-44	13,067	9,864	3,203	59.7	91.0	29.0
	45-54	9,294	7,774	1,520	26.9	46.0	8.6
	55-64	2,177	1,938	238	9.6	17.9	2.0
	65+	1,211	872	339	3.5	6.1	1.7
	TOTAL	356,107	175,847	180,260	131.7	133.2	130.4
1999	10-14	5,954	825	5,129	30.5	8.2	53.8
	15-19	104,426	34,295	70,131	528.8	337.9	730.8
	20-24	108,741	52,735	56,007	603.3	574.3	633.4
	25-29	56,120	32,604	23,516	308.2	360.1	256.9
	30-34	32,344	20,690	11,654	164.0	211.7	117.1
	35-39	23,441	16,217	7,224	104.0	144.6	63.8
	40-44	14,007	10,652	3,355	62.9	96.5	29.9
	45-54	10,338	8,657	1,681	28.9	49.5	9.2
	55-64	2,356	2,122	233	10.1	19.0	1.9
	65+	905	722	183	2.6	5.0	0.9
	TOTAL	359,716	179,913	179,803	131.9	135.0	129.0
2000	10-14	5,925	830	5,094	28.9	7.9	50.9
	15-19	102,043	33,312	68,731	504.7	320.6	699.3
	20-24	112,313	54,195	58,119	592.2	559.4	626.5
	25-29	55,929	32,831	23,098	288.6	335.0	241.0
	30-34	31,814	20,603	11,211	155.1	199.6	110.0
	35-39	22,605	15,765	6,840	99.6	139.3	60.1
	40-44	13,526	10,234	3,292	60.3	92.0	29.1
	45-54	10,344	8,669	1,676	27.5	46.9	8.7
	55-64	2,299	2,077	222	9.5	17.8	1.8
	65+	897	722	175	2.6	5.0	0.9
	TOTAL	358,779	179,651	179,128	127.5	130.1	124.9
2001	10-14	6,041	862	5,179	29.4	8.2	51.8
	15-19	101,065	31,952	69,113	499.8	307.5	703.2
	20-24	116,207	54,604	61,603	612.8	563.6	664.1
	25-29	56,083	32,181	23,902	289.4	328.4	249.4
	30-34	32,537	21,050	11,487	158.6	203.9	112.7
	35-39	21,799	15,216	6,583	96.0	134.4	57.8
	40-44	13,605	10,072	3,533	60.6	90.5	31.2
	45-54	10,458	8,655	1,803	27.8	46.8	9.4
	55-64	2,255	2,003	252	9.3	17.2	2.0
	65+	843	651	192	2.4	4.5	0.9
	TOTAL	361,758	177,531	184,227	128.5	128.6	128.5
2002	10-14	5,449	784	4,665	26.5	7.4	46.6
	15-19	96,325	29,921	66,404	476.4	287.9	675.6
	20-24	112,449	52,130	60,318	593.0	538.1	650.3
	25-29	55,480	31,391	24,089	286.3	320.4	251.4
	30-34	32,081	20,560	11,521	156.4	199.2	113.1
	35-39	21,419	14,878	6,541	94.3	131.4	57.4
	40-44	13,791	10,254	3,536	61.5	92.1	31.3
	45-54	10,927	8,891	2,036	29.0	48.1	10.6
	55-64	2,284	2,019	266	9.4	17.3	2.1
	65+	791	631	159	2.3	4.4	0.8
	TOTAL	351,836	171,839	179,997	125.0	124.5	125.5

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 forms. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

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Table 22A. Gonorrhea — Reported cases by age, sex, and race/ethnicity: United States, 1998–2002

Age Group	Total			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	Total	Male	Female	
1998	10-14	6,017	802	5,216	835	54	781	4,780	689	4,091	329	52	277	23	3	20	51	4	46
	15-19	103,540	33,772	69,768	15,555	2,522	13,033	81,131	29,076	52,055	5,661	1,959	3,702	458	81	377	735	134	601
	20-24	103,675	50,288	53,387	13,889	4,105	9,784	82,325	42,676	39,649	6,253	3,122	3,131	572	196	376	636	190	446
	25-29	54,561	31,385	23,176	7,660	3,296	4,364	42,657	25,788	16,869	3,517	2,029	1,488	355	159	197	371	113	259
	30-34	31,570	19,797	11,772	5,298	2,866	2,432	23,838	15,438	8,399	2,043	1,315	729	195	95	100	196	83	113
	35-39	22,405	15,241	7,163	3,915	2,395	1,520	16,938	11,865	5,074	1,259	837	422	140	82	58	152	63	89
	40-44	12,805	9,651	3,153	2,105	1,394	711	9,915	7,731	2,184	627	432	195	75	48	27	82	47	35
	45-54	9,080	7,589	1,490	1,535	1,177	358	7,005	6,038	967	437	312	125	45	23	23	58	41	17
	55-64	2,127	1,891	236	396	344	53	1,598	1,450	148	107	82	25	11	6	4	16	10	6
	65+	1,186	854	333	231	159	73	854	633	220	77	57	20	9	3	6	15	2	14
	TOTAL	348,069	171,650	176,419	51,581	18,354	33,227	271,884	141,684	130,199	20,390	10,219	10,170	1,892	698	1,194	2,322	694	1,628
1999	10-14	5,952	824	5,128	842	55	787	4,666	705	3,961	368	60	308	35	1	34	41	3	39
	15-19	104,430	34,295	70,135	14,882	2,437	12,445	81,913	29,452	52,460	6,359	2,151	4,208	562	133	429	714	121	592
	20-24	108,768	52,757	56,011	14,408	4,288	10,120	86,318	44,709	41,609	6,704	3,278	3,426	673	291	382	665	190	475
	25-29	56,119	32,608	23,511	7,859	3,397	4,462	43,874	26,821	17,053	3,773	2,114	1,659	316	173	142	298	103	195
	30-34	32,330	20,680	11,650	5,364	2,864	2,499	24,390	16,279	8,110	2,131	1,306	825	240	138	102	206	93	113
	35-39	23,436	16,212	7,224	4,319	2,563	1,756	17,559	12,685	4,875	1,272	815	457	146	91	55	139	57	82
	40-44	14,005	10,652	3,353	2,395	1,671	725	10,832	8,492	2,340	638	410	228	69	38	32	70	41	29
	45-54	10,336	8,656	1,680	1,817	1,387	430	7,954	6,877	1,076	432	310	122	63	43	20	69	39	31
	55-64	2,354	2,121	233	503	432	71	1,718	1,587	131	109	83	26	14	11	3	11	8	3
	65+	903	721	183	193	151	42	634	517	116	62	48	15	6	1	4	9	3	6
	TOTAL	359,716	179,919	179,797	52,733	19,295	33,438	280,707	148,437	132,270	21,920	10,602	11,318	2,130	925	1,205	2,226	660	1,566
2000	10-14	5,923	830	5,093	769	50	719	4,649	689	3,960	419	82	336	38	1	37	48	7	41
	15-19	102,044	33,310	68,734	14,608	2,576	12,032	79,244	28,108	51,137	6,877	2,315	4,563	670	180	489	644	131	514
	20-24	112,328	54,207	58,121	15,597	4,831	10,766	87,435	44,977	42,459	7,757	3,762	3,995	884	431	454	655	207	448
	25-29	55,930	32,836	23,094	7,898	3,373	4,524	42,931	26,572	16,359	4,175	2,417	1,758	565	351	214	361	123	238
	30-34	31,809	20,601	11,207	5,802	3,190	2,612	23,063	15,542	7,521	2,347	1,482	865	378	274	104	219	114	105
	35-39	22,602	15,763	6,838	4,689	2,969	1,720	16,039	11,591	4,448	1,445	933	512	251	181	70	178	89	89
	40-44	13,524	10,234	3,290	2,724	1,840	884	9,909	7,796	2,114	668	449	219	126	96	30	96	52	44
	45-54	10,342	8,669	1,674	2,038	1,572	465	7,576	6,567	1,009	560	414	146	103	73	29	66	41	25
	55-64	2,298	2,077	222	495	436	59	1,636	1,513	123	115	91	24	30	19	11	22	17	5
	65+	896	722	175	190	144	46	641	527	114	51	45	6	2	0	2	13	6	7
	TOTAL	358,779	179,662	179,117	54,964	21,039	33,925	273,928	144,191	129,737	24,512	12,030	12,481	3,056	1,609	1,447	2,319	793	1,526
2001	10-14	6,040	861	5,179	855	57	798	4,646	715	3,932	440	80	360	53	6	47	46	3	43
	15-19	101,065	31,949	69,116	14,961	2,611	12,351	77,554	26,692	50,862	7,095	2,312	4,783	763	205	559	692	130	562
	20-24	116,226	54,619	61,607	16,997	5,390	11,607	89,154	44,621	44,533	8,416	4,024	4,393	881	354	526	778	231	547
	25-29	56,084	32,186	23,899	8,535	3,610	4,924	42,275	25,705	16,570	4,418	2,464	1,954	512	281	231	344	124	219
	30-34	32,531	21,049	11,482	6,106	3,461	2,645	23,242	15,644	7,597	2,636	1,646	990	327	205	122	220	93	127
	35-39	21,794	15,213	6,581	4,720	3,026	1,694	15,136	10,957	4,178	1,630	1,055	575	160	116	44	149	59	90
	40-44	13,603	10,072	3,531	2,882	1,924	958	9,749	7,496	2,253	759	513	246	111	92	19	101	46	55
	45-54	10,455	8,654	1,801	2,364	1,796	568	7,386	6,356	1,030	542	398	144	84	60	25	79	45	34
	55-64	2,254	2,003	251	583	510	73	1,510	1,374	136	124	90	33	23	16	7	14	12	2
	65+	842	650	192	207	163	44	554	443	111	57	29	28	17	11	6	7	3	4
	TOTAL	361,758	177,541	184,217	58,323	22,585	35,738	271,871	140,235	131,636	26,190	12,624	13,566	2,935	1,348	1,588	2,439	751	1,689
2002	10-14	5,448	783	4,665	786	50	736	4,181	665	3,516	412	57	355	28	4	24	41	7	34
	15-19	96,326	29,920	66,406	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	112,467	52,141	60,325	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	55,483	31,399	24,084	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	32,076	20,560	11,516	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	21,414	14,875	6,538	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	13,787	10,253	3,535	3,386	2,393	993	9,226	7,098	2,128	957	637	320	109	66	44	109	58	51
	45-54	10,924	8,890	2,034	2,706	2,089	617	7,460	6,268	1,192	573	408	165	105	74	31	80	51	29
	55-64	2,283	2,018	265	664	574	90	1,467	1,336	132	125	95	29	23	10	13	4	3	2
	65+	790	631	159	196	155	41	523	428	95	50	35	15	18	11	7	3	3	0
	TOTAL	351,836	171,849	179,987	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

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. For 1998, ID and NJ did not report age and/or race/ethnicity for most cases and were excluded. Cases and population denominators have been excluded for these states/areas. Differences between total cases from this table and others in the report are due to different reporting forms and above listed exclusions. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 22B. Gonorrhea — Rates per 100,000 population by age, sex, and race/ethnicity: United States, 1998–2002

Age Group	Total			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	Total	Male	Female
10-14	32.4	8.4	57.5	6.7	0.8	13.0	173.7	49.3	301.8	12.9	4.0	22.2	3.3	0.8	5.9	25.2	4.2	46.9
15-19	547.5	347.4	759.4	123.3	38.8	213.0	2,909.7	2,053.7	3,792.6	216.6	144.0	295.5	64.8	22.5	108.1	389.8	142.0	638.9
20-24	605.9	577.4	635.4	122.4	70.7	176.4	3,401.1	3,574.4	3,232.3	249.4	240.2	259.3	84.1	58.2	109.5	411.4	244.4	579.9
25-29	303.0	350.4	256.1	62.9	54.2	71.6	1,774.1	2,251.2	1,340.0	143.5	159.7	126.2	43.6	42.0	44.9	236.8	140.8	337.4
30-34	162.1	205.0	119.9	39.3	42.7	36.0	960.1	1,332.4	634.3	80.6	99.9	59.8	23.5	24.6	22.5	133.1	112.8	153.3
35-39	102.8	140.5	65.4	24.8	30.3	19.3	641.8	962.3	360.8	52.7	68.1	36.5	16.8	20.7	13.3	98.8	82.8	114.5
40-44	60.6	92.3	29.6	13.4	17.7	9.0	401.9	672.8	165.8	31.7	43.2	20.0	9.6	12.9	6.6	57.6	67.7	48.1
45-54	27.2	46.6	8.7	5.9	9.2	2.7	202.7	386.2	51.1	16.6	24.3	9.3	3.9	4.2	3.6	27.1	39.6	15.5
55-64	9.7	18.2	2.1	2.3	4.1	0.6	76.0	159.4	12.4	7.0	11.5	3.0	1.6	2.1	1.2	12.7	16.4	9.3
65+	3.6	6.2	1.7	0.8	1.4	0.4	31.9	60.6	13.6	4.5	8.0	2.0	1.3	1.0	1.4	10.9	2.6	17.0
TOTAL	133.4	134.6	132.2	27.3	19.9	34.5	859.4	946.2	781.4	69.9	69.6	70.3	20.0	15.4	24.3	117.7	71.6	162.4
10-14	30.4	8.2	53.8	6.5	0.8	12.5	159.5	47.4	275.1	13.4	4.3	23.0	4.6	0.4	9.0	20.0	2.6	38.0
15-19	528.8	337.8	730.8	113.5	36.1	195.5	2,833.8	2,004.8	3,690.4	228.7	148.9	315.2	73.5	34.5	113.4	365.4	123.9	607.7
20-24	603.4	574.5	633.4	121.1	70.4	174.1	3,377.4	3,540.9	3,217.8	249.2	235.0	264.5	93.8	82.2	105.2	414.3	236.2	593.4
25-29	308.2	360.1	256.8	64.6	55.9	73.4	1,772.7	2,269.6	1,318.7	146.8	160.3	132.6	37.3	44.3	31.3	186.5	127.1	248.0
30-34	163.9	211.7	117.0	39.7	42.6	36.9	967.1	1,380.7	604.0	80.1	95.0	64.2	27.0	33.5	21.4	139.1	124.8	153.6
35-39	104.0	144.5	63.8	26.7	31.7	21.8	639.0	986.0	333.6	49.2	61.4	36.4	16.2	21.3	11.7	89.3	74.2	104.2
40-44	62.9	96.5	29.9	14.5	20.3	8.8	413.7	695.3	167.5	29.5	37.5	21.3	8.1	9.3	7.1	47.6	57.4	38.3
45-54	28.9	49.5	9.2	6.6	10.2	3.1	211.7	404.6	52.3	14.8	21.8	8.2	4.9	7.1	2.9	31.0	36.2	26.3
55-64	10.1	19.0	1.9	2.7	4.8	0.7	76.4	163.4	10.2	6.5	10.7	2.8	1.9	3.1	0.8	8.2	12.7	4.3
65+	2.6	5.0	0.9	0.7	1.3	0.2	22.7	47.3	6.9	3.4	6.2	1.4	0.7	0.4	0.9	6.2	4.6	7.3
TOTAL	131.9	135.0	129.0	26.9	20.1	33.4	848.3	947.0	759.4	70.0	67.3	72.7	20.9	18.9	22.7	109.9	66.3	152.0
10-14	28.9	7.9	50.9	5.8	0.7	11.2	147.9	43.2	255.8	13.2	5.1	21.7	5.1	0.4	10.0	22.6	6.4	39.5
15-19	504.7	320.6	699.3	111.6	38.5	188.3	2,692.7	1,889.3	3,514.0	216.8	137.1	307.6	81.8	43.2	121.8	322.7	128.2	525.5
20-24	592.3	559.5	626.6	131.4	80.4	183.5	3,322.1	3,511.8	3,142.4	227.5	200.6	260.4	100.0	97.5	102.6	397.5	247.8	551.6
25-29	288.6	335.1	241.0	64.5	54.7	74.5	1,685.0	2,194.7	1,223.5	123.3	132.4	112.7	53.7	67.9	40.1	233.5	158.6	308.9
30-34	155.1	199.6	110.0	42.6	46.6	38.6	881.4	1,255.0	545.8	75.1	88.9	59.4	37.5	55.7	20.2	140.8	147.1	134.5
35-39	99.5	139.3	60.0	29.5	37.3	21.6	567.3	872.5	296.7	51.1	63.3	37.9	25.9	38.6	14.0	103.3	105.9	100.9
40-44	60.3	92.0	29.1	16.6	22.5	10.8	366.5	614.6	147.3	29.0	38.1	19.4	14.0	22.6	6.3	58.6	66.2	51.6
45-54	27.4	46.9	8.7	7.1	11.0	3.2	185.6	348.1	46.0	17.9	26.7	9.2	7.1	10.9	3.7	25.7	33.3	18.5
55-64	9.5	17.8	1.8	2.6	4.7	0.6	69.1	143.4	9.4	6.7	11.3	2.6	3.7	4.9	2.6	15.4	25.0	6.4
65+	2.6	5.0	0.8	0.6	1.2	0.3	22.8	49.2	6.5	2.9	6.3	0.5	0.2	0.0	0.4	10.4	10.8	10.1
TOTAL	127.5	130.1	124.9	27.7	21.7	33.5	788.2	873.5	711.0	69.4	66.2	72.8	27.8	30.2	25.5	108.7	75.2	141.4
10-14	29.4	8.2	51.7	6.4	0.8	12.4	147.8	44.8	253.9	13.9	5.0	23.3	7.0	1.6	12.7	21.6	2.7	41.3
15-19	499.8	307.5	703.2	114.3	39.0	193.2	2,635.3	1,794.1	3,495.2	223.7	136.9	322.5	93.2	49.0	139.1	346.3	127.5	574.6
20-24	612.9	563.8	664.1	143.1	89.7	197.8	3,387.4	3,484.0	3,295.9	246.9	214.6	286.3	99.7	80.2	119.1	472.2	276.6	673.5
25-29	289.4	328.5	249.4	69.7	58.5	81.1	1,659.3	2,123.2	1,239.3	130.5	134.9	125.3	48.7	54.4	43.2	222.1	160.3	284.3
30-34	158.6	203.9	112.7	44.9	50.6	39.1	888.2	1,263.2	551.3	84.4	98.7	68.0	32.4	41.8	23.5	141.6	119.5	163.5
35-39	96.0	134.4	57.8	29.7	38.0	21.3	535.3	824.8	278.7	57.7	71.5	42.6	16.6	24.8	8.9	86.4	70.5	101.4
40-44	60.6	90.5	31.2	17.6	23.5	11.7	360.6	591.0	157.0	33.0	43.6	21.8	12.4	21.8	4.0	61.5	58.1	64.7
45-54	27.7	46.8	9.4	8.2	12.6	3.9	181.0	336.9	46.9	17.3	25.7	9.1	5.8	8.9	3.2	30.8	36.4	25.5
55-64	9.3	17.2	2.0	3.0	5.5	0.7	63.8	130.2	10.4	7.2	11.3	3.7	2.8	4.2	1.6	9.6	17.4	2.3
65+	2.4	4.5	0.9	0.7	1.3	0.3	19.7	41.4	6.3	3.3	4.0	2.7	2.0	3.2	1.2	5.5	6.0	5.1
TOTAL	128.5	128.6	128.5	29.4	23.3	35.3	782.3	849.6	721.4	74.2	69.5	79.1	26.7	25.3	28.0	114.4	71.2	156.5
10-14	26.5	7.4	46.6	5.9	0.7	11.4	133.0	41.7	227.1	13.0	3.5	22.9	3.8	1.1	6.6	19.1	6.4	32.4
15-19	476.4	287.9	675.6	115.0	37.7	196.1	2,484.9	1,680.1	3,307.7	214.7	125.0	316.8	66.8	29.2	105.9	393.1	167.2	628.7
20-24	593.1	538.2	650.3	152.0	95.1	210.1	3,197.6	3,256.2	3,142.1	253.7	222.7	291.5	87.4	68.9	105.9	511.6	292.3	737.4
25-29	286.3	320.4	251.3	74.9	63.5	86.4	1,600.5	2,031.3	1,210.4	137.3	135.2	139.6	47.7	50.8	44.6	251.9	201.8	302.3
30-34	156.4	199.2	113.0	47.4	53.0	41.8	849.3	1,207.3	527.6	90.2	99.3	79.9	31.9	42.2	22.2	167.7	151.3	184.0
35-39	94.3	131.4	57.4	31.8	41.9	21.8	504.4	767.0	271.7	60.0	76.8	41.6	22.1	27.8	16.9	101.5	103.3	99.9
40-44	61.4	92.1	31.2	20.7	29.3	12.1	341.3	559.6	148.2	41.5	54.1	28.4	12.2	15.5	9.3	66.1	73.6	59.2
45-54	29.0	48.1	10.6	9.4	14.6	4.3	182.8	332.2	54.3	18.3	26.3	10.4	7.3	11.1	4.0	31.3	41.2	22.1
55-64	9.4	17.3	2.1	3.5	6.2	0.9	62.0	126.6	10.0	7.3	11.9	3.2	2.8	2.5	3.0	3.0	4.0	2.2
65+	2.3	4.4	0.8	0.7	1.3	0.2	18.6	39.9	5.5	2.9	4.8	1.5	2.2	3.0	1.6	2.4	5.6	0.0
TOTAL	125.0	124.5	125.5	31.1	25.2	36.8	742.3	802.7	687.7	76.0	70.6	81.7	24.1	22.5	25.6	126.8	85.9	166.8

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. For 1998, ID and NJ did not report age and/or race/ethnicity for most cases and were excluded. Cases and population denominators have been excluded for these states/areas. Differences between total cases from this table and others in the report are due to different reporting forms and above listed exclusions. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 23. All stages of syphilis* — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	1,139	1,019	753	724	700	26.2	23.3	16.9	16.3	15.7
Alaska	13	13	6	9	9	2.1	2.1	1.0	1.4	1.4
Arizona	697	833	848	1,147	1,085	14.9	17.4	16.5	22.4	21.1
Arkansas	506	364	366	239	217	19.9	14.3	13.7	8.9	8.1
California	2,869	2,859	3,354	3,053	3,912	8.8	8.6	9.9	9.0	11.5
Colorado	122	91	63	149	174	3.1	2.2	1.5	3.5	4.0
Connecticut	177	126	151	165	188	5.4	3.8	4.4	4.8	5.5
Delaware	114	72	45	79	62	15.3	9.6	5.7	10.1	7.9
Florida	2,540	2,690	2,770	2,915	3,280	17.0	17.8	17.3	18.2	20.5
Georgia	1,836	1,974	1,640	1,988	1,893	24.0	25.3	20.0	24.3	23.1
Hawaii	18	11	22	41	59	1.5	0.9	1.8	3.4	4.9
Idaho	15	13	11	11	23	1.2	1.0	0.9	0.9	1.8
Illinois	1,946	1,966	1,638	1,546	1,592	16.2	16.2	13.2	12.4	12.8
Indiana	509	802	751	529	318	8.6	13.5	12.4	8.7	5.2
Iowa	48	37	55	44	54	1.7	1.3	1.9	1.5	1.8
Kansas	116	95	67	88	77	4.4	3.6	2.5	3.3	2.9
Kentucky	339	302	253	191	212	8.6	7.6	6.3	4.7	5.2
Louisiana	1,651	1,423	973	793	775	37.8	32.5	21.8	17.7	17.3
Maine	4	1	7	16	9	0.3	0.1	0.5	1.3	0.7
Maryland	2,156	1,385	1,172	938	839	42.0	26.8	22.1	17.7	15.8
Massachusetts	568	385	448	446	541	9.2	6.2	7.1	7.0	8.5
Michigan	692	780	1,001	1,169	1,181	7.0	7.9	10.1	11.8	11.9
Minnesota	75	71	77	132	148	1.6	1.5	1.6	2.7	3.0
Mississippi	1,161	906	685	654	451	42.2	32.7	24.1	23.0	15.9
Missouri	379	396	299	174	204	7.0	7.2	5.3	3.1	3.6
Montana	0	3	0	0	4	0.0	0.3	0.0	0.0	0.4
Nebraska	35	24	7	16	25	2.1	1.4	0.4	0.9	1.5
Nevada	139	92	52	62	113	8.0	5.1	2.6	3.1	5.7
New Hampshire	14	17	19	20	24	1.2	1.4	1.5	1.6	1.9
New Jersey	836	803	802	1,040	1,062	10.3	9.9	9.5	12.4	12.6
New Mexico	76	80	98	73	110	4.4	4.6	5.4	4.0	6.0
New York	5,148	4,094	2,947	3,609	3,879	28.3	22.5	15.5	19.0	20.4
North Carolina	2,133	1,713	1,495	1,422	1,049	28.3	22.4	18.6	17.7	13.0
North Dakota	0	0	1	2	0	0.0	0.0	0.2	0.3	0.0
Ohio	474	364	282	297	351	4.2	3.2	2.5	2.6	3.1
Oklahoma	369	539	327	288	287	11.0	16.1	9.5	8.3	8.3
Oregon	32	37	49	48	75	1.0	1.1	1.4	1.4	2.2
Pennsylvania	910	932	685	726	689	7.6	7.8	5.6	5.9	5.6
Rhode Island	55	55	38	39	67	5.6	5.6	3.6	3.7	6.4
South Carolina	876	929	860	916	619	22.8	23.9	21.4	22.8	15.4
South Dakota	3	3	1	1	0	0.4	0.4	0.1	0.1	0.0
Tennessee	1,754	1,737	1,709	1,478	1,074	32.3	31.7	30.0	26.0	18.9
Texas	3,967	3,699	3,298	3,662	4,110	20.1	18.5	15.8	17.6	19.7
Utah	58	49	59	25	71	2.8	2.3	2.6	1.1	3.2
Vermont	6	3	0	8	2	1.0	0.5	0.0	1.3	0.3
Virginia	719	722	539	525	528	10.6	10.5	7.6	7.4	7.5
Washington	143	205	171	174	158	2.5	3.6	2.9	3.0	2.7
West Virginia	11	15	13	7	5	0.6	0.8	0.7	0.4	0.3
Wisconsin	257	192	184	131	134	4.9	3.7	3.4	2.4	2.5
Wyoming	2	0	5	4	1	0.4	0.0	1.0	0.8	0.2
U.S. TOTAL†	38,286	35,379	31,612	32,272	32,871	14.2	13.0	11.2	11.5	11.7
Northeast	7,718	6,416	5,097	6,069	6,461	14.9	12.4	9.5	11.3	12.1
Midwest	4,534	4,730	4,363	4,129	4,084	7.2	7.5	6.8	6.4	6.3
South	21,850	19,947	17,414	17,278	16,532	22.9	20.7	17.4	17.2	16.5
West	4,184	4,286	4,738	4,796	5,794	6.9	7.0	7.5	7.6	9.2
Guam	3	12	9	30	18	1.9	7.3	5.8	19.4	11.6
Puerto Rico	1,461	1,463	1,340	1,268	1,390	37.8	37.6	35.2	33.3	36.5
Virgin Islands	35	13	11	9	4	31.9	11.5	10.1	8.3	3.7
OUTLYING AREAS	1,499	1,488	1,360	1,307	1,412	36.3	35.7	33.4	32.1	34.7
TOTAL	39,785	36,867	32,972	33,579	34,283	14.5	13.3	11.5	11.8	12.0

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

†Includes cases reported by Washington, D.C.

Table 24. All stages of syphilis* — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	7	6	2	4	5	1.3	1.1	0.4	0.7	0.9
Albuquerque, NM	45	50	63	42	60	8.6	9.6	11.3	7.5	10.8
Atlanta, GA	591	580	384	799	827	79.9	77.9	47.1	97.9	101.3
Austin, TX	56	62	59	115	101	7.9	8.5	7.3	14.2	12.4
Baltimore, MD	1,472	941	728	477	398	228.0	148.7	111.8	73.3	61.1
Birmingham, AL	246	278	212	151	127	37.3	42.3	32.0	22.8	19.2
Boston, MA	240	164	160	157	231	43.1	29.5	26.8	26.3	38.6
Buffalo, NY	12	6	10	12	10	3.8	1.9	3.1	3.7	3.1
Charlotte, NC	211	194	151	130	102	33.4	29.9	21.7	18.7	14.7
Chicago, IL	1,371	1,322	1,090	1,094	1,148	46.0	44.4	35.3	35.4	37.2
Cincinnati, OH	32	12	14	16	21	3.8	1.4	1.7	1.9	2.5
Cleveland, OH	151	88	42	39	26	10.9	6.4	3.0	2.8	1.9
Columbus, OH	115	109	90	140	189	11.3	10.6	8.4	13.1	17.7
Corpus Christi, TX	27	20	10	10	12	8.5	6.3	3.2	3.2	3.8
Dallas, TX	736	695	587	702	1,044	35.9	33.7	26.5	31.6	47.1
Dayton, OH	39	16	17	18	9	7.0	2.8	3.0	3.2	1.6
Denver, CO	35	46	23	64	89	7.0	9.2	4.1	11.5	16.0
Des Moines, IA	20	7	18	15	19	5.6	1.9	4.8	4.0	5.1
Detroit, MI	477	569	771	924	878	37.8	45.4	81.0	97.1	92.3
El Paso, TX	81	79	92	106	119	11.5	11.3	13.5	15.6	17.5
Fort Worth, TX	175	177	191	267	374	12.9	12.8	13.2	18.5	25.9
Honolulu, HI	18	8	15	30	52	2.1	0.9	1.7	3.4	5.9
Houston, TX	1,401	1,111	850	922	1,035	43.7	34.2	25.0	27.1	30.4
Indianapolis, IN	239	553	521	306	134	29.4	68.2	60.5	35.6	15.6
Jacksonville, FL	154	74	125	139	69	20.9	10.0	16.0	17.8	8.9
Jersey City, NJ	34	42	27	39	59	15.4	19.2	11.2	16.2	24.5
Kansas City, MO	14	66	46	30	37	3.1	14.6	10.2	6.6	8.2
Los Angeles, CA	1,264	1,189	1,857	1,339	1,625	14.7	13.6	20.8	15.0	18.2
Louisville, KY	213	174	149	100	141	31.7	25.9	21.5	14.4	20.3
Memphis, TN	1,036	927	882	896	538	119.2	106.2	98.3	99.8	59.9
Miami, FL	773	795	829	1,044	1,297	35.9	36.5	36.8	46.3	57.6
Milwaukee, WI	233	166	151	98	88	25.6	18.3	16.1	10.4	9.4
Minneapolis, MN	34	28	34	63	79	9.3	7.6	8.9	16.4	20.6
Nashville, TN	416	505	523	379	289	77.9	95.3	91.8	66.5	50.7
New Orleans, LA	348	228	124	101	101	74.8	49.5	25.6	20.8	20.8
New York City, NY	4,652	3,736	2,712	3,304	3,483	62.7	50.3	33.9	41.3	43.5
Newark, NJ	191	172	265	377	343	67.2	60.7	88.1	125.3	114.0
Norfolk, VA	108	84	85	83	47	50.2	37.2	36.3	35.4	20.1
Oakland, CA	129	127	91	109	175	10.1	9.8	6.3	7.5	12.1
Oklahoma City, OK	181	300	193	160	170	44.4	73.2	45.4	37.6	40.0
Omaha, NE	26	10	6	3	15	5.9	2.2	1.3	0.6	3.2
Philadelphia, PA	804	825	618	646	566	56.0	58.2	40.7	42.6	37.3
Phoenix, AZ	572	722	737	957	855	20.5	25.2	24.0	31.2	27.8
Pittsburgh, PA	12	7	7	15	26	0.9	0.6	0.5	1.2	2.0
Portland, OR	17	19	30	29	48	3.4	3.8	5.8	5.6	9.2
Richmond, VA	81	64	40	58	25	41.7	33.7	20.2	29.3	12.6
Rochester, NY	39	16	7	4	13	16.2	6.7	2.8	1.6	5.3
Sacramento, CA	31	20	25	33	38	2.7	1.7	2.0	2.7	3.1
San Antonio, TX	237	228	287	364	306	17.5	16.6	20.6	26.1	22.0
San Diego, CA	187	251	232	151	159	6.7	8.9	8.2	5.4	5.7
San Francisco, CA	129	128	163	301	604	17.3	17.1	21.0	38.8	77.8
San Jose, CA	62	56	43	92	92	3.8	3.4	2.6	5.5	5.5
Seattle, WA	69	123	116	110	96	4.2	7.4	6.7	6.3	5.5
St Louis, MO	170	165	115	63	80	50.1	49.4	33.0	18.1	23.0
St Paul, MN	10	6	9	16	16	3.7	2.2	3.2	5.6	5.6
St Petersburg, FL	56	38	64	40	81	6.4	4.3	6.9	4.3	8.8
Tampa, FL	177	111	132	148	222	19.1	11.8	13.2	14.8	22.2
Toledo, OH	23	21	18	3	18	5.1	4.7	4.0	0.7	4.0
Tucson, AZ	36	42	36	72	91	4.6	5.2	4.3	8.5	10.8
Tulsa, OK	75	109	32	22	30	19.7	28.4	8.1	5.6	7.6
Washington, DC	579	458	516	459	431	110.7	88.2	90.2	80.2	75.3
Wichita, KS	21	34	10	15	13	4.7	7.5	2.2	3.3	2.9
Yonkers, NY	22	12	10	13	27	11.4	6.2	5.0	6.5	13.6
U.S. CITY TOTAL	21,012	19,171	17,446	18,415	19,403	29.8	27.0	23.7	25.0	26.3
San Juan, PR	673	682	545	483	442	64.3	64.8	53.4	47.3	43.3
TOTAL	21,685	19,853	17,991	18,898	19,845	30.3	27.6	24.1	25.3	26.6

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

Table 25. Primary and secondary syphilis — Reported cases and rates by state/area, ranked by rates: United States, 2002

<i>Rank*</i>	<i>State/Area</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Georgia	439	5.4
2	Michigan	486	4.9
3	Maryland	228	4.3
4	Florida	617	3.9
5	Illinois	479	3.9
6	Arizona	200	3.9
7	North Carolina	279	3.5
8	Louisiana	152	3.4
9	Alabama	149	3.4
10	South Carolina	134	3.3
11	California	1,033	3.0
12	Tennessee	168	3.0
13	Texas	589	2.8
14	New York	478	2.5
	U.S. TOTAL†	6,862	2.4
15	Kentucky	88	2.2
16	Oklahoma	72	2.1
17	New Mexico	39	2.1
18	New Jersey	169	2.0
19	Mississippi	49	1.7
20	Massachusetts	99	1.6
21	Colorado	64	1.5
22	Ohio	159	1.4
23	Delaware	11	1.4
24	Arkansas	34	1.3
25	Washington	70	1.2
26	Minnesota	59	1.2
27	Rhode Island	13	1.2
28	Virginia	71	1.0
29	Indiana	62	1.0
30	Pennsylvania	105	0.9
31	Hawaii	11	0.9
32	Connecticut	28	0.8
33	Oregon	28	0.8
34	Nevada	15	0.8
35	Kansas	20	0.7
36	Missouri	34	0.6
37	Wisconsin	30	0.6
38	Idaho	8	0.6
39	New Hampshire	8	0.6
40	Nebraska	6	0.4
41	Iowa	8	0.3
42	Utah	7	0.3
43	Vermont	2	0.3
	YEAR 2010 OBJECTIVE		0.2
44	Maine	2	0.2
45	West Virginia	2	0.1
	Alaska	0	0.0
	Montana	0	0.0
	North Dakota	0	0.0
	South Dakota	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.

†Total includes cases reported by Washington, D.C., but excludes outlying areas (Guam with 6 cases and rate of 3.9, Puerto Rico with 270 cases and rate of 7.1, and Virgin Islands with 1 case and rate of 0.9).

Table 26. Primary and secondary syphilis — Counties and independent cities* ranked by number of reported cases: United States, 2002

<i>Rank[†]</i>	<i>County/Independent City</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>	<i>Cumulative Percent</i>
1	Wayne County, MI	438	21.3	6
2	Cook County, IL	408	7.6	12
3	Los Angeles County, CA	403	4.2	18
4	San Francisco County, CA	315	40.6	22
5	Fulton County, GA	257	31.5	26
6	New York County, NY	248	16.1	30
7	Dade County, FL	231	10.3	33
8	Dallas County, TX	191	8.6	36
9	Maricopa County, AZ	155	5.0	38
10	Broward County, FL	133	8.2	40
11	Baltimore (City), MD	121	18.6	42
12	Harris County, TX	112	3.3	43
13	Tarrant County, TX	106	7.3	45
14	Franklin County, OH	102	9.5	46
15	Montgomery County, AL	96	43.0	48
16	Shelby County, TN	89	9.9	49
17	Essex County, NJ	86	10.8	50

* Accounting for 50% of reported primary and secondary syphilis cases.

† Counties were ranked in descending order by number of cases, rate, and alphabetically by state.

Table 27. Primary and secondary syphilis — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	274	202	123	142	149	6.3	4.6	2.8	3.2	3.4
Alaska	1	1	0	0	0	0.2	0.2	0.0	0.0	0.0
Arizona	185	212	189	180	200	4.0	4.4	3.7	3.5	3.9
Arkansas	108	87	104	49	34	4.3	3.4	3.9	1.8	1.3
California	327	283	325	545	1,033	1.0	0.9	1.0	1.6	3.0
Colorado	10	8	11	23	64	0.3	0.2	0.3	0.5	1.5
Connecticut	26	16	16	12	28	0.8	0.5	0.5	0.4	0.8
Delaware	21	10	9	14	11	2.8	1.3	1.1	1.8	1.4
Florida	294	343	413	484	617	2.0	2.3	2.6	3.0	3.9
Georgia	333	430	402	414	439	4.4	5.5	4.9	5.1	5.4
Hawaii	4	3	2	12	11	0.3	0.3	0.2	1.0	0.9
Idaho	2	1	1	1	8	0.2	0.1	0.1	0.1	0.6
Illinois	396	422	412	409	479	3.3	3.5	3.3	3.3	3.9
Indiana	215	450	351	151	62	3.6	7.6	5.8	2.5	1.0
Iowa	5	9	11	5	8	0.2	0.3	0.4	0.2	0.3
Kansas	14	14	6	25	20	0.5	0.5	0.2	0.9	0.7
Kentucky	106	101	85	48	88	2.7	2.5	2.1	1.2	2.2
Louisiana	430	306	209	173	152	9.8	7.0	4.7	3.9	3.4
Maine	1	0	1	1	2	0.1	0.0	0.1	0.1	0.2
Maryland	648	343	300	266	228	12.6	6.6	5.7	5.0	4.3
Massachusetts	46	37	68	46	99	0.7	0.6	1.1	0.7	1.6
Michigan	211	249	330	428	486	2.1	2.5	3.3	4.3	4.9
Minnesota	9	10	16	33	59	0.2	0.2	0.3	0.7	1.2
Mississippi	261	194	137	140	49	9.5	7.0	4.8	4.9	1.7
Missouri	109	96	29	26	34	2.0	1.8	0.5	0.5	0.6
Montana	0	1	0	0	0	0.0	0.1	0.0	0.0	0.0
Nebraska	8	6	2	10	6	0.5	0.4	0.1	0.6	0.4
Nevada	15	5	5	8	15	0.9	0.3	0.3	0.4	0.8
New Hampshire	2	1	2	1	8	0.2	0.1	0.2	0.1	0.6
New Jersey	107	68	71	137	169	1.3	0.8	0.8	1.6	2.0
New Mexico	14	12	16	19	39	0.8	0.7	0.9	1.0	2.1
New York	119	150	132	304	478	0.7	0.8	0.7	1.6	2.5
North Carolina	723	464	483	445	279	9.6	6.1	6.0	5.5	3.5
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	134	92	69	81	159	1.2	0.8	0.6	0.7	1.4
Oklahoma	98	187	116	60	72	2.9	5.6	3.4	1.7	2.1
Oregon	6	8	12	13	28	0.2	0.2	0.4	0.4	0.8
Pennsylvania	98	84	77	100	105	0.8	0.7	0.6	0.8	0.9
Rhode Island	1	3	4	9	13	0.1	0.3	0.4	0.9	1.2
South Carolina	271	269	229	235	134	7.1	6.9	5.7	5.9	3.3
South Dakota	1	0	0	1	0	0.1	0.0	0.0	0.1	0.0
Tennessee	567	641	532	331	168	10.4	11.7	9.4	5.8	3.0
Texas	443	473	396	478	589	2.2	2.4	1.9	2.3	2.8
Utah	4	2	2	11	7	0.2	0.1	0.1	0.5	0.3
Vermont	4	3	0	3	2	0.7	0.5	0.0	0.5	0.3
Virginia	149	153	126	102	71	2.2	2.2	1.8	1.4	1.0
Washington	44	77	66	57	70	0.8	1.3	1.1	1.0	1.2
West Virginia	3	5	3	5	2	0.2	0.3	0.2	0.3	0.1
Wisconsin	78	41	48	22	30	1.5	0.8	0.9	0.4	0.6
Wyoming	1	0	1	1	0	0.2	0.0	0.2	0.2	0.0
U.S. TOTAL*	7,007	6,617	5,979	6,103	6,862	2.6	2.4	2.1	2.2	2.4
Northeast	404	362	371	613	904	0.8	0.7	0.7	1.1	1.7
Midwest	1,180	1,389	1,274	1,191	1,343	1.9	2.2	2.0	1.8	2.1
South	4,810	4,253	3,704	3,429	3,140	5.0	4.4	3.7	3.4	3.1
West	613	613	630	870	1,475	1.0	1.0	1.0	1.4	2.3
Guam	0	2	1	12	6	0.0	1.2	0.6	7.8	3.9
Puerto Rico	177	146	175	244	270	4.6	3.8	4.6	6.4	7.1
Virgin Islands	7	1	3	0	1	6.4	0.9	2.8	0.0	0.9
OUTLYING AREAS	184	149	179	256	277	4.5	3.6	4.4	6.3	6.8
TOTAL	7,191	6,766	6,158	6,359	7,139	2.6	2.4	2.2	2.2	2.5

*Includes cases reported by Washington, D.C.

Table 28. Primary and secondary syphilis — Women – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	133	102	63	67	63	5.9	4.5	2.7	2.9	2.7
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	67	65	80	50	74	2.8	2.7	3.1	1.9	2.9
Arkansas	59	44	58	27	18	4.5	3.3	4.2	2.0	1.3
California	132	76	51	42	39	0.8	0.5	0.3	0.2	0.2
Colorado	3	6	1	5	2	0.1	0.3	0.0	0.2	0.1
Connecticut	16	6	7	2	3	0.9	0.4	0.4	0.1	0.2
Delaware	11	1	1	5	4	2.9	0.3	0.2	1.2	1.0
Florida	116	143	163	135	108	1.5	1.8	2.0	1.6	1.3
Georgia	130	160	159	129	98	3.3	4.0	3.8	3.1	2.4
Hawaii	0	2	1	0	2	0.0	0.3	0.2	0.0	0.3
Idaho	0	0	0	0	4	0.0	0.0	0.0	0.0	0.6
Illinois	158	180	181	91	81	2.6	2.9	2.9	1.4	1.3
Indiana	113	225	196	71	18	3.7	7.4	6.3	2.3	0.6
Iowa	0	6	6	1	4	0.0	0.4	0.4	0.1	0.3
Kansas	6	8	1	11	6	0.4	0.6	0.1	0.8	0.4
Kentucky	49	45	42	17	43	2.4	2.2	2.0	0.8	2.1
Louisiana	196	153	97	83	76	8.6	6.7	4.2	3.6	3.3
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	302	164	115	113	53	11.4	6.2	4.2	4.1	1.9
Massachusetts	15	15	19	4	12	0.5	0.5	0.6	0.1	0.4
Michigan	86	95	141	161	192	1.7	1.9	2.8	3.2	3.8
Minnesota	4	5	5	16	4	0.2	0.2	0.2	0.6	0.2
Mississippi	128	93	70	69	31	8.9	6.4	4.8	4.7	2.1
Missouri	50	49	11	8	10	1.8	1.7	0.4	0.3	0.3
Montana	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nebraska	3	3	1	8	2	0.4	0.4	0.1	0.9	0.2
Nevada	3	3	2	1	1	0.3	0.3	0.2	0.1	0.1
New Hampshire	1	1	0	0	0	0.2	0.2	0.0	0.0	0.0
New Jersey	37	32	23	44	48	0.9	0.8	0.5	1.0	1.1
New Mexico	8	3	5	6	12	0.9	0.3	0.5	0.6	1.3
New York	28	34	12	23	26	0.3	0.4	0.1	0.2	0.3
North Carolina	347	202	234	191	115	8.9	5.1	5.7	4.7	2.8
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	72	43	26	26	27	1.2	0.7	0.4	0.4	0.5
Oklahoma	45	77	54	28	20	2.6	4.5	3.1	1.6	1.1
Oregon	2	5	4	2	8	0.1	0.3	0.2	0.1	0.5
Pennsylvania	31	27	30	28	22	0.5	0.4	0.5	0.4	0.3
Rhode Island	1	1	2	0	2	0.2	0.2	0.4	0.0	0.4
South Carolina	131	117	96	101	58	6.6	5.8	4.7	4.9	2.8
South Dakota	1	0	0	0	0	0.3	0.0	0.0	0.0	0.0
Tennessee	284	283	247	158	82	10.1	10.0	8.5	5.4	2.8
Texas	183	182	152	169	192	1.8	1.8	1.4	1.6	1.8
Utah	0	0	1	2	0	0.0	0.0	0.1	0.2	0.0
Vermont	1	2	0	0	0	0.3	0.7	0.0	0.0	0.0
Virginia	61	71	44	43	17	1.8	2.0	1.2	1.2	0.5
Washington	7	3	8	7	1	0.2	0.1	0.3	0.2	0.0
West Virginia	2	3	1	1	1	0.2	0.3	0.1	0.1	0.1
Wisconsin	40	18	24	13	6	1.5	0.7	0.9	0.5	0.2
Wyoming	0	0	1	1	0	0.0	0.0	0.4	0.4	0.0
U.S. TOTAL*	3,096	2,777	2,445	1,967	1,594	2.2	2.0	1.7	1.4	1.1
Northeast	130	118	93	101	113	0.5	0.4	0.3	0.4	0.4
Midwest	533	632	592	406	350	1.7	1.9	1.8	1.2	1.1
South	2,211	1,864	1,606	1,344	988	4.5	3.8	3.1	2.6	1.9
West	222	163	154	116	143	0.7	0.5	0.5	0.4	0.5
Guam	0	0	0	5	2	0.0	0.0	0.0	6.6	2.6
Puerto Rico	81	73	76	130	123	4.0	3.6	3.8	6.6	6.2
Virgin Islands	1	1	2	0	0	1.7	1.9	3.5	0.0	0.0
OUTLYING AREAS	82	74	78	135	125	3.8	3.4	3.7	6.4	5.9
TOTAL	3,178	2,851	2,523	2,102	1,719	2.3	2.0	1.7	1.4	1.2

*Includes cases reported by Washington, D.C.

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

Table 29. Primary and secondary syphilis — Men – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	141	100	60	75	86	6.8	4.8	2.8	3.5	4.0
Alaska	1	1	0	0	0	0.3	0.3	0.0	0.0	0.0
Arizona	118	147	109	130	126	5.1	6.2	4.3	5.1	4.9
Arkansas	49	43	46	22	16	4.0	3.5	3.5	1.7	1.2
California	195	206	272	501	994	1.2	1.2	1.6	3.0	5.9
Colorado	7	2	10	18	62	0.4	0.1	0.5	0.8	2.9
Connecticut	10	10	9	10	25	0.6	0.6	0.5	0.6	1.5
Delaware	10	9	8	9	7	2.8	2.5	2.1	2.4	1.8
Florida	178	199	250	349	509	2.5	2.7	3.2	4.5	6.5
Georgia	203	269	243	285	340	5.5	7.1	6.0	7.1	8.4
Hawaii	4	1	1	12	9	0.7	0.2	0.2	2.0	1.5
Idaho	2	1	1	1	4	0.3	0.2	0.2	0.2	0.6
Illinois	238	242	231	318	398	4.1	4.1	3.8	5.2	6.5
Indiana	102	225	155	80	44	3.6	7.8	5.2	2.7	1.5
Iowa	5	3	5	4	4	0.4	0.2	0.3	0.3	0.3
Kansas	8	6	5	14	14	0.6	0.5	0.4	1.1	1.1
Kentucky	57	56	43	31	45	3.0	2.9	2.2	1.6	2.3
Louisiana	234	153	112	90	76	11.1	7.3	5.2	4.2	3.5
Maine	1	0	1	1	2	0.2	0.0	0.2	0.2	0.3
Maryland	346	179	185	153	175	13.9	7.1	7.2	6.0	6.8
Massachusetts	31	22	49	42	87	1.0	0.7	1.6	1.4	2.8
Michigan	125	154	189	267	294	2.6	3.2	3.9	5.5	6.0
Minnesota	5	5	11	17	55	0.2	0.2	0.5	0.7	2.3
Mississippi	131	101	67	71	18	9.9	7.6	4.9	5.2	1.3
Missouri	59	47	18	18	24	2.2	1.8	0.7	0.7	0.9
Montana	0	1	0	0	0	0.0	0.2	0.0	0.0	0.0
Nebraska	5	3	1	2	4	0.6	0.4	0.1	0.2	0.5
Nevada	12	2	3	7	14	1.3	0.2	0.3	0.7	1.4
New Hampshire	1	0	2	1	8	0.2	0.0	0.3	0.2	1.3
New Jersey	70	36	48	93	121	1.8	0.9	1.2	2.3	3.0
New Mexico	6	9	11	13	27	0.7	1.1	1.2	1.5	3.0
New York	91	116	120	281	452	1.0	1.3	1.3	3.1	4.9
North Carolina	376	262	249	254	164	10.3	7.1	6.3	6.4	4.2
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	62	49	43	55	132	1.1	0.9	0.8	1.0	2.4
Oklahoma	53	110	62	32	52	3.2	6.7	3.7	1.9	3.1
Oregon	4	3	8	11	20	0.2	0.2	0.5	0.6	1.2
Pennsylvania	67	57	47	72	83	1.2	1.0	0.8	1.2	1.4
Rhode Island	0	2	2	9	11	0.0	0.4	0.4	1.8	2.2
South Carolina	140	152	133	134	76	7.6	8.1	6.8	6.9	3.9
South Dakota	0	0	0	1	0	0.0	0.0	0.0	0.3	0.0
Tennessee	283	358	285	173	86	10.8	13.5	10.3	6.2	3.1
Texas	260	289	244	309	397	2.7	2.9	2.4	3.0	3.8
Utah	4	2	1	9	7	0.4	0.2	0.1	0.8	0.6
Vermont	3	1	0	3	2	1.0	0.3	0.0	1.0	0.7
Virginia	88	82	82	59	54	2.7	2.4	2.4	1.7	1.6
Washington	37	74	58	50	69	1.3	2.6	2.0	1.7	2.4
West Virginia	1	2	2	4	1	0.1	0.2	0.2	0.5	0.1
Wisconsin	38	23	24	9	24	1.5	0.9	0.9	0.3	0.9
Wyoming	1	0	0	0	0	0.4	0.0	0.0	0.0	0.0
U.S. TOTAL*	3,909	3,835	3,532	4,134	5,267	3.0	2.9	2.6	3.0	3.8
Northeast	274	244	278	512	791	1.1	1.0	1.1	2.0	3.1
Midwest	647	757	682	785	993	2.1	2.5	2.2	2.5	3.1
South	2,597	2,385	2,098	2,085	2,151	5.6	5.1	4.3	4.3	4.4
West	391	449	474	752	1,332	1.3	1.5	1.5	2.4	4.2
Guam	0	2	1	7	4	0.0	2.3	1.3	8.8	5.1
Puerto Rico	96	73	99	114	147	5.2	3.9	5.4	6.2	8.0
Virgin Islands	6	0	1	0	1	11.3	0.0	1.9	0.0	1.9
OUTLYING AREAS	102	75	101	121	152	5.1	3.7	5.1	6.2	7.7
TOTAL	4,011	3,910	3,633	4,255	5,419	3.0	2.9	2.6	3.0	3.9

*Includes cases reported by Washington, D.C.

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

Table 30. Primary and secondary syphilis — Reported cases and rates in selected cities of >200,000 population, ranked by rates: United States, 2002

<i>Rank*</i>	<i>City†</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	San Francisco, CA	315	40.6
2	Detroit, MI	384	40.4
3	Atlanta, GA	257	31.5
4	Newark, NJ	63	20.9
5	Baltimore, MD	121	18.6
6	Oklahoma City, OK	52	12.2
7	Chicago, IL	353	11.4
8	Louisville, KY	77	11.1
9	Miami, FL	231	10.3
10	Washington, DC	58	10.1
11	Memphis, TN	89	9.9
12	Minneapolis, MN	37	9.6
13	Columbus, OH	96	9.0
14	Dallas, TX	191	8.6
15	Boston, MA	48	8.0
16	Denver, CO	41	7.4
17	Fort Worth, TX	106	7.3
18	Jersey City, NJ	16	6.7
19	Norfolk, VA	13	5.5
20	New York City, NY	435	5.4
21	Phoenix, AZ	155	5.0
22	Nashville, TN	26	4.6
23	Philadelphia, PA	67	4.4
24	Indianapolis, IN	36	4.2
25	Los Angeles, CA	359	4.0
26	Charlotte, NC	28	4.0
27	Albuquerque, NM	21	3.8
28	Portland, OR	20	3.8
29	St Louis, MO	13	3.7
30	Oakland, CA	49	3.4
31	Houston, TX	112	3.3
32	Tampa, FL	33	3.3
33	Tucson, AZ	28	3.3
34	San Antonio, TX	45	3.2
35	Seattle, WA	50	2.9
36	Austin, TX	22	2.7
37	Toledo, OH	12	2.6
38	St Petersburg, FL	22	2.4
39	Jacksonville, FL	16	2.1
40	New Orleans, LA	9	1.9
41	San Jose, CA	30	1.8
42	El Paso, TX	12	1.8
43	Kansas City, MO	8	1.8
44	Tulsa, OK	7	1.8
45	St Paul, MN	5	1.8
46	Milwaukee, WI	16	1.7
47	Rochester, NY	4	1.6
48	Richmond, VA	3	1.5
49	Birmingham, AL	9	1.4
50	San Diego, CA	37	1.3
51	Des Moines, IA	5	1.3
52	Honolulu, HI	10	1.1
53	Yonkers, NY	2	1.0
54	Sacramento, CA	11	0.9
55	Buffalo, NY	3	0.9
56	Cincinnati, OH	6	0.7
57	Dayton, OH	4	0.7
58	Wichita, KS	3	0.7
59	Cleveland, OH	9	0.6
60	Corpus Christi, TX	2	0.6
61	Pittsburgh, PA	7	0.5
62	Omaha, NE	2	0.4
63	Akron, OH	2	0.4
YEAR 2010 OBJECTIVE			0.2

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

†Excludes outlying areas (San Juan, PR, with 78 cases and rate of 7.6).

Table 31. Primary and secondary syphilis — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	3	0	0	1	2	0.6	0.0	0.0	0.2	0.4
Albuquerque, NM	11	11	11	8	21	2.1	2.1	2.0	1.4	3.8
Atlanta, GA	163	213	116	224	257	22.0	28.6	14.2	27.5	31.5
Austin, TX	15	19	8	17	22	2.1	2.6	1.0	2.1	2.7
Baltimore, MD	466	246	218	161	121	72.2	38.9	33.5	24.7	18.6
Birmingham, AL	36	24	24	12	9	5.5	3.7	3.6	1.8	1.4
Boston, MA	23	16	25	18	48	4.1	2.9	4.2	3.0	8.0
Buffalo, NY	4	1	1	4	3	1.3	0.3	0.3	1.2	0.9
Charlotte, NC	69	53	45	29	28	10.9	8.2	6.5	4.2	4.0
Chicago, IL	310	282	292	317	353	10.4	9.5	9.5	10.3	11.4
Cincinnati, OH	12	1	0	2	6	1.4	0.1	0.0	0.2	0.7
Cleveland, OH	30	12	4	3	9	2.2	0.9	0.3	0.2	0.6
Columbus, OH	55	43	40	54	96	5.4	4.2	3.7	5.1	9.0
Corpus Christi, TX	0	1	1	1	2	0.0	0.3	0.3	0.3	0.6
Dallas, TX	126	151	100	121	191	6.1	7.3	4.5	5.5	8.6
Dayton, OH	6	2	5	2	4	1.1	0.4	0.9	0.4	0.7
Denver, CO	3	4	4	15	41	0.6	0.8	0.7	2.7	7.4
Des Moines, IA	3	0	1	1	5	0.8	0.0	0.3	0.3	1.3
Detroit, MI	152	189	274	351	384	12.1	15.1	28.8	36.9	40.4
El Paso, TX	2	9	6	12	12	0.3	1.3	0.9	1.8	1.8
Fort Worth, TX	26	22	22	40	106	1.9	1.6	1.5	2.8	7.3
Honolulu, HI	4	3	1	10	10	0.5	0.3	0.1	1.1	1.1
Houston, TX	99	77	70	103	112	3.1	2.4	2.1	3.0	3.3
Indianapolis, IN	165	407	301	128	36	20.3	50.2	35.0	14.9	4.2
Jacksonville, FL	16	7	24	38	16	2.2	0.9	3.1	4.9	2.1
Jersey City, NJ	1	3	1	5	16	0.5	1.4	0.4	2.1	6.7
Kansas City, MO	6	8	1	5	8	1.3	1.8	0.2	1.1	1.8
Los Angeles, CA	120	83	133	186	359	1.4	1.0	1.5	2.1	4.0
Louisville, KY	91	67	57	19	77	13.5	10.0	8.2	2.7	11.1
Memphis, TN	260	258	246	208	89	29.9	29.6	27.4	23.2	9.9
Miami, FL	31	82	126	185	231	1.4	3.8	5.6	8.2	10.3
Milwaukee, WI	71	39	43	18	16	7.8	4.3	4.6	1.9	1.7
Minneapolis, MN	4	6	9	23	37	1.1	1.6	2.3	6.0	9.6
Nashville, TN	210	250	200	76	26	39.3	47.2	35.1	13.3	4.6
New Orleans, LA	105	51	22	24	9	22.6	11.1	4.5	5.0	1.9
New York City, NY	81	130	117	282	435	1.1	1.8	1.5	3.5	5.4
Newark, NJ	27	22	28	58	63	9.5	7.8	9.3	19.3	20.9
Norfolk, VA	33	20	37	35	13	15.3	8.9	15.8	14.9	5.5
Oakland, CA	11	10	11	23	49	0.9	0.8	0.8	1.6	3.4
Oklahoma City, OK	61	114	82	35	52	15.0	27.8	19.3	8.2	12.2
Omaha, NE	4	5	2	3	2	0.9	1.1	0.4	0.6	0.4
Philadelphia, PA	89	69	67	79	67	6.2	4.9	4.4	5.2	4.4
Phoenix, AZ	173	195	172	148	155	6.2	6.8	5.6	4.8	5.0
Pittsburgh, PA	0	2	3	7	7	0.0	0.2	0.2	0.5	0.5
Portland, OR	4	5	11	9	20	0.8	1.0	2.1	1.7	3.8
Richmond, VA	22	13	5	9	3	11.3	6.9	2.5	4.6	1.5
Rochester, NY	7	0	1	2	4	2.9	0.0	0.4	0.8	1.6
Sacramento, CA	1	2	1	4	11	0.1	0.2	0.1	0.3	0.9
San Antonio, TX	26	31	67	71	45	1.9	2.3	4.8	5.1	3.2
San Diego, CA	24	25	27	27	37	0.9	0.9	1.0	1.0	1.3
San Francisco, CA	25	29	53	139	315	3.4	3.9	6.8	17.9	40.6
San Jose, CA	3	3	2	10	30	0.2	0.2	0.1	0.6	1.8
Seattle, WA	33	65	50	41	50	2.0	3.9	2.9	2.4	2.9
St Louis, MO	58	51	11	15	13	17.1	15.3	3.2	4.3	3.7
St Paul, MN	3	2	2	5	5	1.1	0.7	0.7	1.8	1.8
St Petersburg, FL	8	4	7	11	22	0.9	0.5	0.8	1.2	2.4
Tampa, FL	32	15	20	15	33	3.5	1.6	2.0	1.5	3.3
Toledo, OH	8	6	2	1	12	1.8	1.3	0.4	0.2	2.6
Tucson, AZ	7	8	8	22	28	0.9	1.0	0.9	2.6	3.3
Tulsa, OK	14	45	8	5	7	3.7	11.7	2.0	1.3	1.8
Washington, DC	81	45	37	43	58	15.5	8.7	6.5	7.5	10.1
Wichita, KS	3	7	2	4	3	0.7	1.5	0.4	0.9	0.7
Yonkers, NY	1	1	1	1	2	0.5	0.5	0.5	0.5	1.0
U.S. CITY TOTAL	3,537	3,564	3,265	3,525	4,303	5.0	5.0	4.4	4.8	5.8
San Juan, PR	79	61	68	68	78	7.5	5.8	6.7	6.7	7.6
TOTAL	3,616	3,625	3,333	3,593	4,381	5.1	5.0	4.5	4.8	5.9

Table 32. Primary and secondary syphilis — Women – Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	1	0	0	0	0	0.4	0.0	0.0	0.0	0.0
Albuquerque, NM	6	3	3	1	6	2.2	1.1	1.1	0.4	2.1
Atlanta, GA	62	85	37	67	57	16.0	21.8	8.9	16.2	13.8
Austin, TX	6	2	2	3	3	1.7	0.5	0.5	0.8	0.8
Baltimore, MD	222	112	92	77	33	64.4	33.2	26.5	22.2	9.5
Birmingham, AL	15	10	15	8	4	4.3	2.9	4.3	2.3	1.1
Boston, MA	5	5	5	1	6	1.7	1.7	1.6	0.3	1.9
Buffalo, NY	1	0	1	0	0	0.6	0.0	0.6	0.0	0.0
Charlotte, NC	36	18	24	12	13	11.0	5.3	6.8	3.4	3.7
Chicago, IL	119	116	129	61	43	7.7	7.5	8.1	3.8	2.7
Cincinnati, OH	8	0	0	2	2	1.8	0.0	0.0	0.5	0.5
Cleveland, OH	15	3	2	2	3	2.1	0.4	0.3	0.3	0.4
Columbus, OH	32	21	14	17	10	6.0	3.9	2.5	3.1	1.8
Corpus Christi, TX	0	1	1	1	1	0.0	0.6	0.6	0.6	0.6
Dallas, TX	46	57	36	49	76	4.4	5.4	3.2	4.4	6.8
Dayton, OH	3	0	1	1	0	1.0	0.0	0.3	0.3	0.0
Denver, CO	2	3	0	2	0	0.8	1.2	0.0	0.7	0.0
Des Moines, IA	0	0	1	0	2	0.0	0.0	0.5	0.0	1.0
Detroit, MI	67	74	121	136	168	10.1	11.2	24.1	27.0	33.4
El Paso, TX	0	2	1	2	4	0.0	0.5	0.3	0.6	1.1
Fort Worth, TX	9	4	7	16	45	1.3	0.6	1.0	2.2	6.2
Honolulu, HI	0	2	0	0	1	0.0	0.5	0.0	0.0	0.2
Houston, TX	44	30	27	28	16	2.7	1.8	1.6	1.6	0.9
Indianapolis, IN	87	204	170	60	10	20.4	48.0	38.2	13.5	2.2
Jacksonville, FL	8	3	11	18	8	2.1	0.8	2.7	4.5	2.0
Jersey City, NJ	0	0	1	2	1	0.0	0.0	0.8	1.6	0.8
Kansas City, MO	2	5	0	2	1	0.8	2.1	0.0	0.9	0.4
Los Angeles, CA	50	25	19	9	18	1.1	0.6	0.4	0.2	0.4
Louisville, KY	45	30	26	9	39	12.7	8.4	7.2	2.5	10.8
Memphis, TN	134	126	123	106	51	29.4	27.5	26.2	22.6	10.9
Miami, FL	11	24	40	40	33	1.0	2.1	3.4	3.4	2.8
Milwaukee, WI	35	17	21	12	4	7.3	3.6	4.3	2.5	0.8
Minneapolis, MN	2	3	3	12	2	1.1	1.6	1.5	6.2	1.0
Nashville, TN	93	102	83	29	10	33.1	36.6	28.2	9.9	3.4
New Orleans, LA	41	24	8	11	3	16.4	9.7	3.1	4.3	1.2
New York City, NY	18	28	10	19	18	0.5	0.7	0.2	0.5	0.4
Newark, NJ	14	10	9	21	26	9.4	6.7	5.7	13.3	16.5
Norfolk, VA	13	7	14	20	4	11.9	6.4	12.2	17.5	3.5
Oakland, CA	5	2	3	1	0	0.8	0.3	0.4	0.1	0.0
Oklahoma City, OK	26	42	39	18	10	12.3	19.7	17.8	8.2	4.6
Omaha, NE	1	2	1	1	1	0.4	0.9	0.4	0.4	0.4
Philadelphia, PA	30	21	25	24	14	3.9	2.8	3.1	3.0	1.7
Phoenix, AZ	64	62	75	39	59	4.5	4.3	4.9	2.5	3.8
Pittsburgh, PA	0	0	2	1	2	0.0	0.0	0.3	0.1	0.3
Portland, OR	1	3	4	1	5	0.4	1.2	1.5	0.4	1.9
Richmond, VA	8	7	2	3	1	7.5	6.7	1.9	2.8	0.9
Rochester, NY	4	0	0	1	1	3.2	0.0	0.0	0.8	0.8
Sacramento, CA	0	1	1	1	0	0.0	0.2	0.2	0.2	0.0
San Antonio, TX	8	10	23	24	12	1.1	1.4	3.2	3.4	1.7
San Diego, CA	7	6	6	6	6	0.5	0.4	0.4	0.4	0.4
San Francisco, CA	4	1	5	2	4	1.1	0.3	1.3	0.5	1.0
San Jose, CA	1	0	0	1	1	0.1	0.0	0.0	0.1	0.1
Seattle, WA	1	2	4	1	0	0.1	0.2	0.5	0.1	0.0
St Louis, MO	25	28	3	6	4	13.6	15.5	1.6	3.2	2.2
St Paul, MN	2	1	1	1	0	1.4	0.7	0.7	0.7	0.0
St Petersburg, FL	4	2	3	2	2	0.9	0.4	0.6	0.4	0.4
Tampa, FL	20	7	10	6	8	4.2	1.4	2.0	1.2	1.6
Toledo, OH	4	5	0	0	4	1.7	2.1	0.0	0.0	1.7
Tucson, AZ	1	1	2	5	7	0.2	0.2	0.5	1.2	1.6
Tulsa, OK	6	22	4	1	5	3.0	11.1	2.0	0.5	2.5
Washington, DC	34	24	10	8	9	12.2	8.7	3.3	2.6	3.0
Wichita, KS	1	4	1	1	1	0.4	1.7	0.4	0.4	0.4
Yonkers, NY	1	0	0	0	1	1.0	0.0	0.0	0.0	1.0
U.S. CITY TOTAL *	1,510	1,409	1,281	1,010	878	4.1	3.8	3.4	2.7	2.3
San Juan, PR	38	34	32	38	31	7.0	6.2	6.0	7.2	5.8
TOTAL	1,548	1,443	1,313	1,048	909	4.2	3.9	3.4	2.7	2.4

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

Table 33. Primary and secondary syphilis — Men – Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	2	0	0	1	2	0.8	0.0	0.0	0.4	0.8
Albuquerque, NM	5	8	8	7	15	2.0	3.1	2.9	2.6	5.5
Atlanta, GA	101	128	79	157	199	28.6	36.0	19.7	39.1	49.5
Austin, TX	9	16	6	14	19	2.5	4.4	1.4	3.4	4.6
Baltimore, MD	244	134	126	84	88	81.0	45.4	41.5	27.7	29.0
Birmingham, AL	21	14	9	4	5	6.8	4.6	2.9	1.3	1.6
Boston, MA	18	11	20	17	42	6.7	4.1	6.9	5.9	14.6
Buffalo, NY	3	1	0	4	3	2.0	0.7	0.0	2.6	1.9
Charlotte, NC	33	35	21	17	15	10.9	11.2	6.2	5.0	4.4
Chicago, IL	191	166	163	256	310	13.3	11.6	10.9	17.1	20.7
Cincinnati, OH	4	1	0	0	4	1.0	0.3	0.0	0.0	1.0
Cleveland, OH	15	9	2	1	6	2.3	1.4	0.3	0.2	0.9
Columbus, OH	23	22	26	37	86	4.7	4.4	5.0	7.1	16.6
Corpus Christi, TX	0	0	0	0	1	0.0	0.0	0.0	0.0	0.7
Dallas, TX	80	94	64	72	115	7.9	9.3	5.8	6.5	10.4
Dayton, OH	3	2	4	1	4	1.1	0.7	1.5	0.4	1.5
Denver, CO	1	1	4	13	41	0.4	0.4	1.4	4.6	14.6
Des Moines, IA	3	0	0	1	3	1.7	0.0	0.0	0.6	1.7
Detroit, MI	85	115	153	215	216	14.2	19.4	34.1	48.0	48.2
El Paso, TX	2	7	5	10	8	0.6	2.1	1.5	3.1	2.4
Fort Worth, TX	17	18	15	24	61	2.5	2.6	2.1	3.4	8.5
Honolulu, HI	4	1	1	10	9	0.9	0.2	0.2	2.3	2.0
Houston, TX	55	47	43	75	96	3.5	2.9	2.5	4.4	5.7
Indianapolis, IN	78	203	131	68	26	20.2	52.7	31.5	16.3	6.3
Jacksonville, FL	8	4	13	20	8	2.2	1.1	3.4	5.3	2.1
Jersey City, NJ	1	3	0	3	15	0.9	2.8	0.0	2.5	12.7
Kansas City, MO	4	3	1	3	7	1.9	1.4	0.5	1.4	3.2
Los Angeles, CA	70	57	112	175	341	1.6	1.3	2.5	4.0	7.7
Louisville, KY	46	37	31	10	38	14.5	11.6	9.3	3.0	11.5
Memphis, TN	126	132	123	102	38	30.5	31.8	28.7	23.8	8.9
Miami, FL	20	58	86	145	198	1.9	5.6	7.9	13.3	18.2
Milwaukee, WI	36	22	22	6	12	8.3	5.1	4.9	1.3	2.7
Minneapolis, MN	2	3	6	11	35	1.1	1.7	3.2	5.8	18.5
Nashville, TN	117	148	117	47	16	46.2	58.9	42.4	17.0	5.8
New Orleans, LA	64	27	14	13	6	29.7	12.6	6.2	5.7	2.6
New York City, NY	63	102	107	263	417	1.8	2.9	2.8	6.9	11.0
Newark, NJ	13	12	19	37	37	9.7	8.9	13.3	25.9	25.9
Norfolk, VA	20	13	23	15	9	18.9	11.2	19.2	12.5	7.5
Oakland, CA	6	8	8	22	49	1.0	1.3	1.1	3.1	6.9
Oklahoma City, OK	35	72	43	17	42	17.9	36.6	20.8	8.2	20.4
Omaha, NE	3	3	1	2	1	1.4	1.4	0.4	0.9	0.4
Philadelphia, PA	59	48	42	55	53	8.9	7.3	6.0	7.8	7.5
Phoenix, AZ	109	133	97	109	96	7.9	9.4	6.3	7.1	6.2
Pittsburgh, PA	0	2	1	6	5	0.0	0.3	0.2	1.0	0.8
Portland, OR	3	2	7	8	15	1.2	0.8	2.7	3.1	5.8
Richmond, VA	14	6	3	6	2	16.0	7.0	3.3	6.5	2.2
Rochester, NY	3	0	1	1	3	2.6	0.0	0.8	0.8	2.5
Sacramento, CA	1	1	0	3	11	0.2	0.2	0.0	0.5	1.8
San Antonio, TX	18	20	44	47	33	2.8	3.0	6.5	6.9	4.9
San Diego, CA	17	19	21	21	31	1.2	1.3	1.5	1.5	2.2
San Francisco, CA	21	28	48	137	311	5.7	7.6	12.2	34.7	78.8
San Jose, CA	2	3	2	9	29	0.2	0.4	0.2	1.1	3.4
Seattle, WA	32	63	46	40	50	3.9	7.7	5.3	4.6	5.8
St Louis, MO	33	23	8	9	9	21.2	15.0	4.9	5.5	5.5
St Paul, MN	1	1	1	4	5	0.8	0.8	0.7	2.9	3.6
St Petersburg, FL	4	2	4	9	20	1.0	0.5	0.9	2.1	4.6
Tampa, FL	12	8	10	9	25	2.7	1.7	2.0	1.8	5.1
Toledo, OH	4	1	2	1	8	1.9	0.5	0.9	0.5	3.7
Tucson, AZ	6	7	6	17	21	1.6	1.8	1.5	4.1	5.1
Tulsa, OK	8	23	4	4	2	4.4	12.4	2.1	2.1	1.0
Washington, DC	47	21	27	35	49	19.2	8.6	10.0	13.0	18.2
Wichita, KS	2	3	1	3	2	0.9	1.4	0.4	1.3	0.9
Yonkers, NY	0	1	1	1	1	0.0	1.1	1.1	1.1	1.1
U.S. CITY TOTAL *	2,027	2,152	1,982	2,513	3,424	5.9	6.3	5.5	7.0	9.5
San Juan, PR	41	27	36	30	47	8.2	5.3	7.4	6.1	9.6
TOTAL	2,068	2,179	2,018	2,543	3,471	6.0	6.2	5.5	7.0	9.5

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

Table 34. Primary and secondary syphilis — Reported cases and rates per 100,000 population by age and sex: United States, 1998–2002

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
1998	10-14	39	5	34	0.2	0.1	0.4
	15-19	612	193	418	3.1	1.9	4.4
	20-24	1,030	509	521	5.8	5.7	6.0
	25-29	1,029	508	521	5.5	5.5	5.6
	30-34	1,179	626	553	5.8	6.3	5.4
	35-39	1,178	683	494	5.2	6.1	4.3
	40-44	831	533	298	3.8	4.9	2.7
	45-54	780	577	203	2.3	3.4	1.1
	55-64	232	194	37	1.0	1.8	0.3
	65+	102	86	16	0.3	0.6	0.1
	TOTAL	7,018	3,918	3,100	2.6	3.0	2.2
1999	10-14	25	2	23	0.1	0.0	0.2
	15-19	522	183	340	2.6	1.8	3.5
	20-24	963	510	452	5.3	5.6	5.1
	25-29	992	508	483	5.4	5.6	5.3
	30-34	1,084	589	495	5.5	6.0	5.0
	35-39	1,153	676	477	5.1	6.0	4.2
	40-44	808	537	271	3.6	4.9	2.4
	45-54	753	572	181	2.1	3.3	1.0
	55-64	228	188	40	1.0	1.7	0.3
	65+	74	65	9	0.2	0.5	0.0
	TOTAL	6,613	3,833	2,780	2.4	2.9	2.0
2000	10-14	23	4	19	0.1	0.0	0.2
	15-19	457	162	295	2.3	1.6	3.0
	20-24	881	419	462	4.6	4.3	5.0
	25-29	902	527	376	4.7	5.4	3.9
	30-34	957	553	404	4.7	5.4	4.0
	35-39	1,006	606	400	4.4	5.3	3.5
	40-44	782	502	280	3.5	4.5	2.5
	45-54	706	528	178	1.9	2.9	0.9
	55-64	179	157	22	0.7	1.3	0.2
	65+	76	68	8	0.2	0.5	0.0
	TOTAL	5,973	3,528	2,445	2.1	2.6	1.7
2001	10-14	19	2	17	0.1	0.0	0.2
	15-19	387	142	245	1.9	1.4	2.5
	20-24	836	482	354	4.4	5.0	3.8
	25-29	876	583	293	4.5	5.9	3.1
	30-34	964	660	304	4.7	6.4	3.0
	35-39	1,146	818	328	5.0	7.2	2.9
	40-44	808	587	221	3.6	5.3	2.0
	45-54	805	632	173	2.1	3.4	0.9
	55-64	193	167	26	0.8	1.4	0.2
	65+	64	57	7	0.2	0.4	0.0
	TOTAL	6,100	4,132	1,968	2.2	3.0	1.4
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	4.4	5.5	3.3
	25-29	895	668	227	4.6	6.8	2.4
	30-34	1,097	877	220	5.4	8.5	2.2
	35-39	1,367	1,121	246	6.0	9.9	2.2
	40-44	1,023	845	178	4.6	7.6	1.6
	45-54	982	825	157	2.6	4.5	0.8
	55-64	217	196	21	0.9	1.7	0.2
	65+	67	59	8	0.2	0.4	0.0
	TOTAL	6,862	5,268	1,594	2.4	3.8	1.1

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 forms. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 35A. Primary and secondary syphilis — Reported cases by age, sex, and race/ethnicity: United States, 1998–2002

Age Group	Total			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	Total	Male	Female
1998	10-14	39	5	34	4	0	4	34	5	29	1	0	1	0	0	0	0	0
	15-19	612	193	418	54	11	43	504	163	342	43	16	27	3	0	3	7	3
	20-24	1,029	509	521	105	30	75	835	418	417	73	52	21	5	3	2	11	6
	25-29	1,028	508	520	130	50	79	782	383	398	100	65	35	5	4	1	12	5
	30-34	1,179	626	553	146	77	69	949	484	465	65	54	11	9	7	2	9	4
	35-39	1,178	683	494	172	104	68	927	523	404	65	46	18	7	6	1	7	4
	40-44	831	533	298	129	95	35	653	404	250	40	30	10	3	2	1	5	3
	45-54	780	577	203	123	102	20	610	439	171	45	35	10	1	1	0	1	0
	55-64	232	194	37	51	48	3	161	129	32	16	14	2	2	2	0	2	2
	65+	102	86	16	21	18	3	71	60	11	9	7	2	0	0	0	1	1
	TOTAL	7,018	3,918	3,100	936	536	400	5,534	3,009	2,524	457	319	138	36	26	10	56	29
1999	10-14	25	2	23	3	1	2	21	1	20	1	0	1	0	0	0	0	0
	15-19	522	182	340	49	16	32	421	139	282	44	24	19	1	1	0	8	2
	20-24	963	510	452	120	46	74	717	381	336	110	75	35	5	3	2	10	5
	25-29	991	508	482	137	67	70	741	364	376	94	67	26	7	7	0	11	2
	30-34	1,084	589	496	168	98	70	801	411	390	97	73	24	12	6	6	6	1
	35-39	1,153	677	476	189	112	77	883	501	382	69	56	12	4	4	0	8	3
	40-44	808	538	271	142	98	44	601	390	211	56	46	9	8	3	4	2	0
	45-54	753	572	181	139	96	43	561	430	130	42	36	6	5	5	0	6	4
	55-64	228	188	40	53	41	12	151	129	22	22	16	5	1	0	1	1	1
	65+	74	65	9	24	22	2	46	39	7	4	4	0	0	0	0	0	0
	TOTAL	6,612	3,833	2,779	1,026	598	428	4,950	2,788	2,163	538	399	139	43	30	13	54	18
2000	10-14	23	4	19	2	0	2	20	4	16	0	0	0	0	0	0	1	0
	15-19	457	162	295	47	11	35	365	129	236	41	21	19	1	0	1	4	1
	20-24	881	419	462	110	40	70	653	310	344	101	66	35	4	1	3	13	3
	25-29	902	527	376	146	93	53	631	338	293	108	82	27	8	7	1	9	7
	30-34	957	553	404	182	119	62	665	350	314	94	72	22	12	10	2	5	2
	35-39	1,006	606	400	216	143	72	664	374	291	113	81	32	5	4	1	7	3
	40-44	782	502	280	173	118	55	550	341	209	51	38	13	2	2	0	5	3
	45-54	706	528	178	145	114	31	511	375	136	43	32	11	4	4	0	4	4
	55-64	179	157	22	42	40	2	124	106	18	11	10	1	0	0	0	2	1
	65+	76	68	8	21	19	2	50	44	6	3	3	0	1	1	0	1	1
	TOTAL	5,972	3,527	2,445	1,083	698	385	4,233	2,369	1,864	567	405	162	37	29	8	52	26
2001	10-14	19	2	17	0	0	0	17	1	16	2	1	1	0	0	0	0	0
	15-19	387	142	245	32	13	19	290	97	193	59	29	29	2	1	1	4	2
	20-24	836	482	354	114	72	42	562	296	266	138	105	34	6	5	1	15	4
	25-29	876	583	293	152	121	31	554	323	231	140	115	26	13	13	0	18	11
	30-34	964	660	304	236	192	44	563	330	233	137	117	20	12	12	0	17	9
	35-39	1,146	818	328	332	281	51	653	397	255	134	120	13	15	14	1	13	5
	40-44	808	587	221	227	193	34	505	335	170	59	48	11	2	2	0	15	10
	45-54	805	632	173	220	196	24	513	377	137	61	52	9	4	3	1	6	4
	55-64	193	167	26	51	48	3	121	100	21	18	16	2	2	2	0	2	2
	65+	64	57	7	23	22	1	36	30	6	4	4	0	0	0	0	1	1
	TOTAL	6,100	4,132	1,968	1,387	1,138	249	3,813	2,286	1,527	754	607	146	55	51	4	90	49
2002	10-14	15	4	11	2	1	1	10	2	8	2	1	1	1	0	1	0	0
	15-19	351	135	216	33	9	24	253	89	164	62	37	25	2	0	2	1	0
	20-24	842	533	309	129	89	40	546	313	233	146	117	29	13	9	4	8	5
	25-29	895	668	227	224	189	36	485	323	163	165	138	26	17	16	1	4	3
	30-34	1,097	877	220	404	373	31	476	310	166	192	172	20	22	21	1	3	1
	35-39	1,367	1,121	246	576	541	35	568	385	183	200	178	22	15	14	1	8	3
	40-44	1,023	845	178	452	429	23	448	305	142	102	93	8	15	14	1	7	4
	45-54	982	825	157	393	370	23	482	370	112	83	69	15	8	8	0	16	8
	55-64	217	196	21	95	91	4	110	94	16	10	10	0	0	0	0	2	1
	65+	67	59	8	15	15	0	42	35	7	9	8	1	0	0	0	1	1
	TOTAL	6,862	5,268	1,594	2,325	2,108	217	3,421	2,226	1,195	971	823	147	94	83	11	51	27

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. For 1998, ID and NJ did not report age and/or race/ethnicity for most cases and were excluded. Cases and population denominators have been excluded for these states/areas. Differences between total cases from this table and others in the report are due to different reporting forms and above listed exclusions. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 35B. Primary and secondary syphilis — Rates per 100,000 population by age, sex, and race/ethnicity: United States, 1998–2002

Age Group	Total			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	Total	Male	Female
10-14	0.2	0.1	0.4	0.0	0.0	0.1	1.2	0.3	2.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15-19	3.1	1.9	4.4	0.4	0.2	0.7	17.5	11.2	24.1	1.6	1.2	2.0	0.4	0.0	0.8	3.7	3.2	4.3
20-24	5.8	5.7	6.0	0.9	0.5	1.3	33.4	33.9	33.0	2.8	3.8	1.7	0.7	0.9	0.6	7.1	7.7	6.5
25-29	5.5	5.5	5.6	1.0	0.8	1.3	31.4	32.3	30.6	3.9	5.0	2.8	0.6	1.0	0.2	7.7	6.3	9.1
30-34	5.8	6.3	5.4	1.0	1.1	1.0	36.9	40.3	33.9	2.5	3.9	0.9	1.1	1.8	0.4	6.2	5.5	6.9
35-39	5.2	6.1	4.3	1.1	1.3	0.8	33.9	40.9	27.7	2.6	3.6	1.5	0.8	1.5	0.2	4.6	5.3	3.9
40-44	3.8	4.9	2.7	0.8	1.2	0.4	25.6	34.0	18.3	1.9	2.9	1.0	0.4	0.5	0.2	3.5	4.4	2.7
45-54	2.3	3.4	1.1	0.5	0.8	0.2	17.0	27.2	8.7	1.6	2.6	0.7	0.1	0.2	0.0	0.5	0.0	0.9
55-64	1.0	1.8	0.3	0.3	0.5	0.0	7.3	13.6	2.6	1.0	1.9	0.2	0.3	0.6	0.0	1.6	3.3	0.0
65+	0.3	0.6	0.1	0.1	0.1	0.0	2.6	5.6	0.7	0.5	1.0	0.2	0.0	0.0	0.0	0.7	1.7	0.0
TOTAL	2.6	3.0	2.2	0.5	0.6	0.4	16.9	19.4	14.6	1.5	2.1	0.9	0.4	0.5	0.2	2.8	2.9	2.7
10-14	0.1	0.0	0.2	0.0	0.0	0.0	0.7	0.1	1.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15-19	2.7	1.8	3.6	0.4	0.2	0.5	14.6	9.4	19.8	1.6	1.7	1.4	0.1	0.3	0.0	4.2	2.1	6.4
20-24	5.4	5.6	5.1	1.0	0.8	1.3	28.0	30.2	26.0	4.1	5.4	2.7	0.7	0.9	0.6	6.5	6.4	6.6
25-29	5.5	5.6	5.3	1.1	1.1	1.2	29.9	30.9	29.1	3.6	5.1	2.1	0.9	1.9	0.0	7.2	2.5	12.0
30-34	5.5	6.1	5.0	1.2	1.5	1.0	31.8	34.9	29.1	3.6	5.3	1.9	1.3	1.5	1.2	4.3	1.4	7.1
35-39	5.1	6.1	4.2	1.2	1.4	1.0	32.2	39.0	26.1	2.7	4.2	1.0	0.5	1.0	0.0	5.3	4.0	6.7
40-44	3.6	4.9	2.4	0.9	1.2	0.5	23.0	31.9	15.1	2.6	4.2	0.9	0.9	0.8	1.0	1.4	0.0	2.8
45-54	2.1	3.3	1.0	0.5	0.7	0.3	14.9	25.3	6.3	1.4	2.5	0.4	0.4	0.8	0.0	2.8	3.8	1.8
55-64	1.0	1.7	0.3	0.3	0.5	0.1	6.7	13.3	1.7	1.3	2.1	0.6	0.2	0.0	0.3	0.8	1.6	0.0
65+	0.2	0.5	0.0	0.1	0.2	0.0	1.7	3.6	0.4	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	2.4	2.9	2.0	0.5	0.6	0.4	15.0	17.8	12.4	1.7	2.5	0.9	0.4	0.6	0.3	2.7	1.9	3.5
10-14	0.1	0.0	0.2	0.0	0.0	0.0	0.6	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.0
15-19	2.3	1.6	3.0	0.4	0.2	0.6	12.4	8.7	16.2	1.3	1.3	1.3	0.1	0.0	0.3	2.0	1.0	3.1
20-24	4.6	4.3	5.0	0.9	0.7	1.2	24.8	24.2	25.4	3.0	3.5	2.3	0.5	0.2	0.7	8.0	3.7	12.4
25-29	4.7	5.4	3.9	1.2	1.5	0.9	24.8	27.9	21.9	3.2	4.5	1.7	0.8	1.4	0.2	6.0	9.3	2.6
30-34	4.7	5.4	4.0	1.3	1.7	0.9	25.4	28.3	22.8	3.0	4.3	1.5	1.1	1.9	0.4	3.3	2.7	3.9
35-39	4.4	5.3	3.5	1.4	1.8	0.9	23.5	28.1	19.4	4.0	5.5	2.3	0.5	0.9	0.2	4.2	3.7	4.6
40-44	3.5	4.5	2.5	1.1	1.4	0.7	20.4	26.9	14.6	2.2	3.2	1.2	0.2	0.5	0.0	3.1	3.9	2.4
45-54	1.9	2.9	0.9	0.5	0.8	0.2	12.5	19.9	6.2	1.4	2.1	0.7	0.3	0.6	0.0	1.6	3.3	0.0
55-64	0.7	1.3	0.2	0.2	0.4	0.0	5.2	10.0	1.4	0.6	1.3	0.1	0.0	0.0	0.0	1.4	1.4	1.3
65+	0.2	0.5	0.0	0.1	0.2	0.0	1.8	4.1	0.3	0.2	0.4	0.0	0.1	0.3	0.0	0.8	1.9	0.0
TOTAL	2.1	2.6	1.7	0.5	0.7	0.4	12.2	14.4	10.2	1.6	2.2	0.9	0.3	0.5	0.1	2.4	2.4	2.4
10-14	0.1	0.0	0.2	0.0	0.0	0.0	0.5	0.1	1.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15-19	1.9	1.4	2.5	0.2	0.2	0.3	9.9	6.5	13.3	1.8	1.7	2.0	0.3	0.3	0.3	2.1	2.1	2.1
20-24	4.4	5.0	3.8	1.0	1.2	0.7	21.4	23.1	19.7	4.1	5.6	2.2	0.7	1.1	0.2	9.3	4.9	13.9
25-29	4.5	5.9	3.1	1.2	2.0	0.5	21.7	26.7	17.3	4.1	6.3	1.6	1.2	2.4	0.0	11.4	14.8	8.0
30-34	4.7	6.4	3.0	1.7	2.8	0.6	21.5	26.6	16.9	4.4	7.0	1.4	1.1	2.4	0.0	10.7	12.2	9.2
35-39	5.0	7.2	2.9	2.1	3.5	0.6	23.1	29.9	17.0	4.7	8.2	1.0	1.5	3.0	0.2	7.3	6.3	8.1
40-44	3.6	5.3	2.0	1.4	2.4	0.4	18.7	26.4	11.9	2.6	4.0	1.0	0.2	0.5	0.0	8.9	12.0	6.1
45-54	2.1	3.4	0.9	0.8	1.4	0.2	12.6	20.0	6.2	2.0	3.3	0.6	0.3	0.5	0.1	2.4	3.4	1.6
55-64	0.8	1.4	0.2	0.3	0.5	0.0	5.1	9.4	1.6	1.0	1.9	0.2	0.3	0.5	0.0	1.4	3.0	0.0
65+	0.2	0.4	0.0	0.1	0.2	0.0	1.3	2.8	0.3	0.2	0.6	0.0	0.0	0.0	0.0	0.8	1.8	0.0
TOTAL	2.2	3.0	1.4	0.7	1.2	0.2	11.0	13.8	8.4	2.1	3.3	0.9	0.5	1.0	0.1	4.2	4.7	3.8
10-14	0.1	0.0	0.1	0.0	0.0	0.0	0.3	0.1	0.5	0.1	0.1	0.1	0.1	0.0	0.3	0.0	0.0	0.0
15-19	1.7	1.3	2.2	0.3	0.1	0.4	8.6	6.0	11.3	1.9	2.2	1.7	0.2	0.0	0.5	0.5	0.0	1.0
20-24	4.4	5.5	3.3	1.1	1.5	0.7	20.7	24.4	17.2	4.3	6.2	1.9	1.5	2.1	0.9	5.0	6.2	3.8
25-29	4.6	6.8	2.4	1.8	3.1	0.6	19.1	26.6	12.2	4.9	7.6	1.7	1.6	3.1	0.2	2.7	4.1	1.3
30-34	5.4	8.5	2.2	3.0	5.5	0.5	18.2	25.0	12.0	6.1	10.3	1.4	2.2	4.2	0.2	2.0	1.4	2.7
35-39	6.0	9.9	2.2	3.6	6.8	0.4	20.1	29.0	12.2	7.1	12.1	1.7	1.6	3.0	0.2	4.8	3.9	5.8
40-44	4.6	7.6	1.6	2.8	5.2	0.3	16.6	24.1	9.9	4.4	7.9	0.7	1.6	3.2	0.2	4.5	5.3	3.7
45-54	2.6	4.5	0.8	1.4	2.6	0.2	11.8	19.6	5.1	2.7	4.4	0.9	0.6	1.3	0.0	6.1	6.8	5.5
55-64	0.9	1.7	0.2	0.5	1.0	0.0	4.6	8.9	1.2	0.6	1.3	0.0	0.0	0.0	0.0	1.4	1.5	1.3
65+	0.2	0.4	0.0	0.1	0.1	0.0	1.5	3.2	0.4	0.5	1.2	0.1	0.0	0.0	0.0	0.8	1.9	0.0
TOTAL	2.4	3.8	1.1	1.2	2.2	0.2	9.8	13.5	6.5	2.7	4.5	0.9	0.9	1.6	0.2	2.4	2.6	2.2

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. If age or race/ethnicity was not specified, cases were prorated according to the distribution of cases for which these variables were specified. For 1998, ID and NJ did not report age and/or race/ethnicity for most cases and were excluded. Cases and population denominators have been excluded for these states/areas. Differences between total rates from this table and others in the report are due to different reporting forms and above listed exclusions. The 0 to 9 year age group is not shown because some of these may not be due to sexual transmission; however, they are included in the totals.

Table 36. Early latent syphilis — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	440	367	219	192	211	10.1	8.4	4.9	4.3	4.7
Alaska	0	1	1	0	1	0.0	0.2	0.2	0.0	0.2
Arizona	206	290	248	266	200	4.4	6.1	4.8	5.2	3.9
Arkansas	185	123	117	60	51	7.3	4.8	4.4	2.2	1.9
California	783	591	353	408	716	2.4	1.8	1.0	1.2	2.1
Colorado	10	6	7	14	22	0.3	0.1	0.2	0.3	0.5
Connecticut	37	12	9	20	13	1.1	0.4	0.3	0.6	0.4
Delaware	44	16	10	18	9	5.9	2.1	1.3	2.3	1.1
Florida	1,092	1,085	1,165	947	949	7.3	7.2	7.3	5.9	5.9
Georgia	740	729	521	703	701	9.7	9.4	6.4	8.6	8.6
Hawaii	0	1	3	7	21	0.0	0.1	0.2	0.6	1.7
Idaho	0	1	0	0	4	0.0	0.1	0.0	0.0	0.3
Illinois	596	639	382	386	528	4.9	5.3	3.1	3.1	4.3
Indiana	121	172	184	120	53	2.1	2.9	3.0	2.0	0.9
Iowa	20	4	8	6	8	0.7	0.1	0.3	0.2	0.3
Kansas	39	19	9	18	13	1.5	0.7	0.3	0.7	0.5
Kentucky	101	81	62	38	49	2.6	2.0	1.5	0.9	1.2
Louisiana	446	404	231	194	183	10.2	9.2	5.2	4.3	4.1
Maine	0	0	0	3	1	0.0	0.0	0.0	0.2	0.1
Maryland	848	610	518	362	181	16.5	11.8	9.8	6.8	3.4
Massachusetts	104	65	83	64	95	1.7	1.1	1.3	1.0	1.5
Michigan	261	302	406	368	255	2.7	3.1	4.1	3.7	2.6
Minnesota	8	9	18	16	23	0.2	0.2	0.4	0.3	0.5
Mississippi	650	553	409	329	149	23.6	20.0	14.4	11.6	5.2
Missouri	165	99	52	33	51	3.0	1.8	0.9	0.6	0.9
Montana	0	2	0	0	0	0.0	0.2	0.0	0.0	0.0
Nebraska	3	6	1	1	0	0.2	0.4	0.1	0.1	0.0
Nevada	38	28	9	7	12	2.2	1.5	0.5	0.4	0.6
New Hampshire	1	1	0	2	1	0.1	0.1	0.0	0.2	0.1
New Jersey	231	99	109	234	220	2.8	1.2	1.3	2.8	2.6
New Mexico	8	2	25	18	23	0.5	0.1	1.4	1.0	1.3
New York	679	700	467	566	756	3.7	3.8	2.5	3.0	4.0
North Carolina	846	740	618	483	333	11.2	9.7	7.7	6.0	4.1
North Dakota	0	0	1	0	0	0.0	0.0	0.2	0.0	0.0
Ohio	227	168	119	100	84	2.0	1.5	1.0	0.9	0.7
Oklahoma	158	249	128	121	124	4.7	7.4	3.7	3.5	3.6
Oregon	7	6	19	9	18	0.2	0.2	0.6	0.3	0.5
Pennsylvania	424	414	278	260	237	3.5	3.5	2.3	2.1	1.9
Rhode Island	0	1	1	1	9	0.0	0.1	0.1	0.1	0.9
South Carolina	383	407	394	394	202	10.0	10.5	9.8	9.8	5.0
South Dakota	0	1	0	0	0	0.0	0.1	0.0	0.0	0.0
Tennessee	659	647	627	553	390	12.1	11.8	11.0	9.7	6.9
Texas	1,480	1,273	1,171	964	1,149	7.5	6.4	5.6	4.6	5.5
Utah	3	5	10	0	8	0.1	0.2	0.4	0.0	0.4
Vermont	2	0	0	1	0	0.3	0.0	0.0	0.2	0.0
Virginia	230	212	140	133	94	3.4	3.1	2.0	1.9	1.3
Washington	16	17	20	19	23	0.3	0.3	0.3	0.3	0.4
West Virginia	2	3	3	1	1	0.1	0.2	0.2	0.1	0.1
Wisconsin	115	90	72	43	66	2.2	1.7	1.3	0.8	1.2
Wyoming	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
U.S. TOTAL*	12,696	11,534	9,465	8,701	8,429	4.7	4.2	3.4	3.1	3.0
Northeast	1,478	1,292	947	1,151	1,332	2.9	2.5	1.8	2.1	2.5
Midwest	1,555	1,509	1,252	1,091	1,081	2.5	2.4	1.9	1.7	1.7
South	8,592	7,783	6,571	5,711	4,968	9.0	8.1	6.6	5.7	5.0
West	1,071	950	695	748	1,048	1.8	1.6	1.1	1.2	1.7
Guam	0	0	1	2	3	0.0	0.0	0.6	1.3	1.9
Puerto Rico	659	680	663	600	702	17.1	17.5	17.4	15.8	18.4
Virgin Islands	28	12	5	8	1	25.5	10.6	4.6	7.4	0.9
OUTLYING AREAS	687	692	669	610	706	16.6	16.6	16.4	15.0	17.3
TOTAL	13,383	12,226	10,134	9,311	9,135	4.9	4.4	3.5	3.3	3.2

*Includes cases reported by Washington, D.C.

Table 37. Early latent syphilis — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	4	6	1	2	1	0.7	1.1	0.2	0.4	0.2
Albuquerque, NM	5	2	19	8	10	1.0	0.4	3.4	1.4	1.8
Atlanta, GA	303	241	173	398	406	41.0	32.4	21.2	48.8	49.8
Austin, TX	19	23	27	31	23	2.7	3.2	3.3	3.8	2.8
Baltimore, MD	646	472	384	257	124	100.1	74.6	59.0	39.5	19.0
Birmingham, AL	95	103	62	35	27	14.4	15.7	9.4	5.3	4.1
Boston, MA	60	41	29	26	50	10.8	7.4	4.8	4.3	8.4
Buffalo, NY	2	1	1	0	2	0.6	0.3	0.3	0.0	0.6
Charlotte, NC	97	99	63	69	40	15.4	15.3	9.1	9.9	5.8
Chicago, IL	518	521	292	298	439	17.4	17.5	9.5	9.7	14.2
Cincinnati, OH	11	5	2	2	0	1.3	0.6	0.2	0.2	0.0
Cleveland, OH	98	63	29	31	10	7.1	4.6	2.1	2.2	0.7
Columbus, OH	42	34	32	33	48	4.1	3.3	3.0	3.1	4.5
Corpus Christi, TX	13	9	3	1	1	4.1	2.9	1.0	0.3	0.3
Dallas, TX	405	384	361	247	351	19.7	18.6	16.3	11.1	15.8
Dayton, OH	5	5	2	4	1	0.9	0.9	0.4	0.7	0.2
Denver, CO	7	4	1	4	12	1.4	0.8	0.2	0.7	2.2
Des Moines, IA	11	2	6	4	5	3.1	0.5	1.6	1.1	1.3
Detroit, MI	180	223	328	293	172	14.3	17.8	34.5	30.8	18.1
El Paso, TX	14	9	11	14	32	2.0	1.3	1.6	2.1	4.7
Fort Worth, TX	121	66	80	60	115	8.9	4.8	5.5	4.1	8.0
Honolulu, HI	0	1	1	4	16	0.0	0.1	0.1	0.5	1.8
Houston, TX	367	248	134	137	136	11.4	7.6	3.9	4.0	4.0
Indianapolis, IN	44	102	125	82	30	5.4	12.6	14.5	9.5	3.5
Jacksonville, FL	69	37	46	54	25	9.4	5.0	5.9	6.9	3.2
Jersey City, NJ	2	1	1	6	15	0.9	0.5	0.4	2.5	6.2
Kansas City, MO	6	16	4	1	5	1.3	3.5	0.9	0.2	1.1
Los Angeles, CA	525	330	187	203	349	6.1	3.8	2.1	2.3	3.9
Louisville, KY	64	38	40	20	33	9.5	5.6	5.8	2.9	4.8
Memphis, TN	382	338	325	356	202	44.0	38.7	36.2	39.7	22.5
Miami, FL	242	294	329	221	295	11.2	13.5	14.6	9.8	13.1
Milwaukee, WI	94	84	55	35	51	10.3	9.3	5.9	3.7	5.4
Minneapolis, MN	5	7	11	8	17	1.4	1.9	2.9	2.1	4.4
Nashville, TN	148	201	173	137	109	27.7	37.9	30.4	24.0	19.1
New Orleans, LA	84	65	32	31	39	18.0	14.1	6.6	6.4	8.0
New York City, NY	645	659	447	548	726	8.7	8.9	5.6	6.8	9.1
Newark, NJ	56	23	58	74	74	19.7	8.1	19.3	24.6	24.6
Norfolk, VA	50	34	23	25	14	23.2	15.1	9.8	10.7	6.0
Oakland, CA	25	22	4	12	12	2.0	1.7	0.3	0.8	0.8
Oklahoma City, OK	70	147	86	73	74	17.2	35.9	20.2	17.2	17.4
Omaha, NE	3	2	1	0	0	0.7	0.4	0.2	0.0	0.0
Philadelphia, PA	407	394	261	248	214	28.3	27.8	17.2	16.3	14.1
Phoenix, AZ	193	266	220	243	150	6.9	9.3	7.2	7.9	4.9
Pittsburgh, PA	1	1	1	4	6	0.1	0.1	0.1	0.3	0.5
Portland, OR	5	5	12	7	17	1.0	1.0	2.3	1.3	3.3
Richmond, VA	36	34	18	28	11	18.5	17.9	9.1	14.2	5.6
Rochester, NY	9	2	0	1	2	3.7	0.8	0.0	0.4	0.8
Sacramento, CA	12	3	2	5	8	1.0	0.3	0.2	0.4	0.7
San Antonio, TX	63	72	102	120	105	4.7	5.2	7.3	8.6	7.5
San Diego, CA	21	23	10	16	34	0.8	0.8	0.4	0.6	1.2
San Francisco, CA	15	14	18	47	173	2.0	1.9	2.3	6.1	22.3
San Jose, CA	5	11	4	12	11	0.3	0.7	0.2	0.7	0.7
Seattle, WA	8	6	16	14	10	0.5	0.4	0.9	0.8	0.6
St Louis, MO	63	40	21	15	23	18.6	12.0	6.0	4.3	6.6
St Paul, MN	1	1	1	4	2	0.4	0.4	0.4	1.4	0.7
St Petersburg, FL	19	15	23	6	19	2.2	1.7	2.5	0.7	2.1
Tampa, FL	76	51	56	51	57	8.2	5.4	5.6	5.1	5.7
Toledo, OH	5	5	3	1	3	1.1	1.1	0.7	0.2	0.7
Tucson, AZ	6	14	14	8	29	0.8	1.7	1.7	0.9	3.4
Tulsa, OK	44	40	8	5	16	11.6	10.4	2.0	1.3	4.1
Washington, DC	288	284	238	219	192	55.1	54.7	41.6	38.3	33.6
Wichita, KS	13	11	1	7	3	2.9	2.4	0.2	1.5	0.7
Yonkers, NY	2	2	0	0	1	1.0	1.0	0.0	0.0	0.5
U.S. CITY TOTAL	6,829	6,256	5,017	4,905	5,177	9.7	8.8	6.8	6.7	7.0
San Juan, PR	300	296	250	232	210	28.7	28.1	24.5	22.7	20.6
TOTAL	7,129	6,552	5,267	5,137	5,387	10.0	9.1	7.0	6.9	7.2

Table 38. Late and late latent syphilis — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	413	443	403	380	334	9.5	10.1	9.1	8.5	7.5
Alaska	12	11	5	9	8	2.0	1.8	0.8	1.4	1.3
Arizona	281	307	385	672	666	6.0	6.4	7.5	13.1	13.0
Arkansas	183	140	130	124	124	7.2	5.5	4.9	4.6	4.6
California	1,637	1,897	2,590	2,038	2,107	5.0	5.7	7.6	6.0	6.2
Colorado	100	76	45	111	86	2.5	1.9	1.0	2.6	2.0
Connecticut	114	97	125	131	147	3.5	3.0	3.7	3.8	4.3
Delaware	49	46	26	47	42	6.6	6.1	3.3	6.0	5.4
Florida	1,082	1,231	1,150	1,446	1,686	7.3	8.1	7.2	9.0	10.5
Georgia	749	799	695	850	743	9.8	10.3	8.5	10.4	9.1
Hawaii	14	7	17	22	27	1.2	0.6	1.4	1.8	2.2
Idaho	13	11	10	10	11	1.1	0.9	0.8	0.8	0.9
Illinois	883	851	794	706	546	7.3	7.0	6.4	5.7	4.4
Indiana	173	173	212	245	196	2.9	2.9	3.5	4.0	3.2
Iowa	23	24	36	33	38	0.8	0.8	1.2	1.1	1.3
Kansas	63	62	50	43	44	2.4	2.3	1.9	1.6	1.6
Kentucky	127	120	103	104	72	3.2	3.0	2.5	2.6	1.8
Louisiana	767	701	526	426	439	17.6	16.0	11.8	9.5	9.8
Maine	3	1	6	12	6	0.2	0.1	0.5	0.9	0.5
Maryland	616	405	338	305	415	12.0	7.8	6.4	5.8	7.8
Massachusetts	416	283	296	334	346	6.8	4.6	4.7	5.3	5.4
Michigan	202	207	232	347	408	2.1	2.1	2.3	3.5	4.1
Minnesota	58	52	43	83	65	1.2	1.1	0.9	1.7	1.3
Mississippi	235	147	125	175	247	8.5	5.3	4.4	6.2	8.7
Missouri	90	191	215	110	118	1.7	3.5	3.8	2.0	2.1
Montana	0	0	0	0	4	0.0	0.0	0.0	0.0	0.4
Nebraska	24	12	4	5	19	1.4	0.7	0.2	0.3	1.1
Nevada	86	59	38	47	86	4.9	3.3	1.9	2.4	4.3
New Hampshire	11	14	17	17	15	0.9	1.2	1.4	1.4	1.2
New Jersey	411	587	599	637	637	5.1	7.2	7.1	7.6	7.6
New Mexico	54	66	57	36	48	3.1	3.8	3.1	2.0	2.6
New York	4,291	3,201	2,308	2,701	2,620	23.6	17.6	12.2	14.2	13.8
North Carolina	540	490	375	475	424	7.2	6.4	4.7	5.9	5.3
North Dakota	0	0	0	2	0	0.0	0.0	0.0	0.3	0.0
Ohio	109	98	89	115	105	1.0	0.9	0.8	1.0	0.9
Oklahoma	97	94	82	102	89	2.9	2.8	2.4	3.0	2.6
Oregon	19	23	18	26	29	0.6	0.7	0.5	0.8	0.8
Pennsylvania	367	427	321	362	342	3.1	3.6	2.6	2.9	2.8
Rhode Island	54	51	33	29	45	5.5	5.1	3.1	2.8	4.3
South Carolina	198	230	206	268	269	5.2	5.9	5.1	6.7	6.7
South Dakota	1	1	1	0	0	0.1	0.1	0.1	0.0	0.0
Tennessee	515	439	525	580	514	9.5	8.0	9.2	10.2	9.0
Texas	1,930	1,885	1,659	2,145	2,299	9.8	9.4	8.0	10.3	11.0
Utah	50	42	46	14	56	2.4	2.0	2.1	0.6	2.5
Vermont	0	0	0	4	0	0.0	0.0	0.0	0.7	0.0
Virginia	334	354	266	287	362	4.9	5.2	3.8	4.1	5.1
Washington	82	110	85	98	63	1.4	1.9	1.4	1.7	1.1
West Virginia	6	7	7	1	2	0.3	0.4	0.4	0.1	0.1
Wisconsin	58	52	60	64	38	1.1	1.0	1.1	1.2	0.7
Wyoming	1	0	4	3	1	0.2	0.0	0.8	0.6	0.2
U.S. TOTAL*	17,743	16,653	15,594	16,976	17,168	6.6	6.1	5.5	6.0	6.1
Northeast	5,667	4,661	3,705	4,227	4,158	11.0	9.0	6.9	7.9	7.8
Midwest	1,684	1,723	1,736	1,753	1,577	2.7	2.7	2.7	2.7	2.4
South	8,043	7,660	6,853	7,910	8,241	8.4	7.9	6.8	7.9	8.2
West	2,349	2,609	3,300	3,086	3,192	3.9	4.3	5.2	4.9	5.1
Guam	3	10	7	15	9	1.9	6.1	4.5	9.7	5.8
Puerto Rico	597	614	485	402	398	15.5	15.8	12.7	10.6	10.5
Virgin Islands	0	0	3	0	2	0.0	0.0	2.8	0.0	1.8
OUTLYING AREAS	600	624	495	417	409	14.5	15.0	12.2	10.2	10.0
TOTAL	18,343	17,277	16,089	17,393	17,577	6.7	6.2	5.6	6.1	6.2

*Includes cases reported by Washington, D.C.

Table 39. Late and late latent syphilis — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	0	0	1	1	2	0.0	0.0	0.2	0.2	0.4
Albuquerque, NM	29	37	33	26	29	5.5	7.1	5.9	4.7	5.2
Atlanta, GA	120	119	88	168	159	16.2	16.0	10.8	20.6	19.5
Austin, TX	22	20	24	64	52	3.1	2.8	3.0	7.9	6.4
Baltimore, MD	331	202	111	57	145	51.3	31.9	17.0	8.8	22.3
Birmingham, AL	110	149	124	101	89	16.7	22.7	18.7	15.3	13.4
Boston, MA	155	107	106	113	133	27.9	19.2	17.7	18.9	22.2
Buffalo, NY	6	4	8	7	5	1.9	1.3	2.5	2.2	1.6
Charlotte, NC	44	39	40	31	33	7.0	6.0	5.8	4.5	4.7
Chicago, IL	494	475	468	444	325	16.6	15.9	15.2	14.4	10.5
Cincinnati, OH	9	6	12	12	15	1.1	0.7	1.4	1.4	1.8
Cleveland, OH	20	11	7	5	5	1.4	0.8	0.5	0.4	0.4
Columbus, OH	17	30	18	52	45	1.7	2.9	1.7	4.9	4.2
Corpus Christi, TX	13	10	6	8	9	4.1	3.2	1.9	2.6	2.9
Dallas, TX	187	156	120	326	493	9.1	7.6	5.4	14.7	22.2
Dayton, OH	28	9	10	12	4	5.0	1.6	1.8	2.1	0.7
Denver, CO	24	37	18	45	36	4.8	7.4	3.2	8.1	6.5
Des Moines, IA	6	5	11	10	9	1.7	1.4	2.9	2.7	2.4
Detroit, MI	131	136	145	257	294	10.4	10.9	15.2	27.0	30.9
El Paso, TX	65	60	73	78	74	9.2	8.5	10.7	11.5	10.9
Fort Worth, TX	27	87	85	159	149	2.0	6.3	5.9	11.0	10.3
Honolulu, HI	14	4	13	16	26	1.6	0.5	1.5	1.8	3.0
Houston, TX	879	755	614	661	748	27.4	23.2	18.1	19.4	22.0
Indianapolis, IN	30	38	92	87	65	3.7	4.7	10.7	10.1	7.6
Jacksonville, FL	69	30	53	47	28	9.4	4.1	6.8	6.0	3.6
Jersey City, NJ	28	38	22	26	26	12.7	17.4	9.1	10.8	10.8
Kansas City, MO	2	41	39	24	24	0.4	9.1	8.6	5.3	5.3
Los Angeles, CA	557	740	1,496	923	890	6.5	8.5	16.8	10.4	10.0
Louisville, KY	54	69	51	61	31	8.0	10.3	7.4	8.8	4.5
Memphis, TN	383	321	297	324	247	44.1	36.8	33.1	36.1	27.5
Miami, FL	463	409	356	628	766	21.5	18.8	15.8	27.9	34.0
Milwaukee, WI	62	36	49	43	21	6.8	4.0	5.2	4.6	2.2
Minneapolis, MN	25	15	14	32	24	6.9	4.1	3.6	8.3	6.3
Nashville, TN	58	54	145	162	154	10.9	10.2	25.4	28.4	27.0
New Orleans, LA	157	108	70	46	53	33.7	23.4	14.4	9.5	10.9
New York City, NY	3,881	2,907	2,115	2,442	2,300	52.3	39.1	26.4	30.5	28.7
Newark, NJ	82	115	170	237	194	28.8	40.6	56.5	78.8	64.5
Norfolk, VA	25	30	22	22	20	11.6	13.3	9.4	9.4	8.5
Oakland, CA	91	92	75	71	114	7.1	7.1	5.2	4.9	7.9
Oklahoma City, OK	39	34	25	50	43	9.6	8.3	5.9	11.8	10.1
Omaha, NE	19	3	3	0	13	4.3	0.7	0.6	0.0	2.8
Philadelphia, PA	287	355	281	315	280	20.0	25.0	18.5	20.8	18.5
Phoenix, AZ	187	245	324	546	536	6.7	8.6	10.5	17.8	17.4
Pittsburgh, PA	11	4	3	4	13	0.9	0.3	0.2	0.3	1.0
Portland, OR	8	9	7	13	11	1.6	1.8	1.3	2.5	2.1
Richmond, VA	20	17	17	20	11	10.3	9.0	8.6	10.1	5.6
Rochester, NY	21	13	6	1	7	8.7	5.4	2.4	0.4	2.8
Sacramento, CA	16	13	20	24	19	1.4	1.1	1.6	2.0	1.6
San Antonio, TX	143	121	113	167	155	10.6	8.8	8.1	12.0	11.1
San Diego, CA	135	196	195	103	87	4.9	6.9	6.9	3.7	3.1
San Francisco, CA	88	84	91	114	116	11.8	11.2	11.7	14.7	14.9
San Jose, CA	54	40	36	68	47	3.3	2.4	2.1	4.0	2.8
Seattle, WA	28	51	50	55	36	1.7	3.1	2.9	3.2	2.1
St Louis, MO	46	69	82	30	44	13.6	20.7	23.6	8.6	12.6
St Paul, MN	6	3	6	7	9	2.2	1.1	2.1	2.5	3.2
St Petersburg, FL	29	18	34	23	40	3.3	2.0	3.7	2.5	4.3
Tampa, FL	65	41	55	76	130	7.0	4.4	5.5	7.6	13.0
Toledo, OH	10	10	13	1	3	2.2	2.2	2.9	0.2	0.7
Tucson, AZ	23	20	14	42	34	2.9	2.5	1.7	5.0	4.0
Tulsa, OK	14	23	16	12	6	3.7	6.0	4.1	3.0	1.5
Washington, DC	202	129	237	195	180	38.6	24.9	41.4	34.1	31.5
Wichita, KS	5	16	7	4	7	1.1	3.5	1.5	0.9	1.5
Yonkers, NY	17	9	9	12	23	8.8	4.6	4.5	6.0	11.6
U.S. CITY TOTAL	10,171	9,024	8,845	9,710	9,686	14.4	12.7	12.0	13.2	13.1
San Juan, PR	293	322	222	178	152	28.0	30.6	21.8	17.4	14.9
TOTAL	10,464	9,346	9,067	9,888	9,838	14.6	13.0	12.1	13.2	13.2

Table 40. Congenital syphilis — Reported cases and rates in infants <1 year of age: United States (excluding outlying areas), 1963–2002

<i>Year</i>	<i>Cases</i>	<i>Rate per 100,000 Live Births</i>
1963*	367	9.2
1964*	336	8.7
1965*	335	8.9
1966*	333	8.8
1967	156	4.1
1968	274	7.3
1969	264	7.0
1970	323	8.6
1971	422	11.9
1972	360	11.0
1973	295	9.4
1974	250	7.9
1975	169	5.3
1976	160	5.1
1977	134	4.0
1978	104	3.0
1979	123	3.5
1980	107	3.0
1981	160	4.4
1982	159	4.3
1983	158	4.3
1984	247	6.7
1985	266	7.1
1986	357	9.5
1987	444	11.7
1988	658	16.8
1989	1,807	44.7
1990	3,816	91.8
1991	4,410	107.3
1992	4,024	99.0
1993	3,395	84.9
1994	2,435	61.6
1995	1,860	47.7
1996	1,280	32.9
1997	1,079	27.8
1998	840	21.3
1999	575	14.5
2000	574	14.1
2001	492	12.2
2002	412	10.2

*For 1963 to 1966 data were reported for the federal fiscal year ending June 30 of the year indicated.

NOTE: The surveillance case definition for congenital syphilis changed in 1988. As of 1995, cases of congenital syphilis <1 year of age are obtained using case reporting form CDC 73.126. Yearly case counts in this table correspond to confirmed diagnoses of congenital syphilis among those known to be less than one year of age. As a result, the case counts in this table are a subset of those listed in Table 1 for the years prior to 1995.

Table 41. Congenital syphilis — Reported cases and rates in infants <1 year of age by state/area, ranked by rates: United States, 2002

<i>Rank*</i>	<i>State/Area†</i>	<i>Cases</i>	<i>Rate per 100,000 Live Births</i>
1	New Jersey	36	31.1
2	South Carolina	14	25.1
3	Michigan	32	24.0
4	Arizona	19	22.2
5	Arkansas	8	21.6
6	Illinois	39	21.2
7	Maryland	15	20.5
8	Texas	73	20.0
9	Mississippi	6	14.2
10	Florida	28	13.6
11	North Carolina	13	11.0
12	California	56	10.6
	U.S. TOTAL§	412	10.2
13	Alabama	6	9.9
14	New York	25	9.8
15	Indiana	7	8.1
16	Georgia	10	7.5
17	Kentucky	3	5.5
18	Oklahoma	2	4.0
19	Pennsylvania	5	3.5
20	Colorado	2	3.0
21	Tennessee	2	2.6
22	Washington	2	2.5
23	Ohio	3	2.0
24	Louisiana	1	1.5
25	Minnesota	1	1.5
26	Missouri	1	1.3
27	Massachusetts	1	1.2
	YEAR 2010 OBJECTIVE		1.0
28	Virginia	1	1.0
	Alaska	0	0.0
	Connecticut	0	0.0
	Delaware	0	0.0
	Hawaii	0	0.0
	Idaho	0	0.0
	Iowa	0	0.0
	Kansas	0	0.0
	Maine	0	0.0
	Montana	0	0.0
	Nebraska	0	0.0
	Nevada	0	0.0
	New Hampshire	0	0.0
	New Mexico	0	0.0
	North Dakota	0	0.0
	Oregon	0	0.0
	Rhode Island	0	0.0
	South Dakota	0	0.0
	Utah	0	0.0
	Vermont	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 Washington, D.C. but excludes outlying areas (Guam with 0 cases and rate of 0.0, Puerto Rico with 20 cases and rate of 35.8, and Virgin Islands with 0 cases and rate of 0.0).

Table 42. 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, 1998–2002

State/Area*	Cases					Rates per 100,000 Live Births				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	12	7	8	10	6	19.3	11.3	12.6	16.5	9.9
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	25	24	26	29	19	32.0	29.6	30.5	33.9	22.2
Arkansas	30	14	15	6	8	81.4	38.1	39.7	16.2	21.6
California	122	88	86	62	56	23.4	17.0	16.2	11.7	10.6
Colorado	2	1	0	1	2	3.4	1.6	0.0	1.5	3.0
Connecticut	0	1	1	2	0	0.0	2.3	2.3	4.7	0.0
Delaware	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Florida	72	31	42	38	28	36.8	15.7	20.6	18.5	13.6
Georgia	14	16	22	21	10	11.4	12.6	16.6	15.7	7.5
Hawaii	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Idaho	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Illinois	71	54	50	45	39	38.9	29.7	27.0	24.4	21.2
Indiana	0	7	4	13	7	0.0	8.1	4.6	15.0	8.1
Iowa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas	0	0	2	2	0	0.0	0.0	5.0	5.1	0.0
Kentucky	5	0	3	1	3	9.2	0.0	5.4	1.8	5.5
Louisiana	8	12	7	0	1	12.0	17.9	10.3	0.0	1.5
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	44	27	16	5	15	61.1	37.5	21.5	6.8	20.5
Massachusetts	2	0	1	2	1	2.5	0.0	1.2	2.5	1.2
Michigan	18	22	33	26	32	13.5	16.5	24.2	19.5	24.0
Minnesota	0	0	0	0	1	0.0	0.0	0.0	0.0	1.5
Mississippi	15	12	14	10	6	34.9	28.1	31.8	23.7	14.2
Missouri	15	10	3	5	1	19.9	13.3	3.9	6.6	1.3
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	0	0	0	0.0	0.0	0.0	0.0	0.0
New Hampshire	0	1	0	0	0	0.0	7.1	0.0	0.0	0.0
New Jersey	87	49	23	32	36	75.9	42.9	19.9	27.6	31.1
New Mexico	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New York	59	43	40	38	25	22.8	16.8	15.5	15.0	9.8
North Carolina	24	19	19	19	13	21.5	16.7	15.8	16.1	11.0
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	4	6	5	1	3	2.6	3.9	3.2	0.7	2.0
Oklahoma	16	9	1	5	2	32.3	18.4	2.0	10.0	4.0
Oregon	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Pennsylvania	21	7	9	4	5	14.4	4.8	6.2	2.8	3.5
Rhode Island	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
South Carolina	24	23	31	19	14	44.5	41.9	55.2	34.1	25.1
South Dakota	1	1	0	0	0	9.7	9.5	0.0	0.0	0.0
Tennessee	13	10	25	14	2	16.8	12.9	31.4	17.9	2.6
Texas	114	68	72	75	73	33.3	19.5	19.8	20.5	20.0
Utah	1	0	1	0	0	2.2	0.0	2.1	0.0	0.0
Vermont	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Virginia	6	3	7	3	1	6.4	3.1	7.1	3.0	1.0
Washington	1	1	0	0	2	1.3	1.3	0.0	0.0	2.5
West Virginia	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Wisconsin	6	9	4	2	0	8.9	13.2	5.8	2.9	0.0
Wyoming	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
U.S. TOTAL†	840	575	574	492	412	21.3	14.5	14.1	12.2	10.2
Northeast	169	101	74	78	67	24.4	14.7	10.7	11.4	9.8
Midwest	115	109	101	94	83	13.1	12.4	11.2	10.6	9.4
South	405	251	286	228	183	28.5	17.5	19.2	15.4	12.4
West	151	114	113	92	79	15.9	12.0	11.5	9.4	8.1
Guam	0	0	0	1	0	0.0	0.0	0.0	28.1	0.0
Puerto Rico	28	23	17	22	20	46.3	38.6	28.7	39.4	35.8
Virgin Islands	0	0	0	1	0	0.0	0.0	0.0	59.9	0.0
OUTLYING AREAS	28	23	17	24	20	42.1	35.2	26.3	39.3	32.7
TOTAL	868	598	591	516	432	21.7	14.9	14.3	12.6	10.6

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

†Includes cases reported by Washington, D.C.

Table 43. Congenital syphilis — Reported cases and rates in infants <1 year of age in selected cities of >200,000 population, ranked by rates: United States, 2002

<i>Rank*</i>	<i>City†</i>	<i>Cases</i>	<i>Rate per 100,000 Live Births</i>
1	Newark, NJ	12	242.7
2	Detroit, MI	28	182.8
3	Houston, TX	39	88.2
4	Baltimore, MD	8	81.5
5	Chicago, IL	31	62.6
6	Phoenix, AZ	14	55.5
7	Atlanta, GA	5	53.6
8	Jersey City, NJ	2	51.6
9	Birmingham, AL	2	46.5
10	Los Angeles, CA	27	41.8
11	Miami, FL	5	36.8
12	Yonkers, NY	1	35.8
13	Dallas, TX	9	35.7
14	Fort Worth, TX	4	35.3
15	Austin, TX	4	31.1
16	Cleveland, OH	2	24.6
17	San Jose, CA	4	24.3
18	Tampa, FL	2	24.2
19	Philadelphia, PA	5	23.6
20	Indianapolis, IN	3	21.5
21	New York City, NY	22	18.4
22	Minneapolis, MN	1	15.2
23	Tulsa, OK	1	15.1
24	Washington, DC	1	13.1
25	Oklahoma City, OK	1	12.5
26	Charlotte, NC	1	9.6
27	El Paso, TX	1	7.7
28	San Diego, CA	1	5.4
29	San Antonio, TX	1	4.5
	YEAR 2010 OBJECTIVE		1.0
	Tucson, AZ	0	0.0
	Oakland, CA	0	0.0
	Sacramento, CA	0	0.0
	San Francisco, CA	0	0.0
	Denver, CO	0	0.0
	Jacksonville, FL	0	0.0
	St Petersburg, FL	0	0.0
	Honolulu, HI	0	0.0
	Des Moines, IA	0	0.0
	Wichita, KS	0	0.0
	Louisville, KY	0	0.0
	New Orleans, LA	0	0.0
	Boston, MA	0	0.0
	St Paul, MN	0	0.0
	Kansas City, MO	0	0.0
	St Louis, MO	0	0.0
	Omaha, NE	0	0.0
	Albuquerque, NM	0	0.0
	Buffalo, NY	0	0.0
	Rochester, NY	0	0.0
	Akron, OH	0	0.0
	Cincinnati, OH	0	0.0
	Columbus, OH	0	0.0
	Dayton, OH	0	0.0
	Toledo, OH	0	0.0
	Portland, OR	0	0.0
	Pittsburgh, PA	0	0.0
	Memphis, TN	0	0.0
	Nashville, TN	0	0.0
	Corpus Christi, TX	0	0.0
	Norfolk, VA	0	0.0
	Richmond, VA	0	0.0
	Seattle, WA	0	0.0
	Milwaukee, WI	0	0.0

*Cities were ranked in descending order by rate, number of cases, and alphabetically by state. Cities with no cases were not ranked. Excludes outlying areas (San Juan, PR, with 2 cases and rate of 32.2).

†Mother's city of residence used to assign case.

Table 44. Congenital syphilis — Reported cases and rates in infants <1 year of age in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City*	Cases					Rates per 100,000 Live Births				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Albuquerque, NM	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Atlanta, GA	5	7	7	9	5	57.2	78.2	73.9	96.5	53.6
Austin, TX	0	0	0	3	4	0.0	0.0	0.0	23.3	31.1
Baltimore, MD	29	21	15	2	8	295.6	203.9	146.9	20.4	81.5
Birmingham, AL	5	2	2	3	2	112.6	44.6	43.9	69.7	46.5
Boston, MA	2	0	0	0	0	25.4	0.0	0.0	0.0	0.0
Buffalo, NY	0	0	0	1	0	0.0	0.0	0.0	22.8	0.0
Charlotte, NC	1	3	3	1	1	10.8	31.0	28.1	9.6	9.6
Chicago, IL	49	44	38	35	31	95.2	87.1	74.8	70.6	62.6
Cincinnati, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Cleveland, OH	3	2	2	0	2	33.5	23.4	23.2	0.0	24.6
Columbus, OH	1	2	0	1	0	8.9	18.7	0.0	9.4	0.0
Corpus Christi, TX	1	0	0	0	0	21.6	0.0	0.0	0.0	0.0
Dallas, TX	18	4	6	8	9	77.4	16.8	24.5	31.7	35.7
Dayton, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Denver, CO	1	1	0	0	0	10.2	9.8	0.0	0.0	0.0
Des Moines, IA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Detroit, MI	14	21	24	23	28	85.2	132.9	151.1	150.1	182.8
El Paso, TX	0	1	2	2	1	0.0	7.9	15.4	15.4	7.7
Fort Worth, TX	1	2	4	8	4	10.1	19.2	36.8	70.6	35.3
Honolulu, HI	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Houston, TX	56	31	32	21	39	133.2	72.0	71.4	47.5	88.2
Indianapolis, IN	0	6	3	9	3	0.0	43.6	21.1	64.4	21.5
Jacksonville, FL	0	0	2	0	0	0.0	0.0	17.5	0.0	0.0
Jersey City, NJ	3	0	3	2	2	76.4	0.0	75.6	51.6	51.6
Kansas City, MO	0	1	2	0	0	0.0	13.7	27.2	0.0	0.0
Los Angeles, CA	62	36	41	27	27	94.2	55.5	62.7	41.8	41.8
Louisville, KY	4	0	1	0	0	58.5	0.0	14.1	0.0	0.0
Memphis, TN	11	10	14	8	0	96.6	87.7	122.9	71.3	0.0
Miami, FL	37	10	18	10	5	278.7	76.5	131.7	73.7	36.8
Milwaukee, WI	6	7	4	2	0	54.5	62.2	35.9	17.9	0.0
Minneapolis, MN	0	0	0	0	1	0.0	0.0	0.0	0.0	15.2
Nashville, TN	0	0	5	4	0	0.0	0.0	56.9	46.5	0.0
New Orleans, LA	2	4	0	0	0	26.4	52.1	0.0	0.0	0.0
New York City, NY	45	40	33	32	22	37.5	33.5	27.3	26.8	18.4
Newark, NJ	26	12	9	8	12	536.7	245.7	183.0	161.8	242.7
Norfolk, VA	0	0	3	1	0	0.0	0.0	75.0	24.8	0.0
Oakland, CA	2	3	1	3	0	31.4	47.5	14.8	44.4	0.0
Oklahoma City, OK	11	5	0	2	1	142.8	66.3	0.0	25.1	12.5
Omaha, NE	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Philadelphia, PA	21	7	9	4	5	95.0	32.2	41.1	18.9	23.6
Phoenix, AZ	19	16	21	20	14	82.0	66.4	83.6	79.3	55.5
Pittsburgh, PA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Portland, OR	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Richmond, VA	3	0	0	1	0	105.2	0.0	0.0	31.9	0.0
Rochester, NY	2	1	0	0	0	46.3	25.8	0.0	0.0	0.0
Sacramento, CA	2	2	2	0	0	18.8	18.9	18.3	0.0	0.0
San Antonio, TX	5	4	5	6	1	22.9	18.3	22.6	27.2	4.5
San Diego, CA	7	7	0	5	1	37.8	37.8	0.0	26.9	5.4
San Francisco, CA	1	1	1	1	0	12.3	12.3	11.5	12.1	0.0
San Jose, CA	0	2	1	2	4	0.0	12.5	5.9	12.1	24.3
Seattle, WA	0	1	0	0	0	0.0	13.6	0.0	0.0	0.0
St Louis, MO	3	5	1	3	0	53.4	90.5	18.4	56.6	0.0
St Paul, MN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
St Petersburg, FL	0	1	0	0	0	0.0	29.5	0.0	0.0	0.0
Tampa, FL	4	4	1	6	2	50.8	47.5	11.8	72.5	24.2
Toledo, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tucson, AZ	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tulsa, OK	3	1	0	0	1	45.1	15.2	0.0	0.0	15.1
Washington, DC	8	0	4	2	1	104.1	0.0	52.2	26.2	13.1
Wichita, KS	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Yonkers, NY	2	0	0	0	1	74.3	0.0	0.0	0.0	35.8
U.S. CITY TOTAL	475	327	319	275	237	59.4	40.9	39.0	34.0	29.3
San Juan, PR	1	3	5	5	2	15.3	43.2	77.3	80.4	32.2
TOTAL	476	330	324	280	239	59.1	40.9	39.3	34.4	29.3

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

Table 45. Congenital syphilis — Reported cases and rates in infants <1 year of age by race/ethnicity of mother, 1998–2002

<i>Year of Birth</i>	<i>Race/Ethnicity</i>	<i>Cases</i>	<i>Rate per 100,000 Live Births</i>
1998	White/Non-Hispanic	76	3.2
	Black/Non-Hispanic	529	88.6
	Hispanic	204	27.8
	Asian/Pacific Islander	8	4.7
	Native American/Alaskan Native	5	13.2
	Other	8	NA
	Unknown	10	NA
	Total	840	21.3
1999	White/Non-Hispanic	47	2.0
	Black/Non-Hispanic	350	59.1
	Hispanic	148	19.4
	Asian/Pacific Islander	8	4.5
	Native American/Alaskan Native	6	15.9
	Other	4	NA
	Unknown	12	NA
	Total	575	14.5
2000	White/Non-Hispanic	37	1.5
	Black/Non-Hispanic	330	54.3
	Hispanic	169	20.7
	Asian/Pacific Islander	11	5.6
	Native American/Alaskan Native	5	12.9
	Other	3	NA
	Unknown	19	NA
	Total	574	14.1
2001	White/Non-Hispanic	48	2.0
	Black/Non-Hispanic	260	43.9
	Hispanic	161	18.9
	Asian/Pacific Islander	4	2.0
	Native American/Alaskan Native	5	12.8
	Other	2	NA
	Unknown	12	NA
	Total	492	12.2
2002	White/Non-Hispanic	33	1.4
	Black/Non-Hispanic	236	39.8
	Hispanic	126	14.8
	Asian/Pacific Islander	8	4.1
	Native American/Alaskan Native	3	7.7
	Other	1	NA
	Unknown	5	NA
	Total	412	10.2

NA = Not applicable

Table 46. Chancroid — Reported cases and rates by state/area listed in alphabetical order: United States and outlying areas, 1998–2002

State/Area	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alabama	1	1	1	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	2	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arkansas	7	0	0	0	0	0.3	0.0	0.0	0.0	0.0
California	7	7	3	2	2	0.0	0.0	0.0	0.0	0.0
Colorado	0	0	1	0	0	0.0	0.0	0.0	0.0	0.0
Connecticut	2	0	0	0	0	0.1	0.0	0.0	0.0	0.0
Delaware	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Florida	3	2	0	2	7	0.0	0.0	0.0	0.0	0.0
Georgia	2	1	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	0	0	0	0.0	0.0	0.0	0.0	0.0
Illinois	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Indiana	1	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	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kentucky	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Louisiana	1	9	6	0	2	0.0	0.2	0.1	0.0	0.0
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Massachusetts	0	1	2	2	3	0.0	0.0	0.0	0.0	0.0
Michigan	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Minnesota	0	1	0	0	0	0.0	0.0	0.0	0.0	0.0
Mississippi	3	0	0	0	0	0.1	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	0	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	4	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	82	39	26	3	2	0.5	0.2	0.1	0.0	0.0
North Carolina	9	7	5	3	0	0.1	0.1	0.1	0.0	0.0
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	3	0	1	0	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	1	0	0	0	0.0	0.0	0.0	0.0	0.0
Pennsylvania	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Rhode Island	0	1	0	0	0	0.0	0.1	0.0	0.0	0.0
South Carolina	19	48	10	15	43	0.5	1.2	0.2	0.4	1.1
South Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tennessee	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Texas	34	16	19	6	5	0.2	0.1	0.1	0.0	0.0
Utah	0	0	0	1	0	0.0	0.0	0.0	0.0	0.0
Vermont	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Virginia	7	3	2	0	1	0.1	0.0	0.0	0.0	0.0
Washington	1	0	0	0	1	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	3	4	2	0	1	0.1	0.1	0.0	0.0	0.0
Wyoming	1	1	0	0	0	0.2	0.2	0.0	0.0	0.0
U.S. TOTAL*	189	142	78	38	67	0.1	0.1	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	1	3	4	2	0.1	0.0	0.1	0.1	0.1
Virgin Islands	0	0	1	0	0	0.0	0.0	0.9	0.0	0.0
OUTLYING AREAS	2	1	4	4	2	0.0	0.0	0.1	0.1	0.0
TOTAL	191	143	82	42	69	0.1	0.1	0.0	0.0	0.0

*Includes cases reported by Washington, D.C.

Table 47. Chancroid — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1998–2002

City	Cases					Rates per 100,000 Population				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Akron, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Albuquerque, NM	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Atlanta, GA	1	0	0	0	0	0.1	0.0	0.0	0.0	0.0
Austin, TX	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Baltimore, MD	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Birmingham, AL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Boston, MA	0	0	0	0	1	0.0	0.0	0.0	0.0	0.2
Buffalo, NY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Charlotte, NC	0	1	0	1	0	0.0	0.2	0.0	0.1	0.0
Chicago, IL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Cincinnati, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Cleveland, OH	2	0	0	0	0	0.1	0.0	0.0	0.0	0.0
Columbus, OH	1	0	0	0	0	0.1	0.0	0.0	0.0	0.0
Corpus Christi, TX	0	1	0	0	1	0.0	0.3	0.0	0.0	0.3
Dallas, TX	6	4	6	1	1	0.3	0.2	0.3	0.0	0.0
Dayton, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Denver, CO	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Des Moines, IA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Detroit, MI	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
El Paso, TX	4	0	1	0	0	0.6	0.0	0.1	0.0	0.0
Fort Worth, TX	0	2	2	0	0	0.0	0.1	0.1	0.0	0.0
Honolulu, HI	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Houston, TX	20	7	3	1	3	0.6	0.2	0.1	0.0	0.1
Indianapolis, IN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Jacksonville, FL	0	0	0	1	0	0.0	0.0	0.0	0.1	0.0
Jersey City, NJ	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas City, MO	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Los Angeles, CA	0	1	1	0	0	0.0	0.0	0.0	0.0	0.0
Louisville, KY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Memphis, TN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Miami, FL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Milwaukee, WI	2	2	0	0	1	0.2	0.2	0.0	0.0	0.1
Minneapolis, MN	0	1	0	0	0	0.0	0.3	0.0	0.0	0.0
Nashville, TN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Orleans, LA	0	4	6	0	0	0.0	0.9	1.2	0.0	0.0
New York City, NY	82	39	26	3	2	1.1	0.5	0.3	0.0	0.0
Newark, NJ	0	0	0	1	0	0.0	0.0	0.0	0.3	0.0
Norfolk, VA	0	1	0	0	0	0.0	0.4	0.0	0.0	0.0
Oakland, CA	0	1	0	1	0	0.0	0.1	0.0	0.1	0.0
Oklahoma City, OK	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Omaha, NE	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Philadelphia, PA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Phoenix, AZ	2	0	0	0	0	0.1	0.0	0.0	0.0	0.0
Pittsburgh, PA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Portland, OR	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Richmond, VA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Rochester, NY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Sacramento, CA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
San Antonio, TX	0	0	1	0	0	0.0	0.0	0.1	0.0	0.0
San Diego, CA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
San Francisco, CA	4	0	0	1	0	0.5	0.0	0.0	0.1	0.0
San Jose, CA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Seattle, WA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
St Louis, MO	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
St Paul, MN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
St Petersburg, FL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tampa, FL	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Toledo, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tucson, AZ	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tulsa, OK	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Washington, DC	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Wichita, KS	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Yonkers, NY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
U.S. CITY TOTAL	124	64	46	10	9	0.2	0.1	0.1	0.0	0.0
San Juan, PR	1	1	2	1	1	0.1	0.1	0.2	0.1	0.1
TOTAL	125	65	48	11	10	0.2	0.1	0.1	0.0	0.0

A P P E N D I X

Sources and Limitations of CDC Surveillance Data

Much of the information in this document is based on cases of sexually transmitted diseases (STDs) reported to the Division of STD Prevention (DSTDP), National Center for HIV, STD, and TB Prevention (NCHSTP), Centers for Disease Control and Prevention (CDC), by the STD control programs and health departments in the 50 states, the District of Columbia, selected cities, 3,139 U.S. counties, U.S. dependencies and possessions, and independent nations in free association with the United States. 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.

In the past, STD data were submitted to CDC on a variety of hardcopy summary reporting forms (monthly, quarterly, and annually). As of December 31, 2002, a total of 49 states (with the exception of Arizona, Virgin Islands, Guam and Puerto Rico) had converted from summary hardcopy reporting to electronic submission of line-listed (i.e., case-specific) STD data via the National Electronic Telecommunications System for Surveillance (NETSS). Data reported through NETSS comprise the notifiable disease information that is published in the Morbidity and Mortality Weekly Report (MMWR).

The data used in this report are based on a combination of aggregated final NETSS electronic data and summary hardcopy reporting forms. Monthly hardcopy reporting forms (CDC 73.998) include summary data for syphilis by county and state. Quarterly hardcopy reporting forms (CDC 73.688) include summary data for early syphilis, gonorrhea, chlamydia, and other STDs by sex and source of report (STD clinic or non-STD clinic) for the 50 states, 64 (including San Juan, PR) selected cities (with a population of 200,000 or more as of 1980), and outlying areas of the United States. Annual hardcopy reporting forms (CDC 73.2638) include summary data for P&S syphilis, gonorrhea, and chlamydia by age, race, and sex for the 50 states and 6 large cities.

Areas differ in their ability to resolve differences in total cases derived from 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. 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 area, the discrepancies may be larger.

Reports and corrections sent to CDC on hardcopy forms and for NETSS electronic data through May 2, 2003 have been included in this report. Data received after this date will appear in subsequent issues. The data in the figures and tables in this document supersede those in all earlier publications.

Population Denominators and Rate Calculations

Crude incidence rates (new cases/population) were calculated on an annual basis per 100,000 population. In this report, the 2001 and 2002 rates for the U.S., all states, cities and outlying areas were calculated by dividing the number of cases reported from each area in 2001 and 2002 by the estimated area-specific 2000 population (the most current detailed population file available at time of publication). 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). Rates for states and counties were calculated using published intercensal estimates based on Bureau of the Census population estimates for 1980-1989 (Irwin R; 1980-1989 Intercensal Population Estimates by Race, Sex, and Age; Alexandria, [VA]: Demo-Detail, 1992; machine-readable data file). Rates for 1990 were calculated using population data from the 1990 census (Census of Population and Housing, 1990: Summary Tape File 1 (All States) [machine-readable file]; Washington: Bureau of the Census, 1991), which included information on area (County, State), age (5-year age groups), race (White, Black, Asian/Pacific Islander, American Indian/Alaska Native) and ethnicity (Hispanic, non-Hispanic). Rates for 1991-2002 were updated from previous issues of this report using postcensal population estimates based on the Bureau of the Census data (U.S. Bureau of the Census; 1991-2000 Estimates of the Population of Counties by Age, Sex and Race/Hispanic Origin: 1990 to 2000; machine-readable data files).

Many cities do not have a separate health jurisdiction that collects and reports cases of STDs. For these cities, case numbers and crude incidence rates are equal to those of the county or combination of counties in which the city is located. These city population numbers are updated yearly, based on estimates from the Bureau of Census, and verified by the city project areas.

Population estimates for 1980-1988 for areas outside the United States were obtained from the Bureau of the Census (Bureau of the Census; population estimates for Puerto Rico and the outlying areas: 1980 to 1988; Current Population Reports [Series P-25, No. 1049]; Washington: U.S. Government Printing Office, 1989). After 1988, population estimates for outlying areas were obtained from the health departments located in these areas. Population estimates for the Virgin Islands were used to calculate the rates through 1999. Population estimates for Guam were projected for each year through 1999 based on the 1990 census. Population estimates for both Guam and Virgin Islands were available from the Bureau of the Census for 2000 and were used to calculate 2000-2002 rates. Puerto Rico's population estimates from 1997 to 2000 were obtained from the Bureau of the Census.

The percentage of reported cases for which race/ethnicity and age information was missing differed substantially by year, area, and disease. States were excluded from comparison across race/ethnicity categories if race/ethnicity data were missing from 50% or more of the state's reported cases (these exclusions, if any, are described in the footnote in the race-specific tables). Similarly, states in which age information was missing from the majority of reported cases were excluded from comparison across age categories. For the remaining states, cases with unknown race/ethnicity or age were redistributed to known race/ethnicity or age categories based on the proportion of cases in each race/ethnicity or age category.

Rates of congenital syphilis for 1989-2002 were calculated using live births from the National Center for Health Statistics (NCHS) (Vital Statistics: Natality Tapes 1989-2001 or Vital Statistics Reports, United States 1999, Vol. 48 No.10-Natality). Race-specific rates for 2001-2002 were calculated using live births for 2001. Rates before 1989 were calculated using published live birth data (NCHS; Vital Statistics Report, United States, 1988 [Vol.1–Natality]).

Reporting Practices

Although most areas generally adhere to the case definitions for STDs found in *Case Definitions for Infectious Conditions under Public Health Surveillance*,¹ there may be differences in the policies and systems for collecting surveillance data. Thus, comparisons of case numbers and rates among areas should be interpreted with caution. However, since case definitions and surveillance activities within a given area remain relatively stable, 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. Military cases are not reported as a separate category.

Reporting of Chlamydia Cases

New York City has been reporting chlamydia cases since 1984. However, the State of New York, with the exception of New York City, initiated chlamydia reporting during the year 2000. As a result, the number of chlamydia cases reported by the state of New York (including the cities of Buffalo, Rochester and Yonkers) prior to the year 2001 may be incomplete, and the rate for New York State is underestimated. To be consistent with the practice used in earlier years, New York State chlamydia reporting data were included in the calculation of overall national chlamydia rates. The number of chlamydia cases occurring in the fourth quarter of 2000 for the State of Colorado was projected based on case counts from the first three quarters.

Trends in many areas were more reflective of changes in reporting of cases rather than actual trends in disease. Cases and rates of chlamydia reported in sex-specific tables are underestimated due to some reported cases with unknown sex. Despite problems with under-reporting, it is important to publish available data to emphasize the large numbers of cases of chlamydia being detected in the United States. 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.

Reporting of Syphilis Cases

"Total syphilis" or "all stages of syphilis" includes primary, secondary, early latent, late (including neurosyphilis, late latent, late with clinical manifestations, and unknown latent), and congenital syphilis. Cases of latent syphilis of unknown duration, neurosyphilis, and late syphilis with clinical manifestations are included in late and late latent syphilis totals.

Reporting of Congenital Syphilis Cases

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. As a result of this change in surveillance activity a period of transition during which trends cannot be clearly interpreted has resulted; however, all reporting areas had implemented the new case definition for reporting all cases of congenital syphilis by January 1, 1992. Therefore, the reliability of trends is expected to have stabilized after this date.

In addition to changing the case definition for congenital syphilis, CDC introduced a new data collection form (CDC 73.126) in 1990. Beginning with 1995, the data collected on this form are used for reporting congenital syphilis reported cases and associated rates. This form is used to collect individual case information which allows more thorough analysis of cases. 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 1995 through 2002.

Chlamydia, Gonorrhea, and Syphilis Prevalence Monitoring

Chlamydia and gonorrhea test positivity for women attending family planning clinics, prenatal clinics, Indian Health Service clinics, the National Job Training Program, men attending STD clinics participating in the MSM Prevalence Monitoring Project, the adolescent women attending organizations participating in the Adolescent Women Reproductive Health Monitoring Project, and men and women entering corrections facilities was calculated by dividing the number of persons testing positive for chlamydia or gonorrhea (numerator) by the total number of persons screened for each disease (denominator) and was expressed as a percentage. Except for the National Job Training Program screening data, the denominators for these data sources may include more than one test from the same individual if that person was tested more than once during a year. Various laboratory test methods were used for all of these data sources except the National Job Training Program and, for most of the figures shown, no adjustments of test positivity were made based on laboratory test type and sensitivity. However, for Figure 9, 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-specific sensitivities were defined as estimates 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 2002 Supplement: Chlamydia Prevalence Monitoring Project Annual Report 2002*. Atlanta, GA: U.S. Department of Health and Human Services (in press).

Data on antimicrobial susceptibility in *Neisseria gonorrhoeae* were collected through the Gonococcal Isolate Surveillance Project (GISP), a sentinel system of 27 STD clinics and five regional laboratories located throughout the United States. For more details on findings from GISP gonorrhea cases, refer to the following annual publication: Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2002 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2002*. Atlanta, GA: U.S. Department of Health and Human Services (in press).

Syphilis seroreactivity data on men attending STD clinics participating in the MSM Prevalence Monitoring Project, and on men and women entering jails and juvenile corrections facilities were calculated by dividing the number of persons with a reactive syphilis serologic test (numerator) by the total number of persons screened for syphilis (denominator) and expressed as a percentage. These 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.

Prevalence data for region- and state-specific figures were published with permission from the Regional Infertility Prevention Program, selected state STD prevention programs, the National Job Training Program, U.S. Department of Labor, and the Indian Health Service.

Definition of HHS Regions

The ten Health and Human Services (HHS) regions referred to in the text and figures are as follows: 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.

Definition of IHS Areas

The 12 Indian Health Service (IHS) Areas referred to in the text and figures are as follows, with overlap in some states: Aberdeen Area (Iowa, North Dakota, Nebraska, and South Dakota); Alaska Area (Alaska); Albuquerque Area (Colorado and New Mexico); Bemidji Area (Illinois, Indiana, Michigan, Minnesota, and Wisconsin); Billings Area (Montana and Wyoming); California Area (California); Nashville Area (Alabama, Connecticut, Florida, Louisiana, Maine, Maryland, Massachusetts, Mississippi, New York, North Carolina, Rhode Island, South Carolina, and Tennessee); Navajo Area (Arizona, New Mexico, and Utah); Oklahoma City Area (Kansas, Oklahoma, and Texas); Phoenix Area (Arizona, Nevada and Utah); Portland Area (Idaho, Oregon, and Washington); and Tucson Area (Arizona).

Other Data Sources

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 years 1966-2002). For more information on this database, contact IMS Health, 660 W. Germantown Pike, Plymouth Meeting, PA 19462; Telephone: (800) 523-5333.

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 1980-2000), an ongoing nationwide sample survey of short-stay 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. The National Hospital Ambulatory Medical Care Survey (NHAMCS-ER) (machine-readable files for 1995-2000) was used to obtain estimates of the number of emergency room visits for pelvic inflammatory disease among women ages 15 to 44. Data on HSV-2 seroprevalence among the non-institutionalized U.S. population were obtained from the National Health and Nutrition Examination Survey (NHANES). The estimates generated using these data sources (NHDS, NHAMCS, and NHANES) are based on statistical surveys and therefore have sampling variability associated with the estimates.

Healthy People 2010 Objectives

In January 2000, CDC released objectives for Healthy People 2010 (HP2010).⁶ The year 2010 rate objectives 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 3.0% 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 (Table A1).

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

² Kaufman RE, Jones, OG, Blount, JH, Wiesner PJ. Questionnaire survey of reported early congenital syphilis: problems in diagnosis, prevention, and treatment. *Sex Transm Dis* 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. *Sex Transm Dis* 1994;21:S165-6.

⁵ Black CM, Marrazzo J, Johnson RE, et al. Head-to-head multicenter comparison 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. Healthy People 2010 Sexually Transmitted Diseases Objective Status

<i>HP 2010 Objectives</i>		<i>Baseline Year</i>	<i>Baseline</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>HP 2010 Target</i>
25-1	Reduce the proportion of adolescents and young adults with <i>Chlamydia trachomatis</i> infections									
	a. Females aged 15 to 24 years attending family planning clinics	1997	5.0%	5.0%*	6.1%*	5.6%*	5.9%*	5.8%*	6.0%*	3.0%
	b. Females aged 15 to 24 years attending STD clinics	1997	12.2%	12.2%*	13.5%*	13.7%*	13.5%*	13.3%*	13.5%*	3.0%
	c. Males aged 15 to 24 years attending STD clinics	1997	15.7%	15.7%*	16.9%*	17.0%*	16.4%*	17.0%*	17.5%*	3.0%
25-2	Reduce gonorrhea (cases per 100,000 population)	1997	123.0	122.4	131.9	132.3	129.0	128.5	125.0	19.0
25-3	Eliminate sustained domestic transmission of primary and secondary syphilis (cases per 100,000 population)	1997	3.2	3.2	2.6	2.4	2.1	2.2	2.4	0.2
25-4	Reduce the proportion of adults aged 20 to 29 years with genital herpes infection	1988-94	17.0%	NA	NA	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%	NA	NA	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%	NA	NA	NA	NA	NA	NA	15.0%
25-9	Reduce congenital syphilis (cases per 100,000 live births)	1997	27.0	27.8	21.3	14.5	14.1	12.2	10.2	1.0

<i>HP 2010 Objective</i>	<i>Data Source</i>
25-1	STD Surveillance System, CDC, NCHSTP.
25-2	STD Surveillance System, CDC, NCHSTP.
25-3	STD Surveillance System, CDC, NCHSTP.
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, CDC, NCHSTP.

*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

STD Surveillance Case Definitions

PART 1. CASE DEFINITIONS¹ 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

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 DEFINITIONS¹ 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/mm³
- 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).

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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 August 15, 2003.

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