

# **Sexually Transmitted Disease Surveillance 2001**

**Division of STD Prevention  
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DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Center for HIV, STD, and TB Prevention  
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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.”<sup>1</sup>

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<sup>1</sup> 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, 2001* presents statistics and trends for sexually transmitted diseases (STDs) in the United States through 2001. 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 Program, 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, 2001* 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. Included in this section, are Figures A1-A3 that show progress made by states in converting from hardcopy aggregate reporting to electronic line-listed data.

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.<sup>1</sup> **Appendix** Table A1 displays progress made towards the HP2010 Priority Area 25, for STDs. These objectives are used as reference points throughout this edition of *Sexually Transmitted Disease Surveillance, 2001*.

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.

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<sup>1</sup> U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

## **Acknowledgments**

Publication of this report would not have been possible without the contributions of the State and Territorial Health Departments and the Sexually Transmitted Disease Control Programs, the Regional Infertility Prevention Program, 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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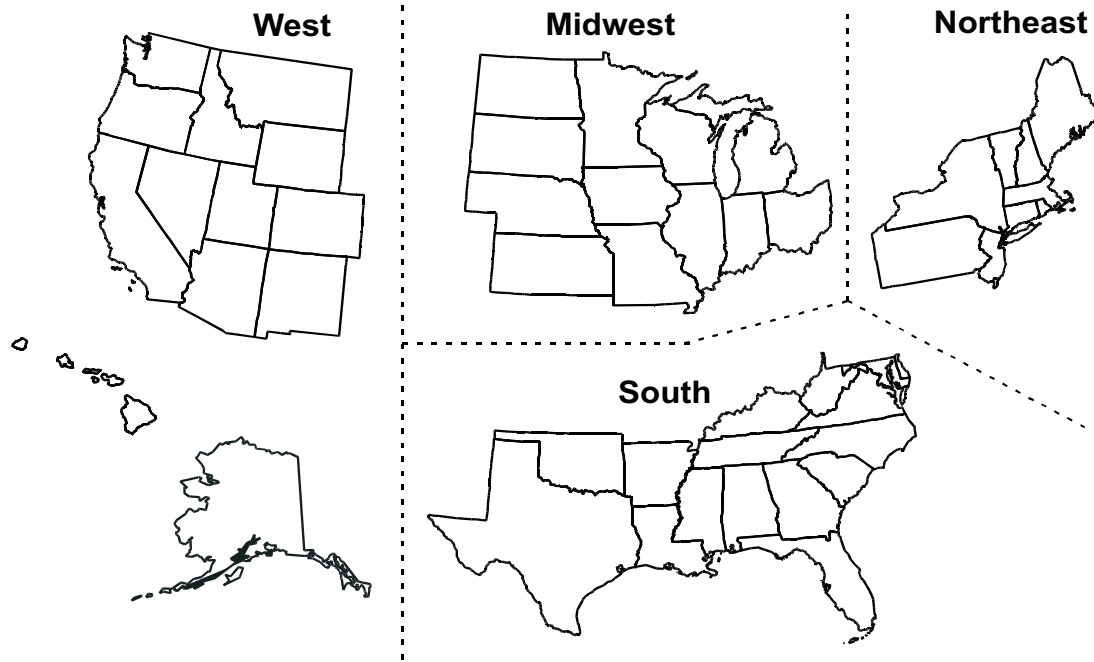
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## Geographic Divisions of the United States



### 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, 2001

The logo on the cover of *Sexually Transmitted Disease Surveillance, 2001* 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*,<sup>1</sup> 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 2001 are worthy of note.

## Chlamydia

In 2001, 783,242 cases of genital *Chlamydia trachomatis* infection were reported to CDC (Table 1). This case count corresponds to a rate of 278.3 cases per 100,000 population, an increase of 10.4% compared with the rate of 252.1 in 2000. Rates of reported chlamydial infection 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.<sup>2</sup> The increase in chlamydia case reports in 2001 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 2001, the overall reported rate of chlamydial infection in the U.S. among women (435.2 cases per 100,000 females) was approximately four times the reported rate among men (113.9 cases per 100,000 males), reflecting the large number of women screened for this disease. However, with the increased availability of urine testing, men are increasingly being tested for chlamydial infection. From 1997 to 2001, the reported chlamydial infection rate in men increased by 61.6% (from 70.5 to 113.9 cases per 100,000 males) compared with a 27.3% increase in women over this period (from 341.8 to 435.2 cases per 100,000 females) (Tables 5 and 6).

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 2001, 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 2.7% to 13.9%) (Figure 7), and at selected prenatal clinics in 22 states and Puerto Rico, 7.4% (range 3.7% to 13.5%) (Figure F). For economically-disadvantaged women 16

to 24 years who entered the National Job Training Program in 2001, from 26 states and Puerto Rico, the median state-specific prevalence was 10.6% (range 5.1% to 18.0%) (Figure L). For women 15 to 30 years screened at Indian Health Service (IHS) clinics in four IHS areas, the prevalence ranged from 3.1% to 10.0% by area (Figure U). For adolescent women entering juvenile detention centers, the median chlamydia positivity by facility was 14.8% (range 4.0% to 25.8%) (Figure GG). It was 9.6% among women attending school-based clinics and 17.6% in street youth (Figure M). For adolescent men entering juvenile detention centers, the median chlamydia positivity was 5.3% by facility (range 1.6% to 11.5%) (Figure HH). 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 disease has declined substantially. During 1988-2001, 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 59.2% (from 13.0% to 5.3%) (Figure 8). 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 five of 10 HHS regions from 2000 to 2001, increased in four regions, and remained the same in one. 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** for the composition of the HHS regions.

## Gonorrhea

Following a 73.8% decline in the reported rate of gonorrhea from 1975 (467.7) to 1997 (122.4), overall rates increased in 1998 (131.9) and have since remained essentially unchanged (Table 1). The gonorrhea rate for 2001 (128.5 cases per 100,000 population) was similar to the rates in 2000 (129.0 cases per 100,000 population) and 1999 (132.3 per 100,000 population) (Table 1). The 2001 rate for gonorrhea exceeds the Healthy People 2010 (HP2010) objective of 19 cases per 100,000 population.

The gonorrhea rate in the U.S. among women in 2001 was similar to the rate in 2000 (128.2 and 126.7 cases per 100,000 women, respectively) (Table 15). As in 2000, there were no significant sex differences in gonorrhea rates in 2001 (Tables 15 and 16). Since 1998, there has been little year-to-year change in the reported rates for most 5-year age categories. 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.

In 2001, 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 parts of the United States. Among 15- to 24-year-old women attending selected family planning clinics in 34 states, the District of Columbia, Puerto Rico, and the Virgin Islands, the median state-specific gonorrhea prevalence was 1.0% (range 0.1% to 3.2%) (Figure 15). For women in this age group attending selected prenatal clinics in 16 states, the median prevalence was 0.9% (range 0.0% to 4.3%) (Figure G). However, for 16- to 24-year-old women entering the National Job Training Program in 17 states and Puerto Rico in 2001, the median state-specific gonorrhea prevalence was 3.7% (range 0.7% to 8.1%) (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 2001, increased numbers of fluoroquinolone-resistant *N. gonorrhoeae* infections were identified in California. Ciprofloxacin, levofloxacin, and ofloxacin are fluoroquinolone antibiotics that are recommended for treatment of gonorrhea by CDC except in areas where fluoroquinolone-resistance levels are found to be elevated. These oral antibiotics are inexpensive and effectively treat gonorrhea with a single dose. Nationally in 2001, 0.7% of *N. gonorrhoeae* isolates tested through the Gonococcal Isolate Surveillance Project (GISP) demonstrated resistance to ciprofloxacin, compared to 0.4% in 2000 and 0.1% in 1998. There is considerable geographic variation in the prevalence of fluoroquinolone-resistance within the U.S. Notably, in Honolulu, the proportion of GISP isolates that were resistant to ciprofloxacin continued to increase quite markedly and was 20.2% in 2001 compared to 14.3% in 2000. Also, in 2001, increased numbers of GISP isolates resistant to ciprofloxacin were identified in all four California GISP sites (3.0% in Long Beach, 2.3% in Orange County, 2.1% in San Diego, and 3.1% in San Francisco). As a result of these data, the 2002 CDC STD Treatment Guidelines<sup>3</sup> 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 2001, there was a marked increase in the proportion of GISP isolates from men who have sex with men (MSM), with 17.2% of isolates from MSM compared with 13.9% in 2000 and 13.1% in 1999 (Figure CC). 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.<sup>4</sup> 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 (the first annual rate increase since 1990); this increase was 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.

In 2001, P&S syphilis cases reported to CDC increased to 6,103 from 5,979 in 2000, an increase of 2.1%. The overall reported rate of P&S syphilis in the United States in 2001 (2.2 cases per 100,000 population) was slightly above the rate reported in 2000 (2.1 cases per 100,000), and was substantially higher than the Healthy People 2010 (HP2010) objective of 0.2 cases per 100,000 population (Figure 21, Table 1). The rate of P&S syphilis among women decreased from 1.7 cases per 100,000 population in 2000 to 1.4 cases per 100,000 population in 2001; among men, the rate increased from 2.6 to 3.0 cases per 100,000 population (Tables 28 and 29).

One factor that greatly facilitates syphilis elimination efforts is that this disease continues to be primarily reported only in specific areas of the country. In 2001, 2,516 (80.2%) 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 20 counties and one city (0.7% of total number of U.S. counties) (Table 26). However, the 2001 P&S syphilis rates were greater than the HP2010 objective in 606 counties (19.3% of the total number of U.S. counties). These 606 counties accounted for more than 99.6% of all reported P&S syphilis cases. Sixty-seven percent (403 out of 606) of these counties are located in the southern part of the United States (Figure KK). These data suggest that comprehensive syphilis prevention efforts focused in the South could markedly reduce the number of syphilis cases occurring in the United States.

Between 2000 and 2001, the national rate of congenital syphilis decreased by 20.7%, from 14.0 to 11.1 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 2001, approximately one half of the states and outlying areas had a reported 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 reported 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 reported for 2001 among African-Americans was 16 times the rate reported among whites, reflecting a substantial decline from 1997, when the rate among African-Americans was 44 times greater than that among whites (Table 35B).

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.

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<sup>1</sup> 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.

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

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

<sup>4</sup> 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

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%.<sup>1</sup> 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 1990s 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 for this infection 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 are provided medical care through managed care organizations.<sup>2</sup> 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.<sup>3</sup> In parts of the United States where large scale chlamydia screening programs have been instituted, prevalence of the disease has declined substantially.

- 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 2001, 783,242 chlamydial infections were reported to CDC from 50 states and the District of Columbia (Table 1). This case count corresponds to a rate of 278.3 cases per 100,000 population, an increase of 10.4% compared with the rate of 252.1 in 2000. The reported number of chlamydial infections was more than twice the number of reported cases of gonorrhea (361,705 gonorrhea cases were reported in 2001) (Table 1).
- From 1987 through 2001, the reported rates of chlamydial infection increased from 50.8 to 278.3 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 1997-2001, the chlamydia rates in the Southern region of the United States (230.1, 268.4, 286.0, 285.5, 306.7 cases per 100,000 population,



respectively) were higher than the rates in any other region of the country (Figures 3 and 4, Table 4). The higher rates in this region likely reflect both an expansion of screening activities in the South and the high burden of disease in this region. Before 1996, reported chlamydia rates were highest in the West and Midwest, where substantial public resources had been committed for screening programs in family planning clinics.

- In 2001, the overall reported rate of chlamydial infection among women in the U.S. (435.2 cases per 100,000 females) was approximately four times higher than the reported rate among men (113.9 cases per 100,000 males), likely reflecting a greater number of women screened for this disease (Figure 5, 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 the new, highly sensitive nucleic acid amplification tests that can be performed on urine, symptomatic and asymptomatic men are increasingly being diagnosed with chlamydial infection. From 1997 to 2001, the reported chlamydial infection rate in males increased by 61.6% (from 70.5 to 113.9 cases per 100,000 males) compared with a 27.3% increase in women over this period (from 341.8 to 435.2 cases per 100,000 females) (Tables 5 and 6).
- For women, the highest age-specific reported rates of chlamydia in 2001 occurred among 15- to 19- year-olds (2,536.1 per 100,000 females) and 20- to 24-year-olds (2,447.0 per 100,000 females). Age-specific reported rates among men, while substantially lower than the rates in women, were also highest in these same age groups (Figure 6, Table 11).
- In 2001, the reported rate of chlamydia among African-American females in the U.S. was nine times higher than the rate among white females (1,646.1 and 192.3 per 100,000, respectively) (Table 12B). The chlamydia rate among African-American males was 13 times higher than that among white males (531.8 and 42.2 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 2001, 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 2.7% to 13.9%) (Figure 7). In nearly all states chlamydia positivity was greater than the HP2010 objective of 3.0%.<sup>4</sup>
- 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 2001, the screening programs in HHS Region X (Alaska, Idaho, Oregon, Washington) family planning clinics demonstrated a 59.2% decline in chlamydia positivity from 13.0% to 5.3% among 15- to 44-year-old women (Figure 8); chlamydia positivity was adjusted for changes in laboratory test methods and associated test sensitivity (see **Appendix**).<sup>5</sup>



- 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 five of 10 HHS regions from 2000 to 2001, increased in four regions, and remained the same in one region (Figure 8). 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**.

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

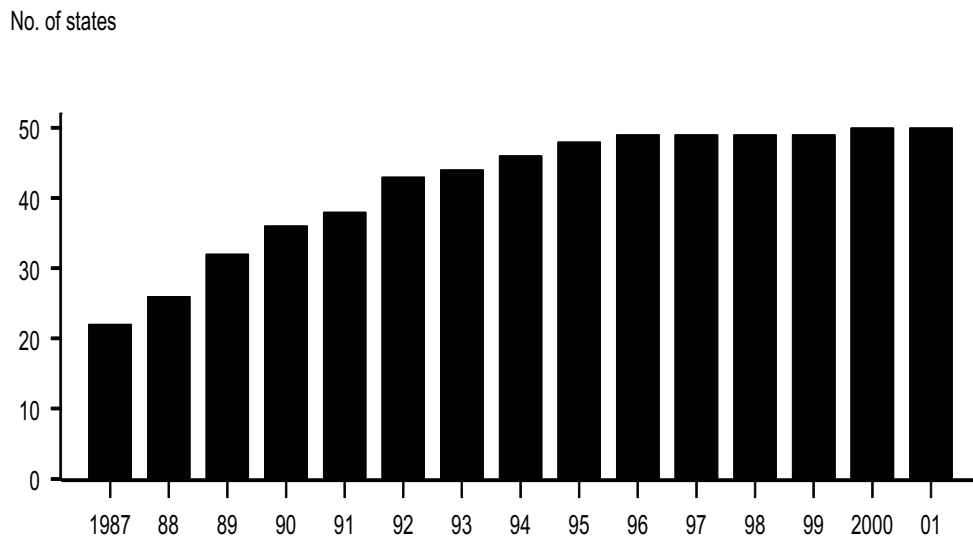
<sup>2</sup> National Committee for Quality Assurance (NCQA). *HEDIS 2000: Technical Specifications*, Washington, DC, 1999, pp. 68-70, 285-286.

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

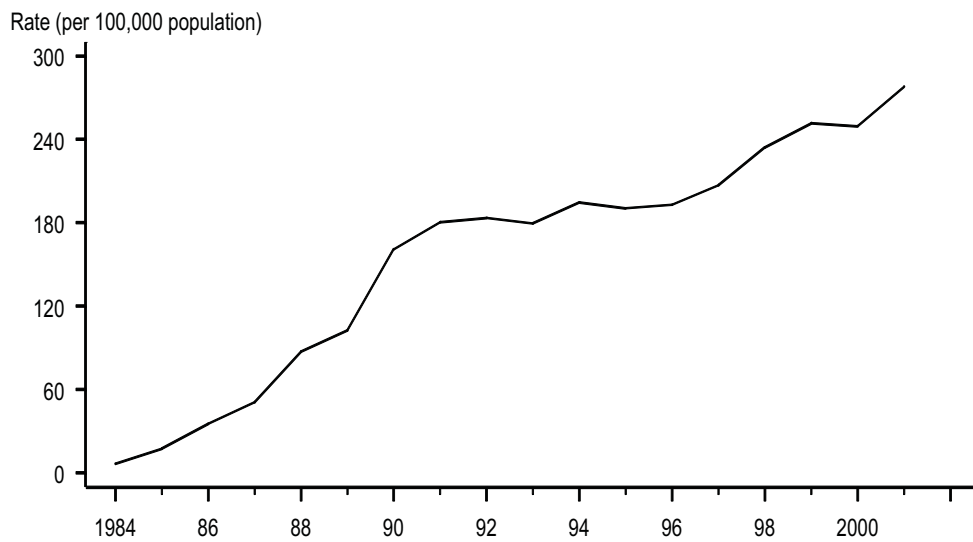
<sup>4</sup> U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

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

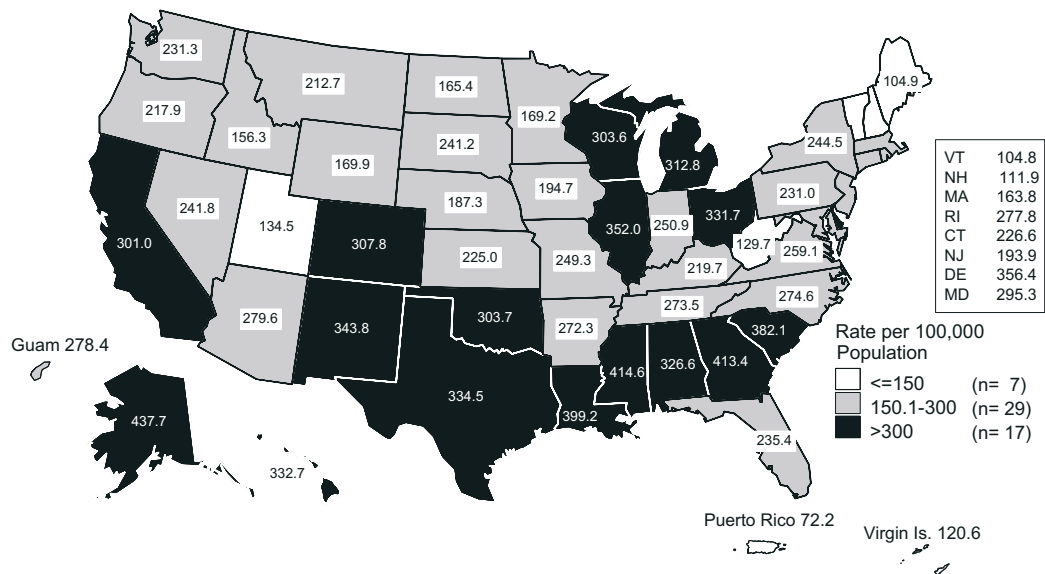
**Figure 1. Chlamydia — Number of states that require reporting of *Chlamydia trachomatis* infections: United States, 1987–2001**



**Figure 2. Chlamydia — Reported rates: United States, 1984–2001**

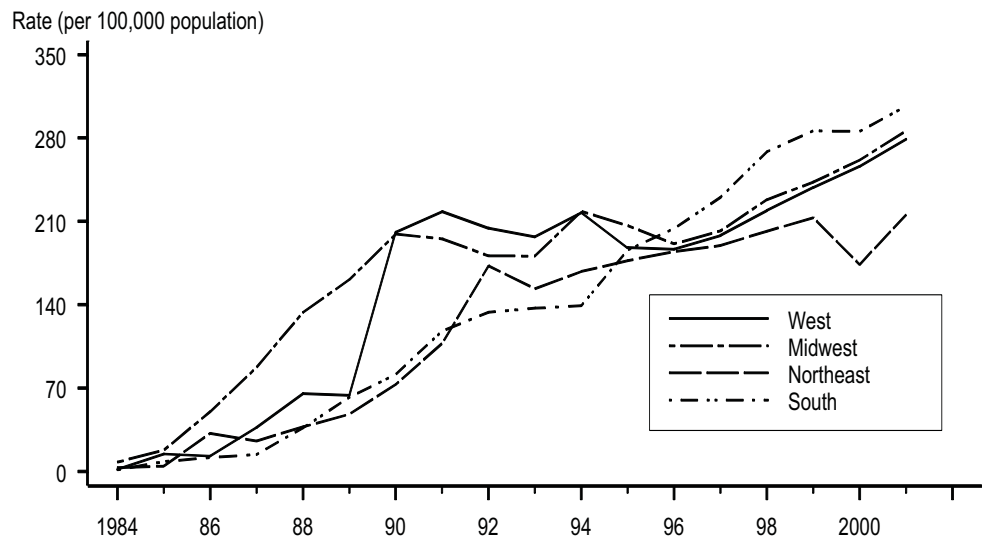


**Figure 3. Chlamydia — Rates by state: United States and outlying areas, 2001**

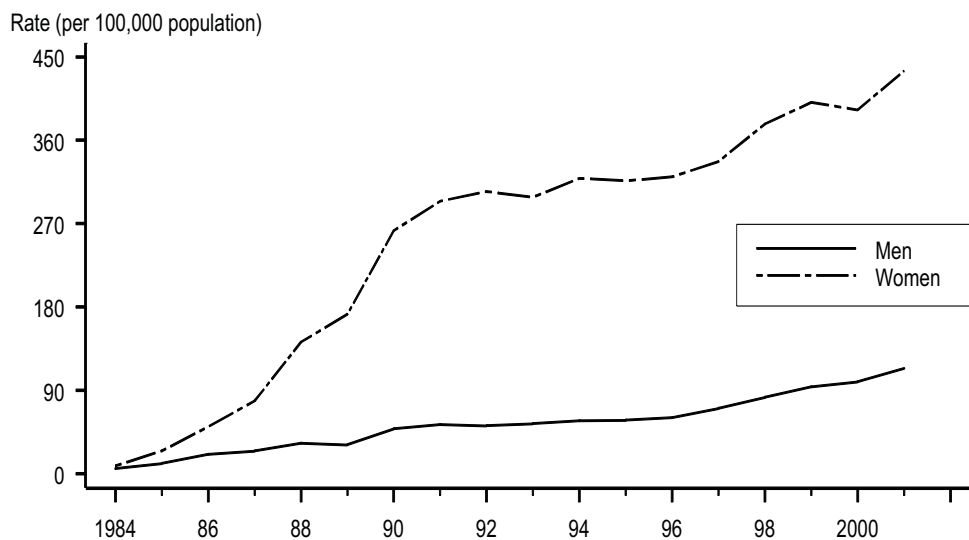


Note: The total rate of chlamydia for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 275.5 per 100,000 population. For further information on chlamydia reporting, see the Appendix.

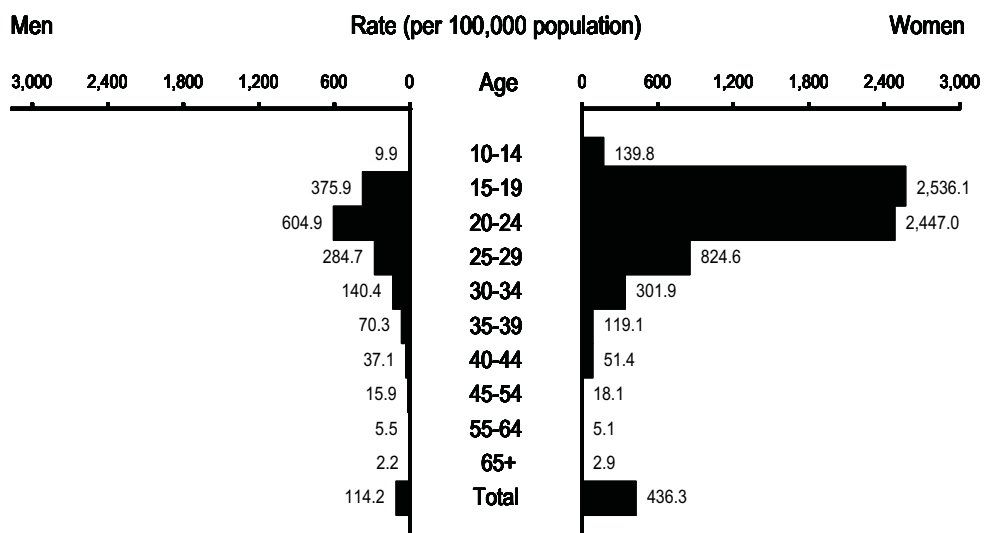
**Figure 4. Chlamydia — Rates by region: United States, 1984–2001**



**Figure 5. Chlamydia — Rates by sex: United States, 1984–2001**

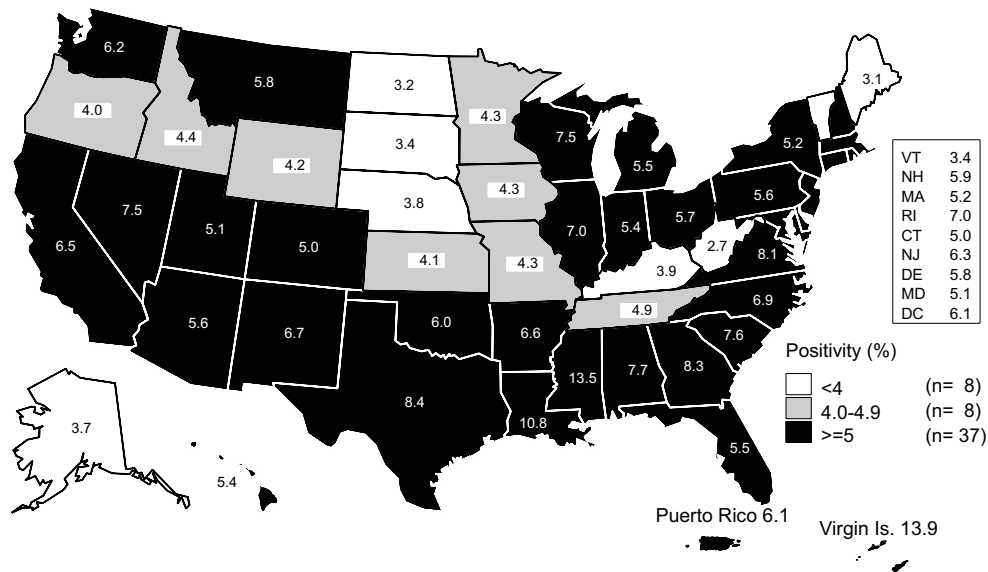


**Figure 6. Chlamydia — Age- and sex-specific rates: United States, 2001**



Note: See Table 11 and Appendix for more information.

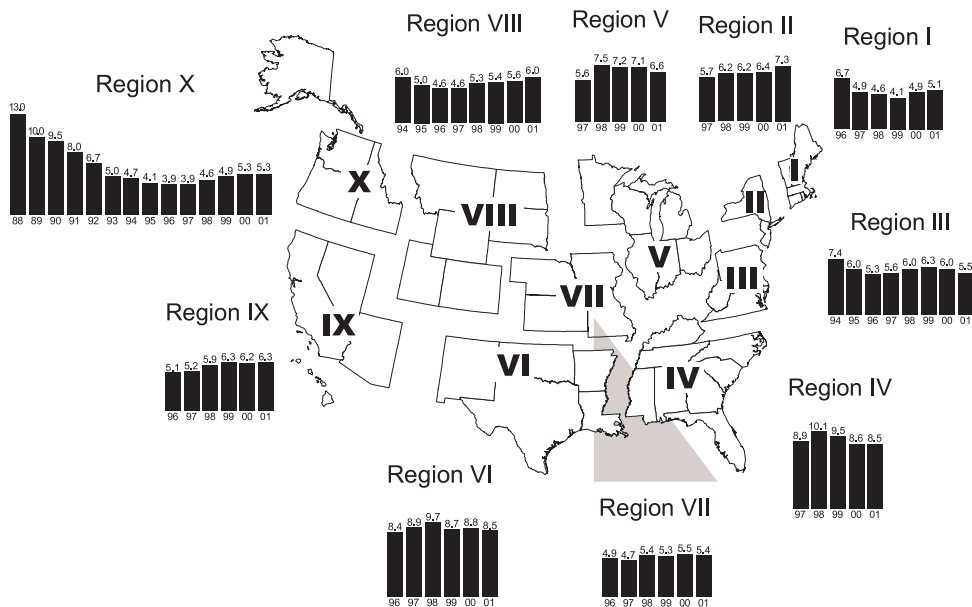
**Figure 7. Chlamydia — Positivity among 15-24 year old women tested in family planning clinics by state: United States and outlying areas, 2001**



Note: States reported chlamydia positivity data on at least 500 women aged 15-24 years screened during 2001.

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

**Figure 8. Chlamydia — Trends in positivity among 15-44 year old women tested in family planning clinics by HHS regions, 1988–2001**



Note: Trends adjusted for changes in laboratory test method and associated increases in test sensitivity (see Appendix). 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 Program; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention



## Gonorrhea

Infections due to *Neisseria gonorrhoeae*, like those resulting from *Chlamydia trachomatis*, are a major cause of pelvic inflammatory disease (PID) in the United States. Occurrence of 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.<sup>1</sup>

Following a 73.8% decline in the reported rate of gonorrhea from 1975 to 1997, in 1998 the gonorrhea rate increased by 7.8% and has remained essentially unchanged through 2001 (Figure 9 and Table 1 ). Although increased screening (usually associated with simultaneous testing for chlamydial infection), use of more sensitive diagnostic tests, and improved reporting may account for a portion of the recent increase, true increases in disease in some populations and geographic areas also appear to have occurred.<sup>2</sup>

As with reporting of chlamydial infection, reporting of gonorrhea cases to CDC is incomplete. 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.<sup>2,3</sup> As a result, for most areas, the number of gonorrhea cases reported to CDC are affected by many factors, only one of which is the occurrence of the infection within the population. For this reason, new data on gonorrhea prevalence in persons screened in a variety of different settings are useful in assessing disease burden in selected populations.

- In 2001, 361,705 cases of gonorrhea were reported in the United States (Table 1).
- The rate of reported gonorrhea in the United States was 128.5 cases per 100,000 population in 2001 which was similar to the rates for the previous three years (129.0 in 2000, 132.3 in 1999, and 131.9 in 1998) (Table 14). In the period from 1975 to 1997, the national gonorrhea rate had been generally declining following the implementation of the national gonorrhea control program in the mid-1970s (Table 1).
- In 2001, eight states and one outlying area reported gonorrhea rates below the Healthy People 2010 (HP2010) national objective of 19 cases per 100,000 population<sup>4</sup> (Figure 10 and Table 13).
- Between 2000 and 2001, the gonorrhea rates in two of the four Census regions of the United States (Northeast and West) increased while the rates decreased slightly in the other two regions (Midwest and South). The Northeast experienced a 9.6% increase in rates (from 89.3 per 100,000 population in 2000 to 97.9 in 2001) and the West experienced a 7.0% increase (from 57.5 per 100,000 in 2000 to 61.5 in 2001). Meanwhile, the gonorrhea rate in the Midwest decreased by 1.7% (from 145.9 per 100,000 in 2000 to 143.4 in 2001) and the South had a 3.9% decrease in rates (from 184.6 cases per 100,000 population in 2000 to 177.5 in 2001). As in previous reporting years, the South had the highest reported gonorrhea rate in 2001 among the four regions of the country (Figure 11, Table 14).

- The reported gonorrhea rate among women in 2001 (128.2 cases per 100,000 females) was similar to the rate in previous years (126.7 in 2000 and 128.6 in 1999) (Figure 12 and Table 15). The gonorrhea rate among men has declined in the last two years from 135.5 cases per 100,000 males in 1999 to 130.9 in 2000 and to 128.4 in 2001 (Figure 12 and Table 16).
- State-specific reported gonorrhea rates for men and women were higher than the HP2010 objective of 19 cases per 100,000 population in 42 states and two outlying areas (Tables 15 and 16).
- The overall gonorrhea rate reported from selected large cities with populations over 200,000 persons was 227.4 cases per 100,000 population in 2001. This rate is similar to what was reported for these cities in 2000 (231.2 cases per 100,000 population) (Table 18). All of these 63 cities and one outlying area, had reported rates higher than the HP2010 objective of 19 cases per 100,000 population (Table 17).
- Changes in the reported 2001 gonorrhea rates, relative to those reported in 2000, differed depending on racial/ethnic group. Gonorrhea rates increased in 2001 for three of the five racial/ethnic groups. The rates among Hispanics (69.4 per 100,000 in 2000 and 74.2 in 2001) and among non-Hispanic whites (27.7 in 2000 and 29.4 in 2001) increased by 6.9% and 6.1% respectively between 2000 and 2001. The gonorrhea rate among Asian/Pacific Islanders declined in 2001 compared to 2000 (from 27.8 down to 26.7) but remained elevated compared to previous years (20.9 in 1999). The rate among African-Americans declined by 0.7% from 788.2 in 2000 to 782.3 in 2001 which was less than the declines in previous years (from 859.4 in 1998 to 848.3 in 1999 to 788.2 in 2000) (Figure 13 and Table 22B). In 2001, the reported gonorrhea rate among African-Americans was about 27 times greater than the rate for non-Hispanic whites. The 2001 gonorrhea rates for all racial/ethnic groups were above the HP2010 objective of 19 per 100,000 population.
- Among women in 2001, 15- to 19-year-olds had the highest reported rate of gonorrhea (703.2 per 100,000), while among men, 20- to 24-year-olds had the highest rate (563.6 per 100,000) (Figure 14 and Table 21).
- In 2001, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected family planning clinics in 34 states, Puerto Rico, District of Columbia, and the Virgin Islands was 1.0% (range 0.1% to 3.2%) (Figure 15). 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.<sup>5,6</sup> Overall, 20.9% of isolates collected in 2001 by the Gonococcal Isolate Surveillance Project (GISP) were resistant to penicillin, tetracycline, or both (Figures 16 and 17).
- Resistance to ciprofloxacin was first identified in GISP in 1991. From 1991 to 1998, fewer than 9 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 of the 25 GISP clinics. In 2001, 38 (0.7%) ciprofloxacin-resistant GISP isolates were identified in 6 clinics (Figure 18). Notably, in Honolulu, the proportion of GISP isolates that were resistant to ciprofloxacin continued to increase quite markedly and was



20.3% in 2001, compared to 14.3% in 2000. This ongoing trend reinforces the recommendation made by CDC in 2000 that fluoroquinolones not be used to treat gonorrhea acquired in Hawaii.<sup>5</sup> In 2001, elevated proportions of GISP isolates resistant to ciprofloxacin were identified in all four California GISP sites (3.0% in Long Beach, 2.3% in Orange County, 2.1% in San Diego, and 3.4% in San Francisco); as a result, in 2002, the California STD Program recommended that fluoroquinolones no longer be used for gonorrhea treatment in California.

- In 2001, four (0.1%) GISP isolates had decreased susceptibility to cefixime; no GISP isolates had decreased susceptibility 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. However, it was notable that three of the four isolates with decreased susceptibility to cefixime were also resistant to penicillin, tetracycline, and ciprofloxacin; such multi-drug resistance in combination with decreased susceptibility to cefixime has rarely been identified in the United States.<sup>7</sup>
- 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  $\geq$  0.5 mg/ml compared with 1.5% in 2001. In 1992, there were no isolates with azithromycin MIC  $\geq$  1.0 mg/ml but in 2001, there were 15 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 2001 (22.0%) (Figure 19).
- 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.

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<sup>1</sup> 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.

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

<sup>3</sup> 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.

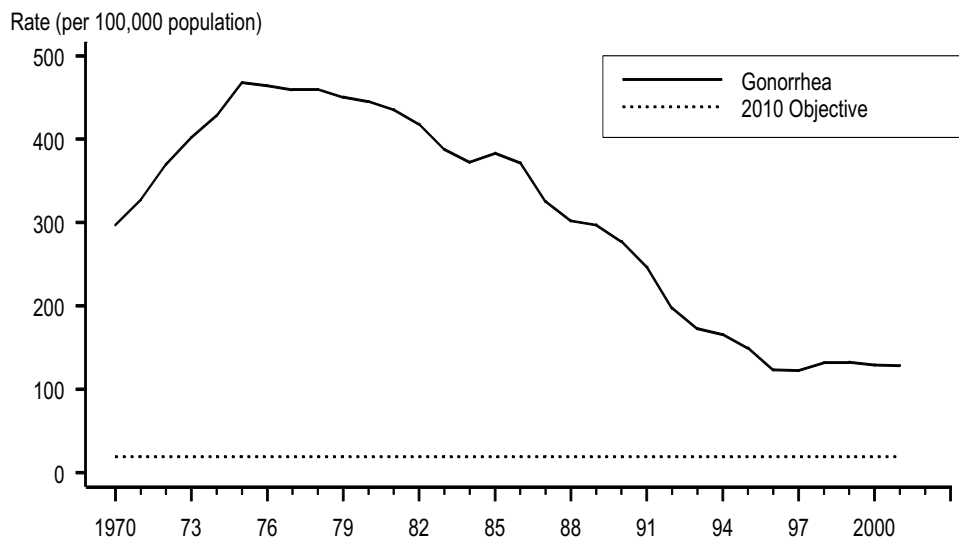
<sup>4</sup> U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

<sup>5</sup> 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.

<sup>6</sup> Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2001 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2001. Atlanta, GA: U.S. Department of Health and Human Services (in press).

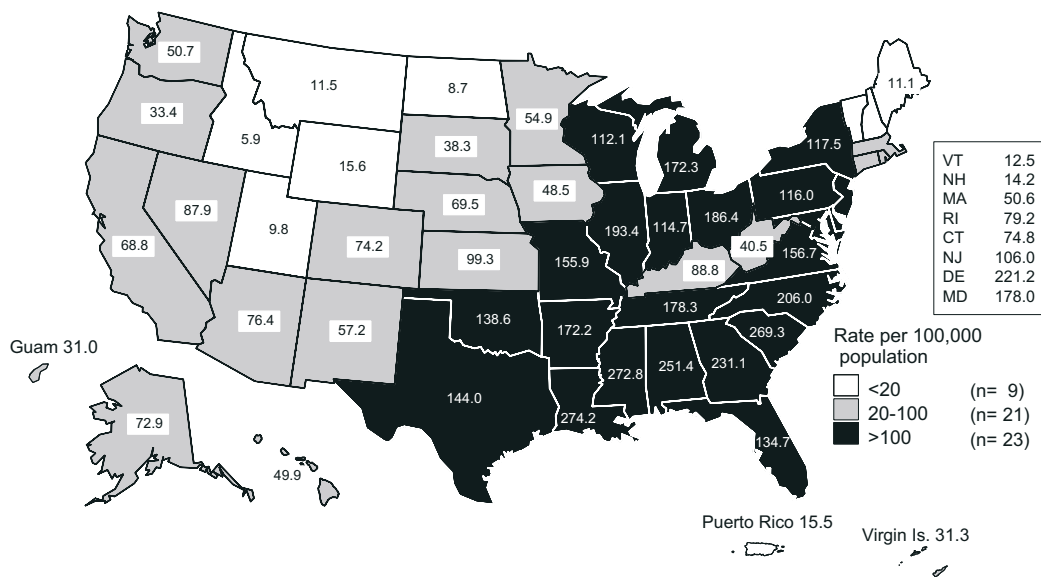
<sup>7</sup> Wang SA, Lee MV, Iverson CJ, O'Connor N, Ohye RG, Hale JA, Knapp JS, Effler PV, Weinstock HS. Multi-drug resistant *Neisseria gonorrhoeae* with decreased susceptibility to cefixime, Hawaii, 2001. [Abstract] International Conference on Emerging Infectious Diseases, Atlanta, Georgia, March 25, 2002.

**Figure 9. Gonorrhea — Reported rates: United States, 1970–2001 and the Healthy People year 2010 objective**



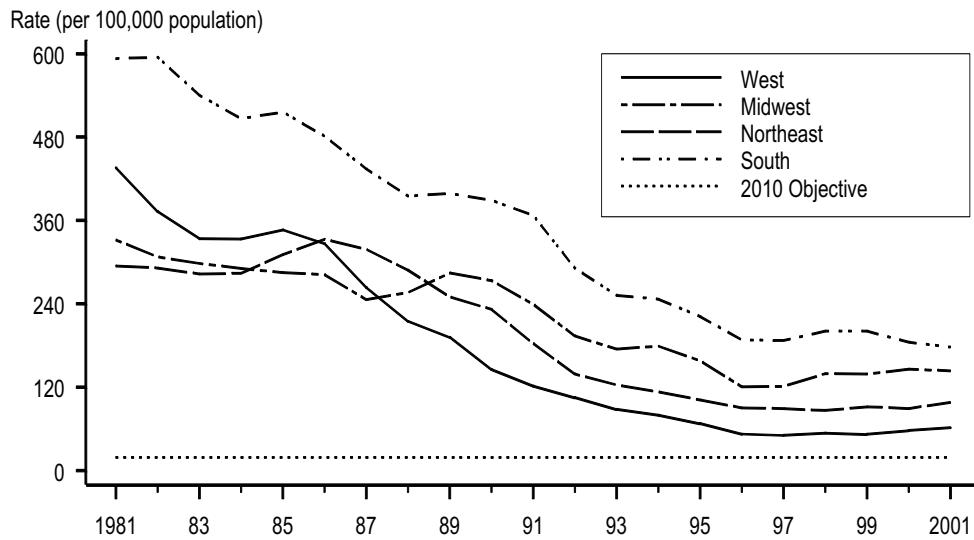
Note: The Healthy People 2010 (HP2010) objective for gonorrhea is 19.0 cases per 100,000 population.

**Figure 10. Gonorrhea — Rates by state: United States and outlying areas, 2001**

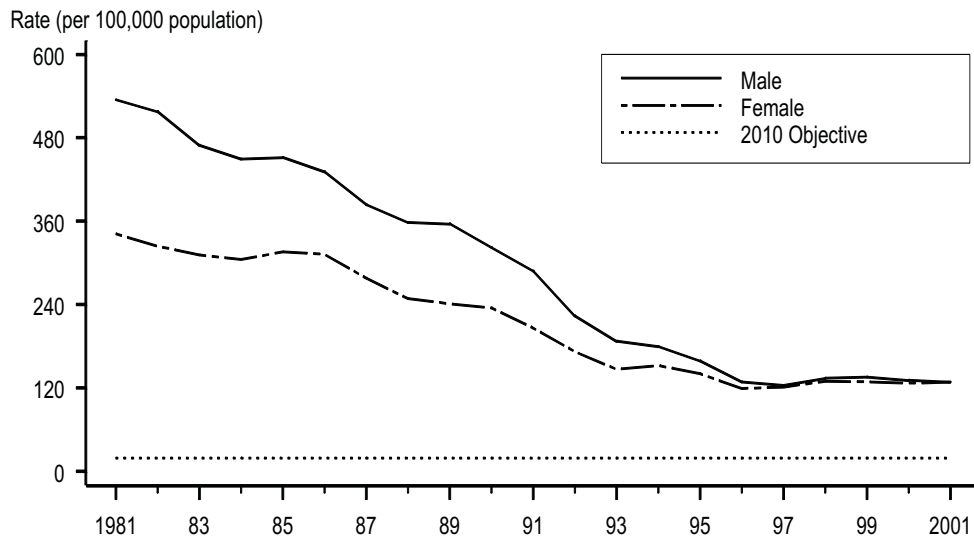


Note: The total rate of gonorrhea for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 126.9 per 100,000 population. The Healthy People year 2010 objective is 19.0 per 100,000 population.

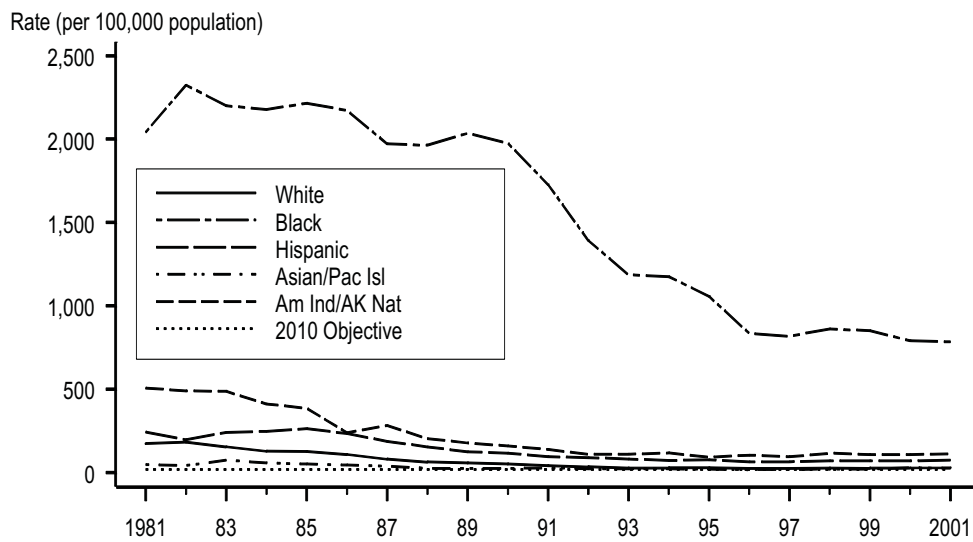
**Figure 11. Gonorrhea — Rates by region: United States, 1981–2001 and the Healthy People year 2010 objective**



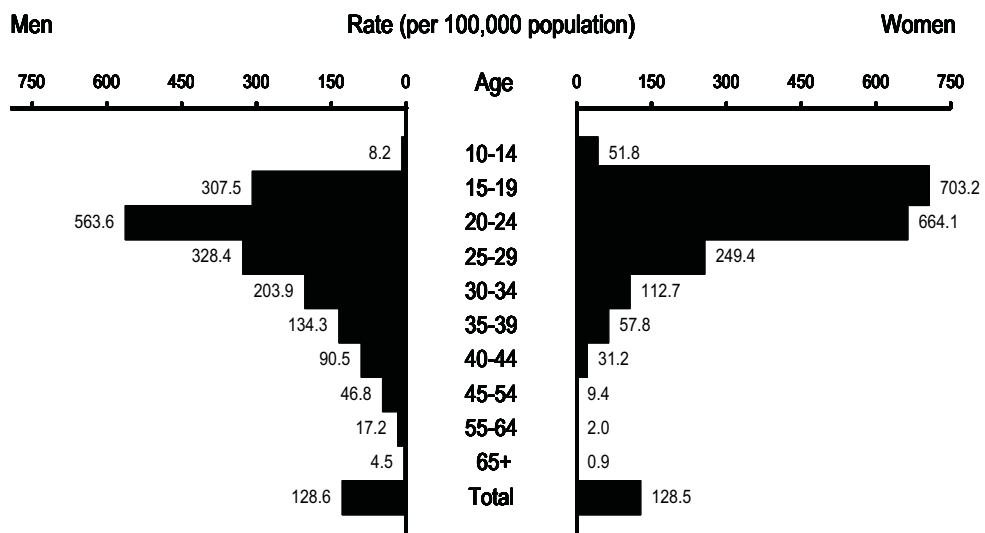
**Figure 12. Gonorrhea — Rates by sex: United States, 1981–2001 and the Healthy People year 2010 objective**



**Figure 13. Gonorrhea — Rates by race and ethnicity: United States, 1981–2001 and the Healthy People year 2010 objective**

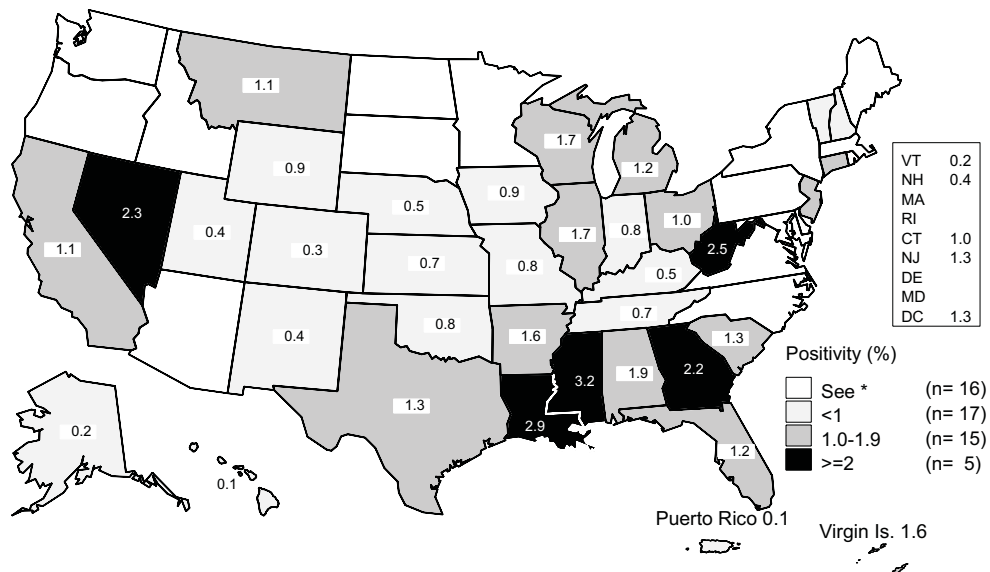


**Figure 14. Gonorrhea — Age- and sex-specific rates: United States, 2001**



Note: See Table 21 and Appendix for more information.

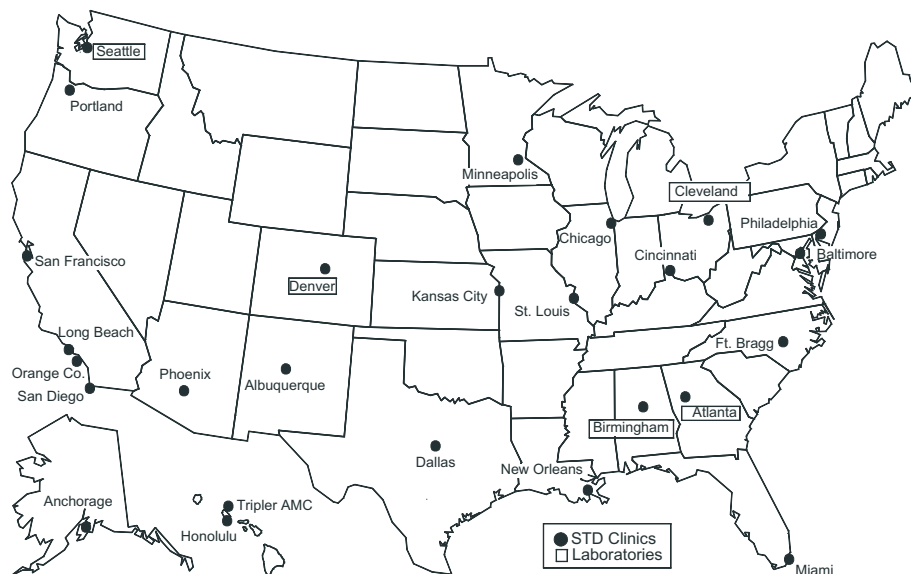
**Figure 15. Gonorrhea — Positivity among 15-24 year old women tested in family planning clinics by state: United States and outlying areas, 2001**



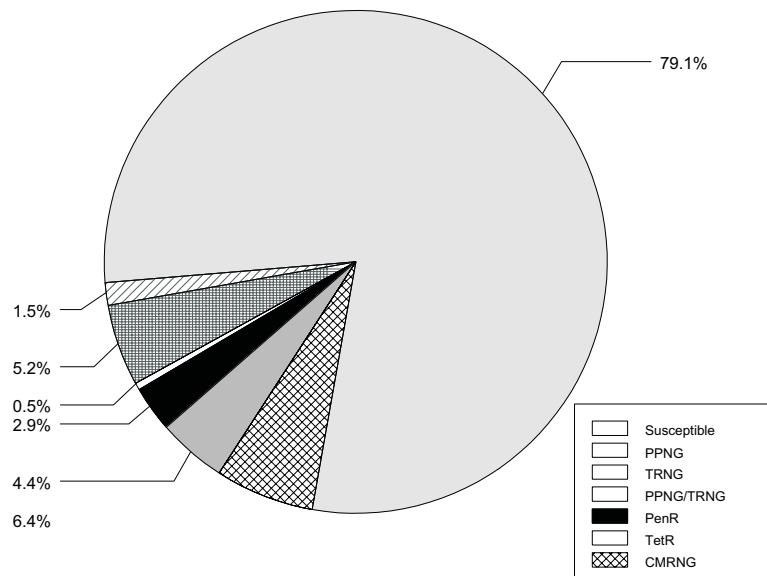
\*States reported gonorrhea positivity data on less than 500 women aged 15-24 years during 2001.

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

**Figure 16. Gonococcal Isolate Surveillance Project (GISP) — Location of participating clinics and regional laboratories: United States, 2001**

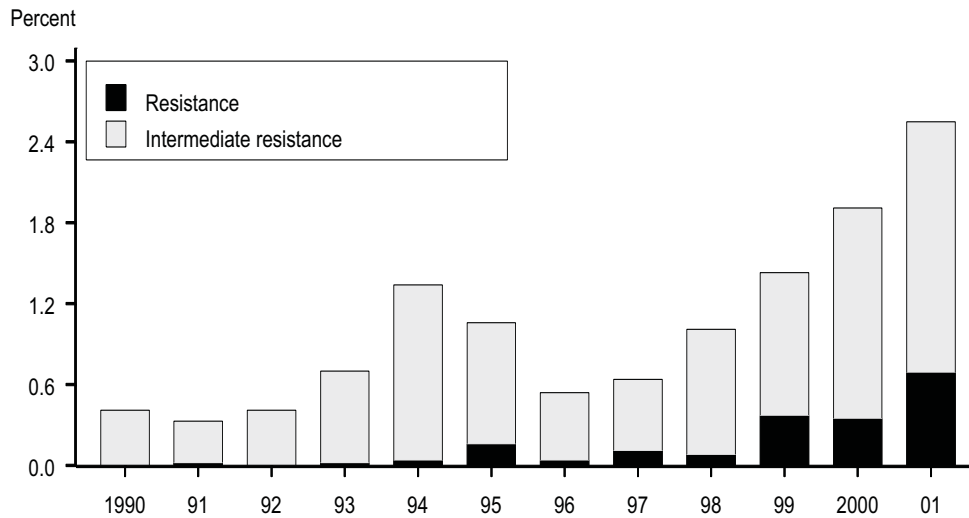


**Figure 17. Gonococcal Isolate Surveillance Project (GISP) — Penicillin and tetracycline resistance among GISP isolates, 2001**



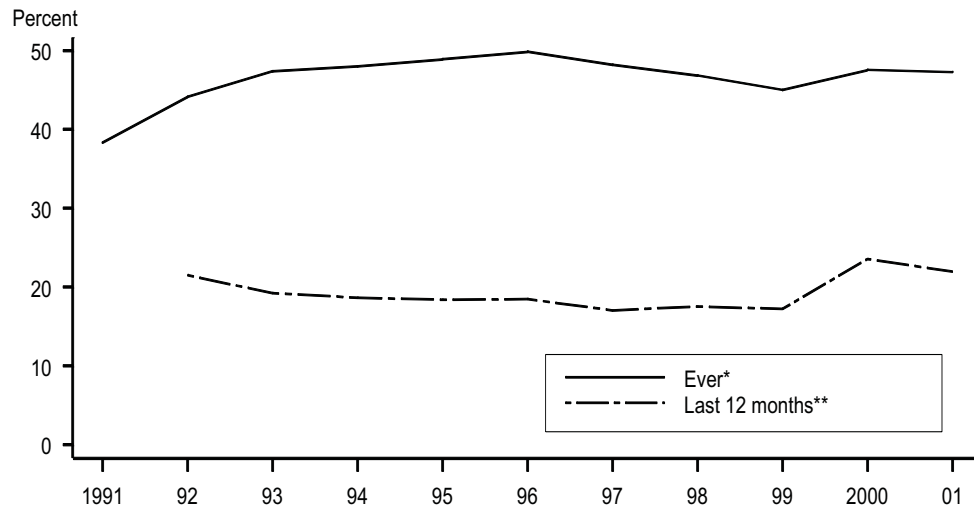
Note: PPNG=penicillinase-producing *N. gonorrhoeae*; TRNG=plasmid-mediated tetracycline resistant *N. gonorrhoeae*; PPNG-TRNG=plasmid-mediated penicillin and tetracycline resistant *N. gonorrhoeae*; PenR=chromosomally mediated penicillin resistant *N. gonorrhoeae*; TetR=chromosomally mediated tetracycline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

**Figure 18. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates with resistance or intermediate resistance to ciprofloxacin, 1990–2001**



Note: Resistant isolates have ciprofloxacin MICs  $\geq 1 \mu\text{g/mL}$ . 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 19. Gonococcal Isolate Surveillance Project (GISP) — Percent of men with gonorrhea who had a previous gonorrhea infection, 1991–2001**



\*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, such as the South, 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.<sup>1</sup>

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 20). 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 Surgeon General David Satcher in October 1999.<sup>2</sup> Collaboration with diverse organizations, public health professionals, the private medical community, and other partners working in STD and HIV is essential for the success of this effort.<sup>3</sup>

The rate of P&S syphilis in the United States declined by 89.7% from 1990 through 2000. However, the rate of P&S syphilis increased slightly in 2001 (the first annual rate increase since 1990); this increase was observed only in men. Despite national progress toward syphilis elimination, particularly among African-Americans, syphilis remains an important problem in the South and in some urban areas in other regions of the country. Recently, outbreaks of syphilis among men who have sex with men (MSM) have been reported, possibly reflecting an increase in risky behavior in this population associated, in part, with the availability of highly active antiretroviral therapy for HIV infection.<sup>4,5</sup>

- In 2001, P&S syphilis cases reported to CDC increased to 6,103 from 5,979 in 2000, an increase of 2.1%. The reported rate of P&S syphilis in the United States in 2001 (2.2 cases per 100,000 population) was slightly higher than the rate reported in 2000 (2.1 cases per 100,000 population), and it is greater than the Healthy People 2010 (HP2010) objective of 0.2 case per 100,000 population (Figure 21, Table 1).<sup>6</sup>
- In 2001, P&S syphilis rates in nine states and one outlying area were less than or equal to the HP2010 national objective of 0.2 case per 100,000 population (Figure 22, Table 25). Ten states and one outlying area reported five or fewer cases of P&S syphilis in 2001 (Table 25).
- In 2001, 2,516 (80.2%) of 3,139 counties in the United States reported no cases of P&S syphilis compared with 2,520 (80.3%) counties reporting no cases in 2000. Of 623 counties reporting at least one case of P&S syphilis in 2001, 17 (2.7%) reported 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 606 counties in 2001 (Figure 23). These 606 counties (19.3% of the total number of counties in the U.S.) accounted for 99.6% of the total P&S syphilis cases reported in 2001.

- In 2001, half of the total number of P&S syphilis cases were reported from 20 counties and the city of Baltimore, MD (Table 26).
- The reported rate of P&S syphilis increased 15.4% among men (from 2.6 cases to 3.0 cases per 100,000 men) between 2000 and 2001 (Figure 25, Table 29). During this time, the rate declined 17.7% among women (from 1.7 to 1.4 cases per 100,000 women) (Figure 25, Table 28).
- The male-to-female rate ratio for P&S syphilis has risen steadily since 1996 when it was 1.1 (Figure 27). The male-to-female rate ratio in 2000 was 1.5:1; in 2001, the rate ratio was 2.1:1, suggesting an increase in syphilis among men who have sex with men.
- An increase in male-to-female rate ratio for P&S syphilis occurred in all racial/ethnic groups during 2000 to 2001. The male-to-female rate ratio for P&S syphilis increased from 1.8 to 6.0 in whites, from 1.4 to 1.7 in African-Americans, from 2.4 to 3.7 in Hispanics, from 5.0 to 10.0 in Asian/Pacific Islanders, and from 1.0 to 1.2 in American Indian/Alaska Natives (Table 35B).
- An increase in the male-to-female rate ratio for P&S syphilis occurred in the District of Columbia and in 16 (53.3%) of the 28 states and one outlying area that reported greater than or equal to 25 cases in 2001.
- In 2001, the South continued to have a higher rate of P&S syphilis (3.4 cases per 100,000 population) than any other region of the country. During 2000-2001, rates decreased 8.1% in the South (from 3.7 to 3.4 cases per 100,000 population) and 10.0% in the Midwest (from 2.0 to 1.8); they increased 40.0% in the West (from 1.0 to 1.4) and 57.1% in the Northeast (from 0.7 to 1.1). The 2001 reported rates in all regions were greater than the HP2010 objective of 0.2 case per 100,000 population (Figure 24, Table 27).
- The overall rate of P&S syphilis reported in 2001 for 63 selected large cities with populations of 200,000 persons or more in the U.S. (4.8 cases per 100,000 population) was 9.1% higher than the rate in 2000 (4.4). Rates exceeded the HP2010 objective of 0.2 case per 100,000 population in 59 (93.7%) of these 63 cities (Tables 30 and 31).
- Between 2000 and 2001, the rates of P&S syphilis declined among African-Americans (from 12.2 cases per 100,000 population in 2000 to 11.0 in 2001) but increased among whites (from 0.5 to 0.7), Hispanics (from 1.6 to 2.1), Asian/Pacific Islanders (from 0.3 to 0.5), and American Indian/Alaska Natives (from 2.4 to 4.2) (Figure 26, Table 35B).
- In 2001, the rate of P&S syphilis reported in African-Americans (11.0 cases per 100,000 population) was 16 times greater than the rate reported in whites (0.7 case per 100,000 population). This differential was substantially less than that in 1997, when the rate of P&S syphilis among African-Americans was 44 times greater than the rate reported among whites (Table 35B). Declining differential rates between African-Americans and whites between 1997 and 2001 are due to consistent decreases in rates in African-Americans during this period in conjunction with an increase in rates in whites in 2001.
- The incidence of P&S syphilis was highest among women aged 20-24 years (3.8 cases per 100,000 population) and among men aged 35-39 (7.2 cases per 100,000 population) (Figure 28, Table 34).

- Between 2000 and 2001, the overall rate of congenital syphilis decreased by 20.7% in the U.S., from 14.0 to 11.1 cases per 100,000 live births (Figure 29, Table 42). In addition, among the 18 states and outlying areas with five or more reported cases of congenital syphilis in 2000, 10 had rates that decreased since 2000. Five of these states had rate decreases of 30% or more between 2000 and 2001 (Table 42).
- The continuing decrease in the rate of congenital syphilis (Figure 30) likely reflects the substantial reduction in the rate of P&S syphilis among women that has occurred in the last decade (Figure 29).<sup>7</sup> During the period from 1991 through 2001, the average yearly percentage decrease in the congenital syphilis rate was 19.8% (Table 40). The average yearly percentage decrease in the rate of P&S syphilis reported among women for the years 1991 through 2001 was 20.8%.
- In 2001, 27 states and three outlying areas had reported rates of congenital syphilis that exceeded the HP2010 objective of 1.0 case per 100,000 live births (Tables 41 and 42).
- Thirty-four (54.0%) of the 63 selected cities with populations of 200,000 persons or more had congenital syphilis rates for 2001 greater than the HP2010 objective of 1.0 case per 100,000 live births (Table 43). All of these cities had reported rates that were more than six times the HP2010 objective.
- Additional information on syphilis and congenital syphilis can be found in the **Special Focus Profiles**.

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

<sup>2</sup> 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.

<sup>3</sup> Centers for Disease Control and Prevention. Primary and secondary syphilis – United States, 1999. *MMWR* 2000;50:113-117.

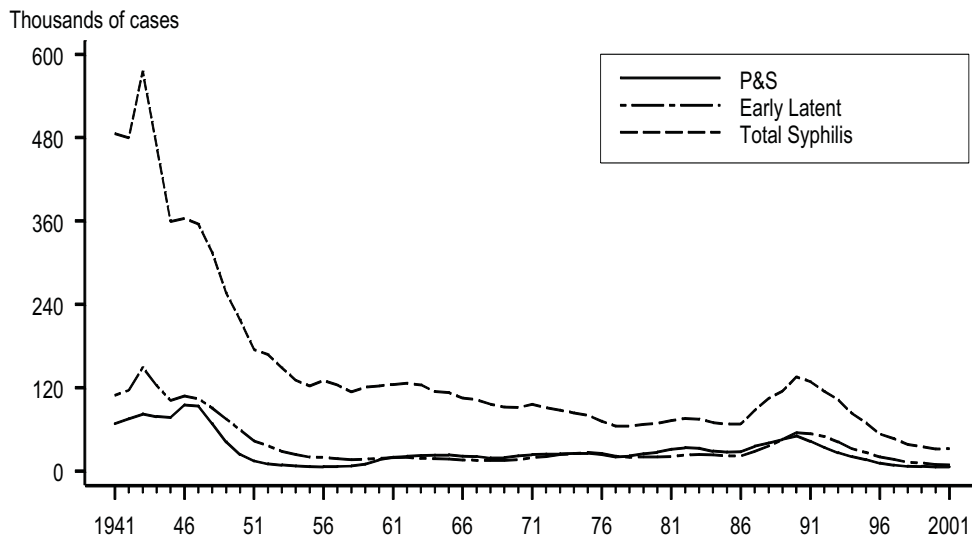
<sup>4</sup> Centers for Disease Control and Prevention. Resurgent bacterial sexually transmitted disease among men who have sex with men – King County, Washington, 1997-1999. *MMWR* 1999; 48:773-777.

<sup>5</sup> 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.

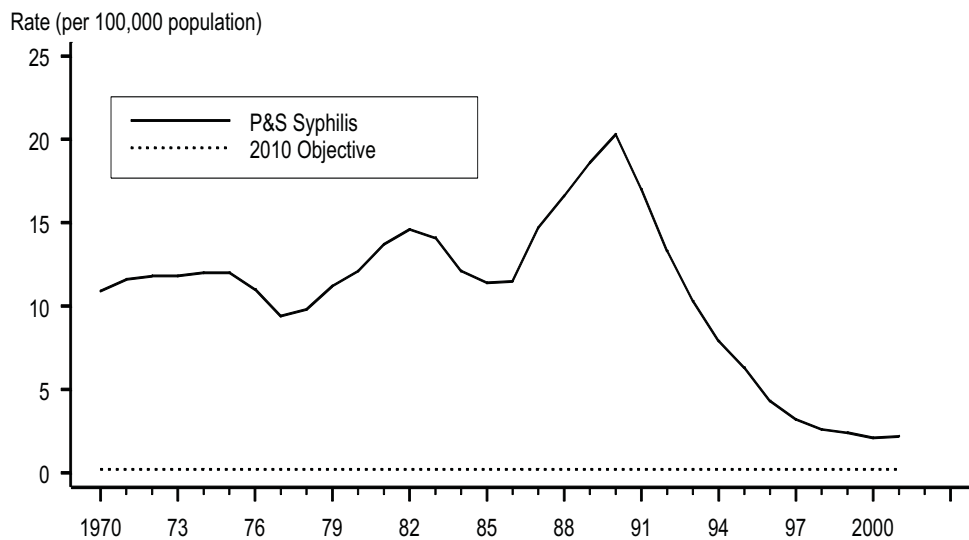
<sup>6</sup> U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

<sup>7</sup> Centers for Disease Control and Prevention. Congenital Syphilis – United States, 2000. *MMWR* 2001;50(27):573-77.

**Figure 20. Syphilis — Reported cases by stage of illness: United States, 1941–2001**

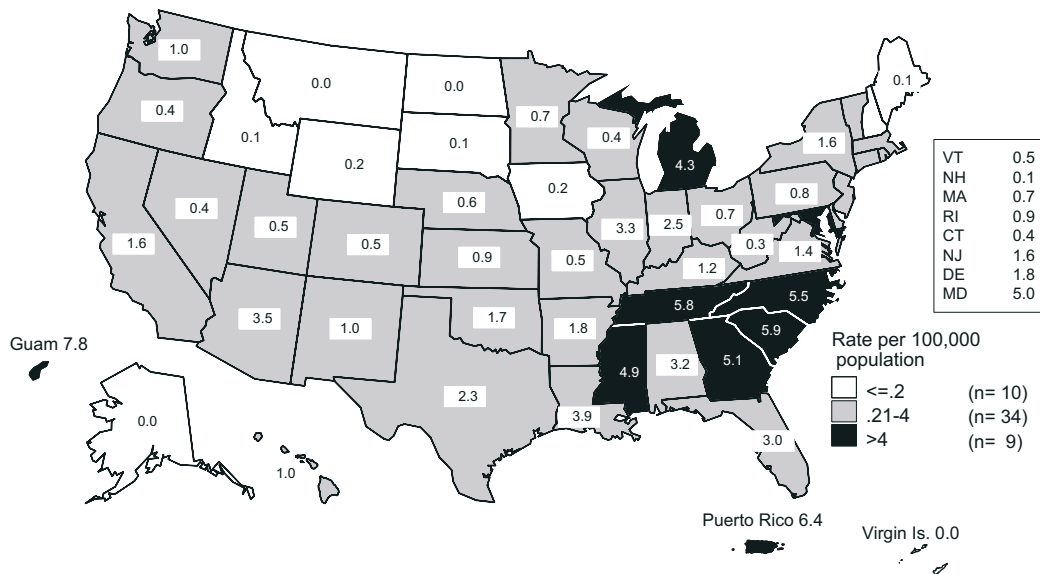


**Figure 21. Primary and secondary syphilis — Reported rates: United States, 1970–2001 and the Healthy People year 2010 objective**



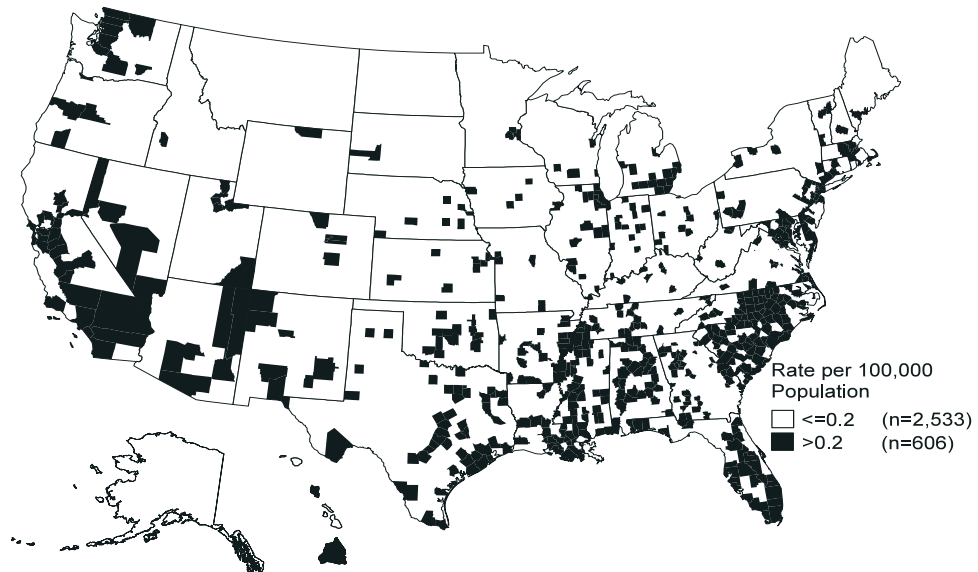
Note: The Healthy People 2010 (HP2010) objective for primary and secondary syphilis is 0.2 case per 100,000 population.

**Figure 22. Primary and secondary syphilis — Rates by state: United States and outlying areas, 2001**

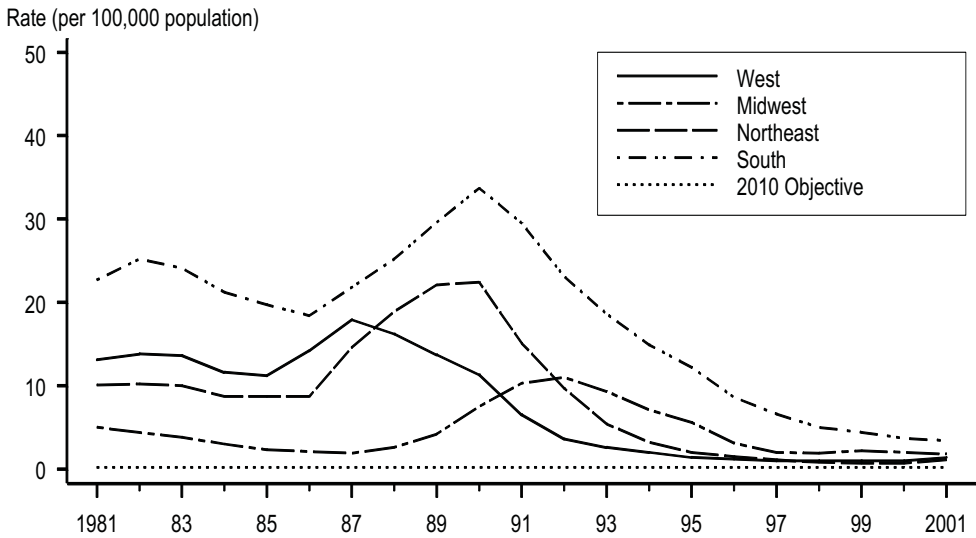


Note: The total rate of primary and secondary syphilis for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 2.2 per 100,000 population. The Healthy People year 2010 objective is 0.2 per 100,000 population.

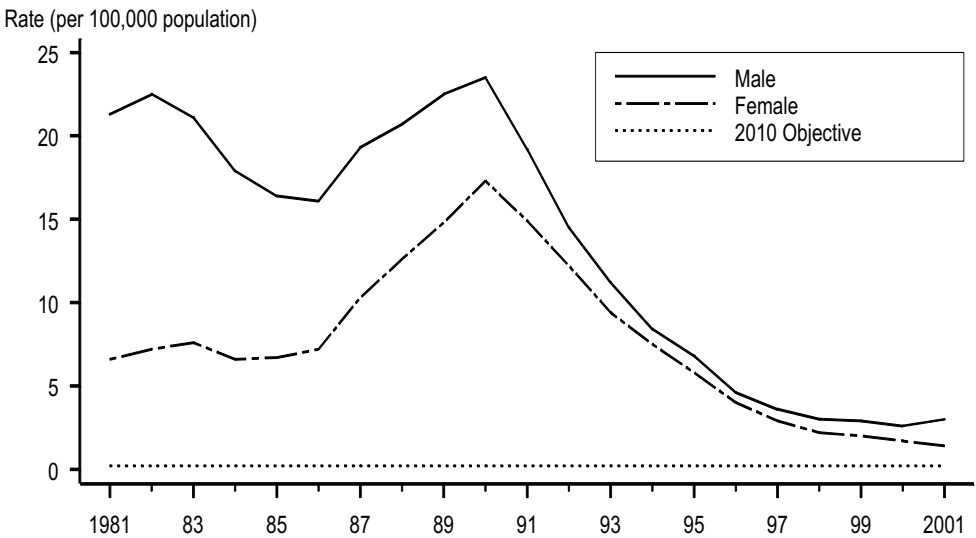
**Figure 23. Primary and secondary syphilis — Counties with rates above and counties with rates below the Healthy People year 2010 objective: United States, 2001**



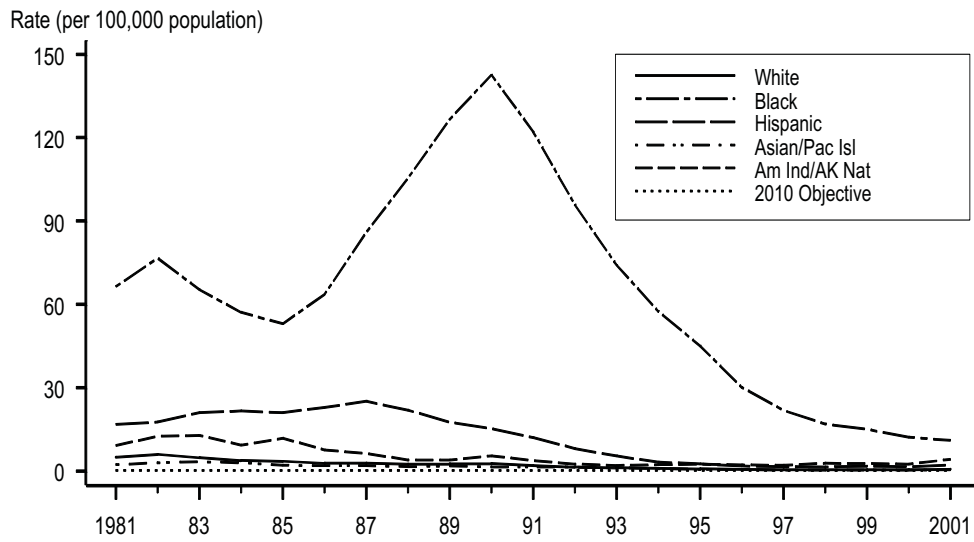
**Figure 24. Primary and secondary syphilis — Rates by region: United States, 1981–2001 and the Healthy People year 2010 objective**



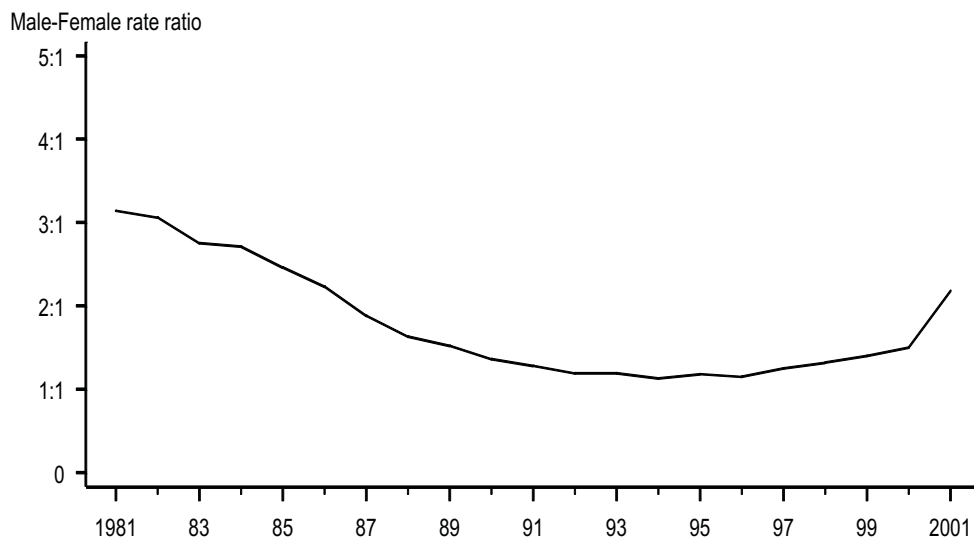
**Figure 25. Primary and secondary syphilis — Rates by sex: United States, 1981–2001 and the Healthy People year 2010 objective**



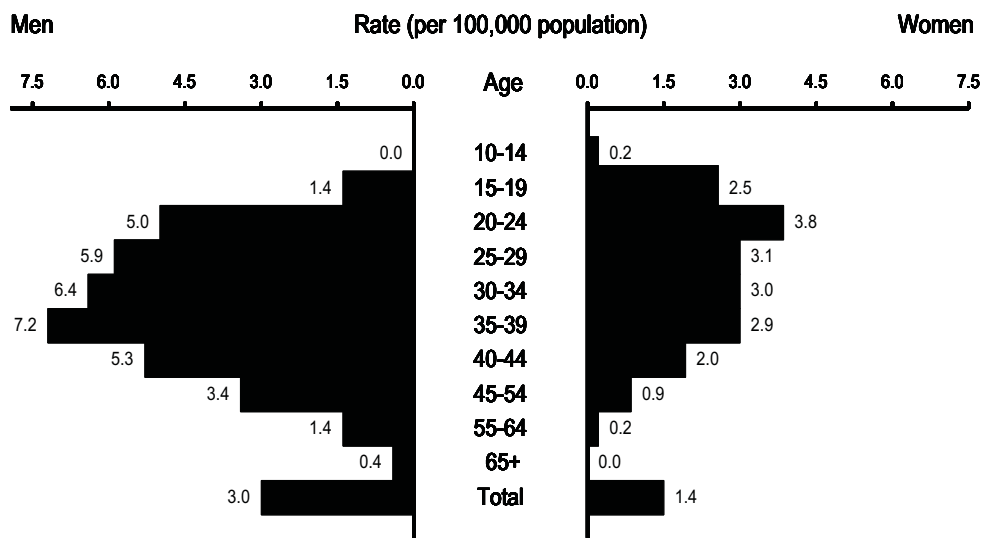
**Figure 26. Primary and secondary syphilis — Rates by race and ethnicity: United States, 1981–2001 and the Healthy People year 2010 objective**



**Figure 27. Primary and secondary syphilis — Male to female rate ratios: United States, 1981–2001**

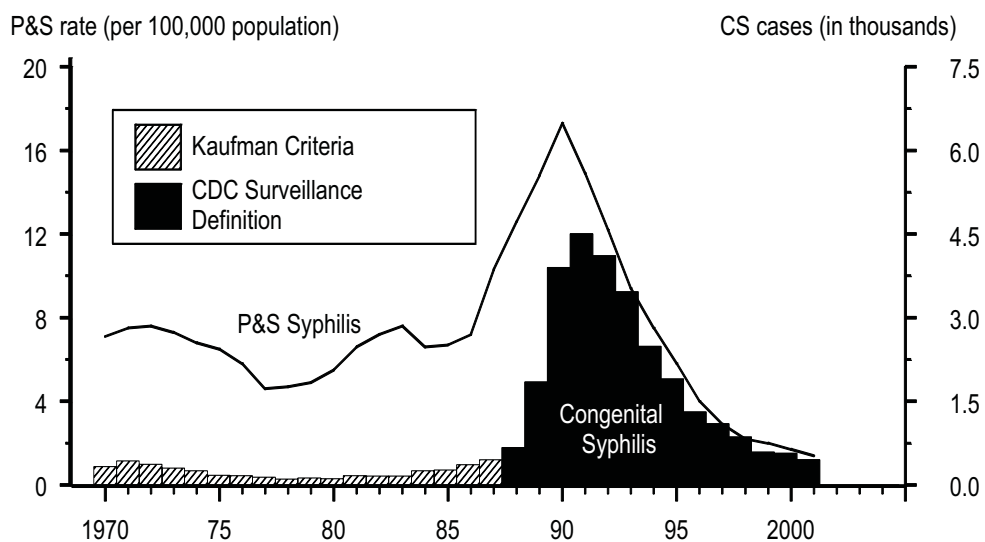


**Figure 28. Primary and secondary syphilis — Age- and sex-specific rates: United States, 2001**



Note: See Table 34 and Appendix for more information.

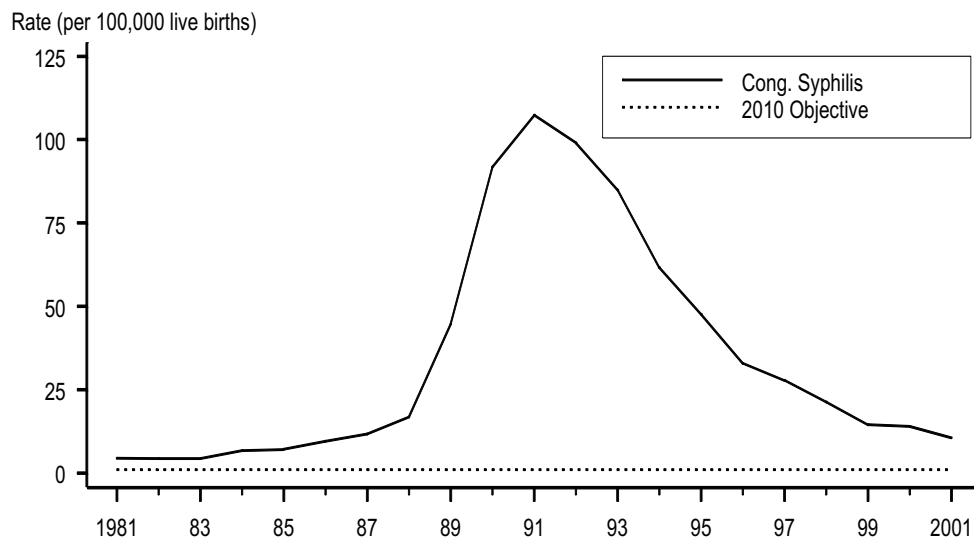
**Figure 29. Congenital syphilis — Reported cases for infants <1 year of age and rates of primary and secondary syphilis among women: United States, 1970–2001**



Note: The surveillance case definition for congenital syphilis changed in 1988 (see Appendix). Case counts for congenital syphilis shown in this graph correspond to those listed in Table 40.



**Figure 30. Congenital syphilis — Rates for infants <1 year of age: United States, 1981–2001 and the Healthy People year 2010 objective**



Note: The Healthy People 2010 (HP2010) objective for primary and secondary syphilis is 0.2 case per 100,000 population. The surveillance case definition for congenital syphilis changed in 1988 (see Appendix).



## Other Sexually Transmitted Diseases

Since 1987, reported cases of chancroid have declined steadily (Figure 31, Table 1). In 2001, a total of 38 cases of chancroid were reported in the United States. Only nine states and one outlying area reported one or more cases of chancroid in 2001 and two of these states (South Carolina and Texas) accounted for 55.3% of the 38 reported cases in the U.S. New York and Texas had notable declines in number of cases between 2000 and 2001 (New York: 26 to 3, Texas: 19 to 6) (Table 46). Although the 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 underdiagnosed.<sup>1,2</sup>

Case reporting data for genital herpes simplex virus (HSV), genital warts, human papillomavirus, non-gonococcal urethritis, and trichomoniasis are not available. Ongoing trend data are limited to estimates of the office visits in physicians' office practices provided by the National Disease and Therapeutic Index (NDTI) (Figures 32 and 34-36).

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.<sup>3</sup> Data on genital 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 three of the youngest age groups which include persons aged 12 to 39 years (Figure 33).<sup>4</sup> Women had a higher seroprevalence than men regardless of age or race/ethnicity.<sup>5</sup>

For data on PID, see the **Special Focus Profile** on Women and Infants.

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<sup>1</sup> 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.

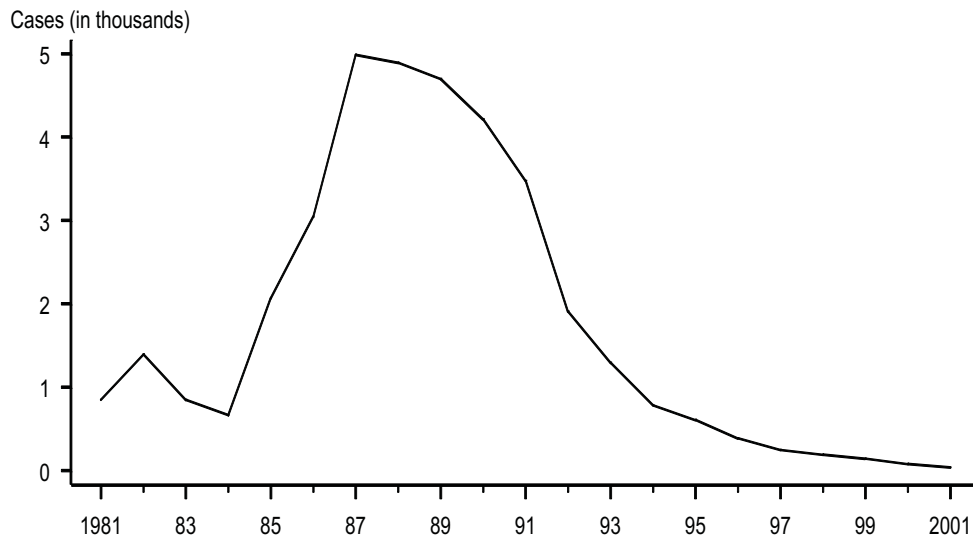
<sup>2</sup> Mertz KJ, Trees D, Levine WC, et al. Etiology of genital ulcers and prevalence of human immunodeficiency virus coinfection in 10 US cities. *J Infect Dis* 1998;178:1795-8.

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

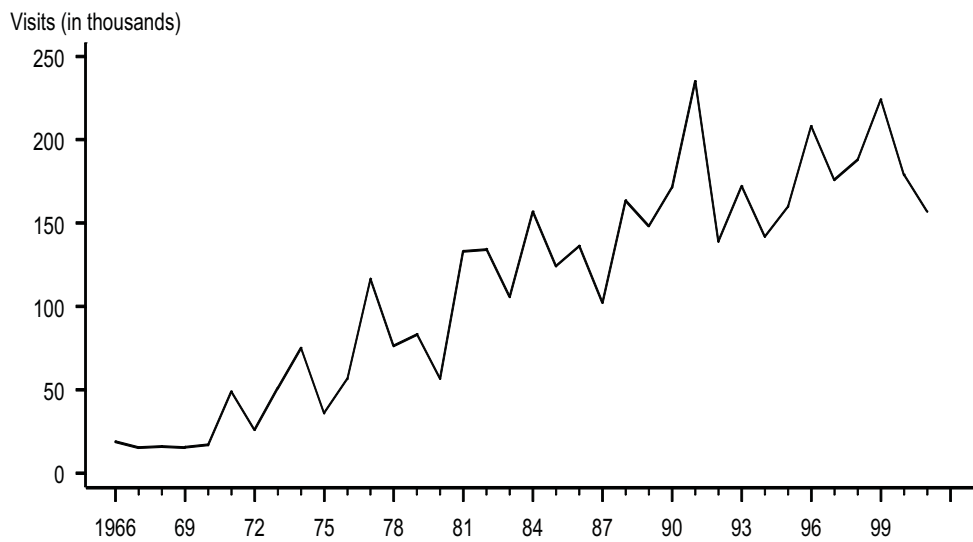
<sup>4</sup> Fleming DT, McQuillan GM, Johnson RE, et al. Herpes simplex virus type 2 in the United States, 1976 to 1994. *N Engl J Med* 1997;337:1105-11.

<sup>5</sup> 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 31. Chancroid — Reported cases: United States, 1981–2001**



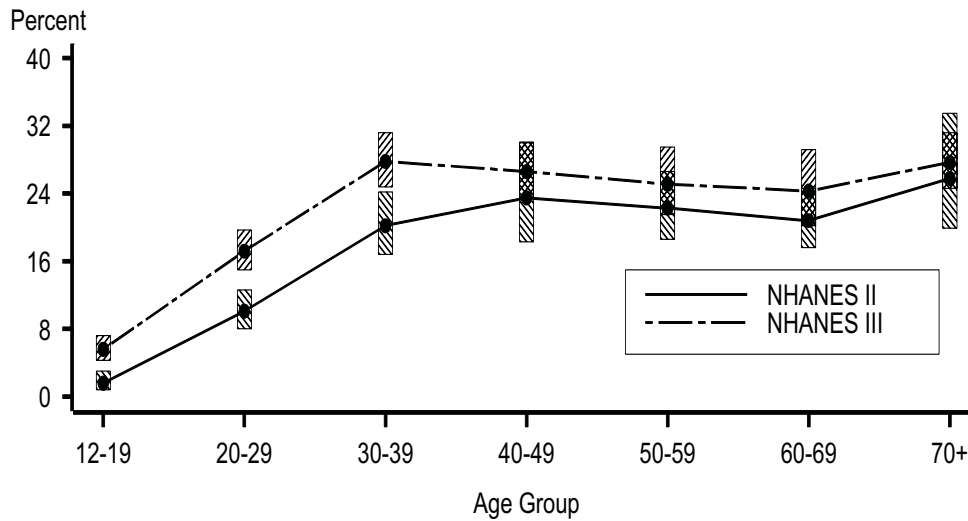
**Figure 32. Genital herpes — Initial visits to physicians' offices: United States, 1966–2001**



Note: See Appendix.

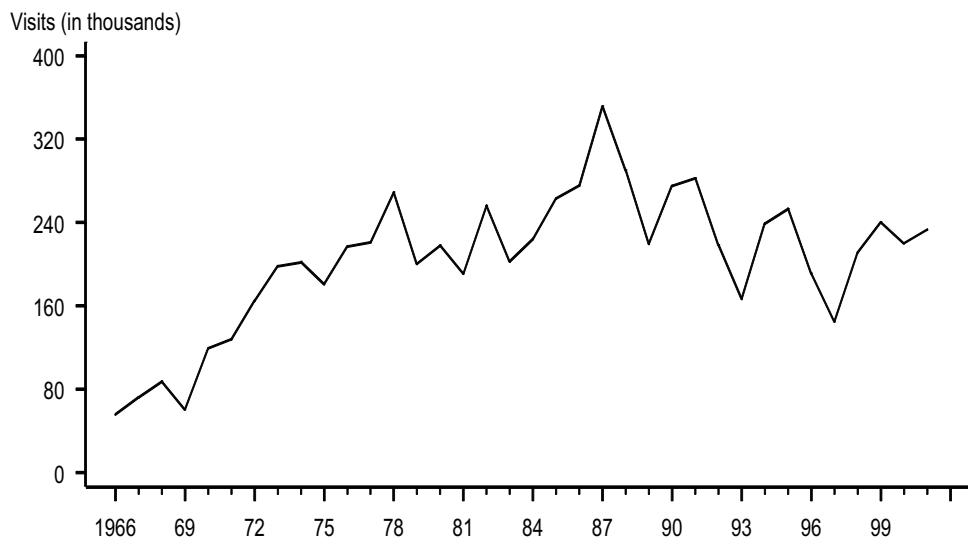
SOURCE: National Disease and Therapeutic Index (IMS America, Ltd.)

**Figure 33. Genital herpes simplex virus type 2 infections — Percent seroprevalence according to age in NHANES\* II (1976-1980) and NHANES III (1988-1994)**



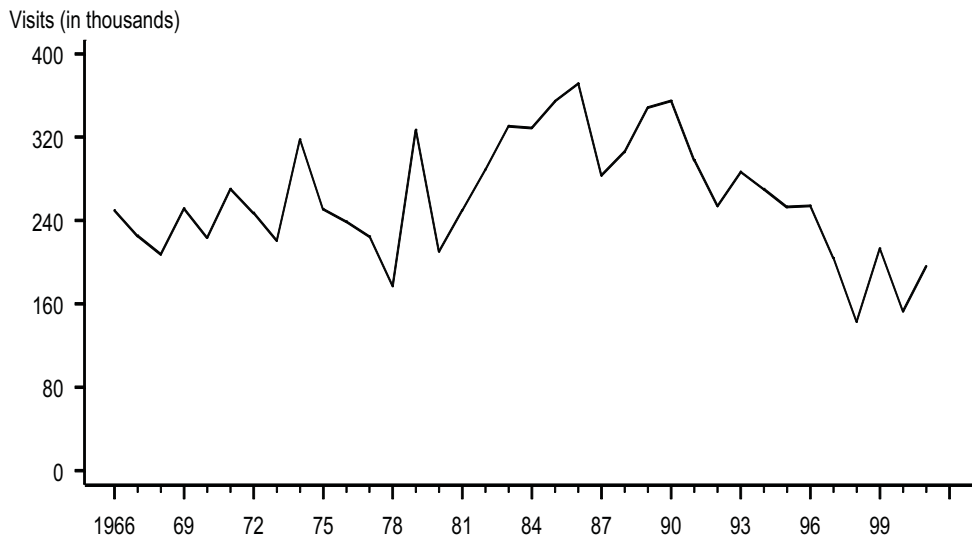
Note: Bars indicate 95% confidence intervals.  
 \*National Health and Nutrition Examination Survey

**Figure 34. Genital warts — Initial visits to physicians' offices: United States, 1966–2001**



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

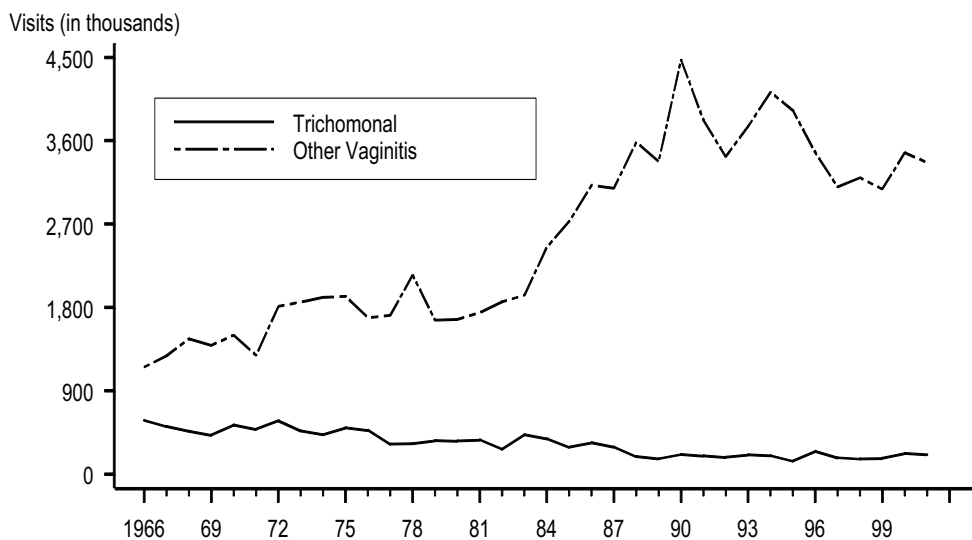
**Figure 35. Nonspecific urethritis — Initial visits to physicians' offices by men: United States, 1966–2001**



Note: See Appendix.

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

**Figure 36. Trichomonal and other vaginal infections — Initial visits to physicians' offices: United States, 1966–2001**



Note: See Appendix.

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

## 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); persons entering corrections facilities; and populations in the southern United States. The **Special Focus Profiles** refer to figures located in disease-specific sections in the **National Profile** and additional figures (Figures A-MM) 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 chlamydia<sup>1</sup> and 10% to 40% of women infected with gonorrhea<sup>2</sup> may develop PID. Among women with PID, scarring will cause involuntary infertility in 20%, ectopic pregnancy in 9%, and chronic pelvic pain in 18%.<sup>3</sup> Approximately 70% of chlamydial infections and 50% of gonococcal infections in women are asymptomatic.<sup>4,5,6</sup> 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.<sup>7</sup> 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%.<sup>8</sup>

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 at delivery is effective for prevention of ophthalmia neonatorum, prevention of neonatal pneumonia requires prenatal detection and treatment.

While the great majority of infections with human papillomavirus (HPV) in women do not cause cervical cancer, infections with HPV 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.<sup>9</sup>

Genital infections with herpes simplex virus have serious consequences for pregnant women including potentially fatal neonatal infections.<sup>10</sup>

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 preventable if women are screened for syphilis and treated early during prenatal care.<sup>11</sup>

## Observations

- Between 2000 and 2001, the reported case rate of chlamydial infections in women increased from 397.3 to 435.2 per 100,000 females (Figure 5, Table 5). Chlamydia rates exceed gonorrhea rates among women in all states (Figures A and B, Tables 5 and 15).

- In 2001, the median state-specific chlamydia test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 22 states and Puerto Rico was 7.4% (range 3.7% to 13.5%) (Figure F).
- Gonorrhea rates among women were higher than the overall HP 2010 objective of 19.0 cases per 100,000 population<sup>12</sup> in 42 states and two outlying areas in 2001 (Figure B, Table 15). As in previous years, the highest rates of gonorrhea among women in 2001 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 12, Tables 15 and 16). The gonorrhea rate for women in 2001 (128.2 per 100,000 females) was similar to the 2000 rate of 126.7 cases per 100,000 females and the 1999 rate of 128.6 cases. The gonorrhea rate among men in 2001 was also similar to the 2000 rate. Men with gonorrhea are usually symptomatic and may seek care; therefore, trends in men may be a relatively good indicator of trends in incidence of disease. As with chlamydia, trends in reported gonorrhea rates among women are more likely to reflect screening practices as well as the actual burden of disease.
- In 2001, the median state-specific gonorrhea test positivity among 15- to 24-year-old women screened in selected prenatal clinics in 16 states was 0.9% (range 0.0% to 4.3%) (Figure G).
- The HP2010 objective for primary and secondary (P&S) syphilis is 0.2 case per 100,000 population. In 2001, 29 states and two outlying areas reported 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. Twenty-seven states and three outlying areas had reported rates higher than this objective in 2001 (Figure D, Tables 41 and 42).
- The rate of congenital syphilis closely follows the trend of P&S syphilis in women (Figure 29). Peaks in congenital syphilis usually occur one year after peaks in P&S syphilis in women. The congenital syphilis rate peaked in 1991 at 107.3 cases per 100,000 live births and has declined by 89.7% to 11.1 cases per 100,000 live births in 2001 (Figure 30, Table 40). The rate of P&S syphilis in women peaked at 17.3 cases per 100,000 females in 1990 and declined 91.9% to 1.4 cases per 100,000 females in 2001 (Figure 29).
- The 2001 reported rate of congenital syphilis for the United States is currently well above the HP2010 objective of 1.0 case per 100,000 live births. This objective is many times greater than the rate of congenital syphilis of most industrialized countries where syphilis and congenital syphilis have nearly been eliminated.<sup>13</sup>
- 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.<sup>14</sup>

- 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. Trends in hospitalizations for PID have declined steadily throughout the 1980s and early 1990s, but have remained relatively constant from 1995 through 1999 (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.<sup>15</sup> 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.
- 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 1998 but has remained, for the most part, unchanged since 1998 (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 began to decline. The number of reported hospitalizations for ectopic pregnancy remained the same in 2000 compared to the number reported in 1999 (Figure H). Data suggest that nearly half of all ectopic pregnancies are treated on an outpatient basis.<sup>16</sup>

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<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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.

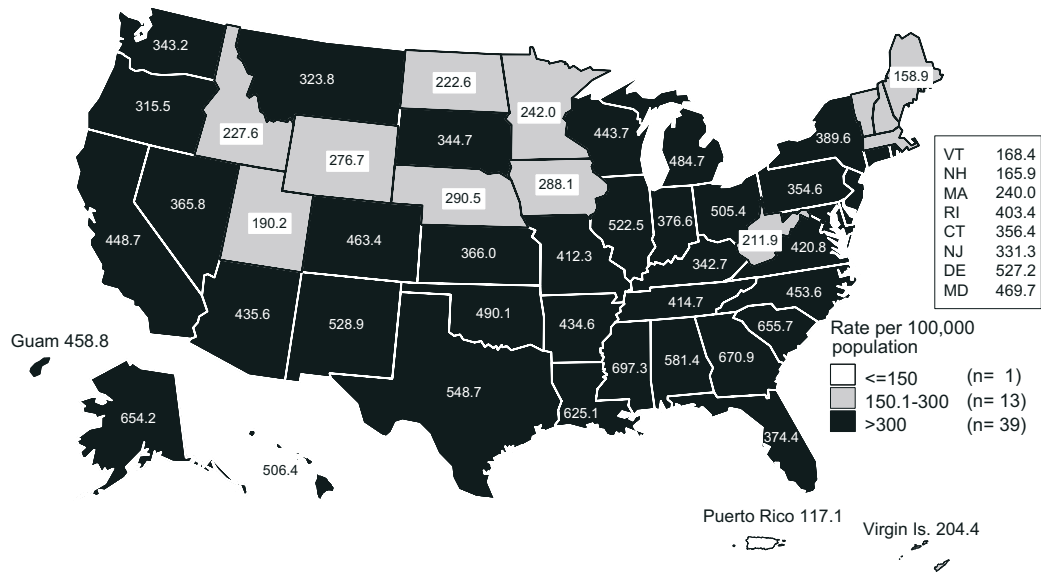
<sup>6</sup> Zimmerman HL, Potterat JJ, Dukes RL, et al. Epidemiologic differences between chlamydia and gonorrhea. *Am J Public Health* 1990;80:1338-42.

<sup>7</sup> 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.

<sup>8</sup> 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.

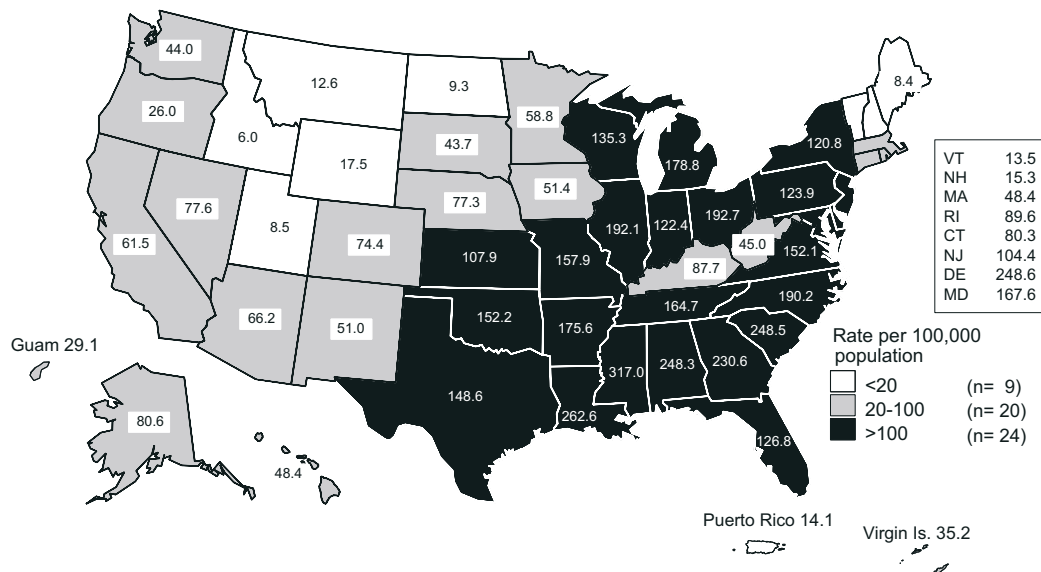
- <sup>9</sup> Division of STD Prevention. *Prevention of Genital HPV Infection and Sequelae: Report of an External Consultants' Meeting*. National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, December 1999.
- <sup>10</sup> Handsfield HH, Stone KM, Wasserheit JN. Prevention agenda for genital herpes. *Sex Transm Dis* 1999;26:228-231.
- <sup>11</sup> Centers for Disease Control. Guidelines for prevention and control of congenital syphilis. *MMWR* 1988;37(No.S-1).
- <sup>12</sup> 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.
- <sup>13</sup> Division of STD/HIV Prevention. *Healthy People 2000: National Health Promotion and Disease Objectives. Progress Review: Sexually Transmitted Diseases*, October 26, 1994.
- <sup>14</sup> Centers for Disease Control and Prevention. Congenital syphilis - United States, 2000. *MMWR* 2001;50:573-77.
- <sup>15</sup> Rolfs RT, Galaid EI, Zaidi AA. Pelvic inflammatory disease: trends in hospitalization and office visits, 1979 through 1988. *Am J Obstet Gynecol* 1992;166:983-90.
- <sup>16</sup> Centers 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, 2001**



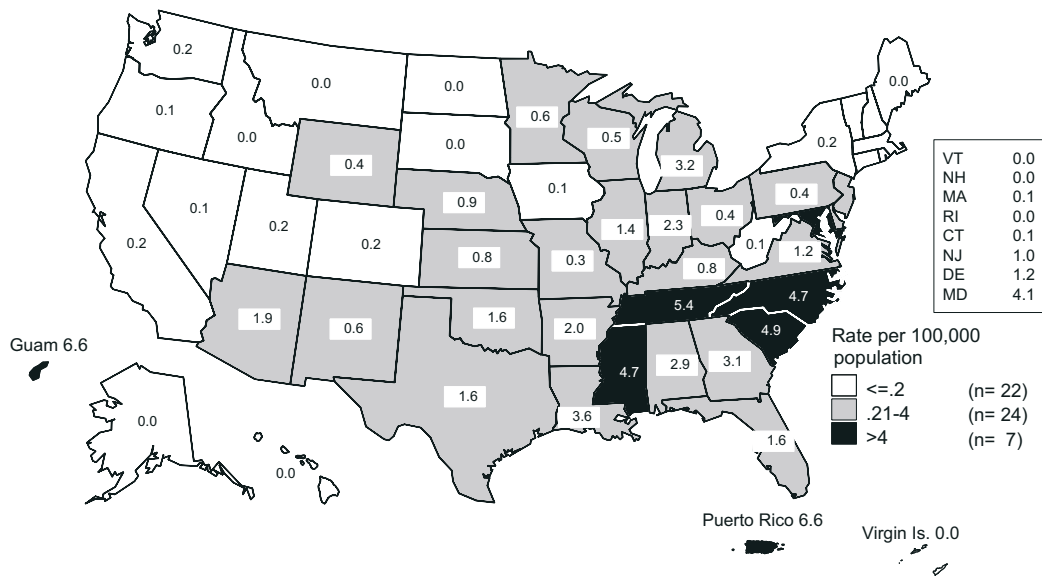
Note: The total rate of chlamydia for women in the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 430.8 per 100,000 population.

**Figure B. Gonorrhea — Rates for women by state: United States and outlying areas, 2001**



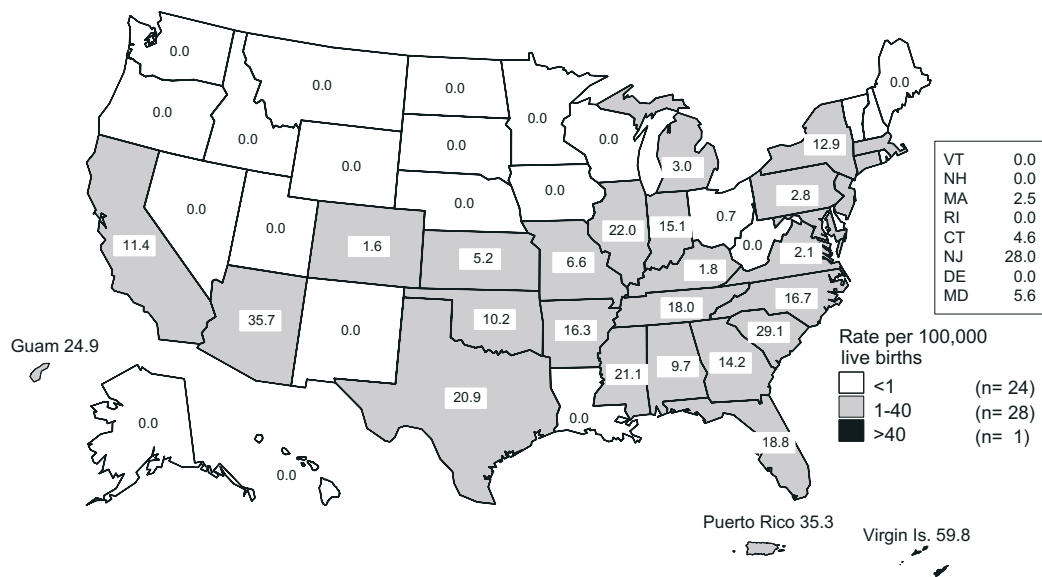
Note: The total rate of gonorrhea for women in the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 126.6 per 100,000 population. The Healthy People year 2010 objective is 19.0 per 100,000 population for women.

**Figure C. Primary and secondary syphilis — Rates for women by state: United States and outlying areas, 2001**



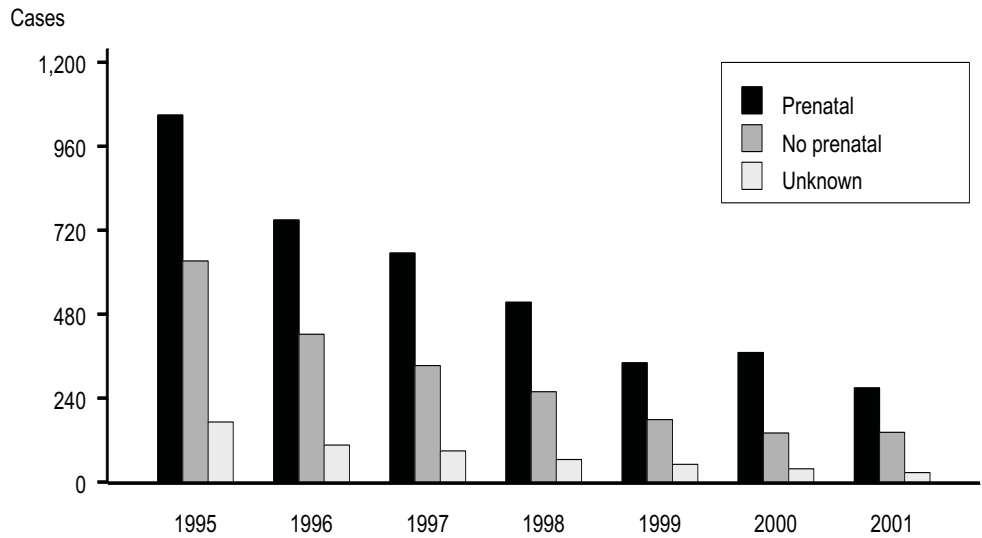
Note: The total rate of primary and secondary syphilis for women in the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 1.4 per 100,000 population. The Healthy People year 2010 objective is 0.2 per 100,000 population.

**Figure D. Congenital syphilis — Rates for infants <1 year of age by state: United States and outlying areas, 2001**

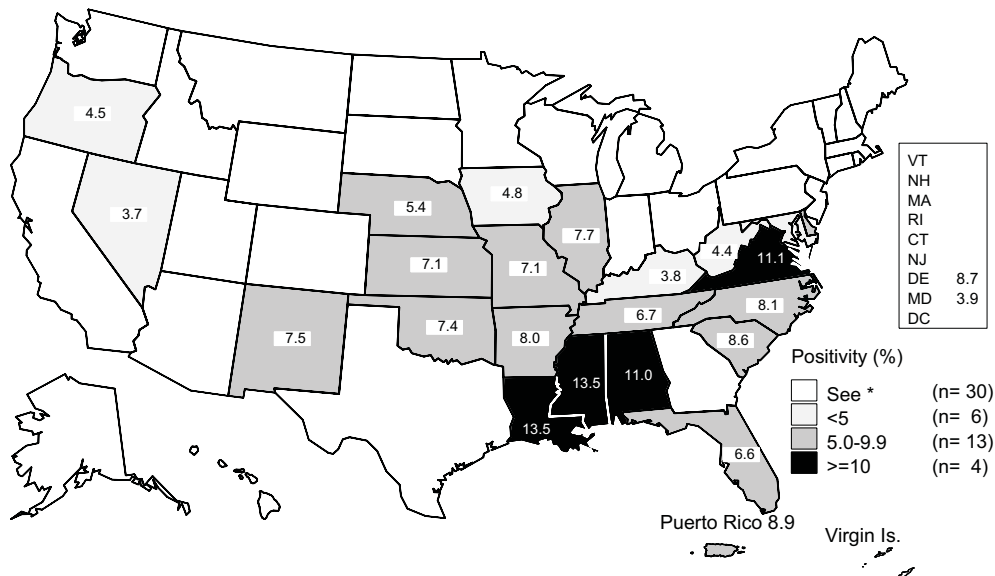


Note: The total rate of congenital syphilis for infants <1 year of age for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 11.5 per 100,000 live births. The Healthy People year 2010 objective is 1.0 per 100,000 live births.

**Figure E. Congenital syphilis — Cases by prenatal care utilization: United States, 1995-2001**



**Figure F. Chlamydia — Positivity among 15-24 year old women tested in prenatal clinics by state: United States and outlying areas, 2001**

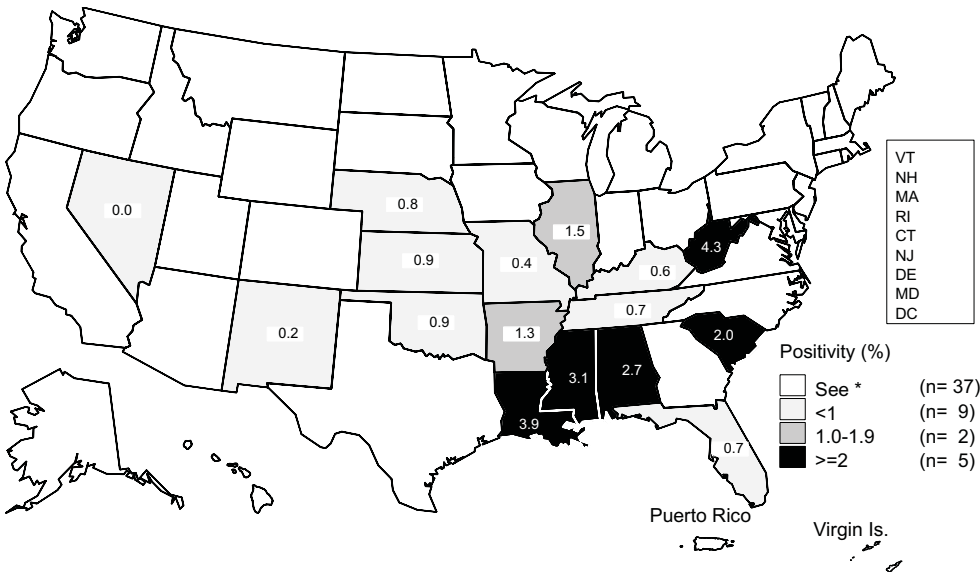


\*States not reporting chlamydia positivity data in prenatal clinics.

Note: States reported chlamydia positivity data on at least 100 women aged 15-24 years during 2001.

SOURCE: Regional Infertility Prevention Program; 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, 2001**

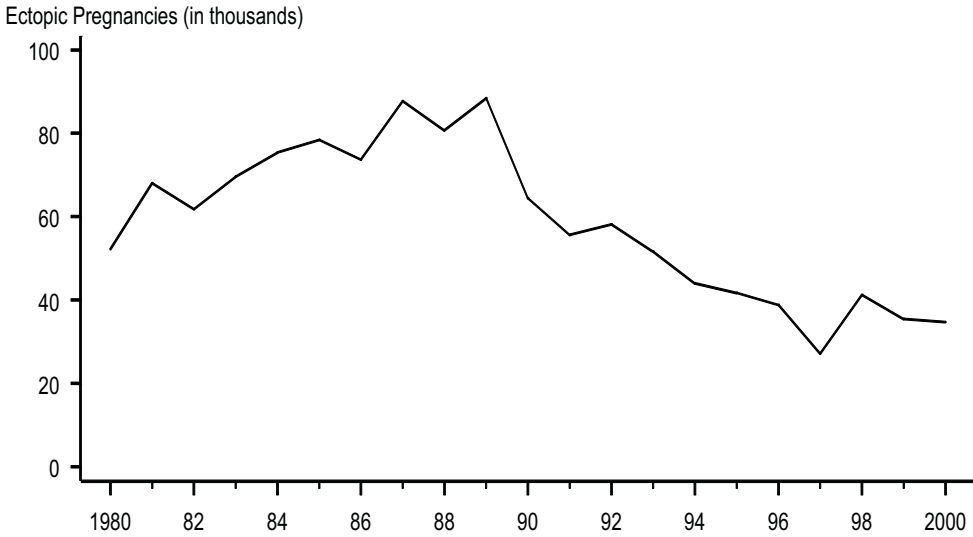


\*States not reporting gonorrhea positivity data in prenatal clinics.

Note: States reported gonorrhea positivity data on at least 100 women aged 15-24 years during 2001.

SOURCE: Regional Infertility Prevention Program; 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, 1980-2000**

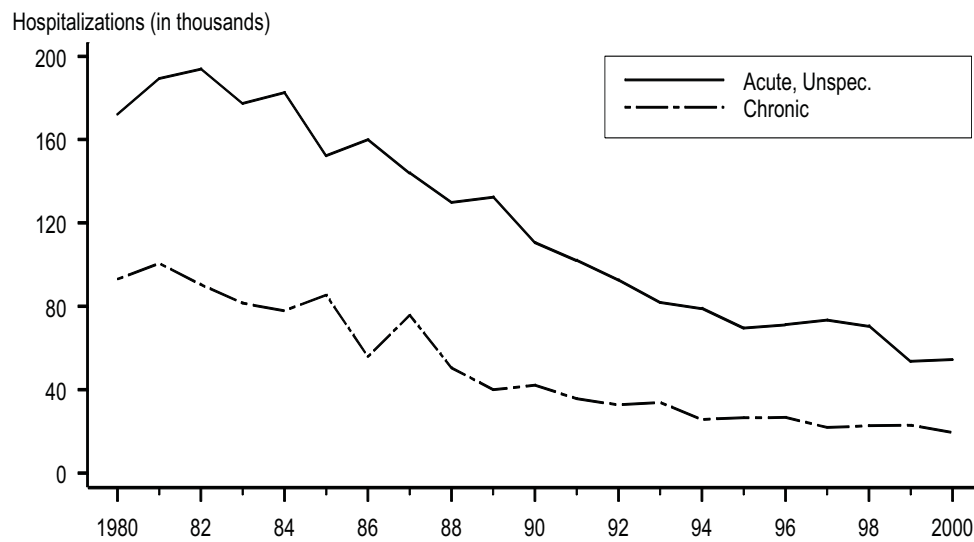


Note: Some variations in 1981 and 1988 numbers may be due to changes in sampling procedures. The relative standard error for these estimates ranges from 8% to 11%.

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



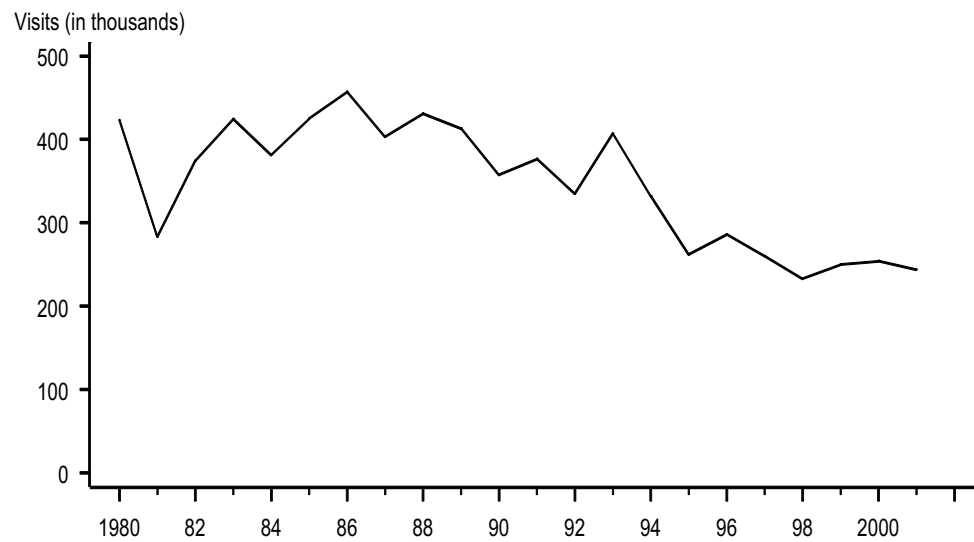
**Figure I. Pelvic inflammatory disease — Hospitalizations of women 15-44 years of age: United States, 1980–2000**



Note: The relative standard error for the estimates of the overall total number of PID cases range from 6% to 9%.

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, 1980–2001**



Note: See Appendix.

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: they may be more likely to have multiple (sequential or concurrent) sexual partners rather than a single, long-term relationship; and they may select partners at higher risk. In addition, for some STDs, for example *Chlamydia trachomatis*, adolescent women may have a physiologically increased susceptibility to infection due to increased cervical ectopy.

In addition, the higher prevalence of STDs among adolescents 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.<sup>1,2,3</sup> The Regional Infertility Prevention Program that performs large scale screening for detecting chlamydial infections among women attending family planning clinics demonstrate that younger women consistently have higher positivity rates of chlamydia than older women, even as prevalence declines. An example is the Region X Chlamydia Project, which has screened women in family planning clinics since 1988 (Figure K).
- Among women, 15- to 19-year-olds had the highest rate of gonorrhea in 2001 compared to 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 2001 (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).
- Rates of gonorrhea among male adolescents generally decreased between the years 1991 and 2001 (Figure Q). In the 15- to 19-year-old group, the rate declined for a third year, going from 337.9 cases per 100,000 males in 1999, to 320.6 in 2000, to 307.5 in 2001, an overall 9.0% decrease. Among young men in the 20- to 24-year-old group, the rate of gonorrhea had generally been declining in the early 1990s but then increased slightly in the late 1990s and now has remained relatively unchanged in 2000 and 2001 (559.4 and 563.6 cases per 100,000 males, respectively).
- In 15- to 19-year-old women, the 2001 gonorrhea rate of 703.2 cases per 100,000 females was similar to the 2000 rate of 699.3. Among young women in the 20- to 24-year-old group, the rate of gonorrhea in 2001 was 664.1, a 6.0%

increase from 626.5 in 2000 and a 22.4% increase from the rate in 1996 (542.7) (Figure P, Table 21).

- In 2001, the highest age-specific gonorrhea rates among women and the third highest rates among men were in the 15- to 19-year-old group (Figure 14 and Table 21).
- 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. Among women entering the program from 26 states and Puerto Rico in 2001, based on their place of residence before program entry, the median state-specific chlamydia prevalence was 10.6% (range 5.1% to 18.0%) (Figure L). Chlamydial infection is widespread geographically and highly prevalent among these economically-disadvantaged young women.<sup>3</sup>
- Data from National Job Training Program centers submitting gonorrhea specimens to the national contract laboratory from female students aged 16 to 24 years indicate a high prevalence of gonococcal infection in this population. Specimens from at least 100 students from each of 17 states and Puerto Rico, were tested by the contract laboratory; the median state-specific gonorrhea prevalence was 3.7% (range 0.7% to 8.1%) in 2001 (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 detention centers, drug treatment centers, and organizations serving street youth. In 2001, results from this screening project, which uses urine-based tests, identified a median site-specific chlamydia positivity of 9.6% (range 7.2% to 17.7%) at 16 school-based clinics and 17.6% (range 14.3% to 19.0%) at 16 organizations serving street youth (Figure M). Median site-specific gonorrhea positivity was 1.6% (range 1.2% to 4.8%) at school-based clinics and 4.4% (range 2.7% to 6.4%) at organizations serving street youth (Figure N).
- Among adolescent women attending juvenile detention facilities, data from the Adolescent Women Reproductive Health Monitoring Project and the Jail STD Prevalence Monitoring Project identified a median chlamydia positivity of 14.8% (range 4.0% to 25.8%) (Figure GG) and a median gonorrhea positivity of 5.6% (range 0.0% to 13.6%) (Figure II) (see **STDs in Persons Entering Corrections Facilities**).

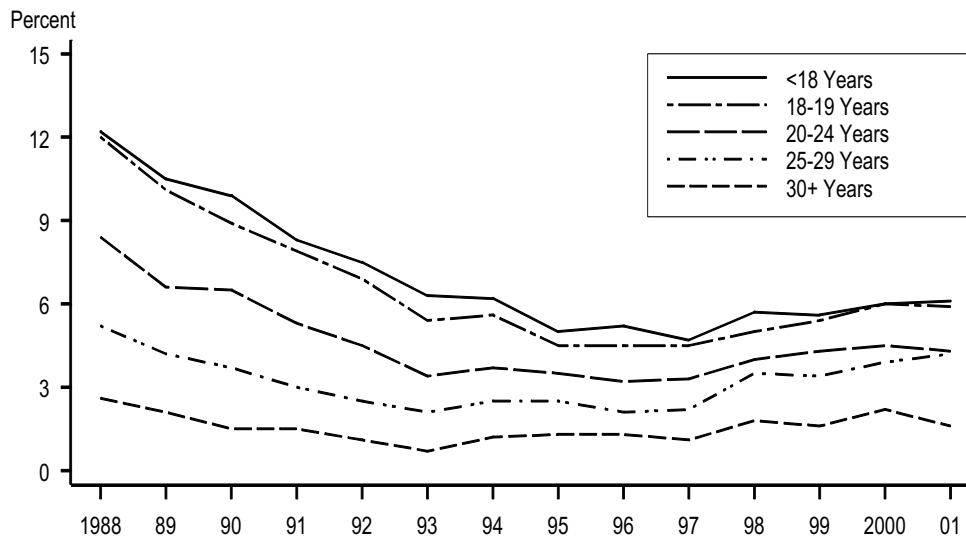
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<sup>1</sup> Centers for Disease Control and Prevention. Recommendations for the prevention and management of *Chlamydia trachomatis* infections, 1993. *MMWR* 1993;42(No. RR-12).

<sup>2</sup> 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.

<sup>3</sup> 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.

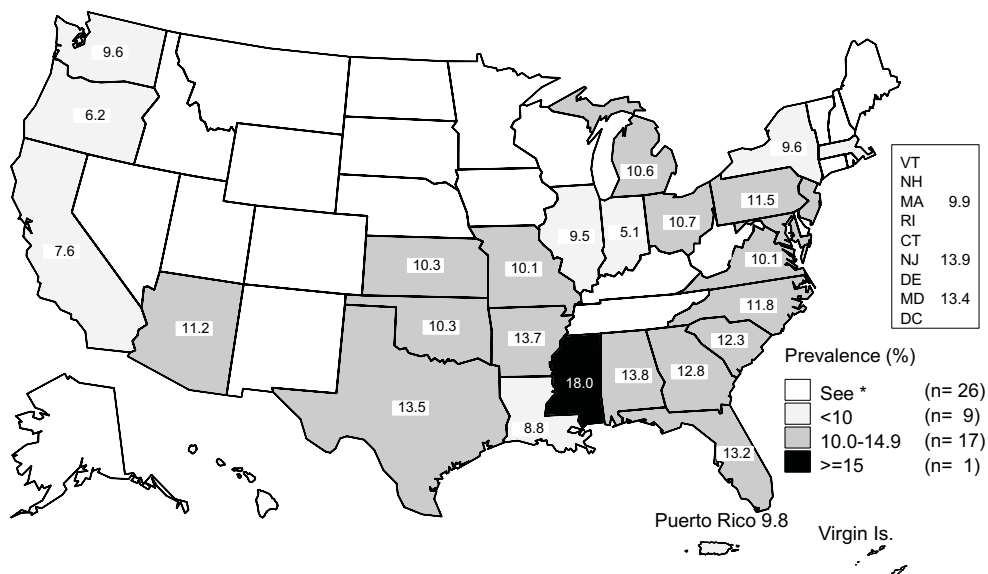
**Figure K. Chlamydia — Positivity among women tested in family planning clinics by age group: Region X, 1988–2001**



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 1999–2001.

SOURCE: Regional Infertility Prevention Program: Region X Chlamydia Project (Alaska, Idaho, Oregon and Washington)

**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, 2001**

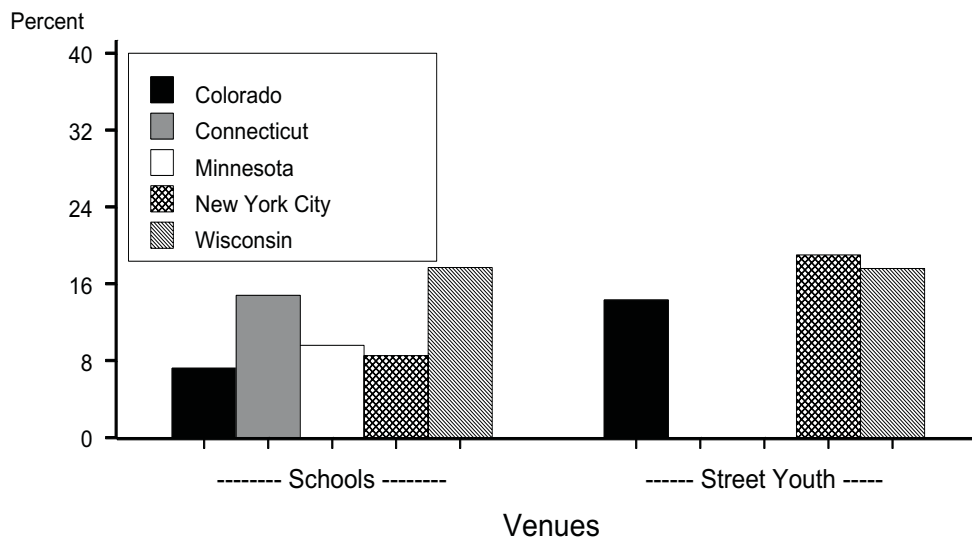


\*Fewer than 100 women residing in these states and entering the National Job Training Program were screened for chlamydia in 2001.

Note: The overall chlamydia prevalence among female students entering the National Job Training Program in 2001 was 10.8%.

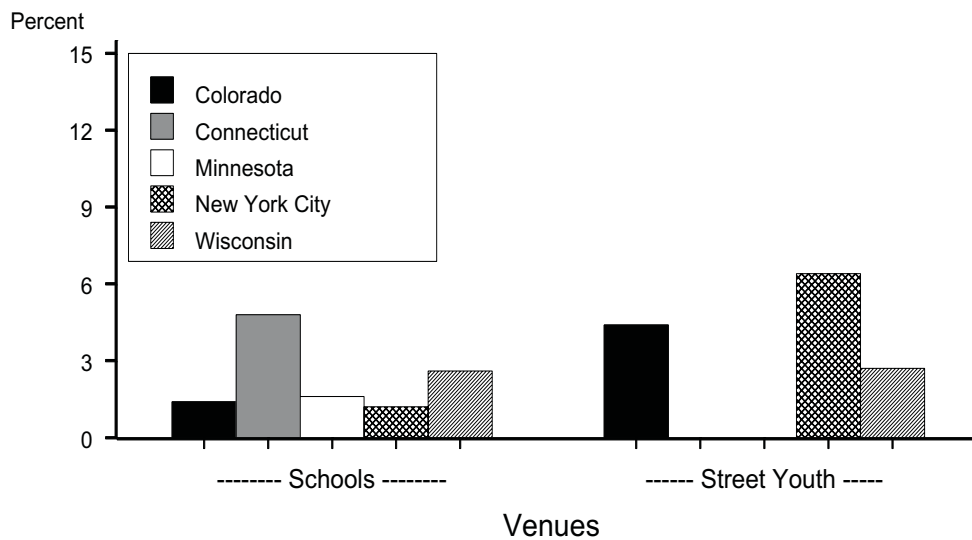
SOURCE: U.S. Department of Labor

**Figure M. Chlamydia — Adolescent Women Reproductive Health Monitoring Project  
chlamydia positivity by venue and project area, 2001**



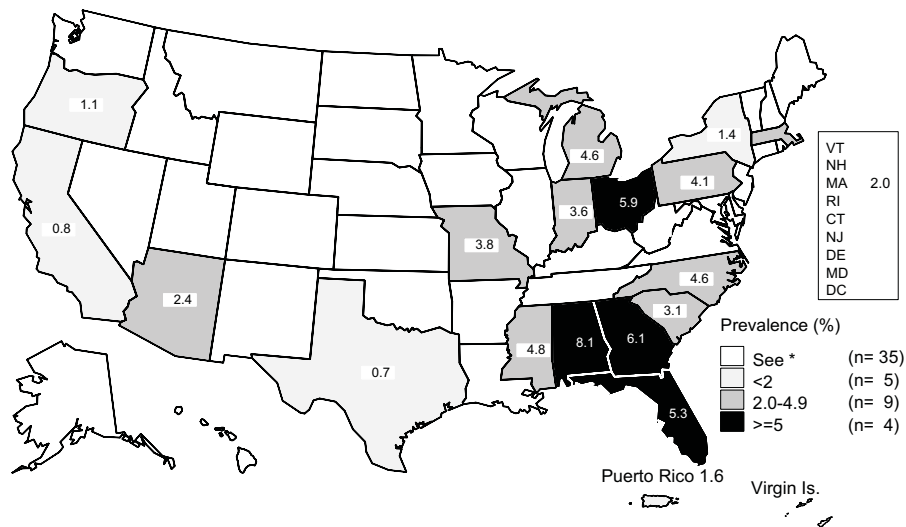
Note: Where data are missing for project areas and venues, no testing or fewer than 50 chlamydia tests were performed at the missing location in 2001.

**Figure N. Gonorrhea — Adolescent Women Reproductive Health Monitoring Project  
gonorrhea positivity by venue and project area, 2001**



Note: Where data are missing for project areas and venues, no testing or fewer than 50 gonorrhea tests were performed in 2001.

**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, 2001**

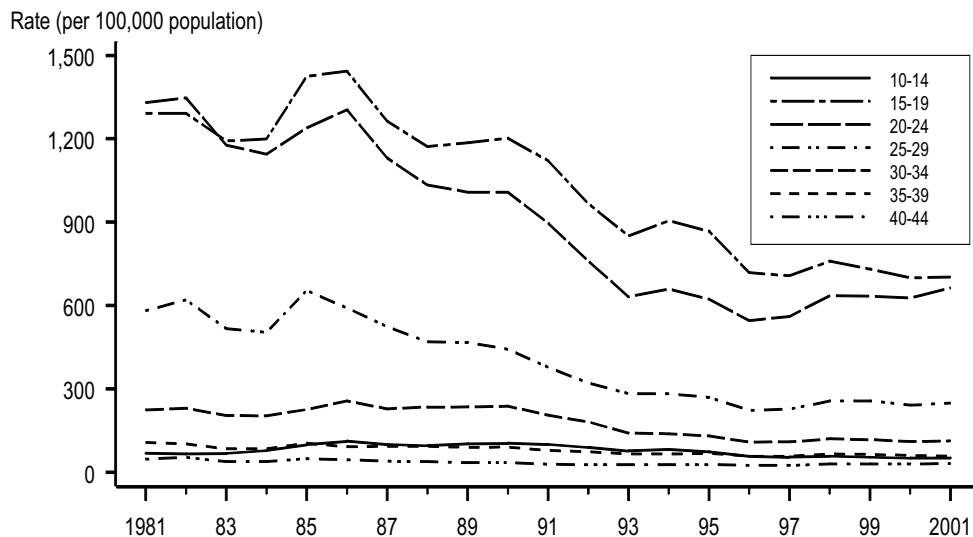


\*Fewer than 100 women residing in these states and entering the National Job Training Program were screened for gonorrhea by the national contract laboratory in 2001.

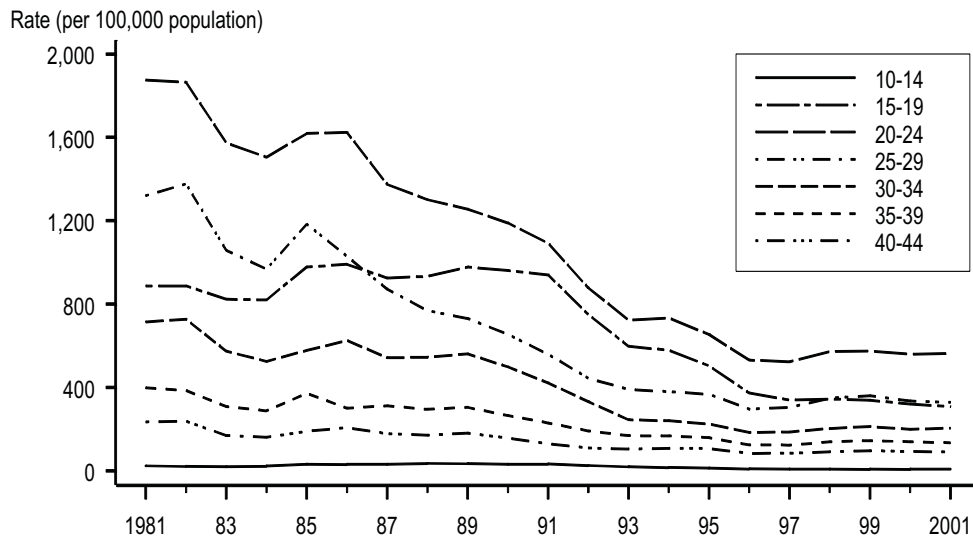
Note: Many training centers test female students for gonorrhea using local laboratories; these results are not available to CDC. For this map, gonorrhea test results for students at centers submitting specimens to the national contract laboratory were included if the number of gonorrhea tests submitted 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 2001 was 3.3%.

SOURCE: U.S. Department of Labor

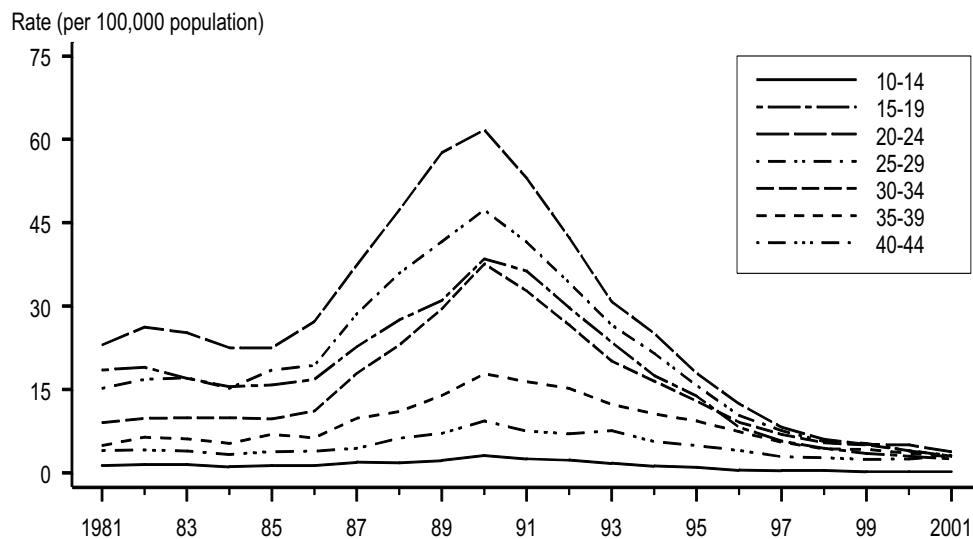
**Figure P. Gonorrhea — Age-specific rates among women 10-44 years of age: United States, 1981-2001**



**Figure Q. Gonorrhea — Age-specific rates among men 10-44 years of age: United States, 1981–2001**

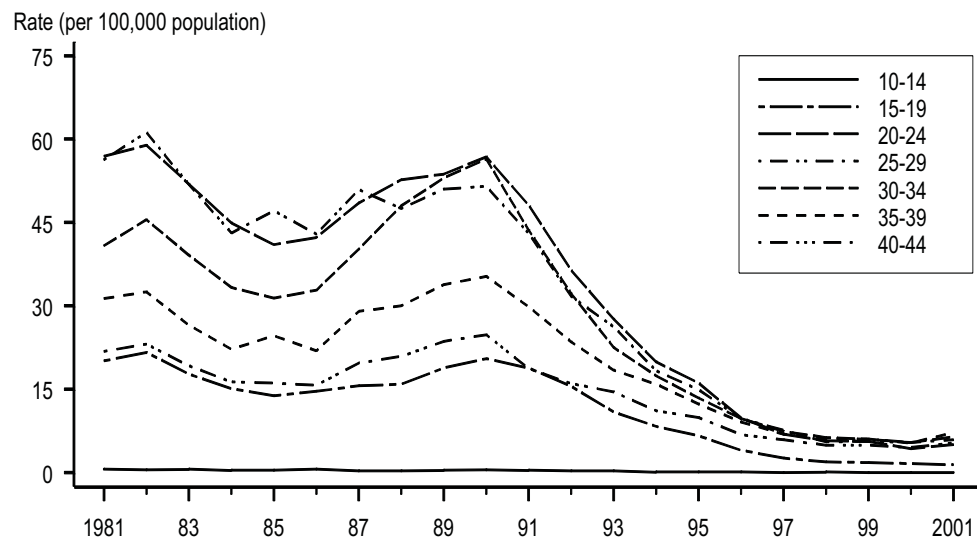


**Figure R. Primary and secondary syphilis — Age-specific rates among women 10-44 years of age: United States, 1981–2001**





**Figure S. Primary and secondary syphilis — Age-specific rates among men 10-44 years of age: United States, 1981–2001**





# STDs in Racial and Ethnic Minorities

## Public Health Impact

Surveillance data show higher reported rates of 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 (Alaska, Idaho, Oregon, and Washington) show consistently higher chlamydia positivity among minorities (Figure T).
- In 2001, chlamydia positivity among sexually active 15- to 30-year-old women screened at clinics of the Indian Health Service (IHS) in four IHS areas ranged from 3.1% to 10.0% (Figure U).
- In 2001, 75% of the total number of cases of gonorrhea reported to CDC occurred among African-Americans (Table 22A). The reported rate of gonorrhea among African-Americans in 2001 was 782.3 cases per 100,000 population (Table 22B). Among Hispanics, the 2001 reported gonorrhea rate was 74.2 cases per 100,000 population and among American Indian/Alaska Natives the rate was 114.4 cases per 100,000 population. These rates are 27, 2.5 and 3.9 times higher respectively than the rate reported among non-Hispanic whites in 2001 of 29.4 cases per 100,000 population (Figure 13, Table 22B).
- Gonorrhea rates in 2001 were highest for African-Americans aged 15- to 24-years among all racial, ethnic, and age categories. In 2001, African-American women aged 15- to 19-years had a gonorrhea rate of 3,495.2 cases per 100,000 females. This rate is 18 times greater than the 2001 rate among non-Hispanic white females of similar age (193.2). African-American men in the 15- to 19-year-old age category had a 2001 gonorrhea rate of 1,794.1 cases per 100,000 males, which was 46 times higher than the rate among 15- to 19-year-old white males of 39.0 (Table 22B). Among 20- to 24-year-olds in 2001,

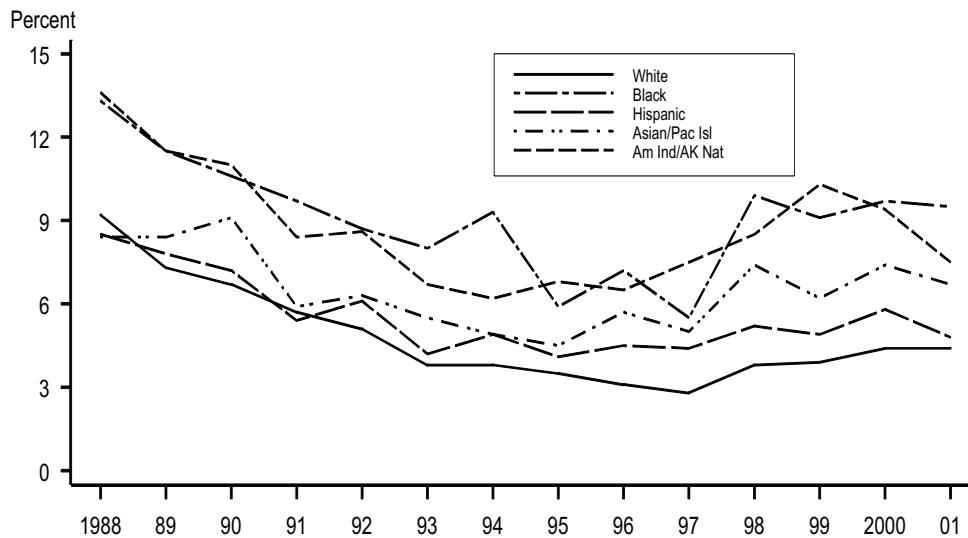
the gonorrhea rate among African-Americans was 24 times greater than that among non-Hispanic whites (3,387.4 and 143.1 cases per 100,000 population respectively) (Table 22B).

- Although gonorrhea rates declined for most age and race/ethnic groups during the 1980s, this was not the case for African-American adolescents. African-American females aged 15 to 19 did not show a decline in rates until 1991 (Figures V and W). Declines among African-American males aged 15- to 19-years did not begin until 1992 (Figure W). From 2000 to 2001 gonorrhea rates among African-Americans declined slightly by 0.7% (788.2 and 782.3 cases per 100,000 population respectively). In 2001, rates decreased among Asian/Pacific Islanders by 4.0%. During the same period, gonorrhea rates increased by 6.9% among Hispanics and by 5.2% among American Indian/Alaska Natives (Table 22B).
- The syphilis epidemic in the late 1980s occurred primarily among heterosexual, minority populations.<sup>1</sup> From 1990 to 1996, rates of primary and secondary (P&S) syphilis declined among all racial and ethnic groups (Figure 26 and Table 35B). From 1997 to 2000, rates of P&S syphilis were fairly stable in all racial and ethnic groups except African-Americans who experienced steadily declining rates. In 2001, although rates for African-Americans continued to decline, rates for all other racial and ethnic groups increased primarily due to increases among men. Rates for African-Americans and Hispanics continue to be higher than for non-Hispanic whites. In 2001, 62.5% of all cases of P&S syphilis reported to CDC occurred among African-Americans (Table 35A). Although the rate for African-Americans declined from 12.2 to 11.0 cases per 100,000 population between 2000 and 2001, the 2001 rate was 15.7 times greater than the rate of 0.7 per 100,000 population among non-Hispanic whites.
- Between 2000 and 2001, P&S syphilis rates for African-Americans aged 15-19 years declined 20.2%; rates declined 17.9% among African-American females and 25.3% 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 13.7% between 2000 and 2001; rates declined 22.4% among African-American females and 4.5% among African-American males in this age group (Table 35B).
- The 2001 rate of P&S syphilis among Hispanics was 2.1 cases per 100,000 population, which is 3 times greater than the rate among non-Hispanic whites (Table 35B).
- In 2001, the rate of congenital syphilis (based on the mother's race/ethnicity) was 37.8 cases per 100,000 live births among African-Americans and 20.1 cases per 100,000 live births among Hispanics. These rates are 21 and 11 times greater than the 2001 rate of 1.8 cases per 100,000 live births among non-Hispanic whites, respectively (Figure Z, Table 45). Compared with 2000, the 2001 rate of congenital syphilis decreased by 28.4% among African-Americans and 8.6% among Hispanics.

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<sup>1</sup> 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.

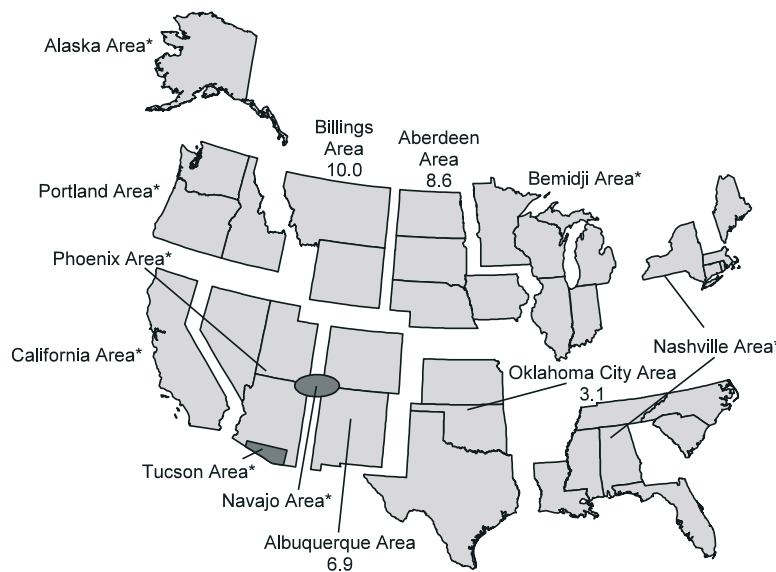
**Figure T. Chlamydia — Positivity among women tested in family planning clinics by race and ethnicity: Region X, 1988–2001**



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, 1999–2001.

SOURCE: Regional Infertility Prevention Program: Region X Chlamydia Project (Alaska, Idaho, Oregon and Washington)

**Figure U. Chlamydia — Positivity among 15-30 year old women tested in Indian Health Service Clinics by IHS areas, 2001**

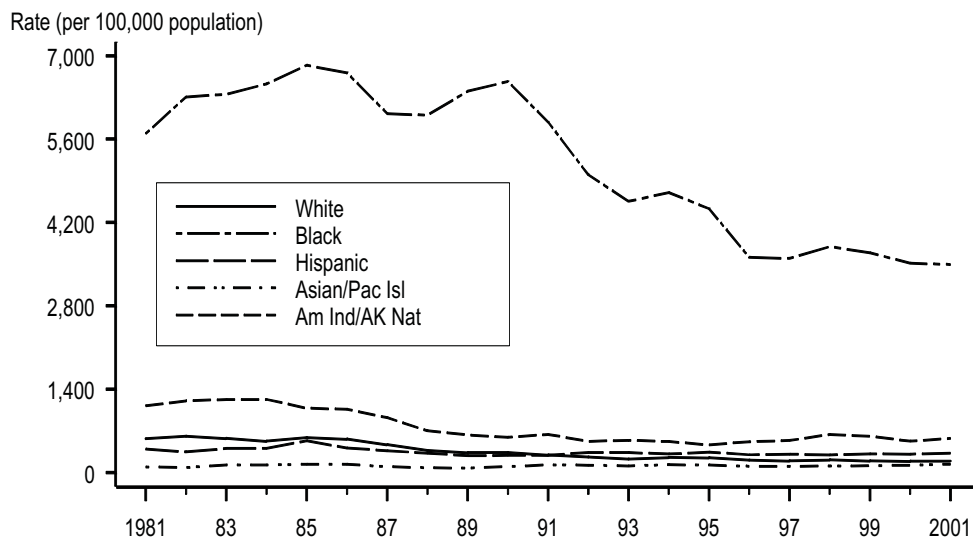


\*IHS areas not reporting chlamydia positivity data during 2001. See Appendix for definitions of IHS areas.

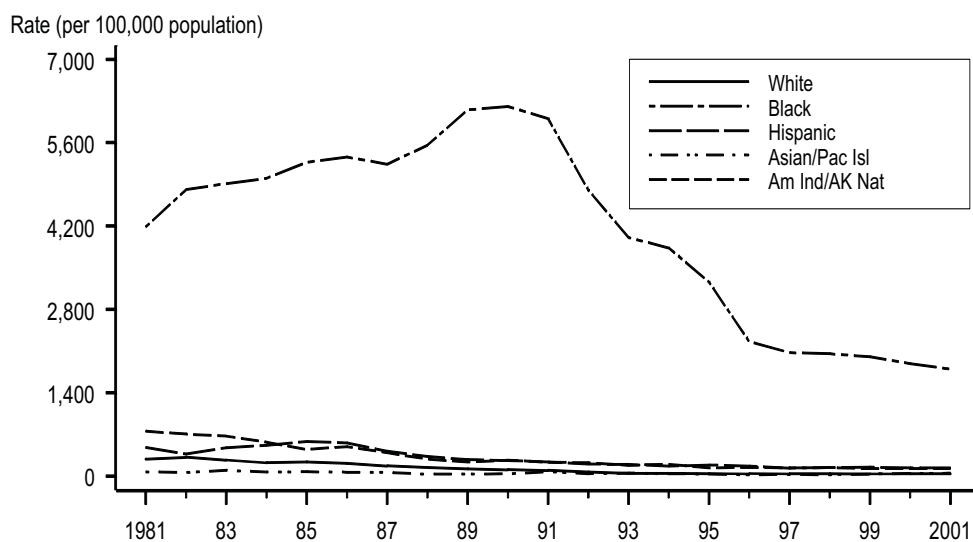
Note: Albuquerque Area - chlamydia positivity data reported for January-October only.

SOURCE: Indian Health Service

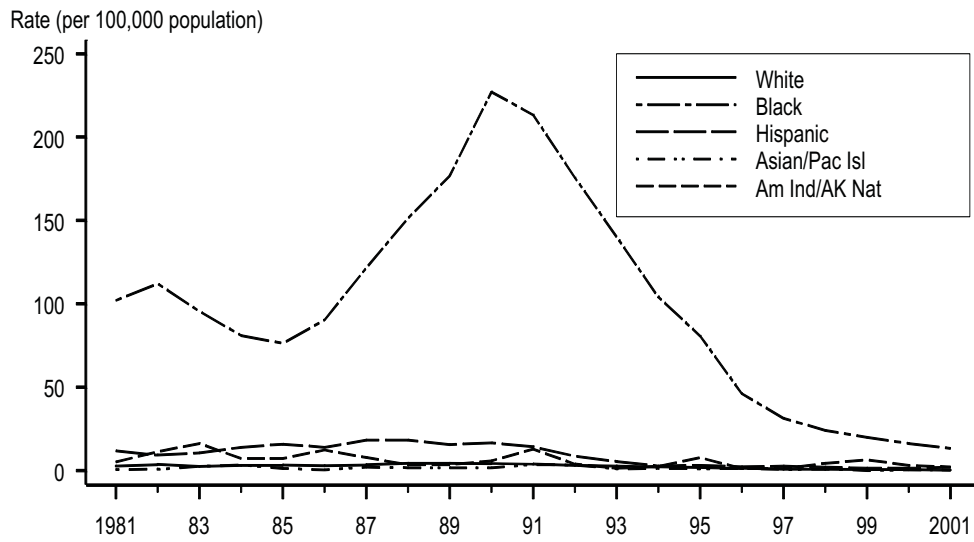
**Figure V. Gonorrhea — Reported rates for 15-19 year old females by race and ethnicity: United States, 1981–2001**



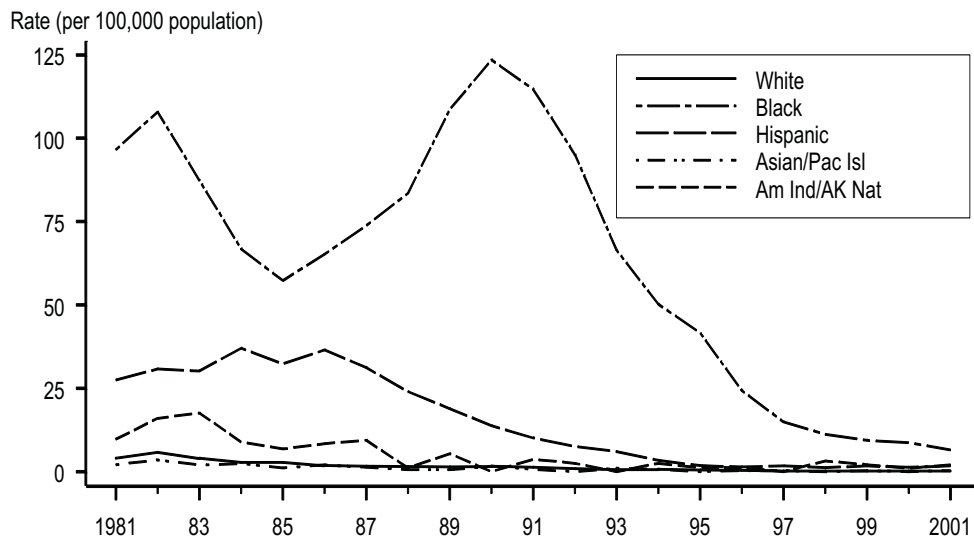
**Figure W. Gonorrhea — Reported rates for 15-19 year old males by race and ethnicity: United States, 1981–2001**



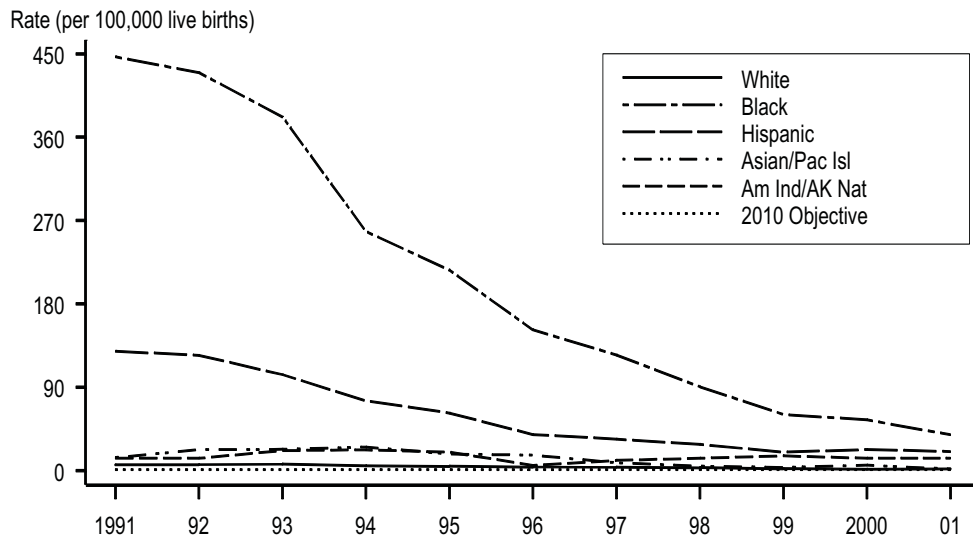
**Figure X. Primary and secondary syphilis — Reported rates for 15-19 year old females by race and ethnicity: United States, 1981–2001**



**Figure Y. Primary and secondary syphilis — Reported rates for 15-19 year old males by race and ethnicity: United States, 1981–2001**



**Figure Z. Congenital syphilis — Rates for infants <1 year of age by mother’s race and ethnicity: United States, 1991–2001 and the Healthy People year 2010 objective**



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



# STDs Among Men Who Have Sex with Men

## Public Health Impact

In the early 1980s, rates of reportable STDs among men who have sex with men (MSM) declined as they did for the rest of the U.S. population. 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.<sup>1,2,3,4</sup>

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.<sup>5</sup> Several factors may have contributed to this change, including the availability of highly active antiretroviral therapy (HAART).<sup>6</sup> Because STDs, and the behaviors associated with them, increase the likelihood of acquiring and transmitting HIV infection,<sup>7</sup> the rise in STDs among MSM may signal an increase in the incidence of HIV infection among MSM.

## Observations

- National 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 2001, seven U.S. cities (Chicago, Denver, the District of Columbia, Houston, Long Beach, Philadelphia, and Seattle) participating in the MSM Prevalence Monitoring Project submitted gonorrhea, chlamydia, syphilis, and HIV data from MSM attending STD clinics to CDC. The MSM Prevalence Monitoring Project includes data collected during routine care and reflects testing practices at participating clinics.
- Overall, 77% (range 22-100% by clinic) of MSM were tested for urethral gonorrhea, 43% (range 28-73%) for rectal gonorrhea, 64% (range 48-80%) for pharyngeal gonorrhea, and 72% (range 0-98%) for urethral chlamydia. Median STD test positivity by clinic among MSM was the following: urethral gonorrhea, 12% (range 10-31%); rectal gonorrhea, 6% (range 3-8%); pharyngeal gonorrhea, 3% (range 1-8%); and urethral chlamydia, 6% (range 5-8%). STD positivity varied by race and ethnicity, but tended to be highest among African-American MSM (Figure AA).
- Among MSM who had not previously tested HIV-positive, 46% (range 0-63%) were tested for HIV. Median HIV test positivity by clinic for African-Americans

was 8% (range 0-18%); Hispanics, 5% (range 0-12%); and whites, 2% (range 0-5%) (Figure AA).

- Overall HIV prevalence (including those previously testing HIV-positive) was 21% for African-Americans (range 10%-29%), 10% (range 3-18%) for Hispanics, and 8% (range 3-22%) for whites.
- Overall, 82% (range 71-91%) of MSM had a nontreponemal serologic test for syphilis (STS) performed. Of STS performed, 4% (range 0-11%) were reactive.
- Gonorrhea positivity was higher for HIV-positive than HIV-negative MSM or MSM of unknown status; urethral gonorrhea was 19% and 11%; rectal gonorrhea was 8% and 5%; and pharyngeal gonorrhea was 5% and 2%, respectively. Urethral chlamydia positivity was 5% among HIV-positive and 6% among HIV-negative MSM or MSM of unknown status (Figure BB).

### Nationally Reported Syphilis Surveillance Data

- Primary and secondary (P&S) syphilis increased slightly in the U.S. in 2001, and this increase occurred only among men. Trends in syphilis male-to-female rate ratios, which may reflect trends among MSM, have been increasing in the U.S. during recent years (Figure 27). The increase in these ratios has been particularly marked in cities with outbreaks of syphilis among MSM.
- In 2001, the reported rate of P&S syphilis among men (3.0 cases per 100,000 males) was 2.1 times greater than the rate among women (1.4 cases per 100,000 females). The overall male-to-female rate ratio has risen steadily since 1996 when it was 1.2. An increase in the male-to-female rate ratio occurred in all racial/ethnic groups between 2000 and 2001. Additional information on syphilis can be found in the **Syphilis** section.

### Gonococcal Isolate Surveillance Project (GISP)

- GISP reports the percentage of *Neisseria gonorrhoeae* isolates obtained from MSM.<sup>8</sup> Overall, the proportion of isolates coming from MSM increased from 4% in 1988 to 17% in 2001 in GISP clinics, with most of the increase occurring after 1993 (Figure CC). The number of GISP clinics having greater than 5% of GISP isolates from MSM rose from 7 clinics in 1990 to 16 clinics in 2001. Among the 16 GISP clinics with greater than 5% of isolates coming from MSM in 2001, the percentage of patients who were MSM ranged from 6% to 66%, with a median of 20% (Figure DD). Additional information on GISP may be found in the **Gonorrhea** section.

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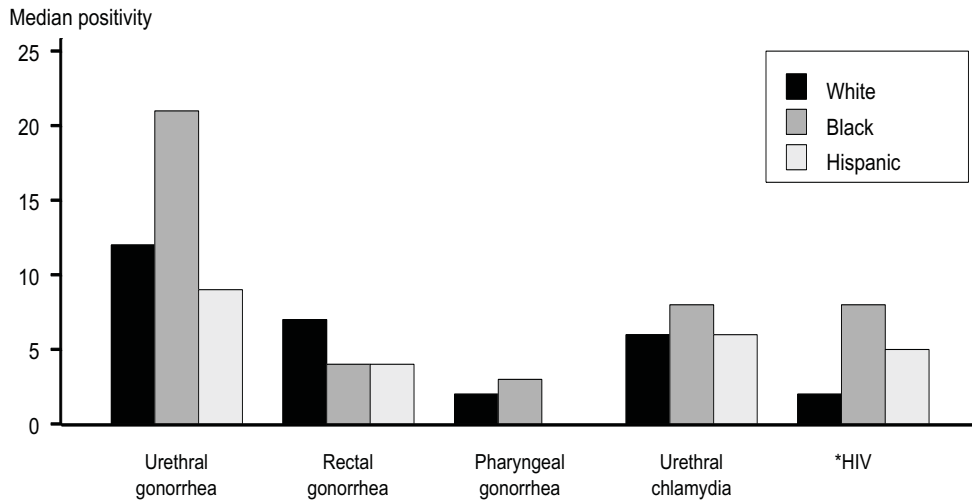
<sup>1</sup> Centers for Disease Control and Prevention. Resurgent bacterial sexually transmitted disease among men who have sex with men- King County, Washington, 1997-1999. *MMWR* 1999;48:773-7.

<sup>2</sup> Centers for Disease Control and Prevention. Outbreak of syphilis among men who have sex with men – Southern California, 2000. *MMWR* 2001;50:117-20.

<sup>3</sup> 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.

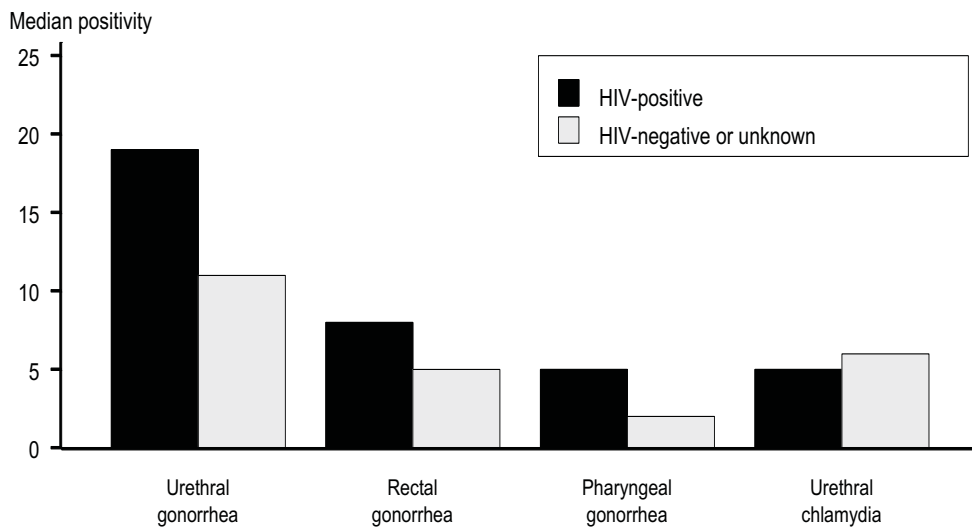
- <sup>4</sup> Fox KK, del Rio C, Holmes K, et. al. Gonorrhea in the HIV era: A reversal in trends among men who have sex with men. *Am J Public Health*. 2001;91:959-964.
- <sup>5</sup> Stall R, Hays R, Waldo C, Ekstrand M, McFarland W. The gay '90s: a review of research in the 1990s on sexual behavior and HIV risk among men who have sex with men. *AIDS* 2000;14:S1-S14.
- <sup>6</sup> 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.
- <sup>7</sup> 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;48:773-7.
- <sup>8</sup> Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2001 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2001*. Atlanta, GA: U.S. Department of Health and Human Services (in press).

**Figure AA. MSM Prevalence Monitoring Project — Median test positivity by clinic for gonorrhea, chlamydia, and HIV among MSM attending STD clinics, by race/ethnicity, 2001**

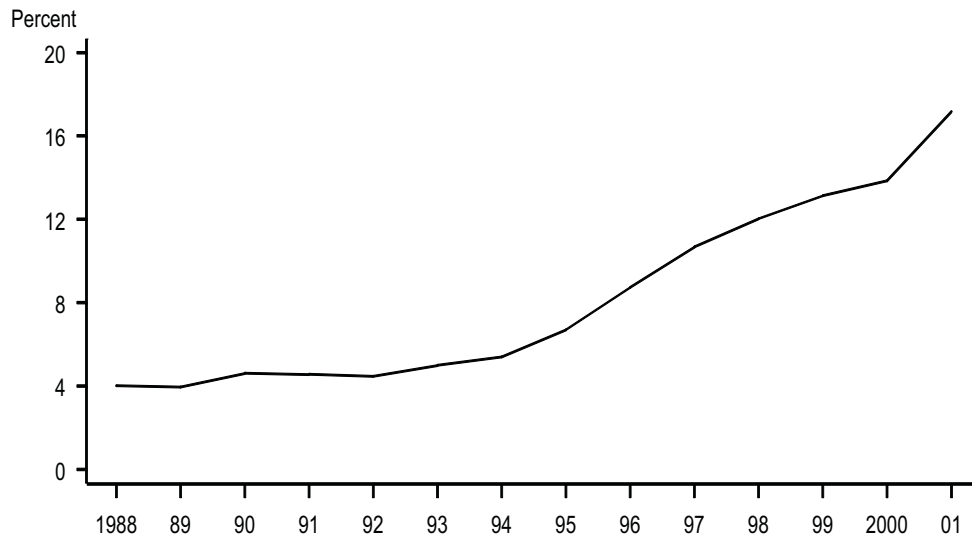


\*Excludes persons known to be HIV-positive.

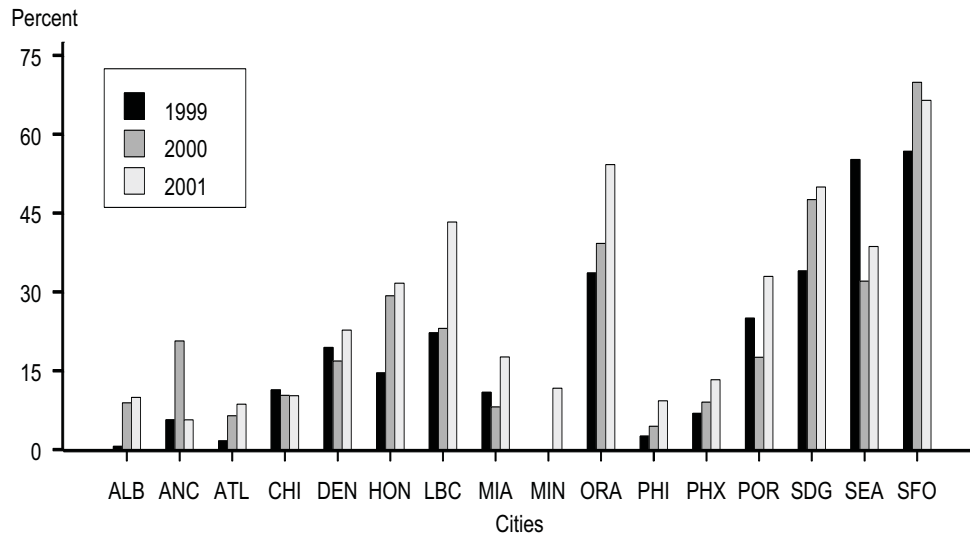
**Figure BB. MSM Prevalence Monitoring Project — Median test positivity by clinic for gonorrhea and chlamydia among MSM attending STD clinics, by HIV status, 2001**



**Figure CC. Gonococcal Isolate Surveillance Project (GISP) — Percent of gonorrhea cases that occurred among MSM, 1988-2001**



**Figure DD. Gonococcal Isolate Surveillance Project (GISP) — Percent of *Neisseria gonorrhoeae* isolates obtained from MSM attending STD clinics in 16 cities, 1999, 2000, and 2001**



Note: In 2001, these 16 clinics reported 95.2% (853/896) 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; 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 detention facilities.<sup>1,2,3,4</sup> 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.<sup>4</sup> 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.<sup>4</sup>

## Observations

- In 2001, 10 states reported chlamydia, gonorrhea, or syphilis data to CDC as part of the Jail STD Prevalence Monitoring Project. Five states reported syphilis data as part of the Syphilis Elimination Initiative. Four states reported chlamydia and gonorrhea data as part of the Adolescent Women Reproductive Health Monitoring Project. Twenty-two states reported chlamydia and gonorrhea data (at least 100 test results) from corrections facilities as part of the Regional Infertility Prevention Program, and three additional states reported data in response to CDC's request for data.
- The maps shown in this section represent approximately 250,000 syphilis tests among men and 35,000 among women; 62,000 chlamydia tests among men and 31,000 among women; and 30,000 gonorrhea tests among men and 22,000 among women.
- The median percentage of reactive syphilis tests by facility was 8.7% (range 2.1% to 22.2%) for women entering 16 adult corrections facilities and 0.8% (range 0.4% to 1.6%) for adolescent women entering four juvenile detention centers (Figure EE); it was 2.7% (range 0.3% to 10.7%) among men at 18 adult corrections facilities and 0.1% (range 0.0% to 0.3%) among men at three juvenile facilities (Figure FF). The percentage of reactive syphilis tests representing cases of syphilis varied from site to site.
- Chlamydia positivity was higher in adolescent women screened in juvenile facilities than in adult facilities. Among adolescent women entering juvenile detention facilities, the median facility positivity for chlamydia was 14.8% (range 4.0% to 25.8%); positivity was greater than 10% in 19 of 24 facilities (79%) reporting data (Figure GG). Among adult women entering 22 corrections facilities, the median positivity for chlamydia was 4.5% (range 0.5% to 11.0%).
- The median chlamydia positivity among adolescent men entering 33 juvenile facilities was 5.3% (range 1.6% to 11.5%) (Figure HH). Among adult men

entering 13 corrections facilities, the median positivity was 6.8% (range 1.5% to 12.0%).

- The median positivity for gonorrhea among women entering 20 juvenile facilities was 5.6% (range 0.0% to 13.6%); positivity was greater than 4% in 13 of 20 juvenile facilities (65%) (Figure II). Among adult women entering 14 corrections facilities, the median positivity for gonorrhea was 2.5% (range 0.5% to 5.8%).
- The median positivity for gonorrhea among adolescent men entering 20 juvenile facilities was 1.2% (range 0.5% to 4.6%) (Figure JJ). Among adult men entering nine facilities, the median positivity was 2.2% (range 0.5% to 12.6%).

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<sup>1</sup> 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.

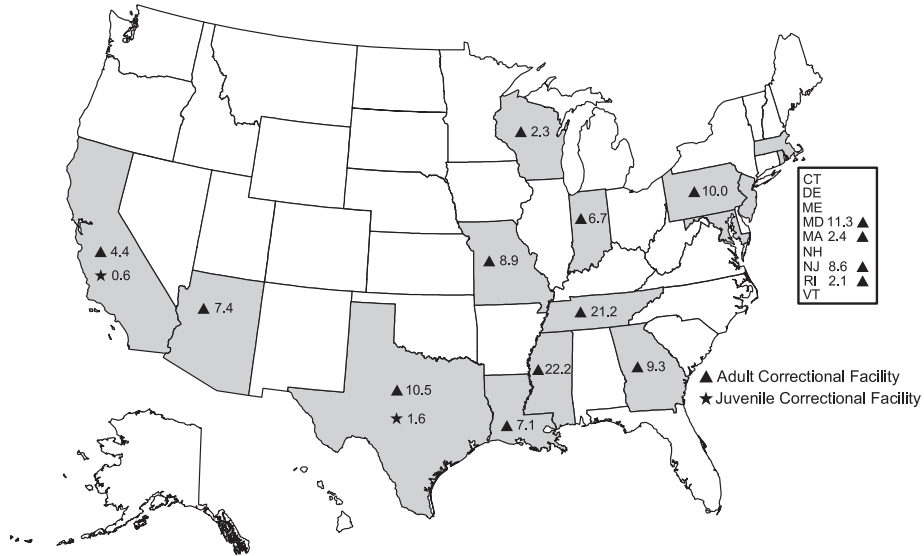
<sup>2</sup> CDC. Syphilis screening among women arrestees at the Cook County Jail – Chicago, 1996. *MMWR* 1998;47:432-3.

<sup>3</sup> 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.

<sup>4</sup> 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.



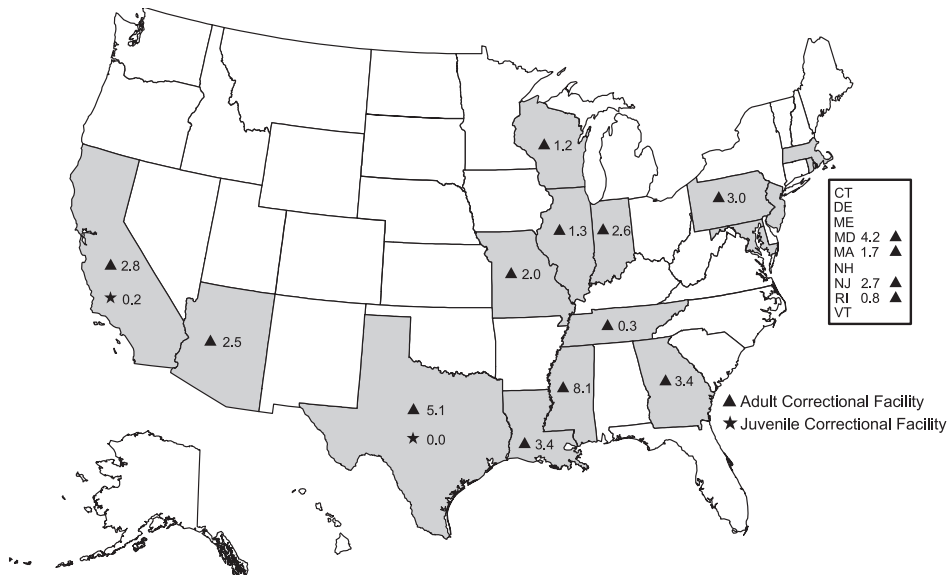
**Figure EE. Syphilis serologic tests — Percent seroreactivity in women entering juvenile and adult corrections facilities, 2001**



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

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

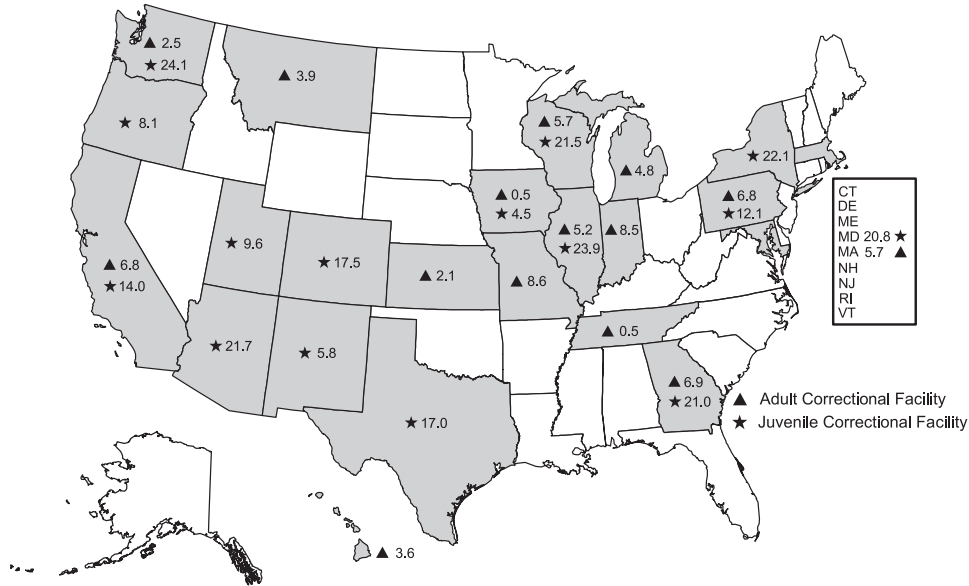
**Figure FF. Syphilis serologic tests — Percent seroreactivity in men entering juvenile and adult corrections facilities, 2001**



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

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

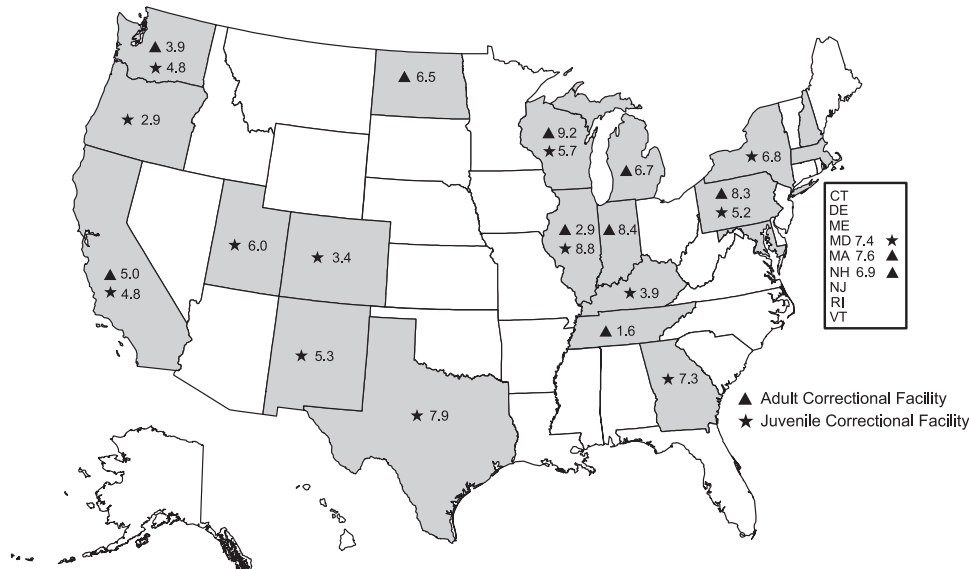
**Figure GG. Chlamydia — Positivity in women entering juvenile and adult corrections facilities, 2001**



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

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

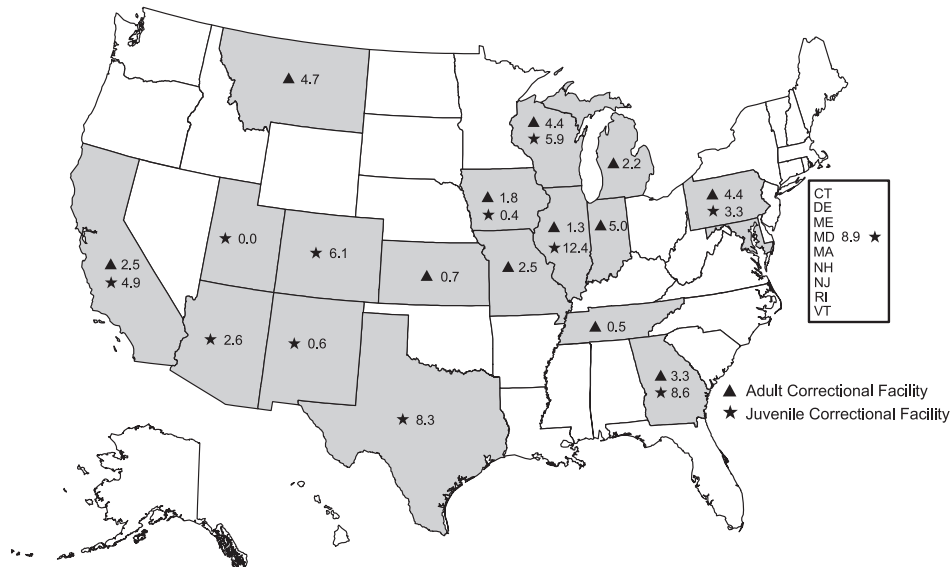
**Figure HH. Chlamydia — Positivity in men entering juvenile and adult corrections facilities, 2001**



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

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

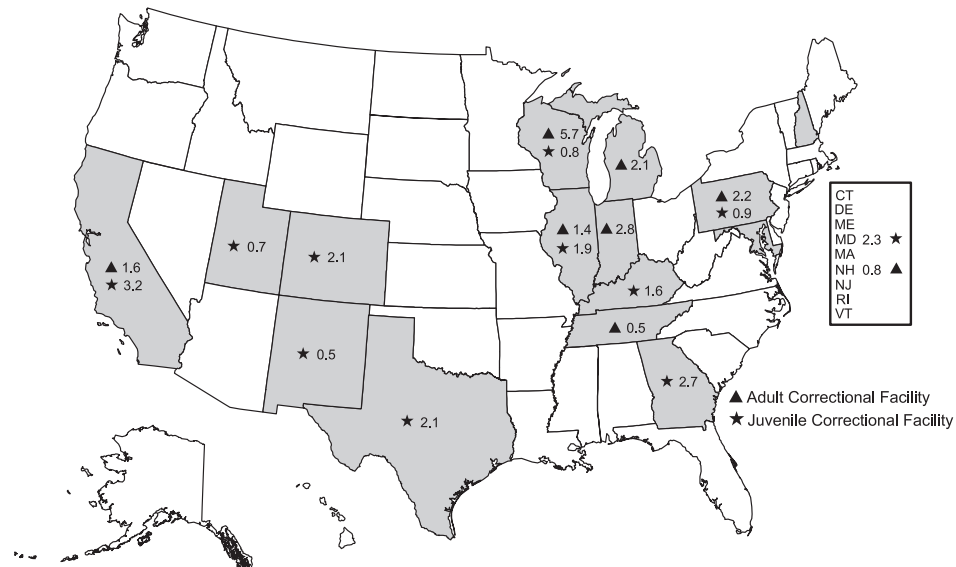
**Figure II. Gonorrhea — Positivity in women entering juvenile and adult corrections facilities, 2001**



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

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

**Figure JJ. Gonorrhea — Positivity in men entering juvenile and adult corrections facilities, 2001**



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

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



# STDs in the South

## Public Health Impact

The southern region of the United States consists of the District of Columbia and 16 states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. This region has consistently had higher reported rates of chlamydia, gonorrhea and primary and secondary (P&S) syphilis than the other regions of the country (Northeast, Midwest, and West). The reasons for these higher rates in the South are not well understood, but may include differences in the racial and ethnic distribution of the population, poverty, and availability and quality of health care services. Regional differences in STD rates are particularly disturbing in light of the fact that STDs can increase the risk of HIV transmission. The high HIV prevalence among childbearing women living in the South is consistent with the high rates of these other STDs in the region.<sup>1</sup>

## Observations

- The South has consistently had higher rates of gonorrhea and P&S syphilis compared with other regions throughout the 1980s and 1990s (Figures 11 and 24, Tables 14 and 27). From 1997 through 2001, the South also had a higher reported rate of chlamydia than the other regions of the country (Figure 4, Table 4).
- In 2001, six of the 10 states with the highest chlamydia rates were in the South (Figure 3, Table 3). Similarly, seven of the 10 states with the highest rates of gonorrhea were located in the South (Figure 10, Table 13). All 16 of the southern states had 2001 reported rates of P&S syphilis that were greater than the Healthy People Year 2010 (HP2010) objective of 0.2 case per 100,000 population (Figure 22, Table 25).
- In 2001, 403 (66%) of 606 counties with P&S syphilis rates above the HP2010 objective were located in the South (Figures 23 and KK).
- County-specific rates of chlamydia and gonorrhea in 2001 were calculated for those southern states submitting county level data (Figures LL and MM). These county level data were reported through the National Electronic Telecommunications System for Surveillance (NETSS), *and are provisional for all states shown except Alabama, Arkansas, Delaware, Florida, Indiana, Kentucky, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia where hardcopy reports have been discontinued based on consistent, high quality, and timely submissions of NETSS data (see Figures A1, A2, and A3 in **Appendix**).*

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<sup>1</sup> Koumans EH, Sternberg M, Gwinn M, Swint E, Zaidi A, St. Louis M. Geographic variation of HIV infection in childbearing women with syphilis in the United States. *AIDS* 2000;14:279-87.

Figure KK. South — Primary and secondary syphilis case rates by county, 2001

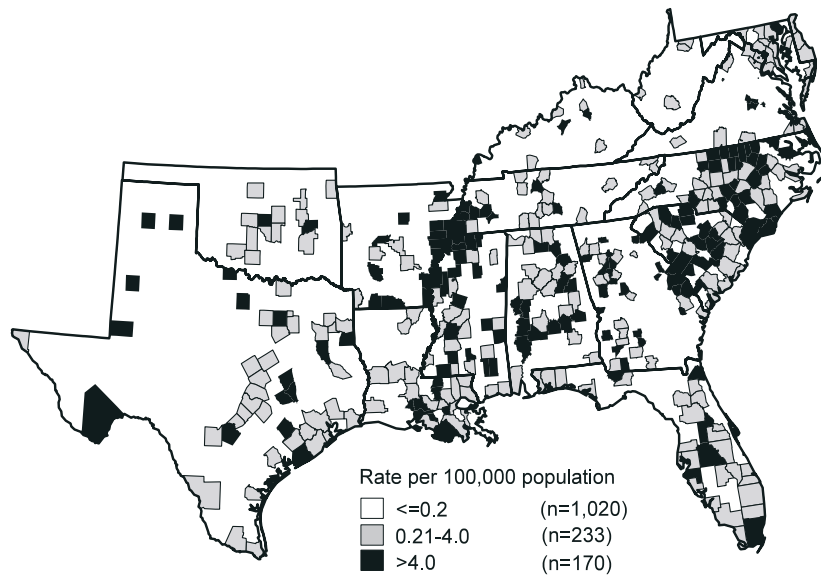
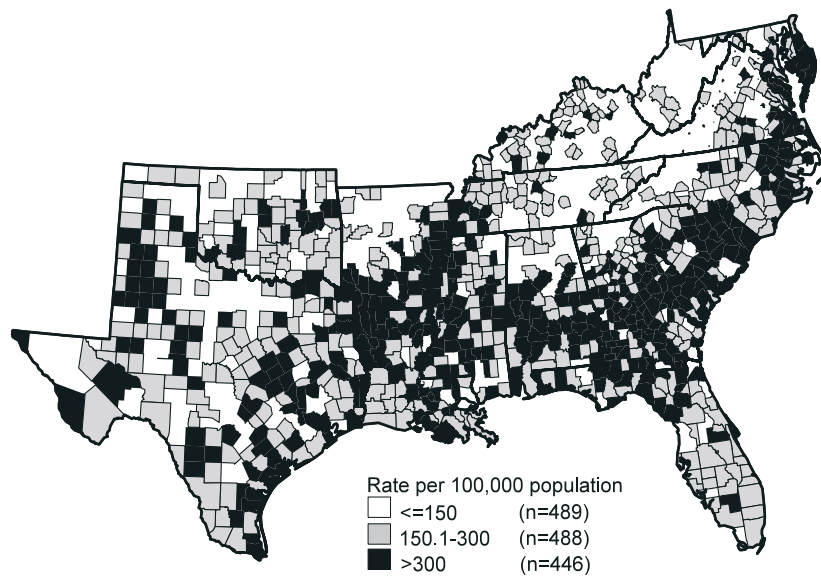
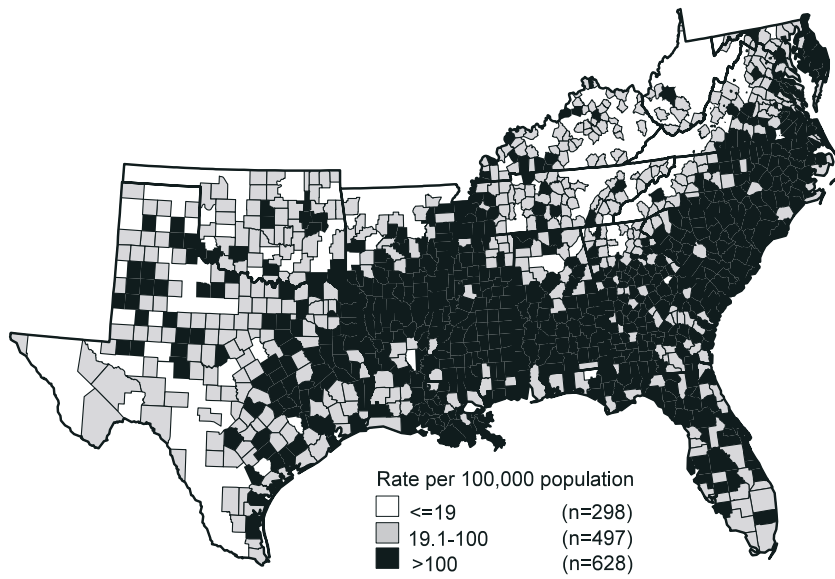


Figure LL. South — Chlamydia case rates by county, 2001



SOURCE: National Electronic Telecommunications System for Surveillance (NETSS) data

Figure MM. South — Gonorrhea case rates by county, 2001



SOURCE: National Electronic Telecommunications System for Surveillance (NETSS) data





**Table 1. Cases of sexually transmitted diseases reported by state health departments and rates per 100,000 civilian population: United States, 1941–2001**

Year <sup>1</sup>	Syphilis										Chlamydia*		Gonorrhea		Chancroid		Granuloma Inguinale		Lympho-granuloma Venereum			
	All Stages		Primary and Secondary		Early Latent		Late and Late Latent		Congenital		Cases	Rate <sup>2</sup>	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate <sup>2</sup>	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	.	1,001,994	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	.	1,002,219	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	.	1,013,436	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	.	1,004,058	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	.	1,004,029	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, 1941–2001 (continued)**

Year <sup>1</sup>	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 <sup>2</sup>	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	0	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	46,712	17.5	8,556	3.2	16,631	6.2	20,447	7.6	1,078	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	31,592	11.2	5,979	2.1	9,465	3.4	15,594	5.5	554	0.2	709,452	252.1	363,136	129.0	78	0.0	4	0.0	42	0.0
2001	32,221	11.4	6,103	2.2	8,701	3.1	16,976	6.0	441	0.2	783,242	278.3	361,705	128.5	38	0.0	7	0.0	25	0.0

\*NR = No report

<sup>1</sup>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.

<sup>2</sup>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 3, 2002 (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.

**Table 2. Reported cases of sexually transmitted disease by sex and reporting source: United States, 2001**

<i>Disease*</i>	<i>Non-STD Clinic</i>			<i>STD Clinic</i>			<i>Total<sup>1</sup></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 Chlamydia Trachomatis	93,326	512,758	607,636	63,946	111,146	175,520	157,304	623,958	783,242
Chlamydial PID <sup>2</sup>	NA	2,817	2,819	NA	370	377	NA	3,187	3,196
Ophthalmia Neonatorum	89	153	242	5	13	18	94	166	260
Total Gonorrhea	89,688	139,193	229,403	87,500	44,667	132,293	177,194	183,863	361,705
Gonococcal PID	NA	2,537	2,538	NA	465	471	NA	3,002	3,009
Ophthalmia Neonatorum	14	18	32	6	7	13	20	25	45
Total Syphilis	NA	NA	NA	NA	NA	NA	18,461	13,711	32,221
Primary	697	142	840	916	161	1,077	1,613	303	1,917
Secondary	1,402	883	2,285	1,119	781	1,901	2,521	1,664	4,186
Early Latent	2,682	2,207	4,890	2,099	1,712	3,811	4,781	3,919	8,701
Late and Late Latent <sup>3</sup>	5,585	4,898	10,495	3,754	2,714	6,481	9,339	7,612	16,976
Neurosyphilis <sup>4</sup>	240	73	313	10	1	11	250	74	324
Congenital <1 year <sup>5</sup>	NR	NR	NR	NR	NR	NR	207	213	441
Chancroid	7	6	13	17	8	25	24	14	38
Granuloma Inguinale	0	1	1	3	3	6	3	4	7
Lymphogranuloma Venereum	5	8	13	10	2	12	15	10	25

\*NA = Not applicable. NR = No report.

<sup>1</sup>Totals include unknown sex and reporting source.

<sup>2</sup>PID = Pelvic inflammatory disease.

<sup>3</sup>Cases of unknown duration for syphilis are included in late and late latent syphilis.

<sup>4</sup>Neurosyphilis cases are not included with Total Syphilis cases but are included in the late and late latent syphilis cases.

<sup>5</sup>Cases of congenital syphilis <1 year of age are obtained using reporting from CDC 73.126. Clinic reporting source is not available from that form.

**Table 3. Chlamydia — Reported cases and rates by state/area, ranked by rates: United States, 2001**

<i>Rank<sup>2</sup></i>	<i>State/Area</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Alaska	2,744	437.7
2	Mississippi	11,793	414.6
3	Georgia	33,840	413.4
4	Louisiana	17,840	399.2
5	South Carolina	15,329	382.1
6	Delaware	2,793	356.4
7	Illinois	43,716	352.0
8	New Mexico	6,254	343.8
9	Texas	69,752	334.5
10	Hawaii	4,031	332.7
11	Ohio	37,653	331.7
12	Alabama	14,524	326.6
13	Michigan	31,090	312.8
14	Colorado	13,239	307.8
15	Oklahoma	10,478	303.7
16	Wisconsin	16,284	303.6
17	California	101,944	301.0
18	Maryland	15,640	295.3
19	Arizona	14,346	279.6
	<b>U.S. TOTAL<sup>1</sup></b>	<b>783,242</b>	<b>278.3</b>
20	Rhode Island	2,912	277.8
21	North Carolina	22,101	274.6
22	Tennessee	15,560	273.5
23	Arkansas	7,280	272.3
24	Virginia	18,337	259.1
25	Indiana	15,258	250.9
26	Missouri	13,949	249.3
27	New York	46,393	244.5
28	Nevada	4,831	241.8
29	South Dakota	1,821	241.2
30	Florida	37,625	235.4
31	Washington	13,631	231.3
32	Pennsylvania	28,371	231.0
33	Connecticut	7,718	226.6
34	Kansas	6,050	225.0
35	Kentucky	8,881	219.7
36	Oregon	7,454	217.9
37	Montana	1,919	212.7
38	Iowa	5,699	194.7
39	New Jersey	16,312	193.9
40	Nebraska	3,206	187.3
41	Wyoming	839	169.9
42	Minnesota	8,323	169.2
43	North Dakota	1,062	165.4
44	Massachusetts	10,402	163.8
45	Idaho	2,023	156.3
46	Utah	3,004	134.5
47	West Virginia	2,346	129.7
48	New Hampshire	1,383	111.9
49	Maine	1,338	104.9
50	Vermont	638	104.8

<sup>1</sup>Total includes cases reported by Washington, D.C., but excludes outlying areas (Guam with 431 cases and rate of 278.4, Puerto Rico with 2,748 cases and rate of 72.2, and Virgin Islands with 131 cases and rate of 120.6). See Appendix.

<sup>2</sup>States were ranked in descending order by rate, number of cases, and alphabetically by state.

**Table 4. Chlamydia — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	8,704	10,065	12,375	15,323	14,524	201.5	231.3	283.2	344.6	326.6
Alaska	1,616	1,907	1,886	2,569	2,744	265.2	310.6	304.4	409.8	437.7
Arizona	10,783	11,489	12,111	12,591	14,346	236.7	246.1	253.5	245.4	279.6
Arkansas	2,503	4,123	5,865	6,219	7,280	99.2	162.4	229.9	232.6	272.3
California	68,737	76,519	85,156	95,392	101,944	213.0	234.2	256.9	281.6	301.0
Colorado <sup>2</sup>	7,749	9,113	10,848	12,000	13,239	199.1	229.5	267.4	279.0	307.8
Connecticut	6,377	6,977	7,422	7,604	7,718	195.0	213.1	226.1	223.3	226.6
Delaware	2,613	2,608	2,761	2,856	2,793	357.2	350.7	366.4	364.5	356.4
Florida	26,788	24,949	31,410	33,390	37,625	182.8	167.3	207.9	208.9	235.4
Georgia	15,911	25,250	30,368	29,359	33,840	212.5	330.4	389.9	358.6	413.4
Hawaii	1,829	2,604	3,165	3,547	4,031	154.1	218.3	267.0	292.8	332.7
Idaho	1,709	2,035	1,778	1,907	2,023	141.2	165.6	142.0	147.4	156.3
Illinois	29,184	32,861	36,409	40,350	43,716	245.3	272.8	300.2	324.9	352.0
Indiana	9,600	10,801	11,734	14,063	15,258	163.7	183.1	197.4	231.3	250.9
Iowa	4,907	5,174	5,511	5,987	5,699	172.0	180.8	192.1	204.6	194.7
Kansas	4,627	5,587	6,093	6,056	6,050	178.3	212.5	229.6	225.3	225.0
Kentucky	6,332	6,441	7,378	8,063	8,881	162.0	163.6	186.3	199.5	219.7
Louisiana	11,545	15,188	16,635	17,846	17,840	265.3	347.6	380.5	399.3	399.2
Maine	1,066	1,073	1,220	1,474	1,338	85.8	86.2	97.4	115.6	104.9
Maryland	13,978	13,097	13,568	14,533	15,640	274.4	255.1	262.4	274.4	295.3
Massachusetts	7,984	8,363	8,776	10,967	10,402	130.5	136.0	142.1	172.7	163.8
Michigan	21,399	22,156	23,107	26,237	31,090	218.9	225.7	234.3	264.0	312.8
Minnesota	6,631	6,970	7,450	8,102	8,323	141.5	147.5	156.0	164.7	169.2
Mississippi	10,020	10,614	11,545	12,697	11,793	367.0	385.7	417.0	446.3	414.6
Missouri	12,257	12,670	13,355	13,448	13,949	226.9	233.0	244.2	240.3	249.3
Montana	1,146	1,412	1,584	1,469	1,919	130.4	160.4	179.4	162.8	212.7
Nebraska	2,766	2,911	3,616	3,791	3,206	166.9	175.1	217.0	221.5	187.3
Nevada	2,887	3,320	3,086	4,019	4,831	172.2	190.1	170.6	201.1	241.8
New Hampshire	816	960	976	1,130	1,383	69.6	81.0	81.3	91.4	111.9
New Jersey	10,339	11,686	12,424	10,814	16,312	128.4	144.0	152.6	128.5	193.9
New Mexico	4,021	3,793	5,017	5,204	6,254	232.5	218.4	288.4	286.1	343.8
New York <sup>3</sup>	28,468	26,218	26,766	31,494	46,393	387.7	353.3	360.3	166.0	244.5
North Carolina	17,108	22,197	21,812	21,985	22,101	230.4	294.1	285.1	273.1	274.6
North Dakota	902	1,036	947	909	1,062	140.7	162.3	149.4	141.5	165.4
Ohio	22,827	27,786	29,398	31,190	37,653	204.1	247.9	261.2	274.7	331.7
Oklahoma	7,419	9,393	8,195	9,331	10,478	223.7	280.7	244.0	270.4	303.7
Oregon	5,270	5,855	6,127	7,107	7,454	162.5	178.4	184.8	207.7	217.9
Pennsylvania	19,838	24,629	27,019	26,475	28,371	165.0	205.2	225.3	215.6	231.0
Rhode Island	2,069	2,307	2,345	2,632	2,912	209.5	233.4	236.7	251.1	277.8
South Carolina	12,511	18,510	18,499	9,950	15,329	332.7	482.5	476.1	248.0	382.1
South Dakota	1,439	1,572	1,544	1,834	1,821	195.0	213.0	210.6	243.0	241.2
Tennessee	12,502	13,717	14,216	15,069	15,560	232.9	252.6	259.2	264.9	273.5
Texas	50,675	60,436	62,958	68,814	69,752	260.7	305.9	314.1	330.0	334.5
Utah	1,774	2,209	2,219	2,190	3,004	86.2	105.2	104.2	98.1	134.5
Vermont	434	413	485	526	638	73.7	69.9	81.7	86.4	104.8
Virginia	11,955	13,561	13,735	15,352	18,337	177.5	199.7	199.8	216.9	259.1
Washington	9,523	10,998	11,964	13,066	13,631	169.7	193.3	207.8	221.7	231.3
West Virginia	3,108	2,791	1,820	2,144	2,346	171.2	154.1	100.7	118.6	129.7
Wisconsin	9,554	13,999	14,462	16,365	16,284	184.8	268.0	275.4	305.1	303.6
Wyoming	635	725	787	807	839	132.4	150.8	164.1	163.4	169.9
<b>U.S. TOTAL<sup>1</sup></b>	<b>537,904</b>	<b>614,250</b>	<b>662,647</b>	<b>709,452</b>	<b>783,242</b>	<b>209.4</b>	<b>236.7</b>	<b>253.0</b>	<b>252.1</b>	<b>278.3</b>
Northeast	77,391	82,626	87,433	93,116	115,467	189.7	201.7	212.9	173.7	215.4
Midwest	126,093	143,523	153,626	168,332	184,111	201.9	228.2	242.9	261.4	285.9
South	216,741	256,122	275,860	286,136	307,405	230.1	268.4	286.0	285.5	306.7
West	117,679	131,979	145,728	161,868	176,259	198.1	219.0	238.3	256.1	278.9
Guam	368	410	497	525	431	235.6	256.5	303.9	339.1	278.4
Puerto Rico	2,123	1,685	1,445	2,695	2,748	55.5	43.7	37.2	70.8	72.2
Virgin Islands	14	10	136	131	131	12.8	9.1	120.5	120.6	120.6
<b>OUTLYING AREAS</b>	<b>2,505</b>	<b>2,105</b>	<b>2,078</b>	<b>3,351</b>	<b>3,310</b>	<b>61.2</b>	<b>51.0</b>	<b>49.9</b>	<b>82.3</b>	<b>81.3</b>
<b>TOTAL</b>	<b>540,409</b>	<b>616,355</b>	<b>664,725</b>	<b>712,803</b>	<b>786,552</b>	<b>207.1</b>	<b>233.8</b>	<b>249.8</b>	<b>249.7</b>	<b>275.5</b>

<sup>1</sup>Includes cases reported by Washington, D.C., and rates exclude population of states that did not report.

<sup>2</sup>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.

<sup>3</sup>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 from 1997–2000 by the state of New York may be incomplete and the rate for New York State is underestimated. See Appendix.

**Table 5. Chlamydia — Women – Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	7,957	9,197	11,524	13,746	13,375	354.9	406.2	507.1	597.5	581.4
Alaska	1,291	1,479	1,456	1,863	1,981	446.6	506.9	494.5	615.2	654.2
Arizona	8,597	9,015	9,497	10,008	11,193	374.3	382.0	393.4	389.5	435.6
Arkansas	2,346	3,850	4,618	5,015	5,949	180.3	293.4	350.3	366.4	434.6
California	53,536	59,747	66,334	72,178	76,261	332.4	365.6	400.4	424.7	448.7
Colorado <sup>2</sup>	5,958	6,979	8,172	8,748	9,894	303.8	348.5	399.5	409.7	463.4
Connecticut	5,282	5,828	6,053	6,238	6,260	314.4	345.8	358.3	355.2	356.4
Delaware	2,070	2,117	2,268	2,271	2,125	551.9	554.2	585.6	563.4	527.2
Florida	21,953	20,171	25,957	27,562	30,647	291.5	262.7	333.6	336.8	374.4
Georgia	13,927	21,156	24,685	24,067	27,905	363.1	539.2	617.6	578.6	670.9
Hawaii	1,548	2,209	2,557	2,757	3,053	262.4	371.4	430.9	457.3	506.4
Idaho	1,336	1,553	1,308	1,435	1,469	220.8	252.3	208.5	222.4	227.6
Illinois	23,478	26,112	28,758	31,771	33,124	385.9	423.1	462.9	501.2	522.5
Indiana	7,819	8,823	9,410	10,935	11,668	260.2	291.3	308.4	353.0	376.6
Iowa	3,900	4,077	4,208	4,480	4,295	267.0	277.6	285.8	300.5	288.1
Kansas	3,840	4,649	5,034	4,973	4,977	291.5	347.8	373.3	365.7	366.0
Kentucky	5,128	5,126	5,891	6,466	7,081	255.3	253.0	289.2	312.9	342.7
Louisiana	9,414	12,169	13,247	14,099	14,416	417.6	536.5	584.0	611.4	625.1
Maine	898	899	991	1,143	1,040	141.4	141.0	154.5	174.6	158.9
Maryland	12,180	11,093	11,351	12,099	12,863	466.0	420.2	427.0	441.8	469.7
Massachusetts	6,522	6,812	6,959	8,452	7,897	206.2	214.0	217.7	256.9	240.0
Michigan	18,289	18,769	18,869	20,905	24,550	365.1	372.4	372.6	412.7	484.7
Minnesota	4,953	5,119	5,469	5,856	6,010	208.7	213.5	225.8	235.8	242.0
Mississippi	8,590	9,185	9,953	11,005	10,258	605.6	640.9	690.3	748.1	697.3
Missouri	10,749	11,063	11,515	11,525	11,854	386.5	394.4	408.5	400.9	412.3
Montana	941	1,131	1,192	1,097	1,466	213.5	255.4	268.5	242.3	323.8
Nebraska	2,288	2,390	2,903	3,018	2,521	270.9	281.4	341.0	347.7	290.5
Nevada	2,484	2,820	2,500	3,124	3,586	302.3	328.8	281.5	318.7	365.8
New Hampshire	639	726	769	889	1,042	107.4	120.6	126.0	141.5	165.9
New Jersey	9,641	10,735	11,123	9,486	14,352	232.6	256.6	265.0	219.0	331.3
New Mexico	3,503	3,204	4,177	4,171	4,891	399.5	363.1	472.6	451.1	528.9
New York <sup>3</sup>	25,706	23,449	23,896	26,928	38,297	662.8	596.4	607.9	273.9	389.6
North Carolina	14,553	18,646	18,416	18,625	18,628	381.5	479.8	467.3	453.5	453.6
North Dakota	684	755	680	663	716	212.9	235.5	213.5	206.1	222.6
Ohio	19,727	23,248	23,380	25,105	29,521	342.0	401.4	402.0	429.8	505.4
Oklahoma	6,269	7,696	6,737	7,715	8,600	370.1	449.4	392.0	439.7	490.1
Oregon	3,848	4,307	4,462	5,192	5,442	234.8	259.3	265.8	301.0	315.5
Pennsylvania	17,257	20,878	22,470	21,389	22,521	277.0	335.0	360.8	336.8	354.6
Rhode Island	1,738	1,779	1,769	1,969	2,197	339.4	346.5	343.8	361.5	403.4
South Carolina	11,120	16,489	16,669	8,721	13,528	572.2	829.7	829.0	422.7	655.7
South Dakota	1,021	1,171	1,194	1,308	1,311	272.9	312.2	320.4	344.0	344.7
Tennessee	9,605	10,552	11,084	11,648	12,105	346.4	375.5	390.7	399.0	414.7
Texas	42,750	49,940	52,071	56,817	57,611	435.0	498.7	512.7	541.2	548.7
Utah	1,357	1,616	1,618	1,610	2,119	131.3	153.0	151.0	144.5	190.2
Vermont	379	357	414	432	523	126.9	118.9	137.3	139.1	168.4
Virginia	10,452	11,567	11,556	12,976	15,177	304.2	332.9	328.8	359.8	420.8
Washington	7,331	8,377	8,880	9,583	10,159	260.5	292.8	306.8	323.8	343.2
West Virginia	2,590	2,340	1,585	1,790	1,969	275.8	249.3	169.2	192.6	211.9
Wisconsin	7,459	10,846	11,225	12,352	12,045	284.2	408.2	420.4	455.0	443.7
Wyoming	536	595	649	667	679	225.1	248.8	271.9	271.8	276.7
<b>U.S. TOTAL<sup>1</sup></b>	<b>448,097</b>	<b>505,533</b>	<b>539,894</b>	<b>569,658</b>	<b>623,958</b>	<b>341.8</b>	<b>380.8</b>	<b>403.1</b>	<b>397.3</b>	<b>435.2</b>
Northeast	68,062	71,463	74,444	76,926	94,129	322.0	336.0	349.3	277.7	339.9
Midwest	104,207	117,022	122,645	132,891	142,592	326.0	362.9	378.3	404.7	434.2
South	183,562	214,016	230,003	237,408	255,044	380.1	436.5	464.2	463.9	498.3
West	92,266	103,032	112,802	122,433	132,193	310.5	341.1	368.2	386.8	417.6
Guam	325	351	432	430	347	442.6	467.3	562.1	568.6	458.8
Puerto Rico	1,722	1,327	1,147	2,226	2,313	86.5	66.1	56.7	112.7	117.1
Virgin Islands	13	10	113	108	116	22.8	17.4	219.1	190.3	204.4
<b>OUTLYING AREAS</b>	<b>2,060</b>	<b>1,688</b>	<b>1,692</b>	<b>2,764</b>	<b>2,776</b>	<b>97.1</b>	<b>78.9</b>	<b>78.7</b>	<b>131.2</b>	<b>131.7</b>
<b>TOTAL</b>	<b>450,157</b>	<b>507,221</b>	<b>541,586</b>	<b>572,422</b>	<b>626,734</b>	<b>337.9</b>	<b>376.0</b>	<b>398.0</b>	<b>393.5</b>	<b>430.8</b>

<sup>1</sup>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.

<sup>2</sup>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.

<sup>3</sup>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 from 1997-2000 by the state of New York may be incomplete and the rate for New York State is underestimated. See Appendix.



**Table 6. Chlamydia — Men — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1997–2001**

State/Area	Cases*					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	708	844	795	1,432	1,124	34.1	40.4	37.9	66.7	52.4
Alaska	325	428	430	706	763	101.5	132.8	132.3	217.8	235.4
Arizona	2,186	2,474	2,614	2,583	3,153	96.8	107.1	110.6	100.9	123.1
Arkansas	143	267	1,247	1,204	1,325	11.7	21.8	101.1	92.3	101.6
California	14,875	16,525	18,236	22,759	24,930	92.0	101.2	110.0	134.9	147.7
Colorado <sup>2</sup>	1,784	2,115	2,666	3,251	3,328	92.4	107.5	132.6	150.1	153.6
Connecticut	1,095	1,149	1,369	1,366	1,445	68.9	72.3	85.9	82.8	87.6
Delaware	543	491	493	585	668	152.3	135.8	134.6	153.7	175.5
Florida	4,835	4,363	5,341	5,828	6,967	67.9	60.3	72.9	74.7	89.3
Georgia	1,962	3,932	5,462	5,102	5,926	53.7	105.7	144.1	126.7	147.2
Hawaii	281	395	583	777	977	47.1	66.0	98.5	127.7	160.5
Idaho	373	482	446	462	528	61.6	78.6	71.4	71.2	81.4
Illinois	5,706	6,749	7,642	8,578	10,588	98.2	114.9	129.2	141.1	174.1
Indiana	1,773	1,968	2,313	3,093	3,555	62.0	68.6	80.0	103.7	119.2
Iowa	1,007	1,096	1,302	1,505	1,401	72.4	78.6	93.2	104.8	97.6
Kansas	787	938	1,059	1,083	1,073	61.6	72.6	81.1	81.5	80.8
Kentucky	1,182	1,093	1,328	1,513	1,779	62.2	57.2	69.0	76.6	90.1
Louisiana	2,131	3,019	3,388	3,747	3,424	101.6	143.7	161.0	173.2	158.3
Maine	168	174	229	331	297	27.7	28.7	37.5	53.4	47.9
Maryland	1,798	1,973	2,196	2,379	2,777	72.5	79.1	87.4	93.0	108.6
Massachusetts	1,462	1,551	1,817	2,515	2,502	49.5	52.3	61.0	82.2	81.8
Michigan	3,110	3,387	4,237	5,331	6,540	65.3	70.9	88.3	109.4	134.2
Minnesota	1,678	1,851	1,981	2,246	2,313	72.6	79.5	84.2	92.2	95.0
Mississippi	1,200	1,355	1,450	1,647	1,535	91.5	102.7	109.3	119.9	111.8
Missouri	1,508	1,607	1,840	1,923	2,095	57.5	61.0	69.4	70.7	77.0
Montana	198	281	392	371	449	45.2	64.2	89.3	82.5	99.9
Nebraska	473	520	712	769	680	58.2	63.9	87.4	91.2	80.6
Nevada	403	498	586	893	1,239	47.1	56.0	63.6	87.7	121.7
New Hampshire	177	234	207	241	341	30.6	40.1	35.0	39.7	56.1
New Jersey	689	944	1,281	1,279	1,948	17.6	24.0	32.5	31.3	47.7
New Mexico	518	589	839	1,001	1,237	60.7	68.9	98.0	111.9	138.3
New York <sup>3</sup>	2,762	2,669	2,846	4,436	8,042	79.7	76.5	81.4	48.5	87.9
North Carolina	2,555	3,551	3,396	3,359	3,473	70.8	97.0	91.5	85.2	88.1
North Dakota	218	281	267	246	346	68.2	88.5	84.7	76.7	107.9
Ohio	2,884	4,211	5,604	5,819	7,603	53.2	77.7	103.0	105.6	137.9
Oklahoma	1,150	1,697	1,458	1,616	1,878	70.8	103.8	88.9	95.3	110.7
Oregon	1,422	1,548	1,665	1,915	2,012	88.6	95.5	101.7	112.9	118.6
Pennsylvania	2,581	3,751	4,549	5,086	5,850	44.6	65.0	78.9	85.8	98.7
Rhode Island	331	528	576	663	715	69.6	111.1	120.9	131.6	142.0
South Carolina	1,215	1,837	1,679	1,127	1,731	66.9	99.4	89.5	57.8	88.8
South Dakota	417	400	348	523	510	114.6	110.2	96.5	139.6	136.2
Tennessee	2,897	3,165	3,132	3,421	3,455	111.6	120.8	118.3	123.5	124.7
Texas	7,925	10,301	10,597	11,829	12,033	82.5	105.7	107.2	114.3	116.2
Utah	417	593	601	580	882	40.7	56.8	56.8	51.8	78.8
Vermont	55	56	71	94	115	19.0	19.3	24.3	31.5	38.5
Virginia	1,379	1,988	2,177	2,359	3,107	41.8	59.9	64.8	67.9	89.5
Washington	2,192	2,621	3,084	3,483	3,472	78.4	92.7	107.8	118.7	118.3
West Virginia	515	448	233	350	371	58.7	51.3	26.8	39.8	42.2
Wisconsin	2,095	3,144	3,212	4,006	4,191	82.3	122.5	124.5	151.2	158.2
Wyoming	99	130	138	140	160	41.0	53.8	57.3	56.4	64.4
<b>U.S. TOTAL<sup>1</sup></b>	<b>88,598</b>	<b>106,671</b>	<b>120,430</b>	<b>137,957</b>	<b>157,304</b>	<b>70.5</b>	<b>84.1</b>	<b>94.1</b>	<b>99.9</b>	<b>113.9</b>
Northeast	9,320	11,056	12,945	16,011	21,255	47.4	56.1	65.5	61.8	82.1
Midwest	21,656	26,152	30,517	35,122	40,895	71.0	85.3	99.0	111.3	129.6
South	32,549	40,784	44,688	47,903	52,024	70.9	87.9	95.3	97.6	106.0
West	25,073	28,679	32,280	38,921	43,130	84.5	95.4	105.8	123.4	136.7
Guam	43	59	65	95	84	51.9	69.7	75.0	120.0	106.1
Puerto Rico	401	358	298	469	435	21.8	19.3	16.0	25.6	23.7
Virgin Islands	1	NR	23	23	15	1.9	.	37.5	44.3	28.9
<b>OUTLYING AREAS</b>	<b>445</b>	<b>417</b>	<b>386</b>	<b>587</b>	<b>534</b>	<b>22.6</b>	<b>21.5</b>	<b>19.2</b>	<b>29.9</b>	<b>27.2</b>
<b>TOTAL</b>	<b>89,043</b>	<b>107,088</b>	<b>120,816</b>	<b>138,544</b>	<b>157,838</b>	<b>69.7</b>	<b>83.2</b>	<b>92.9</b>	<b>98.9</b>	<b>112.7</b>

<sup>1</sup>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.

<sup>2</sup>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.

<sup>3</sup>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 from 1997-2000 by the state of New York may be incomplete and the rate for New York State is underestimated. See Appendix.

\*NR = No report (see Appendix).

**Table 7. Chlamydia — Reported cases and rates in selected cities of >200,000 population, ranked by rates: United States, 2001**

<i>Rank</i> <sup>1</sup>	<i>City</i> *	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Richmond, VA	2,082	1,052.6
2	Detroit, MI	11,552	942.0
3	St Louis, MO	3,195	917.6
4	Philadelphia, PA	13,628	898.0
5	Milwaukee, WI	8,224	874.7
6	Baltimore, MD	5,405	830.1
7	Newark, NJ	2,408	800.6
8	New Orleans, LA	3,871	798.7
9	Atlanta, GA	6,426	787.5
10	Indianapolis, IN	6,611	768.3
11	Denver, CO	4,186	754.7
12	Buffalo, NY	2,379	738.5
13	Chicago, IL	22,420	726.4
14	Minneapolis, MN	2,614	680.8
15	Norfolk, VA	1,475	629.3
16	Kansas City, MO	2,747	607.9
17	Memphis, TN	5,418	603.7
18	Oklahoma City, OK	2,444	574.6
19	Washington, DC	3,286	574.4
20	Albuquerque, NM	3,139	563.9
21	Cincinnati, OH	4,594	543.5
22	St Paul, MN	1,506	529.1
23	Toledo, OH	2,244	493.1
24	Boston, MA	2,935	490.8
25	Corpus Christi, TX	1,458	464.9
26	Dallas, TX	10,249	461.9
27	Jacksonville, FL	3,551	455.9
28	Columbus, OH	4,850	453.7
29	Portland, OR	2,355	451.9
30	Birmingham, AL	2,957	446.6
31	Tulsa, OK	1,720	436.2
32	Rochester, NY	1,064	430.6
33	San Antonio, TX	5,749	412.7
34	Austin, TX	3,317	408.4
35	Honolulu, HI	3,473	396.4
36	San Francisco, CA	3,030	390.1
37	Jersey City, NJ	893	371.2
38	Omaha, NE	1,719	370.8
39	New York City, NY	29,649	370.2
40	Dayton, OH	2,066	369.5
41	Los Angeles, CA	32,706	367.1
42	Nashville, TN	2,086	366.0
43	Sacramento, CA	4,442	363.1
44	Oakland, CA	4,682	354.8
45	El Paso, TX	2,356	346.7
46	Cleveland, OH	4,811	345.1
47	Houston, TX	11,289	332.0
48	San Diego, CA	9,166	325.7
49	Wichita, KS	1,465	323.5
50	Tucson, AZ	2,700	320.0
51	Des Moines, IA	1,122	299.5
52	Phoenix, AZ	8,953	291.4
53	Fort Worth, TX	4,142	286.4
54	Louisville, KY	1,952	281.4
55	Charlotte, NC	1,936	278.4
56	Pittsburgh, PA	3,444	268.7
57	Tampa, FL	2,535	253.8
58	Seattle, WA	4,295	247.3
59	San Jose, CA	4,118	244.7
60	Akron, OH	1,162	214.0
61	St Petersburg, FL	1,884	204.5
62	Yonkers, NY	373	187.9
63	Miami, FL	3,800	168.6

\*Excludes outlying areas (San Juan, PR with 1,076 cases and rate of 105.5). See Appendix.

<sup>1</sup>Cities were ranked in descending order by rate, number of cases, and alphabetically by state.



**Table 8. Chlamydia — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1997–2001**

City	Cases*					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	852	859	841	990	1,162	160.3	159.7	156.4	182.4	214.0
Albuquerque, NM	1,635	1,715	1,674	2,368	3,139	310.8	326.1	319.8	425.4	563.9
Atlanta, GA	4,208	5,276	5,572	5,558	6,426	582.4	713.6	748.1	681.1	787.5
Austin, TX	2,977	3,030	2,795	3,113	3,317	429.2	426.4	384.4	383.2	408.4
Baltimore, MD	6,066	5,663	5,286	5,433	5,405	922.9	877.2	835.5	834.4	830.1
Birmingham, AL	2,372	2,476	2,209	3,601	2,957	360.1	375.4	336.0	543.9	446.6
Boston, MA	2,450	2,588	2,680	3,229	2,935	439.5	465.2	481.7	539.9	490.8
Buffalo, NY	NR	NR	NR	722	2,379	.	.	.	224.1	738.5
Charlotte, NC	1,049	1,695	1,669	1,873	1,936	171.0	268.7	257.4	269.3	278.4
Chicago, IL	15,168	17,023	18,125	19,792	22,420	520.5	571.5	608.1	641.3	726.4
Cincinnati, OH	2,617	4,840	3,801	4,715	4,594	307.3	571.2	452.3	557.8	543.5
Cleveland, OH	3,056	3,650	3,446	3,961	4,811	220.4	264.4	251.2	284.2	345.1
Columbus, OH	3,133	3,854	3,997	4,298	4,850	308.0	377.4	388.9	402.1	453.7
Corpus Christi, TX	986	1,220	1,158	1,525	1,458	310.6	385.7	367.1	486.2	464.9
Dallas, TX	7,990	8,893	9,355	9,976	10,249	394.9	433.6	453.7	449.6	461.9
Dayton, OH	813	929	1,256	1,176	2,066	144.8	166.4	222.0	210.4	369.5
Denver, CO	2,726	2,834	3,371	3,164	4,186	546.3	567.9	674.5	570.5	754.7
Des Moines, IA	567	743	922	1,075	1,122	160.1	206.5	252.8	287.0	299.5
Detroit, MI	6,622	7,351	7,753	9,989	11,552	608.0	583.3	618.6	814.5	942.0
El Paso, TX	1,439	1,697	1,898	2,225	2,356	205.1	241.4	270.4	327.4	346.7
Fort Worth, TX	2,402	4,089	3,752	4,214	4,142	181.0	301.7	271.4	291.4	286.4
Honolulu, HI	1,488	2,205	2,631	2,932	3,473	171.1	252.7	304.3	334.6	396.4
Houston, TX	10,756	11,561	10,511	12,213	11,289	340.6	360.6	323.4	359.1	332.0
Indianapolis, IN	3,693	4,584	4,641	5,506	6,611	453.9	563.6	572.3	639.9	768.3
Jacksonville, FL	2,402	1,913	2,703	3,501	3,551	327.9	260.0	366.0	449.5	455.9
Jersey City, NJ	553	678	724	624	893	253.9	308.1	331.6	259.4	371.2
Kansas City, MO	3,086	3,105	2,738	3,128	2,747	690.2	687.0	606.3	692.2	607.9
Los Angeles, CA	23,346	24,160	27,614	31,074	32,706	272.7	280.2	316.2	348.8	367.1
Louisville, KY	1,598	1,253	1,447	1,656	1,952	238.3	186.4	215.0	238.8	281.4
Memphis, TN	4,244	4,791	5,025	4,967	5,418	490.1	551.4	575.6	553.4	603.7
Miami, FL	3,579	3,486	4,010	3,032	3,800	175.0	162.0	184.3	134.6	168.6
Milwaukee, WI	5,121	7,758	7,641	9,018	8,224	563.4	850.9	843.1	959.2	874.7
Minneapolis, MN	2,473	2,555	2,584	2,652	2,614	645.1	700.9	705.7	690.7	680.8
Nashville, TN	1,820	1,981	2,202	2,403	2,086	341.0	371.0	415.4	421.7	366.0
New Orleans, LA	2,869	3,331	3,651	3,817	3,871	611.6	715.5	792.1	787.5	798.7
New York City, NY <sup>2</sup>	28,468	26,218	26,766	26,170	29,649	387.7	353.3	360.3	326.8	370.2
Newark, NJ	1,669	1,725	1,881	1,567	2,408	586.5	606.6	664.1	521.0	800.6
Norfolk, VA	899	954	920	1,093	1,475	391.9	443.3	407.3	466.3	629.3
Oakland, CA	3,419	3,651	4,111	4,975	4,682	272.8	285.3	317.7	377.0	354.8
Oklahoma City, OK	1,013	2,008	1,768	2,060	2,444	229.9	492.6	431.3	484.3	574.6
Omaha, NE	1,349	1,410	1,808	1,935	1,719	305.9	317.7	405.1	417.4	370.8
Philadelphia, PA	10,480	11,763	12,660	13,584	13,628	722.1	819.0	893.1	895.1	898.0
Phoenix, AZ	6,580	7,549	7,660	7,987	8,953	244.0	271.1	267.7	260.0	291.4
Pittsburgh, PA	2,879	2,980	2,879	2,885	3,444	224.8	234.9	229.1	225.1	268.7
Portland, OR	1,844	2,128	2,018	2,306	2,355	374.2	427.4	403.9	442.5	451.9
Richmond, VA	2,175	1,619	1,972	2,230	2,082	1,130.5	833.8	1,039.5	1,127.5	1,052.6
Rochester, NY	NR	NR	NR	115	1,064	.	.	.	46.5	430.6
Sacramento, CA	3,499	4,005	4,469	4,599	4,442	310.8	350.0	377.3	375.9	363.1
San Antonio, TX	4,838	5,909	5,731	5,871	5,749	363.1	436.7	417.4	421.5	412.7
San Diego, CA	6,397	7,044	7,591	8,591	9,166	235.0	253.3	269.1	305.3	325.7
San Francisco, CA	2,243	2,616	2,718	3,093	3,030	306.3	350.8	364.0	398.2	390.1
San Jose, CA	2,751	3,349	3,428	3,908	4,118	171.0	204.1	208.1	232.3	244.7
Seattle, WA	3,174	3,486	3,949	4,495	4,295	194.4	210.7	237.2	258.8	247.3
St Louis, MO	2,653	2,921	3,090	2,711	3,195	776.0	860.8	925.3	778.6	917.6
St Paul, MN	1,112	1,233	1,349	1,639	1,506	402.8	455.8	498.1	575.8	529.1
St Petersburg, FL	1,789	1,692	1,760	1,834	1,884	205.2	192.7	200.3	199.0	204.5
Tampa, FL	2,836	2,240	2,757	2,714	2,535	311.8	242.1	293.1	271.7	253.8
Toledo, OH	528	780	1,043	1,646	2,244	117.0	173.9	233.6	361.7	493.1
Tucson, AZ	1,888	1,610	1,908	1,786	2,700	242.0	203.6	237.4	211.7	320.0
Tulsa, OK	793	1,782	1,636	1,770	1,720	205.5	468.4	426.3	448.9	436.2
Washington, DC	3,069	3,182	2,720	3,205	3,286	580.2	608.3	524.1	560.3	574.4
Wichita, KS	1,159	861	1,532	1,457	1,465	264.2	192.2	339.2	321.7	323.5
Yonkers, NY	NR	NR	NR	379	373	.	.	.	190.9	187.9
<b>U.S. CITY TOTAL<sup>1</sup></b>	<b>235,660</b>	<b>258,501</b>	<b>269,806</b>	<b>296,125</b>	<b>318,308</b>	<b>341.9</b>	<b>370.4</b>	<b>384.2</b>	<b>401.0</b>	<b>431.0</b>
San Juan, PR	739	615	501	966	1,076	84.7	58.8	47.6	94.7	105.5
<b>TOTAL</b>	<b>236,399</b>	<b>259,116</b>	<b>270,307</b>	<b>297,091</b>	<b>319,384</b>	<b>338.7</b>	<b>365.8</b>	<b>379.2</b>	<b>396.8</b>	<b>426.6</b>

<sup>1</sup>Rates exclude population of cities that did not report. <sup>2</sup>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 in 1997-2000 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. \*NR = No report (see Appendix).

**Table 9. Chlamydia — Women — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1997–2001**

City	Cases*					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	666	697	653	769	916	241.2	249.1	233.1	273.2	325.5
Albuquerque, NM	1,386	1,437	1,401	1,815	2,368	515.1	532.6	521.4	637.3	831.5
Atlanta, GA	3,596	4,217	4,287	4,468	5,152	954.0	1,090.7	1,101.3	1,078.5	1,243.6
Austin, TX	2,468	2,463	2,367	2,432	2,633	710.2	689.4	647.6	613.6	664.3
Baltimore, MD	5,607	5,066	4,700	4,828	4,825	1,595.4	1,470.5	1,393.0	1,389.5	1,388.6
Birmingham, AL	2,269	2,352	2,086	2,792	2,524	647.6	668.6	595.2	797.8	721.2
Boston, MA	1,842	1,920	2,107	2,360	2,086	638.8	665.9	731.6	762.2	673.7
Buffalo, NY	NR	NR	NR	528	1,731	.	.	.	314.1	1,029.8
Charlotte, NC	576	1,395	1,373	1,498	1,484	181.5	426.3	408.0	423.2	419.2
Chicago, IL	12,203	13,424	14,377	15,631	16,756	809.7	867.6	928.2	982.0	1,052.6
Cincinnati, OH	2,349	4,122	3,211	3,938	3,740	524.9	923.7	724.9	890.3	845.5
Cleveland, OH	2,672	3,173	2,955	3,183	3,635	364.3	433.7	406.3	432.8	494.2
Columbus, OH	2,666	3,027	2,907	3,185	3,336	506.7	571.6	545.0	579.4	606.9
Corpus Christi, TX	802	1,031	999	1,292	1,233	495.9	634.1	615.9	806.7	769.8
Dallas, TX	6,159	6,699	7,143	7,726	8,083	600.1	642.4	681.6	695.6	727.7
Dayton, OH	756	729	834	863	1,595	259.1	250.2	282.2	296.9	548.7
Denver, CO	2,076	2,146	2,468	2,190	2,962	809.8	837.9	962.3	798.0	1,079.3
Des Moines, IA	430	581	660	789	814	233.4	309.6	347.1	409.1	422.1
Detroit, MI	5,863	6,491	6,343	7,716	9,137	1,024.4	978.8	961.0	1,209.4	1,432.2
El Paso, TX	1,263	1,421	1,599	1,881	1,936	349.9	387.8	435.6	534.6	550.2
Fort Worth, TX	1,968	3,278	2,933	3,317	3,277	292.7	477.7	419.6	454.2	448.8
Honolulu, HI	1,236	1,850	2,102	2,239	2,574	285.5	423.8	484.8	514.0	590.9
Houston, TX	9,326	9,912	8,740	10,222	9,473	588.1	612.8	533.4	598.9	555.0
Indianapolis, IN	2,680	3,472	3,481	3,896	4,552	629.4	814.3	818.2	876.6	1,024.2
Jacksonville, FL	1,753	1,368	2,091	2,809	2,865	464.1	359.9	546.9	700.3	714.3
Jersey City, NJ	536	657	681	605	818	477.8	577.2	603.0	494.2	668.2
Kansas City, MO	2,779	2,785	2,413	2,763	2,396	1,190.7	1,175.9	1,020.1	1,179.7	1,023.0
Los Angeles, CA	17,911	18,930	21,564	23,056	24,358	417.6	435.2	489.4	511.6	540.4
Louisville, KY	1,248	985	1,136	1,301	1,511	353.7	277.8	319.8	359.4	417.4
Memphis, TN	3,325	3,786	4,020	3,943	4,378	734.0	830.3	877.4	841.0	933.8
Miami, FL	2,884	2,799	3,282	2,449	3,079	271.8	248.6	288.0	210.3	264.4
Milwaukee, WI	4,051	6,219	6,076	7,077	6,308	850.5	1,298.3	1,271.8	1,445.5	1,288.4
Minneapolis, MN	1,710	1,762	1,756	1,759	1,716	868.1	938.6	931.3	902.4	880.4
Nashville, TN	1,308	1,426	1,628	1,758	1,537	467.7	507.9	584.4	597.9	522.7
New Orleans, LA	2,266	2,574	2,794	2,772	2,958	901.0	1,029.3	1,129.3	1,076.2	1,148.4
New York City, NY <sup>2</sup>	25,706	23,449	23,896	22,663	25,118	662.8	596.4	607.9	537.8	596.1
Newark, NJ	1,615	1,632	1,684	1,330	2,117	1,079.4	1,090.5	1,130.3	843.4	1,342.4
Norfolk, VA	801	826	795	964	1,251	719.3	754.7	727.4	841.4	1,091.9
Oakland, CA	2,715	2,942	3,212	3,851	3,562	427.1	452.9	490.0	573.7	530.6
Oklahoma City, OK	892	1,585	1,449	1,686	1,941	391.1	747.8	680.5	770.0	886.4
Omaha, NE	1,107	1,139	1,437	1,516	1,346	486.2	495.6	622.2	640.1	568.3
Philadelphia, PA	9,300	10,182	10,479	10,724	10,833	1,196.5	1,321.5	1,377.2	1,320.0	1,333.4
Phoenix, AZ	5,064	5,653	5,787	6,195	6,841	371.8	401.2	399.9	403.4	445.5
Pittsburgh, PA	2,416	2,415	2,380	2,398	2,798	355.5	358.2	356.2	355.4	414.7
Portland, OR	1,248	1,453	1,379	1,597	1,651	495.4	571.4	540.5	606.7	627.3
Richmond, VA	1,931	1,452	1,713	1,900	1,752	1,837.7	1,360.3	1,643.0	1,797.2	1,657.2
Rochester, NY	NR	NR	NR	86	807	.	.	.	67.2	630.4
Sacramento, CA	2,750	3,069	3,452	3,391	3,279	477.0	526.0	571.9	542.8	524.9
San Antonio, TX	4,093	4,854	4,697	4,767	4,632	596.5	692.0	661.0	666.3	647.5
San Diego, CA	4,733	5,394	5,839	6,371	6,510	350.8	388.1	417.0	455.5	465.4
San Francisco, CA	1,426	1,541	1,541	1,819	1,723	384.3	409.3	408.9	476.3	451.2
San Jose, CA	2,135	2,594	2,636	2,948	3,017	268.0	318.7	322.6	355.3	363.7
Seattle, WA	2,279	2,430	2,654	3,006	2,905	276.6	289.5	314.5	344.5	332.9
St Louis, MO	2,442	2,630	2,736	2,362	2,787	1,314.7	1,430.9	1,512.5	1,279.4	1,509.6
St Paul, MN	830	897	972	1,154	1,098	578.3	635.4	687.3	782.6	744.6
St Petersburg, FL	1,486	1,391	1,446	1,511	1,522	320.7	299.0	310.9	313.1	315.4
Tampa, FL	2,371	1,851	2,380	2,319	2,112	509.5	389.7	492.8	454.5	414.0
Toledo, OH	480	630	815	1,348	1,801	204.1	269.0	349.4	570.5	762.2
Tucson, AZ	1,510	1,299	1,531	1,411	2,058	380.5	321.3	372.6	327.2	477.3
Tulsa, OK	622	1,467	1,331	1,485	1,406	312.3	744.0	670.1	731.4	692.4
Washington, DC	2,658	2,722	2,391	2,786	2,807	946.7	978.9	866.4	920.4	927.3
Wichita, KS	915	665	1,218	1,134	1,166	409.6	290.5	528.1	495.2	509.2
Yonkers, NY	NR	NR	NR	327	326	.	.	.	315.7	314.8
<b>U.S. CITY TOTAL<sup>1</sup></b>	<b>194,155</b>	<b>210,356</b>	<b>217,017</b>	<b>232,899</b>	<b>247,912</b>	<b>547.7</b>	<b>584.0</b>	<b>599.1</b>	<b>615.4</b>	<b>655.1</b>
San Juan, PR	580	445	385	761	901	120.9	81.8	70.4	143.4	169.8
<b>TOTAL</b>	<b>194,735</b>	<b>210,801</b>	<b>217,402</b>	<b>233,660</b>	<b>248,813</b>	<b>542.0</b>	<b>576.5</b>	<b>591.2</b>	<b>608.9</b>	<b>648.4</b>

<sup>1</sup>Rates exclude population of cities that did not report. Cases reported with unknown sex are not included in this table. <sup>2</sup>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 1997-2000 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. \*NR = No report (see Appendix).

**Table 10. Chlamydia — Men — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1997–2001**

City	Cases*					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	179	161	183	216	243	70.0	62.4	71.0	82.6	92.9
Albuquerque, NM	249	278	272	521	654	96.9	108.5	106.8	191.6	240.5
Atlanta, GA	597	1,038	1,262	1,079	1,273	172.7	294.3	354.9	268.6	316.9
Austin, TX	509	564	428	676	683	147.1	159.6	118.4	162.5	164.2
Baltimore, MD	459	566	565	550	580	150.1	188.0	191.3	181.1	191.0
Birmingham, AL	101	123	117	700	433	32.8	40.0	38.1	224.3	138.7
Boston, MA	608	668	573	869	849	226.0	249.2	213.5	301.3	294.4
Buffalo, NY	NR	NR	NR	194	648	.	.	.	125.9	420.7
Charlotte, NC	174	300	296	375	452	58.8	98.8	94.9	109.8	132.4
Chicago, IL	2,965	3,599	3,744	4,160	5,660	210.7	251.4	261.5	278.4	378.7
Cincinnati, OH	247	688	552	748	818	61.1	171.5	138.9	185.6	203.0
Cleveland, OH	365	463	469	748	1,145	55.9	71.3	72.8	113.6	173.9
Columbus, OH	459	812	1,053	1,071	1,434	93.5	165.2	213.0	206.2	276.1
Corpus Christi, TX	184	188	158	233	225	118.1	122.3	103.1	151.8	146.6
Dallas, TX	1,831	2,156	2,156	2,151	2,105	183.7	213.9	212.6	194.1	189.9
Dayton, OH	54	198	415	302	460	20.0	74.1	153.5	112.5	171.4
Denver, CO	645	676	898	974	1,219	265.9	278.3	369.1	347.6	435.0
Des Moines, IA	137	162	262	286	307	80.6	94.1	150.1	157.4	168.9
Detroit, MI	759	860	1,410	2,273	2,415	146.9	144.0	237.6	386.3	410.4
El Paso, TX	176	273	296	343	420	51.7	81.1	88.4	104.6	128.1
Fort Worth, TX	434	763	778	888	858	66.3	114.0	113.8	124.0	119.8
Honolulu, HI	252	355	515	683	898	57.7	81.4	119.5	155.0	203.9
Houston, TX	1,430	1,648	1,634	1,971	1,804	91.0	103.7	101.4	116.4	106.5
Indianapolis, IN	1,013	1,112	1,157	1,604	2,045	261.2	287.3	300.1	385.6	491.6
Jacksonville, FL	649	544	612	692	686	182.9	153.0	171.8	183.2	181.6
Jersey City, NJ	16	21	43	19	72	15.1	19.8	40.8	16.1	60.9
Kansas City, MO	307	320	325	365	351	143.7	148.8	151.1	167.7	161.3
Los Angeles, CA	5,373	5,230	6,020	8,000	8,307	125.8	122.4	139.1	181.7	188.7
Louisville, KY	349	260	307	352	439	109.8	81.9	96.6	106.2	132.4
Memphis, TN	919	1,005	1,005	1,024	1,040	222.5	243.4	242.3	238.9	242.6
Miami, FL	695	685	717	583	721	70.7	66.7	69.2	53.5	66.2
Milwaukee, WI	1,070	1,532	1,556	1,935	1,881	247.3	354.1	363.1	429.5	417.5
Minneapolis, MN	763	793	828	893	898	409.4	448.5	466.2	472.4	475.0
Nashville, TN	512	555	574	645	549	201.6	219.2	228.3	233.8	199.0
New Orleans, LA	603	757	857	1,045	913	277.1	351.3	401.4	460.2	402.0
New York City, NY <sup>2</sup>	2,762	2,669	2,846	3,377	4,477	79.7	76.5	81.4	89.0	118.0
Newark, NJ	52	93	194	234	291	38.5	69.0	144.5	163.5	203.4
Norfolk, VA	84	128	125	129	222	71.2	121.0	107.2	107.7	185.3
Oakland, CA	704	698	759	1,075	1,080	114.0	110.7	118.9	165.8	166.6
Oklahoma City, OK	121	423	319	374	503	56.9	216.2	161.9	181.2	243.8
Omaha, NE	237	270	370	416	373	111.1	126.2	171.8	183.5	164.5
Philadelphia, PA	1,180	1,581	2,181	2,860	2,795	175.1	237.5	332.1	405.6	396.4
Phoenix, AZ	1,516	1,896	1,873	1,792	2,112	113.6	137.9	132.4	116.6	137.5
Pittsburgh, PA	463	565	499	487	646	77.0	95.1	84.8	80.2	106.4
Portland, OR	596	675	639	709	704	247.4	277.1	261.4	274.9	273.0
Richmond, VA	234	167	259	329	329	268.0	191.0	303.1	357.3	357.3
Rochester, NY	NR	NR	NR	29	257	.	.	.	24.4	215.9
Sacramento, CA	725	907	987	1,171	1,101	132.0	161.7	169.9	195.6	183.9
San Antonio, TX	745	1,048	1,032	1,096	1,110	115.3	160.8	155.8	161.8	163.8
San Diego, CA	1,477	1,583	1,704	2,072	2,232	107.5	113.8	119.9	146.4	157.7
San Francisco, CA	817	1,075	1,177	1,274	1,307	226.2	291.1	318.2	322.7	331.0
San Jose, CA	607	717	761	937	1,065	74.7	86.7	91.6	109.9	124.9
Seattle, WA	895	1,056	1,295	1,489	1,390	110.6	129.5	157.7	172.2	160.8
St Louis, MO	211	291	354	349	408	135.1	187.1	231.3	213.4	249.4
St Paul, MN	282	336	377	485	408	212.7	259.8	291.3	353.5	297.4
St Petersburg, FL	303	294	314	323	362	74.2	71.2	76.0	73.6	82.5
Tampa, FL	465	353	377	395	423	104.7	78.4	82.4	80.8	86.5
Toledo, OH	44	144	222	288	430	20.4	67.2	104.1	131.6	196.6
Tucson, AZ	378	311	377	375	642	98.6	80.5	96.0	90.9	155.6
Tulsa, OK	171	315	305	285	314	91.6	171.8	164.7	149.0	164.2
Washington, DC	411	460	316	405	451	165.6	187.7	130.0	150.4	167.4
Wichita, KS	244	196	314	323	299	113.3	89.5	142.1	144.3	133.6
Yonkers, NY	NR	NR	NR	52	47	.	.	.	54.8	49.5
<b>U.S. CITY TOTAL<sup>1</sup></b>	<b>40,807</b>	<b>47,604</b>	<b>52,013</b>	<b>62,298</b>	<b>69,263</b>	<b>121.9</b>	<b>141.0</b>	<b>153.0</b>	<b>173.0</b>	<b>192.4</b>
San Juan, PR	159	170	116	205	175	40.5	33.8	23.0	41.9	35.7
<b>TOTAL</b>	<b>40,966</b>	<b>47,774</b>	<b>52,129</b>	<b>62,503</b>	<b>69,438</b>	<b>121.0</b>	<b>139.4</b>	<b>151.1</b>	<b>171.3</b>	<b>190.3</b>

<sup>1</sup>Rates exclude population of cities that did not report. Cases reported with unknown sex are not included in this table. <sup>2</sup>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 1997-2000 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. \*NR = No report (see Appendix).

**Table 11. Chlamydia — Reported cases and rates per 100,000 population by age and sex: United States, 1997–2001**

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
1997	10-14	12,625	585	12,039	66.5	6.0	130.0
	15-19	218,287	24,032	194,256	1,147.7	245.2	2,107.5
	20-24	177,542	31,073	146,469	1,016.5	346.9	1,721.2
	25-29	69,599	15,651	53,948	370.0	165.8	575.8
	30-34	28,818	7,889	20,929	139.4	76.5	201.8
	35-39	13,509	4,165	9,345	59.9	37.0	82.7
	40-44	5,855	1,969	3,886	27.5	18.6	36.2
	45-54	3,810	1,445	2,365	11.4	8.8	13.8
	55-64	860	360	500	4.0	3.5	4.4
	65+	1,422	304	1,118	4.2	2.2	5.6
TOTAL	534,774	88,167	446,607	200.4	67.5	327.8	
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	

NOTE: This table should be used only for age comparisons. This is because, if age was not specified, cases were prorated according to the distribution of cases for which age was known. For 1997, Delaware did not report age for most chlamydia cases and was excluded from the case counts and the U.S. population denominators. 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, 1997–2001**

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	
1997	10-14	8,969	437	8,532	2,578	70	2,508	4,525	235	4,291	1,509	115	1,394	118	9	109	238	8	230
	15-19	157,306	18,940	138,366	52,237	4,312	47,925	72,707	10,373	62,333	27,022	3,676	23,346	2,201	275	1,926	3,139	303	2,836
	20-24	129,875	25,181	104,694	41,533	6,629	34,904	56,680	12,882	43,798	26,545	4,892	21,653	2,379	418	1,961	2,738	360	2,378
	25-29	51,350	12,578	38,772	15,002	3,243	11,758	21,495	6,360	15,135	12,459	2,575	9,884	1,149	233	916	1,245	168	1,078
	30-34	21,105	6,253	14,853	5,837	1,582	4,255	8,653	3,191	5,462	5,433	1,249	4,184	558	139	419	624	92	533
	35-39	9,764	3,246	6,518	2,902	869	2,033	4,011	1,642	2,369	2,232	617	1,615	318	57	261	302	62	240
	40-44	4,208	1,516	2,693	1,317	437	880	1,706	779	927	907	251	656	148	33	115	130	15	114
	45-54	2,634	1,115	1,520	859	368	492	1,017	530	487	564	168	396	111	38	73	83	11	71
	55-64	562	267	295	179	78	101	229	123	107	114	53	62	16	3	13	23	10	13
	65+	1,061	240	821	368	76	292	441	109	332	196	47	149	20	5	15	37	3	34
TOTAL	388,528	70,296	318,232	123,314	17,804	105,510	172,175	36,447	135,728	77,388	13,786	63,602	7,057	1,222	5,834	8,595	1,037	7,558	
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	

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. This is because, 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: 1997 (CO, DE, DC, GA, MD, MI, MS, NJ, NY, OH, SC); 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). 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 — Reported rates per 100,000 population by age, sex, and race/ethnicity: United States, 1997–2001**

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	63.7	6.0	124.3	27.2	1.4	54.4	259.8	26.5	500.6	71.4	10.6	135.3	20.8	3.1	39.2	130.6	8.4	256.2
15-19	1,115.2	260.1	2,027.5	551.6	88.5	1,042.7	4,130.1	1,157.0	7,216.1	1,246.3	318.9	2,299.6	407.3	100.5	722.0	1,895.0	364.8	3,433.9
20-24	1,004.1	377.7	1,670.2	486.0	151.6	836.1	3,704.3	1,690.3	5,702.9	1,225.6	412.5	2,209.1	428.6	150.4	708.1	1,984.7	518.7	3,470.3
25-29	371.9	180.6	566.4	160.0	69.3	250.6	1,434.3	882.1	1,946.4	582.2	218.8	1,025.9	174.4	74.2	265.6	902.1	237.3	1,598.6
30-34	140.1	82.9	197.5	55.5	30.2	80.7	549.6	428.9	657.9	246.4	105.2	411.1	87.1	45.8	124.4	468.9	138.6	795.0
35-39	59.3	39.3	79.3	24.1	14.4	33.8	242.5	209.9	271.8	112.4	58.8	172.5	50.3	18.8	79.0	221.7	92.6	345.6
40-44	27.0	19.5	34.4	11.2	7.4	15.0	113.4	109.9	116.5	56.0	29.9	84.0	24.7	11.8	36.0	104.4	25.8	177.2
45-54	10.8	9.3	12.2	4.5	3.9	5.1	49.8	56.7	43.9	26.8	16.0	37.6	12.6	9.3	15.5	45.3	13.0	75.3
55-64	3.5	3.5	3.6	1.4	1.3	1.5	18.0	22.1	14.8	9.5	9.3	9.7	3.1	1.2	4.7	21.2	20.0	22.1
65+	4.2	2.3	5.6	1.7	0.9	2.3	26.8	16.8	33.2	14.4	8.1	19.2	3.5	2.3	4.4	29.9	5.3	48.0
<b>TOTAL</b>	<b>198.0</b>	<b>72.9</b>	<b>318.6</b>	<b>86.2</b>	<b>25.4</b>	<b>144.4</b>	<b>872.3</b>	<b>387.1</b>	<b>1,315.0</b>	<b>318.2</b>	<b>109.7</b>	<b>541.2</b>	<b>95.6</b>	<b>34.4</b>	<b>152.2</b>	<b>489.0</b>	<b>120.0</b>	<b>845.5</b>
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
<b>TOTAL</b>	<b>228.2</b>	<b>84.8</b>	<b>365.7</b>	<b>96.0</b>	<b>28.9</b>	<b>160.4</b>	<b>948.0</b>	<b>407.8</b>	<b>1,437.4</b>	<b>342.1</b>	<b>127.3</b>	<b>562.3</b>	<b>116.7</b>	<b>41.4</b>	<b>185.9</b>	<b>573.4</b>	<b>153.9</b>	<b>978.8</b>
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
<b>TOTAL</b>	<b>251.3</b>	<b>96.1</b>	<b>400.1</b>	<b>103.3</b>	<b>32.8</b>	<b>171.0</b>	<b>1,030.7</b>	<b>454.4</b>	<b>1,552.1</b>	<b>387.8</b>	<b>142.6</b>	<b>638.4</b>	<b>137.2</b>	<b>50.8</b>	<b>216.5</b>	<b>605.2</b>	<b>174.6</b>	<b>1,021.4</b>
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	7,862.1	1,394.6	396.1	2,535.2	535.2	131.6	954.4	2,465.5	622.7	4,385.5
20-24	1,340.9	529.5	2,191.0	648.1	228.3	1,078.2	4,563.3	2,067.9	6,938.5	1,432.2	521.0	2,555.1	573.3	214.4	933.4	2,766.7	800.5	4,791.6
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
<b>TOTAL</b>	<b>253.8</b>	<b>101.8</b>	<b>400.4</b>	<b>105.6</b>	<b>35.7</b>	<b>172.5</b>	<b>991.8</b>	<b>456.3</b>	<b>1,479.2</b>	<b>388.9</b>	<b>147.4</b>	<b>646.5</b>	<b>134.8</b>	<b>54.4</b>	<b>209.8</b>	<b>645.5</b>	<b>199.8</b>	<b>1,080.6</b>
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	8,483.0	1,547.1	466.3	2,782.4	567.1	146.4	1,003.3	2,522.4	615.9	4,508.9
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	2,713.9	858.9	4,621.3
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	989.4
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
<b>TOTAL</b>	<b>282.3</b>	<b>117.8</b>	<b>441.2</b>	<b>118.7</b>	<b>42.2</b>	<b>192.3</b>	<b>1,114.5</b>	<b>531.8</b>	<b>1,646.1</b>	<b>447.4</b>	<b>177.5</b>	<b>735.9</b>	<b>149.9</b>	<b>60.5</b>	<b>233.3</b>	<b>650.8</b>	<b>205.0</b>	<b>1,086.1</b>

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex or overall totals. This is because, 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: 1997 (CO, DE, DC, GA, MD, MI, MS, NJ, NY, OH, SC); 1998 (CO, DC

**Table 13. Gonorrhea — Reported cases and rates by state/area, ranked by rates: United States, 2001**

<i>Rank<sup>2</sup></i>	<i>State/Area</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Louisiana	12,253	274.2
2	Mississippi	7,759	272.8
3	South Carolina	10,805	269.3
4	Alabama	11,182	251.4
5	Georgia	18,920	231.1
6	Delaware	1,733	221.2
7	North Carolina	16,583	206.0
8	Illinois	24,025	193.4
9	Ohio	21,163	186.4
10	Tennessee	10,145	178.3
11	Maryland	9,427	178.0
12	Michigan	17,120	172.3
13	Arkansas	4,604	172.2
14	Virginia	11,095	156.7
15	Missouri	8,723	155.9
16	Texas	30,024	144.0
17	Oklahoma	4,784	138.6
18	Florida	21,531	134.7
	<b>U.S. TOTAL<sup>1</sup></b>	<b>361,705</b>	<b>128.5</b>
19	New York	22,299	117.5
20	Pennsylvania	14,244	116.0
21	Indiana	6,972	114.7
22	Wisconsin	6,011	112.1
23	New Jersey	8,921	106.0
24	Kansas	2,669	99.3
25	Kentucky	3,588	88.8
26	Nevada	1,756	87.9
27	Rhode Island	830	79.2
28	Arizona	3,920	76.4
29	Connecticut	2,546	74.8
30	Colorado	3,190	74.2
31	Alaska	457	72.9
32	Nebraska	1,189	69.5
33	California	23,296	68.8
34	New Mexico	1,040	57.2
35	Minnesota	2,701	54.9
36	Washington	2,991	50.7
37	Massachusetts	3,214	50.6
38	Hawaii	604	49.9
39	Iowa	1,418	48.5
40	West Virginia	732	40.5
41	South Dakota	289	38.3
42	Oregon	1,144	33.4
	<b>YEAR 2010 OBJECTIVE</b>		<b>19.0</b>
43	Wyoming	77	15.6
44	New Hampshire	176	14.2
45	Vermont	76	12.5
46	Montana	104	11.5
47	Maine	141	11.1
48	Utah	219	9.8
49	North Dakota	56	8.7
50	Idaho	76	5.9

<sup>1</sup>Total includes cases reported by Washington, D.C., but excludes outlying areas (Guam with 48 cases and rate of 31.0, Puerto Rico with 589 cases and rate of 15.5, and Virgin Islands with 34 cases and rate of 31.3).

<sup>2</sup>States were ranked in descending order by rate, number of cases, and alphabetically by state.



**Table 14. Gonorrhea — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	12,031	12,737	10,888	12,063	11,182	278.5	292.7	249.2	271.3	251.4
Alaska	391	331	302	361	457	64.2	53.9	48.7	57.6	72.9
Arizona	3,802	4,213	4,293	4,130	3,920	83.5	90.2	89.8	80.5	76.4
Arkansas	4,382	3,953	3,226	3,642	4,604	173.7	155.7	126.4	136.2	172.2
California	17,979	19,590	18,672	21,619	23,296	55.7	60.0	56.3	63.8	68.8
Colorado	2,315	2,033	2,526	3,112	3,190	59.5	51.2	62.3	72.4	74.2
Connecticut	3,154	3,177	3,321	2,912	2,546	96.5	97.0	101.2	85.5	74.8
Delaware	1,273	1,556	1,662	1,735	1,733	174.0	209.3	220.6	221.4	221.2
Florida	19,079	19,080	22,794	22,781	21,531	130.2	127.9	150.8	142.5	134.7
Georgia	18,471	20,666	21,244	20,265	18,920	246.7	270.4	272.8	247.5	231.1
Hawaii	510	506	463	483	604	43.0	42.4	39.1	39.9	49.9
Idaho	158	182	89	98	76	13.1	14.8	7.1	7.6	5.9
Illinois	19,524	22,499	24,136	24,812	24,025	164.1	186.8	199.0	199.8	193.4
Indiana	6,155	6,307	6,092	6,525	6,972	105.0	106.9	102.5	107.3	114.7
Iowa	1,311	1,616	1,365	1,392	1,418	46.0	56.5	47.6	47.6	48.5
Kansas	2,075	2,622	2,665	2,795	2,669	80.0	99.7	100.4	104.0	99.3
Kentucky	4,027	3,813	3,349	3,502	3,588	103.0	96.9	84.6	86.6	88.8
Louisiana	10,782	12,499	13,189	13,245	12,253	247.8	286.1	301.7	296.4	274.2
Maine	66	67	83	90	141	5.3	5.4	6.6	7.1	11.1
Maryland	11,568	11,254	10,430	9,837	9,427	227.1	219.2	201.7	185.7	178.0
Massachusetts	2,225	2,258	2,453	3,045	3,214	36.4	36.7	39.7	48.0	50.6
Michigan	15,736	16,359	15,907	18,182	17,120	161.0	166.6	161.3	182.9	172.3
Minnesota	2,417	2,708	2,830	3,160	2,701	51.6	57.3	59.3	64.2	54.9
Mississippi	9,367	10,689	10,411	9,217	7,759	343.1	388.4	376.0	324.0	272.8
Missouri	7,658	9,463	8,187	8,883	8,723	141.8	174.0	149.7	158.8	155.9
Montana	66	55	53	60	104	7.5	6.2	6.0	6.7	11.5
Nebraska	1,210	1,204	1,471	1,534	1,189	73.0	72.4	88.3	89.6	69.5
Nevada	829	1,445	1,303	1,553	1,756	49.4	82.7	72.0	77.7	87.9
New Hampshire	96	91	115	110	176	8.2	7.7	9.6	8.9	14.2
New Jersey	7,566	7,858	7,852	7,232	8,921	94.0	96.8	96.4	85.9	106.0
New Mexico	857	957	974	1,152	1,040	49.5	55.1	56.0	63.3	57.2
New York	22,393	19,062	19,826	20,114	22,299	123.5	104.9	109.0	106.0	117.5
North Carolina	16,888	19,230	19,428	17,823	16,583	227.4	254.8	253.9	221.4	206.0
North Dakota	68	80	83	73	56	10.6	12.5	13.1	11.4	8.7
Ohio	14,961	18,275	18,141	19,303	21,163	133.7	163.0	161.2	170.0	186.4
Oklahoma	4,760	5,243	4,021	4,229	4,784	143.5	156.7	119.7	122.6	138.6
Oregon	773	880	903	1,038	1,144	23.8	26.8	27.2	30.3	33.4
Pennsylvania	9,967	11,719	13,295	13,607	14,244	82.9	97.6	110.8	110.8	116.0
Rhode Island	422	430	601	661	830	42.7	43.5	60.7	63.1	79.2
South Carolina	11,487	11,575	15,037	8,383	10,805	305.5	301.7	387.0	208.9	269.3
South Dakota	172	221	192	277	289	23.3	29.9	26.2	36.7	38.3
Tennessee	11,023	11,840	11,366	11,876	10,145	205.3	218.0	207.3	208.7	178.3
Texas	26,612	32,833	32,910	32,919	30,024	136.9	166.2	164.2	157.9	144.0
Utah	278	236	254	231	219	13.5	11.2	11.9	10.3	9.8
Vermont	53	38	52	65	76	9.0	6.4	8.8	10.7	12.5
Virginia	8,888	9,265	9,402	10,175	11,095	132.0	136.4	136.8	143.7	156.7
Washington	1,956	1,948	2,132	2,418	2,991	34.9	34.2	37.0	41.0	50.7
West Virginia	957	920	584	645	732	52.7	50.8	32.3	35.7	40.5
Wisconsin	4,316	6,365	6,662	7,013	6,011	83.5	121.9	126.9	130.7	112.1
Wyoming	54	36	43	53	77	11.3	7.5	9.0	10.7	15.6
<b>U.S. TOTAL<sup>1</sup></b>	<b>327,665</b>	<b>356,492</b>	<b>360,813</b>	<b>363,136</b>	<b>361,705</b>	<b>122.4</b>	<b>131.9</b>	<b>132.3</b>	<b>129.0</b>	<b>128.5</b>
Northeast	45,942	44,700	47,598	47,836	52,447	89.1	86.4	91.8	89.3	97.9
Midwest	75,603	87,719	87,731	93,949	92,336	121.0	139.5	138.7	145.9	143.4
South	176,152	191,661	193,477	185,043	178,048	187.0	200.8	200.6	184.6	177.6
West	29,968	32,412	32,007	36,308	38,874	50.5	53.8	52.3	57.5	61.5
Guam	47	72	59	62	48	30.1	45.0	36.1	40.1	31.0
Puerto Rico	526	400	321	527	589	13.7	10.4	8.3	13.8	15.5
Virgin Islands	40	39	51	24	34	36.5	35.6	45.2	22.1	31.3
<b>OUTLYING AREAS</b>	<b>613</b>	<b>511</b>	<b>431</b>	<b>613</b>	<b>671</b>	<b>15.0</b>	<b>12.4</b>	<b>10.3</b>	<b>15.1</b>	<b>16.5</b>
<b>TOTAL</b>	<b>328,278</b>	<b>357,003</b>	<b>361,244</b>	<b>363,749</b>	<b>362,376</b>	<b>120.8</b>	<b>130.1</b>	<b>130.5</b>	<b>127.4</b>	<b>126.9</b>

<sup>1</sup>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, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	5,984	6,313	5,460	5,984	5,712	266.9	278.8	240.3	260.1	248.3
Alaska	230	181	153	198	244	79.6	62.0	52.0	65.4	80.6
Arizona	1,625	1,730	1,760	1,754	1,700	70.8	73.3	72.9	68.3	66.2
Arkansas	2,071	1,919	1,576	1,807	2,404	159.2	146.2	119.5	132.0	175.6
California	8,462	9,345	8,903	9,624	10,448	52.5	57.2	53.7	56.6	61.5
Colorado	1,224	1,055	1,271	1,544	1,588	62.4	52.7	62.1	72.3	74.4
Connecticut	1,642	1,714	1,796	1,621	1,411	97.7	101.7	106.3	92.3	80.3
Delaware	705	855	912	987	1,002	188.0	223.8	235.5	244.9	248.6
Florida	9,513	8,923	10,960	10,862	10,380	126.3	116.2	140.9	132.7	126.8
Georgia	9,532	10,056	10,092	9,844	9,590	248.5	256.3	252.5	236.7	230.6
Hawaii	264	278	251	240	292	44.8	46.7	42.3	39.8	48.4
Idaho	83	74	42	51	39	13.7	12.0	6.7	7.9	6.0
Illinois	9,560	10,737	11,563	11,829	12,178	157.1	174.0	186.1	186.6	192.1
Indiana	3,141	3,308	3,254	3,446	3,792	104.5	109.2	106.6	111.2	122.4
Iowa	762	895	759	740	766	52.2	60.9	51.6	49.6	51.4
Kansas	1,133	1,454	1,573	1,496	1,468	86.0	108.8	116.6	110.0	107.9
Kentucky	1,882	1,866	1,626	1,725	1,812	93.7	92.1	79.8	83.5	87.7
Louisiana	5,202	6,143	6,697	6,471	6,056	230.7	270.8	295.3	280.6	262.6
Maine	31	31	40	29	55	4.9	4.9	6.2	4.4	8.4
Maryland	5,767	5,391	4,749	4,577	4,591	220.6	204.2	178.6	167.1	167.6
Massachusetts	1,151	1,155	1,207	1,568	1,591	36.4	36.3	37.8	47.7	48.4
Michigan	7,969	8,265	7,771	9,190	9,057	159.1	164.0	153.5	181.4	178.8
Minnesota	1,307	1,443	1,495	1,681	1,461	55.1	60.2	61.7	67.7	58.8
Mississippi	5,188	5,973	6,137	5,603	4,663	365.7	416.8	425.6	380.9	317.0
Missouri	4,113	4,924	4,459	4,489	4,540	147.9	175.5	158.2	156.1	157.9
Montana	31	33	35	38	57	7.0	7.5	7.9	8.4	12.6
Nebraska	670	683	814	849	671	79.3	80.4	95.6	97.8	77.3
Nevada	317	591	480	618	761	38.6	68.9	54.0	63.0	77.6
New Hampshire	57	47	61	53	96	9.6	7.8	10.0	8.4	15.3
New Jersey	3,564	3,763	3,824	3,571	4,522	86.0	89.9	91.1	82.4	104.4
New Mexico	509	530	528	573	472	58.0	60.1	59.7	62.0	51.0
New York	12,833	10,586	10,639	10,691	11,873	136.6	112.2	112.9	108.8	120.8
North Carolina	7,844	9,129	9,089	8,468	7,810	205.6	234.9	230.6	206.2	190.2
North Dakota	42	56	46	36	30	13.1	17.5	14.4	11.2	9.3
Ohio	8,349	10,117	9,707	10,311	11,257	144.8	174.7	166.9	176.5	192.7
Oklahoma	2,418	2,932	2,240	2,433	2,670	142.8	171.2	130.3	138.7	152.2
Oregon	348	430	433	486	448	21.2	25.9	25.8	28.2	26.0
Pennsylvania	5,396	6,472	7,356	7,371	7,872	86.6	103.9	118.1	116.1	123.9
Rhode Island	263	258	371	381	488	51.4	50.3	72.1	69.9	89.6
South Carolina	5,128	5,730	5,874	4,057	5,126	263.9	288.3	292.1	196.6	248.5
South Dakota	87	124	117	165	166	23.3	33.1	31.4	43.4	43.7
Tennessee	4,940	5,263	4,965	5,343	4,808	178.2	187.3	175.0	183.0	164.7
Texas	13,797	16,704	16,819	16,932	15,599	140.4	166.8	165.6	161.3	148.6
Utah	84	70	100	99	95	8.1	6.6	9.3	8.9	8.5
Vermont	32	22	22	33	42	10.7	7.3	7.3	10.6	13.5
Virginia	4,290	4,543	4,566	4,856	5,485	124.9	130.7	129.9	134.6	152.1
Washington	965	863	1,009	1,078	1,301	34.3	30.2	34.9	36.4	44.0
West Virginia	512	549	357	375	418	54.5	58.5	38.1	40.4	45.0
Wisconsin	2,344	3,754	3,826	4,189	3,672	89.3	141.3	143.3	154.3	135.3
Wyoming	30	23	26	31	43	12.6	9.6	10.9	12.6	17.5
<b>U.S. TOTAL<sup>1</sup></b>	<b>165,310</b>	<b>179,204</b>	<b>179,319</b>	<b>181,668</b>	<b>183,863</b>	<b>121.0</b>	<b>129.6</b>	<b>128.6</b>	<b>126.7</b>	<b>128.2</b>
Northeast	24,969	24,048	25,316	25,318	27,950	93.7	89.8	94.4	91.4	100.9
Midwest	39,477	45,760	45,384	48,421	49,058	123.5	141.9	140.0	147.5	149.4
South	86,692	94,193	93,628	91,595	89,367	179.5	192.1	188.9	179.0	174.6
West	14,172	15,203	14,991	16,334	17,488	47.7	50.3	48.9	51.6	55.2
Guam	12	25	28	23	22	16.3	33.3	36.4	30.4	29.1
Puerto Rico	212	163	132	238	279	10.7	8.1	6.5	12.1	14.1
Virgin Islands	19	16	38	14	20	33.3	27.8	73.7	24.7	35.2
<b>OUTLYING AREAS</b>	<b>243</b>	<b>204</b>	<b>198</b>	<b>275</b>	<b>321</b>	<b>11.5</b>	<b>9.5</b>	<b>9.2</b>	<b>13.0</b>	<b>15.2</b>
<b>TOTAL</b>	<b>165,553</b>	<b>179,408</b>	<b>179,517</b>	<b>181,943</b>	<b>184,184</b>	<b>119.3</b>	<b>127.8</b>	<b>126.8</b>	<b>125.1</b>	<b>126.6</b>

<sup>1</sup>Includes cases reported by Washington, D.C. 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, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	6,022	6,411	5,399	6,039	5,457	290.0	307.1	257.4	281.3	254.2
Alaska	161	150	149	163	213	50.3	46.6	45.8	50.3	65.7
Arizona	2,177	2,483	2,533	2,376	2,220	96.4	107.5	107.1	92.8	86.7
Arkansas	2,295	2,029	1,650	1,832	2,191	187.9	165.5	133.8	140.4	167.9
California	9,452	10,192	9,618	11,896	12,701	58.5	62.4	58.0	70.5	75.3
Colorado	1,091	978	1,255	1,568	1,602	56.5	49.7	62.4	72.4	74.0
Connecticut	1,512	1,463	1,525	1,291	1,132	95.1	92.1	95.7	78.3	68.6
Delaware	568	701	750	748	731	159.3	193.9	204.8	196.6	192.1
Florida	9,566	10,054	11,797	11,919	11,149	134.3	138.9	160.9	152.9	143.0
Georgia	8,916	10,525	11,039	10,309	9,325	244.2	283.1	291.2	256.0	231.6
Hawaii	246	228	211	243	312	41.2	38.1	35.6	39.9	51.3
Idaho	75	108	46	47	35	12.4	17.6	7.4	7.2	5.4
Illinois	9,964	11,761	12,559	12,981	11,845	171.5	200.2	212.3	213.5	194.8
Indiana	3,006	2,991	2,836	3,069	3,169	105.1	104.2	98.1	102.9	106.3
Iowa	549	721	606	652	652	39.4	51.7	43.4	45.4	45.4
Kansas	942	1,168	1,092	1,299	1,201	73.7	90.4	83.7	97.8	90.4
Kentucky	2,137	1,887	1,669	1,751	1,769	112.5	98.8	86.8	88.6	89.6
Louisiana	5,580	6,356	6,492	6,774	6,197	266.1	302.6	308.6	313.2	286.5
Maine	35	36	43	61	86	5.8	5.9	7.0	9.8	13.9
Maryland	5,801	5,846	5,669	5,196	4,836	233.9	234.3	225.6	203.1	189.1
Massachusetts	1,074	1,103	1,246	1,477	1,622	36.4	37.2	41.8	48.3	53.0
Michigan	7,767	8,094	8,136	8,992	8,063	163.0	169.5	169.5	184.5	165.5
Minnesota	1,110	1,265	1,335	1,479	1,240	48.0	54.3	56.7	60.7	50.9
Mississippi	4,049	4,653	4,184	3,586	3,096	308.6	352.8	315.4	261.1	225.4
Missouri	3,545	4,539	3,728	4,394	4,183	135.2	172.4	140.7	161.5	153.8
Montana	35	22	18	22	47	8.0	5.0	4.1	4.9	10.5
Nebraska	537	520	657	681	516	66.1	63.9	80.6	80.7	61.2
Nevada	512	854	822	935	993	59.9	96.1	89.2	91.8	97.5
New Hampshire	39	44	54	57	80	6.7	7.5	9.1	9.4	13.2
New Jersey	3,999	4,094	4,019	3,654	4,391	102.3	104.2	101.8	89.5	107.5
New Mexico	348	427	445	572	555	40.8	50.0	52.0	64.0	62.1
New York	9,560	8,476	9,176	9,378	10,397	109.3	96.9	104.6	102.5	113.7
North Carolina	9,044	10,101	10,339	9,354	8,772	250.5	276.0	278.7	237.2	222.5
North Dakota	26	24	37	37	26	8.1	7.6	11.7	11.5	8.1
Ohio	6,506	8,023	8,245	8,837	9,679	120.1	148.1	151.5	160.3	175.6
Oklahoma	2,342	2,311	1,781	1,796	2,114	144.3	141.4	108.6	105.9	124.7
Oregon	425	450	470	552	696	26.5	27.8	28.7	32.5	41.0
Pennsylvania	4,571	5,247	5,939	6,236	6,372	79.0	90.9	103.0	105.2	107.5
Rhode Island	159	172	230	280	342	33.4	36.2	48.3	55.6	67.9
South Carolina	6,340	5,769	9,052	4,256	5,640	349.0	312.1	482.8	218.4	289.4
South Dakota	85	97	75	111	123	23.4	26.7	20.8	29.6	32.8
Tennessee	6,083	6,577	6,401	6,533	5,337	234.4	251.0	241.8	235.8	192.7
Texas	12,815	15,995	15,973	15,919	14,370	133.3	164.1	161.5	153.8	138.8
Utah	194	166	154	132	124	18.9	15.9	14.5	11.8	11.1
Vermont	21	16	30	32	34	7.2	5.5	10.3	10.7	11.4
Virginia	4,590	4,720	4,832	5,307	5,574	139.2	142.3	143.9	152.9	160.5
Washington	991	1,085	1,123	1,340	1,690	35.4	38.4	39.2	45.7	57.6
West Virginia	445	369	227	269	313	50.8	42.3	26.1	30.6	35.6
Wisconsin	1,972	2,611	2,827	2,817	2,321	77.5	101.7	109.6	106.3	87.6
Wyoming	24	13	17	22	34	9.9	5.4	7.1	8.9	13.7
<b>U.S. TOTAL<sup>1</sup></b>	<b>161,940</b>	<b>176,529</b>	<b>180,524</b>	<b>180,701</b>	<b>177,194</b>	<b>123.6</b>	<b>133.7</b>	<b>135.5</b>	<b>130.9</b>	<b>128.4</b>
Northeast	20,970	20,651	22,262	22,466	24,456	84.1	82.8	89.0	86.8	94.4
Midwest	36,009	41,814	42,133	45,349	43,018	118.1	136.4	136.7	143.7	136.3
South	89,230	96,908	99,268	93,018	88,498	194.4	208.9	211.6	189.6	180.4
West	15,731	17,156	16,861	19,868	21,222	53.0	57.1	55.3	63.0	67.3
Guam	35	47	31	39	26	42.3	55.5	35.8	49.3	32.8
Puerto Rico	314	237	189	289	310	17.1	12.8	10.1	15.8	16.9
Virgin Islands	21	23	13	10	14	39.9	43.2	21.2	19.3	27.0
<b>OUTLYING AREAS</b>	<b>370</b>	<b>307</b>	<b>233</b>	<b>338</b>	<b>350</b>	<b>18.8</b>	<b>15.4</b>	<b>11.6</b>	<b>17.2</b>	<b>17.8</b>
<b>TOTAL</b>	<b>162,310</b>	<b>176,836</b>	<b>180,757</b>	<b>181,039</b>	<b>177,544</b>	<b>122.0</b>	<b>131.9</b>	<b>133.6</b>	<b>129.3</b>	<b>126.8</b>

<sup>1</sup>Includes cases reported by Washington, D.C. 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, 2001**

<i>Rank</i> <sup>1</sup>	<i>City*</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Richmond, VA	2,109	1,066.3
2	St Louis, MO	3,185	914.7
3	Baltimore, MD	5,014	770.0
4	Rochester, NY	1,769	716.0
5	Buffalo, NY	2,194	681.1
6	Detroit, MI	8,220	670.3
7	New Orleans, LA	3,160	652.0
8	Norfolk, VA	1,450	618.6
9	Newark, NJ	1,798	597.8
10	Atlanta, GA	4,621	566.3
11	Philadelphia, PA	8,096	533.5
12	Washington, DC	2,883	504.0
13	Memphis, TN	4,420	492.5
14	Kansas City, MO	2,161	478.2
15	Chicago, IL	14,326	464.2
16	Milwaukee, WI	4,150	441.4
17	Indianapolis, IN	3,383	393.2
18	Birmingham, AL	2,600	392.7
19	Oklahoma City, OK	1,617	380.2
20	Cincinnati, OH	3,178	376.0
21	Jacksonville, FL	2,731	350.6
22	Minneapolis, MN	1,295	337.3
23	Columbus, OH	3,349	313.3
24	Denver, CO	1,618	291.7
25	Charlotte, NC	2,014	289.6
26	Nashville, TN	1,625	285.1
27	Dallas, TX	6,166	277.9
28	Cleveland, OH	3,854	276.5
29	San Francisco, CA	2,053	264.3
30	Toledo, OH	1,187	260.8
31	Tulsa, OK	1,014	257.2
32	Dayton, OH	1,428	255.4
33	Boston, MA	1,332	222.7
34	Corpus Christi, TX	667	212.7
35	Louisville, KY	1,436	207.0
36	Jersey City, NJ	489	203.3
37	Omaha, NE	934	201.5
38	St Paul, MN	560	196.7
39	Austin, TX	1,536	189.1
40	Wichita, KS	837	184.8
41	Akron, OH	962	177.2
42	Houston, TX	5,489	161.4
43	Fort Worth, TX	2,291	158.4
44	New York City, NY	12,614	157.5
45	Oakland, CA	2,039	154.5
46	San Antonio, TX	2,140	153.6
47	Tampa, FL	1,517	151.9
48	St Petersburg, FL	1,391	151.0
49	Pittsburgh, PA	1,916	149.5
50	Portland, OR	743	142.6
51	Albuquerque, NM	647	116.2
52	Sacramento, CA	1,171	95.7
53	Phoenix, AZ	2,826	92.0
54	Seattle, WA	1,556	89.6
55	Tucson, AZ	748	88.7
56	Miami, FL	1,964	87.2
57	Los Angeles, CA	7,747	86.9
58	Des Moines, IA	270	72.1
59	Yonkers, NY	143	72.0
60	San Diego, CA	1,878	66.7
61	Honolulu, HI	557	63.6
62	El Paso, TX	291	42.8
63	San Jose, CA	547	32.5
	<b>YEAR 2010 OBJECTIVE</b>		<b>19.0</b>

\*Excludes outlying areas (San Juan, PR, with 281 cases and rate of 27.5).

<sup>1</sup>Cities were ranked in descending order by rate, number of cases, and alphabetically by state.

**Table 18. Gonorrhea — Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	669	823	848	913	962	125.8	153.1	157.7	168.2	177.2
Albuquerque, NM	544	570	472	697	647	103.4	108.4	90.2	125.2	116.2
Atlanta, GA	5,468	5,599	5,631	3,456	4,621	756.8	757.3	756.0	423.5	566.3
Austin, TX	1,531	1,803	1,562	1,518	1,536	220.7	253.7	214.8	186.9	189.1
Baltimore, MD	6,693	6,989	6,124	5,603	5,014	1,018.3	1,082.6	967.9	860.5	770.0
Birmingham, AL	3,104	3,172	2,492	3,018	2,600	471.3	481.0	379.1	455.9	392.7
Boston, MA	939	982	900	1,229	1,332	168.5	176.5	161.8	205.5	222.7
Buffalo, NY	1,172	1,108	1,233	1,572	2,194	366.0	349.8	392.8	488.0	681.1
Charlotte, NC	1,703	1,911	1,908	1,758	2,014	277.7	302.9	294.3	252.8	289.6
Chicago, IL	12,316	14,143	15,169	14,872	14,326	422.6	474.8	509.0	481.9	464.2
Cincinnati, OH	2,552	3,583	2,814	3,227	3,178	299.7	422.8	334.8	381.8	376.0
Cleveland, OH	2,743	3,030	3,391	3,497	3,854	197.8	219.5	247.2	250.9	276.5
Columbus, OH	2,218	3,082	3,120	3,386	3,349	218.0	301.8	303.6	316.8	313.3
Corpus Christi, TX	351	449	524	775	667	110.6	141.9	166.1	247.1	212.7
Dallas, TX	6,645	7,421	7,476	7,315	6,166	328.4	361.8	362.5	329.7	277.9
Dayton, OH	1,070	1,092	932	1,015	1,428	190.6	195.5	164.7	181.6	255.4
Denver, CO	1,140	973	1,157	1,594	1,618	228.5	195.0	231.5	287.4	291.7
Des Moines, IA	330	371	333	380	270	93.2	103.1	91.3	101.4	72.1
Detroit, MI	7,518	8,459	7,900	9,610	8,220	690.3	671.2	630.3	783.6	670.3
El Paso, TX	155	252	156	209	291	22.1	35.8	22.2	30.8	42.8
Fort Worth, TX	1,759	3,310	2,847	2,787	2,291	132.5	244.2	205.9	192.7	158.4
Honolulu, HI	484	481	430	433	557	55.6	55.1	49.7	49.4	63.6
Houston, TX	6,606	7,226	5,939	5,918	5,489	209.2	225.4	182.7	174.0	161.4
Indianapolis, IN	2,912	3,071	3,045	3,206	3,383	357.9	377.5	375.5	372.6	393.2
Jacksonville, FL	2,089	2,463	2,972	3,640	2,731	285.1	334.8	402.4	467.3	350.6
Jersey City, NJ	373	491	490	465	489	171.2	223.1	224.4	193.3	203.3
Kansas City, MO	1,872	2,538	1,956	2,688	2,161	418.7	561.6	433.1	594.9	478.2
Los Angeles, CA	5,810	5,986	6,054	7,307	7,747	67.9	69.4	69.3	82.0	86.9
Louisville, KY	1,817	1,462	1,195	1,200	1,436	270.9	217.5	177.6	173.0	207.0
Memphis, TN	4,876	5,235	5,038	4,941	4,420	563.1	602.5	577.1	550.5	492.5
Miami, FL	2,168	2,573	2,775	1,995	1,964	106.0	119.5	127.5	88.5	87.2
Milwaukee, WI	3,303	4,856	4,884	5,146	4,150	363.4	532.6	538.9	547.4	441.4
Minneapolis, MN	1,430	1,562	1,558	1,577	1,295	373.0	428.5	425.5	410.7	337.3
Nashville, TN	2,050	1,777	1,785	2,404	1,625	384.1	332.8	336.8	421.8	285.1
New Orleans, LA	2,743	2,691	2,687	3,015	3,160	584.8	578.0	583.0	622.1	652.0
New York City, NY	15,592	12,097	12,210	11,669	12,614	212.3	163.0	164.4	145.7	157.5
Newark, NJ	1,967	1,781	1,741	1,558	1,798	691.2	626.3	614.7	518.0	597.8
Norfolk, VA	1,466	1,415	1,291	1,490	1,450	639.1	657.5	571.6	635.7	618.6
Oakland, CA	1,559	1,742	1,700	1,793	2,039	124.4	136.1	131.4	135.9	154.5
Oklahoma City, OK	982	1,571	1,351	1,434	1,617	222.9	385.4	329.6	337.2	380.2
Omaha, NE	813	871	1,000	1,161	934	184.4	196.3	224.1	250.4	201.5
Philadelphia, PA	6,504	7,271	7,775	8,198	8,096	448.1	506.2	548.5	540.2	533.5
Phoenix, AZ	3,007	3,543	3,586	3,195	2,826	111.5	127.3	125.3	104.0	92.0
Pittsburgh, PA	1,026	1,351	1,573	1,494	1,916	80.1	106.5	125.2	116.6	149.5
Portland, OR	478	527	540	681	743	97.0	105.8	108.1	130.7	142.6
Richmond, VA	1,465	1,527	1,827	1,752	2,109	761.5	786.4	963.1	885.8	1,066.3
Rochester, NY	1,867	1,992	2,037	2,142	1,769	774.1	827.9	851.0	866.9	716.0
Sacramento, CA	1,380	1,546	1,236	1,295	1,171	122.6	135.1	104.3	105.8	95.7
San Antonio, TX	1,751	1,862	2,087	2,298	2,140	131.4	137.6	152.0	165.0	153.6
San Diego, CA	1,509	1,595	1,561	1,798	1,878	55.4	57.4	55.3	63.9	66.7
San Francisco, CA	1,510	1,858	1,606	2,161	2,053	206.2	249.1	215.1	278.2	264.3
San Jose, CA	471	453	418	446	547	29.3	27.6	25.4	26.5	32.5
Seattle, WA	918	975	922	1,221	1,556	56.2	58.9	55.4	70.3	89.6
St Louis, MO	2,806	3,652	2,876	2,879	3,185	820.8	1,076.3	861.2	826.8	914.7
St Paul, MN	383	519	545	703	560	138.7	191.9	201.2	247.0	196.7
St Petersburg, FL	1,201	1,468	1,835	1,542	1,391	137.8	167.2	208.9	167.3	151.0
Tampa, FL	2,246	1,696	1,783	1,653	1,517	247.0	183.3	189.6	165.5	151.9
Toledo, OH	346	655	624	864	1,187	76.7	146.0	139.8	189.9	260.8
Tucson, AZ	575	403	415	591	748	73.7	51.0	51.6	70.0	88.7
Tulsa, OK	618	1,308	964	892	1,014	160.2	343.8	251.2	226.2	257.2
Washington, DC	4,557	4,508	3,536	2,706	2,883	861.5	861.7	681.3	473.0	504.0
Wichita, KS	614	466	771	675	837	140.0	104.0	170.7	149.0	184.8
Yonkers, NY	79	105	102	109	143	41.0	54.4	52.4	54.9	72.0
<b>U.S. CITY TOTAL</b>	<b>156,843</b>	<b>170,291</b>	<b>165,709</b>	<b>170,766</b>	<b>167,906</b>	<b>225.1</b>	<b>241.4</b>	<b>233.5</b>	<b>231.2</b>	<b>227.4</b>
San Juan, PR	233	227	179	270	281	26.7	21.7	17.0	26.5	27.5
<b>TOTAL</b>	<b>157,076</b>	<b>170,518</b>	<b>165,888</b>	<b>171,036</b>	<b>168,187</b>	<b>222.6</b>	<b>238.2</b>	<b>230.3</b>	<b>228.4</b>	<b>224.6</b>



**Table 19. Gonorrhea — Women – Reported cases and rates in selected cities of >200,000 population listed in alphabetical order: United States and outlying areas, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	356	435	413	463	484	128.9	155.4	147.5	164.5	172.0
Albuquerque, NM	306	308	234	323	254	113.7	114.2	87.1	113.4	89.2
Atlanta, GA	2,544	2,462	2,443	1,543	2,110	674.9	636.8	627.6	372.5	509.3
Austin, TX	860	894	768	712	722	247.5	250.2	210.1	179.6	182.1
Baltimore, MD	3,279	3,258	2,702	2,578	2,423	933.0	945.7	800.8	741.9	697.3
Birmingham, AL	1,567	1,555	1,229	1,552	1,420	447.3	442.0	350.6	443.5	405.8
Boston, MA	445	477	410	618	623	154.3	165.4	142.4	199.6	201.2
Buffalo, NY	720	682	725	914	1,212	431.4	412.8	443.9	543.7	721.0
Charlotte, NC	644	830	754	748	830	203.0	253.7	224.0	211.3	234.5
Chicago, IL	5,738	6,345	6,821	6,525	6,924	380.7	410.1	440.4	409.9	435.0
Cincinnati, OH	1,515	2,044	1,600	1,868	1,743	338.6	458.0	361.2	422.3	394.0
Cleveland, OH	1,573	1,672	1,779	1,697	1,816	214.4	228.6	244.6	230.7	246.9
Columbus, OH	1,214	1,584	1,575	1,798	1,696	230.7	299.1	295.3	327.1	308.5
Corpus Christi, TX	163	181	224	355	349	100.8	111.3	138.1	221.7	217.9
Dallas, TX	3,319	3,591	3,616	3,494	3,103	323.4	344.4	345.1	314.6	279.4
Dayton, OH	502	490	393	430	722	172.0	168.2	133.0	147.9	248.4
Denver, CO	577	463	515	714	717	225.1	180.8	200.8	260.2	261.3
Des Moines, IA	160	189	161	200	144	86.9	100.7	84.7	103.7	74.7
Detroit, MI	3,583	4,147	3,706	4,737	4,336	626.0	625.4	561.5	742.5	679.6
El Paso, TX	76	123	78	96	148	21.1	33.6	21.2	27.3	42.1
Fort Worth, TX	1,014	1,743	1,405	1,346	1,153	150.8	254.0	201.0	184.3	157.9
Honolulu, HI	252	262	231	217	269	58.2	60.0	53.3	49.8	61.7
Houston, TX	3,082	3,285	2,699	2,986	2,674	194.3	203.1	164.7	175.0	156.7
Indianapolis, IN	1,401	1,532	1,601	1,516	1,751	329.0	359.3	376.3	341.1	394.0
Jacksonville, FL	1,009	898	1,238	1,599	1,200	267.1	236.3	323.8	398.7	299.2
Jersey City, NJ	204	231	228	211	234	181.8	202.9	201.9	172.4	191.2
Kansas City, MO	1,072	1,382	1,045	1,242	1,039	459.3	583.5	441.8	530.3	443.6
Los Angeles, CA	2,645	2,792	2,835	3,072	3,469	61.7	64.2	64.3	68.2	77.0
Louisville, KY	745	624	494	510	640	211.1	176.0	139.1	140.9	176.8
Memphis, TN	2,175	2,259	2,163	2,225	2,070	480.2	495.4	472.1	474.6	441.5
Miami, FL	987	1,053	1,152	750	775	93.0	93.5	101.1	64.4	66.6
Milwaukee, WI	1,707	2,862	2,783	3,057	2,540	358.4	597.5	582.5	624.4	518.8
Minneapolis, MN	737	806	781	725	625	374.1	429.4	414.2	371.9	320.6
Nashville, TN	845	718	736	1,016	752	302.1	255.8	264.2	345.5	255.8
New Orleans, LA	1,226	1,158	1,198	1,325	1,310	487.5	463.1	484.2	514.4	508.6
New York City, NY	9,101	6,791	6,402	6,051	6,671	234.6	172.7	162.9	143.6	158.3
Newark, NJ	848	794	806	692	881	566.7	530.5	541.0	438.8	558.6
Norfolk, VA	636	593	542	646	662	571.1	541.8	495.9	563.8	577.8
Oakland, CA	901	987	950	992	1,062	141.7	151.9	144.9	147.8	158.2
Oklahoma City, OK	503	839	721	839	909	220.6	395.8	338.6	383.2	415.1
Omaha, NE	456	494	546	626	518	200.3	215.0	236.4	264.3	218.7
Philadelphia, PA	3,507	3,938	4,179	4,288	4,421	451.2	511.1	549.2	527.8	544.2
Phoenix, AZ	1,209	1,415	1,434	1,325	1,169	88.8	100.4	99.1	86.3	76.1
Pittsburgh, PA	543	788	920	826	1,045	79.9	116.9	137.7	122.4	154.9
Portland, OR	203	246	250	303	268	80.6	96.7	98.0	115.1	101.8
Richmond, VA	650	752	956	783	1,016	618.6	704.5	916.9	740.6	961.0
Rochester, NY	959	1,031	1,047	1,102	947	768.4	827.4	845.9	860.8	739.7
Sacramento, CA	765	869	692	702	619	132.7	148.9	114.6	112.4	99.1
San Antonio, TX	955	1,012	1,113	1,187	1,124	139.2	144.3	156.6	165.9	157.1
San Diego, CA	660	688	653	702	685	48.9	49.5	46.6	50.2	49.0
San Francisco, CA	298	402	381	412	360	80.3	106.8	101.1	107.9	94.3
San Jose, CA	205	224	190	174	198	25.7	27.5	23.3	21.0	23.9
Seattle, WA	403	324	331	448	572	48.9	38.6	39.2	51.3	65.6
St Louis, MO	1,409	1,685	1,510	1,426	1,620	758.6	916.7	834.8	772.4	877.5
St Paul, MN	203	278	276	411	335	141.4	196.9	195.2	278.7	227.2
St Petersburg, FL	648	738	942	739	651	139.8	158.7	202.5	153.2	134.9
Tampa, FL	1,214	886	942	823	758	260.9	186.5	195.1	161.3	148.6
Toledo, OH	162	350	388	487	713	68.9	149.5	166.3	206.1	301.7
Tucson, AZ	285	175	179	257	346	71.8	43.3	43.6	59.6	80.2
Tulsa, OK	299	728	527	494	503	150.1	369.2	265.3	243.3	247.7
Washington, DC	1,919	1,904	1,509	1,271	1,241	683.5	684.7	546.8	419.9	410.0
Wichita, KS	321	243	452	358	473	143.7	106.1	196.0	156.3	206.6
Yonkers, NY	35	55	73	64	81	34.8	54.3	71.7	61.8	78.2
<b>U.S. CITY TOTAL<sup>1</sup></b>	<b>77,539</b>	<b>82,564</b>	<b>79,646</b>	<b>81,590</b>	<b>82,125</b>	<b>216.3</b>	<b>226.8</b>	<b>217.5</b>	<b>215.6</b>	<b>217.0</b>
San Juan, PR	83	85	73	105	114	17.3	15.6	13.3	19.8	21.5
<b>TOTAL</b>	<b>77,622</b>	<b>82,649</b>	<b>79,719</b>	<b>81,695</b>	<b>82,239</b>	<b>213.7</b>	<b>223.7</b>	<b>214.5</b>	<b>212.9</b>	<b>214.3</b>

<sup>1</sup>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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	310	380	429	446	474	121.3	147.4	166.4	170.6	181.3
Albuquerque, NM	238	262	237	367	380	92.6	102.3	93.0	135.0	139.8
Atlanta, GA	2,917	3,118	3,172	1,910	2,510	844.0	884.0	892.2	475.4	624.8
Austin, TX	671	905	792	804	814	193.9	256.1	219.1	193.3	195.7
Baltimore, MD	3,414	3,714	3,410	2,961	2,591	1,116.4	1,233.5	1,154.8	975.0	853.2
Birmingham, AL	1,531	1,614	1,258	1,439	1,177	496.6	524.5	409.9	461.1	377.1
Boston, MA	494	505	490	611	709	183.6	188.4	182.6	211.8	245.8
Buffalo, NY	452	426	508	658	982	294.9	281.1	337.4	427.1	637.5
Charlotte, NC	1,059	1,081	1,154	1,010	1,184	357.8	356.0	370.0	295.8	346.7
Chicago, IL	6,578	7,797	8,338	8,346	7,400	467.5	544.6	582.5	558.5	495.2
Cincinnati, OH	1,023	1,518	1,193	1,343	1,417	253.1	378.4	300.1	333.3	351.6
Cleveland, OH	1,153	1,347	1,589	1,777	2,019	176.5	207.5	246.6	269.9	306.6
Columbus, OH	997	1,488	1,523	1,561	1,618	203.0	302.6	308.1	300.6	311.6
Corpus Christi, TX	188	268	300	420	318	120.7	174.3	195.7	273.6	207.2
Dallas, TX	3,326	3,814	3,834	3,775	3,028	333.7	378.3	378.1	340.6	273.2
Dayton, OH	566	601	539	578	699	210.0	225.1	199.4	215.4	260.5
Denver, CO	563	510	642	880	901	232.1	209.9	263.9	314.1	321.5
Des Moines, IA	170	182	172	180	126	100.0	105.7	98.6	99.0	69.3
Detroit, MI	3,935	4,312	4,194	4,873	3,884	761.5	722.1	706.8	828.2	660.1
El Paso, TX	79	129	78	113	143	23.2	38.3	23.3	34.5	43.6
Fort Worth, TX	745	1,537	1,425	1,433	1,133	113.7	229.7	208.5	200.1	158.2
Honolulu, HI	232	219	199	216	288	53.1	50.2	46.2	49.0	65.4
Houston, TX	3,524	3,937	3,193	2,928	2,809	224.1	247.8	198.1	172.9	165.8
Indianapolis, IN	1,511	1,539	1,443	1,687	1,630	389.6	397.7	374.3	405.5	391.8
Jacksonville, FL	1,080	1,564	1,734	2,041	1,531	304.3	439.7	486.8	540.3	405.3
Jersey City, NJ	169	260	262	254	255	160.0	244.7	248.5	215.0	215.9
Kansas City, MO	800	1,156	911	1,446	1,122	374.3	537.4	423.6	664.4	515.5
Los Angeles, CA	3,165	3,194	3,218	4,228	4,264	74.1	74.7	74.4	96.0	96.8
Louisville, KY	1,071	831	699	688	793	337.0	261.7	220.0	207.5	239.1
Memphis, TN	2,701	2,976	2,875	2,716	2,350	654.0	720.8	693.0	633.6	548.2
Miami, FL	1,181	1,518	1,618	1,245	1,189	120.1	147.9	156.2	114.3	109.2
Milwaukee, WI	1,596	1,994	2,098	2,084	1,596	368.9	460.8	489.6	462.5	354.2
Minneapolis, MN	693	756	777	852	670	371.9	427.6	437.5	450.7	354.4
Nashville, TN	1,205	1,059	1,049	1,388	873	474.4	418.2	417.2	503.1	316.5
New Orleans, LA	1,517	1,533	1,489	1,690	1,850	697.2	711.5	697.4	744.2	814.6
New York City, NY	6,491	5,306	5,797	5,573	5,914	187.4	152.1	165.8	146.9	155.9
Newark, NJ	1,119	987	935	866	917	829.2	732.8	696.4	605.2	640.9
Norfolk, VA	828	822	749	841	783	701.5	777.2	642.5	701.8	653.4
Oakland, CA	658	749	667	783	960	106.6	118.8	104.5	120.8	148.1
Oklahoma City, OK	479	732	630	595	708	225.3	374.1	319.8	288.3	343.1
Omaha, NE	355	376	454	531	415	166.4	175.7	210.8	234.2	183.0
Philadelphia, PA	2,997	3,333	3,596	3,910	3,675	444.6	500.6	547.6	554.5	521.2
Phoenix, AZ	1,798	2,128	2,152	1,870	1,657	134.8	154.8	152.2	121.7	107.8
Pittsburgh, PA	483	563	653	668	871	80.4	94.7	110.9	110.0	143.5
Portland, OR	275	281	290	378	475	114.2	115.3	118.6	146.6	184.2
Richmond, VA	815	775	870	968	1,083	933.3	886.4	1,018.3	1,051.4	1,176.3
Rochester, NY	908	961	990	1,040	822	780.3	828.5	856.4	873.6	690.4
Sacramento, CA	606	673	534	581	543	110.3	120.0	91.9	97.0	90.7
San Antonio, TX	796	846	974	1,110	1,015	123.1	129.8	147.1	163.8	149.8
San Diego, CA	805	883	896	1,066	1,109	58.6	63.5	63.1	75.3	78.4
San Francisco, CA	1,212	1,456	1,225	1,749	1,693	335.5	394.3	331.2	443.0	428.8
San Jose, CA	264	227	224	270	349	32.5	27.4	27.0	31.7	40.9
Seattle, WA	515	651	591	773	984	63.7	79.8	72.0	89.4	113.8
St Louis, MO	1,397	1,967	1,366	1,453	1,565	894.8	1,264.8	892.4	888.3	956.8
St Paul, MN	180	241	269	292	225	135.8	186.4	207.8	212.9	164.0
St Petersburg, FL	553	728	893	803	740	135.4	176.2	216.0	182.9	168.6
Tampa, FL	1,032	800	841	830	759	232.4	177.7	183.8	169.8	155.3
Toledo, OH	184	305	235	370	466	85.1	142.3	110.2	169.1	213.0
Tucson, AZ	290	228	236	334	402	75.7	59.0	60.1	81.0	97.4
Tulsa, OK	319	580	437	398	511	170.9	316.4	236.0	208.1	267.2
Washington, DC	2,637	2,604	2,014	1,430	1,627	1,062.5	1,062.7	828.7	530.9	604.0
Wichita, KS	293	223	319	317	364	136.1	101.8	144.3	141.6	162.6
Yonkers, NY	44	50	29	45	62	47.8	54.4	31.2	47.4	65.3
<b>U.S. CITY TOTAL<sup>1</sup></b>	<b>79,187</b>	<b>87,519</b>	<b>85,708</b>	<b>88,792</b>	<b>85,421</b>	<b>234.0</b>	<b>256.5</b>	<b>249.4</b>	<b>246.6</b>	<b>237.2</b>
San Juan, PR	150	142	106	165	167	38.2	28.3	21.0	33.7	34.1
<b>TOTAL</b>	<b>79,337</b>	<b>87,661</b>	<b>85,814</b>	<b>88,957</b>	<b>85,588</b>	<b>231.8</b>	<b>253.1</b>	<b>246.1</b>	<b>243.7</b>	<b>234.5</b>

<sup>1</sup>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, 1997–2001**

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
1997	10-14	5,740	795	4,945	30.1	8.1	53.3
	15-19	99,303	33,282	66,021	520.8	338.7	714.4
	20-24	95,811	47,006	48,806	547.1	523.5	572.0
	25-29	50,472	28,785	21,686	267.5	304.0	230.7
	30-34	30,811	19,208	11,603	148.6	185.8	111.6
	35-39	20,609	13,917	6,692	91.1	123.3	59.0
	40-44	11,574	8,892	2,681	54.1	83.9	24.9
	45-54	8,202	6,882	1,320	24.4	41.8	7.7
	55-64	2,046	1,801	245	9.4	17.3	2.1
	65+	1,266	867	399	3.7	6.2	2.0
TOTAL	326,971	161,835	165,136	122.2	123.5	120.9	
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	

NOTE: This table should be used only for age comparisons. This is because, 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, 1997–2001**

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	
1997	10-14	5,333	748	4,585	832	56	776	4,103	636	3,467	331	49	283	21	3	18	45	4	41
	15-19	90,694	30,710	59,983	13,421	2,263	11,158	71,323	26,594	44,729	4,962	1,645	3,317	389	85	305	598	124	475
	20-24	87,381	43,391	43,990	11,661	3,519	8,142	69,906	37,124	32,782	4,880	2,391	2,489	442	201	240	493	155	337
	25-29	45,766	26,306	19,461	6,713	2,844	3,869	35,708	21,606	14,102	2,800	1,625	1,175	264	122	142	281	109	173
	30-34	27,581	17,285	10,296	4,657	2,481	2,176	20,891	13,565	7,326	1,658	1,041	617	185	117	68	190	82	108
	35-39	18,649	12,685	5,964	3,376	1,970	1,405	14,079	9,962	4,117	1,007	661	346	82	48	35	105	43	62
	40-44	10,540	8,166	2,374	1,719	1,202	518	8,215	6,564	1,650	482	333	149	61	37	24	63	29	33
	45-54	7,385	6,254	1,131	1,348	1,064	285	5,644	4,927	717	308	213	96	48	33	14	36	18	19
	55-64	1,818	1,605	213	341	265	75	1,374	1,258	117	81	68	14	11	8	3	10	6	3
	65+	1,162	799	363	210	137	73	877	613	264	70	47	23	2	0	2	2	2	0
TOTAL	297,352	148,327	149,025	44,432	15,840	28,593	232,914	123,152	109,762	16,669	8,109	8,560	1,508	655	853	1,829	572	1,257	
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	

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex or overall totals. This is because, 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: 1997 (ID, NJ, NY); 1998 (ID, 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 22B. Gonorrhea — Reported rates per 100,000 population by age, sex, and race/ethnicity: United States, 1997–2001**

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	31.0	8.5	54.7	7.1	0.9	13.7	164.8	50.3	282.9	14.8	4.2	25.9	3.3	0.9	5.8	23.3	4.1	43.1
15-19	525.0	344.9	716.7	114.9	37.6	196.9	2,822.8	2,073.6	3,595.0	216.3	135.0	308.6	65.4	28.1	103.7	337.0	138.9	536.7
20-24	551.8	533.9	570.5	110.2	65.1	157.3	3,176.1	3,418.0	2,940.4	213.3	191.1	240.1	71.7	65.2	78.2	331.0	207.5	456.2
25-29	269.5	308.4	230.3	57.6	48.9	66.3	1,633.6	2,076.0	1,231.6	123.8	130.8	115.3	36.2	35.1	37.3	187.8	141.6	236.4
30-34	148.7	186.8	110.8	35.7	38.1	33.2	911.4	1,266.3	600.0	71.1	83.0	57.3	26.0	34.5	18.3	131.2	114.0	148.3
35-39	92.0	125.3	58.8	22.6	26.3	18.9	586.2	886.7	322.1	47.8	59.4	34.8	11.8	14.3	9.5	70.8	59.4	81.9
40-44	54.9	85.6	24.6	11.9	16.6	7.1	374.7	641.3	141.2	28.0	37.5	17.9	9.2	12.1	6.7	46.1	44.8	47.3
45-54	24.5	42.4	7.4	5.7	9.1	2.4	188.2	361.0	43.9	13.8	19.0	8.5	4.9	7.4	2.7	18.1	18.3	18.0
55-64	9.3	17.3	2.1	2.2	3.5	0.9	74.8	157.5	11.2	6.4	11.2	2.1	2.0	3.1	1.1	8.3	11.6	5.5
65+	3.8	6.4	2.0	0.8	1.3	0.5	36.7	65.3	18.2	4.9	7.7	2.8	0.4	0.0	0.6	1.2	2.9	0.0
<b>TOTAL</b>	<b>123.8</b>	<b>126.0</b>	<b>121.7</b>	<b>25.3</b>	<b>18.4</b>	<b>31.8</b>	<b>814.8</b>	<b>908.1</b>	<b>730.6</b>	<b>64.8</b>	<b>61.0</b>	<b>68.8</b>	<b>18.6</b>	<b>16.8</b>	<b>20.3</b>	<b>96.6</b>	<b>61.4</b>	<b>130.6</b>
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
<b>TOTAL</b>	<b>133.4</b>	<b>134.6</b>	<b>132.2</b>	<b>27.3</b>	<b>19.9</b>	<b>34.5</b>	<b>859.4</b>	<b>946.2</b>	<b>781.4</b>	<b>69.9</b>	<b>69.6</b>	<b>70.3</b>	<b>20.0</b>	<b>15.4</b>	<b>24.3</b>	<b>117.7</b>	<b>71.6</b>	<b>162.4</b>
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
<b>TOTAL</b>	<b>131.9</b>	<b>135.0</b>	<b>129.0</b>	<b>26.9</b>	<b>20.1</b>	<b>33.4</b>	<b>848.3</b>	<b>947.0</b>	<b>759.4</b>	<b>70.0</b>	<b>67.3</b>	<b>72.7</b>	<b>20.9</b>	<b>18.9</b>	<b>22.7</b>	<b>109.9</b>	<b>66.3</b>	<b>152.0</b>
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
<b>TOTAL</b>	<b>127.5</b>	<b>130.1</b>	<b>124.9</b>	<b>27.7</b>	<b>21.7</b>	<b>33.5</b>	<b>788.2</b>	<b>873.5</b>	<b>711.0</b>	<b>69.4</b>	<b>66.2</b>	<b>72.8</b>	<b>27.8</b>	<b>30.2</b>	<b>25.5</b>	<b>108.7</b>	<b>75.2</b>	<b>141.4</b>
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	2,123.1	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
<b>TOTAL</b>	<b>128.5</b>	<b>128.6</b>	<b>128.5</b>	<b>29.4</b>	<b>23.3</b>	<b>35.3</b>	<b>782.3</b>	<b>849.6</b>	<b>721.4</b>	<b>74.2</b>	<b>69.5</b>	<b>79.1</b>	<b>26.7</b>	<b>25.3</b>	<b>28.0</b>	<b>114.4</b>	<b>71.2</b>	<b>156.5</b>

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex, or overall totals. This is because, 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: 1997 (ID, NJ, NY); 1998 (ID, 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 23. All stages of syphilis — Reported cases and rates by state/area and region listed in alphabetical order: United States and outlying areas, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	1,486	1,139	1,019	752	720	34.4	26.2	23.3	16.9	16.2
Alaska	12	13	13	6	9	2.0	2.1	2.1	1.0	1.4
Arizona	600	697	833	847	1,147	13.2	14.9	17.4	16.5	22.4
Arkansas	572	506	364	366	239	22.7	19.9	14.3	13.7	8.9
California	3,828	2,869	2,859	3,354	3,050	11.9	8.8	8.6	9.9	9.0
Colorado	153	122	91	63	149	3.9	3.1	2.2	1.5	3.5
Connecticut	325	177	126	151	165	9.9	5.4	3.8	4.4	4.8
Delaware	113	114	72	45	79	15.4	15.3	9.6	5.7	10.1
Florida	2,746	2,540	2,690	2,770	2,914	18.7	17.0	17.8	17.3	18.2
Georgia	2,835	1,836	1,974	1,640	1,985	37.9	24.0	25.3	20.0	24.2
Hawaii	47	18	11	22	41	4.0	1.5	0.9	1.8	3.4
Idaho	24	15	13	11	11	2.0	1.2	1.0	0.9	0.9
Illinois	1,956	1,946	1,966	1,638	1,541	16.4	16.2	16.2	13.2	12.4
Indiana	522	509	802	751	529	8.9	8.6	13.5	12.4	8.7
Iowa	72	48	37	55	44	2.5	1.7	1.3	1.9	1.5
Kansas	169	116	95	67	88	6.5	4.4	3.6	2.5	3.3
Kentucky	403	339	302	253	191	10.3	8.6	7.6	6.3	4.7
Louisiana	1,808	1,651	1,423	973	793	41.5	37.8	32.5	21.8	17.7
Maine	13	4	1	7	16	1.0	0.3	0.1	0.5	1.3
Maryland	2,455	2,156	1,385	1,172	937	48.2	42.0	26.8	22.1	17.7
Massachusetts	730	568	385	448	446	11.9	9.2	6.2	7.1	7.0
Michigan	794	692	780	986	1,147	8.1	7.0	7.9	9.9	11.5
Minnesota	124	75	71	77	132	2.6	1.6	1.5	1.6	2.7
Mississippi	1,441	1,161	906	685	653	52.8	42.2	32.7	24.1	23.0
Missouri	503	379	396	299	174	9.3	7.0	7.2	5.3	3.1
Montana	5	0	3	0	0	0.6	0.0	0.3	0.0	0.0
Nebraska	34	35	24	7	16	2.1	2.1	1.4	0.4	0.9
Nevada	120	139	92	52	62	7.2	8.0	5.1	2.6	3.1
New Hampshire	26	14	17	19	20	2.2	1.2	1.4	1.5	1.6
New Jersey	1,166	836	803	802	1,040	14.5	10.3	9.9	9.5	12.4
New Mexico	103	76	80	98	73	6.0	4.4	4.6	5.4	4.0
New York	5,645	5,148	4,094	2,946	3,604	31.1	28.3	22.5	15.5	19.0
North Carolina	2,202	2,133	1,713	1,494	1,422	29.7	28.3	22.4	18.6	17.7
North Dakota	0	0	0	1	2	0.0	0.0	0.0	0.2	0.3
Ohio	761	474	364	282	297	6.8	4.2	3.2	2.5	2.6
Oklahoma	410	369	539	327	288	12.4	11.0	16.1	9.5	8.3
Oregon	48	32	37	49	48	1.5	1.0	1.1	1.4	1.4
Pennsylvania	1,182	910	932	685	726	9.8	7.6	7.8	5.6	5.9
Rhode Island	84	55	55	38	39	8.5	5.6	5.6	3.6	3.7
South Carolina	1,139	876	929	860	913	30.3	22.8	23.9	21.4	22.8
South Dakota	8	3	3	1	1	1.1	0.4	0.4	0.1	0.1
Tennessee	2,368	1,754	1,737	1,709	1,478	44.1	32.3	31.7	30.0	26.0
Texas	5,382	3,967	3,699	3,297	3,660	27.7	20.1	18.5	15.8	17.6
Utah	57	58	49	59	25	2.8	2.8	2.3	2.6	1.1
Vermont	1	6	3	0	8	0.2	1.0	0.5	0.0	1.3
Virginia	1,118	719	722	539	524	16.6	10.6	10.5	7.6	7.4
Washington	137	143	205	171	174	2.4	2.5	3.6	2.9	3.0
West Virginia	20	11	15	13	7	1.1	0.6	0.8	0.7	0.4
Wisconsin	317	257	192	184	131	6.1	4.9	3.7	3.4	2.4
Wyoming	4	2	0	5	4	0.8	0.4	0.0	1.0	0.8
<b>U.S. TOTAL<sup>1</sup></b>	<b>46,712</b>	<b>38,286</b>	<b>35,379</b>	<b>31,592</b>	<b>32,221</b>	<b>17.5</b>	<b>14.2</b>	<b>13.0</b>	<b>11.2</b>	<b>11.4</b>
<b>Northeast</b>	<b>9,172</b>	<b>7,718</b>	<b>6,416</b>	<b>5,096</b>	<b>6,064</b>	<b>17.8</b>	<b>14.9</b>	<b>12.4</b>	<b>9.5</b>	<b>11.3</b>
<b>Midwest</b>	<b>5,260</b>	<b>4,534</b>	<b>4,730</b>	<b>4,348</b>	<b>4,102</b>	<b>8.4</b>	<b>7.2</b>	<b>7.5</b>	<b>6.8</b>	<b>6.4</b>
<b>South</b>	<b>27,142</b>	<b>21,850</b>	<b>19,947</b>	<b>17,411</b>	<b>17,262</b>	<b>28.8</b>	<b>22.9</b>	<b>20.7</b>	<b>17.4</b>	<b>17.2</b>
<b>West</b>	<b>5,138</b>	<b>4,184</b>	<b>4,286</b>	<b>4,737</b>	<b>4,793</b>	<b>8.6</b>	<b>6.9</b>	<b>7.0</b>	<b>7.5</b>	<b>7.6</b>
Guam	1	3	12	9	30	0.6	1.9	7.3	5.8	19.4
Puerto Rico	1,577	1,461	1,463	1,340	1,267	41.2	37.8	37.6	35.2	33.3
Virgin Islands	10	35	13	11	9	9.1	31.9	11.5	10.1	8.3
<b>OUTLYING AREAS</b>	<b>1,588</b>	<b>1,499</b>	<b>1,488</b>	<b>1,360</b>	<b>1,306</b>	<b>38.8</b>	<b>36.3</b>	<b>35.7</b>	<b>33.4</b>	<b>32.1</b>
<b>TOTAL</b>	<b>48,300</b>	<b>39,785</b>	<b>36,867</b>	<b>32,952</b>	<b>33,527</b>	<b>17.8</b>	<b>14.5</b>	<b>13.3</b>	<b>11.5</b>	<b>11.7</b>

<sup>1</sup>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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	4	7	6	2	4	0.8	1.3	1.1	0.4	0.7
Albuquerque, NM	56	45	50	63	42	10.6	8.6	9.6	11.3	7.5
Atlanta, GA	872	591	580	384	797	120.7	79.9	77.9	47.1	97.7
Austin, TX	98	56	62	59	115	14.1	7.9	8.5	7.3	14.2
Baltimore, MD	1,781	1,472	941	728	477	271.0	228.0	148.7	111.8	73.3
Birmingham, AL	474	246	278	212	149	72.0	37.3	42.3	32.0	22.5
Boston, MA	305	240	164	160	157	54.7	43.1	29.5	26.8	26.3
Buffalo, NY	23	12	6	10	12	7.2	3.8	1.9	3.1	3.7
Charlotte, NC	153	211	194	151	130	24.9	33.4	29.9	21.7	18.7
Chicago, IL	1,314	1,371	1,322	1,090	1,090	45.1	46.0	44.4	35.3	35.3
Cincinnati, OH	93	32	12	14	16	10.9	3.8	1.4	1.7	1.9
Cleveland, OH	250	151	88	42	39	18.0	10.9	6.4	3.0	2.8
Columbus, OH	117	115	109	90	140	11.5	11.3	10.6	8.4	13.1
Corpus Christi, TX	22	27	20	10	10	6.9	8.5	6.3	3.2	3.2
Dallas, TX	717	736	695	587	702	35.4	35.9	33.7	26.5	31.6
Dayton, OH	126	39	16	17	18	22.4	7.0	2.8	3.0	3.2
Denver, CO	72	35	46	23	64	14.4	7.0	9.2	4.1	11.5
Des Moines, IA	26	20	7	18	15	7.3	5.6	1.9	4.8	4.0
Detroit, MI	548	477	569	756	902	50.3	37.8	45.4	61.6	73.5
El Paso, TX	112	81	79	92	106	16.0	11.5	11.3	13.5	15.6
Fort Worth, TX	299	175	177	191	267	22.5	12.9	12.8	13.2	18.5
Honolulu, HI	42	18	8	15	30	4.8	2.1	0.9	1.7	3.4
Houston, TX	1,937	1,401	1,111	849	921	61.3	43.7	34.2	25.0	27.1
Indianapolis, IN	125	239	553	521	306	15.4	29.4	68.2	60.5	35.6
Jacksonville, FL	206	154	74	125	139	28.1	20.9	10.0	16.0	17.8
Jersey City, NJ	85	34	42	27	39	39.0	15.4	19.2	11.2	16.2
Kansas City, MO	13	14	66	46	30	2.9	3.1	14.6	10.2	6.6
Los Angeles, CA	1,630	1,264	1,189	1,857	1,339	19.0	14.7	13.6	20.8	15.0
Louisville, KY	232	213	174	149	100	34.6	31.7	25.9	21.5	14.4
Memphis, TN	1,435	1,036	927	882	896	165.7	119.2	106.2	98.3	99.8
Miami, FL	874	773	795	829	1,044	42.7	35.9	36.5	36.8	46.3
Milwaukee, WI	275	233	166	151	98	30.3	25.6	18.3	16.1	10.4
Minneapolis, MN	53	34	28	34	63	13.8	9.3	7.6	8.9	16.4
Nashville, TN	412	416	505	523	379	77.2	77.9	95.3	91.8	66.5
New Orleans, LA	463	348	228	124	101	98.7	74.8	49.5	25.6	20.8
New York City, NY	4,961	4,652	3,736	2,711	3,300	67.6	62.7	50.3	33.9	41.2
Newark, NJ	241	191	172	265	377	84.7	67.2	60.7	88.1	125.3
Norfolk, VA	158	108	84	85	82	68.9	50.2	37.2	36.3	35.0
Oakland, CA	128	129	127	91	109	10.2	10.1	9.8	6.9	8.3
Oklahoma City, OK	110	181	300	193	160	25.0	44.4	73.2	45.4	37.6
Omaha, NE	17	26	10	6	3	3.9	5.9	2.2	1.3	0.6
Philadelphia, PA	1,093	804	825	618	646	75.3	56.0	58.2	40.7	42.6
Phoenix, AZ	473	572	722	736	957	17.5	20.5	25.2	24.0	31.2
Pittsburgh, PA	21	12	7	7	15	1.6	0.9	0.6	0.5	1.2
Portland, OR	23	17	19	30	29	4.7	3.4	3.8	5.8	5.6
Richmond, VA	137	81	64	40	58	71.2	41.7	33.7	20.2	29.3
Rochester, NY	32	39	16	7	4	13.3	16.2	6.7	2.8	1.6
Sacramento, CA	55	31	20	25	33	4.9	2.7	1.7	2.0	2.7
San Antonio, TX	309	237	228	287	364	23.2	17.5	16.6	20.6	26.1
San Diego, CA	259	187	251	232	151	9.5	6.7	8.9	8.2	5.4
San Francisco, CA	171	129	128	163	301	23.4	17.3	17.1	21.0	38.8
San Jose, CA	93	62	56	43	92	5.8	3.8	3.4	2.6	5.5
Seattle, WA	62	69	123	116	110	3.8	4.2	7.4	6.7	6.3
St Louis, MO	261	170	165	115	63	76.3	50.1	49.4	33.0	18.1
St Paul, MN	8	10	6	9	16	2.9	3.7	2.2	3.2	5.6
St Petersburg, FL	79	56	38	64	40	9.1	6.4	4.3	6.9	4.3
Tampa, FL	207	177	111	132	148	22.8	19.1	11.8	13.2	14.8
Toledo, OH	25	23	21	18	3	5.5	5.1	4.7	4.0	0.7
Tucson, AZ	52	36	42	36	72	6.7	4.6	5.2	4.3	8.5
Tulsa, OK	36	75	109	32	22	9.3	19.7	28.4	8.1	5.6
Washington, DC	644	579	458	516	459	121.7	110.7	88.2	90.2	80.2
Wichita, KS	85	21	34	10	15	19.4	4.7	7.5	2.2	3.3
Yonkers, NY	34	22	12	10	13	17.6	11.4	6.2	5.0	6.5
<b>U.S. CITY TOTAL</b>	<b>25,018</b>	<b>21,012</b>	<b>19,171</b>	<b>17,428</b>	<b>18,379</b>	<b>35.9</b>	<b>29.8</b>	<b>27.0</b>	<b>23.6</b>	<b>24.9</b>
San Juan, PR	719	673	682	545	483	82.4	64.3	64.8	53.4	47.3
<b>TOTAL</b>	<b>25,737</b>	<b>21,685</b>	<b>19,853</b>	<b>17,973</b>	<b>18,862</b>	<b>36.5</b>	<b>30.3</b>	<b>27.6</b>	<b>24.0</b>	<b>25.2</b>

**Table 25. Primary and secondary syphilis — Reported cases and rates by state/area, ranked by rates: United States, 2001**

<i>Rank</i> <sup>2</sup>	<i>State/Area</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	South Carolina	235	5.9
2	Tennessee	331	5.8
3	North Carolina	445	5.5
4	Georgia	414	5.1
5	Maryland	266	5.0
6	Mississippi	140	4.9
7	Michigan	428	4.3
8	Louisiana	173	3.9
9	Arizona	180	3.5
10	Illinois	409	3.3
11	Alabama	142	3.2
12	Florida	484	3.0
13	Indiana	151	2.5
14	Texas	478	2.3
	<b>U.S. TOTAL<sup>1</sup></b>	<b>6,103</b>	<b>2.2</b>
15	Arkansas	49	1.8
16	Delaware	14	1.8
17	Oklahoma	60	1.7
18	California	545	1.6
19	New York	304	1.6
20	New Jersey	137	1.6
21	Virginia	102	1.4
22	Kentucky	48	1.2
23	Washington	57	1.0
24	New Mexico	19	1.0
25	Hawaii	12	1.0
26	Kansas	25	0.9
27	Rhode Island	9	0.9
28	Pennsylvania	100	0.8
29	Ohio	81	0.7
30	Massachusetts	46	0.7
31	Minnesota	33	0.7
32	Nebraska	10	0.6
33	Missouri	26	0.5
34	Colorado	23	0.5
35	Utah	11	0.5
36	Vermont	3	0.5
37	Wisconsin	22	0.4
38	Oregon	13	0.4
39	Connecticut	12	0.4
40	Nevada	8	0.4
41	West Virginia	5	0.3
	<b>YEAR 2010 OBJECTIVE</b>		<b>0.2</b>
42	Iowa	5	0.2
43	Wyoming	1	0.2
44	Idaho	1	0.1
45	Maine	1	0.1
46	New Hampshire	1	0.1
47	South Dakota	1	0.1
	Alaska	0	0.0
	Montana	0	0.0
	North Dakota	0	0.0

<sup>1</sup>Total includes cases reported by Washington, D.C., but excludes outlying areas (Guam with 12 cases, and rate of 7.8, Puerto Rico with 244 cases and rate of 6.4, and Virgin Islands with 0 cases).

<sup>2</sup>States were ranked in descending order by rate, number of cases, and alphabetically by state. States with no cases were not ranked.

**Table 26. Primary and secondary syphilis — Counties and independent cities\* ranked by number of reported cases: United States, 2001\*\***

<i>Rank</i> <sup>1</sup>	<i>County/Independent City</i>	<i>Cases</i>	<i>Rate per 100,000 Population</i>	<i>Cumulative Percent</i>
1	Wayne County, MI	379	18.4	6
2	Cook County, IL	339	6.3	11
3	Fulton County, GA	224	27.5	15
4	Los Angeles County, CA	211	2.2	18
5	Shelby County, TN	208	23.2	22
6	Dade County, FL	185	8.2	25
7	Baltimore (City), MD	161	24.7	27
8	Maricopa County, AZ	148	4.8	30
9	New York County, NY	145	9.4	32
10	San Francisco County, CA	138	17.8	35
11	Marion County, IN	128	14.9	37
12	Dallas County, TX	121	5.5	39
13	Harris County, TX	103	3.0	40
14	Robeson County, NC	90	73.0	42
15	Essex County, NJ	79	10.0	43
16	Philadelphia County, PA	78	5.1	44
17	Davidson County, TN	76	13.3	46
18	Bexar County, TX	71	5.1	47
19	Kings County, NY	71	2.9	48
20	Guilford County, NC	70	16.6	49
21	Franklin County, OH	62	5.8	50

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

\*\*Corrections to the reported number of cases in the future could alter the ranking and/or inclusion of the counties and independent cities in this table.

<sup>1</sup>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, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	410	274	202	123	142	9.5	6.3	4.6	2.8	3.2
Alaska	1	1	1	0	0	0.2	0.2	0.2	0.0	0.0
Arizona	132	185	212	189	180	2.9	4.0	4.4	3.7	3.5
Arkansas	173	108	87	104	49	6.9	4.3	3.4	3.9	1.8
California	386	327	283	325	545	1.2	1.0	0.9	1.0	1.6
Colorado	15	10	8	11	23	0.4	0.3	0.2	0.3	0.5
Connecticut	62	26	16	16	12	1.9	0.8	0.5	0.5	0.4
Delaware	22	21	10	9	14	3.0	2.8	1.3	1.1	1.8
Florida	296	294	343	413	484	2.0	2.0	2.3	2.6	3.0
Georgia	515	333	430	402	414	6.9	4.4	5.5	4.9	5.1
Hawaii	1	4	3	2	12	0.1	0.3	0.3	0.2	1.0
Idaho	1	2	1	1	1	0.1	0.2	0.1	0.1	0.1
Illinois	435	396	422	412	409	3.7	3.3	3.5	3.3	3.3
Indiana	151	215	450	351	151	2.6	3.6	7.6	5.8	2.5
Iowa	7	5	9	11	5	0.2	0.2	0.3	0.4	0.2
Kansas	32	14	14	6	25	1.2	0.5	0.5	0.2	0.9
Kentucky	135	106	101	85	48	3.5	2.7	2.5	2.1	1.2
Louisiana	364	430	306	209	173	8.4	9.8	7.0	4.7	3.9
Maine	2	1	0	1	1	0.2	0.1	0.0	0.1	0.1
Maryland	891	648	343	300	266	17.5	12.6	6.6	5.7	5.0
Massachusetts	78	46	37	68	46	1.3	0.7	0.6	1.1	0.7
Michigan	153	211	249	330	428	1.6	2.1	2.5	3.3	4.3
Minnesota	16	9	10	16	33	0.3	0.2	0.2	0.3	0.7
Mississippi	390	261	194	137	140	14.3	9.5	7.0	4.8	4.9
Missouri	118	109	96	29	26	2.2	2.0	1.8	0.5	0.5
Montana	0	0	1	0	0	0.0	0.0	0.1	0.0	0.0
Nebraska	3	8	6	2	10	0.2	0.5	0.4	0.1	0.6
Nevada	11	15	5	5	8	0.7	0.9	0.3	0.3	0.4
New Hampshire	0	2	1	2	1	0.0	0.2	0.1	0.2	0.1
New Jersey	150	107	68	71	137	1.9	1.3	0.8	0.8	1.6
New Mexico	9	14	12	16	19	0.5	0.8	0.7	0.9	1.0
New York	138	119	150	132	304	0.8	0.7	0.8	0.7	1.6
North Carolina	721	723	464	483	445	9.7	9.6	6.1	6.0	5.5
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	218	134	92	69	81	1.9	1.2	0.8	0.6	0.7
Oklahoma	117	98	187	116	60	3.5	2.9	5.6	3.4	1.7
Oregon	10	6	8	12	13	0.3	0.2	0.2	0.4	0.4
Pennsylvania	123	98	84	77	100	1.0	0.8	0.7	0.6	0.8
Rhode Island	2	1	3	4	9	0.2	0.1	0.3	0.4	0.9
South Carolina	378	271	269	229	235	10.1	7.1	6.9	5.7	5.9
South Dakota	1	1	0	0	1	0.1	0.1	0.0	0.0	0.1
Tennessee	747	567	641	532	331	13.9	10.4	11.7	9.4	5.8
Texas	676	443	473	396	478	3.5	2.2	2.4	1.9	2.3
Utah	5	4	2	2	11	0.2	0.2	0.1	0.1	0.5
Vermont	0	4	3	0	3	0.0	0.7	0.5	0.0	0.5
Virginia	237	149	153	126	102	3.5	2.2	2.2	1.8	1.4
Washington	17	44	77	66	57	0.3	0.8	1.3	1.1	1.0
West Virginia	1	3	5	3	5	0.1	0.2	0.3	0.2	0.3
Wisconsin	89	78	41	48	22	1.7	1.5	0.8	0.9	0.4
Wyoming	0	1	0	1	1	0.0	0.2	0.0	0.2	0.2
<b>U.S. TOTAL<sup>1</sup></b>	<b>8,556</b>	<b>7,007</b>	<b>6,617</b>	<b>5,979</b>	<b>6,103</b>	<b>3.2</b>	<b>2.6</b>	<b>2.4</b>	<b>2.1</b>	<b>2.2</b>
Northeast	555	404	362	371	613	1.1	0.8	0.7	0.7	1.1
Midwest	1,223	1,180	1,389	1,274	1,191	2.0	1.9	2.2	2.0	1.8
South	6,190	4,810	4,253	3,704	3,429	6.6	5.0	4.4	3.7	3.4
West	588	613	613	630	870	1.0	1.0	1.0	1.0	1.4
Guam	0	0	2	1	12	0.0	0.0	1.2	0.6	7.8
Puerto Rico	249	177	146	175	244	6.5	4.6	3.8	4.6	6.4
Virgin Islands	2	7	1	3	0	1.8	6.4	0.9	2.8	0.0
<b>OUTLYING AREAS</b>	<b>251</b>	<b>184</b>	<b>149</b>	<b>179</b>	<b>256</b>	<b>6.1</b>	<b>4.5</b>	<b>3.6</b>	<b>4.4</b>	<b>6.3</b>
<b>TOTAL</b>	<b>8,807</b>	<b>7,191</b>	<b>6,766</b>	<b>6,158</b>	<b>6,359</b>	<b>3.2</b>	<b>2.6</b>	<b>2.4</b>	<b>2.2</b>	<b>2.2</b>

<sup>1</sup>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, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	183	133	102	63	67	8.2	5.9	4.5	2.7	2.9
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	37	67	65	80	50	1.6	2.8	2.7	3.1	1.9
Arkansas	103	59	44	58	27	7.9	4.5	3.3	4.2	2.0
California	116	132	76	51	42	0.7	0.8	0.5	0.3	0.2
Colorado	5	3	6	1	5	0.3	0.1	0.3	0.0	0.2
Connecticut	25	16	6	7	2	1.5	0.9	0.4	0.4	0.1
Delaware	10	11	1	1	5	2.7	2.9	0.3	0.2	1.2
Florida	131	116	143	163	135	1.7	1.5	1.8	2.0	1.6
Georgia	194	130	160	159	129	5.1	3.3	4.0	3.8	3.1
Hawaii	0	0	2	1	0	0.0	0.0	0.3	0.2	0.0
Idaho	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Illinois	194	158	180	181	91	3.2	2.6	2.9	2.9	1.4
Indiana	82	113	225	196	71	2.7	3.7	7.4	6.3	2.3
Iowa	4	0	6	6	1	0.3	0.0	0.4	0.4	0.1
Kansas	12	6	8	1	11	0.9	0.4	0.6	0.1	0.8
Kentucky	66	49	45	42	17	3.3	2.4	2.2	2.0	0.8
Louisiana	187	196	153	97	83	8.3	8.6	6.7	4.2	3.6
Maine	1	0	0	0	0	0.2	0.0	0.0	0.0	0.0
Maryland	400	302	164	115	113	15.3	11.4	6.2	4.2	4.1
Massachusetts	33	15	15	19	4	1.0	0.5	0.5	0.6	0.1
Michigan	68	86	95	141	161	1.4	1.7	1.9	2.8	3.2
Minnesota	4	4	5	5	16	0.2	0.2	0.2	0.2	0.6
Mississippi	201	128	93	70	69	14.2	8.9	6.4	4.8	4.7
Missouri	63	50	49	11	8	2.3	1.8	1.7	0.4	0.3
Montana	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nebraska	0	3	3	1	8	0.0	0.4	0.4	0.1	0.9
Nevada	6	3	3	2	1	0.7	0.3	0.3	0.2	0.1
New Hampshire	0	1	1	0	0	0.0	0.2	0.2	0.0	0.0
New Jersey	59	37	32	23	44	1.4	0.9	0.8	0.5	1.0
New Mexico	5	8	3	5	6	0.6	0.9	0.3	0.5	0.6
New York	56	28	34	12	23	0.6	0.3	0.4	0.1	0.2
North Carolina	353	347	202	234	191	9.3	8.9	5.1	5.7	4.7
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	101	72	43	26	26	1.8	1.2	0.7	0.4	0.4
Oklahoma	53	45	77	54	28	3.1	2.6	4.5	3.1	1.6
Oregon	2	2	5	4	2	0.1	0.1	0.3	0.2	0.1
Pennsylvania	52	31	27	30	28	0.8	0.5	0.4	0.5	0.4
Rhode Island	1	1	1	2	0	0.2	0.2	0.2	0.4	0.0
South Carolina	173	131	117	96	101	8.9	6.6	5.8	4.7	4.9
South Dakota	0	1	0	0	0	0.0	0.3	0.0	0.0	0.0
Tennessee	370	284	283	247	158	13.3	10.1	10.0	8.5	5.4
Texas	315	183	182	152	169	3.2	1.8	1.8	1.4	1.6
Utah	2	0	0	1	2	0.2	0.0	0.0	0.1	0.2
Vermont	0	1	2	0	0	0.0	0.3	0.7	0.0	0.0
Virginia	112	61	71	44	43	3.3	1.8	2.0	1.2	1.2
Washington	8	7	3	8	7	0.3	0.2	0.1	0.3	0.2
West Virginia	1	2	3	1	1	0.1	0.2	0.3	0.1	0.1
Wisconsin	49	40	18	24	13	1.9	1.5	0.7	0.9	0.5
Wyoming	0	0	0	1	1	0.0	0.0	0.0	0.4	0.4
<b>U.S. TOTAL<sup>1</sup></b>	<b>3,895</b>	<b>3,096</b>	<b>2,777</b>	<b>2,445</b>	<b>1,967</b>	<b>2.9</b>	<b>2.2</b>	<b>2.0</b>	<b>1.7</b>	<b>1.4</b>
Northeast	227	130	118	93	101	0.9	0.5	0.4	0.3	0.4
Midwest	577	533	632	592	406	1.8	1.7	1.9	1.8	1.2
South	2,910	2,211	1,864	1,606	1,344	6.0	4.5	3.8	3.1	2.6
West	181	222	163	154	116	0.6	0.7	0.5	0.5	0.4
Guam	0	0	0	0	5	0.0	0.0	0.0	0.0	6.6
Puerto Rico	116	81	73	76	130	5.8	4.0	3.6	3.8	6.6
Virgin Islands	0	1	1	2	0	0.0	1.7	1.9	3.5	0.0
<b>OUTLYING AREAS</b>	<b>116</b>	<b>82</b>	<b>74</b>	<b>78</b>	<b>135</b>	<b>5.5</b>	<b>3.8</b>	<b>3.4</b>	<b>3.7</b>	<b>6.4</b>
<b>TOTAL</b>	<b>4,011</b>	<b>3,178</b>	<b>2,851</b>	<b>2,523</b>	<b>2,102</b>	<b>2.9</b>	<b>2.3</b>	<b>2.0</b>	<b>1.7</b>	<b>1.4</b>

<sup>1</sup>Includes cases reported by Washington, D.C. 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 listed in alphabetical order: United States and outlying areas, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	227	141	100	60	75	10.9	6.8	4.8	2.8	3.5
Alaska	1	1	1	0	0	0.3	0.3	0.3	0.0	0.0
Arizona	95	118	147	109	130	4.2	5.1	6.2	4.3	5.1
Arkansas	70	49	43	46	22	5.7	4.0	3.5	3.5	1.7
California	270	195	206	272	501	1.7	1.2	1.2	1.6	3.0
Colorado	10	7	2	10	18	0.5	0.4	0.1	0.5	0.8
Connecticut	37	10	10	9	10	2.3	0.6	0.6	0.5	0.6
Delaware	12	10	9	8	9	3.4	2.8	2.5	2.1	2.4
Florida	165	178	199	250	349	2.3	2.5	2.7	3.2	4.5
Georgia	321	203	269	243	285	8.8	5.5	7.1	6.0	7.1
Hawaii	1	4	1	1	12	0.2	0.7	0.2	0.2	2.0
Idaho	1	2	1	1	1	0.2	0.3	0.2	0.2	0.2
Illinois	241	238	242	231	318	4.1	4.1	4.1	3.8	5.2
Indiana	69	102	225	155	80	2.4	3.6	7.8	5.2	2.7
Iowa	3	5	3	5	4	0.2	0.4	0.2	0.3	0.3
Kansas	20	8	6	5	14	1.6	0.6	0.5	0.4	1.1
Kentucky	69	57	56	43	31	3.6	3.0	2.9	2.2	1.6
Louisiana	177	234	153	112	90	8.4	11.1	7.3	5.2	4.2
Maine	1	1	0	1	1	0.2	0.2	0.0	0.2	0.2
Maryland	490	346	179	185	153	19.8	13.9	7.1	7.2	6.0
Massachusetts	45	31	22	49	42	1.5	1.0	0.7	1.6	1.4
Michigan	85	125	154	189	267	1.8	2.6	3.2	3.9	5.5
Minnesota	12	5	5	11	17	0.5	0.2	0.2	0.5	0.7
Mississippi	189	131	101	67	71	14.4	9.9	7.6	4.9	5.2
Missouri	55	59	47	18	18	2.1	2.2	1.8	0.7	0.7
Montana	0	0	1	0	0	0.0	0.0	0.2	0.0	0.0
Nebraska	3	5	3	1	2	0.4	0.6	0.4	0.1	0.2
Nevada	5	12	2	3	7	0.6	1.3	0.2	0.3	0.7
New Hampshire	0	1	0	2	1	0.0	0.2	0.0	0.3	0.2
New Jersey	91	70	36	48	93	2.3	1.8	0.9	1.2	2.3
New Mexico	4	6	9	11	13	0.5	0.7	1.1	1.2	1.5
New York	82	91	116	120	281	0.9	1.0	1.3	1.3	3.1
North Carolina	368	376	262	249	254	10.2	10.3	7.1	6.3	6.4
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	117	62	49	43	55	2.2	1.1	0.9	0.8	1.0
Oklahoma	64	53	110	62	32	3.9	3.2	6.7	3.7	1.9
Oregon	8	4	3	8	11	0.5	0.2	0.2	0.5	0.6
Pennsylvania	71	67	57	47	72	1.2	1.2	1.0	0.8	1.2
Rhode Island	1	0	2	2	9	0.2	0.0	0.4	0.4	1.8
South Carolina	205	140	152	133	134	11.3	7.6	8.1	6.8	6.9
South Dakota	1	0	0	0	1	0.3	0.0	0.0	0.0	0.3
Tennessee	377	283	358	285	173	14.5	10.8	13.5	10.3	6.2
Texas	361	260	289	244	309	3.8	2.7	2.9	2.4	3.0
Utah	3	4	2	1	9	0.3	0.4	0.2	0.1	0.8
Vermont	0	3	1	0	3	0.0	1.0	0.3	0.0	1.0
Virginia	125	88	82	82	59	3.8	2.7	2.4	2.4	1.7
Washington	9	37	74	58	50	0.3	1.3	2.6	2.0	1.7
West Virginia	0	1	2	2	4	0.0	0.1	0.2	0.2	0.5
Wisconsin	40	38	23	24	9	1.6	1.5	0.9	0.9	0.3
Wyoming	0	1	0	0	0	0.0	0.4	0.0	0.0	0.0
<b>U.S. TOTAL<sup>1</sup></b>	<b>4,660</b>	<b>3,909</b>	<b>3,835</b>	<b>3,532</b>	<b>4,134</b>	<b>3.6</b>	<b>3.0</b>	<b>2.9</b>	<b>2.6</b>	<b>3.0</b>
Northeast	328	274	244	278	512	1.3	1.1	1.0	1.1	2.0
Midwest	646	647	757	682	785	2.1	2.1	2.5	2.2	2.5
South	3,279	2,597	2,385	2,098	2,085	7.1	5.6	5.1	4.3	4.3
West	407	391	449	474	752	1.4	1.3	1.5	1.5	2.4
Guam	0	0	2	1	7	0.0	0.0	2.3	1.3	8.8
Puerto Rico	133	96	73	99	114	7.2	5.2	3.9	5.4	6.2
Virgin Islands	2	6	0	1	0	3.8	11.3	0.0	1.9	0.0
<b>OUTLYING AREAS</b>	<b>135</b>	<b>102</b>	<b>75</b>	<b>101</b>	<b>121</b>	<b>6.8</b>	<b>5.1</b>	<b>3.7</b>	<b>5.1</b>	<b>6.2</b>
<b>TOTAL</b>	<b>4,795</b>	<b>4,011</b>	<b>3,910</b>	<b>3,633</b>	<b>4,255</b>	<b>3.6</b>	<b>3.0</b>	<b>2.9</b>	<b>2.6</b>	<b>3.0</b>

<sup>1</sup>Includes cases reported by Washington, D.C. 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, 2001**

<i>Rank</i> <sup>1</sup>	<i>City</i> *	<i>Cases</i>	<i>Rate per 100,000 Population</i>
1	Detroit, MI	351	28.6
2	Atlanta, GA	224	27.5
3	Baltimore, MD	161	24.7
4	Memphis, TN	208	23.2
5	Newark, NJ	58	19.3
6	San Francisco, CA	139	17.9
7	Indianapolis, IN	128	14.9
8	Norfolk, VA	35	14.9
9	Nashville, TN	76	13.3
10	Chicago, IL	317	10.3
11	Miami, FL	185	8.2
12	Oklahoma City, OK	35	8.2
13	Washington, DC	43	7.5
14	Minneapolis, MN	23	6.0
15	Dallas, TX	121	5.5
16	Philadelphia, PA	79	5.2
17	San Antonio, TX	71	5.1
18	Columbus, OH	54	5.1
19	New Orleans, LA	24	5.0
20	Jacksonville, FL	38	4.9
21	Phoenix, AZ	148	4.8
22	Richmond, VA	9	4.6
23	St Louis, MO	15	4.3
24	Charlotte, NC	29	4.2
25	New York City, NY	282	3.5
26	Houston, TX	103	3.0
27	Boston, MA	18	3.0
28	Fort Worth, TX	40	2.8
29	Louisville, KY	19	2.7
30	Denver, CO	15	2.7
31	Tucson, AZ	22	2.6
32	Seattle, WA	41	2.4
33	Los Angeles, CA	186	2.1
34	Austin, TX	17	2.1
35	Jersey City, NJ	5	2.1
36	Milwaukee, WI	18	1.9
37	Birmingham, AL	12	1.8
38	El Paso, TX	12	1.8
39	St Paul, MN	5	1.8
40	Oakland, CA	23	1.7
41	Portland, OR	9	1.7
42	Tampa, FL	15	1.5
43	Albuquerque, NM	8	1.4
44	Tulsa, OK	5	1.3
45	St Petersburg, FL	11	1.2
46	Buffalo, NY	4	1.2
47	Honolulu, HI	10	1.1
48	Kansas City, MO	5	1.1
49	San Diego, CA	27	1.0
50	Wichita, KS	4	0.9
51	Rochester, NY	2	0.8
52	San Jose, CA	10	0.6
53	Omaha, NE	3	0.6
54	Pittsburgh, PA	7	0.5
55	Yonkers, NY	1	0.5
56	Dayton, OH	2	0.4
57	Sacramento, CA	4	0.3
58	Des Moines, IA	1	0.3
59	Corpus Christi, TX	1	0.3
	<b>YEAR 2010 OBJECTIVE</b>		<b>0.2</b>
60	Cleveland, OH	3	0.2
61	Cincinnati, OH	2	0.2
62	Akron, OH	1	0.2
63	Toledo, OH	1	0.2

\*Excludes outlying areas (San Juan, PR, with 68 cases and rate of 6.7).

<sup>1</sup>Cities were ranked in descending order by rate, number of cases, and alphabetically by state.

**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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	4	3	0	0	1	0.8	0.6	0.0	0.0	0.2
Albuquerque, NM	9	11	11	11	8	1.7	2.1	2.1	2.0	1.4
Atlanta, GA	204	163	213	116	224	28.2	22.0	28.6	14.2	27.5
Austin, TX	8	15	19	8	17	1.2	2.1	2.6	1.0	2.1
Baltimore, MD	669	466	246	218	161	101.8	72.2	38.9	33.5	24.7
Birmingham, AL	107	36	24	24	12	16.2	5.5	3.7	3.6	1.8
Boston, MA	52	23	16	25	18	9.3	4.1	2.9	4.2	3.0
Buffalo, NY	2	4	1	1	4	0.6	1.3	0.3	0.3	1.2
Charlotte, NC	48	69	53	45	29	7.8	10.9	8.2	6.5	4.2
Chicago, IL	346	310	282	292	317	11.9	10.4	9.5	9.5	10.3
Cincinnati, OH	34	12	1	0	2	4.0	1.4	0.1	0.0	0.2
Cleveland, OH	61	30	12	4	3	4.4	2.2	0.9	0.3	0.2
Columbus, OH	54	55	43	40	54	5.3	5.4	4.2	3.7	5.1
Corpus Christi, TX	2	0	1	1	1	0.6	0.0	0.3	0.3	0.3
Dallas, TX	148	126	151	100	121	7.3	6.1	7.3	4.5	5.5
Dayton, OH	28	6	2	5	2	5.0	1.1	0.4	0.9	0.4
Denver, CO	8	3	4	4	15	1.6	0.6	0.8	0.7	2.7
Des Moines, IA	0	3	0	1	1	0.0	0.8	0.0	0.3	0.3
Detroit, MI	94	152	189	274	351	8.6	12.1	15.1	22.3	28.6
El Paso, TX	3	2	9	6	12	0.4	0.3	1.3	0.9	1.8
Fort Worth, TX	39	26	22	22	40	2.9	1.9	1.6	1.5	2.8
Honolulu, HI	1	4	3	1	10	0.1	0.5	0.3	0.1	1.1
Houston, TX	180	99	77	70	103	5.7	3.1	2.4	2.1	3.0
Indianapolis, IN	71	165	407	301	128	8.7	20.3	50.2	35.0	14.9
Jacksonville, FL	36	16	7	24	38	4.9	2.2	0.9	3.1	4.9
Jersey City, NJ	9	1	3	1	5	4.1	0.5	1.4	0.4	2.1
Kansas City, MO	2	6	8	1	5	0.4	1.3	1.8	0.2	1.1
Los Angeles, CA	108	120	83	133	186	1.3	1.4	1.0	1.5	2.1
Louisville, KY	107	91	67	57	19	16.0	13.5	10.0	8.2	2.7
Memphis, TN	343	260	258	246	208	39.6	29.9	29.6	27.4	23.2
Miami, FL	49	31	82	126	185	2.4	1.4	3.8	5.6	8.2
Milwaukee, WI	84	71	39	43	18	9.2	7.8	4.3	4.6	1.9
Minneapolis, MN	12	4	6	9	23	3.1	1.1	1.6	2.3	6.0
Nashville, TN	203	210	250	200	76	38.0	39.3	47.2	35.1	13.3
New Orleans, LA	132	105	51	22	24	28.1	22.6	11.1	4.5	5.0
New York City, NY	97	81	130	117	282	1.3	1.1	1.8	1.5	3.5
Newark, NJ	26	27	22	28	58	9.1	9.5	7.8	9.3	19.3
Norfolk, VA	44	33	20	37	35	19.2	15.3	8.9	15.8	14.9
Oakland, CA	7	11	10	11	23	0.6	0.9	0.8	0.8	1.7
Oklahoma City, OK	39	61	114	82	35	8.9	15.0	27.8	19.3	8.2
Omaha, NE	1	4	5	2	3	0.2	0.9	1.1	0.4	0.6
Philadelphia, PA	108	89	69	67	79	7.4	6.2	4.9	4.4	5.2
Phoenix, AZ	118	173	195	172	148	4.4	6.2	6.8	5.6	4.8
Pittsburgh, PA	5	0	2	3	7	0.4	0.0	0.2	0.2	0.5
Portland, OR	3	4	5	11	9	0.6	0.8	1.0	2.1	1.7
Richmond, VA	49	22	13	5	9	25.5	11.3	6.9	2.5	4.6
Rochester, NY	2	7	0	1	2	0.8	2.9	0.0	0.4	0.8
Sacramento, CA	4	1	2	1	4	0.4	0.1	0.2	0.1	0.3
San Antonio, TX	27	26	31	67	71	2.0	1.9	2.3	4.8	5.1
San Diego, CA	23	24	25	27	27	0.8	0.9	0.9	1.0	1.0
San Francisco, CA	52	25	29	53	139	7.1	3.4	3.9	6.8	17.9
San Jose, CA	5	3	3	2	10	0.3	0.2	0.2	0.1	0.6
Seattle, WA	11	33	65	50	41	0.7	2.0	3.9	2.9	2.4
St Louis, MO	64	58	51	11	15	18.7	17.1	15.3	3.2	4.3
St Paul, MN	0	3	2	2	5	0.0	1.1	0.7	0.7	1.8
St Petersburg, FL	11	8	4	7	11	1.3	0.9	0.5	0.8	1.2
Tampa, FL	34	32	15	20	15	3.7	3.5	1.6	2.0	1.5
Toledo, OH	6	8	6	2	1	1.3	1.8	1.3	0.4	0.2
Tucson, AZ	12	7	8	8	22	1.5	0.9	1.0	0.9	2.6
Tulsa, OK	8	14	45	8	5	2.1	3.7	11.7	2.0	1.3
Washington, DC	117	81	45	37	43	22.1	15.5	8.7	6.5	7.5
Wichita, KS	16	3	7	2	4	3.6	0.7	1.5	0.4	0.9
Yonkers, NY	2	1	1	1	1	1.0	0.5	0.5	0.5	0.5
<b>U.S. CITY TOTAL</b>	<b>4,148</b>	<b>3,537</b>	<b>3,564</b>	<b>3,265</b>	<b>3,525</b>	<b>6.0</b>	<b>5.0</b>	<b>5.0</b>	<b>4.4</b>	<b>4.8</b>
San Juan, PR	99	79	61	68	68	11.4	7.5	5.8	6.7	6.7
<b>TOTAL</b>	<b>4,247</b>	<b>3,616</b>	<b>3,625</b>	<b>3,333</b>	<b>3,593</b>	<b>6.0</b>	<b>5.1</b>	<b>5.0</b>	<b>4.5</b>	<b>4.8</b>

**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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	2	1	0	0	0	0.7	0.4	0.0	0.0	0.0
Albuquerque, NM	5	6	3	3	1	1.9	2.2	1.1	1.1	0.4
Atlanta, GA	67	62	85	37	67	17.8	16.0	21.8	8.9	16.2
Austin, TX	3	6	2	2	3	0.9	1.7	0.5	0.5	0.8
Baltimore, MD	309	222	112	92	77	87.9	64.4	33.2	26.5	22.2
Birmingham, AL	43	15	10	15	8	12.3	4.3	2.9	4.3	2.3
Boston, MA	19	5	5	5	1	6.6	1.7	1.7	1.6	0.3
Buffalo, NY	1	1	0	1	0	0.6	0.6	0.0	0.6	0.0
Charlotte, NC	18	36	18	24	12	5.7	11.0	5.3	6.8	3.4
Chicago, IL	145	119	116	129	61	9.6	7.7	7.5	8.1	3.8
Cincinnati, OH	13	8	0	0	2	2.9	1.8	0.0	0.0	0.5
Cleveland, OH	27	15	3	2	2	3.7	2.1	0.4	0.3	0.3
Columbus, OH	30	32	21	14	17	5.7	6.0	3.9	2.5	3.1
Corpus Christi, TX	0	0	1	1	1	0.0	0.0	0.6	0.6	0.6
Dallas, TX	66	46	57	36	49	6.4	4.4	5.4	3.2	4.4
Dayton, OH	15	3	0	1	1	5.1	1.0	0.0	0.3	0.3
Denver, CO	3	2	3	0	2	1.2	0.8	1.2	0.0	0.7
Des Moines, IA	0	0	0	1	0	0.0	0.0	0.0	0.5	0.0
Detroit, MI	45	67	74	121	136	7.9	10.1	11.2	19.0	21.3
El Paso, TX	0	0	2	1	2	0.0	0.0	0.5	0.3	0.6
Fort Worth, TX	12	9	4	7	16	1.8	1.3	0.6	1.0	2.2
Honolulu, HI	0	0	2	0	0	0.0	0.0	0.5	0.0	0.0
Houston, TX	84	44	30	27	28	5.3	2.7	1.8	1.6	1.6
Indianapolis, IN	36	87	204	170	60	8.5	20.4	48.0	38.2	13.5
Jacksonville, FL	12	8	3	11	18	3.2	2.1	0.8	2.7	4.5
Jersey City, NJ	5	0	0	1	2	4.5	0.0	0.0	0.8	1.6
Kansas City, MO	1	2	5	0	2	0.4	0.8	2.1	0.0	0.9
Los Angeles, CA	32	50	25	19	9	0.7	1.1	0.6	0.4	0.2
Louisville, KY	51	45	30	26	9	14.5	12.7	8.4	7.2	2.5
Memphis, TN	165	134	126	123	106	36.4	29.4	27.5	26.2	22.6
Miami, FL	16	11	24	40	40	1.5	1.0	2.1	3.4	3.4
Milwaukee, WI	46	35	17	21	12	9.7	7.3	3.6	4.3	2.5
Minneapolis, MN	3	2	3	3	12	1.5	1.1	1.6	1.5	6.2
Nashville, TN	97	93	102	83	29	34.7	33.1	36.6	28.2	9.9
New Orleans, LA	57	41	24	8	11	22.7	16.4	9.7	3.1	4.3
New York City, NY	37	18	28	10	19	1.0	0.5	0.7	0.2	0.5
Newark, NJ	12	14	10	9	21	8.0	9.4	6.7	5.7	13.3
Norfolk, VA	25	13	7	14	20	22.5	11.9	6.4	12.2	17.5
Oakland, CA	0	5	2	3	1	0.0	0.8	0.3	0.4	0.1
Oklahoma City, OK	15	26	42	39	18	6.6	12.3	19.7	17.8	8.2
Omaha, NE	0	1	2	1	1	0.0	0.4	0.9	0.4	0.4
Philadelphia, PA	43	30	21	25	24	5.5	3.9	2.8	3.1	3.0
Phoenix, AZ	31	64	62	75	39	2.3	4.5	4.3	4.9	2.5
Pittsburgh, PA	4	0	0	2	1	0.6	0.0	0.0	0.3	0.1
Portland, OR	1	1	3	4	1	0.4	0.4	1.2	1.5	0.4
Richmond, VA	21	8	7	2	3	20.0	7.5	6.7	1.9	2.8
Rochester, NY	1	4	0	0	1	0.8	3.2	0.0	0.0	0.8
Sacramento, CA	2	0	1	1	1	0.3	0.0	0.2	0.2	0.2
San Antonio, TX	12	8	10	23	24	1.7	1.1	1.4	3.2	3.4
San Diego, CA	5	7	6	6	6	0.4	0.5	0.4	0.4	0.4
San Francisco, CA	8	4	1	5	2	2.2	1.1	0.3	1.3	0.5
San Jose, CA	0	1	0	0	1	0.0	0.1	0.0	0.0	0.1
Seattle, WA	6	1	2	4	1	0.7	0.1	0.2	0.5	0.1
St Louis, MO	36	25	28	3	6	19.4	13.6	15.5	1.6	3.2
St Paul, MN	0	2	1	1	1	0.0	1.4	0.7	0.7	0.7
St Petersburg, FL	7	4	2	3	2	1.5	0.9	0.4	0.6	0.4
Tampa, FL	21	20	7	10	6	4.5	4.2	1.4	2.0	1.2
Toledo, OH	3	4	5	0	0	1.3	1.7	2.1	0.0	0.0
Tucson, AZ	5	1	1	2	5	1.3	0.2	0.2	0.5	1.2
Tulsa, OK	4	6	22	4	1	2.0	3.0	11.1	2.0	0.5
Washington, DC	58	34	24	10	8	20.7	12.2	8.7	3.3	2.6
Wichita, KS	4	1	4	1	1	1.8	0.4	1.7	0.4	0.4
Yonkers, NY	0	1	0	0	0	0.0	1.0	0.0	0.0	0.0
<b>U.S. CITY TOTAL<sup>1</sup></b>	<b>1,789</b>	<b>1,510</b>	<b>1,409</b>	<b>1,281</b>	<b>1,010</b>	<b>5.0</b>	<b>4.1</b>	<b>3.8</b>	<b>3.4</b>	<b>2.7</b>
San Juan, PR	41	38	34	32	38	8.5	7.0	6.2	6.0	7.2
<b>TOTAL</b>	<b>1,830</b>	<b>1,548</b>	<b>1,443</b>	<b>1,313</b>	<b>1,048</b>	<b>5.0</b>	<b>4.2</b>	<b>3.9</b>	<b>3.4</b>	<b>2.7</b>

<sup>1</sup>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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	2	2	0	0	1	0.8	0.8	0.0	0.0	0.4
Albuquerque, NM	4	5	8	8	7	1.6	2.0	3.1	2.9	2.6
Atlanta, GA	137	101	128	79	157	39.6	28.6	36.0	19.7	39.1
Austin, TX	5	9	16	6	14	1.4	2.5	4.4	1.4	3.4
Baltimore, MD	359	244	134	126	84	117.4	81.0	45.4	41.5	27.7
Birmingham, AL	64	21	14	9	4	20.8	6.8	4.6	2.9	1.3
Boston, MA	33	18	11	20	17	12.3	6.7	4.1	6.9	5.9
Buffalo, NY	1	3	1	0	4	0.7	2.0	0.7	0.0	2.6
Charlotte, NC	30	33	35	21	17	10.1	10.9	11.2	6.2	5.0
Chicago, IL	201	191	166	163	256	14.3	13.3	11.6	10.9	17.1
Cincinnati, OH	21	4	1	0	0	5.2	1.0	0.3	0.0	0.0
Cleveland, OH	34	15	9	2	1	5.2	2.3	1.4	0.3	0.2
Columbus, OH	24	23	22	26	37	4.9	4.7	4.4	5.0	7.1
Corpus Christi, TX	2	0	0	0	0	1.3	0.0	0.0	0.0	0.0
Dallas, TX	82	80	94	64	72	8.2	7.9	9.3	5.8	6.5
Dayton, OH	13	3	2	4	1	4.8	1.1	0.7	1.5	0.4
Denver, CO	5	1	1	4	13	2.1	0.4	0.4	1.4	4.6
Des Moines, IA	0	3	0	0	1	0.0	1.7	0.0	0.0	0.6
Detroit, MI	49	85	115	153	215	9.5	14.2	19.4	26.0	36.5
El Paso, TX	3	2	7	5	10	0.9	0.6	2.1	1.5	3.1
Fort Worth, TX	27	17	18	15	24	4.1	2.5	2.6	2.1	3.4
Honolulu, HI	1	4	1	1	10	0.2	0.9	0.2	0.2	2.3
Houston, TX	96	55	47	43	75	6.1	3.5	2.9	2.5	4.4
Indianapolis, IN	35	78	203	131	68	9.0	20.2	52.7	31.5	16.3
Jacksonville, FL	24	8	4	13	20	6.8	2.2	1.1	3.4	5.3
Jersey City, NJ	4	1	3	0	3	3.8	0.9	2.8	0.0	2.5
Kansas City, MO	1	4	3	1	3	0.5	1.9	1.4	0.5	1.4
Los Angeles, CA	76	70	57	112	175	1.8	1.6	1.3	2.5	4.0
Louisville, KY	56	46	37	31	10	17.6	14.5	11.6	9.3	3.0
Memphis, TN	178	126	132	123	102	43.1	30.5	31.8	28.7	23.8
Miami, FL	33	20	58	86	145	3.4	1.9	5.6	7.9	13.3
Milwaukee, WI	38	36	22	22	6	8.8	8.3	5.1	4.9	1.3
Minneapolis, MN	9	2	3	6	11	4.8	1.1	1.7	3.2	5.8
Nashville, TN	106	117	148	117	47	41.7	46.2	58.9	42.4	17.0
New Orleans, LA	75	64	27	14	13	34.5	29.7	12.6	6.2	5.7
New York City, NY	60	63	102	107	263	1.7	1.8	2.9	2.8	6.9
Newark, NJ	14	13	12	19	37	10.4	9.7	8.9	13.3	25.9
Norfolk, VA	19	20	13	23	15	16.1	18.9	11.2	19.2	12.5
Oakland, CA	7	6	8	8	22	1.1	1.0	1.3	1.2	3.4
Oklahoma City, OK	24	35	72	43	17	11.3	17.9	36.6	20.8	8.2
Omaha, NE	1	3	3	1	2	0.5	1.4	1.4	0.4	0.9
Philadelphia, PA	65	59	48	42	55	9.6	8.9	7.3	6.0	7.8
Phoenix, AZ	87	109	133	97	109	6.5	7.9	9.4	6.3	7.1
Pittsburgh, PA	1	0	2	1	6	0.2	0.0	0.3	0.2	1.0
Portland, OR	2	3	2	7	8	0.8	1.2	0.8	2.7	3.1
Richmond, VA	28	14	6	3	6	32.1	16.0	7.0	3.3	6.5
Rochester, NY	1	3	0	1	1	0.9	2.6	0.0	0.8	0.8
Sacramento, CA	2	1	1	0	3	0.4	0.2	0.2	0.0	0.5
San Antonio, TX	15	18	20	44	47	2.3	2.8	3.0	6.5	6.9
San Diego, CA	18	17	19	21	21	1.3	1.2	1.3	1.5	1.5
San Francisco, CA	44	21	28	48	137	12.2	5.7	7.6	12.2	34.7
San Jose, CA	5	2	3	2	9	0.6	0.2	0.4	0.2	1.1
Seattle, WA	5	32	63	46	40	0.6	3.9	7.7	5.3	4.6
St Louis, MO	28	33	23	8	9	17.9	21.2	15.0	4.9	5.5
St Paul, MN	0	1	1	1	4	0.0	0.8	0.8	0.7	2.9
St Petersburg, FL	4	4	2	4	9	1.0	1.0	0.5	0.9	2.1
Tampa, FL	13	12	8	10	9	2.9	2.7	1.7	2.0	1.8
Toledo, OH	3	4	1	2	1	1.4	1.9	0.5	0.9	0.5
Tucson, AZ	7	6	7	6	17	1.8	1.6	1.8	1.5	4.1
Tulsa, OK	4	8	23	4	4	2.1	4.4	12.4	2.1	2.1
Washington, DC	59	47	21	27	35	23.8	19.2	8.6	10.0	13.0
Wichita, KS	12	2	3	1	3	5.6	0.9	1.4	0.4	1.3
Yonkers, NY	2	0	1	1	1	2.2	0.0	1.1	1.1	1.1
<b>U.S. CITY TOTAL<sup>1</sup></b>	<b>2,358</b>	<b>2,027</b>	<b>2,152</b>	<b>1,982</b>	<b>2,513</b>	<b>7.0</b>	<b>5.9</b>	<b>6.3</b>	<b>5.5</b>	<b>7.0</b>
San Juan, PR	58	41	27	36	30	14.8	8.2	5.3	7.4	6.1
<b>TOTAL</b>	<b>2,416</b>	<b>2,068</b>	<b>2,179</b>	<b>2,018</b>	<b>2,543</b>	<b>7.1</b>	<b>6.0</b>	<b>6.2</b>	<b>5.5</b>	<b>7.0</b>

<sup>1</sup>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, 1997–2001**

Year	Age Group	Cases			Rates		
		Total	Male	Female	Total	Male	Female
1997	10-14	43	4	39	0.2	0.0	0.4
	15-19	778	255	523	4.1	2.6	5.7
	20-24	1,318	619	699	7.5	6.9	8.2
	25-29	1,435	721	714	7.6	7.6	7.6
	30-34	1,477	761	716	7.1	7.4	6.9
	35-39	1,407	780	627	6.2	6.9	5.5
	40-44	944	628	317	4.4	5.9	2.9
	45-54	771	565	205	2.3	3.4	1.2
	55-64	256	224	32	1.2	2.2	0.3
	65+	107	99	8	0.3	0.7	0.0
	TOTAL	8,548	4,660	3,888	3.2	3.6	2.8
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

NOTE: This table should be used only for age comparisons. This is because, 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, 1997–2001**

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	
1997	10-14	43	4	39	4	0	4	36	3	33	3	1	2	0	0	0	0	0	0
	15-19	778	255	523	70	16	54	649	214	435	55	24	31	3	1	2	1	0	1
	20-24	1,318	619	699	110	44	66	1,115	517	598	80	54	27	6	1	5	7	3	4
	25-29	1,435	721	714	142	66	76	1,180	569	611	102	77	26	4	4	0	7	5	2
	30-34	1,477	761	716	161	73	88	1,229	632	597	74	52	23	7	3	4	6	2	4
	35-39	1,407	780	627	196	100	97	1,153	639	514	50	38	12	3	2	1	5	2	3
	40-44	944	628	317	107	75	32	787	522	265	38	24	14	5	2	3	7	5	2
	45-54	771	565	205	107	82	26	622	456	166	30	20	10	4	2	2	7	5	2
	55-64	256	224	32	52	44	8	186	162	24	17	17	0	0	0	0	0	0	0
	65+	107	99	8	25	24	1	74	67	7	9	9	0	0	0	0	0	0	0
TOTAL	8,548	4,660	3,888	975	523	453	7,040	3,785	3,255	459	315	145	33	15	17	41	23	18	
1998	10-14	39	5	34	4	0	4	34	5	29	1	0	1	0	0	0	0	0	0
	15-19	612	193	418	54	11	43	504	163	342	43	16	27	3	0	3	7	3	4
	20-24	1,029	509	521	105	30	75	835	418	417	73	52	21	5	3	2	11	6	5
	25-29	1,028	508	520	130	50	79	782	383	398	100	65	35	5	4	1	12	5	7
	30-34	1,179	626	553	146	77	69	949	484	465	65	54	11	9	7	2	9	4	5
	35-39	1,178	683	494	172	104	68	927	523	404	65	46	18	7	6	1	7	4	3
	40-44	831	533	298	129	95	35	653	404	250	40	30	10	3	2	1	5	3	2
	45-54	780	577	203	123	102	20	610	439	171	45	35	10	1	1	0	1	0	1
	55-64	232	194	37	51	48	3	161	129	32	16	14	2	2	2	0	2	2	0
	65+	102	86	16	21	18	3	71	60	11	9	7	2	0	0	0	1	1	0
TOTAL	7,018	3,918	3,100	936	536	400	5,534	3,009	2,524	457	319	138	36	26	10	56	29	28	
1999	10-14	25	2	23	3	1	2	21	1	20	1	0	1	0	0	0	0	0	0
	15-19	522	182	340	49	16	32	421	139	282	44	24	19	1	1	0	8	2	6
	20-24	963	510	452	120	46	74	717	381	336	110	75	35	5	3	2	10	5	5
	25-29	991	508	482	137	67	70	741	364	376	94	67	26	7	7	0	11	2	9
	30-34	1,084	589	496	168	98	70	801	411	390	97	73	24	12	6	6	6	1	5
	35-39	1,153	677	476	189	112	77	883	501	382	69	56	12	4	4	0	8	3	5
	40-44	808	538	271	142	98	44	601	390	211	56	46	9	8	3	4	2	0	2
	45-54	753	572	181	139	96	43	561	430	130	42	36	6	5	5	0	6	4	2
	55-64	228	188	40	53	41	12	151	129	22	22	16	5	1	0	1	1	1	0
	65+	74	65	9	24	22	2	46	39	7	4	4	0	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	36	
2000	10-14	23	4	19	2	0	2	20	4	16	0	0	0	0	0	0	1	0	1
	15-19	457	162	295	47	11	35	365	129	236	41	21	19	1	0	1	4	1	3
	20-24	881	419	462	110	40	70	653	310	344	101	66	35	4	1	3	13	3	10
	25-29	902	527	376	146	93	53	631	338	293	108	82	27	8	7	1	9	7	2
	30-34	957	553	404	182	119	62	665	350	314	94	72	22	12	10	2	5	2	3
	35-39	1,006	606	400	216	143	72	664	374	291	113	81	32	5	4	1	7	3	4
	40-44	782	502	280	173	118	55	550	341	209	51	38	13	2	2	0	5	3	2
	45-54	706	528	178	145	114	31	511	375	136	43	32	11	4	4	0	4	4	0
	55-64	179	157	22	42	40	2	124	106	18	11	10	1	0	0	0	2	1	1
	65+	76	68	8	21	19	2	50	44	6	3	3	0	1	1	0	1	1	0
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	26	
2001	10-14	19	2	17	0	0	0	17	1	16	2	1	1	0	0	0	0	0	0
	15-19	387	142	245	32	13	19	290	97	193	59	29	29	2	1	1	4	2	2
	20-24	836	482	354	114	72	42	562	296	266	138	105	34	6	5	1	15	4	11
	25-29	876	583	293	152	121	31	554	323	231	140	115	26	13	13	0	18	11	6
	30-34	964	660	304	236	192	44	563	330	233	137	117	20	12	12	0	17	9	7
	35-39	1,146	818	328	332	281	51	653	397	255	134	120	13	15	14	1	13	5	7
	40-44	808	587	221	227	193	34	505	335	170	59	48	11	2	2	0	15	10	5
	45-54	805	632	173	220	196	24	513	377	137	61	52	9	4	3	1	6	4	2
	55-64	193	167	26	51	48	3	121	100	21	18	16	2	2	2	0	2	2	0
	65+	64	57	7	23	22	1	36	30	6	4	4	0	0	0	0	1	1	0
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	41	

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex or overall totals. This is because, 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: 1997 (ID, NJ, NY); 1998 (ID, NJ); 1999 (NH). 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 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 — Reported rates per 100,000 population by age, sex, and race/ethnicity: United States, 1997–2001**

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	0.0	0.4	0.0	0.0	0.1	1.3	0.2	2.4	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
15-19	4.1	2.6	5.7	0.5	0.2	0.9	23.0	14.9	31.3	2.1	1.7	2.6	0.4	0.3	0.6	0.5	0.0	1.1
20-24	7.5	6.9	8.2	0.9	0.7	1.2	45.2	42.5	47.9	3.1	3.8	2.3	0.9	0.3	1.4	4.6	3.9	5.3
25-29	7.6	7.6	7.6	1.1	1.0	1.2	47.6	48.2	47.1	4.0	5.5	2.2	0.5	1.0	0.0	4.6	6.4	2.7
30-34	7.1	7.4	6.9	1.1	1.0	1.2	47.1	51.8	42.9	2.8	3.6	1.8	0.9	0.8	0.9	4.1	2.7	5.4
35-39	6.2	6.9	5.5	1.2	1.2	1.2	42.4	50.3	35.5	2.1	3.0	1.1	0.4	0.5	0.2	3.3	2.7	3.9
40-44	4.4	5.9	2.9	0.7	0.9	0.4	31.9	45.5	20.1	1.9	2.4	1.5	0.6	0.6	0.7	5.0	7.4	2.7
45-54	2.3	3.4	1.2	0.4	0.6	0.2	18.1	29.5	8.8	1.2	1.5	0.8	0.4	0.4	0.3	3.4	5.1	1.9
55-64	1.2	2.2	0.3	0.3	0.5	0.1	8.7	17.6	2.0	1.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65+	0.3	0.7	0.0	0.1	0.2	0.0	2.7	6.3	0.4	0.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	3.2	3.6	2.8	0.5	0.5	0.5	21.8	24.8	19.1	1.6	2.1	1.0	0.3	0.3	0.4	2.1	2.3	1.8
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

NOTE: These tables should be used only for race/ethnicity comparisons, not for age, sex or overall totals. This is because, 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: 1997 (ID, NJ, NY); 1998 (ID, NJ); 1999 (NH). 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 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, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	623	440	367	219	192	14.4	10.1	8.4	4.9	4.3
Alaska	0	0	1	1	0	0.0	0.0	0.2	0.2	0.0
Arizona	201	206	290	248	266	4.4	4.4	6.1	4.8	5.2
Arkansas	237	185	123	117	60	9.4	7.3	4.8	4.4	2.2
California	961	783	591	353	408	3.0	2.4	1.8	1.0	1.2
Colorado	13	10	6	7	14	0.3	0.3	0.1	0.2	0.3
Connecticut	86	37	12	9	20	2.6	1.1	0.4	0.3	0.6
Delaware	37	44	16	10	18	5.1	5.9	2.1	1.3	2.3
Florida	1,179	1,092	1,085	1,165	947	8.0	7.3	7.2	7.3	5.9
Georgia	1,085	740	729	521	703	14.5	9.7	9.4	6.4	8.6
Hawaii	0	0	1	3	7	0.0	0.0	0.1	0.2	0.6
Idaho	5	0	1	0	0	0.4	0.0	0.1	0.0	0.0
Illinois	1,032	596	639	382	386	8.7	4.9	5.3	3.1	3.1
Indiana	169	121	172	184	120	2.9	2.1	2.9	3.0	2.0
Iowa	27	20	4	8	6	0.9	0.7	0.1	0.3	0.2
Kansas	58	39	19	9	18	2.2	1.5	0.7	0.3	0.7
Kentucky	122	101	81	62	38	3.1	2.6	2.0	1.5	0.9
Louisiana	550	446	404	231	194	12.6	10.2	9.2	5.2	4.3
Maine	2	0	0	0	3	0.2	0.0	0.0	0.0	0.2
Maryland	1,218	848	610	518	362	23.9	16.5	11.8	9.8	6.8
Massachusetts	127	104	65	83	64	2.1	1.7	1.1	1.3	1.0
Michigan	354	261	302	406	368	3.6	2.7	3.1	4.1	3.7
Minnesota	21	8	9	18	16	0.4	0.2	0.2	0.4	0.3
Mississippi	962	650	553	409	329	35.2	23.6	20.0	14.4	11.6
Missouri	202	165	99	52	33	3.7	3.0	1.8	0.9	0.6
Montana	4	0	2	0	0	0.5	0.0	0.2	0.0	0.0
Nebraska	5	3	6	1	1	0.3	0.2	0.4	0.1	0.1
Nevada	24	38	28	9	7	1.4	2.2	1.5	0.5	0.4
New Hampshire	0	1	1	0	2	0.0	0.1	0.1	0.0	0.2
New Jersey	236	231	99	109	234	2.9	2.8	1.2	1.3	2.8
New Mexico	8	8	2	25	18	0.5	0.5	0.1	1.4	1.0
New York	763	679	700	467	566	4.2	3.7	3.8	2.5	3.0
North Carolina	879	846	740	618	483	11.8	11.2	9.7	7.7	6.0
North Dakota	0	0	0	1	0	0.0	0.0	0.0	0.2	0.0
Ohio	331	227	168	119	100	3.0	2.0	1.5	1.0	0.9
Oklahoma	179	158	249	128	121	5.4	4.7	7.4	3.7	3.5
Oregon	14	7	6	19	9	0.4	0.2	0.2	0.6	0.3
Pennsylvania	668	424	414	278	260	5.6	3.5	3.5	2.3	2.1
Rhode Island	7	0	1	1	1	0.7	0.0	0.1	0.1	0.1
South Carolina	481	383	407	394	394	12.8	10.0	10.5	9.8	9.8
South Dakota	2	0	1	0	0	0.3	0.0	0.1	0.0	0.0
Tennessee	984	659	647	627	553	18.3	12.1	11.8	11.0	9.7
Texas	1,863	1,480	1,273	1,171	964	9.6	7.5	6.4	5.6	4.6
Utah	2	3	5	10	0	0.1	0.1	0.2	0.4	0.0
Vermont	0	2	0	0	1	0.0	0.3	0.0	0.0	0.2
Virginia	379	230	212	140	133	5.6	3.4	3.1	2.0	1.9
Washington	13	16	17	20	19	0.2	0.3	0.3	0.3	0.3
West Virginia	1	2	3	3	1	0.1	0.1	0.2	0.2	0.1
Wisconsin	169	115	90	72	43	3.3	2.2	1.7	1.3	0.8
Wyoming	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
<b>U.S. TOTAL<sup>1</sup></b>	<b>16,631</b>	<b>12,696</b>	<b>11,534</b>	<b>9,465</b>	<b>8,701</b>	<b>6.2</b>	<b>4.7</b>	<b>4.2</b>	<b>3.4</b>	<b>3.1</b>
Northeast	1,889	1,478	1,292	947	1,151	3.7	2.9	2.5	1.8	2.1
Midwest	2,370	1,555	1,509	1,252	1,091	3.8	2.5	2.4	1.9	1.7
South	11,127	8,592	7,783	6,571	5,711	11.8	9.0	8.1	6.6	5.7
West	1,245	1,071	950	695	748	2.1	1.8	1.6	1.1	1.2
Guam	0	0	0	1	2	0.0	0.0	0.0	0.6	1.3
Puerto Rico	679	659	680	663	600	17.7	17.1	17.5	17.4	15.8
Virgin Islands	8	28	12	5	8	7.3	25.5	10.6	4.6	7.4
<b>OUTLYING AREAS</b>	<b>687</b>	<b>687</b>	<b>692</b>	<b>669</b>	<b>610</b>	<b>16.8</b>	<b>16.6</b>	<b>16.6</b>	<b>16.4</b>	<b>15.0</b>
<b>TOTAL</b>	<b>17,318</b>	<b>13,383</b>	<b>12,226</b>	<b>10,134</b>	<b>9,311</b>	<b>6.4</b>	<b>4.9</b>	<b>4.4</b>	<b>3.5</b>	<b>3.3</b>

<sup>1</sup>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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	0	4	6	1	2	0.0	0.7	1.1	0.2	0.4
Albuquerque, NM	6	5	2	19	8	1.1	1.0	0.4	3.4	1.4
Atlanta, GA	367	303	241	173	398	50.8	41.0	32.4	21.2	48.8
Austin, TX	33	19	23	27	31	4.8	2.7	3.2	3.3	3.8
Baltimore, MD	975	646	472	384	257	148.3	100.1	74.6	59.0	39.5
Birmingham, AL	225	95	103	62	35	34.2	14.4	15.7	9.4	5.3
Boston, MA	62	60	41	29	26	11.1	10.8	7.4	4.8	4.3
Buffalo, NY	5	2	1	1	0	1.6	0.6	0.3	0.3	0.0
Charlotte, NC	86	97	99	63	69	14.0	15.4	15.3	9.1	9.9
Chicago, IL	918	518	521	292	298	31.5	17.4	17.5	9.5	9.7
Cincinnati, OH	26	11	5	2	2	3.1	1.3	0.6	0.2	0.2
Cleveland, OH	164	98	63	29	31	11.8	7.1	4.6	2.1	2.2
Columbus, OH	34	42	34	32	33	3.3	4.1	3.3	3.0	3.1
Corpus Christi, TX	6	13	9	3	1	1.9	4.1	2.9	1.0	0.3
Dallas, TX	306	405	384	361	247	15.1	19.7	18.6	16.3	11.1
Dayton, OH	28	5	5	2	4	5.0	0.9	0.9	0.4	0.7
Denver, CO	7	7	4	1	4	1.4	1.4	0.8	0.2	0.7
Des Moines, IA	19	11	2	6	4	5.4	3.1	0.5	1.6	1.1
Detroit, MI	254	180	223	328	293	23.3	14.3	17.8	26.7	23.9
El Paso, TX	34	14	9	11	14	4.8	2.0	1.3	1.6	2.1
Fort Worth, TX	192	121	66	80	60	14.5	8.9	4.8	5.5	4.1
Honolulu, HI	0	0	1	1	4	0.0	0.0	0.1	0.1	0.5
Houston, TX	528	367	248	134	137	16.7	11.4	7.6	3.9	4.0
Indianapolis, IN	33	44	102	125	82	4.1	5.4	12.6	14.5	9.5
Jacksonville, FL	81	69	37	46	54	11.1	9.4	5.0	5.9	6.9
Jersey City, NJ	10	2	1	1	6	4.6	0.9	0.5	0.4	2.5
Kansas City, MO	6	6	16	4	1	1.3	1.3	3.5	0.9	0.2
Los Angeles, CA	649	525	330	187	203	7.6	6.1	3.8	2.1	2.3
Louisville, KY	66	64	38	40	20	9.8	9.5	5.6	5.8	2.9
Memphis, TN	591	382	338	325	356	68.2	44.0	38.7	36.2	39.7
Miami, FL	427	242	294	329	221	20.9	11.2	13.5	14.6	9.8
Milwaukee, WI	140	94	84	55	35	15.4	10.3	9.3	5.9	3.7
Minneapolis, MN	14	5	7	11	8	3.7	1.4	1.9	2.9	2.1
Nashville, TN	173	148	201	173	137	32.4	27.7	37.9	30.4	24.0
New Orleans, LA	119	84	65	32	31	25.4	18.0	14.1	6.6	6.4
New York City, NY	670	645	659	447	548	9.1	8.7	8.9	5.6	6.8
Newark, NJ	30	56	23	58	74	10.5	19.7	8.1	19.3	24.6
Norfolk, VA	87	50	34	23	25	37.9	23.2	15.1	9.8	10.7
Oakland, CA	33	25	22	4	12	2.6	2.0	1.7	0.3	0.9
Oklahoma City, OK	50	70	147	86	73	11.3	17.2	35.9	20.2	17.2
Omaha, NE	2	3	2	1	0	0.5	0.7	0.4	0.2	0.0
Philadelphia, PA	648	407	394	261	248	44.6	28.3	27.8	17.2	16.3
Phoenix, AZ	189	193	266	220	243	7.0	6.9	9.3	7.2	7.9
Pittsburgh, PA	2	1	1	1	4	0.2	0.1	0.1	0.1	0.3
Portland, OR	8	5	5	12	7	1.6	1.0	1.0	2.3	1.3
Richmond, VA	58	36	34	18	28	30.1	18.5	17.9	9.1	14.2
Rochester, NY	9	9	2	0	1	3.7	3.7	0.8	0.0	0.4
Sacramento, CA	10	12	3	2	5	0.9	1.0	0.3	0.2	0.4
San Antonio, TX	96	63	72	102	120	7.2	4.7	5.2	7.3	8.6
San Diego, CA	17	21	23	10	16	0.6	0.8	0.8	0.4	0.6
San Francisco, CA	16	15	14	18	47	2.2	2.0	1.9	2.3	6.1
San Jose, CA	4	5	11	4	12	0.2	0.3	0.7	0.2	0.7
Seattle, WA	5	8	6	16	14	0.3	0.5	0.4	0.9	0.8
St Louis, MO	83	63	40	21	15	24.3	18.6	12.0	6.0	4.3
St Paul, MN	1	1	1	1	4	0.4	0.4	0.4	0.4	1.4
St Petersburg, FL	28	19	15	23	6	3.2	2.2	1.7	2.5	0.7
Tampa, FL	83	76	51	56	51	9.1	8.2	5.4	5.6	5.1
Toledo, OH	6	5	5	3	1	1.3	1.1	1.1	0.7	0.2
Tucson, AZ	6	6	14	14	8	0.8	0.8	1.7	1.7	0.9
Tulsa, OK	16	44	40	8	5	4.1	11.6	10.4	2.0	1.3
Washington, DC	348	288	284	238	219	65.8	55.1	54.7	41.6	38.3
Wichita, KS	45	13	11	1	7	10.3	2.9	2.4	0.2	1.5
Yonkers, NY	5	2	2	0	0	2.6	1.0	1.0	0.0	0.0
<b>U.S. CITY TOTAL</b>	<b>9,139</b>	<b>6,829</b>	<b>6,256</b>	<b>5,017</b>	<b>4,905</b>	<b>13.1</b>	<b>9.7</b>	<b>8.8</b>	<b>6.8</b>	<b>6.6</b>
San Juan, PR	305	300	296	250	232	35.0	28.7	28.1	24.5	22.7
<b>TOTAL</b>	<b>9,444</b>	<b>7,129</b>	<b>6,552</b>	<b>5,267</b>	<b>5,137</b>	<b>13.4</b>	<b>10.0</b>	<b>9.1</b>	<b>7.0</b>	<b>6.9</b>

**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, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	422	413	443	403	380	9.8	9.5	10.1	9.1	8.5
Alaska	11	12	11	5	9	1.8	2.0	1.8	0.8	1.4
Arizona	255	281	307	385	672	5.6	6.0	6.4	7.5	13.1
Arkansas	121	183	140	130	124	4.8	7.2	5.5	4.9	4.6
California	2,319	1,637	1,897	2,590	2,038	7.2	5.0	5.7	7.6	6.0
Colorado	125	100	76	45	111	3.2	2.5	1.9	1.0	2.6
Connecticut	175	114	97	125	131	5.4	3.5	3.0	3.7	3.8
Delaware	52	49	46	26	47	7.1	6.6	6.1	3.3	6.0
Florida	1,198	1,082	1,231	1,150	1,446	8.2	7.3	8.1	7.2	9.0
Georgia	1,218	749	799	695	850	16.3	9.8	10.3	8.5	10.4
Hawaii	46	14	7	17	22	3.9	1.2	0.6	1.4	1.8
Idaho	18	13	11	10	10	1.5	1.1	0.9	0.8	0.8
Illinois	414	883	851	794	706	3.5	7.3	7.0	6.4	5.7
Indiana	199	173	173	212	245	3.4	2.9	2.9	3.5	4.0
Iowa	38	23	24	36	33	1.3	0.8	0.8	1.2	1.1
Kansas	77	63	62	50	43	3.0	2.4	2.3	1.9	1.6
Kentucky	141	127	120	103	104	3.6	3.2	3.0	2.5	2.6
Louisiana	872	767	701	526	426	20.0	17.6	16.0	11.8	9.5
Maine	9	3	1	6	12	0.7	0.2	0.1	0.5	0.9
Maryland	288	616	405	338	305	5.7	12.0	7.8	6.4	5.8
Massachusetts	524	416	283	296	334	8.6	6.8	4.6	4.7	5.3
Michigan	258	202	207	232	347	2.6	2.1	2.1	2.3	3.5
Minnesota	87	58	52	43	83	1.9	1.2	1.1	0.9	1.7
Mississippi	48	235	147	125	175	1.8	8.5	5.3	4.4	6.2
Missouri	173	90	191	215	110	3.2	1.7	3.5	3.8	2.0
Montana	1	0	0	0	0	0.1	0.0	0.0	0.0	0.0
Nebraska	26	24	12	4	5	1.6	1.4	0.7	0.2	0.3
Nevada	85	86	59	38	47	5.1	4.9	3.3	1.9	2.4
New Hampshire	26	11	14	17	17	2.2	0.9	1.2	1.4	1.4
New Jersey	696	411	587	599	637	8.6	5.1	7.2	7.1	7.6
New Mexico	86	54	66	57	36	5.0	3.1	3.8	3.1	2.0
New York	4,639	4,291	3,201	2,308	2,701	25.6	23.6	17.6	12.2	14.2
North Carolina	584	540	490	375	475	7.9	7.2	6.4	4.7	5.9
North Dakota	0	0	0	0	2	0.0	0.0	0.0	0.0	0.3
Ohio	202	109	98	89	115	1.8	1.0	0.9	0.8	1.0
Oklahoma	105	97	94	82	102	3.2	2.9	2.8	2.4	3.0
Oregon	23	19	23	18	26	0.7	0.6	0.7	0.5	0.8
Pennsylvania	354	367	427	321	362	2.9	3.1	3.6	2.6	2.9
Rhode Island	75	54	51	33	29	7.6	5.5	5.1	3.1	2.8
South Carolina	261	198	230	206	268	6.9	5.2	5.9	5.1	6.7
South Dakota	5	1	1	1	0	0.7	0.1	0.1	0.1	0.0
Tennessee	605	515	439	525	580	11.3	9.5	8.0	9.2	10.2
Texas	2,694	1,930	1,885	1,659	2,145	13.9	9.8	9.4	8.0	10.3
Utah	50	50	42	46	14	2.4	2.4	2.0	2.1	0.6
Vermont	1	0	0	0	4	0.2	0.0	0.0	0.0	0.7
Virginia	495	334	354	266	287	7.4	4.9	5.2	3.8	4.1
Washington	107	82	110	85	98	1.9	1.4	1.9	1.4	1.7
West Virginia	17	6	7	7	1	0.9	0.3	0.4	0.4	0.1
Wisconsin	50	58	52	60	64	1.0	1.1	1.0	1.1	1.2
Wyoming	4	1	0	4	3	0.8	0.2	0.0	0.8	0.6
<b>U.S. TOTAL<sup>1</sup></b>	<b>20,447</b>	<b>17,743</b>	<b>16,653</b>	<b>15,594</b>	<b>16,976</b>	<b>7.6</b>	<b>6.6</b>	<b>6.1</b>	<b>5.5</b>	<b>6.0</b>
Northeast	6,499	5,667	4,661	3,705	4,227	12.6	11.0	9.0	6.9	7.9
Midwest	1,529	1,684	1,723	1,736	1,753	2.4	2.7	2.7	2.7	2.7
South	9,289	8,043	7,660	6,853	7,910	9.9	8.4	7.9	6.8	7.9
West	3,130	2,349	2,609	3,300	3,086	5.3	3.9	4.3	5.2	4.9
Guam	1	3	10	7	15	0.6	1.9	6.1	4.5	9.7
Puerto Rico	640	597	614	485	402	16.7	15.5	15.8	12.7	10.6
Virgin Islands	0	0	0	3	0	0.0	0.0	0.0	2.8	0.0
<b>OUTLYING AREAS</b>	<b>641</b>	<b>600</b>	<b>624</b>	<b>495</b>	<b>417</b>	<b>15.7</b>	<b>14.5</b>	<b>15.0</b>	<b>12.2</b>	<b>10.2</b>
<b>TOTAL</b>	<b>21,088</b>	<b>18,343</b>	<b>17,277</b>	<b>16,089</b>	<b>17,393</b>	<b>7.8</b>	<b>6.7</b>	<b>6.2</b>	<b>5.6</b>	<b>6.1</b>

<sup>1</sup>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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Akron, OH	0	0	0	1	1	0.0	0.0	0.0	0.2	0.2
Albuquerque, NM	41	29	37	33	26	7.8	5.5	7.1	5.9	4.7
Atlanta, GA	289	120	119	88	168	40.0	16.2	16.0	10.8	20.6
Austin, TX	57	22	20	24	64	8.2	3.1	2.8	3.0	7.9
Baltimore, MD	81	331	202	111	57	12.3	51.3	31.9	17.0	8.8
Birmingham, AL	136	110	149	124	101	20.6	16.7	22.7	18.7	15.3
Boston, MA	191	155	107	106	113	34.3	27.9	19.2	17.7	18.9
Buffalo, NY	13	6	4	8	7	4.1	1.9	1.3	2.5	2.2
Charlotte, NC	19	44	39	40	31	3.1	7.0	6.0	5.8	4.5
Chicago, IL	0	494	475	468	444	0.0	16.6	15.9	15.2	14.4
Cincinnati, OH	33	9	6	12	12	3.9	1.1	0.7	1.4	1.4
Cleveland, OH	19	20	11	7	5	1.4	1.4	0.8	0.5	0.4
Columbus, OH	28	17	30	18	52	2.8	1.7	2.9	1.7	4.9
Corpus Christi, TX	14	13	10	6	8	4.4	4.1	3.2	1.9	2.6
Dallas, TX	260	187	156	120	326	12.9	9.1	7.6	5.4	14.7
Dayton, OH	70	28	9	10	12	12.5	5.0	1.6	1.8	2.1
Denver, CO	57	24	37	18	45	11.4	4.8	7.4	3.2	8.1
Des Moines, IA	7	6	5	11	10	2.0	1.7	1.4	2.9	2.7
Detroit, MI	175	131	136	145	257	16.1	10.4	10.9	11.8	21.0
El Paso, TX	73	65	60	73	78	10.4	9.2	8.5	10.7	11.5
Fort Worth, TX	62	27	87	85	159	4.7	2.0	6.3	5.9	11.0
Honolulu, HI	41	14	4	13	16	4.7	1.6	0.5	1.5	1.8
Houston, TX	1,128	879	755	614	661	35.7	27.4	23.2	18.1	19.4
Indianapolis, IN	21	30	38	92	87	2.6	3.7	4.7	10.7	10.1
Jacksonville, FL	89	69	30	53	47	12.1	9.4	4.1	6.8	6.0
Jersey City, NJ	62	28	38	22	26	28.5	12.7	17.4	9.1	10.8
Kansas City, MO	4	2	41	39	24	0.9	0.4	9.1	8.6	5.3
Los Angeles, CA	806	557	740	1,496	923	9.4	6.5	8.5	16.8	10.4
Louisville, KY	56	54	69	51	61	8.4	8.0	10.3	7.4	8.8
Memphis, TN	473	383	321	297	324	54.6	44.1	36.8	33.1	36.1
Miami, FL	367	463	409	356	628	17.9	21.5	18.8	15.8	27.9
Milwaukee, WI	42	62	36	49	43	4.6	6.8	4.0	5.2	4.6
Minneapolis, MN	27	25	15	14	32	7.0	6.9	4.1	3.6	8.3
Nashville, TN	36	58	54	145	162	6.7	10.9	10.2	25.4	28.4
New Orleans, LA	208	157	108	70	46	44.3	33.7	23.4	14.4	9.5
New York City, NY	4,110	3,881	2,907	2,115	2,442	56.0	52.3	39.1	26.4	30.5
Newark, NJ	159	82	115	170	237	55.9	28.8	40.6	56.5	78.8
Norfolk, VA	26	25	30	22	22	11.3	11.6	13.3	9.4	9.4
Oakland, CA	86	91	92	75	71	6.9	7.1	7.1	5.7	5.4
Oklahoma City, OK	16	39	34	25	50	3.6	9.6	8.3	5.9	11.8
Omaha, NE	14	19	3	3	0	3.2	4.3	0.7	0.6	0.0
Philadelphia, PA	300	287	355	281	315	20.7	20.0	25.0	18.5	20.8
Phoenix, AZ	156	187	245	324	546	5.8	6.7	8.6	10.5	17.8
Pittsburgh, PA	14	11	4	3	4	1.1	0.9	0.3	0.2	0.3
Portland, OR	11	8	9	7	13	2.2	1.6	1.8	1.3	2.5
Richmond, VA	29	20	17	17	20	15.1	10.3	9.0	8.6	10.1
Rochester, NY	21	21	13	6	1	8.7	8.7	5.4	2.4	0.4
Sacramento, CA	36	16	13	20	24	3.2	1.4	1.1	1.6	2.0
San Antonio, TX	182	143	121	113	167	13.7	10.6	8.8	8.1	12.0
San Diego, CA	206	135	196	195	103	7.6	4.9	6.9	6.9	3.7
San Francisco, CA	101	88	84	91	114	13.8	11.8	11.2	11.7	14.7
San Jose, CA	83	54	40	36	68	5.2	3.3	2.4	2.1	4.0
Seattle, WA	46	28	51	50	55	2.8	1.7	3.1	2.9	3.2
St Louis, MO	109	46	69	82	30	31.9	13.6	20.7	23.6	8.6
St Paul, MN	7	6	3	6	7	2.5	2.2	1.1	2.1	2.5
St Petersburg, FL	40	29	18	34	23	4.6	3.3	2.0	3.7	2.5
Tampa, FL	83	65	41	55	76	9.1	7.0	4.4	5.5	7.6
Toledo, OH	13	10	10	13	1	2.9	2.2	2.2	2.9	0.2
Tucson, AZ	34	23	20	14	42	4.4	2.9	2.5	1.7	5.0
Tulsa, OK	11	14	23	16	12	2.9	3.7	6.0	4.1	3.0
Washington, DC	168	202	129	237	195	31.8	38.6	24.9	41.4	34.1
Wichita, KS	22	5	16	7	4	5.0	1.1	3.5	1.5	0.9
Yonkers, NY	27	17	9	9	12	14.0	8.8	4.6	4.5	6.0
<b>U.S. CITY TOTAL</b>	<b>11,095</b>	<b>10,171</b>	<b>9,024</b>	<b>8,845</b>	<b>9,710</b>	<b>15.9</b>	<b>14.4</b>	<b>12.7</b>	<b>12.0</b>	<b>13.1</b>
San Juan, PR	312	293	322	222	178	35.8	28.0	30.6	21.8	17.4
<b>TOTAL</b>	<b>11,407</b>	<b>10,464</b>	<b>9,346</b>	<b>9,067</b>	<b>9,888</b>	<b>16.2</b>	<b>14.6</b>	<b>13.0</b>	<b>12.1</b>	<b>13.2</b>

**Table 40. Congenital syphilis — Reported cases and rates in infants <1 year of age: United States (excluding outlying areas), 1963–2001**

<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	1,078	27.8
1998	840	21.3
1999	575	14.5
2000	554	14.0
2001	441	11.1

\*Years 1963-1966 are fiscal years.

NOTE: The surveillance case definition for congenital syphilis changed in 1988 (see Appendix). 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, 2001**

<i>Rank</i> <sup>2</sup>	<i>State/ Area</i> <sup>3</sup>	<i>Cases</i>	<i>Rate per 100,000 Live Births</i>
1	Arizona	29	35.7
2	South Carolina	16	29.1
3	New Jersey	32	28.0
4	Illinois	40	22.0
5	Mississippi	9	21.1
6	Texas	73	20.9
7	Florida	37	18.8
8	Tennessee	14	18.0
9	North Carolina	19	16.7
10	Arkansas	6	16.3
11	Indiana	13	15.1
12	Georgia	18	14.2
13	New York	33	12.9
14	California	59	11.4
	<b>U.S. TOTAL<sup>1</sup></b>	<b>441</b>	<b>11.1</b>
15	Oklahoma	5	10.2
16	Alabama	6	9.7
17	Missouri	5	6.6
18	Maryland	4	5.6
19	Kansas	2	5.2
20	Connecticut	2	4.6
21	Michigan	4	3.0
22	Wisconsin	2	2.9
23	Pennsylvania	4	2.8
24	Massachusetts	2	2.5
25	Virginia	2	2.1
26	Kentucky	1	1.8
27	Colorado	1	1.6
	<b>YEAR 2010 OBJECTIVE</b>		<b>1.0</b>
28	Ohio	1	0.7
	Alaska	0	0.0
	Delaware	0	0.0
	Hawaii	0	0.0
	Idaho	0	0.0
	Iowa	0	0.0
	Louisiana	0	0.0
	Maine	0	0.0
	Minnesota	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
	Washington	0	0.0
	West Virginia	0	0.0
	Wyoming	0	0.0

<sup>1</sup>Total includes cases reported by Washington, D.C. but excludes outlying areas (Guam with 1 case and rate of 24.9, Puerto Rico with 21 cases and rate of 35.3, and Virgin Islands with 1 case and rate of 59.8).

<sup>2</sup>States were ranked in descending order by rate, number of cases, and alphabetically by state. States with no cases were not ranked.

<sup>3</sup>Mother's state of residence used to assign case.



**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, 1997–2001**

State/Area*	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	31	12	7	7	6	50.9	19.3	11.3	11.3	9.7
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	12	25	24	25	29	15.9	32.0	29.6	30.8	35.7
Arkansas	41	30	14	15	6	112.4	81.4	38.1	40.8	16.3
California	162	122	88	86	59	30.9	23.4	17.0	16.6	11.4
Colorado	0	2	1	0	1	0.0	3.4	1.6	0.0	1.6
Connecticut	2	0	1	1	2	4.6	0.0	2.3	2.3	4.6
Delaware	2	0	0	0	0	19.5	0.0	0.0	0.0	0.0
Florida	73	72	31	42	37	37.9	36.8	15.7	21.3	18.8
Georgia	17	14	16	22	18	14.4	11.4	12.6	17.4	14.2
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	75	71	54	50	40	41.5	38.9	29.7	27.5	22.0
Indiana	3	0	7	4	13	3.6	0.0	8.1	4.6	15.1
Iowa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas	2	0	0	2	2	5.4	0.0	0.0	5.2	5.2
Kentucky	5	5	0	3	1	9.4	9.2	0.0	5.5	1.8
Louisiana	22	8	12	7	0	33.3	12.0	17.9	10.4	0.0
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	58	44	27	16	4	82.6	61.1	37.5	22.2	5.6
Massachusetts	1	2	0	1	2	1.2	2.5	0.0	1.2	2.5
Michigan	29	18	22	18	4	21.7	13.5	16.5	13.5	3.0
Minnesota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Mississippi	41	15	12	14	9	98.7	34.9	28.1	32.8	21.1
Missouri	10	15	10	3	5	13.5	19.9	13.3	4.0	6.6
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	1	0	0	0.0	0.0	7.1	0.0	0.0
New Jersey	84	87	49	23	32	74.2	75.9	42.9	20.2	28.0
New Mexico	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New York	105	59	43	39	33	40.8	22.8	16.8	15.3	12.9
North Carolina	18	24	19	18	19	16.8	21.5	16.7	15.8	16.7
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	10	4	6	5	1	6.6	2.6	3.9	3.3	0.7
Oklahoma	9	16	9	1	5	18.6	32.3	18.4	2.0	10.2
Oregon	1	0	0	0	0	2.3	0.0	0.0	0.0	0.0
Pennsylvania	37	21	7	9	4	25.7	14.4	4.8	6.2	2.8
Rhode Island	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
South Carolina	19	24	23	31	16	36.4	44.5	41.9	56.4	29.1
South Dakota	0	1	1	0	0	0.0	9.7	9.5	0.0	0.0
Tennessee	32	13	10	25	14	43.0	16.8	12.9	32.1	18.0
Texas	149	114	68	71	73	44.6	33.3	19.5	20.3	20.9
Utah	0	1	0	1	0	0.0	2.2	0.0	2.2	0.0
Vermont	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Virginia	7	6	3	7	2	7.6	6.4	3.1	7.3	2.1
Washington	0	1	1	0	0	0.0	1.3	1.3	0.0	0.0
West Virginia	1	0	0	0	0	4.8	0.0	0.0	0.0	0.0
Wisconsin	9	6	9	4	2	13.5	8.9	13.2	5.9	2.9
Wyoming	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
<b>U.S. TOTAL<sup>1</sup></b>	<b>1,078</b>	<b>840</b>	<b>575</b>	<b>554</b>	<b>441</b>	<b>27.8</b>	<b>21.3</b>	<b>14.5</b>	<b>14.0</b>	<b>11.1</b>
Northeast	229	169	101	73	73	33.4	24.4	14.7	10.6	10.6
Midwest	138	115	109	86	67	15.8	13.1	12.4	9.7	7.6
South	536	405	251	283	212	38.7	28.5	17.5	19.7	14.7
West	175	151	114	112	89	18.6	15.9	12.0	11.7	9.3
Guam	0	0	0	0	1	0.0	0.0	0.0	0.0	24.9
Puerto Rico	9	28	23	17	21	14.0	46.3	38.6	28.5	35.3
Virgin Islands	0	0	0	0	1	0.0	0.0	0.0	0.0	59.8
<b>OUTLYING AREAS</b>	<b>9</b>	<b>28</b>	<b>23</b>	<b>17</b>	<b>23</b>	<b>12.8</b>	<b>42.1</b>	<b>35.2</b>	<b>26.1</b>	<b>35.2</b>
<b>TOTAL</b>	<b>1,087</b>	<b>868</b>	<b>598</b>	<b>571</b>	<b>464</b>	<b>27.5</b>	<b>21.7</b>	<b>14.9</b>	<b>14.2</b>	<b>11.5</b>

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

<sup>1</sup>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, 2001**

<i>Rank</i> <sup>1</sup>	<i>City*</i>	<i>Cases</i>	<i>Rate per 100,000 Live Births</i>
1	Newark, NJ	8	163.8
2	Phoenix, AZ	20	83.0
3	Atlanta, GA	7	78.2
4	Fort Worth, TX	8	76.7
5	Miami, FL	10	76.5
6	Tampa, FL	6	71.3
7	Memphis, TN	8	70.2
8	Indianapolis, IN	9	65.4
9	Chicago, IL	31	61.4
10	St Louis, MO	3	54.3
11	Jersey City, NJ	2	51.6
12	Nashville, TN	4	47.9
13	Oakland, CA	3	47.5
14	Houston, TX	20	46.5
15	Los Angeles, CA	27	41.6
16	Richmond, VA	1	34.1
17	Dallas, TX	8	33.5
18	San Antonio, TX	6	27.5
19	San Diego, CA	5	27.0
20	Washington, DC	2	26.6
21	Oklahoma City, OK	2	26.5
22	Austin, TX	3	25.4
23	New York City, NY	28	23.5
24	Birmingham, AL	1	22.3
25	Buffalo, NY	1	21.5
26	Baltimore, MD	2	19.4
27	Philadelphia, PA	4	18.4
28	Milwaukee, WI	2	17.8
29	El Paso, TX	2	15.7
30	San Jose, CA	2	12.5
31	San Francisco, CA	1	12.3
32	Charlotte, NC	1	10.3
33	Columbus, OH	1	9.4
34	Detroit, MI	1	6.3
	<b>YEAR 2010 OBJECTIVE</b>		<b>1.0</b>
	Tucson, AZ	0	0.0
	Sacramento, 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
	Minneapolis, MN	0	0.0
	St Paul, MN	0	0.0
	Kansas City, MO	0	0.0
	Omaha, NE	0	0.0
	Albuquerque, NM	0	0.0
	Rochester, NY	0	0.0
	Yonkers, NY	0	0.0
	Akron, OH	0	0.0
	Cincinnati, OH	0	0.0
	Cleveland, OH	0	0.0
	Dayton, OH	0	0.0
	Toledo, OH	0	0.0
	Tulsa, OK	0	0.0
	Portland, OR	0	0.0
	Pittsburgh, PA	0	0.0
	Corpus Christi, TX	0	0.0
	Norfolk, VA	0	0.0
	Seattle, WA	0	0.0

\*Mother's residence used to assign case. Excludes outlying areas (San Juan, PR, with 5 cases and rate of 72.0).

<sup>1</sup>Cities were ranked in descending order by rate, number of cases, and alphabetically by state. Cities with no cases were not ranked.

**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, 1997–2001**

City*	Cases					Rates per 100,000 Live Births				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
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	12	5	7	7	7	142.7	57.2	78.2	78.2	78.2
Austin, TX	0	0	0	0	3	0.0	0.0	0.0	0.0	25.4
Baltimore, MD	56	29	21	15	2	573.4	295.6	203.9	145.6	19.4
Birmingham, AL	6	5	2	2	1	139.2	112.6	44.6	44.6	22.3
Boston, MA	0	2	0	0	0	0.0	25.4	0.0	0.0	0.0
Buffalo, NY	3	0	0	0	1	62.7	0.0	0.0	0.0	21.5
Charlotte, NC	0	1	3	3	1	0.0	10.8	31.0	31.0	10.3
Chicago, IL	50	49	44	38	31	97.7	95.2	87.1	75.2	61.4
Cincinnati, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Cleveland, OH	6	3	2	2	0	63.2	33.5	23.4	23.4	0.0
Columbus, OH	1	1	2	0	1	9.1	8.9	18.7	0.0	9.4
Corpus Christi, TX	0	1	0	0	0	0.0	21.6	0.0	0.0	0.0
Dallas, TX	3	18	4	6	8	13.3	77.4	16.8	25.1	33.5
Dayton, OH	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Denver, CO	0	1	1	0	0	0.0	10.2	9.8	0.0	0.0
Des Moines, IA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Detroit, MI	25	14	21	9	1	149.4	85.2	132.9	56.9	6.3
El Paso, TX	2	0	1	2	2	15.2	0.0	7.9	15.7	15.7
Fort Worth, TX	6	1	2	4	8	63.2	10.1	19.2	38.4	76.7
Honolulu, HI	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Houston, TX	101	56	31	31	20	242.8	133.2	72.0	72.0	46.5
Indianapolis, IN	0	0	6	3	9	0.0	0.0	43.6	21.8	65.4
Jacksonville, FL	0	0	0	2	0	0.0	0.0	0.0	17.6	0.0
Jersey City, NJ	4	3	0	3	2	101.9	76.4	0.0	77.3	51.6
Kansas City, MO	1	0	1	2	0	13.1	0.0	13.7	27.4	0.0
Los Angeles, CA	67	62	36	41	27	98.6	94.2	55.5	63.2	41.6
Louisville, KY	3	4	0	1	0	46.0	58.5	0.0	14.5	0.0
Memphis, TN	28	11	10	14	8	248.5	96.6	87.7	122.8	70.2
Miami, FL	31	37	10	18	10	218.4	278.7	76.5	137.6	76.5
Milwaukee, WI	9	6	7	4	2	83.8	54.5	62.2	35.5	17.8
Minneapolis, MN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Nashville, TN	0	0	0	5	4	0.0	0.0	0.0	59.9	47.9
New Orleans, LA	4	2	4	0	0	51.7	26.4	52.1	0.0	0.0
New York City, NY	84	45	40	32	28	70.6	37.5	33.5	26.8	23.5
Newark, NJ	26	26	12	9	8	509.4	536.7	245.7	184.3	163.8
Norfolk, VA	1	0	0	3	0	25.5	0.0	0.0	77.7	0.0
Oakland, CA	2	2	3	1	3	31.2	31.4	47.5	15.8	47.5
Oklahoma City, OK	5	11	5	0	2	65.6	142.8	66.3	0.0	26.5
Omaha, NE	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Philadelphia, PA	37	21	7	9	4	167.6	95.0	32.2	41.4	18.4
Phoenix, AZ	10	19	16	20	20	44.2	82.0	66.4	83.0	83.0
Pittsburgh, PA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Portland, OR	1	0	0	0	0	14.0	0.0	0.0	0.0	0.0
Richmond, VA	1	3	0	0	1	30.5	105.2	0.0	0.0	34.1
Rochester, NY	0	2	1	0	0	0.0	46.3	25.8	0.0	0.0
Sacramento, CA	5	2	2	2	0	47.6	18.8	18.9	18.9	0.0
San Antonio, TX	4	5	4	5	6	18.6	22.9	18.3	22.9	27.5
San Diego, CA	13	7	7	0	5	69.6	37.8	37.8	0.0	27.0
San Francisco, CA	2	1	1	1	1	24.4	12.3	12.3	12.3	12.3
San Jose, CA	1	0	2	1	2	6.2	0.0	12.5	6.2	12.5
Seattle, WA	0	0	1	0	0	0.0	0.0	13.6	0.0	0.0
St Louis, MO	5	3	5	1	3	86.7	53.4	90.5	18.1	54.3
St Paul, MN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
St Petersburg, FL	0	0	1	0	0	0.0	0.0	29.5	0.0	0.0
Tampa, FL	7	4	4	1	6	100.6	50.8	47.5	11.9	71.3
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	1	3	1	0	0	15.7	45.1	15.2	0.0	0.0
Washington, DC	11	8	0	4	2	138.8	104.1	0.0	53.2	26.6
Wichita, KS	2	0	0	0	0	32.2	0.0	0.0	0.0	0.0
Yonkers, NY	0	2	0	0	0	0.0	74.3	0.0	0.0	0.0
<b>U.S. CITY TOTAL</b>	<b>636</b>	<b>475</b>	<b>327</b>	<b>301</b>	<b>239</b>	<b>80.3</b>	<b>59.4</b>	<b>40.9</b>	<b>37.7</b>	<b>29.9</b>
San Juan, PR	3	1	3	5	5	43.2	15.3	43.2	72.0	72.0
<b>TOTAL</b>	<b>639</b>	<b>476</b>	<b>330</b>	<b>306</b>	<b>244</b>	<b>80.0</b>	<b>59.1</b>	<b>40.9</b>	<b>38.0</b>	<b>30.3</b>

\*Mother's residence used to assign case.

**Table 45. Congenital syphilis — Reported cases and rates in infants <1 year of age by race/ethnicity of mother, 1997–2001**

<i>Year of Birth</i>	<i>Race/Ethnicity</i>	<i>Cases</i>	<i>Rate per 100,000 Live Births*</i>
<b>1997</b>	White/Non-Hispanic	85	3.6
	Black/Non-Hispanic	717	122.4
	Hispanic	238	33.5
	Asian/Pacific Islander	14	8.4
	Native American/Alaskan Native	4	11.0
	Other	3	NA
	Unknown	17	NA
	<b>Total</b>	<b>1078</b>	<b>27.8</b>
<b>1998</b>	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
	<b>Total</b>	<b>840</b>	<b>21.3</b>
<b>1999</b>	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
	<b>Total</b>	<b>575</b>	<b>14.5</b>
<b>2000</b>	White/Non-Hispanic	36	1.5
	Black/Non-Hispanic	313	52.8
	Hispanic	168	22.0
	Asian/Pacific Islander	11	6.2
	Native American/Alaskan Native	5	13.2
	Other	3	NA
	Unknown	18	NA
	<b>Total</b>	<b>554</b>	<b>14.0</b>
<b>2001</b>	White/Non-Hispanic	44	1.8
	Black/Non-Hispanic	224	37.8
	Hispanic	154	20.1
	Asian/Pacific Islander	3	1.7
	Native American/Alaskan Native	5	13.2
	Other	1	NA
	Unknown	10	NA
	<b>Total</b>	<b>441</b>	<b>11.1</b>

\*NA = Not applicable.

**Table 46. Chancroid — Reported cases and rates by state/area listed in alphabetical order: United States and outlying areas, 1997–2001**

State/Area	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Alabama	1	1	1	1	0	0.0	0.0	0.0	0.0	0.0
Alaska	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Arizona	0	2	0	0	0	0.0	0.0	0.0	0.0	0.0
Arkansas	1	7	0	0	0	0.0	0.3	0.0	0.0	0.0
California	19	7	7	3	2	0.1	0.0	0.0	0.0	0.0
Colorado	0	0	0	1	0	0.0	0.0	0.0	0.0	0.0
Connecticut	0	2	0	0	0	0.0	0.1	0.0	0.0	0.0
Delaware	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Florida	3	3	2	0	2	0.0	0.0	0.0	0.0	0.0
Georgia	1	2	1	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	5	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Indiana	0	1	0	0	0	0.0	0.0	0.0	0.0	0.0
Iowa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Kansas	0	1	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	3	1	9	6	0	0.1	0.0	0.2	0.1	0.0
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Massachusetts	4	0	1	2	2	0.1	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	0	1	0	0	0.0	0.0	0.0	0.0	0.0
Mississippi	1	3	0	0	0	0.0	0.1	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	2	0	0	0	0	0.1	0.0	0.0	0.0	0.0
New Hampshire	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Jersey	0	0	0	0	4	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	119	82	39	26	3	0.7	0.5	0.2	0.1	0.0
North Carolina	9	9	7	5	3	0.1	0.1	0.1	0.1	0.0
North Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Ohio	3	3	0	1	0	0.0	0.0	0.0	0.0	0.0
Oklahoma	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Oregon	1	0	1	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	0	1	0	0	0.0	0.0	0.1	0.0	0.0
South Carolina	15	19	48	10	15	0.4	0.5	1.2	0.2	0.4
South Dakota	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Tennessee	1	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Texas	53	34	16	19	6	0.3	0.2	0.1	0.1	0.0
Utah	0	0	0	0	1	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	1	7	3	2	0	0.0	0.1	0.0	0.0	0.0
Washington	2	1	0	0	0	0.0	0.0	0.0	0.0	0.0
West Virginia	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Wisconsin	0	3	4	2	0	0.0	0.1	0.1	0.0	0.0
Wyoming	1	1	1	0	0	0.2	0.2	0.2	0.0	0.0
<b>U.S. TOTAL<sup>1</sup></b>	<b>246</b>	<b>189</b>	<b>142</b>	<b>78</b>	<b>38</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>
Guam	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Puerto Rico	1	2	1	3	4	0.0	0.1	0.0	0.1	0.1
Virgin Islands	0	0	0	1	0	0.0	0.0	0.0	0.9	0.0
<b>OUTLYING AREAS</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>
<b>TOTAL</b>	<b>247</b>	<b>191</b>	<b>143</b>	<b>82</b>	<b>42</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>

<sup>1</sup>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, 1997–2001**

City	Cases					Rates per 100,000 Population				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
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	1	0	0	0	0.1	0.1	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	3	0	0	0	0	0.5	0.0	0.0	0.0	0.0
Buffalo, NY	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Charlotte, NC	1	0	1	0	1	0.2	0.0	0.2	0.0	0.1
Chicago, IL	5	0	0	0	0	0.2	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	0	2	0	0	0	0.0	0.1	0.0	0.0	0.0
Columbus, OH	3	1	0	0	0	0.3	0.1	0.0	0.0	0.0
Corpus Christi, TX	0	0	1	0	0	0.0	0.0	0.3	0.0	0.0
Dallas, TX	13	6	4	6	1	0.6	0.3	0.2	0.3	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	2	4	0	1	0	0.3	0.6	0.0	0.1	0.0
Fort Worth, TX	1	0	2	2	0	0.1	0.0	0.1	0.1	0.0
Honolulu, HI	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Houston, TX	23	20	7	3	1	0.7	0.6	0.2	0.1	0.0
Indianapolis, IN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Jacksonville, FL	0	0	0	0	1	0.0	0.0	0.0	0.0	0.1
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	12	0	1	1	0	0.1	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	0	2	2	0	0	0.0	0.2	0.2	0.0	0.0
Minneapolis, MN	0	0	1	0	0	0.0	0.0	0.3	0.0	0.0
Nashville, TN	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
New Orleans, LA	3	0	4	6	0	0.6	0.0	0.9	1.2	0.0
New York City, NY	119	82	39	26	3	1.6	1.1	0.5	0.3	0.0
Newark, NJ	0	0	0	0	1	0.0	0.0	0.0	0.0	0.3
Norfolk, VA	0	0	1	0	0	0.0	0.0	0.4	0.0	0.0
Oakland, CA	1	0	1	0	1	0.1	0.0	0.1	0.0	0.1
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	0	2	0	0	0	0.0	0.1	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	0	1	0	0.0	0.0	0.0	0.1	0.0
San Diego, CA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
San Francisco, CA	3	4	0	0	1	0.4	0.5	0.0	0.0	0.1
San Jose, CA	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Seattle, WA	1	0	0	0	0	0.1	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
<b>U.S. CITY TOTAL</b>	<b>191</b>	<b>124</b>	<b>64</b>	<b>46</b>	<b>10</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>
San Juan, PR	0	1	1	2	1	0.0	0.1	0.1	0.2	0.1
<b>TOTAL</b>	<b>191</b>	<b>125</b>	<b>65</b>	<b>48</b>	<b>11</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>



## Sources and Limitations of Data

### 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 (DSTD), 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.

At present, STD data are submitted to CDC on a variety of hardcopy summary reporting forms (monthly, quarterly, and annually) and electronically either in summary or individual case-specific (line-listed) format 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). DSTD is currently working with project areas on converting from hardcopy reporting of summary data to electronic submission of line-listed (i.e., case-specific) data through NETSS. As of December 31, 2001, 39 states have been reporting primary and secondary (P&S) syphilis, chlamydia and gonorrhea as line-listed extended electronic data. See Figures A1-A3 in this **Appendix** for type of electronic reporting by state and disease. “Summary” refers to aggregate electronic data. “Case” refers to limited line-listed electronic data in conjunction with hardcopy reporting. “Extended case” refers to expanded line-listed electronic data in conjunction with hardcopy reporting. “Discontinued hardcopy” refers to those states that consistently submitted high quality line-listed electronic data and were, therefore, notified by CDC to discontinue hardcopy reporting.

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 large cities (most with a population of 200,000 or more persons in 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 six 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 case-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 3, 2002 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 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 by the estimated area-specific 2000 population. For the United States, rates were calculated using Bureau of the Census population estimates for 1981 through 1989 (Bureau of the Census; United States Population Estimates by Age, Sex and Race: 1980-1989 [Series P-25, No. 1045]; Washington: U.S. Government Printing Office, 1990; and United States Population Estimates by Age, Sex and Race: 1989 [Series P-25, No. 1057]; Washington: U.S. Government Printing Office, 1990). 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). Rates for 1991-2001 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 2000-2001 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 were missing differed substantially by year and area. 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. Similarly, states in which age information was missing from the majority of reported cases were excluded from comparison across age categories. Missing values for race/ethnicity and age were imputed for records missing these data for states in which more than half of the reported cases contained



race/ethnicity and age information. In previous years, missing age and race/ethnicity information was not imputed if a record was missing either of these pieces of information. Beginning in 2000, the imputation method was altered so that missing data were not imputed only for records missing both age and sex information. As a result, some age- and/or race/ethnicity-specific case counts and rates presented in this report may differ from earlier publications. Values cited in this report supercede those presented earlier.

Rates of congenital syphilis for 1989-2001 were calculated using live births from the National Center for Health Statistics (NCHS) (Vital Statistics: Natality Tapes 1989-1999 or Vital Statistics Reports, United States 1999, Vol. 48 No.10-Natality). Race-specific rates for 1999-2001 were calculated using live births for 1999. 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*<sup>1</sup>, 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. In many areas, the reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners). Thus, the 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 was 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 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.<sup>2</sup> 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 2001.

## 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, and men and women entering jail and juvenile detention 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 8, the chlamydia test results for each test type were weighted to reflect the sensitivity of the test used.<sup>3</sup> 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 the midpoints of the range of published values for the sensitivities for each technology type (e.g., non-amplified, nucleic acid amplification, and culture) based on expert consultation regarding test evaluation studies.<sup>4,5</sup> 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 2001 Supplement: Chlamydia Prevalence Monitoring Project Annual Report 2001*. 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 26 STD clinics and five regional laboratories located throughout the United States. For more details on GISP gonorrhea cases, refer to the following annual publication: Centers for Disease Control and Prevention. *Sexually Transmitted*

*Disease Surveillance 2001 Supplement: Gonococcal Isolate Surveillance Project (GISP) Annual Report 2001* Atlanta, GA: U.S. Department of Health and Human Services (in press).

Syphilis seroreactivity data on men and women entering jails and juvenile detention 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. Further details from each site, including prevalence of high titer infections (> 1:8) which may be more indicative of active infection, are provided in Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2001 Supplement: Syphilis Surveillance Annual Report 2001*. Atlanta, GA: U.S. Department of Health and Human Services (in press).

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 1966-2001). 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 1980-1999), 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 1995-1999) 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 Year 2010 Objectives

In January 2000, CDC released objectives for Healthy People 2010 (HP2010).<sup>6</sup> 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).

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

<sup>2</sup> 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.

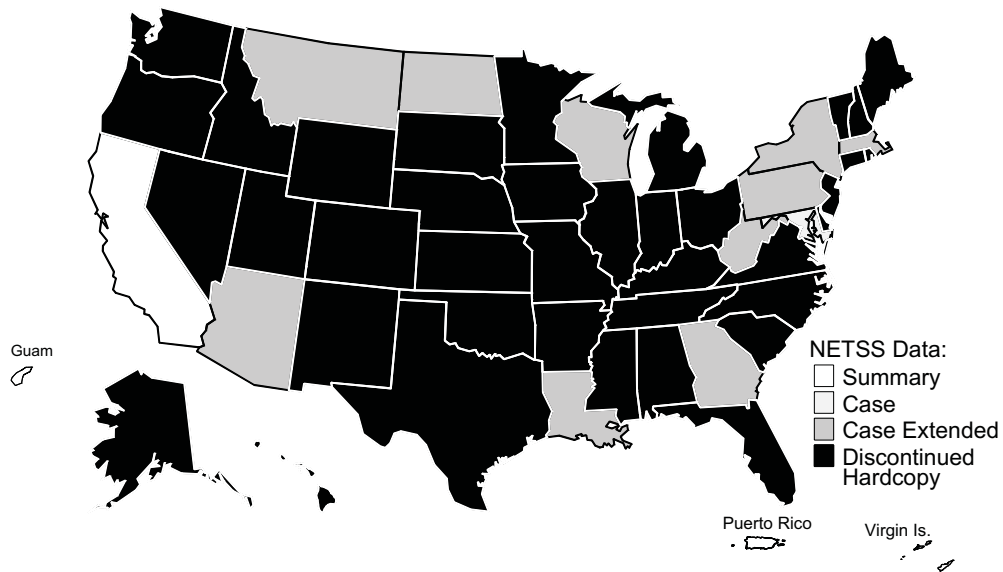
<sup>3</sup> Webster Dicker L, Mosure DJ, Levine WC, Black CM, Berman SM. The impact of switching laboratory tests on reported trends in *Chlamydia trachomatis* infections. *Am J Epidemiol* 2000;151:430-435.

<sup>4</sup> 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.

<sup>5</sup> Centers for Disease Control and Prevention. Screening tests to detect *Chlamydia trachomatis* and *Neisseria gonorrhoea* infections-2002 (in press).

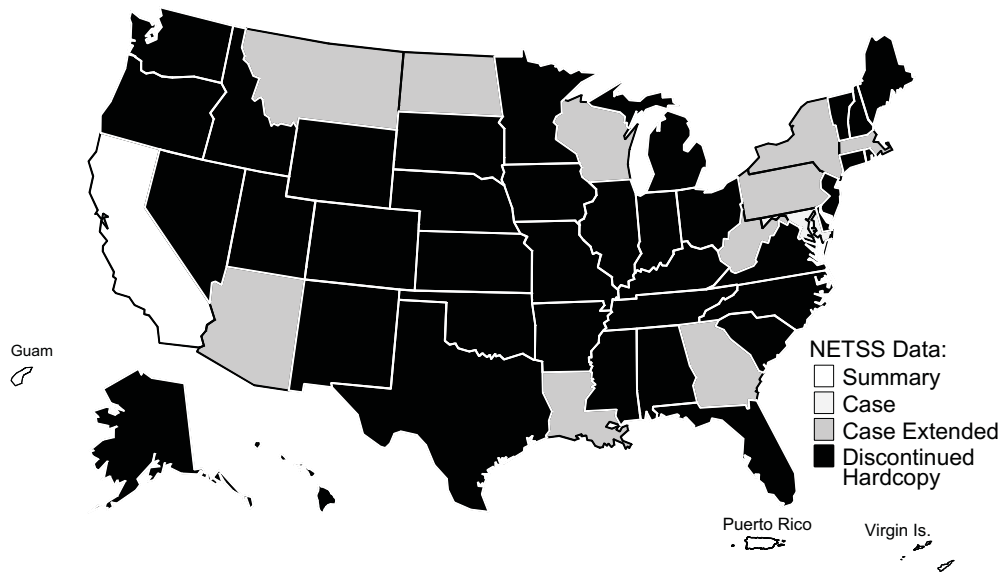
<sup>6</sup> U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000

**Figure A1. Chlamydia — National Electronic Telecommunications System for Surveillance (NETSS) transmission status by state, 2001**



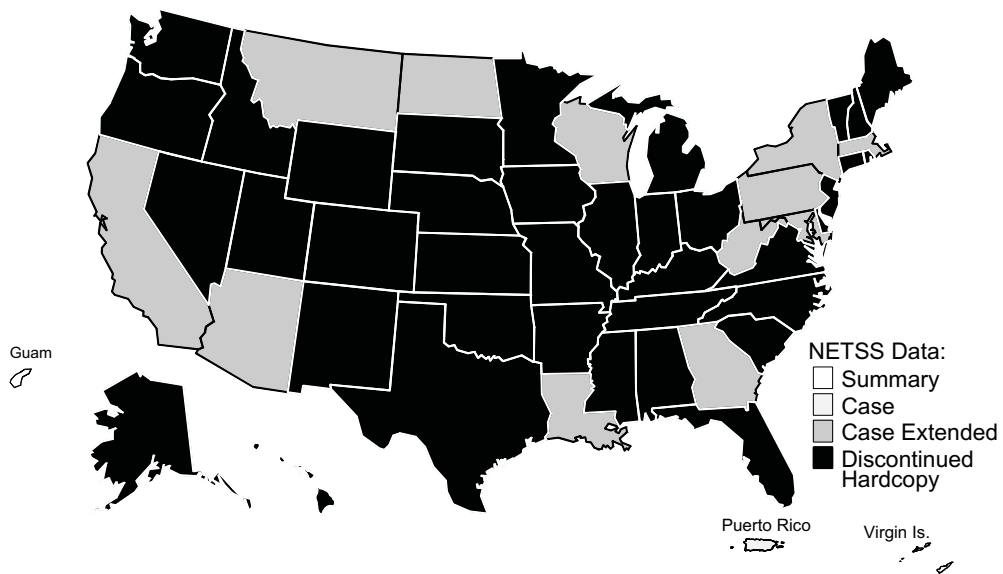
Note: Unless noted, large city projects transmit records in the same format as states. San Francisco and Los Angeles projects report case extended chlamydia records to NETSS.

**Figure A2. Gonorrhea — National Electronic Telecommunications System for Surveillance (NETSS) transmission status by state, 2001**



Note: Unless noted, large city projects transmit records in the same format as states. San Francisco and Los Angeles projects report case extended gonorrhea records to NETSS.

**Figure A3. Primary and secondary syphilis — National Electronic Telecommunications System for Surveillance (NETSS) transmission status by state, 2001**



Note: Unless noted, large city projects transmit records in the same format as states.



**Table A1. Healthy People 2010 Sexually Transmitted Diseases Objective Status**

	<i>Objective</i>	<i>Baseline Year</i>	<i>Baseline</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2010 Objective</i>
<b>25-1</b>	<b>Reduce the proportion of adolescents and young adults with <i>Chlamydia trachomatis</i> infections</b>								
	a. Females aged 15 to 24 years attending family planning clinics	1997	5.0%	5.0%*	6.1%*	5.6%*	5.9%*	5.8*	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*	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*	3.0%
<b>25-2</b>	<b>Reduce gonorrhea (cases per 100,000 population)</b>	1997	123.0	122.4	131.9	132.3	129.0	128.5	19.0
<b>25-3</b>	<b>Eliminate sustained domestic transmission of primary and secondary syphilis (cases per 100,000 population)</b>	1997	3.2	3.2	2.6	2.4	2.1	2.2	0.2
<b>25-4</b>	<b>Reduce the proportion of adults aged 20 to 29 years with genital herpes infection</b>	1988-94	17.0%	---	---	---	---	---	14.0%
<b>25-6</b>	<b>Reduce the proportion of females aged 15 to 44 years who have ever required treatment for pelvic inflammatory disease (PID)</b>	1995	8.0%	---	---	---	---	---	5.0%
<b>25-7</b>	<b>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)</b>	1995	27.0%	---	---	---	---	---	15.0%
<b>25-9</b>	<b>Reduce congenital syphilis (cases per 100,000 live births)</b>	1997	27.0	27.8	21.3	14.5	14.0	11.1	1.0

---Data not available.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

**Data Sources**

Objective number      Data Source

- 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 in 1997-2001 and associated increases in test sensitivity.

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





# STD Surveillance Case Definitions

## PART 1. CASE DEFINITIONS 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  $\geq 7$  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  $\geq 4$

*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  $\geq 32$

### **Neurosyphilis**

#### *Clinical description*

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

#### *Laboratory criteria for diagnosis*

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

#### *Case classification*

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

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

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

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

#### *Clinical description*

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

#### *Laboratory criteria for diagnosis*

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

#### *Case classification*

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

*Confirmed:* a clinically compatible case that is laboratory confirmed

#### *Comment*

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

## **Syphilitic Stillbirth**

### *Clinical description*

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

### *Comment*

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

## **Syphilis, Congenital (Revised 9/96)**

### ***Clinical description***

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

### ***Laboratory criteria for diagnosis***

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

### ***Case classification***

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

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

*Confirmed*: a case that is laboratory confirmed

### ***Comment***

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

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

## **PART 2. CASE DEFINITIONS 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 ( $\geq 5$  white blood cells per high-power field) on a Gram stain of a urethral smear

#### **Laboratory criteria for diagnosis**

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

#### **Case classification**

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

#### **Comment**

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

### **Pelvic Inflammatory Disease (Revised 9/96)**

#### **Clinical case definition**

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

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

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

- Meets the surveillance case definition of *C. trachomatis* infection or gonorrhea
- Temperature  $> 100.4$  F ( $> 38.0$  C)
- Leukocytosis  $> 10,000$  white blood cells/mm<sup>3</sup>
- 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.

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

We gratefully acknowledge the contributions of state STD project directors, STD program managers, and state and territorial epidemiologists to this report. The persons listed were in the positions shown as of August 2, 2002.

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